International Journal of Humanities and Social Science Invention (IJHSSI)
ISSN (Online): 2319 – 7722, ISSN (Print): 2319 – 7714
www.ijhssi.org ||Volume 11 Issue 4 Ser. II || April, 2022 || PP. 08-11

R.K. Ramanujan and Nature Consciousness Environmental Sensibility and Awareness as in the Poems of A.K.Ramanujan

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Abstract: *Nature and love for nature is the central theme in the poems of A.K.Ramanujan. This theme provides a holistic cosmic world view which interrelates nature with human community. It is with the advancement of science and technology, the traditional beliefs of Indians in Nature slowly got diverted. The , materialistic culture, competitive attitude and extreme change in the life styles of human beings resulted in the decline of importance given to environment and its impact on human life.*

Key words*: Nature, human community, ecology, preservation and conservation.*

Date of Submission: 04-04-2022 Date of Acceptance: 19-04-2022

Ramanujan is deeply affected by the socio – economic condition of his India. The poems of Ramanujan are finely crafted pieces, and the words shine with depth of meaning. M.A.K Ramanujan is one of the interactive poets in the 20th century Indian English literature. He was born in Mysore, India. He earned degrees at the university of Mysore and Deccan College in Pune and a Ph.D. from Indiana University.

Most of his poems, though intensely personal, have a universal dimension of their own. The main theme of Ramanujan's poetry are family, love, despair and death. They are full of irony, humour, paradox and sudden reversals. His own family life, his childhood memories, his pleasures, struggles, sufferings, love etc. are his objectives. All his poems are written with his own feelings, emotions and memories. He uses a language which is crisp, intense and casual.

In 1976, the government of India honoured Ramanujan with the prestigious Padma Shree, one of its highest civilian awards, for his significant contributions to Indian literature and linguistics. In 1983, he was awarded the Mac Arthur Prize Fellowship.

In the poem 'The River', the poet success in bring out the damage caused to the Mother Earth due to urban construction activities. He makes the readers be aware of ill – effects of littering plastic which chokes the drainage system, railway tracks in cities and cause inconvenience to our own lives. When we read the poem 'The River', we come to know that Madurai is a city of temples, and culture. The poet describes how in every summer, a river that flows through Madurai is narrow stream through the water gates as piles of straw and women's hair obstruct its flow.

'A River' is a poem which can be analyzed using the theory of Eco – Criticism. When we read the poem, we see the river Vikai being in flood. The people everywhere talk about the inch – by- inch rising of water and the number of stone steps submerged at the bathing place.

The world of literature is crowded with works dealing with beauty and power of nature. The type of writing recently caught the attention of the writers. The concern for ecology and the threat it causes if misused has become concern of good many writers. This theory, namely Ec0- Criticism.

People in India lack the awareness of cleanliness and their duty towards conserving the natural resources. The 'sleepy crocodiles' and 'water buffaloes lounging in the sun' are images that convey the lazy, indolent attitude of the people. The basic inertia that stops people from acting is the target of Ramanjuan. If this attitude is changed, nature can and will be saved from monstrous hands.

A.K. Ramanujan also talks of a pregnant woman with perhaps twins in her womb, with no moles on their bodies, with different coloured diapers to tell them apart. We can take the concept of procreation as synonymous to creation of nature and the nurturing attitude required for trees and animals to thrive. The woman here symbolizes our mother earth and the twins in her womb can be equated to natural resources and life that inhabits this earth. The pregnant woman is shown drowned in the flood due to the negligence of the people.

"…. a river dries to a trickle
in the sand,
baring the sand ribs,
straw and women's hair

clogging the Watergates
at the rusty bars
under the bridges with patches
of repair all over them
the wet stones glistening "

The Early Romantic and Later Romantic poets, have written enough about beautiful rural landscapes as a source of joy. Contemporary poets tend to write about nature more broadly than their predecessors. They focus more on the negative effects of human activity on the planet. Environmental poetry explores the complicated connections between people and nature. The poets are more concerned about our impact on the natural world. A.K.Ramanujan advocated for preservation and conservation.

We find the water level rising speedily. It washed away village homes, one pregnant women and a couple of cows almost every year. The destruction and the damage caused to life and prosperity due to flooding is common in India. Nature has its own way of making its presence and power felt.

River is nothing but extended self of Nature. To harm nature is to harm ourselves. Progress is necessary but it should not be at the cost of Nature. Due to modernization and globalization there is a rapid environmental disaster. There are other causes life deforestation, mining and expansion of urban areas.

The ancient Indian Literature and philosophy believes in harmony between man and nature. They believe that earth itself to be a living organization and is capable of experiencing pain and pleasure.

In the poem, 'Ecology', A.K.Ramanujan is a perfect example of modernity. In this poem, his mother represents traditional view of 'Return to Nature' life. She belongs to the Indian tradition and culture. She worships every aspect of nature. The poem is deeply rooted in the tradition of Indian which the poet is intrinsicallyattached to.

"The day after the first rain,
Monsoon
for years, I would home
in a rage,
Interesting. What are you so mad about, speaker?

for I could see from a mile away
From a mile away, on the way home
our three Red Champak Trees
Our three red champak trees
had done it again,
meaning they've done it before

had burst into flower and given Mother
her first blinding migraine
first but not last; blinding because of the extent of the pain she's in in
of the season
these migraines last the whole season.

with their street-long heavy-hung
yellow pollen fog of a fragrance
The pollen grains have made the air thick like fog - in fact the air IS yellow with it's heady scent
no wind could sift,
the breeze cannot blow away this fog
no door could shut out
and the doors cannot keep it out either. the whole street in front of them is thick with it; it will seep in through the gaps
from our black-
pillared house whose walls had ears
and eyes,
begins personifying the house
scales, smells, bone-creaks, nightly
visiting voices; and were porous
pollen will get in through the holes
like us,
self-explanatory: we will breathe in this fog of pollen

but Mother, flashing her temper
like her mother's twisted silver,
giving the mother's anger some physical quality: shiny, radiant, expressive in her temper
grandchildren's knickers
soaked, then wrung (twisted)
wet as the cold pack on her head,
wet because she was sweating - cold sweats
would not let us cut down
a flowering tree
Flowering tree. Religious significance. Bad omen.
almost as old as her, seeded,
she said, by a passing bird's
providential droppings
Taken as a blessing - came from the sky

to give her gods and her daughters
and daughters' daughters basketsful
of annual flower".

The champaka tree begins to flower after first monsoon. The strong fragrance brings migraine attacks to the speaker's mother but she has developed a kind of associational intimacy with them. The poet wants the tree to be cut but the mother objects. She says that her daughters and daughter's daughter can get the basketful of annual flower from the tree. The mother ignores her personal conveniences. This kind of intense and personal commitment should be shown by every individual towards nature and environment. The world will later face the problem of ecological imbalance if this kind of attitude is allowed to grow.

The poet's attitude to the Champak tree is antithetical to his mother's. The poet represents the modern generation. Ostensibly a very simple poem, the poem reverberates with ecological implications too visible to be ignored. Henry Bunner through his work of art motivates people in plantation as it chooses to show the greatness of the man who plants a tree rather than just saying the usefulness of trees. Thus, the poet gives on to highlight the theme of environmental awareness and appeals people to plant more trees in a brilliant way through his poem.

A.K.Ramanujan uses his art as a medium to create awareness of conserving nature. The poet also wants to say that a particular kind of tree may have advantages and disadvantages. But it is our duty to protect and conserve every plant life.

Towards the concluding part of the poem, the mother tells the poet that the tree is as old as she is. It seed was 'seeded by a passing bird's providential droppings' is a bird; which is a sign of good omen and dropped the seeds of those places. She believes that the bird seeded the plants so that a line of cousins or in other words each new generation may be able to offer its "basketful of annual flower' to God and their daughter (probably during marriage). And for this reason she is all prepared to bear the pain migraine.

Eco poetry investigates both thematically and formally the relationship between nature and culture, language and perception. A.K. Ramanujan has romanticized the lush beauty of India, its vast diversity and landscape. He advocates the need for conservation and protection of our environment.

In the poem, 'Snake', A.K. Ramanujan stresses the diversity between human beings and nature. The relationship is describes in vivid terms. There is reference to snakes, flies and frogs.

"The twirls of their hisses
rise like the tiny dust-cones on slow noon roads
winding through the farmers feet.
Black lorgnettes are etched on their hoods,
ridiculous, alien, like some terrible aunt,
a crest among tiles and scales
that moult with the darkening half
of every moon."

In the poem 'Snake', Ramanujan points out the touching reality and modern society, the reality of insensibility and indifference. It is among the best poems of Ramanujan. The description is of a snake that induces fear in the minds of all. He gives us the picture of snakes that take shelter in the museums, both shelves, glass –shelves etc.

"Yellow amber
or touching a book that has gold
on its spine"

The poet compares the intermittent hissingof the snakes to the little clouds of dust that arise as one walks along a dusty road. The snake's scales mount with the waving of the moon. The poet also remembers one day a snake man brought a basket full of cobras to the poet's home. The poet watches their bodies what –brown in colour with rings all over. The way they move on the floor looks like a strange alphabet written here and there. The poet's mother feeds the snakes with saucers of milk. The snakes suck the milk. The snake man then wears them in his neck in order to impress the poet's father. The latter gives him money.

A.K.Ramanujan narrates what happens while he walks along the forest path. Suddenly he feels as if he is walking on a slippery surface. It is a snake and writhes in pain. He steps on it until it is dead. He is now not afraid of it. He expects the frogs to hop over the sausage rope without fear of being eaten up.

In 'Striders', A.K. Ramanujan describes the Rabbits and the physiognomy of the insect precisely. He makes an attempt to mock the supernatural powers of prophets. The poet's awareness of man- nature relationship is being evident when he says:

Not only prophets
Walk in water. The bug sits
On a landslide of lights
And drowns eye
Deep
Into its tiny strip
Of sky.

Here, the poet wants to emphasis the fact that miracles are not limited to prophets alone, they can take place even in nature and are worthy of our attention.

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Meenakshy N S. "R.K. Ramanujan and Nature Consciousness Environmental Sensibility and Awareness as in the Poems of A.K.Ramanujan." *International Journal of Humanities and Social Science Invention (IJHSSI)*, vol. 11(04), 2022, pp 8-11. Journal DOI- 10.35629/7722

Materials Today: Proceedings 55 (2022) 179–185

Contents lists available at ScienceDirect

Materials Today: Proceedings

journal homepage: www.elsevier.com/locate/matpr

Effect of silver doping on structural and optical properties of starch capped ZnS nanoparticles synthesized by microwave irradiation

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ARTICLE INFO

Article history:
Available online 15 February 2022

Keywords:
ZnS nanoparticles
Microwaves
Silver doping
Starch capping

ABSTRACT

Cost effective facile method of synthesis of silver (Ag) doped zinc sulfide (ZnS) nanoparticles encapsulated by starch is reported in this communication. Synthesis involves chemical co-precipitation method using zinc acetate and thioacetamide as ZnS precursors, silver nitrate as dopant salt, starch as capping agent and water as solvent. Ag is an active metal which gets easily oxidized by the general methods of doping. The effect of efficient heating by microwaves has been utilized in the present work. Energy dispersive spectroscopy (EDS) analysis of the samples implied a solubility of Ag in ZnS lattice. The X-ray diffraction (XRD) patterns of the Ag doped samples retained the same cubic crystal structure as ZnS nanocrystals. Substitutional incorporation of Silver into the ZnS lattice is confirmed by positional shifts of XRD peaks. The mean size of the nanocrystallites calculated using Scherrer equation is about 3 nm. Raman spectra also implied the formation of nanoform of cubic ZnS. Energy band gaps are found to decrease in UV–Vis study for Ag doped samples. The absorption spectra of all samples show quantum confinement effect. The transmission electron microscopy (TEM) and Fourier transform infra red (FTIR) spectroscopy studies for the selected sample reveal that the synthesized particles were stabilized by starch as capping agent.
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Selection and peer-review under responsibility of the scientific committee of the 9th National Conference on Condensed Matter Physics and Applications.

1. Introduction

The generation of large amounts of chemical products like pharmaceuticals, dyes, fertilizers etc. is inevitable due to population growth and developments in industry as well as agricultural fields. So it is essential to device environmentally benign methods of synthesis of materials at least in the field of research. In this direction, preparation of materials in nanoform at low temperature, low cost and non-toxic approach is important and it is an interesting subject of research.

ZnS is a promising material among II – VI compounds for applications in optoelectronics due to its outstanding luminescence, photochemical properties and nontoxicity [1,2]. When ZnS is prepared in nanoform, particles of size 3–5 nm are formed due to its wide energy band gap value (~3.6 eV) [3,4,5]. Such particles have a tendency to agglomerate due to increased surface activities. The particle growth can be prevented using suitable organic species as capping agents. A low-cost, non-toxic and biodegradable biopolymer like starch is a suitable choice as capping agent for ZnS nanoparticles. Starch is identified as a good capping agent and has been used in the synthesis of many semiconductor nanoparticles [6,7].

Silver is proved to be a good candidate for producing a shallow acceptor level in ZnS, when incorporated in substituted Zn sites [8]. Compared to the preparation of doped NPs in organic solvents, the growth of aqueous doped nanoparticles (NPs) are more complex due to the presence of various ions in solution [9]. Therefore, it has been a challenge to dope NPs with metal ions in aqueous solution. Such substitutions require high temperatures, balancing the pH and long processing time. Microwave irradiation (MWI) method appears to be a plausible solution to this problem. MWI is an efficient in core heating technique which can perform reactions at faster rate. We have synthesized Ag doped and starch encapsulated ZnS NPs with water as solvent using microwave irradiation as heating source.

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https://doi.org/10.1016/j.matpr.2022.02.027
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Selection and peer-review under responsibility of the scientific committee of the 9th National Conference on Condensed Matter Physics and Applications.

2. Experimental

2.1. Synthesis

Aqueous solution of zinc acetate was prepared at 0.15 M concentration and 0.3 at% silver dopant was added in the form of aqueous silver nitrate solution and stirred well. Starch solution at concentration of 0.075 wt% was added and stirred for 45 min. To this mixture thioacetamide solution at 0.27 M concentration was added and mixed well. The solution was microwave irradiated in a domestic microwave oven for predetermined 6 min. In case of domestic microwave ovens, duty cycle of operation play an important role in determining the product properties [10]. The duty cycle is described as: if the MWI time is t_1 seconds and rest period is t_2 seconds, then;

$$\text{Duty cycle} = \frac{t_1}{t_1 + t_2} \quad (1)$$

Duty cycle of microwave irradiation was selected such that it was on for 8 s and off for 14 s, still the maximum power available was 800 W which is specific for the microwave oven we have used (LG model: MS-2049UW of 20 L capacity operating at frequency 2.45 GHz). The sample obtained was processed to powder and named as 0.3Ag/ZnS-S. Similarly samples 0.6Ag/ZnS-S, 1Ag/ZnS-S, 2Ag/ZnS-S and 3Ag/ZnS-S were prepared by taking silver dopant amounts as 0.6, 1, 2 and 3 at%. Undoped but starch capped ZnS sample was also prepared and it was named as: ZnS-S.

2.2. Characterization

X-ray diffraction was carried out with Rigaku Miniflex 600 – X-ray diffractometer (XRD) and morphology of selected samples was determined using Jeol/JEM 2100 transmission electron microscope (TEM). Fourier transform infra red (FTIR) spectra were obtained using NICOLET 6700 spectrophotometer and Raman spectra with BRUKER RFS 27: Stand-alone FT-Raman Spectrometer. The UV-Vis absorption studies were recorded using SHIMADZU – 1800 UV–Vis spectrophotometer.

3. Results and discussion

3.1. X-ray diffraction

XRD can reveal the presence of any minority crystalline phase in addition to the host matrix that may result from phase segregation due to doping. Fig. 1(a) shows the XRD patterns of the samples. The XRD peaks of all samples are found to possess cubic sphalerite structure as revealed by the JCPDS file (00-005-0566). The presence of any peaks at 38°, 44° and 64° corresponding to metallic silver is not noticed in the XRD pattern of Ag doped ZnS samples [11]. The samples prepared at lower concentrations of Ag are without any secondary phase or any impurity related to Ag or its related phases. This may be due to the addition of very small quantity of dopant ion, insufficient to cause any change in structure of host lattice.

A gradual shift in XRD prominent peak position towards lower angle is observed as concentration of dopant increases. The shift towards left indicates an increase in lattice constant while shift towards higher scattering angles indicates the decrease, according to Braggs' law. Hence shift observed in the present case indicates a lattice expansion [12,13]. For Ag doped samples, this is attributed to the substitution of silver ion of larger radius (0.97 Å) into the site of Zn ion of smaller radius (0.74 Å) [13]. Further, compared to the radius of S ion (1.7 Å), radius of Ag ion is close to radius of Zn ion in ZnS lattice. Ag can substitute with Zn ion.

Average ZnS crystallite sizes were estimated from Scherrer formula, and inter planar distance by Braggs' law. Line broadening of the peaks indicates that ZnS is formed in nanosize. Table 1 gives the XRD related data.

For a higher concentration like Ag at 3%, Ag_2S phase makes its appearance with small peaks near 37°, 45° and 53° (Fig. 1(b)) as identified by the standard file no. 00-004-0774 for Argentite (Ag_2S). For the samples 2Ag/ZnS-S and 3Ag/ZnS-S, the lattice parameter decreases.

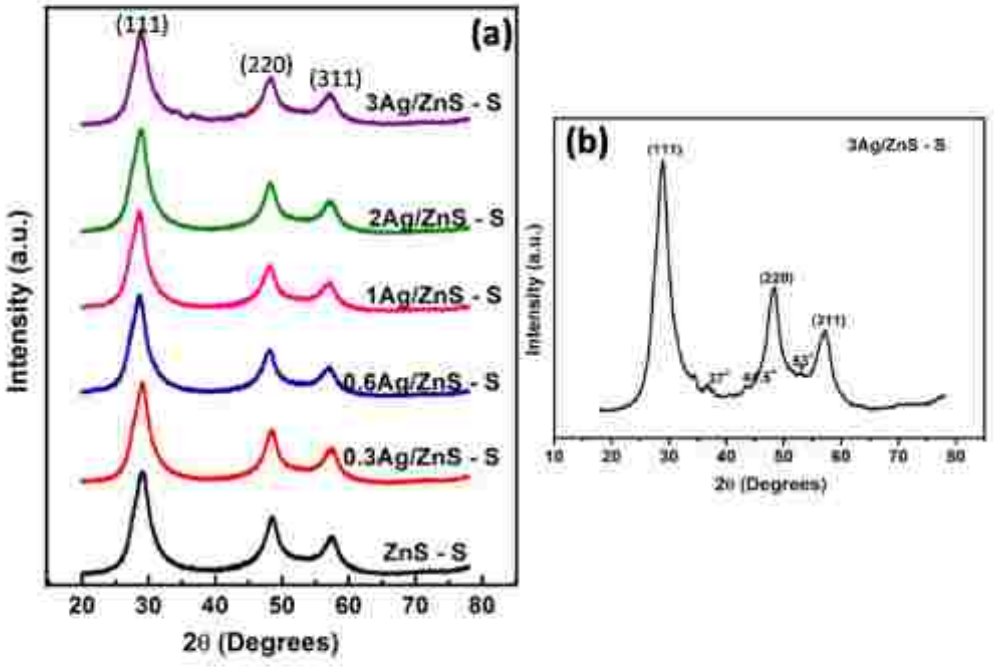

Fig. 1. (a) X-ray diffractogram for undoped and Ag doped ZnS samples, (b) XRD pattern for sample 3Ag/ZnS-S.

Table 1
Elemental composition and XRD related data for silver doped ZnS capped with starch.

Sample code	Ag at % added for synthesis	Ag at% From EDS	Size (nm)	'd' Spacing (Å)	Cell constant a (Å)	Cell Vol. (Å)^3
ZnS-S	0	0	2.5	3.078	5.332	151.6
0.3Ag/ZnS-S	0.3	0.22	2.56	3.080	5.335	151.9
0.6Ag/ZnS-S	0.6	0.48	2.57	3.089	5.351	153.2
1Ag/ZnS-S	1	0.54	2.6	3.116	5.397	157.2
2Ag/ZnS-S	2	1.02	2.58	3.103	5.375	155.3
3Ag/ZnS-S	3	1.54	2.56	3.098	5.365	154.4

For a higher concentration like Ag at 3%, Ag_2S phase makes its appearance with small peaks near 37°, 45° and 53° (Fig. 1(b)) as identified by the standard file no. 00-004-0724 for Argentite (Ag_2S). For the samples 2Ag/ZnS-S and 3Ag/ZnS-S, the lattice parameter decreases.

3.2. Transmission electron microscopy

Fig. 2(a) shows that the TEM images of Ag doped ZnS nanospheres possess an average size of 36 nm. A detailed investigation of the particles in Fig. 2 (b) shows that the nanospheres are possibly formed by cohesion of the smaller spherical particles and these spherical particles possess a dimension of ≈ 2.86 nm as determined from histogram, shown as inset in Fig. 2(b). Our observations are similar to that described in ref. [14] indicating the formation of dispersed ZnS NPs due to capping of starch molecule. SAED pattern consists of three discrete continuous rings (Fig. 2d) which correspond to (111), (220) and (311) planes of the cubic ZnS structures [15]. The HRTEM (Fig. 2c) image shows well resolved diffraction fringes of the particle lattices. The lattice spacings are measured and the distances (~0.31 nm) shown in Fig. 2(c) correspond to (111) planes of cubic ZnS. This is in accordance with the results obtained in XRD studies. The % Ag content in the nanocrystals is measured by energy dispersive X-ray spectrometry (EDS) and given in Table 1 for different samples.

The EDS images for ZnS-S and 1Ag/ZnS-S are shown in Fig. 3, as typical of all samples. From the EDS spectra obtained, it is clear that Ag is present in the doped samples. The observed amounts of Ag in the starch capped Ag doped samples are 0.22, 0.48, 0.54, 1.02 and 1.54 at% in 0.3Ag/ZnS-S, 0.6Ag/ZnS-S, 1Ag/ZnS-S, 2Ag/

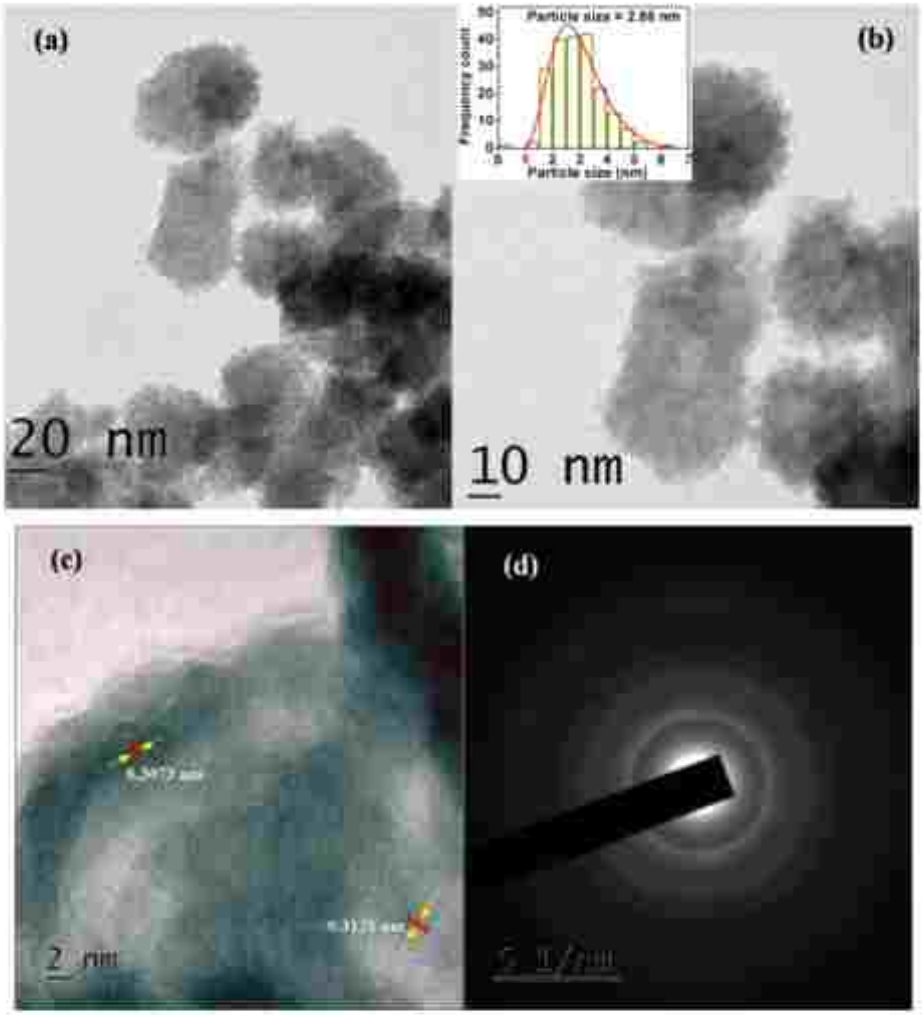

Fig. 2. (a) TEM image of Ag doped ZnS at low magnifications. (b) TEM image at higher magnification (c) HRTEM image (d) SAED pattern.

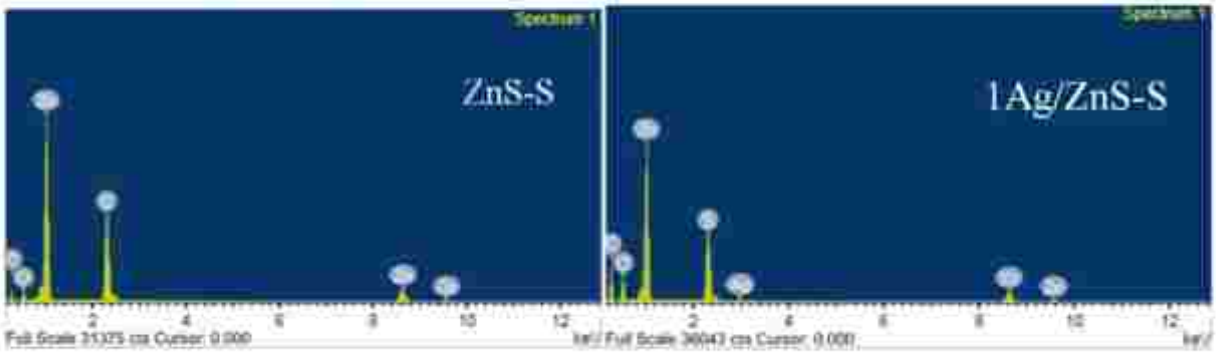

Fig. 3. EDS images for ZnS-S and 1Ag/ZnS-S.

ZnS-S and 3Ag/ZnS-S respectively. This means, when the doping concentration is increased, the % content of Ag also increases in the sample. The presence of C and O is due to starch capping.

3.3. Fourier transform infrared (FTIR) spectroscopy

Fig. 4 (a) shows FTIR spectra of neat starch, undoped and silver doped ZnS-S samples. The —OH stretching peak of neat starch appears at 3421 cm^{-1} and it shifts to 3405 cm^{-1} in starch capped ZnS compounds. This indicates that the —OH groups are the capping ligands for encapsulation of ZnS NPs [16]. Stretching peak of —OH at 1644 cm^{-1} due to water of hydration in neat starch gets shifted to 1628 cm^{-1} in sample 2Ag/ZnS-S. The groups which have not shifted with respect to pure starch are- C—O—H at 1157 cm^{-1}, C—O—C at 1025 cm^{-1} and —CH_2 bending at 1417 cm^{-1} indicating the non-involvement of these groups with ZnS NPs in both Ag doped samples [14]. A band around 1558 cm^{-1} appears in all ZnS – starch compounds due to interaction of ZnS with starch [14]. Vibration around 669 cm^{-1} is assigned to Zn—S vibrations [17]. The noticeable peak at 1117 cm^{-1} is attributed to have come from excessive Ag in 2Ag/ZnS-S (Fig. 4b).

3.4. Raman scattering

Raman measurements were carried out using an excitation laser wavelength of 1064 nm from Nd: YAG laser source and the Raman spectra are shown in Fig. 5 for neat starch, ZnS-S and 1Ag/ZnS-S samples. The first order TO and LO modes near the Brillouin Zone (BZ) center are present at 260 and 342 cm^{-1} for ZnS-S. These are consistent with nano ZnS according to earlier Raman studies for bulk ZnS [18]. The shift of LO peak in 1Ag/ZnS-S indicate the interaction of Ag ions in ZnS. The peak due to first order LA mode of ZnS occurs near 213 cm^{-1} [19]. Hence the peak near 415 cm^{-1} is an over tone of this mode. The peak corresponding to polysachcharide back bone appears at 477 cm^{-1} for neat starch, at 481 cm^{-1} for ZnS-S and at 477 cm^{-1} for 1Ag/ZnS-S [20]. This shows the presence of starch with the ZnS samples. However, it is observed that the Raman bands are not well resolved here and the broad nature of the bands indicate the nanonature of samples [21].

3.5. UV–Vis absorption

The absorbance vs wavelength curves of the samples are shown in Fig. 6. The absorption bands occurred at wavelengths smaller than that of bulk (337 nm) and are blue shifted indicating quantum size effect. In any of the absorbance vs wavelength graphs, enhanced absorption in the 450 nm–650 nm regions due to surface plasmon resonance of Ag crystal is not found [12]. This indicates that Ag crystals or metallic silver phase is not formed in the samples.

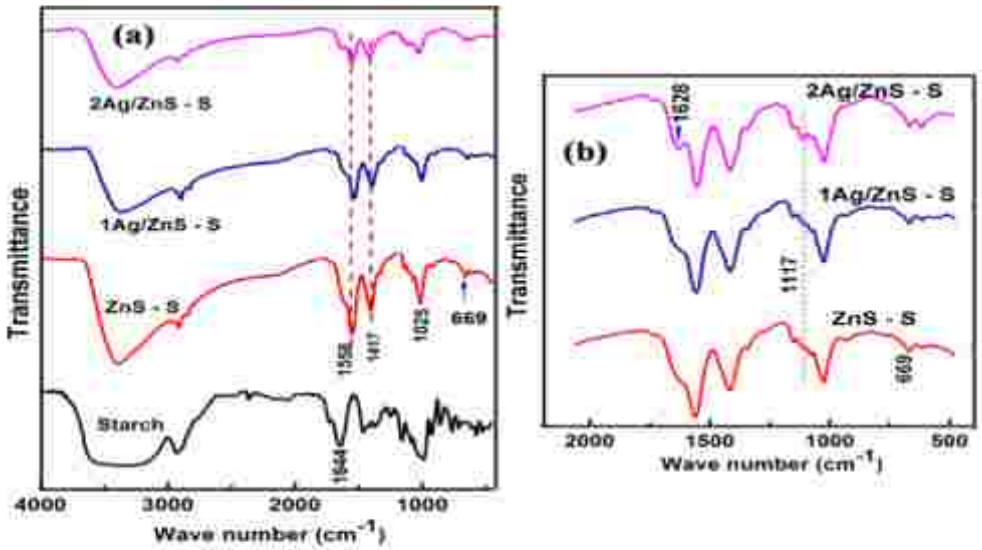

Fig. 4. (a) FTIR spectra of neat starch, undoped and silver doped samples (b) Enlarged figure of finger print region of the doped and undoped ZnS samples.

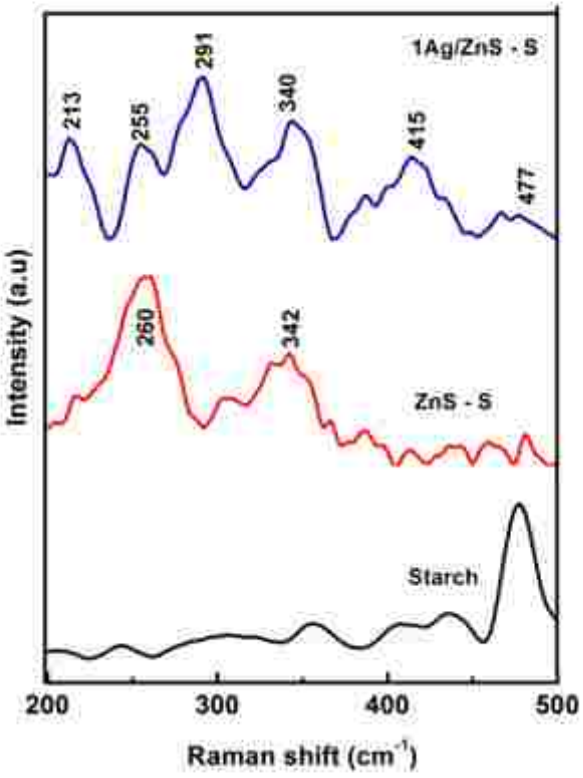

Fig. 5. Raman spectra for neat starch, ZnS-S and 1Ag/ZnS-S samples.

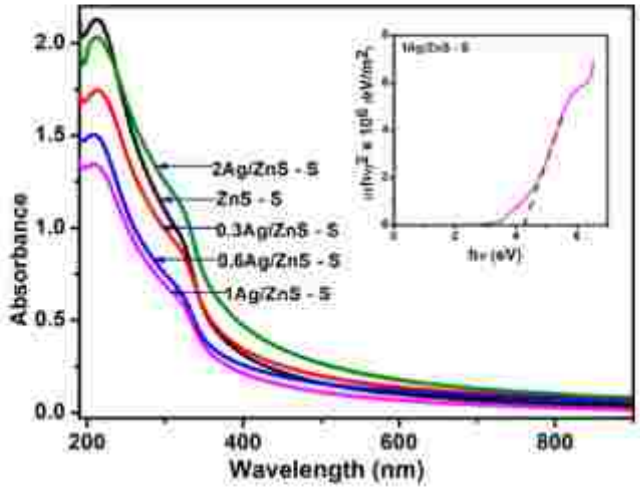

Fig. 6. Optical absorption spectra for ZnS-S and Ag doped ZnS-S samples. Inset shows the Tauc plot for 1Ag/ZnS-S sample.

The band gap energy (E_g) for all samples are obtained by Tauc plot and E_g values decrease with Ag concentration. The E_g values are: 4.45 eV, 4.35 eV, 4.31 eV, 4.25 eV and 4.04 eV for ZnS-S, 0.3Ag/ZnS-S, 0.6Ag/ZnS-S, 1Ag/ZnS-S and 2Ag/ZnS-S respectively. The decrease in E_g is attributed to the formation of impurity levels in the band gap with increased Ag contents.

3.6. Photoluminescence

Fig. 7 shows the PL spectra for undoped and Ag doped ZnS-S samples. It is noticed from the graphs that after doping, the PL intensity increases with concentration of Ag, indicating an interaction between Ag ions and ZnS host. In Ag doped ZnS, some Zn^{2+} sites in ZnS lattice have been replaced by Ag^{+} ions. The native zinc vacancies existing as luminescence centres in ZnS matrix of undoped ZnS, could be filled by Ag^{+} ions [22].

The PL spectra of the samples are deconvoluted and studied in detail. The PL emission from ZnS-S occur near 352 nm, 373 nm, 411 nm and 472 nm corresponding to S- interstitials (I_S), Zn interstitials (I_{Zn}), S vacancies (V_S) and V_S to V_{Zn} recombination respectively [23]. With increase in doping concentration, ZnS related peaks are red shifted, which may be due to size effect [24] as well as impurity levels created in band gap due to dopant. The green emission in the range 490 nm–530 nm are observed in Ag doped ZnS-S samples. Similar results were observed by K Patel *et al* for the silver doped ZnS synthesized by microwave assisted chemical route using PVP as stabilizer [25]. The PL intensity is found to be highest in the case of 0.6Ag/ZnS-S. For 0.6Ag/ZnS-S, the full width at half maximum is highest for blue emission corresponding to S vacancies, peaking at 450 nm. This indicates that the ZnS defect levels are rearranged with the Ag ions occupying Zn positions in ZnS lattice and the emission related to ZnS are affected [22].

4. Conclusions

- Silver incorporated and starch capped ZnS nanoparticles could be synthesized using MWI method. EDS analysis implied a solubility of Ag in ZnS lattice.
- XRD patterns of the Ag doped samples retained the same cubic crystal structure as ZnS nanocrystals. Substitutional incorporation of Silver into the ZnS lattice was confirmed by positional shifts of XRD peaks. The mean size of the nanocrystallites calculated using Scherrer equation was about 3 nm.
- Energy band gaps were found to decrease in UV-Vis study for Ag doped samples. The absorption spectra of all samples showed quantum confinement effect.
- The TEM and FTIR results for the selected samples revealed that the synthesized particles were stabilized by starch.
- Optimum levels of the dopants could be determined by the intense PL spectra shown by sample 0.6Ag/ZnS-S .

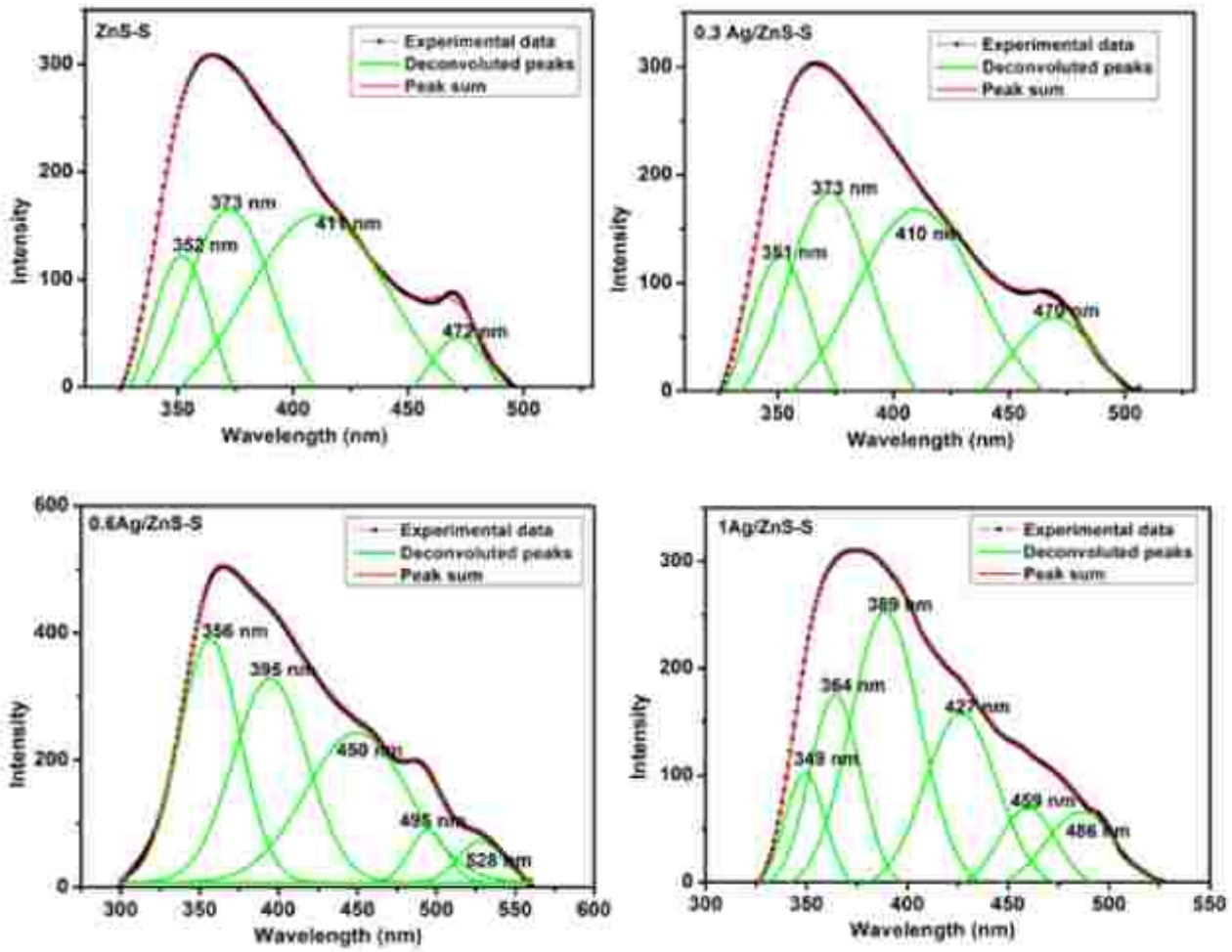

Fig. 7. Emission spectra for undoped and Ag doped ZnS-S samples.

CRediT authorship contribution statement

B. Lalitha Devi: Methodology, Investigation, Formal analysis, Writing – original draft. **K. Mohan Rao:** Conceptualization, Supervision, Writing – review & editing. **D. Ramananda:** Writing – review & editing.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Acknowledgements

Bhandarkars' Arts and Science college, Kundapura is gratefully acknowledged for sample preparation facilities. We thank DST-SAIF centre, IIT Madras at Chennai for Raman scattering experiments, DST- SAIF centre at Karnatak University-Dharwad for FTIR as well as photoluminescence measurements and Manipal Academy of Higher Education – Manipal for other characterizations.

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Inorganic Chemistry Communications 140 (2022) 109460

Contents lists available at ScienceDirect

Inorganic Chemistry Communications

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Short communication

Effect of microwave irradiation time on structural and optical properties of ZnS nanoparticles

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ARTICLE INFO

Keywords:
ZnS nanoparticles
Microwave irradiation
Williamson – Hall method
Photoluminescence

ABSTRACT

In this communication, we report the synthesis of ZnS nanoparticles by chemical precipitation of Zn^{2+} ions with S^{2-} ions in aqueous solution. Freshly formed ZnS nanoparticles (NPs) in colloidal suspension were microwave irradiated for different time intervals in a domestic microwave oven. Effect of microwave irradiation (MWI) time on microstructure, surface morphology and optical properties of NPs are studied using various characterization tools. The structural analysis confirms the influence of MWI time on cubic and crystalline nature of the samples which are in good agreement with selected area electron diffraction (SAED) pattern. The size of the NPs increased with increase in time of MWI. The size increase is consistent with literature reports that microwave irradiation accelerates not only the nucleation but also crystal growth. The band gap of the material tends to decrease as a function of irradiation time. The role of MWI time on surface defect removing process it also explained in detail.

1. Introduction

The reduced dimensions of semiconducting nanoparticles continue to retain interest in their investigation for exhibiting chemical as well as physical properties much different from their corresponding bulk properties. As a result, reduction in electronic circuitry is observed due to reduction in size of components. Semiconducting NPs of CdS, ZnO, CdSe, ZnSe, CuO, ZnS etc. have been investigated immensely for their optoelectronic and photovoltaic applications due to their quantum confinement effect and size-dependent properties [1–7]. These nanomaterials in oxide and sulfide form have been studied to check their suitability for various applications. Despite the numerous features of oxide-based materials, the sulfide-based materials are involved in energy storage and photonic applications [8–12]. In an effort to find an alternative for cadmium-based quantum dots, which are being carcinogenic for living systems, ZnS quantum dots have been attracting a lot of attention now-a day. ZnS is an important member belonging to II – VI group of semiconductors. It has a band gap of 3.66 eV at 300 K and this falls in the ultraviolet (UV) region of electromagnetic spectrum [13]. The optical properties may be tuned due to the size-dependent variation of the band gap energy. The quantum confinement effects, high surface area and nontoxicity possessed by ZnS NPs, they are used as potential candidates for phosphors, light emitting diodes, photoluminescent tags for bio- assays and photocatalysts [14]. The properties of materials in the nanoscale depend strongly on their method of preparation.

Among the emerging new techniques of synthesis of nanomaterials, microwave irradiation (MWI) methods are unique in providing up-scaled processes and avoid unwanted thermal gradient effects [15,16]. In the previous work reported in ref [16], the authors worked on MWI heating and time on ZnS based quantum dots and MWI time was between 60 and 90 min. For this irradiation time authors have observed significant change in the end product with high quantum yield. Also, in ref [17] on ZnO NPs, significant change in particle agglomeration for prolonged MWI. Hence current work focuses on investigating the influence of low irradiation time on properties of synthesized NPs. In microwave heating the substance is heated uniformly and homogeneous nucleation can be induced in the system. By carefully selecting the precursors, solvent, reaction temperature and microwave parameters (like irradiation time and power) during chemical co-precipitation carried out in presence of MWI, one can achieve superior control over the nucleation and growth processes to obtain high-quality quantum dots (QDs) of desired size. In this communication, the effect of microwave irradiation on ZnS NPs for different duration of time is reported. Earlier researchers have studied the effects of MWI time on the nucleation

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https://doi.org/10.1016/j.inoche.2022.109460
Received 19 December 2021; Received in revised form 1 April 2022; Accepted 5 April 2022
Available online 9 April 2022
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phenomena which was followed by growth for materials like ZnO [17,18], $CuInS_2$ [19], ZnS [20] etc. Studies on MWI time on growth of ZnS NPs are sparse and in the present work we have separated the two processes, nucleation and growth. Nucleation occurs at relatively at low temperature by co-precipitation while growth occurs in presence of MWI.

2. Experimental

2.1. Synthesis

0.1 M concentrated sodium sulfide nonahydrate (SSN, $Na_2S{\cdot}9H_2O$, 98%) (Sigma Aldrich) solution prepared in water and added drop wise to 0.1 M Zinc acetate dihydrate (ZAD) (Alfa Aesar 98–101%) solution taken in a beaker. It was observed that when the precursor solutions were mixed, a noticeable color change occurs from colorless to milky white. The white precipitate of ZnS is separated by centrifuging at 2000 rpm for 5 min and dried.

For the study of the effect of time of microwave irradiation (MWI), the mixture obtained after mixing Sodium sulfide to zinc acetate, is exposed to MWI using MW oven (LG Model: MS – 2049 UW) for different times like 3,6 and 10 min. Samples were named as ZnS-1(No MW irradiation), ZnS-2 (MW for 3 min), ZnS- 3 (MW for 6 min) and ZnS-4 (MW for 10 min).

2.2. Characterisation

X-ray diffraction (XRD) patterns for the samples were obtained with Rigaku Miniflex 600 powder diffractometer. Transmission electron microscopic (TEM) studies were carried out using PHILIPS – CM 200 transmission electron microscope. Optical absorption studies were carried out using SHIMADZU-1800 UV-Vis spectrophotometer and the photoluminescence (PL) spectra of some selected samples were obtained using Hitachi F-7000 Fluorescence Spectrophotometer.

3. Results and discussion

3.1. X- ray diffraction

XRD pattern of chemically synthesized samples for different time of MWI is shown in Fig. 1. The average crystallite size of each sample was calculated from the peak widths using the Scherrer equation [21]. The prominent broad peaks indicate nanocrystalline structure and these correspond to (111), (220) and (311) planes of simple cubic structure of ZnS as identified with JCPDS file no. 01-071-5971.

A significant XRD peak broadening occurred due to low crystallite size such that there was insufficient number of planes to build up sharp diffraction pattern. This arises due to the distribution of local strain during crystal structure formation. The contribution of local strain and crystallite size to broadening were analyzed using Williamson and Hall method, which predicted that the observed line broadening (β_{hkl}) is caused by crystallite size and strain [22].Crystallite size contribution is calculated using Scherer formula $\beta_{Cryst} = \frac{0.94\,\lambda}{D\cos\theta}$ λ is the wavelength of the X-ray used and θ is Bragg angle. Strain contribution is calculated by the equation $\beta_{strain} = \varepsilon\tan\theta$, where '$\varepsilon$' is the microstrain. Following the arguments above, line broadening can be written as a combination of line broadening due to crystallite size and strain;

$$\beta_{hkl} = \beta_{Crystallite} + \beta_{strain} \tag{1}$$

$$\text{i.e.}\,\beta_{hkl} = \frac{0.94\lambda}{D\cos\theta} + \varepsilon\tan\theta$$

$$\text{Or}\ \beta_{hkl}\cos\theta = \frac{0.94\,\lambda}{D} + \varepsilon\sin\theta$$

This represents equation of straight line. $\beta_{hkl}\cos\theta$ was plotted as a function of $\sin\theta$ and shown in Fig. 2. Crystallite size may be estimated from the y-intercept and slope of the straight line gives the microstrain. The sizes of particles calculated at zero strain are given in Table 1.

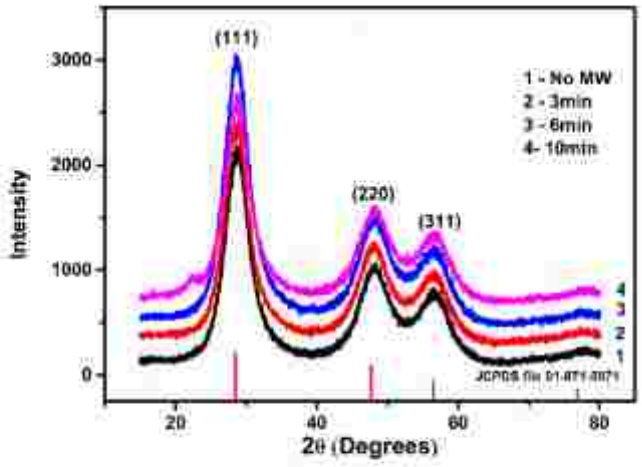

Fig. 1. X-ray diffraction pattern for samples: ZnS-1, ZnS-2, ZnS-3 and ZnS-4.

3.2. Transmission electron microscopy

The particle size and structural morphology of the samples were investigated using TEM and SAED images. Fig. 3a and Fig 4.a show TEM images of ZnS-1 and ZnS-2 respectively, as typifying the samples synthesized without and with MWI. The TEM images indicate that the ZnS NPs are near spherical in shape. The average size and size distributions in the TEM images are estimated by measuring the diameters of individual particles using ImageJ analysis tool. Insets in 3a and 4a are the corresponding size distributions. The sizes of NPs vary between 1 and 6 nm for ZnS – 1 and 2–7 nm for ZnS – 2. To analyze the size distribution quantitatively the particle size distribution was fitted using a lognormal function and the solid red line represents the lognormal fit. It suggests that these nanoparticles have a mean particle size of about 3.68 ± 0.15 nm for ZnS-1 and 4.19 ± 0.09 nm for ZnS-2. These values are high, which may be due to aggregation of nanoparticles that might have occurred during TEM sample preparation processes. However, considerable agglomeration features are also observed in both the TEM images since no stabilizer was used during synthesis to prevent agglomeration. The SAED patterns of the samples are shown in Figs. 3b and Fig 4.b. These depict well defined ring patterns which demonstrate that the crystals are randomly oriented within the structure. The diffraction planes obtained in SAED pattern match very well with the results obtained with XRD patterns for the (111), (220) and (311) planes of sphalerite ZnS.

Information obtained from TEM studies of sample ZnS-2 are furnished below.

With increasing MWI time, the rings become sharper, indicating improved polycrystallinity [23]. The sizes of particles obtained by XRD and TEM are given in Table 1. A steady increase in particle size as a function of MWI time is observed from XRD and TEM studies.

3.3. UV – Vis absorption studies

UV-Vis absorption depends mainly on the size of primary particles. The room temperature UV-Vis absorption spectra of ZnS-1 to ZnS-4 are shown in Fig. 5(a). It can be seen from Fig. 5a that the absorption onset wavelength of the NCs is blue shifted from 337 nm, the absorption onset for the bulk ZnS. This is due to "quantum confinement effect" [24]. But with increase in duration of MWI, a red-shift in the absorption peak is observed due to increased particle size. M V Limaye et al [20] obtained a similar result and attributed the shifting of excitonic absorption band

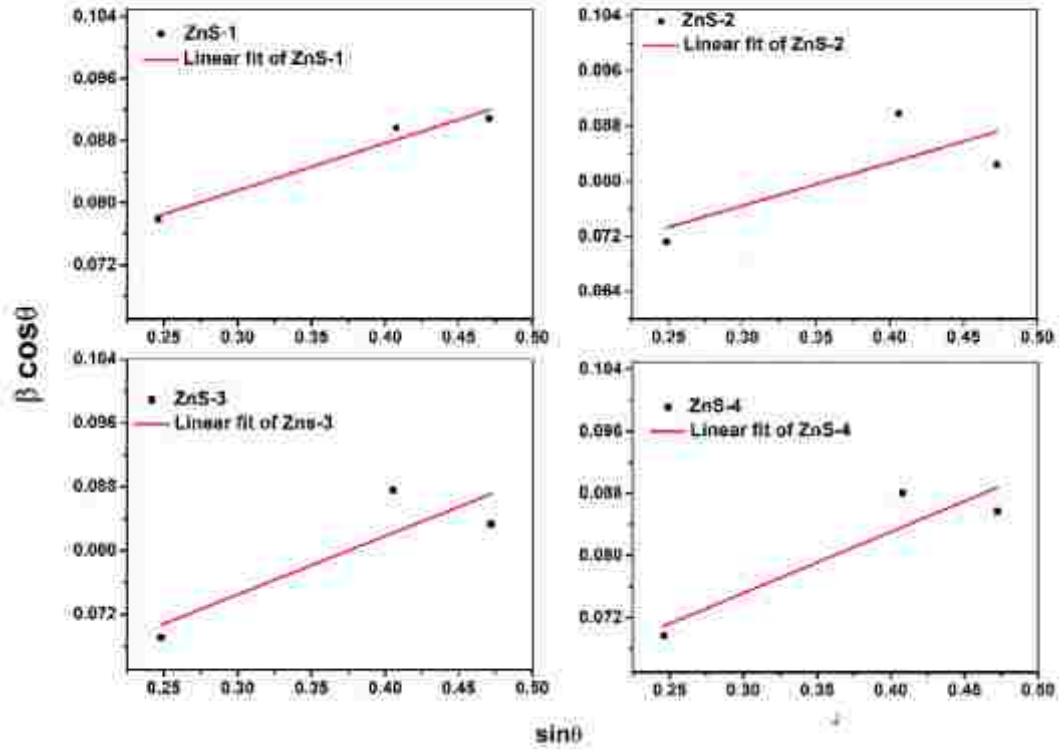

Fig. 2. Williamson-Hall plot for ZnS-1, ZnS-2, ZnS-3 and ZnS-4.

Table 1
Size of nanoparticles from XRD and TEM studies.

Sample Code	Nanocrystallite size (nm)		Particle size (nm)
	Scherrer formula (4θ cosθ)	Williamson-Hall method (4θ sinθ)	TEM image
ZnS-1	1.93	2.29	3.68
ZnS-2	1.98	2.91	4.19
ZnS-3	2.10	2.76	NA
ZnS-4	2.14	2.91	NA

NA – not applicable.

towards longer wavelengths to the increase in dimension of nanostructures, and further, such a process is possible since there is no capping agent to cap the boundaries.

Band gap of ZnS NPs is calculated from the Tauc relation [25] and shown in Fig 5b. The results obtained from UV–Vis absorption studies are tabulated in Table 2.

The energy gap values show a steady decrease implying the increase of particle size with increasing duration of MWI, which confirms the results obtained by XRD and TEM. The energy gap values show a blue shift with respect to the bulk value (3.68 eV). Brus proposed effective mass approximation model [26] to explain such blue shift and according to this model energy band gap of NP can be written as:

$$E_{ng} = (E_g)_{bulk} + \frac{\hbar^2\pi^2}{2R^2}\left(\frac{1}{m_e^*} + \frac{1}{m_h^*}\right) - \frac{1.8e^2}{4\pi\varepsilon_0\varepsilon_r R} \quad (2)$$

where R – radius of nanoparticle, m_e^* - effective mass of an electron in ZnS = 0.34 m_o, m_h^* = effective mass of hole = 0.23 m_o, m_o being rest mass of electron, ε_r = dielectric constant of ZnS = 8.76; ε_0 = permittivity of free space. Sizes of NPs, determined by the above relation are tabulated in Table 2. Fig. 6 depicts the variation of energy band gap and size of nanoparticles with time of MWI.

The ZnS QDs were prepared directly by mixing Zn^{2+} source (ZAD) and S source (SSN) solution. Chemical reactions occurring between Zn

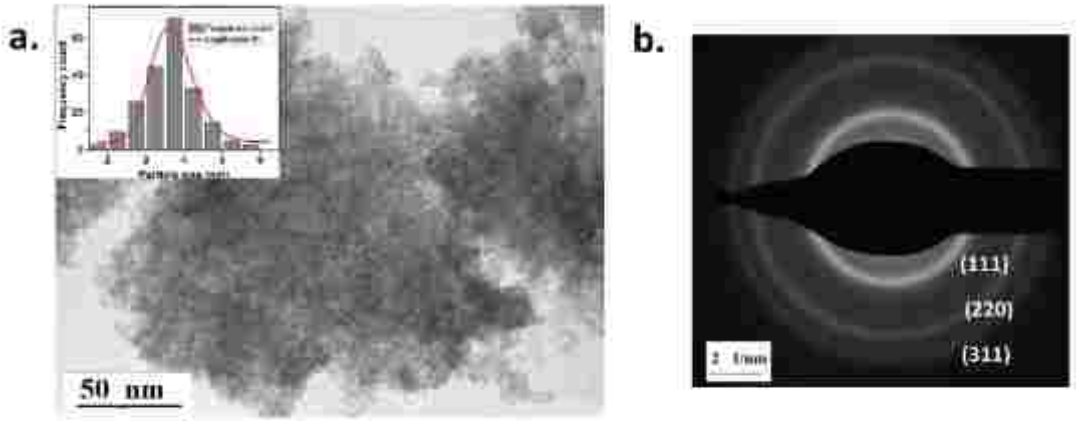

Fig. 3. a.TEM image for ZnS-1sample and inset is histogram of NPs distribution and b. SAED pattern for ZnS – 1.

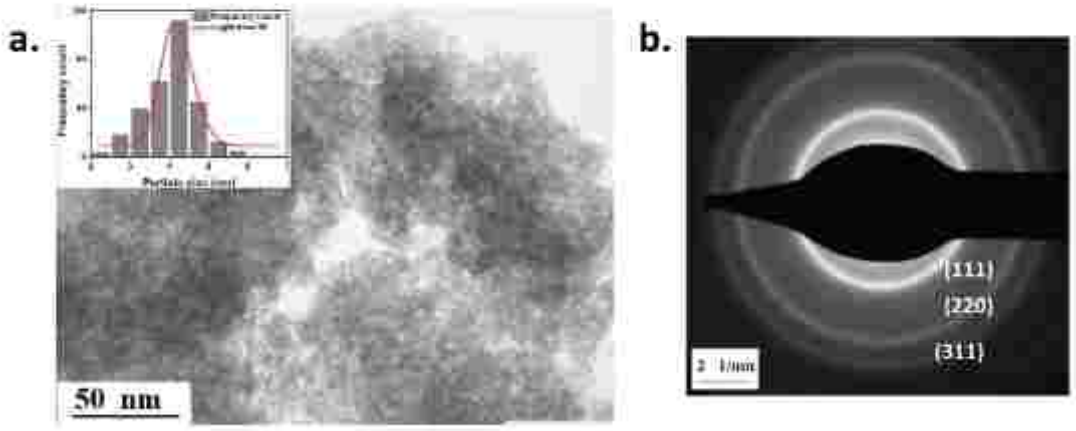

Fig. 4. a.TEM image for ZnS-2 sample and inset is histogram of NPs distribution and b.SAED pattern for ZnS-2.

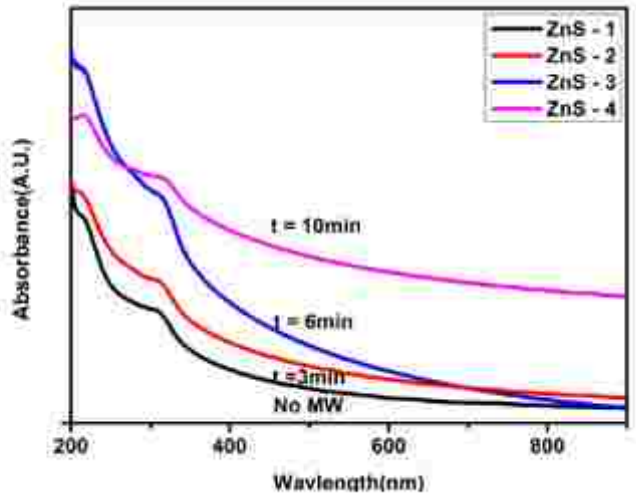

Fig. 5a. Absorption spectra of ZnS-1, ZnS-2, ZnS-3 and ZnS-4.

and S precursors nucleated rapidly to form ZnS nuclei, and these subsequently grew into small ZnS nanoparticles. The formed small nanoparticles may be unstable and start growing quickly into either larger ones or disappeared via decomposition. The stages of nucleation steps as well as the subsequent growth into small NPs are not completely separated [27]. When nucleation and growth occurs in presence of MWI, as in earlier works, the continued MWI resulted in bigger NPs with nonuniform distribution in size [28] This was attributed to Ostwald ripening.

But in the present case, the colloidal solution containing newly formed ZnS nanoparticles was microwave irradiated for different times. The dielectric property of the material in microwave synthesis also plays a major role. Microwave heating occurs by interaction of electromagnetic wave with irradiated material. The charged particles in the material (ZnS NPs) experience force and cause them to rotate or polarize further. When dipolar rotation takes place, heat is generated and gets transferred to outside this region [29]. In heterogeneous mixtures, heat is not homogeneously dissipated and hot spots occur if heat generation rate is faster. With increase in time of MWI, there would be more and more microwave-material (ZnS) interaction at these regions. Such interactions may result in reconstruction of nanoparticles [2,28] and lead to increase in size with increasing MWI time.

3.4. Photoluminescence

Visible luminescence in ZnS can originate only from transitions involving the localized states since energy band gap for bulk form of ZnS is as high as 3.68 eV (energy corresponds to UV region) and it is still higher for nano ZnS. Hence photoluminescence measurements yield valuable information about the energy positions of the electronic states in the band gap (E_g). Emission spectra were recorded for ZnS–1 and ZnS–2 for the excitation wavelength corresponding to their band gap energy.

When a semiconductor absorbs energy greater than E_g, electron and hole pair are formed in the material and later they may result in radiative recombination, emitting a photon. In ZnS the visible PL spectra originates due to point defects present in the crystal. Due to large surface to volume ratio of nanoparticles at smaller dimensions, the defects density increases. The dominant Schottky defects commonly present in ZnS are interstitial Zn(I_{Zn}), interstitial S(I_S), Zn vacancy(V_{Zn}) and S vacancy(V_S) [30]. In colloidal ZnS, vacancy states lie deeper than the states arising from interstitial atoms in the band gap. When an atom is placed into an interstitial site, a rearrangement of the nearest neighbors takes place. The extent of deformation created depends on the size of the incorporated atom. As the sulfur ions are larger ($r = 1.7$ Å) than the zinc ions ($r = 0.74$ Å), interstitial sulfur ion induces more strain to the lattice. Electronic energy levels originating from this site will have smaller binding energies due to strain. Therefore, interstitial sulfur states are located closer to the valence band edge (VB) than interstitial zinc states to the conduction band (CB) edge. The surface S^{2-} vacancy state (SV_S) is located closer to CB than S^{2-} vacancy state (V_S) since electronic levels of surface S^{2-} vacancy possesses smaller binding energy due to surface effect while surface Zn^{2+} vacancy state (SV_{Zn}) is located closer to VB than Zn^{2+} vacancy state (V_{Zn}) [31]. So energy gap between surface S^{2-} vacancies and surface Zn^{2+} vacancies is slightly larger than that between internal S^{2-} vacancies and internal Zn^{2+} vacancies. Based on these considerations, a schematic for various energy bands in the forbidden gap is shown in Fig. 7.

The Fig. 8(a) and 8(b) show the photoluminescence curves for ZnS – 1 and ZnS – 2 samples.

The wavelength corresponding to emission peaks and their energies are given in Table 3.

The energies for the peaks are less than the band gap energies indicating the transitions between the localized states present in the band gap due to the presence of defects in the material.

It is a well reported result [32,33] that emission due to sulfur vacancies is around 420 nm (or 417 nm in ZnS – 2) in ZnS while the emission near 435 nm or 438 nm is due to transfer of electron from surface S vacancy to surface Zn vacancy. Peak at 452 nm is assigned to transition from intrinsic S vacancy to surface Zn vacancy. Emission at 465 nm is assigned to transition from S vacancy to internal Zn vacancy. Emission at 398 nm is attributed to Zn interstitials [34].

In general, the PL properties of nanoparticles depend on many

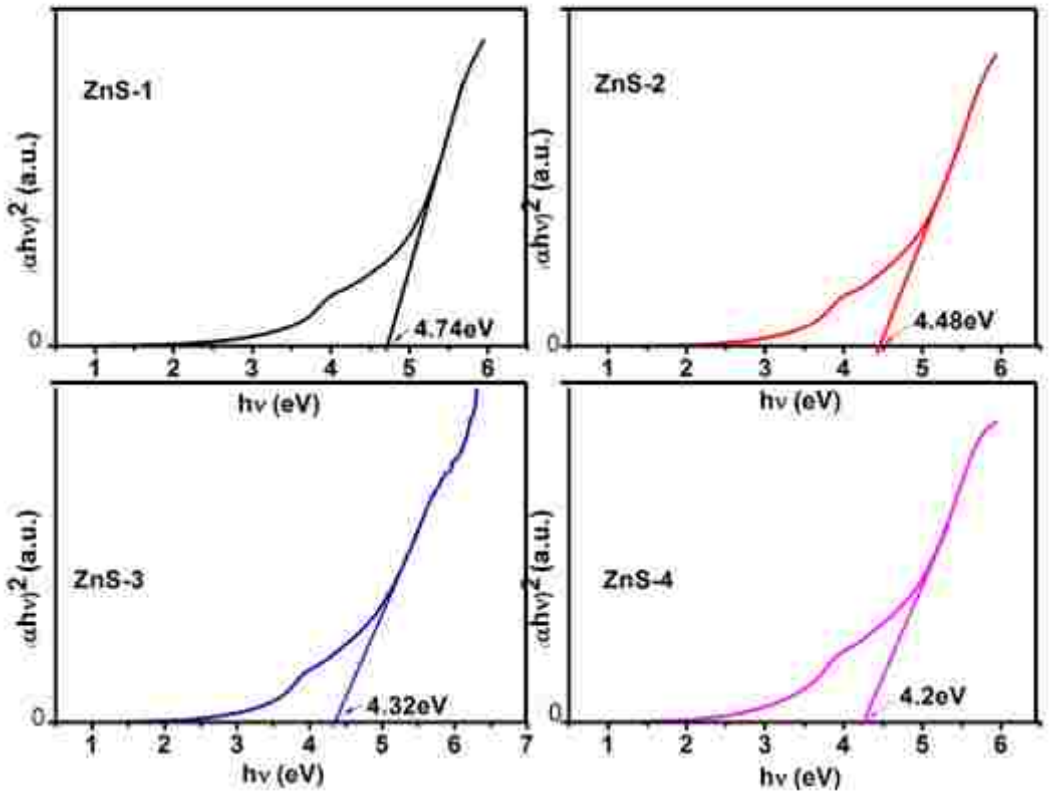

Fig. 5b. $(\alpha h\nu)^2$ vs hν graphs for samples ZnS-1, ZnS-2, ZnS-3 and ZnS-4.

Table 2
Results obtained from UV-Vis absorption studies.

Sample Code	Wavelength at absorption peak (nm)	Energy band gap (eV)	Wavelength at band edge (nm)	Size of nanoparticles (nm)
ZnS-1	311	4.74	262	2.93
ZnS-2	313	4.48	277	3.39
ZnS-3	316	4.32	288	3.7
ZnS-4	319	4.2	296	4.1

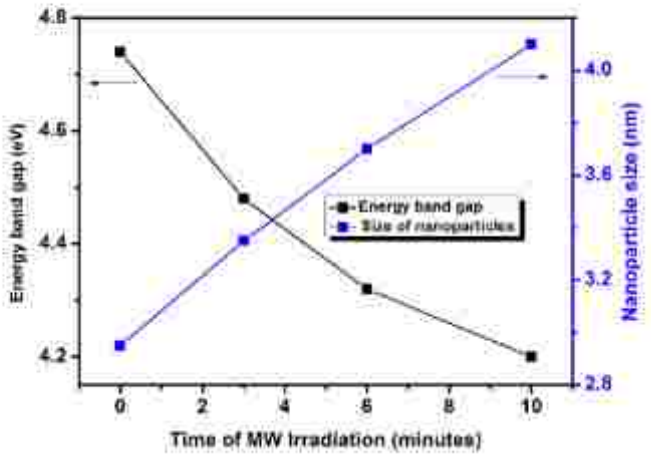

Fig. 6. Variation of energy band gap and size of nanocrystallites with time of MWI.

factors, like particle size, shape etc. due to the formation of different types of defects. Defects present in the crystal serve as sites for non-radiative recombination of electron-hole pairs. So, for enhanced

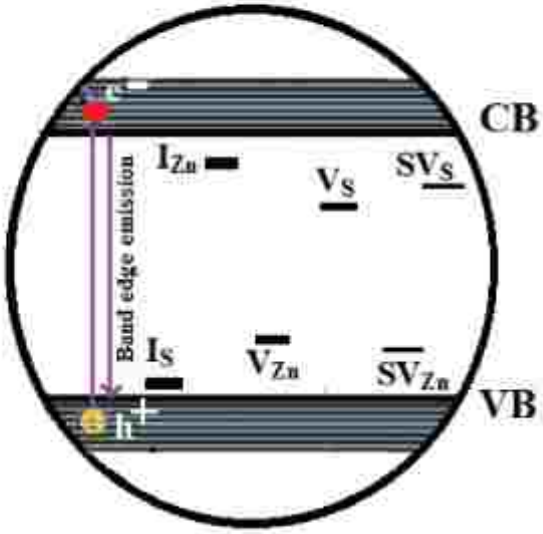

Fig. 7. Schematic showing energy bands due to point defects in ZnS NP.

emission intensities, higher crystallinity with low concentration of defects is desired. Our results of PL spectra indicate increase in crystallinity and the decrease of defects during the growth [35] for increased time of MWI by exhibiting less number of PL peaks for ZnS-2.

4. Conclusions

ZnS quantum dots were synthesized by a facile green chemical route in which chemical precipitation method for the synthesis of ZnS NPs is followed by microwave irradiation for different duration of time.

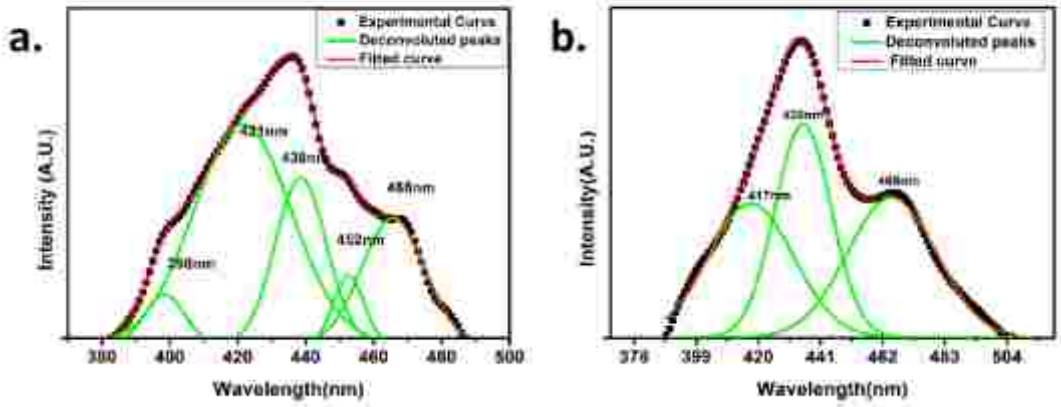

Fig. 8. a. emission plot for ZnS-1 and b. emission plot for ZnS-2.

Table 3
Wavelengths of emission peaks and their energies for samples ZnS – 1 and ZnS – 2.

Sample Code	Wavelength for emission peak (nm)	Energies of emission peak (eV)
ZnS – 1	398	3.12
	421	2.95
	438	2.84
	452	2.75
	468	2.67
ZnS – 2	417	2.98
	438	2.86
	465	2.67

- The synthesized NPs possessed sphalarite structure and size of particles increased with increase in duration of MWI. With increase in time of MWI, microwave-material (ZnS) interaction probabilities increase; leading to an increase in size.
- Photoluminescence spectra showed lesser number of defects for MWI sample indicating that the continued MWI could eliminate some of the surface defects. From this we can conclude that surface modification of NPs suitable for a particular application can be done using MWI.

CRediT authorship contribution statement

B. Lalitha Devi: Methodology, Investigation, Formal analysis, Writing – original draft. **K. Mohan Rao:** Conceptualization, Supervision, Writing – review & editing. **D. Ramananda:** Writing – review & editing.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Acknowledgement

The authors thank Bhandarkars' Arts and Science college, Kundapura for sample preparation facilities and Manipal Academy of Higher Education, Manipal- for characterizations. One of the authors, Lalitha Devi B thanks the University Grants Commission, Government of India, for teacher fellowship.

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22.2022-Impact

Impact of coalition politics on Indian parliamentary institutions (Indian experience)

Dr. Shubhakarachary

Abstract
The Parliament of India, is the supreme bilateral legislative body of Republic India and It is composed of the President of India and the two houses the Rajya Sabha (Council of States) and the Lok Sabha (House of the People). As we know that the President in his role as head of legislature has full powers to summon and prorogue either house of Parliament or to dissolve Lok Sabha. The president can exercise these powers only upon the advice of the Prime Minister and his Union Council of Ministers.
Those elected or nominated by the President to either house of Parliament are referred to as Members of Parliament (MP). The Members of Parliament, Lok Sabha are directly elected by the Indian public voting in Single-member districts and the Members of Parliament, Rajya Sabha are elected bythe members of all State Legislative Assembly by proportional representation. The Parliament has a sanctioned strength of 543 (as called as Magic number to form government in central) in Lok Sabhaand 245 (as called as Magic number to form government in state) in Rajya Sabha including the 12 nominees from the expertise of different fields of science, culture, art and history. The Parliament meets at Sansad Bhavan in New Delhi.

Keywords: Parliament of India, Rajya Sabha, Lok Sabha, Election.

1. Introduction

The roots of the demand for parliamentary system of governance in the country may arguably, be traced back to the early 20th century when Indian persistently demanded the establishment of parliamentary Institutions on the pattern of British Polity of afford an opportunity to them to associate themselves with the governmental activities in the country. Though the colonial rulers had consistently refused to accede to the wishes of natives on ground of the unsuitability of the Indian to run such kinds of Institutions as such for India, on the other, the resolve of the enlightened Indians for some sort of parliamentary systems to be established in the country become progressively hardened with every of the British India government for the same. Afterwards in most, if not all of the documents proposing the model of political set up for Independent India like Nehru report, Sapru report the draft constitution of three India published by socialites party and Hindu Mahasabha as well as by Individuals like Manavendranath Roy. The argument for parliamentary system of government figured prominently as the Ideal model of governance for India after Independence.

Austin reveals was what form of Political Institutions would foster or at least permit a social revolution? As Austin Informs further two competing system of political institutions were available to the framers to opt for first looking back in to the nations rich heritage and findings Indigenous Institutions capable of meeting the country's needs, the framers would base the constitution on the village and its panchayaths and erect upon them a superstructure of Indirect, decentralized government in the Ghandhian Manner and second, opting for the Euro – American constitutional traditions, reflected in the form of parliamentary system, though it meant continuing in the country had taken during the colonial period. The constituent assembly's decision in favour of latter option was arrived at with over whelming majority, with only one member rising a voice in favour of

the village panchayath's though the broad confronts of his scheme of things also appeared to be in the moulal of representative democratic governance. Meaning of coalition Govt, Coalition means alliance, combination, Fedaration, Union of fusion in to one whole, A group formed by people

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23. 2020-krnataka akeekarana

PRATIBIMBA – Multidisciplinary Kannada Research Journal of IIMRD
ISSN: 2582-2284
Vol-2 Issue 2, Sep-Oct 2020, 39-64
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www.iimrd.com

ಕನ್ನಡ ಕಾವ್ಯದಲ್ಲಿ ಜೈನ ಧರ್ಮದ ಪ್ರಭಾವ

ಪವಿತ್ರ ಎಸ್[1]

ಪೀಠಿಕೆ

ಕನ್ನಡ ಸಾಹಿತ್ಯ ಪರಂಪರೆಯಲ್ಲಿ ಜೈನ ಧರ್ಮದ ಪ್ರಭಾವ ಅಪಾರವಾಗಿದೆ. ಕನ್ನಡ ಸಾಹಿತ್ಯದ ಆದಿಕವಿ ಪಂಪನಿಂದ ಹಿಡಿದು ಹಲವಾರು ಕವಿಗಳು ಜೈನ ಧರ್ಮದ ಪ್ರಭಾವಕ್ಕೆ ಒಳಗಾಗಿದ್ದಾರೆ. ಜೈನ ಧರ್ಮದ ಪ್ರಭಾವ ಕನ್ನಡ ಸಾಹಿತ್ಯದ ಮೇಲೆ ಎಷ್ಟರ ಮಟ್ಟಿಗೆ ಇದೆ ಎಂದರೆ ಕನ್ನಡ ಸಾಹಿತ್ಯದ ಮೊದಲ ಐದು ಶತಮಾನಗಳ ಸಾಹಿತ್ಯ ಜೈನ ಸಾಹಿತ್ಯವೇ ಆಗಿದೆ. ಕನ್ನಡ ಸಾಹಿತ್ಯದ ಮೊದಲ ಕೃತಿ ಕವಿರಾಜಮಾರ್ಗ ಜೈನ ಕವಿಯಿಂದ ರಚಿತವಾಗಿದೆ. ಕನ್ನಡ ಸಾಹಿತ್ಯದ ಮೊದಲ ಕವಿ ಪಂಪ ಜೈನ ಕವಿಯಾಗಿದ್ದಾನೆ. ಕನ್ನಡ ಸಾಹಿತ್ಯದ ಮೊದಲ ಕಾವ್ಯ ಪಂಪ ಭಾರತ ಜೈನ ಕಾವ್ಯವಾಗಿದೆ. ಕನ್ನಡ ಸಾಹಿತ್ಯದ ಮೊದಲ ಚಂಪೂ ಕಾವ್ಯ ಪಂಪ ಭಾರತ ಜೈನ ಚಂಪೂ ಕಾವ್ಯವಾಗಿದೆ. ಕನ್ನಡ ಸಾಹಿತ್ಯದ ಮೊದಲ ಸಾಂಗತ್ಯ ಕೃತಿ ಜೈನ ಸಾಂಗತ್ಯ ಕೃತಿಯಾಗಿದೆ. ಕನ್ನಡ ಸಾಹಿತ್ಯದ ಮೊದಲ ಷಟ್ಪದಿ ಕೃತಿ ಜೈನ ಷಟ್ಪದಿ ಕೃತಿಯಾಗಿದೆ. ಕನ್ನಡ ಸಾಹಿತ್ಯದ ಮೊದಲ ಸಾಂಗತ್ಯ ಕೃತಿ ಜೈನ ಸಾಂಗತ್ಯ ಕೃತಿಯಾಗಿದೆ. ಕನ್ನಡ ಸಾಹಿತ್ಯದ ಮೊದಲ ಷಟ್ಪದಿ ಕೃತಿ ಜೈನ ಷಟ್ಪದಿ ಕೃತಿಯಾಗಿದೆ. ಕನ್ನಡ ಸಾಹಿತ್ಯದ ಮೊದಲ ಸಾಂಗತ್ಯ ಕೃತಿ ಜೈನ ಸಾಂಗತ್ಯ ಕೃತಿಯಾಗಿದೆ. ಕನ್ನಡ ಸಾಹಿತ್ಯದ ಮೊದಲ ಷಟ್ಪದಿ ಕೃತಿ ಜೈನ ಷಟ್ಪದಿ ಕೃತಿಯಾಗಿದೆ.

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24. 2020-petty saving

IJCRT.ORG ISSN : 2320-2882

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

PETTY SAVINGS & INCOME OF RURAL WOMEN EMPOWERMENT (WITH REPRENCETO KUNDAPUR TALUK)

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ABSTRACT:

Indian society and family is dominated by male and women are less involved and totally have beenneglected while making decision making process especially in financial decision. Their family obligation, limited access to finance, gender discrimination in family, illiteracy, low management or more such issuesetc are the most important hurdles in the path of empowerment. Rural women today have been suffering alot due to the feeling of helplessness and lack of decision making capabilities in financial matters. Self help groups (SHG's) are the most recent development for them which could enable them to come forwardto make them self dependent and self employed. These SHG's are informal groups of women where members pool their savings and re-lend in the groups on rational basis, depending upon the individual consumption, production or investment needs. But it's all operated very secretly keeping away a word from lead of the family. Thus SHGs have been able to provide rudimentary banking services to the members on cost effective basis and meet urgent micro-credit requirements in time as for as employment of women is concerned the women self help groups in India have been recognized as an effective strategy for the employment of women in rural as well as an effective strategy for the employment of women in rural comparatively urban areas, bringing women together from all spheres of life to fight for their rights. This study high-lights whether SHGs have succeeded in empowering women and making them socially, politically, culturally and economically strong and optimistic.

Key words: Self help Groups, Empowerment, domestic, credits, livelihood, Market, Micro-finance, Urban, Rural, Saving

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25.2020-physico:

Current World Environment
PRATIBHA – Multidisciplinary Kannada Research Journal of IMRD
An International Research Journal of Environmental Science

Physico-Chemical Analysis of Mangrove Soil, Kundapura, Karnataka, India

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Email: vijay.kshalli@gmail.comDOI:
http://dx.doi.org/10.12944/CWE.15.3.27

Abstract

The present study was carried out to determine the periodic variation in physico-chemical characteristics of mangrove soil samples. The soil samples had been accrued from four distinctive places of Kundapura mangrove areas in three seasons, monsoon, pre-monsoon and post-monsoon. Soil analysis pertaining to various variables such as total Nitrogen, Phosphorus, Potassium, pH and Electrical conductivity. Soil pH is assorted from 3.84 to 6.66. Electrical conductivity is assorted from 0.02 dSm-1 to 9.60 dSm-1. Available nitrogen is assorted from 30.7kg/ha to 323 kg/ha. Available phosphorus concentration has ranged between 1.37 kg/ha and
47.27 kg/ha. Available potassium is differed from 117.43 kg/ha to 537.63 kg/ha. The results confirmed variations in all of the analyzed parameters of the soils amassed from four stations.

Introduction

Mangroves are tropical plants which grow along the tropical coastlines of the world. They are found growing along shallow sheltered coasts. Mangroves are responsible for several economic as well as ecological services[1].

Mangroves are the most productive and biologically important ecosystems of the world, as they offer ecological balance, goods and offerings to humans; performs an essential position in nature with the aid of using nurturing ecological, safety and social services[2]. Like any other ecosystem mangrove ecosystem is likewise a cradle and predominant Bioresource for plenty beneficial bioingredients together with many different species which are directly or indirectly depending on the sustenance of mangrove ecosystem[3]. Marine ecosystems are numerous habitats, endowed with physical, chemical, and geographical versions in the ecosystems, wherein the gradation from relatively productive organisms to especially specialised organisms exists[4].

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IJCRT.ORG ISSN : 2320-2882
PRATIBIMBA – Multidisciplinary Kannada Research Journal of IIMRD
INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)
An International Open Access, Peer-reviewed, Refereed Journal

A Socioeconomic and Educational conditions of Koragas (With reference of 100 selected families ofKoragas in and around Kundapura in Udupi District)

ABSTRACT:

The Koraga tribe is a primitive tribe or to say is one the oldest tribe of the region is found mainly on such regions on the part of Dakshina Kannada and Udupi districts of Karnataka and the Kasaragod district of Kerala, south India. These areas in Karnataka, are altogether often referred to as Tulu Nadu. They are also found in small numbers in adjoining districts of Uttara Kannada, Shimoga and Kodagu. The Koraga are classified by the Government of India as a Scheduled Tribe.

The Koraga, who numbered 16,071 according to the 2001 census of India, have their own language, classified as an independent Dravidian language, which is strongly influenced by Tulu, Kannada, Malayalam, languages commonly found in their area.

Tribal community is an integral part of Indian society. India has the second largest tribal population in the world next to Africa. Tribal population add upto 8.6% of the total population of the nation as per 2011 census. It means their population is more than 20 crores. In Karnataka we have 50 Tribal communities especially Soligas, Gondas, Valmikies, Jenu kurubas, Hakkipikkies, Marathi, Malekudiyas, Kadukurubas, Kammaras, Meda, Todas and others. The Jenukurubas and Koragas are considered as Primitive, vulnerable or aboriginal tribes of the regions. In an undivided South Kanara we have observed Four major tribal communities namely Marati / Marati Naiks Malekudiyas, Kammaras and Koragas. The population of these four tribals is less than 2 lakh.

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28-2020-Individual

Published: 13 September 2019

Individual and combined effects of organophosphate and carbamate pesticides on the cricket frog *Fejervarya limnocharis*

Multidisciplinary Kannada Research Journal of IIMRD

ISSN: 2582-2284

Vol-2 Issue 2, Sep-Oct 2020, 11-26

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Abstract

Many amphibians use water bodies associated with agro-ecosystem for breeding and thus are exposed to multiple chemicals. *Fejervarya limnocharis* is a common frog occurring in rice paddy fields. The timings of pesticide application generally coincide with the tenure of the occurrence of tadpoles in shallow waters of paddy fields. Malathion and carbaryl are frequently used in rice paddy fields to control leafhoppers and rice bugs, respectively. Therefore, effects of mixtures of malathion and carbaryl insecticides on the survival of tadpoles and emergence of froglets of *Fejervarya limnocharis* were studied in the laboratory using combinations of three concentrations of carbaryl (0, 25, 50 µg l^{-1}) with four concentrations of malathion (0, 100, 250, 500 µg l^{-1}). Both malathion and carbaryl were found to be toxic to tadpoles. A reduction in tadpole survival and froglet emergence was recorded with increasing concentrations of carbaryl and malathion. We found significant interaction between carbaryl and malathion on tadpole survival and froglet emergence. Tadpoles exposed to combination of pesticides showed early emergence as froglets compared to control. The extent of toxicity and pesticide interactions are varied when mixed in different concentrations. The reduction in survival, froglet emergence and delay in emergence of metamorphs can occur in rice paddy field as both pesticides are used simultaneously. Therefore, combinations of pesticides may have significant negative effects on the frog population of agro-ecosystems, which requires further confirmation through appropriate field experiments.

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PÉsgÁUÀ §ÃqÀPÁlÃÔ ¸ÀªÀÄÄzÀAiÀÄÄzÀ ¸ÁªÀiÁfPÀ, DyðPÀ ¹ÄÄvÀÛ ±ÉÊPÀ®ÁPÀ

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30. **2020-coalition:**

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"COALITION POLITICS IN KARNATAKA"

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ABSTRACT

In the context of contemporary political realities, coalition government it seems has come to stay as an essential features of Indian polity. Coalition polities centres round political parties as it involves games played by the latter to gain the maximum pay off. It became relevant when no single party is able to reach power by itself. In such circumstances one party join another one or more parties to fight the elections and to form government.

Coalition or party alliance may be pre-election or post-election phenomenon. Some parties may cluster together pool their resources and work jointly to maximize their gain by defeating the rivals in the elections processes. If there is a single alliance fighting against individual rival parties. The possibility of alliance winning more seats than the rivals in stronger. If two equal strong alliances are pitted against each other the effect will be that of strong two party system. Either of them getting a majority to form the government. If more than two alliance contest. The result will be either in favour of one of them or none at all. With no alliance being able to win a majority in the last situation a government is possible only by means of a further coalition of two or more alliances.

Keywords: Parliament, Coalition, Vidhanasabha, Vidhana Parishad, Election, Democracy, Election Commission, Federal system etc.

Introduction

Let we begin four different propositions in the particular article one proposition is the fact that the "Mantra of coalition politics" viewed or analysed from the perspective of social categories in other words political coalition of social categories has become the hall mark of Indian politics. Secondly "coalition politics"cannot be identified with the arrival of independence or treated as post-colonial phenomenon alone rather it has to be located in anti- colonial struggle and also in the resistance to hegemonic character of the nationalist

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14. A.S. Narang - Indian Government and Politics.
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their own work. When an employee utilizes the facilities and favors provided by the organization negatively, the purpose would not be served of having the incentives to have a healthy social life.

Conclusion

A good work-life balance is very important in our life. Working is necessary and hard working is surely not bad but we need to find the right balance to keep our body healthy. Some rest is always necessary and that is something that the so called "workaholics" many times forget. Setting healthy boundaries is essential for a healthy work life balance. We must stay attuned to our patterns of working. In today's world, managing work life balance can be tough if you don't know what you're doing. Work is such a large part of your life that it can seem easier to forgo the other areas such as recreation, spirituality and family, to name just a few. But it's important that you find enough time to enjoy all different aspects of your life, otherwise you can burn out.

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International Journal of Applied Research 2019;
5(11): 180-183

Differentiated teaching, learning and comprehensionactivities in a mixed ability class: A challenge

Rohini HB and Sharan SJ

Abstract
English is recognised to be, in Indian minds, a socially well respected and a standardised way of living. In present times, English is the most preferred language. Though Language learning is a natural process for all, the students of other languages, are required to put effort in learning a foreign language. The students of rural and semi-urban areas in India face such problems for English is not their mother- tongue. Nowadays most of the institutions are filled with heterogeneous classes where students of different levels of attention, interest, learning styles, speed, maturity, types of intelligence are formed tobe in groups which pose direct challenges to teachers. Teachers' main objective is to connect with all the students by interacting and monitoring them in various other ways to achieve effective teaching. Students of the rural areas assume English as a subject study and do not realize the need and importance of English as a language of communication used around the world. A systematic approach should be followed in order to solve the hurdles. Moreover the teachers should aim teaching not just forknowledge but skill. This paper deals with the problem of teaching English in mixed ability classes to achieve better results in the teaching and learning of English.

Keywords: English language, language learning, mother-tongue, students, teachers & hurdles

Introduction

In a multilingual and multicultural country like India, classes of mixed ability groups are a feature of every small town and village. Mixed ability classrooms that accommodate students having different learning styles, interests, prior knowledge, attitudes, strengths, personalities and skills, are commonly found. There is a pedagogic challenge associated with providing equal opportunities to different groups of students, who may be high-ability students consisting of 25% of the class, low ability students consisting of 25% or the average-ability students constituting the rest 50% percent of the class. At the same time, achieving quality standards has led to performance based segregation known as ability grouping. The implications of ability grouping include negative effect on the self-concept of low-ability students.

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International Journal of Kannada Research
www.kannadajournal.com

ISSN: 2454-5813
IJKR 2019; 5(4): 96-103
© 2019 IJKR
www.kannadajournal.com
Received: 25-08-2019
Accepted: 27-09-2019

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International Journal of Applied
Research 2020; 6(1): 140-144
PRATIBIMoRI – Multidisciplinary Konkani Research Journal of HMRD

Dr. Shubhakarachary

Abstract
The concept of terrorism is not a new phenomenon. The term originated In France and entered the English Language in 1795 after the region of terror. Its usage dependent on the domain concern of particular age. Even in the very first century there was 'Shimnikyo' a terrorist group based on religion operating in Palestine.
Terrorism means an armed violent movement directed against government as well as non – governmentinvolving premeditated attacks with arms, ammunition and explosive against civilians and resorting to tactics of intimidation such as hostage taking and hijacking but not seeking territorial control. They are encouraged by some countries, external powers to create instability in other countries. They indulge in looting, kidnapping, murder, shooting, arson and other unlawful activities by serve their purpose to creating instabilities or deterring the innocents.
In the recent decades life in the world has become insecure because of global terrorism. The law and order enforcing agencies throughout the world find themselves helpless in meeting the growing challenge posed by global terrorism. One is exposed to the danger of becoming a victim of the terrorist activity. Terrorist are sometimes compared to snakes, which may be hiding at the most unlikely places, waiting for the targets most vulnerable to their attacks.

Keywords: English language, ethos, terrorism

Introduction International Terrorism

International terrorism happens to be one of the most major problems currently being faced by international community. It has been posing a serious threat to the security of all states, particularly to the international peace and security. Since the last decade of 20th century, it has been a keen objective of mankind to bring an end to terrorism which has been adversely affecting the resources and power of such states as a result of directly facing this menace. Its has several form (cross border terrorism, fundamentalist, terrorism, Jihadi terrorism, Narco terrorism, ethnic terrorism ISIS terror and some other forms). Terrorism has put strainimmense on international relations. The term international terrorism is used to refer the abouttypes.

35.2019-Insects

Insects Diversity of Kundapura Taluk, Udupi,Karnataka, India

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Abstract: *We quantified diversity of insects at Kundapura from February 2017 to March 2018. Field observations were made once in ten days for a year. Identified the species based on their colour of wings, markings, body shape, habit, wing shape, and structure of legs. During one year survey at three different sites such as cropland, plantation and forest,we recorded 69 species of 23 families and 8 orders.In three study areas, higher species richness was recorded at plantation with more number of species in order Lepidoptera indicating availability and access to food plants. In Cropland contains Order Lepidoptera only. The present study reveals that the plantation provides suitable environmental conditions for insects.*

1. Introduction

Insects are the world's most diverse group of animals on Earth, in terms of both taxonomic diversity and ecological function. Insects represent the vast majority of species in terrestrial and freshwater ecosystem. They have adopted for almost every conceivable type of environment from the equator to the arctic and from sea level to the snowfield of highest mountains, on land, in air and water and almost everywhere [14].

Insects diversity accounts for a large proportion of all biodiversity on the planet- over half of the estimated 1.5 million organism species are classified as insects [15]. The great number of insect species and individuals were created by a number of factors including their long geological history, the capability of flight, their small size that allows survival in many various habitats, their ability to store sperm for delayed fertilization, and their general adaptive abilities to the environment. Insects have remarkable fertility and reproductive abilities, which have usually vast numbers of individuals in nature. The class insect will constitute the dominant group of animal kingdom representing 80-92% of the entire animal kingdom. Insects play an important role in terrestrial ecosystems as herbivores, pollinators, decomposers, predators and parasites [22].

The presence of insects at a particular habitat depends on a wide range of factors, the availability of food and climatic conditions suitable for egg laying and suitable flowers for feeding of adults govern the distribution of insects [2].Animals particularly insects are considered to pollinate nearly 70% of trees in lowland tropical rain forest [5,10].

In India nearly 59,353 species of insects belonging to 619 families constituting nearly 6.83% of the world insect fauna have been reported. Butterflies are one of the mostimportant assemblages of insects that act as biodiversity indicators as well as nature's gardeners. Owing to habitat destruction for developmental activities in urban environment and unscientific management of natural resources, much of our native butterflies are fast disappearing and at present, their survival is under threat [1].

2. Materials and Methods

Study area: To accomplish the present study, following three study sites were selected based upon the vegetation patternin and around Kundapura.

Site 1: Mullikatte
Site 2: Hosadu
Site 3: Movadi

Figure 1: Geographical location of study area

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36.2019-women and leadership

PRATIBIMBA – Multidisciplinary Kannada Research Journal of IIMRD

Impact Factor – 6.261 | Special Issue - 162 | March 2019 | ISSN – 2348-7143
UGC Approved Journal List No. 40705

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Women and Leadership

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'Leadership is not about being in charge, it's about taking care of those who are in your charge' - Anonymous

We live in a world where half the sky is held by women yet women raising to the ceiling is considered a taboo by many; a world where every other person you meet is a woman but while meeting a woman in authority, you would probably come across hundred odd men in power (such an overwhelming ratio of men who are deemed 'leaders' compared to women with the same crown); a world supported and nourished by men and women equally but very clearly, 'dominated' by men. Being born in such a world as a woman (by chance) BUT being a leader (by choice), I would like to present my account on the very taboo of 'women and leadership' through this article.

A simple question to begin with – "How many of us, men and women both included, believe that women should and ought to be in positions of authority/leadership? Well, speaking of men, the destined 'Tough ones, hard minded, strong souled' – starting off with the ideas of authority way back from the time of Adam and Eve - not much that you can complain with their belief that women ought to be in kitchens and their 'disgrace' in accepting orders from women. (Not all of them, just speaking about the majority).

But how many of us women are affirmative in this regard? This is surely a question to ponder upon. Recollecting my very own experiences –

My 'Mother' had a son after having had 5 daughters in a row because according to her, only a male child has the authority to look after the house after them (Amazing!). She expected me to bend my head while in conversation with anyone – obviously raising my head would be a sign of someone who would want to stand tall on their own feet and I was expected not to do so for the rest of my life anyways (Yes, perks of being a girl). To add to it, heart-wrenching encouraging words from my 'Headmistress' (A Woman) during our board examinations – "All the boys will have to get good grades because you have a long way to go. As far as girls are concerned, even a single mark more than the pass marks would be amazing" (Because, the skill of washing dishes and clothes would be learnt at home meanwhile making us all perfect brides). Fighting against all these odds and raising today to have a Doctorate degree in Sanskrit has been a real struggle for me. Well, honestly I expected things to have a positive turn in this decade but even today, I see in certain professions, a disparity in the salary paid to a male and female worker with the same work load; the explanation given being that it is only men who are supposed to support the family (What will a woman do with all that money anyways?) Inequality exists despite negations regarding the same and it is perhaps the biggest obstacle in the way of women being global leaders. (Crossing the four walls of the house itself is a daunting task amidst all this fuss, leave alone leading a mob).

Well, the idea of telling all these stories is not to portray my frustration with the way life has been. All I want to project is the fact that, leave aside men, even women in past never considered the idea of 'women in leadership' as something that is feasible and acceptable. In fact it's not just about me, there have been surveys conducted all across the country which clearly display the ideals. Studies have also shown that women tend not to see themselves in the higher position while men almost always expect to be boosted in professional career. The Huffington Post mentioned last year that only 23 Fortune 500 Companies were led by women (How much more proof to project the disparity?). All the more, this very account of Emmeline Pankhurst, British Political Leader, summarizes everything - "I have often been the only woman in the room and I thought to myself, 'Well, I don't think I'll say anything today because it'll sound stupid,' and then some man says it and everyone thinks it's brilliant and you think, 'Why didn't I talk?'(Recorded in 'Time', September 2017)

To be honest, the point of this article is not to bring about the disparity in the field but to make those few women, who read the article, realize the fact as to how poised for success they are in leadership roles, but invariably tend to ignore their immense potential.

First and foremost, balancing work and personal life is something that only women are adept at. They just seem to know how much time to invest in each and bring out the optimum in both. Reiterating my homely diaries, my husband took a leave off work when he had to take care of the house in my absence and for me, it is almost a daily task. (Not boasting but point being that if women can handle so much, why deprive her of the top position?)

Secondly, it is a known fact that women are indeed empathetic. I, as a colleague, would find it easier to approach a woman leader with my personal problems than a male counterpart because obviously, women would be able to comprehend the emotional aspect behind the problems

Printed by : PRASHANT PUBLICATIONS

PRATIBIMBA – Multidisciplinary Kannada Research Journal of IIMRD

International Journal of Applied Research 2019; 5(12): 208
-217

Changes in kinship and family among Koragas: A casestudy of selected villages in Kundapur Taluk, Udupi district

Ramachandra

Abstract
In Dakshina Kannada Koragas are considered as untouchables and the practice of social distance, keeping out of personal and social contact is followed in case of Koragas. Hence, Koragas are not allowed to mingle with others in any of the social functions as well as they are also not allowed to enterinto places of worships the persons who touches a Koraga are considered to carry the risk of impurity. Since the concept of untouchability has its roots in the ideas of cleanliness and hygiene it is the lifestyle of Koragas who used to eat dead animals and the left over foods has forced other to keep themselves away from them.

Keywords: Korgas, untouchable & social condition

1. Introduction

The Tribe constituent is an important segment of Indian society. India has the second largest tribal population in the world next to Africa. Tribal population constituting 8.8% of the total population of the nation as per 2011 census. It means their population is more than 20 crores. In Karnataka we have 50 Tribal communities especially Soligas, Gondas, Valmikies, Hakkipikkies, Marathi, Malekudiyas, Kadukurubas, Kammaras Meda, Todas and others. The Jenukurubas and Koragas are considered as Primitive tribal groups or vulnerable or aboriginal tribes of the regions.

In an undivided South Kanara we have observed three major tribal communities namely marati (Marati Naiks) Malekudiyas and Koragas. The population of these three tribals is less than 2 lakh.

2. Objectives

The specific objectives of Research paper is as follows:

1. To analyze the social and cultural life of Koragas with respect of their socialstratification, clan system, kinship and family patterns.
2. To observe the transition from tribal character to caste system in the above-mentionedspheres of social life.
3. To know whether koragas are Sanskritised, Westernised, Modernised, Hindunised andChristianised.

3. Methodology

The information regarding the Research paper has been collected both by primary sources and secondary sources. They are as follows:

a. The information related to the past history was obtained through the records maintainedby administrative bodies.
b. The participant observation and Interview schedule are used in this study.
c. Group discussion was orgainsed to gain information about the various aspects of the wayof life of Koragas.

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PRATIBIMBA – Multidisciplinary Kannada Research Journal of IIMRD

International Journal of Applied Research 2019; 5(11): 247-254

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39.2018-Gayathri Pai

ISSN (Online): 2319 – 6734, ISSN (Print): 2319 – 6726

www.ijest.org ||Volume 7 Issue 1|| January 2018 || PP. 40-46

Antimicrobial Activity of Endophytic Fungi Isolated from Ethnomedicinal Plant *Phyllanthus reticulatus* Poir.

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ABSTRACT: *The objective of the present study was to isolate Endophytic Fungi from ethnomedicinally important plant Phyllanthus reticulatus Poir. [Kirganelia reticulata (Poir.) Baill.] and to evaluate antimicrobial activities against human pathogens. A total of seven endophytic fungi were isolated and identified from the leaves and stem of Phyllanthus reticulatus Poir. Viz., Geotrichum candidum, Cylindrocladium sp. Fusarium sp. Cladosporium cladosporioides sp., Mucor pusillus, Rhizopus sp. and Alternaria alternata. The cell free ferment broth was subjected to antimicrobial assay against human pathogenic microbes such as Escherichia coli, Pseudomonas aeruginosa, Staphylococcus aureus and Candida albicans. The results of the present study showed that Cladosporium cladosporioides has antibacterial activity against Pseudomonas aeruginosa and Fusarium sp. is found to be effective against Escherichia coli. While other endophytic fungi tested against human pathogens did not show any effectiveness. This study has proven that Phyllanthus reticulatus Poir. is a very good source of endophytic fungi with potential to produce bioactive compounds having antibacterial and antifungal effect.*

KEYWORDS: *Antimicrobial, Endophytic fungi, Phyllanthus reticulatus Poir.*

I. INTRODUCTION

Endophytes are microorganisms that are present in living tissues of various plant parts establishing natural relationship without apparently causing any symptom of diseases [1, 2]. These endophytes protect their hosts from infectious agents and adverse conditions by securing bioactive secondary metabolites [3, 4]. Endophytes are recognized as rich sources of bioactive metabolites of multifold importance in medicine, agriculture [5]. Many endophytic fungi have been reported to produce novel antibacterial, antifungal, antiviral, anti-inflammatory, antitumor, and other compounds belonging to the alkaloids, steroid, flavonoid, and terpenoids derivatives types [6]. Fungal endophytes protect their hosts from contagious agents and withstand at adverse conditions by discharging active metabolites [7]. Endophytic fungi are a good source of antibiotics. Natural products from entophytic microbes have been observed to inhibit or kill wide variety of harmful disease causing agents. Endophytic fungi are also capable to produce antimicrobial metabolites. The production of Hypericin, Anaphthodianthrone derivative and Emodin are believed to be the main precursor of hypericin [8]. A compound polyketidecitrinin produced by endophytic fungus *Penicillium janthinellum* from fruits of *Melia azeadirachta*, presented 100 % antibacterial activity against *Leishmania* sp. [9]. These creatures were drawing a great attention after the discovery of fungi *Taxus brevifolia*, producing the anti-cancer drug taxol [10]. Endophytic fungi are also reported from *Avicennia officinalis* [11].

ACKNOWLEDGEMENT

Authors are thankful to the Department of Biosciences, Mangalore University, Mangalagangothri forproviding laboratory facilities to carry out this work.

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40. 2018-Talent management

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TALENT MANAGEMENT PRACTICES IN ORGANIZATIONS

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"Talent management" is about the activities to attract, develop and retain employees; some organizations and experts use this term only in the context of talented and high-potential employees. Human Resource Management" is required to maximize the capabilities and performance of people in organizations. Human resource management function and profession has seen a drastic change over the years from being just a Personnel Department in large organizations merely taking care of paper work, hiring and paying people to being a standalone HR department in organizations of all sizes. With the increasing importance and recognition in recent times, HR department plays a major role in staffing, training and helping to manage people so that people and the organization are performing at maximum capability in a highly fulfilling manner. However the well known and sustained argument as to whether HR-related functions should be organized into large organizations is still considered valid. In this direction, it is seen that Human Resources (HR) can include a broad spectrum of specialties such as recruiting, payroll, policy, safety, training and development, and performance management within organizations. HR professional may handle all of those specialties in small organizations which house small HR departments and also less number of employees. In larger organizations, each specialty can be handled by a department of its own. For an organization to manage its talent effectively, HR should develop programs that will attract, select, develop, and retain the talent needed to meet the organizational mission.

Whether an organization hosts HR department of one or a combination of multiple departments that include hundreds of employees, the primary responsibility of that department is talent management. Talent management needs to be given its due in every organization in order to optimize employee's performance.

Keywords: Talent management, HR department, Professional and Employees

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41. 2018-Evolution

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Evolution of defects and their effect on photoluminescence and conducting properties of green-synthesized ZnS nanoparticles

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Received: 2 January 2018 / Accepted: 17 October 2018
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Abstract

We have grown ZnS (zinc sulfide) nanoparticles (NPs) by hydrothermal and microwave (MW) heating method and a compara- tive study on the physical properties was carried out. Zinc acetate dihydrate (ZAD) and thioacetamide (TA) were used as Zn and S precursors, respectively. X-ray diffraction (XRD) and selected area electron diffraction (SAED) pattern revealed the cubic structure for ZnS and nanocrystalline nature of the samples. The careful observation of the XRD patterns of the samples grown by hydrothermal and microwave heating method indicate that microwave-synthesized ZnS (ZnS–MW) samples were strained compared to those grown by conventional hydrothermal methods. Uniform sized smaller nanoparticles were formed during microwave irradiation in a much shorter time. UV–Vis absorption spectra indicated quantum confinement effect. The emission peaks in photoluminescence spectra indicate the presence of various point defects in the samples. In the microwave synthesized sample, nucleation and growth process of the ZnS crystallites are very quick, leading to the formation of defects. The dielectric studies of both types of the samples show a typical behavior of polycrystalline semiconducting material. Under the applied A.C. fields, the conduction phenomena provide sufficient evidence for the electronic hopping between localized sites. Lower values of activation energy obtained for both dipolar relaxation and DC conductivity in the case of microwave synthesized sample indicate the applicability of such materials in various switching applications.

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42.2018-Investigation

Chemical Physics Letters 700 (2018) 74–79

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Chemical Physics Letters

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Research paper

Investigations on structural and optical properties of starch capped ZnSnanopar[illegible]s synthesized by microwave irradiation method

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ARTICLE INFO

Article history:
Received 9 January 2018
In final form 4 April 2018
Available online 5 April 2018

Keywords:
ZnS nanoparticles Microwave irradiation Starch
Raman scattering Photoluminescence

1. Introduction

Among the types of metal chalcogenides, zinc sulfide (ZnS) is the most commonly used one in a broad spectrum of applications like catalysis, electronic and optoelectronic nanodevices [1–6] since a long time. ZnS is a direct band gap semiconductor which can be used for the fabrication of certain devices like supercapacitors [7] and solar cells [8] in addition to light emitting devices [9]. Several methods of synthesis have been established for the nanoparticles (NPs) of ZnS [10–13]. The large value of surface to volume ratio in NPs of ZnS leads to agglomeration due to increased surface activities and properties in nanoregime is lost. In order to minimize agglomeration, a wide range of synthetic approaches using capping agents or stabilizers have been proposed [14]. One among them is wet chemical synthesis, a 'bottom-up' process. It allows better control over the size and shape of NPs by varying the reaction conditions. During wet chemical synthesis of ZnS nanoparticles, capping agents like polyethylene oxide (PEO) [15], polyvinylpyrroledone (PVP) [16], Polyvinyl carbazole (PVK) [17], mercaptoethanol [18], thiophenol [19], etc. are commonly used to arrest agglomeration. However, now a day, there is a great demand for the replacement of petroleum derived polymers by the biodegradable polymers to minimize hazardous wastes produced.

Polysaccharides are in the focus of research in recent years as novel materials for the development of biodegradable compounds. Starch is considered to be one of the best stabilizers among the abundant, biocompatible, renewable biopolymer materials and it is used in the preparation of NPs of many materials [20]. Such NPs are also found to impart functionality to the material. Remarkable color tunability has been reported for small addition of carbon NPs with starch powder [21]. Vigneshwaran et al. observed antibacterial and UV protection properties in cotton fabrics when impregnated with starch capped ZnO [22]. Starch has been proved to be a better polymer to cap nano-sized particles of ZnO, CdS, CdSe and ZnS nanoparticles [23–27] due to the polar groups present in its structures.

Present work focuses on the study of capping action of starch onto ZnS for different concentrations of starch by a synthesis route using microwave irradiation (MWI). Thioacetamide (TA) was used as source of S ions. On MWI, TA releases, S^{2-} ions needed for the formation of ZnS. The preparation method reported in this work may provide an adoptable route for the large-scale production of highly stable ZnS nanopowders.

2. Experimental

2.1. Materials used

Zinc acetate dihydrate as well as soluble potato starch were procured from Alfa Aesar and thioacetamide was purchased from

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https://doi.org/10.1016/j.cplett.2018.04.010
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43.2018-Indian Parliment

Indian parliament and its working, changing face andneed for reforms

Dr. Shubhakarachary

Abstract
Parliament today is not a law – making body only. It has become move and move a Multifunctional Institute performing a variety of roles. May of these interrelated and often meshing in to one another. This, however is often not appreciated and disproportionate emphasis is laid only on one or two aspects of working of Parliament. Any attempt at a comprehensive identification of roles and analysis of functions of the present day Parliament in the language of Modern Parliamentary Political Science may be quite misleading. With the view to clarifying the Concept, some of the coordinal roles and functions of the Parliament.
The Parliament of India is the Supreme bi-latateral Legislative body of Republic and its is composed ofPresident of India and two houses, the Rajyasabha (Council of States) and the Loksabha (House of the People). As we know that the President in his role as head of the Legislative has full power to summon and prorogue either house of Parliament or to dissolve Loksabha. The President can exercise powers only upon the advice of Prime Minister and his Union Council of Ministers.
The Members of Parliament, Loksabha are directly elected by Indian Public by voting in single – member Constituency. Rajyasabha are elected by the members of all State Legislative Assembly by the proportional representation. The Parliament has a sanctioned strength of 543; 2 members nominated by the President of India from Anglo Indian race to Loksabha. Rajysabha has 238 seats and 12 members nominated by President from the expertise of different fields of Science, Culture, Art, History, Architecture, etc. The Parliament meets at Sansad Bhavan in New Delhi.

Keywords: Constitution, parliament of India, Loksabha, Rajyasabha, president, vice – president, speaker, election, amendments, adjournment

Introduction

It would be appropriate to review the working of our Parliament during the last 70 years and move. We need to attempt a balance – sheet of achievements and failures of Parliament as the supreme representative institution of largest democratic Country in the World.
The first Parliament of India came into being on 26 January, 1950 with the commencement of the Constitution and birth of Republic. This was the Provisional Parliament. The first Constitutional Amendment was passed during its time, in retrospect, one of the other significant events during the life of provisional Parliament was the Mudgal case.
The first General Election under the Constitution were held in 1951 – 52, and bi – cameral Parliament with its two Houses, Loksabha and Rajyasabha was duly constituted.

The Seventeen Loksabha

The First Loksabha (1952 – 1957)
Was constituted on 17th April, 1952. Its first sitting was held on 13th May, 1952. Through elected by universal adult franchise and as such a truly representative body. The first Loksabha in a sense was highly elitist. It had a marked dominance, especially on its proceedings of the people who had their education in prestigious institutions of learning either in India or abroad. Most of them came from the urban background. Single largest professional group was that of Lawyers. Although the house had a preponderance of graduates (37 percent of total membership) under matriculates constituted the next largest group having 23.2 percent of total.
The average age of members was 45 years and 8 months. The maximum numbers ofmembers were in the age group 50 – 55 years. 22 members forming only 4.4 percent were women. It was a treat

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44. 2018 –Sri Aurobindo

International Journal of Humanities and Social Science Invention (IJHSSI)
ISSN (Online): 2319 – 7722, ISSN (Print): 2319 – 7714
www.ijhssi.org || Volume 7 Issue 05 Ver. I || May. 2018 || PP.57-60

Sri Aurobindo: A Mystic of Par Excellence

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Sri Aurobindo is an outstanding figure in Indo – Anglican literature. He has an international reputation as a mystical philosopher. He was born on 15 August, 1872. Besides being a philosopher, he was also a yogi, guru and a poet. He is a spiritual reformer. He spoke on human progress and spiritual evolution through his work of art. He developed a method of spiritual practice which is called Integral Yoga. He believed in a spiritual realization that not only liberated man but also transformed his nature, enabling a divine life on earth. His main literary works are 'The Life Divine'. It deals with theoretical aspects of Integral Yoga. His notable work is 'Synthesis of Yoga'. It is a practical guidance to Integral Yoga. 'Savitri' is an epic poem.
Between 1910 and 1914 Aurobindo published research on the Vedas, the Upanishads, linguistics and other subjects. He also wrote some finely crafted essays on spiritual and cultural subjects. This got published in 'Essays Divine and Human' and poems that are transcripts of spiritual experience on aspiration. 'Meditation of Mandavya' records the moods of Bhakti.The transformation of life Aurobindo speaks of must include a remolding of human society. In 'The Human Cycle', Aurobindo traces the evolution of human cultures from the 'symbolic' stage to the age of rationalism and individualism.
Sri Aurobindo, a great sage of modern India, flooded the entire world with the shower of spiritual consciousness. He revolutionized the human thought and had tremendous impact on the people all over the world. As a poet, he is endowed with a poetic consciousness that is unobtrusively committed to achieving social betterment and spiritual consciousness. He shows a piercing and instantaneous insight into the heart of his subject. He mastered several poetic modes but then, he evolved a writing style of his own that would be in line with his spiritual thought.
Sri Aurobindo is a great mystic poet and philosopher. According to Sri Aurobindo poetry is the mantra. It is the words heard from the innermost soul of the seer poet. The seer poet gets visions, only when the mind is evolved and it merges with Sacchidananda. His realization of the infinite makes him a mystic.

Date of Submission: 23-04-2018 Date of acceptance: 08-05-2018

Aurobindo possesses an insight into the things around him. He reveals the beauty and reality which cannot be seen from the ordinary men. To Aurobindo, the poet has been the 'child of divine'. Poetry overflows with full of living energy, and its creation will be ever fresh and new. We can find this specialty and freshness in his poems. His poems are powered with divine, spiritual and mystical elements. The poem, 'Trance of Waiting' is filled with a mystical glow. Here the poet goes to a state of trans. When this mood of trans is overpowering him, he is attaining a luminous sleep.

Lone on my summits of calm I have brooded with voices around me,
Murmurs of silence that steep mind in a luminous sleep,
Whispers from things beyond thought in the Secrecy flame –white forever,
Unscanned heights that reply seek from the inconscient deep
Distant below me the ocean of life with its passionate surges
Pale like a pool that is stirred by the wings of a shadowy bird.
Thought has flown back from its wheelings and stoppings, the nerve – beat of living
Stills, my spirit at peace bathes in a mighty release.

In this moment, the thought is disappearing totally, and supernal wisdom is occupying the mind. In some of the writings of Sri Aurobindo, this approach does exist with various symbols.

Wisdom supernal looks down on me, Knowledge mind cannot measure,
Light that no vision can render garments the silence with splendor.
Filled with a rapturous Presence the crowded spaces of being
Tremble with the Fire that knows, thrill with the might of repose.
Earth is now girdled with trance and Heaven is put round her for vesture
Wings that are brilliant with fate sleep at Eternity's gate.

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Meenakshy N.S., " Sri Aurobindo: A Mystic of Par Excellence." International Journal of Humanities and Social Science Invention (IJHSSI) 7.05 (2018): 57-60.

45. 2018-Meenakshy

ISSN: 2394-9333, www.ijtrd.com

Mahasweta Devi: A Socio – Political Commentator of the Marginalized Community

Asst Prof. Meenakshy N.S

Abstract

The subject of Mahasweta Devi's creative writings has centered on the struggle of socially marginalized. She tried to depict the struggles of the people against exploitation and tyranny. Her women protagonists hail from marginal sections of society. Their tales expose the power dynamics of sex, economics and culture which collectively tyrannize them all. Her work is inspiring because she reminds us that gender is only one of the many axes on which discrimination rests. She is straightforward with her approach to talking about the lives of experiences of the marginalized. She talks about complex realities. Her fiction allows the reader to look at cultural practices, social institutions, identity formations, sexual roles and how they operate in spaces with different power dynamics. The arrangement of all these in her narratives come together to display the exploitations based on the difference in caste, class and gender. Since time immemorial, men and women in India had their roles differentiated. Women were always on the box of disadvantages. They used to spend their whole lives in the kitchen, taking care of the whole family and often tortured by men. This is highlighted in her novels.

Mahasweta Devi was an Indian Bengali fiction writer and socio-political activist. Her notable literary works include Hajar Churashir Maa, Rudali, and Aranyer Adhikar. She worked for the rights and empowerment of the tribal people (Lodha and Shabar) of West Bengal, Bihar, Madhya Pradesh and Chhattisgarh states of India. Devi wrote over 100 novels and over 20 collections of short stories. She studied the Lodhas and Shabars, the tribal communities of West Bengal, and the women and the dalits. In her elaborate Bengali fiction, she often depicted the brutal oppression of the tribal people and untouchables by the powerful authoritarian upper-caste landlords, money-lenders, and venal government officials.

In the Breast- Giver, to earn a living, Jashoda can only use what she has as a woman: her breasts and milk. The Mistress praises Jashoda about the amount of milk she produces and Jashoda comments that there was "a flood of milk although she was between pregnancies and she didn't have any special food or pampering". When the Mistress gives Jashoda the job, Jashoda goes home that night and says to her husband, "Look, I'm going to pull our weight with these". She obviously takes great pride in her body and what she is able to do with it. However, the fact that her job is a sexist one cannot be overlooked. It is obvious that only a woman can do a job such as the one Jashoda does. Women are again objectified and subjected to the view of only being good for certain things that men cannot do. In this way, you could say that the work is 'gendered' and the text is supporting traditional gender roles. Jashoda is, in a way, the stereotypical woman, raising children (though some are not her own) and keeping a home for her husband. She is seen as submissive and nurturing in a way that the traditional gender roles support.

The only reason Jashoda goes to work outside the home in the first place is because her husband is injured and cannot work and provide for their family any longer. Before her husband's accident, Jashoda was in the home, raising children, and was stuck in a traditionally female role of housewife. She had no other use to him besides bearing and raising children and keeping a home for him and their family. The traditional roles are switched, however, when Jashoda goes to work as a wet nurse.
Though Jashoda is the provider for the family, she is not free from her responsibilities as a wife and mother to her own children. She has to do both jobs simultaneously, which speaks to the complexities of many women's lives. Just because a woman works outside the home to earn a living doesn't mean that she cares any less about the goings on in her household and family.

ISSN: 2394-9333, www.ijtrd.com

tocratic woman is far more dreadful. Rape is the worst recognition of sexual violence ving all the vital information about the famous criminal Draupadi right at the beginning sweta Devi states: that they went underground for a long time and they are on the list of d the technique of guerilla warfare to compete with their enemy. Guerilla warfare is supposed to be the most despicable and repulsive style of fighting with primitive weapons. Dopdi and Dulna belong to the category of such fighters, for they too killed with hatchets and scythes, bows and arrows.

Mahasweta Devi's tribal Dopdi is fighting for her survival, for food and for water. The writer etches out the plight of the tribals in words. She depicts how utter helplessness can finally lead to resistance or even rebellion. Unlike other passive rape victims, Devi does not let her heroine 'Droupadi' suffer in silence. With unconquerable spirit, the naked and bleeding Draupadi faces all her rapists defiantly, out resisting the sexual flouting of her body. Mahasweta Devi gives voice to the voiceless unfortunate of the earth. Her literary output is an attempt to shake the conscience of the citizens and to make them notice, identify and analyze what goes unnoticed, unheard by the naked eye. There is no doubt that this story is a hard hitting comment on the grim situation of the tribal and marginalized in the face of democracy. The condition of women in the present patriarchal society remains the same irrespective of time and place. The tribal woman is marginalized in more than one way as she lives in a constant fear of victimization. In this social environment one comes across a character like Dopdi in literature who decides to take her revenge in her own way. She, raising her voice after being brutally gang raped, shows the extent to which a woman can be pushed. Conquering her pain and humiliation, she emerges as the most powerful 'subject.'

Her tale presents the bitter realities of the revolutionary movements of the tribals in an unabated manner and highlights the irony that in 21st century tribal women still have to fight the unjust world order for bare survival.

Through the compelling interplay of politics and history, Devi exposes the irony of the patriarchal hegemonistic societies that eulogize the idea of protecting a woman's honor at all cost but given a chance, violates her without having any qualm. Dopdi, the central character, is the representative of millions of tribal women who are oppressed, marginalized and victimized by the agents of politics.

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46.2018-Meenakshy

SEARCH FOR CULTURAL IDENTITY IN DIVAKARUNI'S 'QUEEN OF DREAMS' AND 'THE VINE OF DESIRE'

MRS. MEENAKSHY N.S.

Chitra Banerjee Diwakaruniis a Post-colonial diasporic writer of Indian origin has gained a wide national and international fame as a poet, short story writer, novelist and essayist. Diwakaruni has been praised for her literary creativity and personal sensitivity in dealing with cross – cultural complexities of self – identity, family relationships and community values. Most notable has been her concern with these issues in connection with the experiences of Indian and Indian American women. Her story telling power is grounded in social awareness. She deals with East/West cultural conflict that all South Asian Americans' immigrants uniformly encounter. Her novels 'Queen of Dreams' and 'The Vine of Desire' reveal her skill in dealing with cross – cultural identity. They deal with the challenges that she has faced as an Indian American author.

Divakaruni's 'Queen of Dreams' and 'The Vine of Desire' draws readers into the lives of people across cultures, particularly the lives of Indian and Indian American women. Author's own immigrant experiences has been poured in these two novels. It deals with assimilation that takes place in different situations. Her characters reflect the paradox of being caught between two conflicting cultures, the Indian and the American.

The concept of cultural identity has mainly been studied in multicultural societies. In the globalized world with increasing intercultural encounters, cultural identity is constantly enacted, negotiated, maintained and challenged through communicative practices. The concept of cultural identity is most often used in multicultural societies as a way to recognize and celebrate identities of racially and ethnically marginalized groups. Cultural identity helps us understand the relationships around us to determine who we are as individuals in our community. Our cultural identity is also shaped by the people within our culture. We create a mold of cultural identity through the ideas of our parents by adopting a majority of their beliefs at a young age. As we grow older the different people we come in contact with help us to shape our cultural identity.

The protagonists in 'Queen of Dreams' have constant identity crisis and suffer from exile, alienation and embarrassment largely born of cultural prejudices throughout the novel.Divakaruni's writings portrays the realities of women in different dimensions.Divakaruni, is not just a voice among the Diasporic writers of the time, but an author infusing the essence of multiculturalism in her writing. She tells about her Indian heritage and her immigrant encounters of isolation and approval. She handles the tribulations and misconception related to cultural barriers. Her focus is on the diasporic Indian women caught between two opposing worlds. The women who either live abroad or happen to be visiting India are fought between the problems of multiculturalism. They think more rationally but they mentally retain some of the Indian traditional beliefs. They are torn between old and new values. When a person leaves his own culture and enters another, his own values come into conflict with the new ones. The novel ' Queen of Dreams' portrays the American reality which is the source of the American Dream, fears and anxiety that the Americans are vulnerable too, and the immigrant Indian's response to the emptiness and loneliness that haunts the inhabitants of this land.

'Queen of Dreams' is a novel of three generations – immigrant mother Mrs. Gupta, Rakhi, and her American daughter Jonaki. Mrs. Gupta, a first – generation Indian immigrant in America interprets other people's dreams and warns about immigrant danger and problems. Mrs. Gupta, the queen of dreams, retains much of her Indian routes. In America the young dream teller's dreams leave her completely. Unable to dream, Mrs. Gupta loses her identity and sinks into depression. In California, Mrs. Gupta feels increasingly alienated from her talent. Dreams do not come to her.

Rakhi is a young artist and a divorced mother. She lives in Berkeley. She is struggling to keep her footing with her family and with a world in alarming transition. Mrs. Gupta has the ability to share and interpret the dreams of others. She guides them through their fates. This gift of vision fascinates Rakhi but also isolates her from her mother's past in India and the dream world she occupies, and longs for something to bring them closer, Rakhi makes an attempt to know her identity. She discovers that her life is shaken by new horrors that she and her friends must deal with new complexities about their acculturation.

For a second generation Indian American like Rakhi, the sensation of being in- between is troublesome. Conflicts arises from the cultural clash between American individualism and Indian communitarianism. The value system and culture of the second generation is unclear. The dreams support Mrs. Gupta to have a sense of belonging, but Rakhi has nothing . She feels that it is her birth right to know about India. Her conception about India is coloured with the brush of her imagination. Research for origin in India also appears when she chooses Sonny as her life partner. The only means by which Rakhi can associate her feelings with India is her paintings.

Diwakaruni, in the novel, 'The Vine of Desire' writes about Anju and Sudha. Anju and Sudha were friends when they lived in Calcutta. These two rekindle their friendship in America. The novel begins with a sad description. It is of the unfortunate death of Anju's unborn son Prem and the depression and loneliness faced by Anju and her husband Sunil. Anju decides to call her cousin Sudha to California in order to give her mental support. Sudha was then in trouble after her divorce. She is tormented by uncertain future of her new born child. Sudha accepts her offer because she herself wants to get rid of all the troubles that would upset her. After coming to California she realizes the mistake she had

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ISBN :9789381-9796-81

committed. Sunil is attracted towards her and though she knew this, even before Anju got married to him, she never gave it any serious thought. But now she realizes his longing and passion for her. Sudha tries her best to avoid. But passion runs high and the characters get entangled in a vine of desire, unable to separate the wishful from the reality.

Sudha, having run away from the house begins her new life as a maid to Mr. Sen. He is an old man who is counting his last days. Sudha is able to infuse a new life in the old man. Anju too comes on terms with her life after going through bouts of depression. She makes peace with herself. As the story progresses, one can find change in Anju. She understands the reality and tries to see things in clearer lights. We get to know the rustles of Lalit's mind by simply listing 'what he said' and 'what he didn't say' to Sudha. The novel highlights in the alternating voices of the story teller Sudha and the outspoken Anju.

Chitra Banerjee Divakaruni deals with multifaceted problem of identity through her characters in 'Queen of Dreams' and 'The Vine of Desire'. They have constant identity crisis and suffer from exile, alienation and embarrassment largely born of cultural prejudices. When young people are severed from the ideals and positively sanctioned statuses, feelings of alienation or social isolation may develop. These feelings can result in undesired treatment and status. This process results in personal marginalization, and it may lead to social marginalization. This includes a person's relative economic, employment, educational and cultural loss compared to those around him. Here, an individual may experience extreme discomfort.Chitra Banerjee Divakaruni has played a significant role in making South Asian American women writers more visible to the general reading public. Women of the South Asia Diaspora got recognition because of her writings. She has met her own challenges which makes her say, "Writing must come out of what we know, what we feel.... must be rooted in a people and a place... but ultimately it must transcend all that to reach across time and space and memory to touch those who have never – and who will never – live as we have lived."

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47.2018-Meenakshy

International Journal of Engineering Science Invention (IJESI)
ISSN (Online): 2319 – 6734, ISSN (Print): 2319 – 6726
www.ijesi.org ||Volume 7 Issue 4 Ver. I || April 2018 || PP 23-25

Violence in Tendulkar's 'The Vultures' And 'Silence! The Court Is In Session'

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Date of Submission: 24-03-2018 Date of acceptance: 09-04-2018

Introduction

Vijay Dhondopant Tendulkar Was Born On 6 January, 1928 In Girgaon, Mumbai, Maharashtra. He Began His Career As A Dramatist In The Mid 1950s. At The Age Of Eleven, He Wrote, Directed And Acted In His First Play. At Age Fourteen, He Participated In The 1942 Indian Freedom Movement. Tendulkar's Early Struggle For Survival And Living For Sometime In Tenements In Mumbai Provided Him First-Hand Experience About The Life Of Urban Lower Middle Class. He Thus Brought New Authenticity To Their Depiction In Marathi Theatre. 'The Vultures' Was Set In A Morally Collapsed Family Structure And Explored The Theme Of Violence. This Prolific Writer Has Twenty – Eight Full Length Plays To His Credit. Winner Of Several National And International Awards And Fellowships, He Is Both A Venerated And A Controversial Figure In The Country's Theatre Scene.

'The Vultures' Was Published In 1971. Conservative Section Of Maharashtrian Society Was Stunned By The Open Display Of Illicit Sexual Relations And Scenes Of Violence That Constituted The Plot. The Play Is A Ruthless Dissection Of Human Nature Revealing Its Inherent Tendencies To Violence, Avarice, Selfishness, Sensuality And Sheer Wickedness.The Decadence And Degeneration Of Human Individuals Belonging To A Middle Class Family Is Exposed Through The Interactions Among The Members Of The Family. The Play Has Two Acts. There Is A Gruesome Portrayal Of Man's Greed And On The Other, There Is A Portrayal Of Tender Love.

Tendulkar In The Play 'The Vultures' Displays A Rare Genius For Mixing The Absurd – As Evident In The Cruel And Curious Relationship Obtaining In The Relationship Among Pappa The Father, His Two Sons Ramakant And Umakant, And Manik, His Daughter, And The Tender But Possessive Relationship Between Rama, Ramakant's Wife And Rajaninath, Pappa's Illegitimate Son. Tendulkar Admits To The Fact That The Play Is Characterized By Violence. It Is From Rajaninath's Songs That We Come To Know Of The Past And Present Of The Pinslefamily. In The Opening Scene, He Sings That Twenty – Two Years Ago Ramakant And Rama Left The House Locking It. He Remembers The Day Ramakant Married Rama. Then She Was Innocent. Ramakant Being An Addict To Liquor, Failed In His Duty As A Husband To Make A Mother Of His Wife. Rama Had To Fulfill Her Only Desire Through Her Brother- In – Law, Rajaninath.

It Is Liquor That Makes The Characters Be Violent And Harsh Towards One Another. Pappa Is Burdened By His Own Past Crimes. When Ramakant And Umakant Talk To Their Own Sister About Her Affair With The Raja Of Hondur. They Use Bad Language Which Reveals Their Incestuous Nature. The Arrival Of Sakharam Rouses The Suspicion That Their Father Still Has Some Money. They Drive Away Sakharam. Then, Ramakant, Umakant And Manik Make Their Pappa Drink To Know The Truth About The Money. This Scene Is Filled With Violence. The Sons Pretend To Fight Each Other With The Father Getting Trapped Between Them. Pappa Gets Injured. To Escape From Further Assault, Pappa Admits To Them That He Has Deposited Some Money. His Refusal To Part With The Money Enrages His Children. The Children Try To Kill Him. Papa Runs Away. Ramakant And Umakant Want To Get Rid Of Their Sister. At A Game Of Cards, Umakant Is About To Choke Manik To death. Immediately Ramakant Says.

"Don't Bloody Let Her Go."

The Words Of Ramakant Reveals The Inherent Violence In Him. Ramakant And Umakant Discuss Manik's Love Affair With The Raja Of Hondur. They Plot To Break Manik's Leg Inorder To Prevent Her From Meeting Her Lover Further. The Two Brothers Ruthlessly Execute This Plan. Meanwhile, They Learn That Raja Of Hondur Has Impregnated Manik. The Two Brothers Attempt To Blackmail Him But He Dies Of Heart Attack. The Two Brothers Kick Out The Foetus Growing In Manik's Womb. Knowing Of Rama's Pregnancy, Manik Attempts By Superstitious Spell To Get The Foetus Aborted. The Psychological Trauma The Characters Undergo In Pursuit Of Wealth Is Revealed In The Play.

Rama Is Given An Opportunity To Express Her Agony And Frustration. Rama Gives A Long Moving Speech With Regard To Her Survival In The House Of Vultures. She Is Disgusted With Her Husband's

Discomfort She Is Experiencing. Kashikar's Report That She Would Be Dismissed By Tomorrow From The Job Shatters Her. She Is Half Dead And They Continue With Their Attack. Sukhatme's Words Leave Her Morally And Spiritually Wounded. In The Same Scene We Notice The Door Locked From Behind And Benare's Banging The Door To Go Away From The Court And The Process By Which She Is Forced To Remain Inside Amount To Physical Violence.

Mrs. Meenakshy N.S."Violence in Tendulkar's 'The Vultures' And 'Silence! The Court Is In Session'" International Journal of Engineering Science Invention (IJESI), vol. 07, no. 04, 2018, pp 23-25

48.2017-Gayathri Pai

Screening of Phytochemicals and Isolation of Endophytic Fungi from Medicinal plant Helicteres isora

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Abstract: The objective of this study was to screen the phytochemicals and isolate the endophytic fungi harbored in the leaf and stem of medicinal plant Helicteres isora L.. Medicinal plants play a key role in traditional medicine and medicinal property is found to be because of phytochemical constituents present in the plants. Phytochemicals such as alkaloids, carbohydrates, tannins, steroids, flavonoids, saponins, terpenoids, coumarins, carboxylic acid, resins, quinone and phenolic compounds were analyzed by using ethanol as solvent. There is a correlation between phytochemicals and secondary metabolites produced by the endophytic fungi. The medicinal plants and their fungal endophytic communities produce similar therapeutic products. The results of the present study showed the presence of secondary metabolites and endophytic fungi such as Penicillium citrinum, Aspergillus niger, Curvularia vermiformis, Rhizopus sp., Cladosporium sp., Alternaria alternata and Fusarium sp., were isolated and identified by morphological characters. Keywords: Endophytic fungi, Helicteres isora L., Phytochemicals, Secondary metabolites. ---------- Date of Submission: 15-11-2017 Date of acceptance: 02-12-2017 ----------

INTRODUCTION Helicteres isora L. is a medicinal plant used in traditional medicine. The root and bark are expectorant, demulcent, astringent to the bowels, antigalactagogue, lessen gripping; a cure for scabies when applied topically (Unani). The juice of the root is said to have a beneficial effect in empyema and stomach infections. In the Konkan it is used in diabetes, and is a favourite cure for snake-bite. The bark is used in diarrhoea and dysentery. The fruits are made into liniment for sores of the ear, and they are administered internally for colic.[1] Medicinal plants are known to harbour endophytic fungi that are believed to be associated with the production of secondary metabolites and phytochemicals [2].Endophytic organisms that exist in the tissues of living plants are potential resources of novel natural products for exploitation in pharmaceutical industries[3].Endophytes are microorganisms that are present in living tissues of various plant parts establishing natural relationship without apparently causing any symptom of diseases [4,5].These endophytes protect their hosts from infectious agents and adverse conditions by securing bioactive secondary metabolites[6,7].Of the 300,000 plant species that exist on earth, each individual plant is to host one or more endophytes [8,9]

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49.2017-India and China

IJCRT.ORG ISSN : 2320-2882

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

INDIA AND CHINA RELATIONS ISSUESAND CONCERNS

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Abstract:

India and China, The two largest Developing countries in the world share a number of Interest, But since the formal establishment of diplomatic relations with people's Republic of China in 1950, Indo-China relations have been rather voilate, lacking in confidence with unresolved issues hindering the relationship.

The last six decades of India – China relationship have seen more mutual mistrust and suspicion than friendliness and cordial atmosphere. Attempts have been made to bridge the differences. Both the Nations today have growing economics and their bi-lateral relationship to a great extent has assumed global and strategic relevance. If bilateral relationship has to improve then many domestic problems have to be solved in a coherent manner. There are many issues between China and India which still impact their relations like the border and the Tibet issues which are prominent issues. There are many positive and negative connotations of their bilateral relationship.

Key words:

Bi-lateral, civilizations, nuclear device, Line of Actual control, String of posits, Silk route, corridor.

Introduction:

India and China are the only countries in the world, which have legacy of ancient culture and civilization. Both the nations are under developed and are most popular countries in the world. But both nations have many contentions issues even though they have co-operalid on a number of areas. The element of trust and confidence is lacking between these two countries. India was one of the few countries which recognized the "People's Republic of China".

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50.2017-Women

Women Empowerment in Local Self Govt. in Karnataka With Special Reference to Udupi Dist.

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Abstract:

This study seeks to make an investigation in to how much women in Karnataka could make use of the opportunities. Which the Act provided and how much it helped women's to empower themselves. Women empowerment in conditioned by the socio – economic and religion – cultural ambience, it could be achieved with or without governmental assistance and support. Nevertheless in Indian context women empowerment remained a distant dream for a good five decades till the 73rd and 74th Constitutional Amendments Act began to be implemented. The passage of the above acts are landmarks in the March 07 women towards the ultimate goal of self-fulfillment. Women's participation in politics is closely related to their level of empowerment in literacy as well as health care. Karnataka women are far ahead however, their presence in political arena, even at the grassroots level was not all conspicuous until empowerment. Was as i.e. – were, thrust upon them by the 73rd Amendment Act. This Act made the involvement and participation of women in Politics Mandatory. Thirty-three percent of the total seats and posts in the three tier Panchayath Raj Institutions are now been filled by women. This is the background which prompted the identification of this topic for study and to pay maximum effort in to different dimensions of rural democracy and women's Political participation and involvement in them.

Keywords: *Women participation, empowerment of women, Panchayath Raj Act, Grama Panchayath, Taluk Panchayath, Zilla Panchayath, Karnataka, Udupi District.*

Introduction:

Since Independence, various initiatives have been taken for improving the Socio – economic conditions and empowering women in India. In this context the Constitution guarantees socio – economicand political equality and the provision of equal rights for availing different opportunities to all social groups of the population. Especially women, increasing emphasis has also been placed on initiating variety of development schemes and welfare programs for maximizing the participation of women in different activities. Various legal reforms and resolutions in Social status and empowerment of women in Indian Social System. However little progress has been visualized in the participation of women in different activities.

In view of these assumptions the introduction of reservation policy is in favour of women in the Panchayath Raj Institutions. This study relates to political participation of women in Panchayath Raj System in Karnataka. In this study an attempt is made to analyze the political participation of women in Panchayth Raj system. In Grama Panchayath – A case study of Thirty two Grama Panchayath in Udupi District.

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3.3.1 : Number of research papers in journals notified on UGCCARE year wise during the last five years :

Documents :

01.2022-Journal:Meenakshy

International Journal of Humanities and Social Science Invention (IJHSSI)
ISSN (Online): 2319 – 7722, ISSN (Print): 2319 – 7714
www.ijhssi.org ||Volume 11 Issue 4 Ser. II || April, 2022 || PP. 08-11

R.K. Ramanujan and Nature Consciousness Environmental Sensibility and Awareness as in the Poems of A.K.Ramanujan

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Abstract: *Nature and love for nature is the central theme in the poems of A.K.Ramanujan. This theme provides a holistic cosmic world view which interrelates nature with human community. It is with the advancement of science and technology, the traditional beliefs of Indians in Nature slowly got diverted. The , materialistic culture, competitive attitude and extreme change in the life styles of human beings resulted in the decline of importance given to environment and its impact on human life.*

Key words*: Nature, human community, ecology, preservation and conservation*

Date of Submission: 04-04-2022 Date of Acceptance: 19-04-2022

Ramanujan is deeply affected by the socio – economic condition of his India. The poems of Ramanujanare finely crafted pieces, and the words shine with depth of meaning. M.A.K.Ramanujan is one of the interactivepoets in the 20th century Indian English literature. He was born in Mysore, India. He earned degrees at the university of Mysore and Deccan College in Pune and a Ph.D. from Indiana University.

Most of his poems, though intensely personal, have a universal dimension of their own. The main theme of Ramanujan's poetry are family, love, despair and death. They are full of irony, humour, paradox and sudden reversals. His own family life, his childhood memories, his pleasures, struggles, sufferings, love etc. are his objectives. All his poems are written with his own feelings, emotions and memories. He uses a language which is crisp, intense and casual.

In 1976, the government of India honoured Ramanujan with the prestigious Padma Shree, one of its highest civilian awards, for his significant contributions to Indian literature and linguistics. In 1983, he was awarded the Mac Arthur Prize Fellowship.

In the poem 'The River', the poet success in bring out the damage caused to the Mother Earth due to urban construction activities. He makes the readers be aware of ill – effects of littering plastic which chokes the drainage system, railway tracks in cities and cause inconvenience to our own lives. When we read the poem 'The River', we come to know that Madurai is a city of temples, and culture. The poet describes how in every summer, a river that flows through Madurai is narrow stream through the water gates as piles of straw and women's hair obstruct its flow.

'A River' is a poem which can be analyzed using the theory of Eco – Criticism. When we read the poem, we see the river Vikai being in flood. The people everywhere talk about the inch – by- inch rising of water and the number of stone steps submerged at the bathing place.

The world of literature is crowded with works dealing with beauty and power of nature. The type of writing recently caught the attention of the writers. The concern for ecology and the threat it causes if misused has become concern of good many writers. This theory, namely Ec0- Criticism.

People in India lack the awareness of cleanliness and their duty towards conserving the natural resources. The 'sleepy crocodiles' and 'water buffaloes lounging in the sun' are images that convey the lazy, indolent attitude of the people. The basic inertia that stops people from acting is the target of Ramanjuan. If this attitude is changed, nature can and will be saved from monstrous hands.

A.K. Ramanujan also talks of a pregnant woman with perhaps twins in her womb, with no moles on their bodies, with different coloured diapers to tell them apart. We can take the concept of procreation as synonymous to creation of nature and the nurturing attitude required for trees and animals to thrive. The woman here symbolizes our mother earth and the twins in her womb can be equated to natural resources and life that inhabits this earth. The pregnant woman is shown drowned in the flood due to the negligence of the people.

"…. a river dries to a
tricklein the sand,
baring the sand ribs,
straw and women's
hair

The poet compares the intermittent hissingof the snakes to the little clouds of dust that arise as one walks along a dusty road. The snake's scales mount with the waving of the moon. The poet also remembers one day a snake man brought a basket full of cobras to the poet's home. The poet watches their bodies what –brown in colour with rings all over. The way they move on the floor looks like a strange alphabet written here and there. The poet's mother feeds the snakes with saucers of milk. The snakes suck the milk. The snake man then wears them in his neck in order to impress the poet's father. The latter gives him money.

A.K.Ramanujan narrates what happens while he walks along the forest path. Suddenly he feels as if he is walking on a slippery surface. It is a snake and writhes in pain. He steps on it until it is dead. He is now not afraid of it. He expects the frogs to hop over the sausage rope without fear of being eaten up.

In 'Striders', A.K. Ramanujan describes the Rabbits and the physiognomy of the insect precisely. He makes an attempt to mock the supernatural powers of prophets. The poet's awareness of man- nature relationship is being evident when he says:

Not only prophets
Walk in water. The bug
sits On a landslide of
lights And drowns eye
Deep
Into its tiny
stripOf sky.

Here, the poet wants to emphasis the fact that miracles are not limited to prophets alone, they can take placeeven in nature and are worthy of our attention.

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02.2022-Journal:Lalitha Devi

Materials Today: Proceedings 51 (2022) 179–183

Contents lists available at ScienceDirect

Materials Today: Proceedings

journal homepage:

Effect of silver doping on structural and optical properties of starchcapped ZnS nanoparticles synthesized by microwave irradiation

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ARTICLE INFO

Article history:
Available online 17 February 2022

Keywords:
ZnS nanoparticles
Microwave
Silver doping
Starch capping

ABSTRACT

Cost effective facile method of synthesis of silver (Ag) doped zinc sulfide (ZnS) nanoparticles encapsu- lated by starch is reported in this communication. Synthesis involves chemical co-precipitation method using zinc acetate and thioacetamide as ZnS precursors, silver nitrate as dopant salt, starch as capping agent and water as solvent. Ag is an active metal which gets easily oxidized by the general methods of doping. The effect of efficient heating by microwaves has been utilized in the present work. Energy dis- persive spectroscopy (EDS) analysis of the samples implied a solubility of Ag in ZnS lattice. The X-ray diffraction (XRD) patterns of the Ag doped samples retained the same cubic crystal structure as ZnS nanocrystals. Substitutional incorporation of Silver into the ZnS lattice is confirmed by positional shifts of XRD peaks. The mean size of the nanocrystallites calculated using Scherrer equation is about 3 nm. Raman spectra also implied the formation of nanoform of cubic ZnS. Energy band gaps are found to decrease in UV–Vis study for Ag doped samples. The absorption spectra of all samples show quantum confinement effect. The transmission electron microscopy (TEM) and Fourier transform infra red (FTIR) spectroscopy studies for the selected sample reveal that the synthesized particles were stabilized by starch as capping agent.
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Selection and peer-review under responsibility of the scientific committee of the 9th National Conference on Condensed Matter Physics and Applications.

1. Introduction

The generation of large amounts of chemical products like phar- maceuticals, dyes, fertilizers etc. is inevitable due to population growth and developments in industry as well as agricultural fields. So it is essential to device environmentally benign methods of syn- thesis of materials at least in the field of research. In this direction, preparation of materials in nanoform at low temperature, low cost and non-toxic approach is important and it is an interesting subject of research.

ZnS is a promising material among II – VI compounds for appli- cations in optoelectronics due to its outstanding luminescence, photochemical properties and nontoxicity [1,2]. When ZnS is pre- pared in nanoform, particles of size 3–5 nm are formed due to its wide energy band gap value (3.6 eV) [3,4,5]. Such particles have a tendency to agglomerate due to increased surface activities. The particle growth can be prevented using suitable organic species as

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capping agents. A low-cost, non-toxic and biodegradable biopoly- mer like starch is a suitable choice as capping agent for ZnS nanoparticles. Starch is identified as a good capping agent and has been used in the synthesis of many semiconductor nanoparti- cles [6,7].

Silver is proved to be a good candidate for producing a shallow acceptor level in ZnS, when incorporated in substituted Zn sites [8]. Compared to the preparation of doped NPs in organic solvents, the growth of aqueous doped nanoparticles (NPs) are more complex due to the presence of various ions in solution [9]. Therefore, it has been a challenge to dope NPs with metal ions in aqueous solu- tion. Such substitutions require high temperatures, balancing the pH and long processing time. Microwave irradiation (MWI) method appears to be a plausible solution to this problem. MWI is an efficient in core heating technique which can perform reac- tions at faster rate. We have synthesized Ag doped and starch encapsulated ZnS NPs with water as solvent using microwave irra- diation as heating source.

https://doi.org/10.1016/j.matpr.2020.02.027
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Selection and peer-review under responsibility of the scientific committee of the 9th National Conference on Condensed Matter Physics and Applications.

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03.2022-Effect of Microwave

Inorganic Chemistry Communications 140 (2022) 109440

Contents lists available at ScienceDirect

Inorganic Chemistry Communications

journal homepage:

Short communication

Effect of microwave irradiation time on structural and optical properties ofZnS nanoparticles

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ARTICLEINFO

Keywords:
ZnS nanoparticles Microwave irradiation Williamson – Hall method Photoluminescence

ABSTRACT

In this communication, we report the synthesis of ZnS nanoparticles by chemical precipitation of Zn^{2+} ions with S^{2-} ions in aqueous solution. Freshly formed ZnS nanoparticles (NPs) in colloidal suspension were microwave irradiated for different time intervals in a domestic microwave oven. Effect of microwave irradiation (MWI) time on microstructure, surface morphology and optical properties of NPs are studied using various characterization tools. The structural analysis confirms the influence of MWI time on cubic and crystalline nature of the samples which are in good agreement with selected area electron diffraction (SAED) pattern. The size of the NPs increased with increase in time of MWI. The size increase is consistent with literature reports that microwave irradiation accelerates not only the nucleation but also crystal growth. The band gap of the material tends to decrease as a function of irradiation time. The role of MWI time on surface defect removing process is also explained in detail.

1. Introduction

The reduced dimensions of semiconducting nanoparticles continue to retain interest in their investigation for exhibiting chemical as well as physical properties much different from their corresponding bulk properties. As a result, reduction in electronic circuitry is observed due to reduction in size of components. Semiconducting NPs of CdS, ZnO, CdSe, ZnSe, CuO, ZnS etc. have been investigated immensely for their optoelectronic and photovoltaic applications due to their quantum confinement effect and size-dependent properties [1–7]. These nano- materials in oXide and sulfide form have been studied to check their suitability for various applications. Despite the numerous features of oXide-based materials, the sulfide-based materials are involved in en- ergy storage and photonic applications [8–12]. In an effort to find an alternative for cadmium-based quantum dots, which are being carci- nogenic for living systems, ZnS quantum dots have been attracting a lot of attention now-a day. ZnS is an important member belonging to II – VI group of semiconductors. It has a band gap of 3.68 eV at 300 K and this falls in the ultraviolet (UV) region of electromagnetic spectrum [13]. The optical properties may be tuned due to the size-dependent variation of the band gap energy. The quantum confinement effects, high surface area and nontoXicity possessed by ZnS NPs, they are used as potential

candidates for phosphors, light emitting diodes, photoluminescent tags for bio- assays and photocatalysts [14]. The properties of materials in the nanoscale depend strongly on their method of preparation.

Among the emerging new techniques of synthesis of nanomaterials, microwave irradiation (MWI) methods are unique in providing up-scaled processes and avoid unwanted thermal gradient effects [15,16]. In the previous work reported in ref [16], the authors worked on MWI heating and time on ZnS based quantum dots and MWI time was be- tween 60 and 90 min. For this irradiation time authors have observed significant change in the end product with high quantum yield. Also, in ref [17] on ZnO NPs, significant change in particle agglomeration for prolonged MWI. Hence current work focuses on investigating the influence of low irradiation time on properties of synthesized NPs. In microwave heating the substance is heated uniformly and homogeneous nucleation can be induced in the system. By carefully selecting the precursors, solvent, reaction temperature and microwave parameters (like irradiation time and power) during chemical co-precipitation car- ried out in presence of MWI, one can achieve superior control over the nucleation and growth processes to obtain high-quality quantum dots (QDs) of desired size. In this communication, the effect of microwave irradiation on ZnS NPs for different duration of time is reported. Earlier researchers have studied the effects of MWI time on the nucleation

for teacher fellowship.

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ISSN: 0976-3031

Available Online at http://www.recentscientific.com

CODEN: IJRSFP (USA)

International Journal of Recent Scientific Research
Vol. 12, Issue, 07 (D), pp. 42408-42411, July, 2021

International Journal of Recent Scientific Research

DOI: 10.24327/IJRSR

Research Article

ORGANIC FARMING: AN EFFECTIVE WAY TO PROMOTE SUSTAINABLE AGRICULTURE IN INDIA

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DOI: http://dx.doi.org/10.24327/ijrsr.2021.1207.6090

ARTICLE INFO

Article History:
Received 13th April, 2021
Received in revised form 11th May, 2021
Accepted 8th June, 2021
Published online 28th July, 2021

Key Words:
Organic Farming, Agriculture and Sustainable Methods

ABSTRACT

Organic farming is the practice that relies more on using sustainable methods to cultivate crops and it avoids chemical inputs that do not belong to the natural eco system. The paper addresses the scope of organic farming as an effective way to promote sustainable agriculture in India. The promotion of sustainable agriculture is a need of present-day world to overcome the challenges arising from chemical fertiliser-based farming. Agriculture is backbone of Indian economy with more than half of the population still depend on this sector for their livelihood. At the same time contribution of agriculture in India's GDP is less than other sectors in the Economy. This is mainly because of unsustainable farm practices. It is essential to find ways to overcome socio economic and environmental problems arising from unsustainable farm practices. The sustainable agriculture can mitigate the socio economic and environmental problems of chemical fertiliser-based farming. The paper evaluates the possibility of espousing Organic agriculture as an effective strategy to promote sustainable agriculture in India. A sustainable agricultural sector strategy can contribute to a broader development of agricultural productivity, food security, generation of rural employment and poverty reduction while promoting the conservation of the natural resource base. This new strategy should be adopted with sound infrastructure, governance, the private public participation and effective implementation seeking to contribute to poverty reduction, enhance regional integration, accelerate rural development and improve productivity in agriculture.

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INTRODUCTION

Sustainable Agriculture is more a philosophy or way of life. Sustainable agriculture is able to feed the world without destructive the environment or fear-provoking human health. It is a way of growing food in an ecologically and ethically responsible approach and it results in higher returns over time; with less need for high-priced and environmentally harmful inputs such as chemical fertilisers, pesticides and weedicides. Hence, Organic farming is a very native concept to India and it brings agricultural sustainability. It is based on such principles like:

- Soil is a living thing.
- Nature is the best teacher for farming activities since it does not use any external nutrients or additional water

Organic farming is based on understanding the ways of nature. It does not mine the soil of its nutrients nor does it humiliate the soil for fulfilling the needs of the common man. The living inhabitants of the soil are protected and nurtures. The natural

micro-organisms in soil are not debilitated in any way. The focus in organic farming is the soil itself. The health of the soil and its structure is maintained as it is believed to the most important medium. Thus, organic farming is a system of farming that aims at maintenance the soil breathing, maintaining its good health, cultivating the land and then raising the crops. This must be done to sustain a pollution-free environment and in an ecological way. Sustainable agriculture is the practice of farming using principles of safeguarding ecology. Unlike organic agriculture, sustainable agriculture concentrates on the ability of providing food on the long-term. As such, besides artificial fertilizers and pesticides, it also does not allow the use of agricultural machines running on non- renewable resources.

Organic Farming and Sustainable Agriculture in India

As far as India is concerned, the Government of India has been undertaking measures to promote organic farming with the aim to improve soil fertility and help to double the farmers' revenues by the year 2022. The Prime Minister had visited

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How to cite this article:
Manjunatha M and Rasik Kumar 2021, Organic Farming: An Effective Way To Promote Sustainable Agriculture In India. *Int JRecent Sci Res.* 12(07), pp. 42408-42411. DOI:

SJIF Impact Factor 2021: 8.013| ISI I.F.Value:1.241| Journal DOI: 10.36713/epra2016 ISSN: 2455-7838(Online)
EPRA International Journal of Research and Development (IJRD)
Volume: 6 | Issue: 5 | May 2021 - Peer Reviewed Journal

05.2021-online/ traditional

ONLINE V/S TRADITIONAL PEDAGOGY IN PRESENTEDUCATION: A CRITICAL VIEW

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Article DOI: https://doi.org/10.36713/epra6938
DOI No: 10.36713/epra6938

ABSTRACT
"Globalisation, new technologies and demographic developments constitute an enormous challenge; one of the answers to this problem is the access to lifelong learning." - (Jan Figel) Technology has dominated all spheres of life. The education is also one of the fields where we can see the impact of information technology. Over several years the education process has seen drastic changes in imparting knowledge. During the last few years, it has been seen, an almost exponential development and growth of the digitalization, automation and the internet, with little sign of a slowdown. No longer is Internet access restricted to a few selected education establishments it is now available to anyone in their place of work, local libraries, the Internet sites and even in the home. It is the information that has becomes the key to the success in different walks of life. At the time of independence, India inherited an education system with glaring disparities between males and females, between upper and lower classes, between economically advantaged and disadvantaged groups and urban and rural population. Consequently, one of the primary responsibilities of the Government of India after independence was to make education available to all people. This responsibility was sought to be realized through the opening of more and more primary schools, secondary schools and colleges. However, the formal education system alone was found to be unable to meet the demand for education.

KEYWORDS: *Online, Traditional, Education, Pedagogy, Internet,*

I. INTRODUCTION

Technology has dominated all spheres of life. The education is also one of the fields where we can see the impact of information technology. Over several years the education process has seen drastic changes in imparting knowledge. During the last few years, it has been seen, an almost exponential development and growth of the digitalization, automation and the internet, with little sign of a slowdown. No longer is Internet access restricted to a few selected education establishments it is now available to anyone in their place of work, local libraries, and the Internet sites and even in the home.

SJIF Impact Factor 2021: 8.013| ISI I.F.Value:1.241| Journal DOI: 10.36713/epra2016 ISSN: 2455-7838(Online)
EPRA International Journal of Research and Development (IJRD)
Volume: 6 | Issue: 5 | May 2021 - Peer Reviewed Journal

It is the information that has becomes the key to the success in different walks of life. Today, one of the primary responsibility of the Government of India after independence was to make education available to all people. This responsibility was sought to be realized through the opening of more schools and colleges. However, the formal education system alone was found to be unable to meet the demand for education. The report of United Nations Development Programme UNDP (1993) pointed out the fact that only seven percent of the relevant age group is enrolling for higher education in India.

V. CONCLUSION

For decades, scholars have debated on which mode of education is superior? Some scholars argue that online is superior and others argue that online is less effective than traditional face-to-face courses. A few others suggest that the hybrid mode (e.g., online blended with face-to-face lectures) is the most desired, inevitable and productive content delivery method for students. However, students' perceptions towards online learning as compared to traditional face-to-face learning have largely been overlooked. As per this study, It is found that majority of the students are facing communication problems, along with that, they are facing internet issues, etc. Thus, they strongly feel that the study environment in traditional class is more conducive for the study because in online class they just attend the class but not able to understand clearly.

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06.2021-praveen English

International Journal of Humanities and Social Science Invention (IJHSSI)ISSN (Online): 2319 – 7722, ISSN (Print): 2319 – 7714

www.ijhssi.org ||Volume 10 Issue 4 Ser. I|| April 2021 || PP 36-40

Tagore's Gitanjali and "self-transcendence."

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Abstract: *Rabindranath Tagore occupies a frontline position in the galaxy of the prophets of Humanism. He was the first Asian writer to be awarded a Noble Prize in 1913 for translated version of his cycle of song – poems, 'Gitanjali'. Tagore's 'Gitanjali' reflects his desperate efforts to see the world to live in peace and harmony. He tries to foster the values of humanity and bring the happiness in the land by encouraging the masses to love one another, live in peace and lead a harmonious life full of contentment. He shows ways of freeing human soul from all bondage and pettiness of the world and thereby transcending itself into a search for universal love and brotherhood that the Lord provides to the mankind. In 'Gitanjali', Rabindranath Tagore has offered the ways and means of attaining the ultimate purpose in human life – that is to become one with the infinite. Thus we can say that in 'Gitanjali', Tagore concentrates on self-transcendentalism*

Keywords: *Gitanjali, peace,contentment,harmony,self-transcendentalism.*

Date of Submission: 20-03-2021 Date of Acceptance: 04-04-2021

Gitanjali", or Song Offerings, is a collection of poems translated by the author, Rabindranath Tagore, from the original Bengali. Self – transcendence helps us to understand aspects of the moral life which includes development of wisdom, the practice of moral praise, and psychological well – being. Self – transcendence is linked to virtue in different religions and spiritual traditions. K.R Srinivasan Iyenger opines that 'Gitanjali' is a spiritual journey towards the Supreme Soul .His poems is not poems of exclusion but of all inclusion. 'Gitanjali' or Song offerings offers all the possible human and spiritual values a person needs to be in harmony with himself, with society and with the world, the universe at large. Tagore reflects how we can find joy in our lives. The songs are meditative, reflective and remarkable for their spiritual character.

Tagore speaks about God's infinite gifts in the first song of 'Gitanjali'.The poem mentions the grace of God to a human being. The poet considers human body as a frail vessel. The poet tells that God intermittently prepares its damages and fills up it with fresh life. God takes care of his people and helps them to solve their problems. Tagore considers himself as a flute and the poem that comes out of his mouth as an eternal melody which is new forever. He even feels that God will save him, protect him and bless him.

Thou hast made me endless, such is thy pleasure.
This frail vessel thou emptiest again
and again, and fillest it ever with fresh
life.
This little flute of a reed
thou hast carried over hills and dales,
and hast breathed through it melodies eternally new.

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07.2021-optical –physics

Journal of Electronic Materials
https://doi.org/10.1007/s11664

ORIGINAL RESEARCH ARTICLE

4-021-09026-z

Optical and Dielectric Properties of Poly(Vinyl Pyrrolidone-co-VinylAcetate)-Capped ZnS Nanoparticles

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Received: 27 June 2020 / Accepted: 18 May 2021
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Abstract

ZnS nanoparticles were synthesized by a wet chemical method using copolymer poly(vinyl pyrrolidone-co-vinyl acetate) as capping agent in the presence of microwave irradiation. Zinc acetate was used as the Zn precursor and thioacetamide as the sulfur precursor. X-ray diffraction measurements indicated the structure of nanoparticles to be the cubic form of ZnS. Both uncapped and capped ZnS samples were found to exhibit quantum size effects. Also, band gap energies were estimated, and the capped ZnS showed a decrease in band gap value compared to uncapped ZnS. Photoluminescence measurements of the capped sample indicated the elimination of surface defect-related emissions around 440 nm, observed in the uncapped sample. Further, the frequency response of the dielectric constant was studied in the range 100 Hz–5 MHz at different temperatures. At low frequencies and lower-temperature conditions, dielectric constant values were higher for both samples, and decreased at higher temperatures for the copolymer-capped ZnS.

Keywords ZnS nanoparticles · microwave irradiation · photoluminescence · dielectric properties · band gap energy

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08.2021-political

POLITICAL MODERNIZATION AND LINGUISTIC POLITICS IN KARNATAKA

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Abstract

Central aspects of political modernization in the emergence of a Nation State. The modern political systempresupposes a national community existing within a political system that allows for maximum political participation of groups and individuals constant with a minimum degree of political integration, therefore it is possible to evaluate the presence and the growth of political modernization in terms of opportunities for group mobilization available within a political system. We define political modernization in terms of the capacity of a system to achieve political integration dynamically through political mobilization and group conflict then clearly there was political modernization in Mysore in the period of linguistic politics 1947 to 1956. The regional Congress party played a key role in the mobilization and integrative aspects of a Linguistic Politics in the region.

Linguistic Politics as handled by the regional Congress party promoted a substantial politicisation of the major caste groups in the region language politics in the way the language and linguistic differences between people are dealt with in the political arena. This could manifest as the government education as well as how language is treated in official capacities.

Keywords: Modernization, Linguistic, Mobilization, Official, Authority, Activists, Policy, Implementation, Dis-integrate and Politicization

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09.2021-zoology

Study on Avifaunal diversity of Four Different Mangrove regions of Kundapura

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Abstract

Mangroves are salt tolerant forest ecosystems which support a rich species diversity of flora and fauna. Mangroves harbor a greater variety of bird life. Our list of birds was compiled from field work carried out from April-2010 to March-2013. A total of 79 species of birds representing 14 orders and 36 families were recorded from the mangroves of Kundapura. Species diversity of avifauna was encountered through Species Richness and Diversity Indices. Diversity indices such as Shannon-Weiner Index, Simpson Index and Evenness Index were calculated. Species diversity and abundance of birds peaked during October-May with the arrival of migratory birds. Minimum diversity was recorded during June-September owing to the departure of migratory birds.

Keywords: Mangroves; Species diversity; Flora; Fauna; Migratory.

Introduction:

Mangrove is an evergreen, salt tolerant plant community, which grows in inter-tidal coastal zones of tropical and subtropical regions of the world. They act as important habitats for many species of fauna (Duraimurugan *et al*. 2017). The mangrove ecosystem is inhabited by a variety of smaller birds, resident birds, migratory birds and wading birds. One of the most productive ecosystems of world is mangrove forests, providing shelter and feeding sites for many avifaunas (Kumar & Kumara. 2011). Mangrove habitats are host to many waterbirds around the globe (Saber Ghasemi. 2012). Mangroves show diversified avifaunal members. Many of the bird species are associated with the mangroves, for many reasons. Birds use the mangroves for nesting, breeding and as a source of secondary food (Kulkarni Narendra A. 2018). Mangroves are plants which lived at maximum subsiding tide point to maximum rising tide point area, with mud as its substrate. For other organisms, mangroves used as shelter and foraging place. One of those organisms is birds, birds can be used as bioindicators of environmental quality because it has a sensitivity to environmental changes (Aditya Rachmaputra1 *et al*. 2018).

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10.2021-Seasonal

Quest Journals
Journal of Research in Environmental and Earth Sciences
Volume 7 ~ Issue 8 (2021) pp: 01-06
ISSN(Online) :2348-2532
www.questjournals.org

Research Paper

Seasonal variation in the physico-chemical analysis ofMangrovewater, Kundapura, Karnataka, India.

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Abstract: *Physico-chemical analysis of mangrove water was carried out for a period of two years from April-2010 to March-2012. The water samples were collected between 8.00 a.m. to 9.00 a.m. and usually from 10-15 cm depth from the water surface. During the study period, variations observed in different water quality parameters of mangrove stations respectively are as follows: Air temperature (25.20°C to 28.45°C), Water temperature (23.31°C -27°C), pH (6.86-7.56), Electrical conductivity (1.4dSm^{-1}-26.94dSm^{-1}), Dissolved oxygen (4.80mg/L-8.64mg/L), Biological oxygen demand(0.45mg/L-2.46mg/L),Free CO_3(0.96mg/L-1.81mg/L), Calcium (5.22mg/L-15.26mg/L), Magnesium (7.89mg/L-48.2mg/L), Potassium (1.02mg/L-10.15mg/L), Sodium (37.67mg/L-846.08mg/L), Bicarbonate (2.17mg/L-5.97mg/L),Chloride (9.99mg/L-271.41mg/L), Sodium absorption ratio (24.55mg/L-297.78mg/L). The carbonate content was absent in all the sites and in all the season except the site-1 in monsoon-2010 i.e.0.23mg/L. The residual sodium carbonate was observed during monsoon-2010 in site-2 and 4 i.e. 0.4 mg/L and 0.005 mg/L.Most of the parameters suggest low values throughout monsoon season and high values during pre-monsoon season; however dissolved oxygen is maximum for the duration of monsoon season and minimum throughout pre-monsoon.*

Keywords:*Physico-chemical analysis, mangrove, monsoon, pre-monsoon, minimum and maximum.*

Received 18 July, 2021; Revised: 01 August, 2021; Accepted 03 August, 2021 © The author(s) 2021.Published with open access at www.questjournals.org

I. INTRODUCTION

Mangrove ecosystem acts as a buffer between near shore and lagoonal or estuarine environments with regard to the influence of freshwater discharge and salinity regime [1]. They stabilize the shoreline and act as a bulwark against the encroachment by the sea [2]. When river water mixes with seawater, a large number of physical and chemical processes take place, which influence the water quality. The mangrove water is slightly alkaline and contains high amounts of pH, total hardness, calcium, magnesium, chloride, total inorganic and organic phosphate, ammonium, nitrite and nitrate [3].

Mangroves act as land builders and coastline stabilizers [4] &[5]. Among the marine ecosystems, mangroves constitute the second most important ecosystem in productivity and sustained tertiary yield after coral reefs. Productivity in mangrove waters depends on the extent of mangrove canopy cover that supplies carbon, nitrogen and phosphorous[6]. The environmental conditions such as topography, water movement and stratification, salinity, oxygen, temperature and nutrients characterizing particular water mass also determine the composition of its biota[7]. The stability of the mangrove is influenced by salinity, soil type and chemistry, nutrient content and dynamics, physiological tolerance, predation and competition at local level [8].

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11.2021-climate change

CLIMATE CHANGE ON EARTH TODAY: AN OVER VIEW

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Abstract:

Earth's favorable climate enabled our planet to evolve and sustain life. Climate is a broad composite of the average condition of a region, measured by its temperature, amount of rainfall or snowfall, snow and ice cover, wind direction and strength, and other factors. *Climate change* specifically applies to longer term variations (years and longer), in contrast to the shorter fluctuations in *weather* that last hours, days, weeks, or a few months. Earth's climate is highly favorable to life both in an overall, planet wide sense and at more regional scales. Earth's surface temperature averages a comfortable $15.58°C(608°F)$ and much of its surface ranges between $0°C$ and $308°C$ $(328°F$ and $868°F)$ and can support life.

Although we take Earth's habitability for granted, climate can change over time, and with it the degree to which life is possible, especially in vulnerable regions. During the several hundred years in which humans have been making scientific observations of climate, actual changes have been relatively small. Even so, climatic changes significant to human life have occurred. One striking example is the advance of valley glaciers that overran mountain farms and even some small villages in the European Alps and the mountains of Norway a few centuries ago, because climate was slightly cooler than now. Scientific studies reveal that historical changes in climate such as the advance and retreat of this glacier are tiny in comparison with the much larger changes that happened earlier in Earth's history. For example, at times in the distant past, ice covered much of the region that is now the Sahara Desert, and trees flourished in what are now Antarctica and Greenland.

Earth's climate system consists of air, water, ice, land, and vegetation. At the most basic level, changes in these components through time are analyzed in terms of *cause* and *effect*, or, in the words used by climate scientists, *forcing*and*response*. The term "forcing" refers to those factors that drive or cause changes; the responses are the resulting climatic shifts. *Tectonic processes* generated by Earth's internal heat alter the basic geography of Earth's surface. *Changes in Earth's orbit aroundthe Sun* also affect climate.*Changes in the strength of the Sun* also affect the amount of solar radiation arriving on Earth.A fourth factor capable of influencing climate, but not in a strict sense part of the natural climate system, is the effect of humans on climate, referred to as *anthropogenic forcing*. This forcing is an unintended by-product of agricultural, industrial, and other human activities, and it occurs through alterations of Earth's land surfaces and through additions of carbon dioxide (CO_2) and other *greenhouse gases*, sulfate particles, and soot to the atmosphere.

Key words: *Tectonic processes, antiropogenic forcing*, Solar *radiation, greenhouse gases.*

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12.2021-Indian contribution

INDIA'S CONTRIBUTION TO SCIENCE: AN ANALYSIS

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Abstracts:

It is pertinent to reflect upon the nature and place of knowledge in Indian traditions. Ancient Greeks perceived knowledge in terms of power; it was used to acquire and consolidate power; it was not merely knowledge for the sake of knowledge. To Indians it meant liberation – sa vidya ya vimuktaye. But liberation from what – ignorance, disease, poverty or what Buddha called dukkha or liberation from this world itself? As the Brahmanical tradition became strong, the metaphysical other-worldliness overtook the quest for vimukti. The purpose may have changed from time totime but the quest remained. Inherent with the quest, is also the emphasis on wisdom. Wisdomwas the aim of our rishis and was applied even for developing techniques to improve the quality oflife, for instance, ayurveda or yoga.

The Indian knowledge system may not have what Kuhn terms 'paradigm shifts'. The changes evolved slowly; knowledge did move forward but without any sharp break with the past.It moved through writing commentaries which scholars in every generation wrote making additions or subtractions in the then existing corpus of knowledge. Significantly yukti (skill, reasoning) is highly prized in the Indian tradition. Neelkantha praises his hero Aryabhatta as yukti- nidhi; Bhaskara II praises his bija-ganita as avyakta-yukti (handling unknown variables). Unlike Greek 'axiomatism', the Indians used 'computational positivism'. This attitude relied only on facts as the possible objects of knowledge; it did not give any credence to metaphysics or to assumptions that could not be verified as facts. The result was that errors in the predictions of planets were less in the Indian approach compared to those based on Ptolemy's 'axiomatic' procedure. Another interesting aspect is that the Indians considered the siddhantas

valid only for some finite period of time (kvachit kale pramanam) and not valid for ever. The biggest problem in Indian tradition, as an eminent Indian scientist Narliker argues, is that of 'praksipta' which are basically additions reflecting the culture of the time. The 'praksipta' merges well with the text and in most cases, difficult to identify.

Key words: Ancient Indian Astronomy, Babylonian and Greek influences, Ashoka's edicts, zero and infinity, algebraic procedures.

Introduction:

India's scientific and technological heritage is enormous, although it remains poorly accessible to the wider public; for the last two hundred years, much scholarly work of great value has investigated India's accomplishments and contributions in mathematics, astronomy, chemistry, medicine and numerous technologies, but the average Indian remains largely ignorant of them, since they do not figure in our educational system. Instead of a much-needed sober assessment, this void has often led to exaggerations, misconceptions or hollow glorification on the one hand, or ignorant denials on the other. Below is a very brief survey of India's contributions to other cultures in the field of science.

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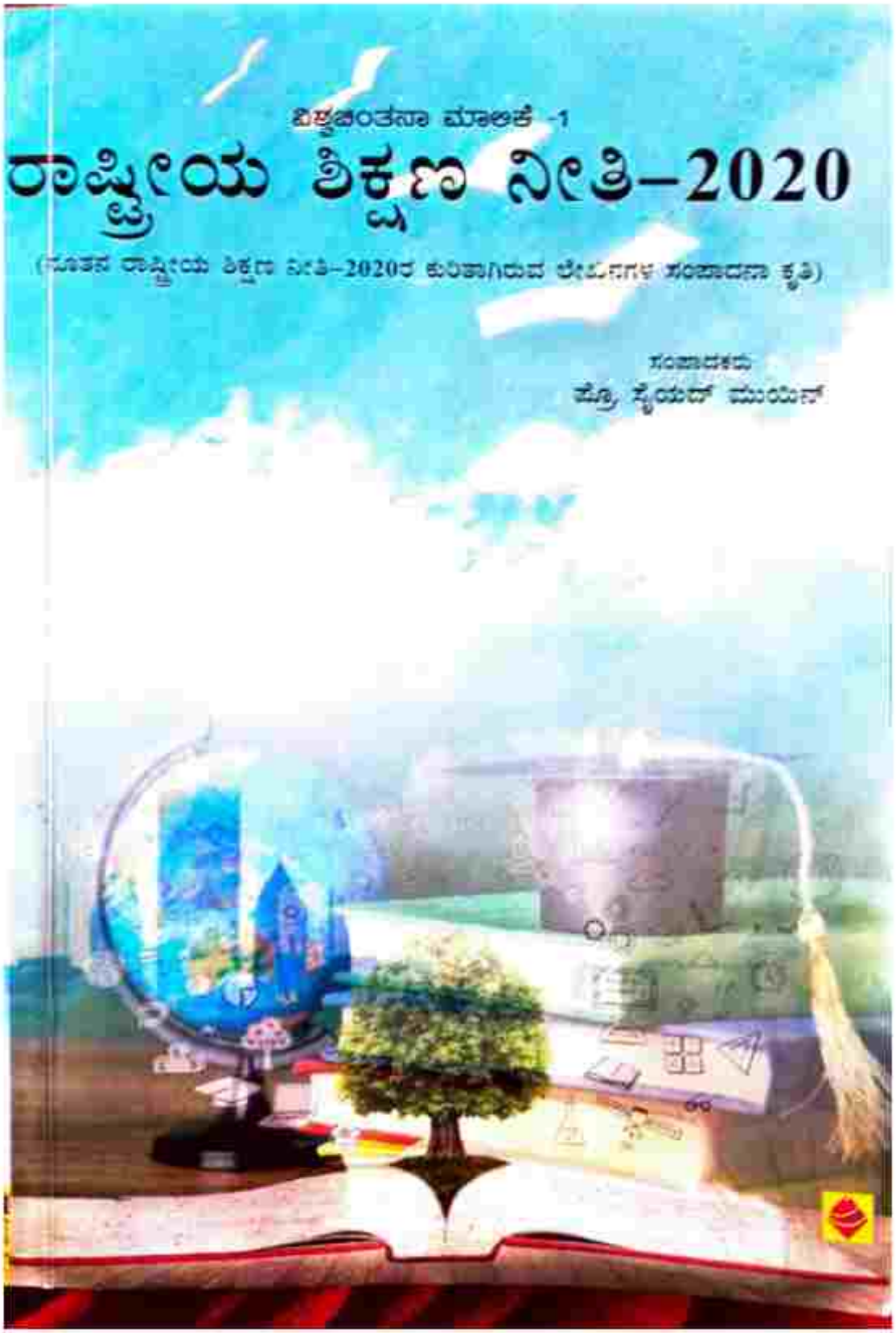
13.2021-NEP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ರಾಷ್ಟ್ರೀಯ ಶಿಕ್ಷಣ ನೀತಿ–2020
(ನೂತನ ರಾಷ್ಟ್ರೀಯ ಶಿಕ್ಷಣ ನೀತಿ–2020ರ ಕುರಿತಾಗಿರುವ ಲೇಖನಗಳ ಸಂಪಾದನಾ ಕೃತಿ)
ಸಂಪಾದಕರು
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existing communication barrier? The questions are many, the answer only lies in the future.

One other thing with the policy is that in a 4 year graduation course, students are being conferred benefits at the end of each year so that students who tend to drop out don't end up with nothing. When an individual can end up with a diploma within 2 years, why would he go ahead and complete his 4 year degree course? Are we going to create a huge number of voluntary dropouts?

Conclusion:

Theoretically, NEP is a wonderful idea with pros outweighing the cons anyday. The question is, will we be able to implement it in the right way? No doubt this requires a perfect co-ordination between the Centre and State. If implemented correctly, the policy will definitely revolutionalise education from kindergarten to universities. The future does seem bright. We just need to be patient for it.

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14.2020-Computer Science

BC-DNA: A GUI BASED PIPELINE FORNGS DATA ANALYSIS

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1.INTRODUCTION

Next Generation Sequencing (NGS) technology has evolved rapidly in the last five years, leading to the generation of hundreds of millions of sequences (reads) in a single run. The number of generated reads varies between1 million for long reads generated ≈400 base pairs (bps) and 2.4 billion for short reads generated ≈75 bps. The invention of the high- throughput sequencers has led to a significant cost reduction of sequencing. NGS generallyproduces short reads or short read pairs meaning short sequences of <~200 bases. Tocompare DNA of the sequenced sample to its reference sequence - a sequence to which the subject is to be compared, there is a need to findthe corresponding part of that sequence for eachread in sequencing data. This is called aligning or mapping the reads against the reference sequence.

Alignment, also called mapping of reads(short DNA sequence), is an essential step in re-sequencing. Re-sequencing refers to acompletesequencing of the genome of DNA. An alignment of data from these re-sequenced organisms is a relatively simple method of detecting variation in samples. Genome sequence alignment and DNA/ RNA Sequence analysis help us to understand genetic variations, understanding various diseases,identification of mutations linked to different forms of cancer etc. The process of aligning these reads to a reference genome is time consuming and demands the development of fast and accurate alignment tools. However, the current available tools make different compromises between the accuracy and the speed of mapping.

Raw short DNA/RNA reads often come in a file format called FASTQ - a plain text format where each single read occupies four consecutive lines. For each of the short reads in the FASTQ file, a corresponding location in the reference sequence needs to be determined. This is achieved by comparing the sequence of the read to that of the reference sequence. A mapping algorithm will locate a location in the reference sequence that matches the DNA / RNA read while tolerating a certain amount of mismatch to allow subsequence variation detection.

RNA sequencing (RNA-Seq), a highly sensitive and accurate technique for measuring expression across the transcriptome is revolutionizing the study of the transcriptome.It is a powerful method for discovering, profiling, and quantifying RNA transcriptsthat provides visibility to previously undetected changes occurring in disease states in response to therapeutics under different environmental conditions and across a broad range of otherstudy designs.

There are many software tools such as BBMap, BLAT, Mosaik, TMAP, NextGenMap,Bowtie etc, for short-read alignment and TopHat, Cufflinks, HISAT, DiffBind, Sailfish etc, for RNA-Seqanalysis tools. Bowtie - it is a reliable, convenient and fast tool compare toother short-read alignment tools and it supports running in parallel mode. Cufflink- is good for compute expression values because it contains a sophisticated algorithm for this calculation,which is far more accurate than other RNA-Seq analysis tools. This is the one of reason to include these modules in our project.

Bowtie is a fast short aligner based on the Burrows-Wheeler transform [1] and the FM (Full-text index in Minute Space) index [2]. An FM-index is a compressed full- text substring index based on the Burrows-Wheeletransform.

1. CONCLUSION

The system is implemented to provide a tool with a user friendly GUI for DNA and RNA- seq analysis. The system overcomes the difficulty of running each module(tool) separately, eventually reducing humanintervention at significant level. The system provides an easy access to submit data and set all the necessary parameters at once, with an additional advantage of running the system in a pipelined manner or a module separately depending on the availability of input data. The system is easy to use and require no prior knowledge of programming and thus allow

users to perform data analysis in an easy and user friendly manner with no in-between humanintervention while running the system in pipeline manner and minimum interventionwhile executing sub-modules. The system is currently under testing at Institute of Bioinformatics and AppliedBiotechnology(IBAB), Bangalore.

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- For software development:www.wikipedia.com

15.2020-Relevance feedback

RELEVANCE FEEDBACK USING MAXIMUM MARGINAL ANALYSIS FOR INTERACTIVE CBIR

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Introduction

Content-based image retrieval (CBIR) is one of the application of computer visualization techniques to the image retrieval problem, that is, the problem of searching for digital images in huge databases. CBIR is also well-known as query by image content (QBIC) and content-based visual information retrieval (CBVIR)

In "Content-based image retrieval" the search analyzes the contents of the image rather than the metadata such as keywords, tags associated with the image. The word "content" refer to colors [12], shapes [14], textures [13], or any other information that can be resulting from the image itself.

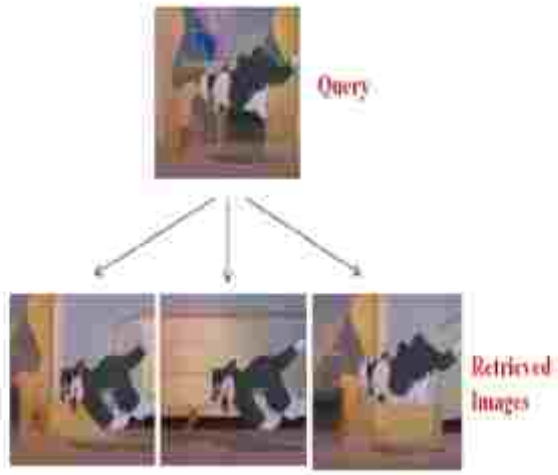

Fig 1.1 Content based image retrieval.

With lots of possible realistic applications, Content-Based Image Retrieval (CBIR) has attracted great attention in the past few years. But the performance is not acceptable, because in this method user perception subjectivity and high level concept is not well modeled. Different persons, or the same person under different circumstances, may perceive the same visual content differently.

This is called human perception subjectivity. The subjectivity exists at various levels. For example, one person may be more interested in an image's color feature while another may be more interested in the texture feature.

To overcome this drawback many Relevance feedback method is developed. It takes the advantage of human computer interaction. In this method user selects the relevant images from previous retrieved result and also can label a few more images as new example for the retrieval engine. Drawback of this technique is it treats positive sample (relevant image) and negative sample (irrelevant images).To improve, support vector machine based RF is used to classify positive and negative samples. But it still ignores the information contained in negative sample and also doesn't take unlabeled sample into account.To explore solution to this problem in this project we are making use of semi supervised biased maximum margin analysis [1].

1.1. Application of CBIR

The CBIR technology has been used in some applications such as

- **Crime prevention:** To find out Criminals Automatic face recognition systems used by police forces.
- **Security Check:** In many organisation Finger print or retina scanning used for access privileges.
- **Medical Diagnosis:** CBIR used in a medical database of medical images to assist diagnosis by identifying related old cases.
- **Intellectual Property: CBIR technology is used in** Trademark image registration, So that a new candidate mark is compared with existing marks.

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16.2020- Application Portal

APPLICATION PORTAL

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ABSTRACT

The main aim of this project is to help the students apply online for any degree courses, and later students may review application status. Admin may check the total number of request details issued, class-wise request details issued, and can accept or deny the application status based on the application details.

KEYWORDS: HTML-Hyper Text Markup Language., PHP-Hypertext Pre-Processor.

INTRODUCTION

Applicants may apply for a college admission process online via this project, and this project helps to know the student's Application status. Since it is a web-based application administrator can check the total number of applications submitted and can accept or deny the status of application.

SOFTWARE REQUIREMENT SPECIFICATION

Hardware Requirements:

- RAM :1 GB or above
- Hard disk :4 GB or above
- Processor :2.4GHZ or above

Software Requirements:

- Platform : Windows
- Front End :HTML
- Back End : PHP

SCOPE:

The scope of this project is to provide both Students and College with a good forum for having all processes online. This program offers online application for students, and they can check the application status.Since it's an online application, it lets the staff and the students use the time effectively.

PURPOSE:

The main purpose of this project is to minimize the administrative work of the teachers and to reduce the time of both the students and the teachers. This prevents administrative collection of student data and holds information in the system for every student.

Functional requirements:

Includes:

- **Login:**This module is used to login to the system.Here Admin or Student can login by entering their Id and password
- **Admin:**Admin can manage all activities like Registration, approve application, reject application, delete applicant's details, and update student details.
- **Student**:
  Student can login to the system by entering their Id and password and can check the status of application.

SYSTEM DEFINATION

Context Flow Diagram (CFD)

CFD is to show the interaction of the proposed software with external environments which includes several entities are source like user, other hardware, other software etc.

In the below figure CFD represent entire Software has single process with the input and output. Data indicated by incoming and outgoing arrows respectively.

17.2020-Kamaldas-Meenakshy

To conclude it can be said that the poems of Kamala Das has a clear note of a rebel woman who raises her voice against the insensible and dehumanized treatment of women in all aspects of life in a male dominated society. "Her poems are revolt, and the revolt is the outcome of all her dissatisfaction and psychological traumas" (Sheeba).Throughout her poems, she speaks in an "aggressively individualistic" tone against the male dominion that makes the life of a woman passive and submissive to insignificant and lifeless. She examines the silences of women in male dominated society, feel the alienation of self and the burden of becoming a woman. She even experiences the lover's betrayal and dehumanized treatment of her husband. However, she does not remain quite like a submissive and obedient wife but questions the conventional role of woman in family and society and rebels against the patriarchal mores of society through fiery voice in her poems. Though apparently it seems that Kamala Das wrote about her life and her experiences because of the repetition of the first person singular "I" in her poems but it is not only about her life and her experience, they become the voice of every rebel Indian woman.

Kamala Das, in her poems, gives the first person account of women's sexual encounters, description of the private lives of women .This pictures the suffering of women. A close examination of the contribution made by Kamala Das through her poetry is specifically the relationship that prevailed between man and woman. As a woman she has been intensely conscious of herself; she is found focusing attention on woman in her different roles as a wife, a mother, a mistress and even as a prostitute. Her poetry concentrates on her own self-discovery and expressing the different layers of hypocrisy which got over quoted in today's life and she has been bitterly criticised for that by the high preachers of social morality. Her feelings and emotions are based on actual experiences of life. It would not be wrong to point out that whatever she has written is in confessional tone, exposing the raw moods of experience. In nutshell, the poetry of Kamala Das advocates freedom and self-respect for women. Kamala Das staunchly etches the emotional picture of woman and succinctly reiterates that she should not be treated as a commodity or a subaltern. She should be bestowed with respectable position in the society.

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18.2020-Feminist- Praveen

International Multi-Disciplinary Seminar on "Role and Status of Women in India" | Jan. 2020
Organizer :- Tuscan Studies & Historical Research Association, Bijapur Collaboration with Shahoorwadi Independent College, Vijayapur

Feminist Perspective in Shashi Deshpande's "That Long Silence"

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Abstract:

Feminism as movement might have originated in the West but with the deterioration in the status of women in India and the subsequent efforts made during the freedom struggle to pave the way for equal access to education and equal status, there arouse a need for feminist studies. Feminism has always meant independence of mind and spirit and body. Its theory is that men and women should be equal politically, economically and socially. It is difficult for a common man to understand female psyche in society. Shashi Deshpande derives the title of her novel "That Long Silence" from the classic understatement by Elizabeth Robbins made in speech to a world body. "That Long Silence" comes relatively close to real life experience. The novel achieves greater credibility from the fact that Jaya, the Protagonist, is a very well-read person, possessing a literary sensitivity which corresponds with her fictional role. Deshpande may not be a formal feminist in strict sense of the word, but it must also be observed that feminism can mean different things to different people.

Key words: *Feminism, discrimination, silence, exploitation and tradition*

Shashi Deshpande was born in Karnataka and educated in Bombay and Bangalore. She published her first collection of short stories in 1978, and her first novel, 'The Dark Holds No Terror', in 1980. She won the Sahitya Akademi Award for the novel "That Long Silence" in 1990 and the Padma Shri award in 2009.

A true artist must have the capacity to have an insight into life and should be aware of his surroundings and environment. Shashi Deshpande was born and brought up in India and in an Indian family. She lives in India and she writes for Indian readers. She is concerned about Indian people and explores the complexities of their lives. Preference of male children, discrimination against girls and denial of freedom to choose the partner of life, restrictions on the choice of occupation are some of the ordeals a woman in India passes through. Gender discrimination takes a major role in Indian society.

In "That Long Silence", the writer has presented this phenomenon through the character of Jaya, who is known by two names: Jaya and Suhasini. Jaya, which means victory, is the name given by her father when she was born, and Suhasini, the name given after her marriage which means a "soft, smiling, placid, motherly woman". In the Indian context, once a girl gets married to a man, whether it be a love marriage or an arranged one, the husband takes complete control over her. Whether the husband follows the right path or wrong one, she has to blindly follow in his footsteps. Due to her sensitive nature, Jaya is very particular about moulding her tastes in order to suit those of the rest even if her superior intellect is not satisfied.

Shashi Deshpande's "That Long Silence" deals with the struggle of women in the tradition-bound, male-dominated, middle-class urban contemporary society in India. Deshpande derives the title of the novel "That Long Silence" from the epigraph of speech made by Elizabeth Robbins to a World body. "That Long Silence" is the story of Jaya, the protagonist, who remains a sufferer in her childhood and adulthood. As a young girl, she is chilled by her grandmother for her inquisitive and witty nature. For seventeen long years, Jaya managed to suppress her feeling, thinking that it is more important to be a good wife than a good writer. She perhaps would have remained in the shadow of her husband Mohan, for the rest of her life if it had not been for the jolt she received as her husband was arrested for misappropriation. Deshpande makes Jaya a writer of woman's magazine fiction. In Jaya's stories they lived happily ever after although she knows the falsity of the view of life. Jaya is representative of the urban, middle-class women exposed to liberal western ideas. But she is unable to free herself entirely from the clutches of male chauvinist ideas. These ideas are a part and parcel of her culture.

The novel "That long Silence" is about a married couple - Jaya and Mohan who get separated in course of time and about Jaya who observes silence all through her married life only to break it in the end. The novel speaks of Jaya's disappointment in married life and her suffering in isolation. The husband and wife perform their duties mechanically. Jaya is also presented in the image of a worm crawling into the hole. She keeps her inner talent of creative writing to herself. She suffers the monotony of life caused by household activities. As a

her husband. Mukta, Jaya's immediate neighbour at her Dadar flat, widowed at a very young age lives with her parents and a rebellious daughter, Nilima. Mukta is economically independent, firm and competent of handling any situation and yet she believes in superstitions. She expects her daughter to be like her. But Nilima is indifferent and rebellious. Muka is to some extent pious and Jaya is shocked at her futile self-imposed suffering by undertaking fasts for seven days of the week. Mukta rarely had her normal meal.

Jeeja, Jaya's maid servant is another typical example of suppression. She is battered about by her good for nothing drunken husband. She supports him without any protest and even provides him liquor with her hard-earned money. She bears no ill feeling though he takes up another woman, Nayana, the help-maid also views life with a calm impartiality. She craves for a male child, not because she expects any help from him in old age, but because she does not want her child, her daughter to be discriminated and harassed by the society. She is confident that a boy shall definitely enjoy at least status and maintain individuality, which are denied to a girl.

The novel also reveals all forms of oppression. Vimala, Mohan's sister tells the pathetic story of Mohan's mother looking at the framed photograph of Mohan's parents Jaya also feels, "The mother looks like any other woman of her time, staring blank faced at the world, the huge kum-kum on her forehead blotting out everything in that face but the blessed woman who dies with her husband yet living". This poor lady miserably suffered the domination of her senseless husband. She had to wait for him late in the night, and to cook the rice for him again as he wanted it fresh, hot and from an untouched vessel, as he refuses to eat what he called, "your children's disgusting leavings." The wife's long waiting for her husband in the night becomes a futile exercise when the man gets angry for not serving fresh chutney to eat, and throws the heavy brass plate at the wall and leaves the house in anger. This poor lady silently picks up the plate, removes the food scattered on the floor and sends her son, Mohan to the next door to borrow some chilies. She patiently and silently prepares fresh chutney, lights the fire, cooks rice again and sits down waiting for her husband. The children wake up to the unexpected storm that is created in the house, finally drift off to sleep again, "she was still sitting there in front of the fire, silent, motionless." The cruelty of the husband and the insensitivity of the son clearly show the discrimination and unsubordination of women. Even her educated son who witnesses the incident never finds fault with his father .The novelist saw despair so great that it would not voice itself. Deshpande tells in the novel "I saw a struggle so bitter that silence was the only weapon. Silence and surrender."

Mohan" s sister Vimala is another victim of suppression and exploitation in this society. These suppressed women seek consolation in their obsession, human bondage leading to social degradation, ill-health and death. She is compelled to sacrifice her own needs and interests to those of her family. She has to bear her exploitation and suffering without protest. Silence is the only option left for such women in this rude patriarchal society. Women suffer and die without uttering a single word of protest. Vimala, Mohan's sister suffers from heavy bleeding and dies of ovarian tumor. She does not even disclose this to her mother-in-law. The novel attempts to portray the sufferings and deprivations of women in general by presenting various characters as stereotyped representatives of traditional womanhood. The strength of the novel lies in its bold analysis of the realities about the Indian womanhood. The novel seems to advocate that woman should be assertive and keep individuality and take her own decisions about her life and future. Thus the paper has probed into the inner most recesses of women to give a better perspective of their life.

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19.2020-Role of women- Shaila

International Multi-Disciplinary Seminar on "Role and Status of Women in India"
Organizer :- Women Studies & Historical Research Association, Bijapur Collaboration with Shishuvan Independent College, Vijayapur
19th Jan. 2020

Role of women in Lahiri's "The Namesake" and "Unaccustomed Earth"

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Abstract:

The feminine consciousness is felt in almost all the novels Jhumpal.ahiri. She offers us a glimpse into the lives of ostensibly content housewives who are nevertheless suppressed under the weight of male dominance. Her protagonists are stronger. Lahiri explores the cross-cultural experiences of dislocated women. She also highlights the note of cultural plurality in her novels. The issues of identity and cultural clashes have already been vastly explored in her novels. In the era of globalization liberal thought was given importance all over the world and it was propagated by western education and culture. The women novelists revealed the new image of women struggling against the oppressive social norms of the western society. The "new woman" is free from conventional social and moral constraints. She possesses a heightened sense of individuality and self-awareness. She might belong to middle class or upper middle class, well-educated and self-conscious caught in dilemma, she struggles for fulfilment of her individuality. This is given utmost importance in her novels.

Key words: Feminine, patriarchal, conventional, oppression and diaspora.

NilanjanaSudheshnaLahiri was born on July 11, 1967, in London, England, to mother Tapati and father Amar, a Bengali couple who immigrated to the United Kingdom from Calcutta, India. Lahiri's father, a university librarian, opted to move to the United States for work, eventually settling in South Kingstown, Rhode Island, when she was still a small child. Jhumpal.ahiri is a Pulitzer Prize-winning author known for works of fiction like "Interpreter of Maladies", "The Namesake", "Unaccustomed Earth" and "The Lowland". Lahiri is renowned for the elegance and poignancy of her prose, with the ability to subtly, mesmerizingly build an emotional connection to characters.

As a popular young writer of Indian background, she is a sort of representative figure for the female predicament in Diaspora. As a Diaspora writer, she deals with a multicultural society both from "inside" and "outside" seeking to find her native identity as well as the new identity in the adopted country. Jhumpal.ahiri's feminist approach is somewhat different from the other diaspora writers. She represents the different image of Indian woman and her marginalization in cultural context. Her female characters are not subjected to any economic exploitation by the patriarchy. Most of the women characters in her works belong to diaspora communities facing cultural dilemma.She presents the different aspects of feminine identity.

The novel"The Namesake" deals with the diverging experiences of two generations of immigrants. This novel can be said as a tribute to Indian Women who leave their country and spend their whole lives at home for the sake of husband and children. This paper focuses on the Diasporic women in the novel especially Ashima. She is a true representative of Indian womanhood. "The Namesake" is the story of AshimaBahaduri who becomes AshimaGangull after her marriage with AshokeGangull. After marriage they move to Boston. When the book opens we see an upset, homesick Ashima who is emotionally detached from her parents and other family members. She is trying to recreate the taste of her favourite Indian snack, thereby trying to recreate the past. Ashima represents what AvtarBrah terms 'the homing desire of the migrant'.

Ashima's immigrant experience, identity problems, the tension between India and the United States and between family tradition and individual freedom, the generation gap, the relationship between parents and children, the uneasy status of the immigrants are the major themes dealt with in "The Namesake". The first generation especially Ashima finds it very difficult to accustom to the host culture. "The Namesake" focuses on the journeys which are undertaken by AshimaGanguli both mentally and physically. Ashima was cent percent true to the roles assigned to her as a daughter, granddaughter, wife and a mother and emerges a true winner. The only reason why Ashima found herself in America was her marriage to Ashoke. Pregnancy period was hard for Ashima as she was alone and no one was there to soothe her in the alien land. She always felt lonely and the surroundings were unfamiliar which nearly killed her feelings. Ashima was the only Indian in the hospital

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20. 2020-Morality-Meenakshy

International Journal of Humanities and Social Science Invention (IJHSSI)ISSN (Online): 2319 – 7722, ISSN (Print): 2319 – 7714

www.ijhssi.org ||Volume 9 Issue 6 Ser. IV || June 2020 || PP 07-09

Morality, Happiness and Kural Literature

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ABSTRACT: *Morality concerns what is 'good or bad' or 'right or wrong' in human character and behavior. A moral person is one who chooses the 'right' and 'good' character and behavior over the bad. Happiness is a mental or emotional state of well-being. We all want to be happy. But how do you achieve it? Even if you don't have much happiness in your life, there are some steps you can take to increase your chances of finding it. They say success doesn't cause happiness, happiness causes success. Life is better all around when you are happy. And religion, of course, can provide such purpose for many people.*

KEYWORDS: *motality, positive, happiness, ethics, virtue and Thiruvalluvar.*

Date of Submission: 07-06-2020 Date of Acceptance: 22-06-2020

Many religions have value frameworks regarding personal behavior meant to guide adherents in determining between right and wrong. There exists a positive relationship between morality and happiness. Many philosophers hold that happiness result from morality.It is a virtue that is achieved after living uprightly. Morality can be defined as the state of being upright. It is acquired from living according to the moral standards and values of a society. Morality is a good judgment of behavior that distinguishes between good and bad decisions, actions, and general way of life.

Kant says that morality is not about becoming happy but rather about becoming worthy of happiness by heeding the call of duty. And those who do so can expect, with some level of certainty, that they will in fact attain happiness. Morality is not the doctrine of how we may make ourselves happy, but how we may make ourselves worthy of happiness. The purpose of morality is to teach you to enjoy yourself and live.This paper will look at the meaning of happiness, morality and religion and why many philosophers hold that in order to be happy, one has to be moral.

Happiness is a state of being contented with life and the progress one is making in life. According to Aristotle _Happiness _is not pleasure nor is it virtue. Happiness depends on acquiring a moral character, where one displays the virtue of courage, generosity, justice, friendship, and citizenship in one's life. Plato maintains a virtue –based' eudemonistic' conception of ethics. That is to say happiness or well being is the highest aim of moral thought and conduct, and the virtues are the requisite skills and dispositions needed to attain it.

Human happiness depends on the wide range of factors. Some of them are common to all individuals while others are specific. Good deeds make us feel better. It happens when we act fulfilling our moral standards. Plato argued that those who are happy are moral.' Moral' refers to what societies sanction as right and acceptable.It is good to understand that, for one to be happy, he must set realistic and achievable goals which he will be able to achieve within a given time limit.

All of us are expected to be responsible and accountable for our actions so that they do not harm anyone. We should follow our conscience in all our actions and decisions.

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21.2020-Spectroscophy

Applied Physics A (2020) 126:824
https://doi.org/10.1007/s00339-020-04107-y

Applied Physics A
Materials Science & Processing

Spectroscopic investigation of green synthesized ZnS nanoparticles encapsulated by sodium carboxy methyl cellulose

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Received: 24 June 2020 / Accepted: 23 October 2020
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Abstract

In this article, the capping action of Sodium carboxymethyl cellulose (NaCMC) on ZnS nanoparticles synthesized by microwave-assisted method is reported. The X-ray diffraction and electron diffraction studies corroborated nanocrystalline nature of cubic ZnS. Discontinuous cluster growth of particles was implied by optical absorption studies. This was reflected in transmission electron microscope images. Fourier-transform infrared studies confirmed NaCMC capping on the surface of ZnS nanoparticles. Effective encapsulation of ZnS nanoparticles by NaCMC was further supported by Raman scattering, thermal studies and photoluminescence studies. Surface modification of ZnS nanoparticles with NaCMC appear to be suitable for specific biomedical applications due to the nontoxicity of ZnS and NaCMC.

Keywords ZnS nanoparticles · Biopolymer · Microwave irradiation · Optical properties · Thermal properties

1 Introduction

ZnS belongs to II–VI semiconductors with a wide band gap of 3.68 eV for sphalerite bulk phase. In addition to its low production cost and non-toxicity, ZnS is a thermally and chemically stable compound possessing a high dielectric constant of 8.7 [1]. Consequently, nanostructured ZnS finds itself in various fields such as super capacitors [2], solar energy applications [3], optical devices such as LED [4], biomedical applications [5][5] and luminescent display sys- tems [7]. However, the nanosized ZnS particles are highly unstable and tend to agglomerate due to the surface effects of smallness in size. Therefore, confining the growth of nanoparticles (NPs) and providing surface passivation are of prime importance in the nanoparticle research. Biode- gradable biopolymers offer an excellent opportunity in this direction.

Acknowledgements The authors thank Bhandarkars' Arts and Science college, Kundapura for sample preparation facilities, DST PURSE Laboratory, Mangalore University – Mangalore for thermal analy- sis, DST- SAIF centre, IIT Madras at Chennai for Raman scattering experiments, DST- SAIF centre at Karnatak University-Dharwad for FTIR and photoluminescence measurements and Manipal Academy ofHigher Education—Manipal for other characterizations. Author Lali- tha Devi B thanks the University Grants Commission, Government of India, for teacher fellowship.

Funding Open access funding provided by Manipal Academy of Higher Education, Manipal.

Compliance with ethical standards

Conflict of interest The authors declare that they have no conflict of interest.

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ISSN: 0976-3031

Available Online at http://www.recentscientific.com

CODEN: IJRSFP (USA)

International Journal of Recent Scientific Research
Vol. 12, Issue, 07 (D), pp. 42408-42411, July, 2021

International Journal of Recent Scientific Research

DOI: 10.24327/IJRSR

Research Article

ORGANIC FARMING: AN EFFECTIVE WAY TO PROMOTE SUSTAINABLE AGRICULTURE IN INDIA

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DOI: http://dx.doi.org/10.24327/ijrsr.2021.1207.6090

ARTICLE INFO

Article History:

Received 13th April, 2021
Received in revised form 11th May, 2021
Accepted 8th June, 2021
Published online 28th July, 2021

Key Words:

Organic Farming, Agriculture and Sustainable Methods

ABSTRACT

Organic farming is the practice that relies more on using sustainable methods to cultivate crops and it avoids chemical inputs that do not belong to the natural eco system. The paper addresses the scope of organic farming as an effective way to promote sustainable agriculture in India. The promotion of sustainable agriculture is a need of present-day world to overcome the challenges arising from chemical fertilizer-based farming. Agriculture is backbone of Indian economy with more than half of the population still depend on this sector for their livelihood. At the same time contribution of agriculture in India's GDP is less than other sectors in the Economy. This is mainly because of unsustainable farm practices. It is essential to find ways to overcome socio economic and environmental problems arising from unsustainable farm practices. The sustainable agriculture can mitigate the socio economic and environmental problems of chemical fertiliser-based farming. The paper evaluates the possibility of espousing Organic agriculture as an effective strategy to promote sustainable agriculture in India. A sustainable agricultural sector strategy can contribute to a broader development of agricultural productivity, food security, generation of rural employment and poverty reduction while promoting the conservation of the natural resource base. This new strategy should be adopted with sound infrastructure, governance, the private public participation and effective implementation seeking to contribute to poverty reduction, enhance regional integration, accelerate rural development and improve productivity in agriculture.

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INTRODUCTION

Sustainable Agriculture is more a philosophy or way of life. Sustainable agriculture is able to feed the world without destructive the environment or fear-provoking human health. It is a way of growing food in an ecologically and ethically responsible approach and it results in higher returns over time, with less need for high-priced and environmentally harmful inputs such as chemical fertilisers, pesticides and weedicides. Hence, Organic farming is a very native concept to India and it brings agricultural sustainability. It is based on such principles like:

- Soil is a living thing.
- Nature is the best teacher for farming activities since it does not use any external nutrients or additional water

Organic farming is based on understanding the ways of nature. It does not mine the soil of its nutrients nor does it humiliate the soil for fulfilling the needs of the common man. The living inhabitants of the soil are protected and nurtured. The natural micro-organisms in soil are not debilitated in any way. The focus in organic farming is the soil itself. The health of the soil and its structure is maintained as it is believed to the most important medium. Thus, organic farming is a system of farming that aims at maintenance the soil breathing, maintaining its good health, cultivating the land and then raising the crops. This must be done to sustain a pollution-free environment and in an ecological way. Sustainable agriculture is the practice of farming using principles of safeguarding ecology. Unlike organic agriculture, sustainable agriculture concentrates on the ability of providing food on the long-term. As such, besides artificial fertilizers and pesticides, it also does not allow the use of agricultural machines running on non-renewable resources.

Organic Farming and Sustainable Agriculture in India

As far as India is concerned, the Government of India has been undertaking measures to promote organic farming with the aim to improve soil fertility and help to double the farmers' revenues by the year 2022. The Prime Minister had visited

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Sikkim state which is India's first organic state and encouraged other states to imitate the "Sikkim model". Similarly, Uttranjal is also a state which is a leading player in Organic farming. Some of the policy initiatives to promote organic farming and exports include development of an organic regulation for exports by the Agricultural and Processed Food Products Export Development Authority (APEDA), removal of quantitative restriction on organic food exports, providing subsidies to farmers under the ParamparagatKrishiVikasYojana (PKVY) in partnership with the state governments, and other schemes such as the Mission Organic Value Chain Development for North Eastern Region. Despite these initiatives, a recent survey-based study covering 418 organic farmers across different states of India suggests that a move to organic farming methods may not be that easy and organic farmers are not getting the expected premium price for their produce.

The supply chain linkage in India is undersized and small and mid-sized farmers located in hilly regions and tribal areas find it extremely difficult to access the market. There is a shortage of pack houses and refrigerated vehicles, which leads to spoilage. Organic products have to be stored separately from conventional products to avoid cross-contamination and the existing supply chain does not often provide that facility. While the government is supporting organic product marketing through fairs and exhibitions, it does not give farmers a stable market. In a number of cases, the middlemen take away most of the profits and farmers are not able to earn a premium price. Direct linkages to processors and retailers could have helped farmers to get a better price, but farmers lack the right linkages and hence have to depend on middlemen and mandis.

Objective

1. To understand the Concept of Organic Forming and its Principles
2. To know the Potential of Organic Farming to Endorse Sustainable Agriculture in India.
3. To find the future prospects and solution for India.

METHODOLOGY

This is a descriptive study based on secondary data and data collected from journals, books, magazines and some published articles.

Concept of Organic Farming & Principles

As per the definition of the USDA "organic farming is a system which avoids or largely excludes the use of synthetic inputs (such as fertilizers, pesticides, hormones, feed additives etc) and to the maximum extent feasible rely upon crop rotations, crop residues, animal manures, off-farm organic waste, mineral grade rock additives and biological system of nutrient mobilization and plant protection".

According to FAO "Organic agriculture is a unique production management system which promotes and enhances agro-ecosystem health including biodiversity, biological cycles and soil biological activity, and this is accomplished by using on-farm agronomic, biological and mechanical methods in exclusion of all synthetic off-farm inputs". The organic farming is based on the following principles.

Principle of health: Organic Agriculture should sustain and enhance the health of soil, plant, animal, human and planet as one and indivisible. This principle points out that the health of individuals and communities cannot be separated from the health of ecosystems -healthy soils produce healthy crops that foster the health of animals and people.

Principle of ecology: Organic Agriculture should be based on living ecological systems and cycles, work with them, emulate them and help sustain them. This principle roots organic agriculture within living ecological systems. It states that production is to be based on ecological processes, and recycling. Nourishment and wellbeing are achieved.

Principle of fairnesv: Organic Agriculture should build on relationships that ensure fairness with regard to the common environment and life opportunities. Fairness is characterized by equity, respect, justice and stewardship of the shared world, both among people and in their relations to other living beings. This principle emphasizes that those involved inorganic agriculture should conduct human relationships in a manner that ensures fairness at all levels and to all parties - farmers, workers, processors, distributors, traders and consumers.

Principle of care: Organic Agriculture should be managed in a precautionary and responsible manner to protect the health and well-being of current and future generations and the environment. Organic agriculture is a living and dynamic system that responds to internal and external demands and conditions.

The Potential of Organic Farming to Endorse Sustainable Agriculture in India

The concept of Sustainable agriculture integrates three main goals- environmental health, economic profitability, and social and economic equity. The concept of Sustainability rests on the principle that we must meet the needs of the present without compromising the ability of future generations to meet their own needs. The conservation of natural resources is critical for the agricultural sector which ensures long-term sustainability. The rigorous reliance on chemical fertilizers and pesticides always questions the concept of sustainability in its all aspect. It harms environment and the food chain. The use of chemicals in farming have serious long-term effects on the environment. These chemicals contaminating soil and water sources, thereby it enters in to the food chain. In addition to this, when cattle consume foliage that contains these chemicals become highly concentrated in the flesh and milk of dairy cows. Ultimately, it creates serious health problems to people who consume dairy products. Organic agriculture avoids all kinds of practices which damages agroecosystem. It provides healthy food while establishing an ecological balance to prevent soil fertility or pest problems. In order to alleviate all environmental and social problems arising from chemical based farming, the promotion of organic farming is indispensable.

Other than environmental problems, chemical fertilizers and pesticides-based farming creating so many economic destitutions to the farmers. The unsustainable farm practices have negative impact on farmer's health and long term returns of farmers. The increase in use of pesticides and fertiliser leads to the increase in cost of production. The only group which gets benefited by this is the corporate who manufacture these

pesticides. The continuous application of chemical fertilizers reduces the fertility of soil which causes continuous decline in farm produce. It leads to the increasing cost of production and declining productivity which makes the farming economically unsustainable. Agriculture can be sustainable only if it has a long-term economic viability. Organic farming ensures long term economic sustainability than modern chemical fertilizers and pesticides-based farming. Moreover, organic products carry a premium price in the market which makes organic farming more profitable. An effective agricultural sector strategy can contribute to a broader development of agricultural productivity, food security, generation of rural employment and poverty reduction while promoting the conservation of the natural resource base. This new strategy should be adopted with sound infrastructure, governance, the private public participation and effective implementation seeking to contribute to poverty reduction, enhance regional integration, accelerate human development, and improve productivity in agriculture. It is thus clear that agriculture needs to undergo a drastic revamp to become more sustainable. This is important to take care of the environment and to improve the productivity of the agro ecosystem. The policy measures are important to support agriculture which reflects the long-term social and environmental sustainability. The organic farming stress on use of local resources which contributes to the empowerment of farmers and rural community.

The following possibilities are identified regarding potential of organic farming to promote sustainable agriculture in India:

- As India now in the initial stage of organic farming, the quantity produced not enough to feed the large Indian population. Under this situation, concentrating on the export aspect of organic farming is more suitable opportunity for India.
- Optimisation of the potential trade in organic products is one of the good opportunities for improving the conditions of agricultural sector of India. Through the export of organic agricultural products, India can improve the conditions of Indian farmers as well as the entire agricultural sector.
- Organic farming can be adopted as one of the strategies for sustainable agriculture promotion with a long-term perspective to foster community institutions that meet employment, environmental and health needs of the society.
- Institutional barriers to the development of the organic sector are needed to be resolved with proper strategy and execution.
- The traditional and indigenous farming knowledge should be conserved, while introducing selected modern technologies to manage and enhance diversity into farming systems.

Future Prospects and Solution for India

Agriculture sector is an important contributor to the Indian economy around which socio-economic privileges and deprivations revolve and any change in its structure is likely to have a corresponding impact on the existing pattern of social equity. Sustainable agricultural production depends upon the efficient use of soil, water, livestock, plant genetics, forest, climate, rainfall, and topology. Indian agriculture faces resource constraints, infrastructural constraints, institutional constraints, technological constraints and policy induced limitations.

Sustainable development is the management and conservation of the natural resource base and the orientation of technological and institutional change in such a manner as to ensure the attainment and continued satisfaction of human needs for the present and future generations. Such sustainable development (in the agriculture, forestry and fisheries sector) conserves land, water, plant and animal genetic resources, is environmentally non-degrading, technically appropriate, economically viable and socially acceptable.

Therefore, to achieve sustainable agriculture development the optimum use of natural resources, human resources, capital resources and technical resources are required.

In India, the crop yield is heavily dependent on rain, which is the main reason for the declining growth rate of agriculture sector. These uncertainties hit the small farmers and laborers worst, which are usually leading a hand to mouth life. Therefore, something must be done to support farmers and sufficient amount of water and electricity must be supplied to them as they feel insecure and continue to die of drought, flood, and fire. India is the second largest country of the world in terms of population; it should realize it is a great resource for the country. India has a huge number of idle people. There is a need to find ways to explore their talent and make the numbers contribute towards the growth. Especially in agriculture, passive unemployment can be noticed.

The sustainable development in India can also be achieved by full utilization of human resources. A large part of poor population of the country is engaged in agriculture, unless we increase their living standard, overall growth of this country is not possible. If we keep ignoring the poor, this disparity will keep on increasing between classes. Debt traps in country are forcing farmers to commit suicides. People are migrating towards city with the hope of better livelihood but it is also increasing the slum population in cities. Therefore, rural population must be given employment in their areas and a chance to prosper. India has been carrying the tag of "developing" country for quite long now; for making the move towards "developed" countries, we must shed this huge dependence on agriculture sector.

CONCLUSION

The increasing awareness about the safety and quality of foods, long term sustainability of the present farming system persuades sustainable agriculture practices. The organic farming has emerged as an alternative system of farming which not only address the quality and sustainability concerns, but also ensure profitable livelihood option for rural community of India. As India in the initial phase of Organic farming, strong institutional mechanisms and governmental support must be essential to realize its sustained growth. Strong Local institutions build up including farmers Group, Local Guidance, knowledge sharing, market linkages etc are critical to build up successful growth of organic farming. Sustainable Agricultural development in India is essential to support the farmers who are struggling to sustain in this sector. As an initial step to promote Sustainable Farming, the Governmental inventiveness

to assist the unorganized frames through various means are essential to overcome the present problems faced by Organic farmers and enable them to achieve social and economic development thorough successful sustainable agricultural practices.

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How to cite this article:

Manjunatha M and Rasik Kumar 2021, Organic Farming: An Effective Way To Promote Sustainable Agriculture In India. *Int J Recent Sci Res.* 12(07), pp. 42408-42411. DOI: http://dx.doi.org/10.24327/ijrsr.2021.1207.6090

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SJIF Impact Factor 2021: 8.013| ISI I.F.Value:1.241| Journal DOI: 10.36713/epra2016 ISSN: 2455-7838(Online)
EPRA International Journal of Research and Development (IJRD)
Volume: 6 | Issue: 5 | May 2021 - Peer Reviewed Journal

ONLINE V/S TRADITIONAL PEDAGOGY IN PRESENT EDUCATION: A CRITICAL VIEW

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Article DOI: https://doi.org/10.36713/epra6938
DOI No: 10.36713/epra6938

ABSTRACT

"Globalisation, new technologies and demographic developments constitute an enormous challenge; one of the answers to this problem is the access to lifelong learning." - (Jan Figel) Technology has dominated all spheres of life. The education is also one of the fields where we can see the impact of information technology. Over several years the education process has seen drastic changes in imparting knowledge. During the last few years, it has been seen, an almost exponential development and growth of the digitalization, automation and the internet, with little sign of a slowdown. No longer is Internet access restricted to a few selected education establishments it is now available to anyone in their place of work, local libraries, the Internet sites and even in the home. It is the information that has becomes the key to the success in different walks of life. At the time of independence, India inherited an education system with glaring disparities between males and females, between upper and lower classes, between economically advantaged and disadvantaged groups and urban and rural population. Consequently, one of the primary responsibilities of the Government of India after independence was to make education available to all people. This responsibility was sought to be realized through the opening of more and more primary schools, secondary schools and colleges. However, the formal education system alone was found to be unable to meet the demand for education.

KEYWORDS: *Online, Traditional, Education, Pedagogy, Internet.*

I. INTRODUCTION

Technology has dominated all spheres of life. The education is also one of the fields where we can see the impact of information technology. Over several years the education process has seen drastic changes in imparting knowledge. During the last few years, it has been seen, an almost exponential development and growth of the digitalization, automation and the internet, with little sign of a slowdown. No longer is Internet access restricted to a few selected education establishments it is now available to anyone in their place of work, local libranes, and the Internet sites and even in the home. It is the information that has becomes the key to the success in different walks of life. Today, one of the primary responsibility of the Government of India after independence was to make education available to all people. This responsibility was sought to be realized through the opening of more schools and colleges. However, the formal education system alone was found to be unable to meet the demand for education. The report of United Nations Development Programme UNDP (1993) pointed out the fact that only seven percent of the relevant age group is enrolling for higher education in India.

SJIF Impact Factor 2021: 8.013| ISI I.F.Value:1.241| Journal DOI: 10.36713/epra2016 ISSN: 2455-7838(Online)
EPRA International Journal of Research and Development (IJRD)
Volume: 6 | Issue: 5 | May 2021 - Peer Reviewed Journal

Every stage of societal development requires an educational system that can adequately reflect its needs and demands. Currently we are witnessing in education global shifts that reflect changes brought about by computers and communication technology. This shift may be called Electronic Learning, or E-learning. E-learning is a mode of knowledge production and circulation wherein information technologies play a decisive role. The aim of learning is to explore and to add useful knowledge over and above faster copying, searching and distribute.

Concept of Online Education

The term Online Education means learn through online and it is basically the online delivery of information communication, training and learning. Online Education involves the use of computers and Internet to aid in the learning process. If a computer is a standalone, then we have Computer Learning (CL) that can be used either Computer Based Learning (CBL) or Computer Assisted Learning (CAL). CBL involves the computer taking the place, for the most part, of the teacher, and is popular in distance education. CAL involves a teacher using Online Education to supplement face-to-face teaching. Online Education has a number of other implications such as, Exploration Experience Engagement Ease of use, Empowerment, etc.

Concept of Traditional Education

The traditional learning comes in basic four forms which are:

1. Classroom sessions: Attending lectures wherein teacher takes lesson topic-by topic or lesson-by-lesson. Generally learning takes place in collaborative atmosphere.

2. The lab sessions: Experiments are carried out in the lab by the teacher and/or by students themselves and study observations/ results of these experiments.

3. Library sessions: Students go to the library and explore books/study notes magazines on subjects of their interest.

3. Collaborative learning: Students get in touch with co-students and discuss about their queries and get these queries solved by discussion among them or in some Classroom Sessions.

II. OBJECTIVE

1. To study the student's propensity for online education.
2. To review the changes in the field of education over a long period of time.
3. To know the need of online education in present scenario.
4. To study the short comings of online education.

III. METHODOLOGY

The study is based on primary as well as secondary data sources. The primary data are collected by google form. To collect the data structured questionnaire was circulated among students, respondents selected through random sampling method. Totally 200 students are included in the sample size. Thereafter, tabular analysis is done to analysis Online and Traditional Pedagogy. Simple statistical methods like averages, percentages and graphs are used to analyse. Secondary sources used are published reports, Journals, articles, etc.

IV. RESPONDENTS PROFILE

Table: 1 Profile of the Respondents.

	Frequency	Percentage		Frequency	Percentage
Age Groups			**Male-Female Ratio of Respondents**		
Below 16 Years	04	02%	Male	58	29%
16-20 Years	148	74%	Female	142	71%
20-24 Years	32	16%	Total	200	100%
24 and Above	16	08%	**Social Category of Respondents**		
Total	200	100%	General	58	29 %
Educational Level			SC/ST	06	03%
Secondary	06	03%	OBC	136	68%
Higher Secondary	48	24%	Total	200	100%
Graduation	90	45%	**Current Enrolment Status**		
Post-Graduation	48	24%	Full Time	134	67%
Diploma. /Others	08	04%	Part Time	66	33%
Total	200	100%	Total	200	100%

Sources: Primary Data

SJIF Impact Factor 2021: 8.013| ISI I.F.Value:1.241| Journal DOI: 10.36713/epra2016 ISSN: 2455-7838(Online)
EPRA International Journal of Research and Development (IJRD)
Volume: 6 | Issue: 5 | May 2021 - Peer Reviewed Journal

In this study among the randomly selected students 02% are from less than 16 years of age, 74% belonging to 16-20 years age group. In relating to gender representation 29% representing boys, 71% students are girls. When we observe their educational level 03% were having secondary education, 24% are having higher education as well as post-graduation respectively, 45% are graduates and 04% students are from Diploma and other streams. In this study 29% general category students were participated, 68% OBC students were participated and 03% SC and ST students were participated. Here 67% students were enrolled as full time and remaining 33% students were enrolled as part time.

V. ANALYSIS

1. Convenience and Participation in Online Class

The study clearly depicts that traditional classes were more convenient to the students due to the various reason. Especially we found that the students from the rural region face bundle of problems in online class mainly network issues.

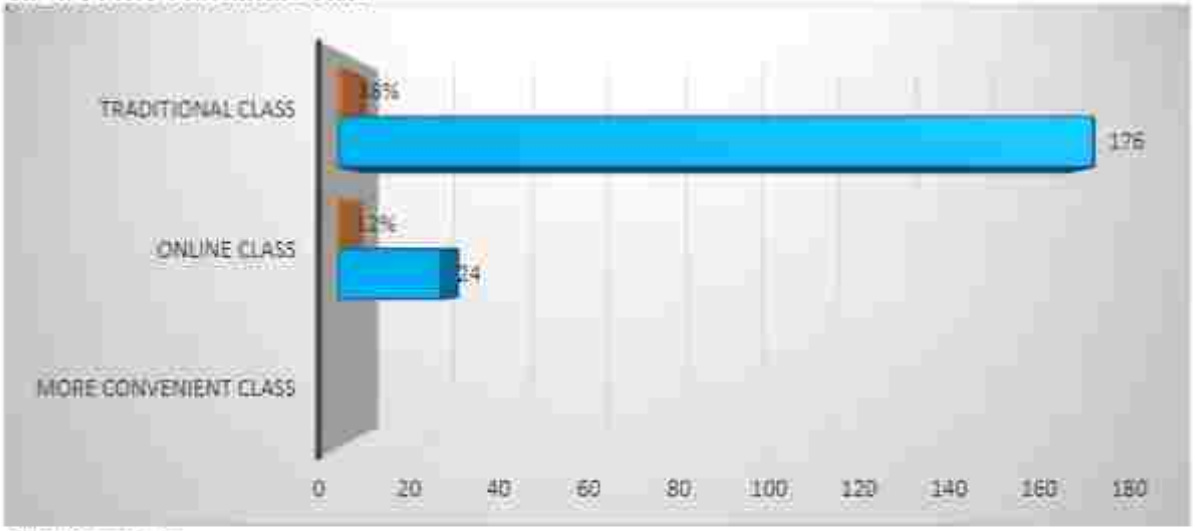
Table: 2 Convenience and Participation in Online Class

	Frequency	Percentage		Frequency	Percentage
More Convenient Class			**Participation in Online Class**		
Online Class	24	12%	Yes	188	94%
Traditional Class	176	88%	No	12	06%
Total	200	100%	Total	200	100%

Sources: Primary Data

Table 2 represent 88% students were prefer traditional class and only 12% students were gone for online class. From this we can conclude that online class is not a perfect substitute for traditional class just it is a choice but majority students are participating in online class in these days. Here we can observe 94% students are participating in online class, just 06% students are not able to participate in online class.

Chart: 1 More Convenience Class



Sources: Primary Data

SJIF Impact Factor 2021: 8.013| ISI I.F.Value:1.241| Journal DOI: 10.36713/epra2016 ISSN: 2455-7838(Online)
EPRA International Journal of Research and Development (IJRD)
Volume: 6 | Issue: 5 | May 2021 - Peer Reviewed Journal

2. Difficulties and Differences between Online and Traditional Class

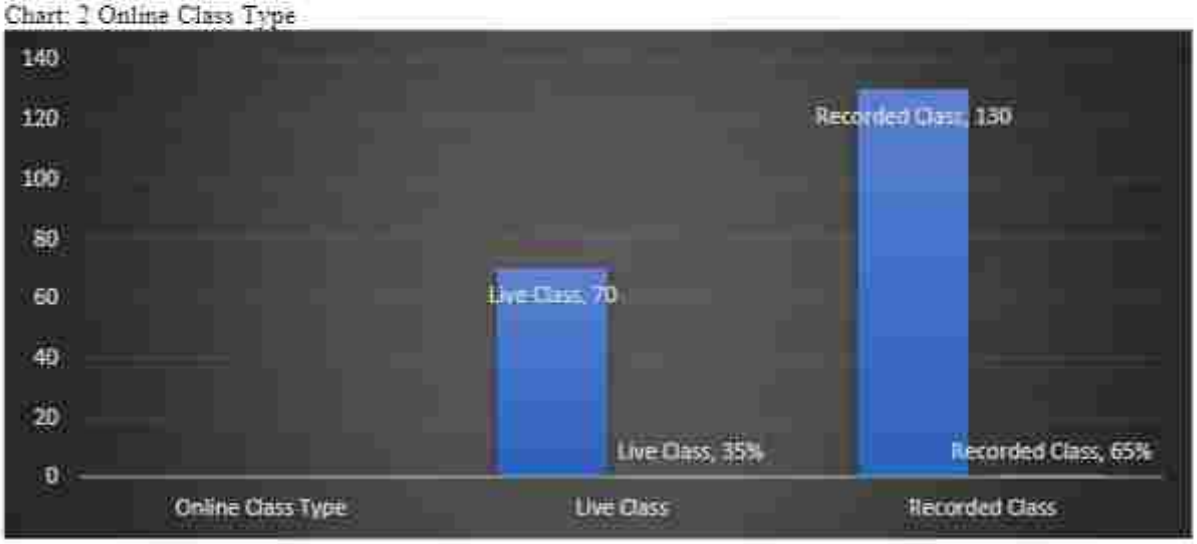
Table: 3 Difficulties and Differences between Online and Traditional Class

	Frequency	Percentage		Frequency	Percentage
Online Classes are More Difficult			**Difference in Online Class**		
Yes	148	74%	Much Difference	82	41%
No	34	17%	Not Much Difference	42	21%
Maybe	18	09%	Maybe	76	38%
Total	200	100%	Total	200	100%
Online Class Type			**Availability of Instructor**		
Live Class	70	35%	Available	156	78%
Recorded Class	130	65%	Not Available	44	22%
Total	200	100%	Total	200	100%

Sources: Primary Data

In the above table (Table No. 3) we can observe that difficulties in online class and difference between online and traditional class. For 74% students' online class is more difficult to attend the class as well as to understand the class. 41% students said that there is much difference between traditional and online class, for 38% students there maybe the difference between both classes. Majority 65% students were prefer recorded class instead of live class. 78% students said that instructors are available for conversation. Here we can conclude that students especially from rural region are facing much difficulties in online class, they always go for traditional class.

Chart: 2 Online Class Type



Sources: Primary Data

3. Device Used for Online Class

We settled on a definition from Educause "Using portable computing devices (such as iPads, laptops, tablet PCs, PDAs, and smart phones) with wireless networks enables mobility and mobile learning, allowing teaching and learning to extend to spaces beyond the traditional classroom. Within the classroom, mobile learning gives instructors and learners increased flexibility and new opportunities for interaction." Here we can observe that almost all students were settled with smartphones. They use mobile phones regularly even for online class also. 91% students are using smartphone for online class, a very few students are using other devices like, desktop, laptop, etc.

SJIF Impact Factor 2021: 8.013| ISI I.F.Value:1.241| Journal DOI: 10.36713/epra2016 ISSN: 2455-7838(Online)
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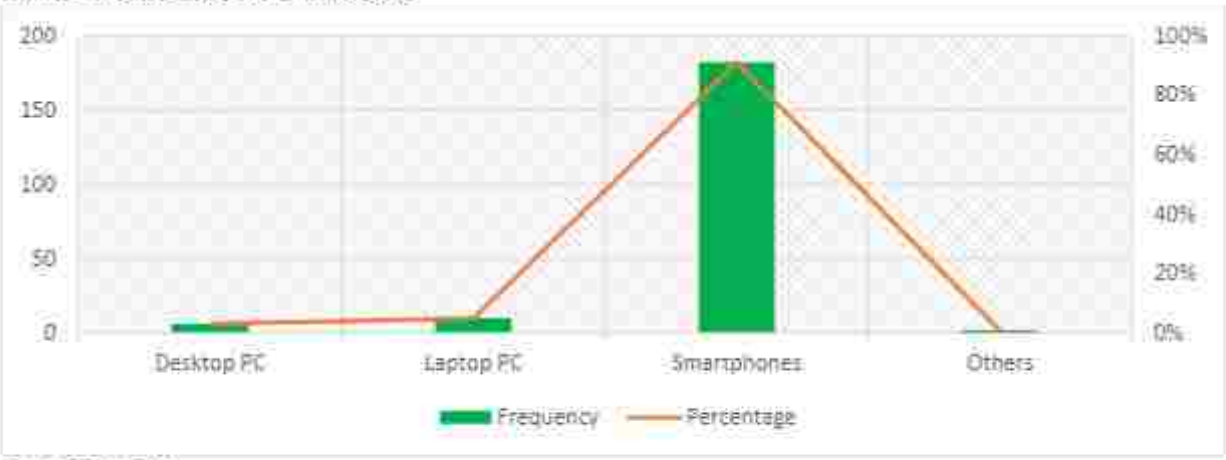
Volume: 6 | Issue: 5 | May 2021 - Peer Reviewed Journal

Table: 4 Device Used for Online Class

Devices	Frequency	Percentage
Desktop PC	06	03%
Laptop PC	10	05%
Smartphones	182	91%
Others	02	01%
Total	200	100%

Sources: Primary Data

Chart: 3 Device Used for Online Class



Sources: Primary Data

Mobile technology is becoming prevalent in today's society. Yet despite the widespread use of Internet-accessible mobile

4. PROBLEMS IN ONLINE CLASS

Comparing traditional education with online education brings forth significant deficiencies in the online mode such as lack of human connect, absence of opportunities of collaborative learning, teacher supervision and the most glaring being lack of opportunities for hands-on learning in complex subjects such as science and mathematics. Along with that students also face physical health barriers, technical stability, availability online learning site etc.

Table: 5 Problems in Online Class

	Frequency	Percentage		Frequency	Percentage
Interaction with Co-learners			**Accessibility of Internet**		
Possible	82	41%	Easy	126	63%
Impossible	118	59%	Difficult	74	37%
Total	200	100%	Total	200	100%
Up-to-date ICT in Institution			**Security in Online Class**		
Available	132	66%	Secure	76	38%
Not Available	68	34%	Not Secure	124	62%
Total	200	100%	Total	200	100%
Physical Health Barrers			**Understandability of Online Learning**		
Yes	120	60%	Understandable	60	30%

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No	80	40%	Not Understandable	140	70%
Total	200	100%	Total	200	100%
Technical Stability in Online Learning			**Availability of Online Learning Site**		
Yes	108	54%	Regular	130	65%
No	92	46%	Irregular	70	35%
Total	200	100%	Total	200	100%

Sources: Primary Data

Table 5 shows that problems involved in the online class. Here only 59% students are able to interact with their co-learners, remaining 41% students are not able to interact with their co-learners. For 63% students it is easy to access the internet, the study depicts that 66% institutions have up-to-date ICT in their institution 34% institutions re suffer to provide up-to-date technology to their students. When we come to the security in online class it is most danger thing because majority 62% students were felt that online class is not secure that much. 60% students are facing health barriers in online class like eye strains, headache, etc. The most important thing found in the study is majority 70% students are not able to understand the class. Here we can observe that technical stability is also not that much at the same time online sites are also not available every time.

VI. CONCLUSION

For decades, scholars have debated on which mode of education is superior? Some scholars argue that online is superior and others argue that online is less effective than traditional face-to-face courses. A few others suggest that the hybrid mode (e.g., online blended with face-to-face lectures) is the most desired, inevitable and productive content delivery method for students. However, students' perceptions towards online learning as compared to traditional face-to-face learning have largely been overlooked. As per this study, It is found that majority of the students are facing communication problems, along with that, they are facing internet issues, etc. Thus, they strongly feel that the study environment in traditional class is more conducive for the study because in online class they just attend the class but not able to understand clearly.

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International Journal of Humanities and Social Science Invention (IJHSSI)
ISSN (Online): 2319 – 7722, ISSN (Print): 2319 – 7714
www.ijhssi.org ||Volume 10 Issue 4 Ser. I || April 2021 || PP 36-40

Tagore's Gitanjali and "self-transcendence."

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Abstract: *Rabindranath Tagore occupies a frontline position in the galaxy of the prophets of Humanism. He was the first Asian writer to be awarded a Noble Prize in 1913 for translated version of his cycle of song – poems, 'Gitanjali'. Tagore's 'Gitanjali' reflects his desperate efforts to see the world to live in peace and harmony. He tries to foster the values of humanity and bring the happiness in the land by encouraging the masses to love one another, live in peace and lead a harmonious life full of contentment. He shows ways of freeing human soul from all bondage and pettiness of the world and thereby transcending itself into a search for universal love and brotherhood that the Lord provides to the mankind. In 'Gitanjali', Rabindranath Tagore has offered the ways and means of attaining the ultimate purpose in human life – that is to become one with the infinite. Thus we can say that in 'Gitanjali', Tagore concentrates on self-transcendentalism*

Keywords*: Gitanjali, peace,contentment,harmony,self-transcendentalism.*

Date of Submission: 20-03-2021 Date of Acceptance: 04-04-2021

Gitanjali", or Song Offerings, is a collection of poems translated by the author, Rabindranath Tagore, from the original Bengali. Self – transcendence helps us to understand aspects of the moral life which includes development of wisdom, the practice of moral praise, and psychological well – being. Self – transcendence is linked to virtue in different religions and spiritual traditions. K R Srinivasan Iyenger opines that 'Gitanjali' is a spiritual journey towards the Supreme Soul. His poems is not poems of exclusion but of all inclusion. 'Gitanjali' or Song offerings offers all the possible human and spiritual values a person needs to be in harmony with himself, with society and with the world, the universe at large. Tagore reflects how we can find joy in our lives. The songs are meditative, reflective and remarkable for their spiritual character.

Tagore speaks about God's infinite gifts in the first song of 'Gitanjali'. The poem mentions the grace of God to a human being. The poet considers human body as a frail vessel. The poet tells that God intermittently prepares its damages and fills up it with fresh life. God takes care of his people and helps them to solve their problems. Tagore considers himself as a flute and the poem that comes out of his mouth as an eternal melody which is new forever. He even feels that God will save him, protect him and bless him.

Thou hast made me endless, such is thy pleasure.
This frail vessel thou emptiest again and again,
and fillest it ever with fresh life.
This little flute of a reed
thou hast carried over hills and dales,
and hast breathed through it melodies eternally new.
At the immortal touch of thy hands
my little heart loses its limits in joy and gives birth
to utterance ineffable.
Thy infinite gifts come to me only
on these very small hands of mine. Ages pass,
and still thou pourest,
and still there is room to fill.

Tagore is a highly devoted person who just wants to please God. He feels that to remember God at the time of pain and agony is much easier than worshipping Him during the moments of success and happiness. The poet does give importance to self – transcendence. He wants every moment of his life to be dedicated in praising and pleasing God. This is very well brought out in poem 4 of 'Gitanjali'.

Life of my life, I shall ever try
to keep my body pure, knowing that thy living touch
is upon all my limbs.
I shall ever try to keep all untruths out from my thoughts,
knowing that thou art that truth which has kindled
the light of reason in my mind.

I shall ever try to drive all evils away from my heart
and keep my love in flower, knowing that thou hast thy seat
in the inmost shrine of my heart.
And it shall be my endeavour to reveal thee in my actions,
knowing it is thy power gives me strength to act.

The poet advocates life in nature and in the open as the best means of spiritual progress, for in nature the religious eye will see the infinite lying stretched in silent smiling repose. According to Tagore the best to derive inspiration is to lose oneself in the contemplation of nature. It is only perfect harmony between man and everything else in nature would enable man's soul to comprehend the mysteries of reality and realize the infinite. According to him, man must experience the freedom of consciousness.

To know oneself is to understand the world around. First of all man must know how to segregate his soul from his self. The self is the body that causes him pain and suffering, greed and pride, fear and death. However true greatness lies in the realisation of the fact that we are not just the physical self or body but our soul is part of the larger consciousness. It is only the soul which by its very nature can overcome all limits, and finds its affinity with the Supreme One.

The very goal of life is to move from imperfection to perfection. Tagore is a romantic. He is the worshipper of beauty. This is reflected in his 'Gitanjali'. His happiness in the midst of the nature's beauty is obvious when he writes:

Pluck this little flower and take it, delay not!
I fear lest it droop and drop into the dust.
It may not find a place in thy garland, but
honour it with a touch of pain from thy hand
and pluck it. I fear lest the day end before I am aware,
and the time of offering go by.
Though its colour be not deep and
its smell be faint, use this flower in thy service
and pluck it while there is time.

Tagore says that the Lord walks in the midst of the poorest, the lowest and the lost people who have no hopes. He feels that the Lord is there with them to love and take care of them. He also feels that he has to become good and try to overcome the pride and only then he can follow the Lord.

Here is thy footstool and there rest thy feet
where live the poorest, and loveliest, and lost.
When I try to bow to thee, my obeisance
cannot reach down to the depth where thy feet rest
among the poorest, and loveliest, and lost.
Pride can never approach to where
thou walkest in the clothes of the humble
among the poorest, and loveliest, and lost.
My heart can never find its way to where
thou keepest company with the companionless
among the poorest, and loveliest, and lost.

Rabindranath Tagore has consideration towards those who are being targeted by the social systems. He cannot stand the injustice done to the downtrodden people of India. He wants the country to make a new one where corruptions and evil deeds are not seen. This can be seen in 'Gitanjali' 37

I thought that my voyage had come to its end
at the last limit of my power,
that the path before me was closed,
that provisions were exhausted and
the time come to take shelter in a silent obscurity.

But I find that thy will knows no end in me.

And when old words die out on the tongue,
new melodies break forth from the heart;
and where the old tracks are lost,
new country is revealed with its wonders.

According to Dr. S.Radhakrishnan, Tagore's poetry is, "a light that fills the mind, a song that stirs the blood and a rhyme that moves the heart. The voice of Rabindranath vibrating with the passion of genius, and glorifying all his race, instils into the sinking heart of India faith in herself, faith in her future and faith in the world". Tagore's vision of good education led him to open Visva – Bharati University. According to him, a good education was not about facts and dates, but about enlightenment of the mind. He felt, "Education means enabling the mind to find out that ultimate truth which emancipates us from the bondage of dust and gives us wealth not of things but of inner light, not of power but of love. It is a process of enlightenment. It is divine wealth. It helps in the realisation of truth."

The songs of 'Gitanjali' can purify our body and mind. It makes us to get closer to our God. The God of Rabindranath Tagore is the God of beauty, wisdom and perfection, not a rigid deity prescribed by religion or tradition. Throughout the 'Gitanjali' collection, Tagore expresses emphasis on devotion, faith and an individual's relationship with the divine in contrast with the official rules and practices of orthodox religion. Though Tagore is a firm believer in the union of Man and God he has no faith in absolute identity. Tagore is a dualist who believes in a mysterious identitiy in difference. That is why in his poetry, there is a constant synthesis of opposites. Thus freedom means freedom from bondage, but it can be realised only through bondage. See, how nicely the very idea is expressed in the following sweet lyric from 'Gitanjali'.

Deliverance is not for me in renunciation.
I feel the embrace of freedom
in a thousand bonds of delight.
Thou ever pourest for me the fresh draught of
thy wine of various colours and fragrance,
filling this earthen vessel to the brim.
My world will light its hundred different lamps
with thy flame and place them before
the altar of thy temple.
No, I will never shut the doors
of my senses. The delights of sight and hearing
and touch will bear thy delight.
Yes, all my illusions will burn into illumination of joy,
and all my desires ripen into fruit of love.

Self-transcendence is a determining feature of all mystical experience. A mystic is essentially a transcendentalist As A. Srinivasa Raghavan says "mysticism posits eternal values such as Truth, Beauty and Goodness, which are all infinite, and which transcend any system of human relations, but it finds these actualised in concrete human situations and experiences. God as Truth safeguards society's pursuit of knowledge and broadens the horizon of human concepts, attitudes and affections. God as Beauty assures the promotion and conservation of values in the world of art. God as Goodness and Love guaranties man and society all that is worth maintaining and developing in social life and relations. God as the Person of Persons conserves the supreme values of personality of all men and in all human situations. Finally, God as the Transcendent Being or the Real Self stands for the conjunction of the values of Truth, Beauty and Goodness." To study Rabindranath Tagore is to know the essence of mysticism in his poems. It also gives a glimpse of Indian artistic traditions. As the poem follows, Tagore expresses a strong desire for God's company. He says to God:

When thou commandest me to sing it seems that
my heart would break with pride; and I look to thy face,
and tears come to my eyes.
All that is harsh and dissonant in my life melts
into one sweet harmony – and my adoration
spreads wings like a glad bird on its flight across the sea.
I know thou takest pleasure in my singing,
I know that only as a singer I come before thy presence.

I touch by the edge of the far spreading wing of my
song thy feet which I could never aspire to reach.
Drunk with the joy of singing I forget myself
and call thee friend who art my lord.

The poet further tells that God is not a creator but also take care of everything on this earth. God is bound to his duty forever. There is no other way than hard work to attain God. The poet asks the worshipper to come out from his meditation. He says that God could not be found through meditation or through offering flowers and incense. All these efforts are fotile. The poet further says that there is no harm if our clothes gets dirty and stained. If we want to attain God we have to stand by him with all those people who work hard throughout the day to earn their living. The whole idea of the poem is that hard work itself is worship.

Leave this chanting and singing and telling of beads!
Whom dost thou worship in this lonely dark corner of a temple with
doors all shut?
Open thine eyes and see thy God is not before thee!
He is there where the tiller is tilling the hard ground
and where the path – maker is breaking stones. He is with them
in sun and in shower, and his garment is covered with dust.
Put off thy holy mantle and even like him come down
on the dusty soil!
Deliverance? Where is this deliverance to be found?
Our master himself has joyfully taken upon him the bonds
of creation; he is bound with us all for ever.
Come out of thy meditations and leave aside thy flowers and
incense! What harm is there if thy clothes become tattered
and stained?
Meet him and stand by him in toil and in sweat of thy brow.

In 'Gitanjali' Tagore's longing for communion with God proves mysticism in the poem. Poem after poem Tagore looks forward to meet God, to stand before God or to have a spiritual communion with God. There are many poems in which he expresses this longing, this hope and even this conviction. For instance, in one poem Tagore asks if the time has come when he may see God's Love and offer to him his silence.

Through Tagore's 'Gitanjali' we get a glimpse of the poet's true nature and his spiritual feelings. Embodied in this work is his very soul. This pious poet's prayer will continue, kindle in generations of poets the desire to lead a life of humility and set oblivion. In the first verse of the poem, Tagore says that he worships his creator in the dust of the earth. Humility, devotion and love are the key which determines the tone of his work.

Thou hast made me endless, such is thy pleasure.
This frail vessel thou emptiest again and again,
and fillest it ever with fresh life.
This little flute of a reed
thou hast carried over hills and dales,
and hast breathed through it melodies eternally new.
At the immortal touch of thy hands
my little heart loses its limits in joy and gives birth
to utterance ineffable.
Thy infinite gifts come to me only
on these very small hands of mine. Ages pass,
and still thou pourest,
and still there is room to fill.

Tagore's poems are a celebration of the joy of living, of love towards all human beings, especially to the lowest in the society. The highest ideal which Tagore envisages for human beings is – to find fulfilment in creativity and in the dedication of one's life to the service of others. Among the elements of Hinduism he lays special stress on love which is the basis for all change towards good. In understanding Tagore that is the most vital truth. He calls it joy, which is at the root of all creation. This is the underlying idea of 'Gitanjali'.

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Praveen. "Tagore's Gitanjali and "self-transcendence." *International Journal of Humanities and Social Science Invention (IJHSSI)*, vol. 10(04), 2021, pp 36-40. Journal DOI- 10.35629/7722

Journal of Electronic Materials
https://doi.org/10.1007/s11664-021-09026-z

ORIGINAL RESEARCH ARTICLE

Optical and Dielectric Properties of Poly(Vinyl Pyrrolidone-co-Vinyl Acetate)-Capped ZnS Nanoparticles

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Received: 27 June 2020 / Accepted: 18 May 2021
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Abstract

ZnS nanoparticles were synthesized by a wet chemical method using copolymer poly(vinyl pyrrolidone-co-vinyl acetate) as capping agent in the presence of microwave irradiation. Zinc acetate was used as the Zn precursor and thioacetamide as the sulfur precursor. X-ray diffraction measurements indicated the structure of nanoparticles to be the cubic form of ZnS. Both uncapped and capped ZnS samples were found to exhibit quantum size effects. Also, band gap energies were estimated, and the capped ZnS showed a decrease in band gap value compared to uncapped ZnS. Photoluminescence measurements of the capped sample indicated the elimination of surface defect-related emissions around 440 nm, observed in the uncapped sample. Further, the frequency response of the dielectric constant was studied in the range 100 Hz–5 MHz at different temperatures. At low frequencies and lower-temperature conditions, dielectric constant values were higher for both samples, and decreased at higher temperatures for the copolymer-capped ZnS.

Keywords ZnS nanoparticles · microwave irradiation · photoluminescence · dielectric properties · band gap energy

Introduction

Zinc sulphide (ZnS) is a widely used compound in flat-panel displays, photoconductors, electroluminescent devices, solar cell infrared windows, light-emitting diodes (LEDs), sensors, lasers, and bio-devices.[1,2] ZnS nanocrystals are commonly used in biological labeling and diagnostics.[3] A number of biological compounds have been identified by the fluorescence quenching of ZnS nanoparticles (NPs).[4,5] However, nanosized ZnS particles are unstable and tend to agglomerate due to surface effects of smallness in size. As the aggregation of NPs affects the behavior of materials in the nano regime, it is necessary to suppress aggregation and stabilize the NPs at the desired size using chemical methods of capping. This can be done using suitable polymers or polymer blends, as the binding action of polymer molecules with inorganic nanoparticles has been proven to be effective.[6] The copolymer poly(vinyl pyrrolidone-co-vinyl acetate) [P(VP-co-VAc)] is a suitable choice in the present case because it contains two functional groups, an amide group on the pyrrolidone moiety and an acetate side chain.[7]

The development of synthesis methods is of great importance for reducing environmental pollution and improving product quality. To this end, microwave (MW)-assisted synthesis may provide an efficient alternative technique among various other methods. Microwave-assisted heating can reduce the energy consumption and reduce the time required for reaction. Further, with the use of polar solvents such as water in MW-assisted synthesis, environmental pollution can be minimized. The present study investigates the effect of copolymer capping on the structural, optical, and dielectric properties of ZnS NPs.

This communication depicts the possibility of capping ZnS nanoparticles with the help of copolymer poly(vinyl pyrrolidone-co-vinyl acetate), a water-soluble polymer. The sample preparation route followed is a green chemical synthesis in which most of the principles of green chemistry are followed. Heating of chemicals is done for only 6 min using MW irradiation, avoiding hour-long conventional heating.[8,9] As MW irradiation induces in-core volumetric heating, the chemical reactions will be complete, giving pure products. The copolymer used in our experiments is nontoxic, containing vinyl pyrrolidone and vinyl acetate groups. The binding action of ZnS with pyrrolidone tends to be enhanced

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Published online: 09 June 2021

due to amide groups, while stable shelf life can be expected due to the presence of vinyl acetate.[10] Hence, apart from device applications, the copolymer-capped ZnS may find application in the field of drug delivery due to its nontoxic properties.

Experimental Details

About 0.05 g of the copolymer P(VP-co-VAc) was dissolved in double-distilled (DD) water and aged for 24 h. The poly(vinyl pyrrolidone-co-vinyl acetate) solution was added to 0.15 M concentrated zinc acetate solution prepared in DD water, and stirred for 30 min. An aqueous solution of thioacetamide was mixed and the resulting mixture was heated in a microwave oven setup for 6 min. The colloidal precipitate was cooled to room temperature, washed several times with DD water, and separated using centrifugation. Pure samples of ZnS nanoparticles were also synthesized without the copolymer.

Characterization

Synthesized samples were characterized by x-ray diffraction (XRD) using the Rigaku MiniFlex 600 x-ray diffractometer operating at 40 kV and 15 mA, with Cu-K_α radiation. The morphological features were analyzed via field emission scanning electron microscopy (FESEM) using a Carl Zeiss instrument. Optical absorption studies were carried out with a Shimadzu UV-1800 UV-Vis spectrophotometer. The room-temperature luminescence behavior of the samples was obtained using the Hitachi F-7000 fluorescence spectrophotometer. Dielectric measurements were carried out on cylindrical pellets of samples using a Novocontrol Alpha impedance analyzer (Novocontrol Technologies, Germany) equipped with the Quatro Cryosystem liquid nitrogen gas system, over a frequency range of 100 Hz to 5 MHz at several temperatures between 223 K and 333 K.

Results and Discussion

X-ray Diffraction

XRD patterns of uncapped and capped ZnS samples are shown in Fig. 1. Both samples show three broad peaks corresponding to the (111), (220), and (311) planes of cubic ZnS. This is in accord with JCPDS file no. 03-065-9585, shown in Fig. 1. Broadening of the XRD peaks indicates the formation of ZnS nanocrystals for both uncapped and capped samples. The full width at half maximum (FWHM) β is provided in Table I, and it is observed that β is inversely proportional to crystallite size *D*.

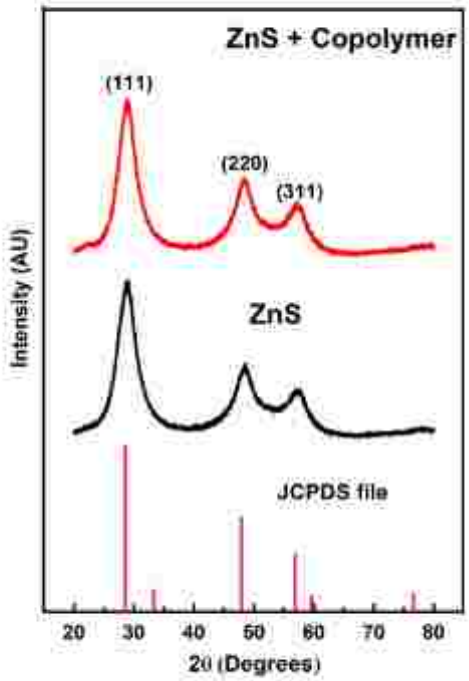

Fig. 1 X-ray diffraction pattern for samples: ZnS and ZnS + copolymer.

The crystallite size of the ZnS NPs is determined using the Scherrer equation[11] as:

$$D = \frac{0.9\lambda}{\beta \cos\theta} \tag{1}$$

where λ is the wavelength of x-rays used (1.5402 Å), θ is the diffraction angle, and β is the full width at half maximum (FWHM) of Bragg's peak. Using Bragg's law, interplanar separation (d_{hkl}) between parallel planes is calculated. The strain (ε) produced in the nanocrystallites is calculated using

$$\varepsilon = \frac{\beta}{4\tan\theta} \tag{2}$$

Lattice parameter 'α' for cubic structure is determined using:

$$a = d_{hkl} \times \sqrt{h^2 + k^2 + l^2} \tag{3}$$

The results show that the nanocrystallite size increases due to copolymer capping. Our results are similar to those reported by Soltani et al. for PVP-encapsulated ZnS synthesized by MW irradiation.[6] Porambo et al. attributed such results to the larger polymer chain of PVP corresponding to greater concentration of Zn^{2+} ions. This leads to the formation of larger crystallites.[12] The strain involved in the crystallite during formation also decreased due to the copolymer encapsulation. The parameters obtained from XRD are tabulated in Table I.

Table 1 Data from XRD studies for ZnS and ZnS + copolymer

Samples	FWHM (degrees)	Size D (nm)	Interplanar distance d (Å)	Lattice parameter (Å)	Strain (x 10^{-3})
ZnS	3.882	2.2	3.111	5.388	65.22
ZnS + copolymer	3.429	2.4	3.094	5.359	58.17

Morphological Study

Figure 2 shows the FESEM image of the copolymer-capped ZnS. The sample powders exhibit nanospherical features, possibly due to the agglomeration among nanoparticles. We estimated the size of the nanospheres using ImageJ software, and the size obtained from the histogram is ~ 35 nm. The size obtained by XRD is smaller than that measured by FESEM because the XRD data estimate the average crystallite size, and the size obtained from FESEM here is constituted by several crystallites.[13]

To understand the effect of copolymer capping on ZnS, x-ray energy-dispersive spectroscopy (EDS) was carried out and is shown in Fig. 2b. The EDS spectrum acquired from the copolymer-capped ZnS shows the presence of Zn, S corresponding to ZnS, and C, O, N related to the copolymer.

Optical Absorption: UV-Vis Spectroscopy

Figure 3a and b show that excitonic bands appear at 322 nm and 310 nm, respectively, for the ZnS and ZnS-copolymer samples. These wavelengths are less than that for bulk ZnS (337 nm), indicating a quantum confinement effect.[14, 15]

The energy band gap Eg was estimated using the Tauc relation[16] for direct-band-gap semiconductors like ZnS as:

$$(\alpha h\nu)^2 = A\left(h\nu - E_g\right) \tag{4}$$

where α is the absorption coefficient, calculated using the Beer-Lambert principle[17]:

$$\alpha = \frac{2.303\ \text{Absorbance}}{t} \tag{5}$$

t is the path length of the solution. $(\alpha h\nu)^2$ is plotted against $h\nu$, and the energy band gap values are determined by extrapolating $(\alpha h\nu)^2$ to the $h\nu$ axis. The Tauc plots are shown as insets in both figures. A noticeable red shift in the Eg values is observed for the ZnS + copolymer sample. This indicates that the size of the NPs increases due to copolymer encapsulation.

Photoluminescence (PL)

ZnS samples were dispersed in DD water and photo-excited at 250 nm. The PL spectra for ZnS and ZnS + copolymer are shown in Fig. 4a and b, respectively. Broad and asymmetric spectra are observed for both samples, and a Gaussian curve-fitting procedure is adopted to deconvolute the PL curves. The PL intensity for the ZnS sample is higher than that for the capped sample of ZnS.

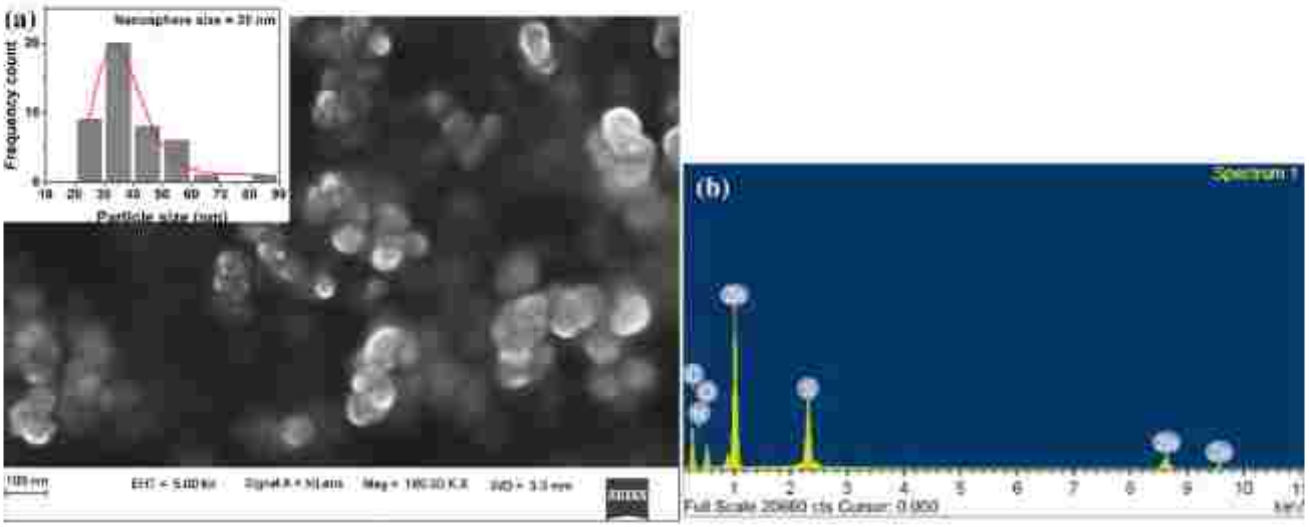

Fig. 2 (a) FESEM image of copolymer-capped ZnS; top left inset is histogram of particles. (b) EDS pattern of copolymer-capped ZnS sample.

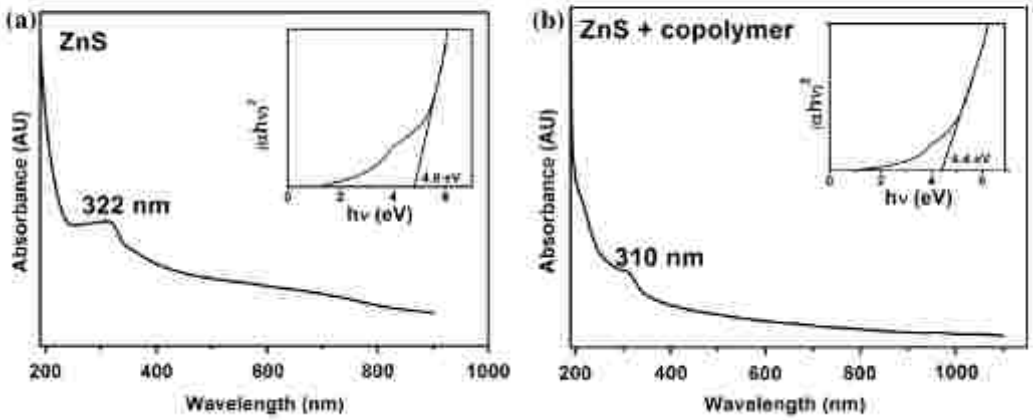

Fig. 3 (a) UV-Vis spectra for ZnS (inset is its Tauc plot) and (b) for copolymer-capped ZnS.

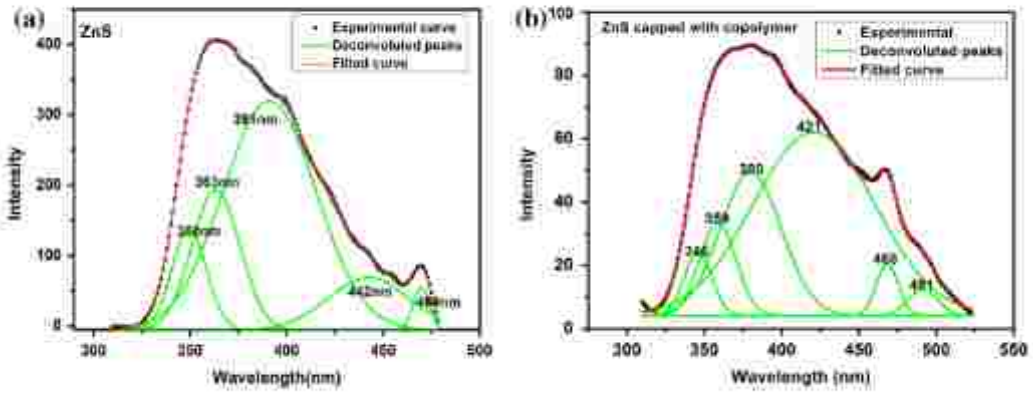

Fig. 4 (a) PL spectra for ZnS sample and (b) for ZnS + copolymer composite sample.

The emission occurring near 350 nm appears to be caused by S interstitials. The peak around 360 nm is attributed to Zn interstitials. The peaks appearing around 390 nm may be due to excess Zn present in the sample.[18] This is in accordance with the EDS spectra, which showed a slightly higher amount of Zn than the stoichiometric ratio for ZnS.

The peaks appearing near 468 nm are the result of transitions between intrinsic sulfur vacancies to intrinsic zinc vacancies. Here, the small but broad peak around 442 nm is attributed to the transition from surface sulfur vacancies to surface Zn vacancies in the pure ZnS sample. This peak disappears in the capped sample, as most of the surface states are passivated by the capping agent. Further, the addition of copolymer results in redistribution of PL peaks in the ZnS + copolymer sample. A strong peak due to S vacancies (Versus) appears near 421 nm, and a weak peak near 491 nm occurs due to capping by the copolymer.

Dielectric Response

Using dielectric measurements, the capability of a material to store electrical charges can be evaluated. The capacitance (C) of the pellets of samples was measured in a parallel plate configuration. The dielectric constant is calculated using

$$\varepsilon' = \frac{Cd}{\varepsilon_0 A} \tag{6}$$

The variation of dielectric constant with frequency at different temperatures for pure ZnS and ZnS + copolymer in Fig. 5a and b shows that at higher temperatures, an appreciable ion migration causes interfacial polarization, leading to rise in permittivity at lower frequencies.

In the copolymer-capped sample, at temperatures above 40 °C, low-frequency dielectric constant values decrease. In the polymer nanocomposites, the dielectric response appears

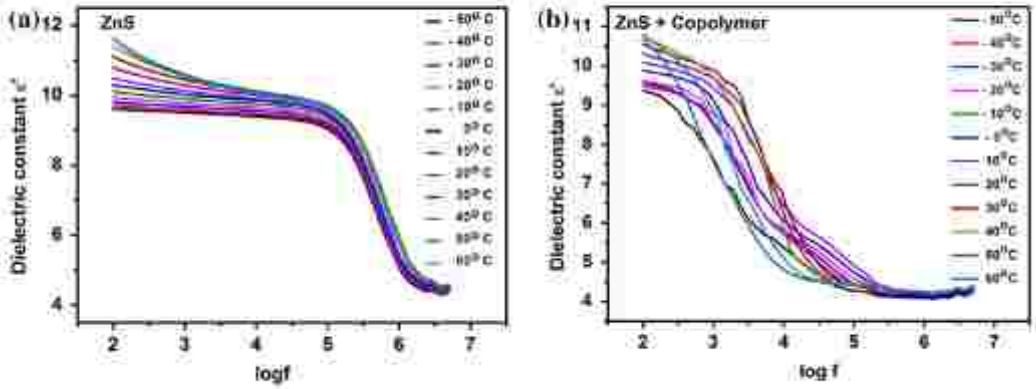

Fig. 5 Variation of dielectric constant with frequency at different temperatures for pure ZnS (a) and ZnS + copolymer (b).

to come from both the polymer and the nanoparticle regime. The increased temperature causes polymer chain mobility, leading to the decrease of interfaces between nanoparticle and copolymer.[19] As a result, the dielectric constant decreases in the capped sample of ZnS. Such materials may be useful in controlling thermal runaway of electronic devices containing lithium-ion batteries.[20]

Lower-permittivity materials are suitable for device miniaturization, as the larger capacitance due to high-permittivity materials leads to undesirable high RC delays. Also, it is desirable to have insulating connections with low permittivity so that when dimensions are small, the reactance does not become too low.[18, 21] Reports on capping of ZnS NPs by the copolymer poly(vinyl pyrrolidone-co-vinyl acetate) are sparse in literature.

Conclusions

- Pure ZnS nanoparticles and copolymer poly(vinyl pyrrolidone-co-vinyl acetate)-capped ZnS nanoparticles were effectively synthesized using a microwave-assisted method.
- The samples possessed ZnS cubic crystalline phase in the nanoform as revealed by XRD studies. The nanocrystallite size calculated by the Scherrer equation indicated an increase in size for the copolymer-capped sample.
- UV-Vis spectroscopic studies showed a quantum confinement effect. The energy band gaps for both samples were greater in comparison to the bulk, but the energy band gap for the capped sample was less than that of the uncapped sample.
- Photoluminescence studies implied surface capping of the nanoparticles, as surface states were eliminated on capping by polymer. The temperature variation study of the frequency response of the dielectric constant indicated the capping of nanoparticles.

Acknowledgments Bhandarkars' Arts and Science College is thankfully acknowledged for the sample preparation facilities and the funding for this work. We are indebted to UGC–DAE Consortium, Mumbai for dielectric measurements, DST PURSE Laboratory, Mangalore University–Mangalore for FESEM and EDS analysis, DST-SAIF centre at Karnatak University-Dharwad for photoluminescence measurements, IISc Kudapura for UV-Vis measurements, and Manipal Academy of Higher Education-Manipal for other characterizations of the samples.

Conflict of interest The authors declare that they have no conflict of interest in publishing this article.

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POLITICAL MODERNIZATION AND LINGUISTIC POLITICS IN KARNATAKA

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Abstract

Central aspects of political modernization in the emergence of a Nation State. The modern political systempresupposes a national community existing within a political system that allows for maximum political participation of groups and individuals constant with a minimum degree of political integration, therefore it is possible to evaluate the presence and the growth of political modernization in terms of opportunities for group mobilization available within a political system. We define political modernization in terms of the capacity of a system to achieve political integration dynamically through political mobilization and group conflict then clearly there was political modernization in Mysore in the period of linguistic politics 1947 to 1956. The regional Congress party played a key role in the mobilization and integrative aspects of a Linguistic Politics in the region.

Linguistic Politics as handled by the regional Congress party promoted a substantial politicisation of the major caste groups in the region language politics in the way the language and linguistic differences between people are dealt with in the political arena. This could manifest as the government education as well as how language is treated in official capacities.

Keywords: Modernization, Linguistic, Mobilization, Official, Authority, Activists, Policy, Implementation, Dis-integrate and Politicization

Introduction:

The growth of modern political structures and the increasing investment of traditional communal groups can be adequately explained only in terms of their modernisation under the impact of social mobilization process such as growth of literacy and education, urbanisation, Industrialisation and Communication an Important political consequences of this development was the growth of new individuals who had skill and will to utilize the modern structures for political goals. Linguistic politics organised as an ideology and movement of new middle class elite within the upper castes, increasing in numbers from mid 19th century in the region in response to the social mobilization process initiated by the colonial system. Through the linguistic regional movement, the new middle class leaders began to mobilize politically the urban, educated, middle class population. It was not until the 1930 that linguistic politics began to be differentiated in communal terms. The process of differentiation meant a shift in political control both within the regional Congress organisation and integration movement itself from Brahmans to the new middle class Lingayat leaders.

Political mobilization in terms of linguistic politics, communal politics and sub-regional separatism became intimately interwined to such an extent that none of these can be explained or understood without taking seriously into account the other two political mobilizations. The political movement of linguistic state in Mysore cannot be explained without recognising the caste that lingayat were chiefly driving force behind it. Similarly it would be impossible to discuss separatist politics in old Mysore and Coorg without referring to the Communalism of Vokkaligas and Coorg Kshatriyas the dominant sub-regional castes. At the same time neither linguistic regionalism nor separatism can be reduced to simple communal politics therefore regional politics should be viewed as a process of of complex interaction between these two of political mobilisation the regional linguistic movement and the sub-regional separatist Movement in the region the movement aimed not so much at greater anatomy for the regions as a greater recognition of the linguistic region in terms of the existing constitutional structure itself.

To the extent that it draws attention to the need to relate this middle-class to communal politics and to see the two as involved in a dynamic interactive process. This study claims to have communal politics and through it the process of modernization in the country. The current theories of caste politics tend to isolate caste politics from the framework of urban

middle class, but this study however does not take issue with the actual characterization of a communal politics postulates in those theories. Rajani Kothari's analysis of caste politics for instance traces the evolution of communal politics in terms of the three stages. Fragmentary, traditional, communal and the modern casteassociation stages. There are broadly similar to the stages elaborated in this thesis.

In emphasing the evolutionary adoptive upset communal politics the existing interpretations of caste politics fails to pay adequate attention to the dynamic aspect of the development of caste politics because of this they fail to distinguish between an early aspects of the politics when there exist a tie between the rising urban middle class political elite and caste politics and a later development in which this ties dissolve ushering in what we have described in this thesis as the thirdmodernfragmented customised stages of communal politics the source of modernization may be the growing middle class and caste politics a transitional phase through which modern middle class politics comes finally into its own. Apart from purely theoretical issues this interpretation calls for changes in the tactics of political actors oriented towards modernization. They may have to abandon their tactics of initialisation and force into open the confrontation between the traditional communal forces and modernizing forces in other words if there is no genuine communal politics then it would be better to present communal group conflict as other kinds of modern conflict between individuals, non-communal groups including class or parties.

while there was considerable communal mobilization outside the Congress Party and its structure ranking from pressure group activity within legislative to extra parliamentary agitation, remained the focal point of this mobilization. This caste political mobilization and separatist subregional mobilization both crucial variables in linguistic politics found themselves predominantly though not exclusively expressed within Congress party structures and the formal political agencies dominated by it especially at regional level the Congress party context was important in the various mutual groups bargainings formal as well as informal that involved communal leaders and sub-reginal leaders in the case of old Mysore and Coorg, these two leadership tended to fuse. The common party Conflicts Set limits to both kinds of conflict inter-communal and inter sub-regional and facilitated their eventual resolution.

Thus it is possible to see linguistic politics and the role of Congress in terms of group political mobilization and the group conflict generated by such mobilisation we have also

argued that this political mobilisation was historically linked to the social mobilization process in the region through the the meditation of urban middle class leaderships.

Political Integration and Linguistic Politics

The regional political integration through the regional Congress party was a complex process. It involved the establishment of inter caste relationship as well as inter sub regional political agreements. The task of the regional Congress was a very difficult one since it involved simultaneously such integration with in as a whole this meant that the linguistic regional Congress unit as an integrated organisational structure evolved at the same time as the evolution of linguistic politics in 1956 there emerged not only the new linguistic state of Mysore but also the new Mysore Pradesh Congress Committee with jurisdiction over the entire linguistic region.

The historical incorporation of the Kannada linguistic regional group into the national political system can be explained in terms of the two conceptual distinctions the first is a distinction between the mobilizing and integrative roles of the Congress party. The second is a conceptual distinction between Political integration and national integration integration is not an automatic process but one that involves conscious group action it involves therefore groups that become historical agents of such integration in Mysore this role was formed by the urban middle class leaders in the region politicians as well as intellectuals they evolved and ideology of Karnataka transformed it into a political movement and eventually succeeded in bringing about the existence of single integrated Kannada linguistic state. The regional leaders claimed that this arrangement would make for a more effective state within the Indian Union. Though divided politically on communal and subregional lines. They were united in their commitment toa national political culture of liberal parliamentary democracy.

Language is a politically volatile issue across India. It is because language is an integral part of one's culture and effort to pressure and nourish it in justified. Though Indian states were formed basis on the linguistic lines there were many people in the state who continued to speak other languages as their mother tongue not only at the border but also every part of the state. This is in addition to Tribal and minor language the state attempts to make the majority language of the state has compulsory language in school education, official language policy of India has made Hindi as the official language of the Indian Union and English as the associated language while the states have their languages as official languages of the three

language formula emerged as political consensus in 1950 and became part of the National Educational policy in 1968 and 1986. It is imposed in all states except Tamilnadu which opposed it since it was opposed to imposition of Hindi after 2000 there are many development in many states which hinder linguistic harmony within the States. Three language formula advocates mother tongue based on multi-culturalism. Every child begin his or her schooling in the mother tongue and move on to add at least two more languages by the time they complete their High School. The three language formula is also recommended by the National Commission of Education in 1964 – 66.

The issues concerning language politics in Karnataka

1. Kannada as the Official Language

In 1958 the state government appointed A committee to make recommendations in regard to the adoption of Kannada at the official language in the state. Several steps has been taken to implement the objective of making Kannada as the officer language of state after consideration of recommendations of the committee. In furtherance of this policy it is now proposed to enact legislation in pursuance of article 345 of the Constitution providing for the adaptation of Kannada as the language to be used for official purposes in the state under clause (2) article 210 of the constitution. The English language shall not be used for transaction of business in the Legislature of state after the expire of 15 years from the commencement of the Constitution after 20th January 1965 unless the Legislature of the state by law or otherwise provides it is considered necessary to continue the use of English language in addition to Kannada and Hindi for the transaction of business in the Legislature of the state the above reasons are cited to make the "Karnataka official languages act 1963" part- IV- 2A dated 27th August 1963.

2. Creation of Kannada Development Authority

English medium education in Government schools has been previously opposed in Karnataka since 1956 when the states reorganisation commission permitted the boundaries of newly independent India's 14 states and union territories to be redrawn along linguistic lines. Since then the states language lobby grouped under the banner of Kannada Development Authority (KDA) has been powerful factor in Karnataka politics with a full fledged ministry within the state cabinet.

3. Historical Ruling by High Court

Language lobby involved in the promotion of Kannada textbooks printing and publishing opposed the opening of English medium schools. Karnataka unaided schools management Association filed writ petition in Karnataka High Court and subsequently in the Supreme Court challenging the 1994 ordinance prohibiting the promotion of English medium schools in the state. In 2012 in a historic order the high court of Karnataka quashed the 1994 ordinance and ruled that parents have the right to choose the medium of instructions in school education.

4. Right to Education

The politics of language in schools let to the state government amending the right to education (RTE) Act to make Kannada the mandatory medium of instruction from classes one to five (1-5) the Kannada language learning bill made learning Kannada mandatory from classes 1 to 10 but this rule cannot applied to CBSE and ICSE schools. According to Supreme Court forcing a particular language as the medium of instruction violates one's fundamental right. 80% of the schools in India and about 70% in Karnataka are still government run by opening up such schools the government had made personal choice difficult.

5. Political support to Kannada

When Siddaramaiah was the chief minister of Karnataka he was passionate about the Kannada language and culture. He also realised the significance of the movement of Kannada Development Authority. He took Pro Kannada decisions like no Hindi signage reservation for kannadigas in government jobs Kannada flag NEET exams in Kannada etc., according to him whoever lives in Karnataka is a kannadiga and should learn Kannada and make their children learn it too. Thus he tried to create the Kannada Sab nationalism and made Kannada Pride a poll plank. According to present Chief Minister of Karnataka BS Yeddyurappa all official languages are equal in the nation but Kannada continues to be the principal language in the state of Karnataka and its importance will not be compromised.

6. Activists against Hindi imposition by Centre

Both online and offline the activists have been against the imposition of Hindi. The new movement is now being led by young well educated professionals with a world view who want to fight methodically for primacy of Kannada in Karnataka through democratic means. These activists for the first time demanded that all the three major players in the state the Congress, the BJP and JD(s) must come out with Manifesto for Kannada voluntary organisation like, Munnota, BanavasiBalaga, Kannada grahaka Koota and few others have systematically been fighting to safeguard the interest of Kannada and kannadigas. Kannada Movement in the state especially in Bangalore were Defamed by some vested interests to make money. However the genuine activists explain how Kannada is being systematically killed or sidelined in Bangalore and Hindi is making in roads due to Central Government policies trying to impose Hindi as our National language where as it is only and official language. The recent Kannada activists are usually social media to invite the people to further their cause.

7. Language History

Bengaluru still has over 60% people whose mother tongue is Kannada and over 75% to 80% people here speak or understand Kannada. They are slowly realising the threat posed by Hindi along with the usual basic needs demanded by people. Kannada language is new to demand that has to be considered by the political parties Kannada is one of the Dravidian languages of the South India spoken by the majority in Karnataka. There are also a large number of people speaking it in the neighbouring states of Karnataka, Kerala, Tamil Nadu, Andhra Pradesh and Maharashtra.

8. Gokak Agitation

it was a successful language right movement in 1980's for the states of first language status of Kannada in Karnataka. V K Gokak, the former vice chancellor of Karnataka University and Jnanapeeta awardee headed the committee appointed by the Government of Karnataka to analyse the study the linguistic issues that were raised regarding importance of various languages including Kannada, English, Marati, Telugu, Tamil and Urdu. The report of the committee recommended that the government provide first language status to Kannada there

was opposition to the Gokak report from several sectors of the public. So, Dr.Rajkumar was made to lead the agitation which made the government to accept the report.

Implementation of Kannada as Official Language

Technically Kannada is declared the official language both through the legislature's resolution and cabinet decision. But it is not fully implemented the Governor who is the head of the state is a non Kannada speaking person. Legislative bill and the cabinet decisions are drafted in English. The administration English still continues to be the medium at the highest levels from time to time, the officers are asked to use Kannada and sometimes threatened with the disciplinary actions just to appease the Kannada protagonist. In the courts there is difficulty of arguing cases in Kannada when the laws, judgements and commentaries are all in English due to this slow implementation the government had to appoint the Kannada watch committee headed by a person with the rank of cabinet minister during the Janata Party government headed by Ramakrishna Hegde but it has not resulted in any effect to change.

Conclusion:

The regional Congress party therefore made a significant contribution to regional political modernization by handling successfully the issue of political mobilization and political integration and by strengthening modern political structure and modern political culture in the Karnataka region. Thus in Karnataka unlike many other states it is facing number of problems in in and forcing the regional language in its Administration and also the educational institutions. Language politics is evident even in border disputes with Maharashtra and Kerala. Language politics in extremely volatile and subject to different interpretations it is extremely difficult to find a solution which is agreeable to all, therefore the politics of the debate indicates the absence of consensus.

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International Journal of Scientific Engineering and Applied Science (IJSEAS) – Volume-7, Issue-4, April 2021
ISSN: 2395-3470
www.ijseas.com

Study on Avifaunal Diversity of four different Mangrove regions of Kundapura

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Abstract

Mangroves are salt tolerant forest ecosystems which support a rich species diversity of flora and fauna. Mangroves harbor a greater variety of bird life. Our list of birds was compiled from field work carried out from April-2010 to March-2013. A total of 79 species of birds representing 14 orders and 36 families were recorded from the mangroves of Kundapura. Species diversity of avifauna was encountered through Species Richness and Diversity Indices. Diversity indices such as Shannon-Weiner Index, Simpson Index and Evenness Index were calculated. Species diversity and abundance of birds peaked during October-May with the arrival of migratory birds. Minimum diversity was recorded during June-September owing to the departure of migratory birds.

Keywords: Mangroves; Species diversity; Flora; Fauna; Migratory.

Introduction:

Mangrove is an evergreen, salt tolerant plant community, which grows in inter-tidal coastal zones of tropical and subtropical regions of the world. They act as important habitats for many species of fauna (Duraimurugan *et al*. 2017). The mangrove ecosystem is inhabited by a variety of smaller birds, resident birds, migratory birds and wading birds. One of the most productive ecosystems of world is mangrove forests, providing shelter and feeding sites for many avifaunas (Kumar & Kumara. 2011). Mangrove habitats are host to many waterbirds around the globe (Saber Ghasemi. 2012). Mangroves show diversified avifaunal members. Many of the bird species are associated with the mangroves, for many reasons. Birds use the mangroves for nesting, breeding and as a source of secondary food (Kulkarni Narendra A. 2018). Mangroves are plants which lived at maximum subsiding tide point to maximum rising tide point area, with mud as its substrate. For other organisms, mangroves used as shelter and foraging place. One of those organisms is birds, birds can be used as bioindicators of environmental quality because it has a sensitivity to environmental changes (Aditya Rachmaputra1 *et al*. 2018).

Materials and Methods:

Study area: The domain of study is located at Kundapura, 440 km from Bangalore and 37 km from Udupi, at 13°37'24" N latitude and 74°41'30" E longitude and maximum elevation of 18 meters above sea level. Four study sites (Table: 1) have been selected beside the backwaters of the Haladi River.

Table-1 Study sites

Study sites	Latitude	Longitude	Elevation
Site-1. Herikudru	13°38'28"N	74°42'01"E	28'
Site-2. Uppinakudru	13°39'21"N	74°41'59"E	25'
Site-3. Jaladi	13°39'41"N	74°42'16"E	16'
Site-4. Hemmadi	13°40'46"N	74°41'20"E	32'

Bird watching: Our list of birds was compiled from field work conducted from April-2010 to March-2013. Weekly visits to the sites were made for three years with a maximum of 4 visits per month. Binoculars were used for bird watching; photographs were taken with a Nikon SLR Digital Camera. The birds can be recorded by line transect method (Burnham *et al.*, 1980). Birds were identified by reference to field guides (Grewal, 1995; Grimmett *et al.*, 2006; Ali, 2002).

Surveys were conducted every weekend in the early morning from 5.00-7.30 a.m and every evening from 5.00-7.30 p.m. The relative abundance of birds was estimated and monthly fluctuations were recorded. I quantified bird diversity and abundance in the study area. Birds were classified on the basis of "The Book of Indian birds" (Ali, 2002).

Data analysis: The data were subjected to detail analysis which included Shannon Diversity Index/Shannon-Weiner Index, Simpson Index, Species Richness Index and Species Evenness Index.

Shannon Diversity Index: Species diversity was calculated by

$$H = \sum_{i=1}^{S} -(Pi \text{x} \ln Pi)$$

Where, H is the Shannon diversity index
P_i = fraction of the entire population made up of species i
S= numbers of species encountered
$\sum$ = sum from species 1 to species S.

Simpson Index: Simpson (1949) derived a formula based on the expected outcome of two random samples.

$$D_s = \frac{N(N-1)}{\sum ni(ni-1)}$$

Where, N = the total number of individuals of all species
n_i = the number of individuals of species i

Evenness Index: To calculate the evenness of species, the Pielou's Evenness Index (e) was used (Pielou, 1966).

E= H'/lnS
Where, H' is Shannon-Weiner's diversity index and S is species richness.

Species Richness: Margalef's index was used as a simple measure of species richness (Margalef, 1958).
Margalef's index = $(S-1) / \ln N$

S = total number of species
N = total number of individuals in the sample
ln = natural logarithm

Results and discussion:

A total of 79 species of birds representing 14 orders and 36 families were recorded from the mangroves of Kundapura (Table-2). Species diversity of avifauna was encountered

through Species Richness and Diversity Indices. Diversity Indices such as Shannon-Weiner Index, Simpson Index and Evenness Index were calculated. Species richness (S) is the number of species on that list, and is most often used as the first-pass-estimate of diversity for a community. Species richness was S=64 in site-1, S=63 in site-2, S=76 in site-3 and S=71 in site-4. Species richness was encountered by Margalef's index. Margalef's index value encountered avifauna was estimated to be 7.30 in site-1, 7.34 in site-2, 7.53 in site-3, and 7.17 in site-4. Shannon-Weiner index value encountered avifauna was estimated to be 4.97 in site-3 followed by site-4 (4.64), site-1 (3.22) and site-2 (2.53). Simpson Index is a calculation of variety which takes into records both richness and evenness. It has been a useful tool to understand the profile of biodiversity across study area. This Diversity Index value encountered avifauna was estimated to be 14.62 in site-1, 11.98 in site-2, 8.72 in site-3 and 9.11 in site-4. Evenness of birds compares the similarity of the population size of each of the species which was recorded as 0.77 in site-1, 0.61 in site-2, 1.15 in site-3 and 1.09 in site-4 (Table- 3).

Species diversity and abundance of birds peaked during October-May with the arrival of migratory birds. Minimum diversity was recorded during June-September owing to the departure of migratory birds. Species diversity was highest during pre-monsoon and post-monsoon and lower during monsoon (Table-4) at all the study sites. Similar observations were also made by Bhat *et al*., (2009).

Total numbers of birds inhabiting site-1, site-2, site-3 and site-4 are listed in Table-4. Site-1 was occupied by 11% of birds, site-2 was occupied by 10% of birds, site-3 was occupied by 43% of birds and site-4 was occupied by 36% of birds. Most birds occupied site-3 and site-4. Dense growths of mangroves were observed in site-3 and site-4. Hence most of the birds selected these sites as roosting place; hence more number of birds was recorded in these sites. Only patches of mangrove vegetation observed in site-1 and site-2. Hence less number of birds was recorded in these sites.

Table-2: Checklist of birds sighted in the study area (April-2010 to March-2013)
(VijayaKumar K M & Vijayakumara. 2014)

Sl.No	Order / Family	Common name	Scientific name
1	**O:**Galliformes **F:**Phasianidae	Indian Peafowl	*Pavo cristatus*
2	**O**:Piciformes	Black-rumped Flameback	*Dinopium benghalense*
3	**F:**Picidae	Brown-headed Barbet	*Megalaima zeylanica*
4		White-cheeked Barbet	*Megalaima viridis*
5	**O:**Upupiformes **F:**Upupidae	Common Hoopoe	*Upupa epops*
6	O:Coraciformes **F**:Coracidae	Indian Roller	*Coracias benghalensis*
7	**F:**Alcedinidae	Common Kingfisher	*Alcedo atthis*
8	**F:**Dacelonidae	White-throated Kingfisher	*Halcyon smyrnensis*
9		Stork-billed Kingfisher	*Halcyon capensis*
10		Black-capped Kingfisher	*Halcyon pileata*
11	**F:**Cerylidae	Pied Kingfisher	*Ceryle rudis*
12	**F:**Meropidae	Green Bee-eaters	*Merops orientalis*
13		Blue-tailed Bee-eaters	*Merops philippinus*
14		Chestnut-headed Bee-eater	*Merops leschenaulti*

	O:Cuculiformes		
15	**F**:Cuculidae	Asian Koel	*Eudynamys scolopacea*
16	**F**:Centropodidae	Greater Coucal	*Centropus sinensis.*
	O:Psittaciformes		
17	**F**:Psittacidae	Rose-ringed Parakeet	*Psittacula krameri*
	O:Apodiformes		
18	**F**:Hemiprocnidae	Crested Treeswifts	*Hemiprocne coronata*
	O:Strigiformes		
19	**F**:Tytonidae	Barn Owl	*Tyto alba*
20	**F**:Strigidae	Spotted Owlet	*Athene brama*
21	**O**:Columbiformes	Blue Rock Pigeon	*Columba livia*
22	**F**:Columbidae	Spotted Dove	*Streptopelia chinensis*
	O:Gruiformes		
23	**F**:Rallidae	White-breasted Waterhen	*Amaurornis phoenicurus*
24	**O**:Ciconiformes	Indian Pond Heron	*Ardeola grayii*
25	**F**:Ardeidae	Little Heron	*Butorides striatus*
26		Black-crowned Night Heron	*Nycticorax nycticorax*
27		Grey Heron	*Ardea cinerea*
28		Purple Heron	*Ardea purpurea*
29		Great Egret	*Casmerodius albus*
30		Cattle Egret	*Bubulcus ibis*
31		Little Egret	*Egretta garzetta*
32		Intermediate Egrets	*Mesophoyx intermedia*
33	**F**:Threskiornithidae	Black-headed Ibis	*Threskiornis melanocephalus*
34		Black Ibis	*Pseudibis papillosa*
35	**F**:Phalacrocoracidae	Little Cormorants	*Phalacrocorax niger*
36	**F**:Anhingidae	Darters	*Anhinga melanogaster*
37	**F**:Charadridae	Red-wattled Lapwing	*Vanellus indicus*
38		Kentish Plover	*Charadrius alexandrinus*
39		Little Ringed Plover	*Charadrius dubius*
40	**F**:Scolopacidae	Common Sandpiper	*Actitis hypoleucos*
41		Marsh Sandpiper	*Tringa stagnatilis*
42		Curlew Sandpiper	*Calidris ferruginea*
43		Common Redshank	*Trigna totanus*
44		Ruddy Turnstone	*Arenaria interpres*
45		Sanderling	*Calidris alba*
46		*Long Toed Stint*	*Calidris subminuta*
47		Common Greenshank	*Trigna nebularia*
48	**F**:Accipitridae	Pariah Kite	*Milvus migrans*
49		Brahminy Kite	*Haliastur indus*
50	**F**:Ciconidae	Asian Openbill	*Anastomus oscitans*
51		Greater Adjutant	*Leptoptilos dubius.*
52		Woolly-necked Stork	*Ciconia episcopus*
53	**O**: Passeriformes	Black Drongo	*Dicrurus macrocercus*
54	**F**:Dicruridae	Greater Racket-tailed Drongo	*Dicrurus paradiseus*
55	**F**:Sturnidae	Common Myna	*Acridotheres tristis*
56		Chestnut-tailed Starling	*Sturnus malabaricus*
57	**F**:Pycnonotidae	Red-whiskered Bulbul	*Pycnonotus jocosus*
58	**F**:Silvidae	Jungle Babbler	*Turdoides striatus*

59	**F:**Corvidae	House Crow	*Corvus splendens*
60		Asian Paradise-flycatcher	*Terpsiphone paradisi*
61		Eurasian Golden Oriole	*Oriolus oriolus*
62		Black-hooded Oriole	*Oriolus xanthornus*
63		Rufous Treepie	*Dendrocitta vagabunda*
64	**F:**Muscicapidae	Oriental Magpie Robin	*Copsychus saularis*
65		Pied Bush Chats	*Saxicola caprata*
66		Orange-headed Thrush	*Zoothera citrina cyanotus*
67	**F:**Alaudidae	Crested Lark	*Galerida cristata*
68		Oriental Skylark	*Alauda gulgula*
69		Indian Bush Lark	*Mirafra erythroptera*
70	**F:**Nectarinidae	Purple-rumped Sunbird	*Nectarinia zeylonica*
71	**F:**Passeridae	White-browed Wagtail	*Motacilla maderaspatensis*
72		Black-headed Munia	*Lonchura malacca*
73		Baya Weaver	*Ploceus philippinus*
74		Paddyfield Pipit	*Anthus rufulus*
75		House Sparrow	*Passer domesticus*
76	**F:**Cisticolidae	Common Tailorbird	*Orthotomus sutorius*
77		Zitting Cisticola	*Cisticola juncidis*
78	**O:**Anseriformes **F:**Anatidae	Lesser Whistling-ducks	*Dendrocygna javanica*
79	**O:**Bucerotiformes **F:**Bucerotidae	Great Hornbill	*Buceros bicornis*

Notes: O= Order, F= Family.

Table-3. Diversity indices of avifauna

Diversity Index	Site-1	Site-2	Site-3	Site-4
Shannon Weiner Index	3.22	2.53	4.97	4.64
Simpson Index	14.62	11.98	8.72	9.12
Species evenness	0.77	0.61	1.15	1.09
Species richness	64	63	76	71
Margalef's index	7.30	7.34	7.53	7.17

Table-4. Average and season wise bird count

Sites	Total bird count	Monsoon	Post monsoon	Pre monsoon
1	5570	1397	2110	2063
2	4680	1152	1707	1821
3	21066	5122	7620	8324
4	17269	4094	6354	6821

Notes:
Monsoon: Rainy season (June, July, August & September)
Post monsoon: After monsoon season (October, November, December & January)
Pre monsoon: Summer season (February, March, April & May)

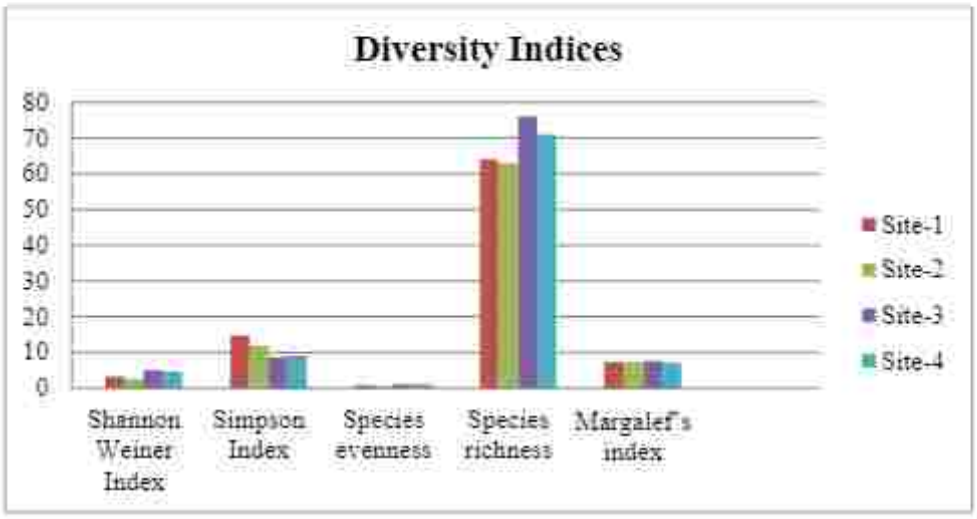

Fig-1. Showing the diversity indices of avifauna.

Fig-2: Showing the average total bird count from April-2010 to March-2013.

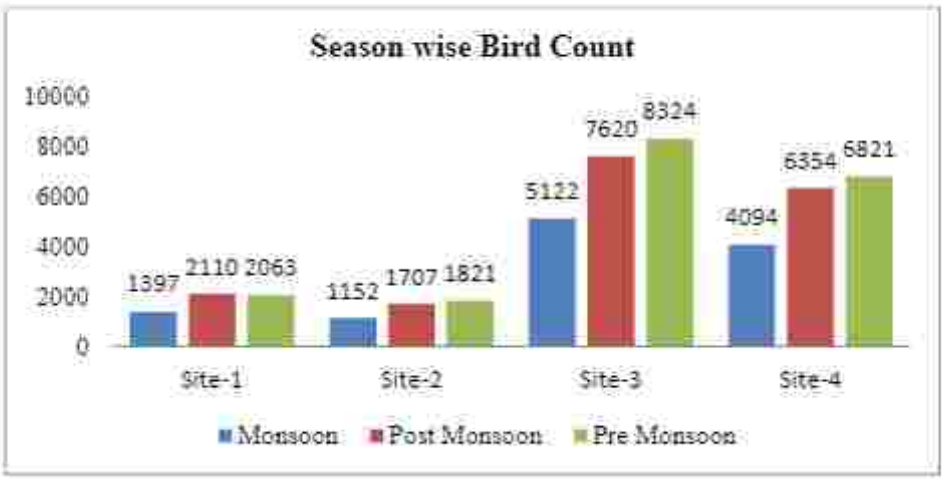

Fig-3: Showing the season wise bird count from April-2010 to March-2013.

Summary and Conclusion:

Mangrove vegetation provide a compliant niche for the myriad resident as well as passage migrant aquatic birds, which utilize the system in varying degrees from feeding, roosting and breeding. Mangroves serve the birds in different ways. Mangrove ecosystems play a significant role in conservation of not only resident species but also migratory and endangered birds. Both aquatic as well as tree dwelling birds are commonly found in mangroves and associated areas. Ecological conditions of Kundapura mangroves support a rich diversity of birds.

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Quest Journals
Journal of Research in Environmental and Earth Sciences
Volume 7 ~ Issue 8 (2021) pp: 01-06
ISSN(Online) :2348-2532
www.questjournals.org

Research Paper

Seasonal variation in the physico-chemical analysis ofMangrove water, Kundapura, Karnataka, India.

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Abstract: *Physico-chemical analysis of mangrove water was carried out for a period of two years from April-2010 to March-2012. The water samples were collected between 8.00 a.m. to 9.00 a.m. and usually from 10-15 cm depth from the water surface. During the study period, variations observed in different water quality parameters of mangrove stations respectively are as follows: Air temperature (25.20°C to 28.45°C), Water temperature (23.31°C -27°C), pH (6.86-7.56), Electrical conductivity (1.4dSm^{-1}-26.94dSm^{-1}), Dissolved oxygen (4.80mg/L-8.64mg/L), Biological oxygen demand(0.45mg/L-2.46mg/L),Free CO_2(0.96mg/L-1.81mg/L), Calcium (5.22mg/L-15.26mg/L), Magnesium (7.89mg/L-48.2mg/L), Potassium (1.02mg/L-10.15mg/L), Sodium (57.67mg/L-846.08mg/L), Bicarbonate (2.17mg/L-5.97mg/L),Chloride (9.99mg/L-271.41mg/L), Sodium absorption ratio (24.55mg/L-297.78mg/L). The carbonate content was absent in all the sites and in all the season except the site-1 in monsoon-2010 i.e.0.23mg/L. The residual sodium carbonate was observed during monsoon-2010 in site-2 and 4 i.e. 0.4 mg/L and 0.005 mg/L.Most of the parameters suggest low values throughout monsoon season and high values during pre-monsoon season; however dissolved oxygen is maximum for the duration of monsoon season and minimum throughout pre-monsoon.*

Keywords:*Physico-chemical analysis, mangrove, monsoon, pre-monsoon, minimum and maximum.*

Received 18 July, 2021; Revised: 01 August, 2021; Accepted 03 August, 2021 © The author(s) 2021. Published with open access at www.questjournals.org

I. INTRODUCTION

Mangrove ecosystem acts as a buffer between near shore and lagoonal or estuarine environments with regard to the influence of freshwater discharge and salinity regime [1]. They stabilize the shoreline and act as a bulwark against the encroachment by the sea [2]. When river water mixes with seawater, a large number of physical and chemical processes take place, which influence the water quality. The mangrove water is slightly alkaline and contains high amounts of pH, total hardness, calcium, magnesium, chloride, total inorganic and organic phosphate, ammonium, nitrite and nitrate [3].

Mangroves act as land builders and coastline stabilizers [4] &[5]. Among the marine ecosystems, mangroves constitute the second most important ecosystem in productivity and sustained tertiary yield after coral reefs. Productivity in mangrove waters depends on the extent of mangrove canopy cover that supplies carbon, nitrogen and phosphorous[6]. The environmental conditions such as topography, water movement and stratification, salinity, oxygen, temperature and nutrients characterizing particular water mass also determine the composition of its biota[7]. The stability of the mangrove is influenced by salinity, soil type and chemistry, nutrient content and dynamics, physiological tolerance, predation and competition at local level [8].

II. MATERIALS AND METHODS

Study area: The domain of study is located at Kundapura, 440 km from Bangalore and 37 km from Udupi, at 13°37'24" N latitude and 74°41'30" E longitude and maximum elevation of 18 meters above sea level. Four study sites (Table: 1) have been selected beside the backwaters of the Haladi River.

Table-1. Study sites

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Site-4. Hemmadi	13°40'46"N	74°41'20"E	32

Sample collection and analysis: Monthly water samples were collected from 4 different sampling sites for a period from April-2010 to March-2012. The water samples were collected between 8.00 a.m. to 9.00 a.m. using wide mouth sterile transparent plastic jar of five-liter capacity and usually from 10-15 cm depth from the water surface. The samples were analyzed in the laboratory by following standard methods of American Public Health Association[9]. The results of analysis were expressed as mg/L except temperature and conductivity measured as $^{\circ}C$ and dSm^{-1} respectively.The temperature of air was recorded at the time of sampling using the thermometer. The temperature of water was recorded at the time of sampling using the mercury bulb thermometer by immersing the bulb of thermometer in water column. Water pH was recorded by pH meter. The conductivity of the samples was measured with the help of a digital conductivity meter. The amount of dissolved oxygen in water was estimated by the Winkler's iodometric method by titration assembly[9]. The dissolved oxygen was fixed on spot. In laboratory the biological oxygen demand of water was estimated by 5 days incubation method at 20°C in BOD incubator.The free carbon dioxide in water was estimated by the titrimetric method by titration assembly.The calcium of water was estimated by the EDTA titrimetric method by titration assembly.In the laboratory the chloride of water was estimated by the Argentometric method by titration assembly.In the laboratory the sodium and potassium of water was determined by using flame photometer. The magnesium of water was estimated by the EDTA titrimetric method by titration assembly.Carbonate and bicarbonate were estimated by titrimetric method.SAR is a parameter that evaluates the sodium hazard in relation to calcium and magnesium concentration. The SAR value was calculated with the analytical results of calcium, magnesium, and sodium from a discrete sample using the following equation:

$$SAR = \frac{Na^{+}}{\sqrt{\frac{Ca^{2+}+Mg^{2+}}{2}}}$$

III. RESULTS AND DISCUSSION

The air temperature varied from 25.20°C (site-2)during monsoon and 28.45°C (site-4)during pre-monsoon. Air temperature reaches its maximum during summer and minimum during monsoon.The surface water temperature varied from 23.31°C during post monsoon (site-3) to 27°C during pre-monsoon (site-4). There was a steady increase in temperature from March to May, and peaked during May. All the stations showed similar trend with similar seasonal changes. In the present study, summer peaks and monsoonal troughs in air and water temperature were noticed, as observed earlier by several workers in the west coast of India [10]; [11]; [12].

The pH values varied from 6.86 during monsoon (site-1) to 7.56 during pre-monsoon (site-3). pH in surface waters remained alkaline and slightly acidic throughout the study period in all the stations, fluctuations in pH values during different seasons of the year are due to removal of CO_2 by photosynthesis through bicarbonate degradation, dilution of seawater by freshwater inflow, reduction of salinity, temperature and decomposition of organic matter [13]; [14].

The electrical conductivity varied from 1.4 dSm^{-1} during monsoon (site-2) to 26.94 dSm^{-1} during pre-monsoon (site-4). The maximum and minimum values of electrical conductivity are due to freshwater influx and mix up with ebb and flow. The conductivity usually depends upon the dissolved nutrients and other dissolved ions [15]; [16].

The dissolved oxygen varied from 4.80 mg/L during pre-monsoon (site-3) to 8.64 mg/L during monsoon (site-2). In the present investigation, higher values of dissolved oxygen were recorded during monsoon season and lower values were found during summer. Higher dissolved oxygen concentration observed during the monsoon season might be due to the cumulative effect of higher wind velocity coupled with heavy rainfall and the resultant freshwater mixing[17]; [12]; [18].

The maximum value of B.O.D i.e 2.46 mg/L was observed in site-4 in post monsoon, whereas the minimum value of B.O.D i.e. 0.45 mg/L was found in the site-1 in monsoon. BOD is an indicator for the amount of the biodegradable organic substances. B.O.D depends on temperature, extent of biochemical activities, concentration of organic matter and such other related factors in monsoon period [19]. BOD value rises when there is more organic matter such as leaves; wood, waste water or urban storm water runoff took place at the river water[20].

The value of free CO_2 varied from 0.96 mg/L during monsoon in all the sites to 1.81 mg/L during pre-monsoon (site-1). This may depend upon alkalinity and hardness of the water body. High value of CO_2 could be related to the high rate of decomposition in the warmer months. Similar results were reported by [21].

The calcium content varied from 5.22 mg/L during monsoon (site-1) to 15.26 mg/L during pre-monsoon (site-1). Calcium values are indicative of intense of chemical weathering in the Indian sub-continent. Calcium concentration is the highest in estuaries due to the influx of riverine source. Similar results were reported by [22] &[23]. Magnesium values varied from 7.89 mg/L during monsoon (site-4) to 48.2 mg/L during pre-

monsoon(site-3). Similar results were reported by [3]. The potassium content varied from 1.02 mg/L during monsoon (site-4) to 10.15 mg/L during post monsoon (site-3). The highest concentration appeared in the winter and the lowest concentration was observed in the rainy season. Similar results were reported by [24].

Thesodium content varied from 37.67 mg/L during monsoon (Site-2) to 846.08 mg/L during pre-monsoon (site-4). Higher value of sodium (mg/L) during pre-monsoon season due to high salinity and low value during monsoon season due to rain and flow of river water [23]. Similar results were reported by [22].The bicarbonate content values varied from 2.17 mg/L during monsoon (site-3) to 5.97 mg/L during pre-monsoon (site-1). The high value in summer is due to the mixing of sea water and low value during rainy season is due to inflow of freshwater. The presence of high amount of bicarbonate indicates very hard water which is very hazardous for ecosystems [24]. The carbonate content was absent in all the sites and in all the season except the site-1 in the month of September-2010 i.e.0.23 mg/L.

The chloride values varied from 9.99 mg/L during monsoon (site-2) to 271.41 mg/L during pre-monsoon (site-4). Chloride contents tend to vary inversely to the rate of flow of water[25]. The chlorides, in high concentration, indicate the presence of organic matter[26]. The value of chloride was higher during pre-monsoon which might be due to high salinity, tidal flow and less freshwater mixing. Low value was during monsoon season due to rain and more mixing of freshwater from river[23]. Thesodium absorption ratio varied from 24.55 mg/L during monsoon (site-2) to 279.78 mg/L during pre-monsoon (site-3). The residual sodium carbonate was observed during the months of August-2010 in site-2 and 4 i.e. 0.4 mg/L and 0.005 mg/L and absent in all the months from September to July.

Table-2: Seasonal average values of the physico-chemical parameters of water: (April-2010 to March-2012)

Sites	Air temperature			Water temperature			pH		
	Monsoon	Post monsoon	Pre monsoon	Monsoon	Post monsoon	Pre monsoon	Monsoon	Post monsoon	Pre monsoon
1.	25.83	26.25	27.37	24.41	24.37	26.37	6.86	7.06	7.40
2.	25.20	26.83	27.75	24.45	24.68	25.62	7.12	7.05	7.48
3.	25.54	26	27.87	23.79	23.31	25.83	7.04	7.21	7.56
4.	26.16	26.93	28.45	24.81	25	27	6.97	7.23	7.51

Sites	Electrical Conductivity			Dissolved Oxygen			Biological Oxygen Demand		
	Monsoon	Post monsoon	Pre monsoon	Monsoon	Post monsoon	Pre monsoon	Monsoon	Post monsoon	Pre monsoon
1.	15.87	16.95	24.48	7.77	5.87	5.85	0.45	1.33	1.84
2.	1.4	17.55	14.98	8.64	6.78	5.95	0.58	2.29	2.25
3.	1.45	19.43	26.64	7.29	5.56	4.80	0.90	2.12	1.87
4.	2.235	24.07	26.94	8.01	5.98	5.32	1.012	2.46	1.65

Sites	Free CO_2			Potassium			Calcium		
	Monsoon	Post monsoon	Pre monsoon	Monsoon	Post monsoon	Pre monsoon	Monsoon	Post monsoon	Pre monsoon
1.	0.96	1.73	1.02	1.81	8.49	7.82	10.74	5.22	15.26
2.	0.96	1.66	1.63	1.25	5.25	5.21	7.94	11.7	11.46
3.	0.96	1.66	1.64	1.38	10.15	7.72	10.99	12.95	15.24
4.	0.96	1.73	1.32	1.02	7.34	9.16	10.53	13.96	14.55

Sites	Magnesium			Sodium			Bicarbonate		
	Monsoon	Post monsoon	Pre monsoon	Monsoon	Post monsoon	Pre monsoon	Monsoon	Post monsoon	Pre monsoon
1.	11.09	16.45	44.43	95.71	648.42	456.95	2.93	2.64	5.97
2.	11.44	8.77	28.52	37.67	681.98	188.76	2.84	2.81	3.74
3.	14.38	12.99	48.2	55.41	595.76	789.53	2.17	2.79	4.33
4.	7.89	20.21	46.90	91.74	449.78	846.08	2.60	3.425	4.71

Sites	Carbonate			Chloride			Sodium absorption ratio		
	Monsoon	Post monsoon	Pre monsoon	Monsoon	Post monsoon	Pre monsoon	Monsoon	Post monsoon	Pre monsoon
1.	0.23	0	0	28.82	195.13	227.98	44.93	215.75	103.5
2.	0	0	0	9.99	94.10	132.29	24.55	197.025	62.14
3.	0	0	0	10.28	143.65	238.43	58.08	279.78	237.23
4.	0	0	0	13.33	161.94	271.41	64.31	177.58	215.61

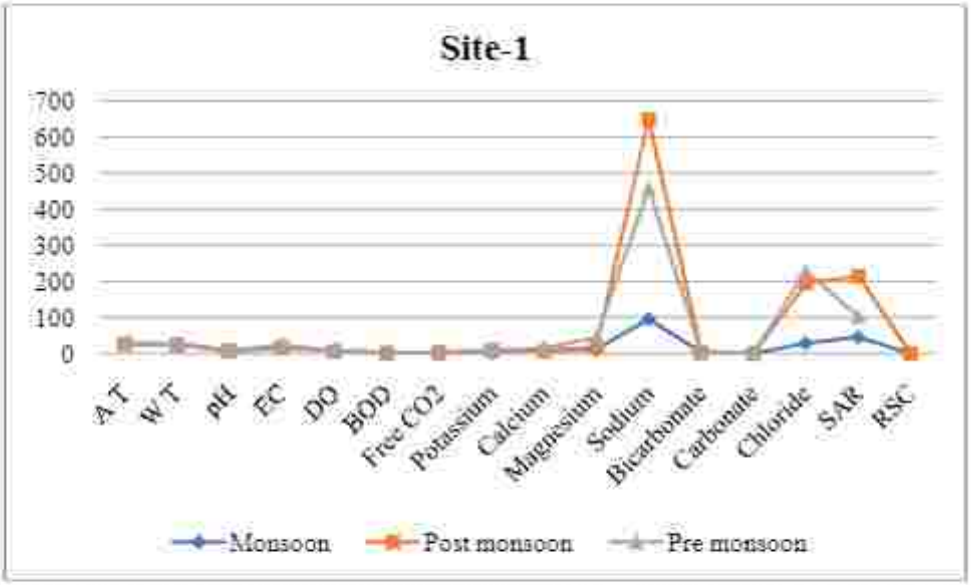

Fig-1, Site-1: Showing the seasonal average values of physico-chemical parameters of water: (April-2010 to March-2012)

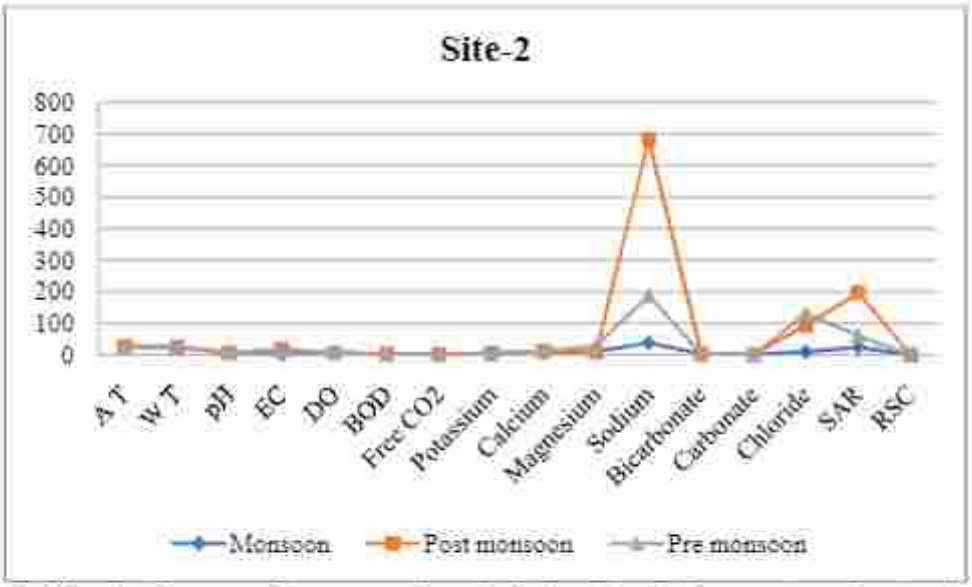

Fig-2, Site-2: Showing the seasonal average values of physico-chemical parameters of water: (April-2010 to March-2012)

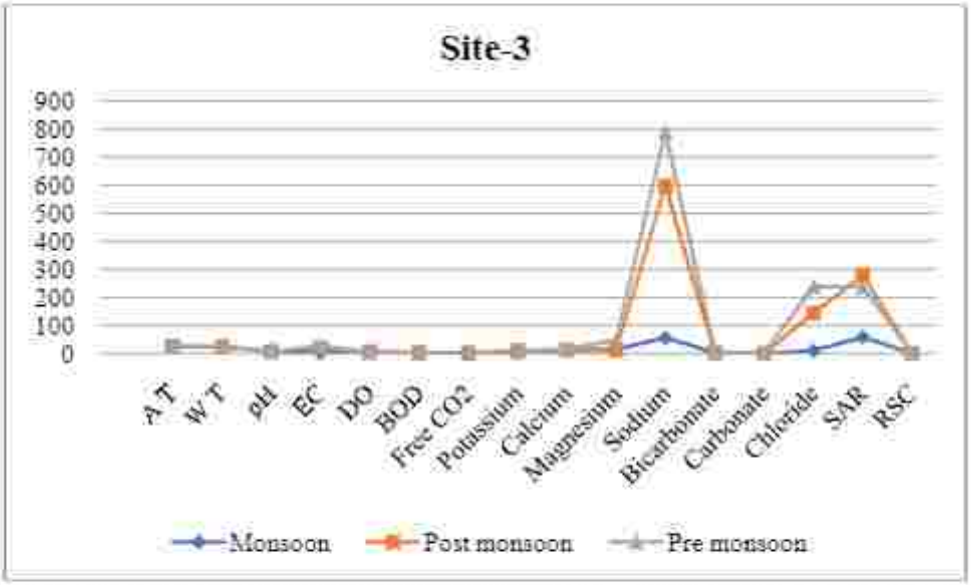

Fig-3, Site-3: Showing the seasonal average values of physico-chemical parameters of water: (April-2010 to March-2012)

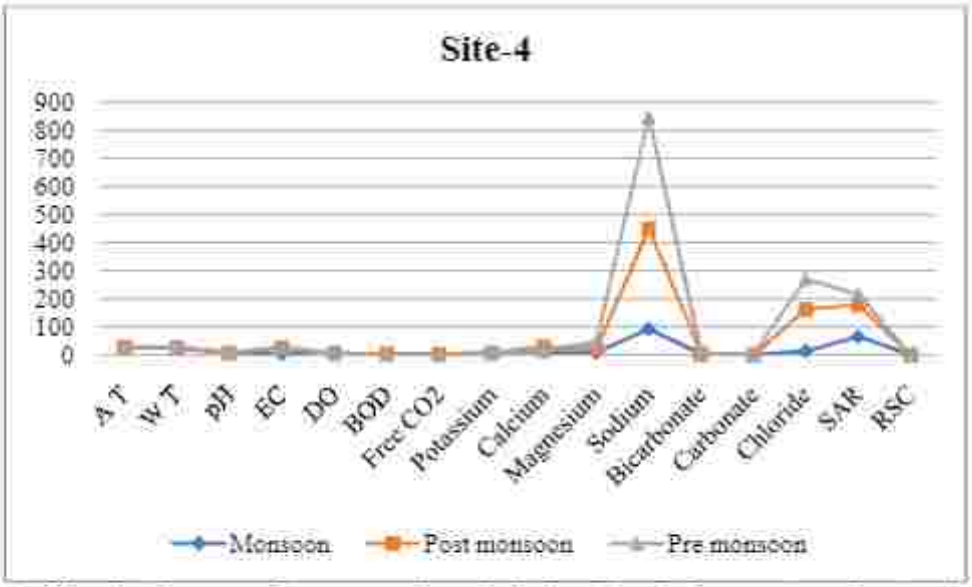

Fig-4, Site-4: Showing the seasonal average values of physico-chemical parameters of water: (April-2010 to March-2012)

IV. CONCLUSION

Physico-chemical parameters of the mangrove water showed fluctuations from season to season. Most of the parameters suggest low values throughout monsoon season and high values during pre-monsoon season; however dissolved oxygen is maximum for the duration of monsoon season and minimum throughout pre-monsoon. The excessive value in summer season is due to the combination of sea water and low value within the course of rainy season is due to inflow of freshwater. Higher dissolved oxygen concentration observed in the course of the monsoon season might be due to the cumulative effect of higher wind velocity coupled with heavy rainfall and the resultant freshwater mixing.

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ISSN: 2278-4632
Vol-11 Issue-12 No.01 December 2021

CLIMATE CHANGE ON EARTH TODAY: AN OVER VIEW

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Abstract:
Earth's favorable climate enabled our planet to evolve and sustain life. Climate is a broad composite of the average condition of a region, measured by its temperature, amount of rainfall or snowfall, snow and ice cover, wind direction and strength, and other factors. *Climate change* specifically applies to longer term variations (years and longer), in contrast to the shorter fluctuations in *weather* that last hours, days, weeks, or a few months. Earth's climate is highly favorable to life both in an overall, planet wide sense and at more regional scales. Earth's surface temperature averages a comfortable 15.58$^{\circ}C$(608$^{\circ}F$) and much of its surface ranges between $0^{\circ}C$ and 308$^{\circ}C$ (328$^{\circ}F$ and 868$^{\circ}F$) and can support life.

Although we take Earth's habitability for granted, climate can change over time, and with it the degree to which life is possible, especially in vulnerable regions. During the several hundred years in which humans have been making scientific observations of climate, actual changes have been relatively small. Even so, climatic changes significant to human life have occurred. One striking example is the advance of valley glaciers that overran mountain farms and even some small villages in the European Alps and the mountains of Norway a few centuries ago, because climate was slightly cooler than now. Scientific studies reveal that historical changes in climate such as the advance and retreat of this glacier are tiny in comparison with the much larger changes that happened earlier in Earth's history. For example, at times in the distant past, ice covered much of the region that is now the Sahara Desert, and trees flourished in what are now Antarctica and Greenland.

Earth's climate system consists of air, water, ice, land, and vegetation. At the most basic level, changes in these components through time are analyzed in terms of *cause* and *effect*, or, in the words used by climate scientists, *forcing*and*response*. The term "forcing" refers to those factors that drive or cause changes; the responses are the resulting climatic shifts. *Tectonic processes* generated by Earth's internal heat alter the basic geography of Earth's surface. *Changes in Earth's orbit around the Sun* also affect climate.*Changes in the strength of the Sun* also affect the amount of solar radiation arriving on Earth.A fourth factor capable of influencing climate, but not in a strict sense part of the natural climate system, is the effect of humans on climate, referred to as *anthropogenic forcing*. This forcing is an unintended by-product of agricultural, industrial, and other human activities, and it occurs through alterations of Earth's land surfaces and through additions of carbon dioxide (CO_2) and other *greenhouse gases*, sulfate particles, and soot to the atmosphere.
Key words: *Tectonic processes, anthropogenic forcing*, Solar *radiation, greenhouse gases.*

Introduction:

Life exists nearly everywhere on Earth because the climate is favorable. We live in, on, and surrounded by the climate system: the air, land surfaces, oceans, ice, and tapestry of Earth's history, along with the evolution of life and the physical vegetation. Climate change is an important thread in thetransformations of this planet.But the study of climate also matters for a practical reason: it is relevant to the climatic changes we face in the near future. We have left an era when natural changes governed Earth's climate and have now entered a time when changes caused by human activity predominate. This emerging era is widely referred to as "the Anthropogenic. Earth's climate system, which basically functionsas a heat engine driven by the Sun. Earth receives and absorbs more heat inthe tropics than at the poles, and the climate system works to compensatefor this imbalance by transferring energy from low to high latitudes.

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ISSN: 2278-4632
Vol-11 Issue-12 No.01 December 2021

Thecombination of solar heating and movement of heat energy determine the basicdistributions of temperature, precipitation, ice, and vegetation on Earth.

The longest time scale of climate change on Earth, the Tectonic processes driven by Earth's internal heat have altered Earth's geography and its climate for billions of years. Prior to the last several hundred millions of years, the record of *tectonic scale*. Climate change is relatively sparse, and the configurations of continents and oceans are generally not known with a high degree of accuracy. Yet we do know that Earth's climate for the most part remained relatively moderate, neither freezing completely (although coming close once) nor heating up enough to boil away its oceans. Earth appears to have had a built-in thermostat that allowed it to avoid those extremes.

The last 550 million years of Earth's history are far better known than the first 4 year shapes of the ocean basins become progressively clearer. Better-preserved sedimentary rock archives also hold more abundant evidence of past climates, including alters. From this time forward to the present, the locations of the continents and the billionnations between icehouse intervals with large ice sheets present and greenhouse intervalswithout ice on land. [5] Our recent icehouse climate, marked by large fluctuations of ice sheets andsea ice in both hemispheres, is the result of a gradual cooling over manytens of millions of years. Earth's record of this transition is rich in information, including the initial appearance of mountain glaciers and continentalice sheets, the replacement of warm-adapted vegetation by cold-adapted forms and a range of evidence indicating progressively cooler ocean temperatures.

Each year, we feel the effects of Earth's orbit around the Sun through seasonal changes in the angle of the Sun's rays and their effects on temperature andother responses. We experience seasonal changes because Earth is tilted as it orbits the Sun toward the Sun in summer and away from it in winter. The seasonal cycle is by far the largest climate-related signal people experience in a lifetime. Monsoonal circulations exist on Earth today because the land responds toseasonal changes in solar radiation much more quickly than the oceandoes. The reason for these differing rates of response is that the land hasa far smaller capacity to store heat than the ocean.

The discovery from air bubbles trapped in these cores is that two important greenhouse gases, carbon dioxide (CO_2) and methane (CH_4) have varied at the periods of Earth's orbit. Atmospheric CO_2 concentrations match the, 100,000-year rhythm of the ice sheets, with high concentrations during warm interglacial intervals but values 30% lower during maximum glaciations. The carbon taken from the atmosphere during glacial times ended up in the deep ocean. Contributing factors include an ocean cooling thatincreased CO_2 solubility in seawater; greater transfer ("bio-pumping") of organiccarbon from surface to deep waters; and changes in the patterns of deep-water circulation.

Earth was transformed following the last glacial maximum. The melting ice sheetssent enough water to the ocean to raise global sea level by 110–125 meters. The rising ocean submerged glacial maximum links between continents and islands, and itflooded basins that had earlier been cut off from the sea. Melt water lakes formed in bedrock depressions left by the retreating ice. Ice lobes dammed these lakes but wereperiodically breached, sending catastrophic floods across some regions. Forests and tundragradually moved north to occupy broad regions abandoned by the ice, in some regions penetrating beyond their present limits before retreating in recent millennia. Tropical monsoonsstrengthened until 10,000 years ago and then weakened.

Large climatic oscillations have occurred over intervals considerably shorter than the orbital cycles. Because they last for a few thousand years, they are called millennial oscillations. Some of these fluctuations ended within decades, fast enough to be of possible relevance to human concerns about future climate, but their cause remains uncertain. The oscillations were largest when glacial ice sheets existed in the Northern Hemisphere and much smaller or absent during interglacial climates like the current one. Especially large oscillations have been found in Greenland ice cores and in North Atlantic sediments, and similar fluctuations have also appeared in numerous other records from the Northern Hemisphere. Much smaller fluctuations occurin south Polar Regions, with a different (opposite) timing compared to the fluctuations in the north. The oscillations are largely random, rather than cyclic.

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ISSN: 2278-4632
Vol-11 Issue-12 No.01 December 2021

Over most of our time on Earth, we humans and our immediate predecessors were affected by climate but did not have any measurable impact on the climate system. With the spread of agriculture during the last several millennia of the current interglacial period, however, we began to alter climate by adding greenhouse gases to the atmosphere in amounts sufficient to offset part of a natural cooling. The rate and amount of warming since 1900 has been unprecedented compared to changes during the previous 1,000 years. Prior to the late 1900s, climatic changes were mostly measured with instruments at Earth's surface, including thermometers on land and at sea, and field studies of glacier flow and length using stakes driven into the ice. More recently, changes in global sea level have been reconstructed from tide gauges after correction for the lingering effects of the last deglaciation. Over the last few decades, satellite measurements of the extent of sea ice and snow cover, of growing-season length, and of ice sheet mass balance have also become available, along with other information from remotely deployed instruments. All of these measurements show that climate warmed significantly during the last century and the early part of the current one. Themeasurements also reveal shorter-term (multiannual to decadal) oscillations in climate across smaller regions of the globe.

During the past two decades, climate scientists have explored how much of this warming has been caused by natural factors and how much by the buildup of CO_2, CH_4, and other greenhouse gases in Earth's atmosphere as a result of human activities. Most climate scientists now agree that natural changes at tectonic, orbital, and millennial time scales do not explain this warming. Although solar forcing may have played a small role, the rapid warming of the last century or more is largely the result of humans.

The climatic effects of rising CO_2 levels will become increasingly significant in the future. Consumption of estimated reserves of fossil fuels in the next two or three centuries will add far more CO_2 to the atmosphere than has been emitted to date unless ambitious conservation efforts or technological innovations reduce the influx. Atmospheric CO_2 concentrations will increase to levels at least twice and possibly four times the highest amounts measured in the last 800,000 years spanned by ice-core records. This warming will overwhelm natural variations in climate and cause climatic and environmental changes unprecedented in human experience. Atmospheric CO_2 levels will eventually decrease as the ocean slowly absorbs much of the excess carbon, but this process will acidify the oceans. After the main pulse of fossil-fuel emissions has passed, atmospheric CO_2 values will decrease back toward preindustrial levels, but enough CO_2 will remain in the atmosphere to prevent future glaciations for tens of thousands of years.

Conclusion:

On a philosophical level, if we (meaning humanity) can manipulate climate, and if we choose to do so, what climate will we pick? Our first instinct may be that the safest path will return Earth to a "natural" climate, but what is "natural"? This is not a simple question The massive clearance of forests and plowing of prairies during the last century and a half will not be reversed because humanity needs the cropland and pastureland to grow enough food for the current global population, not to mention the 10 billion people expected by the middle of this century The consensus may emerge that the optimal "natural" world was the not-too-warm, not-too-cold climate just prior to the industrial era, even though Earth's surface had already been massively transformed by that time. Or perhaps humanity will be unable to agree on a desirable future climate. In any case, humankind in the near future will likely be weighing the merits of whether to engineer a different climate, and if so which one. Earth's climatic future is now in our hands.

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ISSN: 2278-4632
Vol-11 Issue-12 No.01 December 2021

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INDIA'S CONTRIBUTION TO SCIENCE: AN ANALYSIS

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Abstracts:
It is pertinent to reflect upon the nature and place of knowledge in Indian traditions. Ancient Greeks perceived knowledge in terms of power; it was used to acquire and consolidate power; it was not merely knowledge for the sake of knowledge. To Indians it meant liberation – sa vidya ya vimuktaye. But liberation from what – ignorance, disease, poverty or what Buddha called dukkha or liberation from this world itself? As the Brahmanical tradition became strong, the metaphysical other-worldliness overtook the quest for vimukti. The purpose may have changed from time to time but the quest remained. Inherent with the quest, is also the emphasis on wisdom. Wisdom was the aim of our rishis and was applied even for developing techniques to improve the quality of life, for instance, ayurveda or yoga.

The Indian knowledge system may not have what Kuhn terms 'paradigm shifts'. The changes evolved slowly; knowledge did move forward but without any sharp break with the past. It moved through writing commentaries which scholars in every generation wrote making additions or subtractions in the then existing corpus of knowledge. Significantly yukti (skill, reasoning) is highly prized in the Indian tradition. Neelkantha praises his hero Aryabhatta as yukti-nidhi; Bhaskara II praises his bija-ganita as avyakta-yukti (handling unknown variables). Unlike Greek 'axiomatism', the Indians used 'computational positivism'. This attitude relied only on facts as the possible objects of knowledge; it did not give any credence to metaphysics or to assumptions that could not be verified as facts. The result was that errors in the predictions of planets were less in the Indian approach compared to those based on Ptolemy's 'axiomatic' procedure. Another interesting aspect is that the Indians considered the siddhantas

valid only for some finite period of time (kvachit kale pramanam) and not valid for ever. The biggest problem in Indian tradition, as an eminent Indian scientist Narliker argues, is that of 'praksipta' which are basically additions reflecting the culture of the time. The 'praksipta' merges well with the text and in most cases, difficult to identify.

Key words: Ancient Indian Astronomy, Babylonian and Greek influences, Ashoka's edicts, zero and infinity, algebraic procedures.

Introduction:

India's scientific and technological heritage is enormous, although it remains poorly accessible to the wider public; for the last two hundred years, much scholarly work of great value has investigated India's accomplishments and contributions in mathematics, astronomy, chemistry, medicine and numerous technologies, but the average Indian remains largely ignorant of them, since they do not figure in our educational system. Instead of a much-needed sober assessment, this void has often led to exaggerations, misconceptions or hollow glorification on the one hand, or ignorant denials on the other. Below is a very brief survey of India's contributions to other cultures in the field of science.

Origin:

As a civilization, India has been a generous giver in philosophy, spirituality, literature, arts, architecture and more. Occasionally, she did not mind borrowing, too. It is probable, for instance, that Babylonian and Greek influences are behind the introduction into India of the 24-hour day and the seven-day week, both concepts being absent from the earliest Indian scientific literature.

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This is also the case of the solar zodiac of 12 signs (rāshi), first recorded in the Yavanajātaka (c. 269 CE), the word Yavana referring originally to a Greek, later to any Westerner, including Romans and Persians (1).

The concept of 27 nakshatras, which constitute the lunar zodiac (the band of constellations forming the background of the moon's orbit in the celestial sphere), appears in the early Vedic literature. It has often been thought to have been imported, too, since it was shared by the Chinese and the Mesopotamian. However, there is no final evidence for this borrowing, as those three civilizations may well have come up with this concept independently, simply by observing and recording the path of the moon in the course of the year(2).

Mathematics and Astronomy:

When we come to the historical period, India's greatest scientific contribution is undoubtedly the full-fledged place-value system of numeral notation, documented in Buddhist and Jain texts of the first few centuries CE. Although we are so used to this system that it seems trivial to us today, it required not only a high level of abstract thinking, which gave digits a value tied to their position in a number (hence the description of this system as "positional"), but also the integration of the zero as a number that could be added, subtracted or multiplied. While positional systems existed earlier (especially in Babylonia), they had failed to integrate zero with the nine numerals. The new system, which represented a great advance as it immensely facilitated calculations, was gradually adopted across India, and later taken to Europe through the Arabs(3).

Along with it, the nine Indian numerals (ten with the zero) travelled, eventually evolving into our modern "Arabic" numerals (sometimes also called "Hindu-Arabic"). Those numerals were originally derived from India's earliest historical script, Brahmi, and were found in Ashoka's edicts and other inscriptions of the last centuries BCE, although at the time the number system in use was not yet positional (it was somewhat similar to the system of Roman numbers; for instance a number like 30 would be written by repeating the sign for 10 twice, that is, 10-10-10; such systems are clearly non-positional).

In India, we find the zero represented with place value in the famous 876 CE inscription of Bhojadeva at Gwalior, although there are several earlier candidates. The zero appears in a Khmer inscription (at Trapeang Prei, province of Sambor) of 683 CE, where the year 605 (of the Shaka era) is engraved in stone, and in another the same year in Sumatra (Palembang). Just a couple of decades earlier, in 662 CE, the Syrian bishop Severus Sebokht praised "... the science of the Indians... their subtle discoveries in astronomy, discoveries that are more ingenious than those of the Greeks and the Babylonians, and their valuable methods of calculation which surpass description done by means of nine signs." The above evidence testifies to the rapid spread of the system eastward as well as westward, although for a long time Europe will remain very reluctant to abandon the Roman numbers. Indian works were popularized in Europe by Adelard of Bath's Latin translations (in the12th century) and Leonardo Pisano Bigollo, better known as Fibonacci (13th century), with his work Liber Abaci, which introduced the Indian numeral system(4).

The French historian of mathematics Georges Ifrah gives a fair estimate of India's contribution in the field: "The Indian mind has always had for calculations and the handling of numbers an extraordinary inclination, ease and power, such as no other civilization in history ever possessed to the same degree. So much so that Indian culture regarded the science of numbers as the noblest of its arts. ... A thousand years ahead of Europeans, Indian savants knew that the zero and infinity were mutually inverse notions."

India's knowledge of astronomy and geography probably aided the Arabs' progress in avigation and maritime trade. We know of the visit to the Baghdad court of the Caliph al-Mansūr (in the second half of the eighth century) by an Indian astronomer, "who brought with him ... planetary tables, texts for the calculations of eclipses, ascension of signs and other matters of astronomical import." Al-Mansūr soon ordered two major works of Brahmagupta to be translated into Arabic; Indian pandits assisted Arab scholars in this considerable task. A few years later, in

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803 CE, astronomers from India were on record for helping set up observatories at Baghdad and Damascus (5).

In the early ninth century, the Caliph al-Mamūn established in Baghdad the famous "House of Wisdom", functioning as a translation bureau, it employed scholars from various parts of Europe and Asia to translate scientific texts, Greek and Indian ones especially, into Arabic. The translators are said to have been paid handsomely— the weight of the manuscript in gold! At least two Indian savants worked on the highly prized Indian manuscripts from various branches of knowledge.

This was also the time when the Persian mathematician and astronomer alKhwārizmī, working at the same House of Wisdom, authored several treatises, some of them compiled from Indian texts. He wrote in particular on the Indian decimal numeral system and on algebraic algorithms elaborated by Indian mathematicians such as Brahmagupta. Translated into Latin, al-Khwārizmī's works relayed some of India's advances to Europe. Interestingly, his own Latinized name, "Algoritmi", gave rise to the word "algorithm"; the term thus has an indirect Indian connection. Following the same channels, the Arabic translation of Āryabhata's Āryabhatīya was in turn translated into Latin in the thirteenth century: Āryabhata was known as "Arjabhad" in the Arab world and as "Ardubarius" in medieval Europe.

Two centuries after al-Khwārizmī, the Persian scholar and scientist al-Bīrūnī travelled to India as part of Mahmūd of Ghazni's entourage and authored in 1030 a comprehensive study of Indian customs and sciences with, in particular, lengthy discussions on Indian astronomy, his favourite field of research. Al-Bīrūnī collected Sanskrit manuscripts and translated texts by Brahmagupta and Varāhamihira into Arabic or Persian.

An almost parallel story unfolded in China. In the 7th and 8th centuries, the Chinese mathematician Yi Xing (I-Hsing) referred to Indian mathematical texts and referred to them. Three families of Indian astronomers settled in China and held important positions in the astronomical bureaus of the Tang dynasty; among them, Gautama Siddha wrote a 120-chapter work on Chinese and India systems, introduced the Indian decimal notation, elements of trigonometry, the division of the earth's orbit into 360°, etc. As a result, much of Indian mathematics and mathematical astronomy was known in China. According to the Sinologist Jean-Claude Martzloff, "Chinese translations of Indian mathematical and astronomical texts were made at this time [the early Tang dynasty or 7th century CE]. The representation of numbers in Chinese Buddhist literature is often borrowed from Indian culture, especially in the form of phonetical transliterations of Sanskrit words into Chinese."

Migration of Indian science to Southeast Asia continued and was not limited to mathematics: astronomy, and especially its fundamental reference text Sūrya Siddhānta, was popular in the region.

In the medieval period, a complex interface with Islamic astronomy took place, which, among other benefits, brought instruments such as the astrolabe to India. The famous and massive yantramantra or Jantar Mantar observatories built in the early 18th century by the Maharaja of Jaipur, Sawai Jai Singh (1688-1743), represent a convergence between Indian, Arabic and European astronomy. Indian astronomy interacted not only with Islamic (or Zīj) and European astronomies, but also with Chinese astronomy, in complex interplays that invariably enriched both players (6).

Medicine.

India's achievements in the field of medicine, including early surgery and ayurveda, are fairly well documented. What is not so well known is that they crossed India's borders in several directions. The Greek, according to the French Indologist Jean Filliozat, probably took their notion of pneuma (breath) from that of prāna, which appears as early as the Atharva Veda. (7) Plato in his Timaeus provides a theory of three elements in balance or association in the body, which is somewhat similar to the tridosha principle of ayurveda. The Hippocratic Collection makes several references to the borrowing of some Indian drugs and medical formulas. "Indian herbals were

sought after in the Roman world." Later, the Greek physician Galen (130-200 CE) who spent many years in Rome, acknowledged some borrowings from Indian sources.

Ayurvedic medicine followed India's cultural expansion into Central Asia and China. According to Vijaya Deshpande, "Chinese medical works and pharmacopoeia from the fifth century AD onwards, include materials suggesting connections with Buddhist medicine that usually have Ayurvedic flavour." Ayurveda became very popular in Tibet too; indeed, "Tibetan medicine" is simply a branch or variant of Ayurveda. Manuscripts were recovered from Central Asia of medical texts in Sanskrit (or translated into the local language). A number of Indian drugs were preserved in the Japanese Imperial Treasury from the eight century onward, and we find Sushruta mentioned in Sanskrit inscriptions in Cambodia(8).

Equally noteworthy is the story of an Ayurvedic physician who migrated to Baghdad in the ninth century CE, became the physician-in-chief there after "successfully curing his royal patient of a long-standing stomach trouble," and went on to translate the foundational text of Ayurveda, Sushruta Samhitā, into Arabic and Persian ("Sushruta" was Arabized into "Susrud"). Charaka Samhitā, the other major text of this branch of Indian medicine, soon followed, translated by an Arab scholar. The two texts were also among "medical, pharmacological and toxicological texts in Sanskrit" (9, 10).

Conclusion.

Altogether, in scientific fields, it is apparent that India gave much more than she borrowed, and it is good to remember that these contributions, direct or indirect, often helped give shape to what goes by the name of "modern science". Indian school children who learn about numbers, arithmetic, basic algebraic procedures, trigonometry or geometry, remain largely unaware that many of the procedures in their textbooks were actually worked out in India.

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ವಿಶ್ವಚಿಂತನಾ ಮಾಲಿಕೆ -1

ರಾಷ್ಟ್ರೀಯ ಶಿಕ್ಷಣ ನೀತಿ–2020

(ನೂತನ ರಾಷ್ಟ್ರೀಯ ಶಿಕ್ಷಣ ನೀತಿ–2020ರ ಕುರಿತಾಗಿರುವ ಲೇಖನಗಳ ಸಂಪಾದನಾ ಕೃತಿ)

ಸಂಪಾದಕರು
ಪ್ರೊ. ಸೈಯದ್ ಮುಯಿನ್

ವಿಶ್ವಚಿಂತನಾ ಮಾಲಿಕೆ -1

ರಾಷ್ಟ್ರೀಯ ಶಿಕ್ಷಣ ನೀತಿ – 2020

National Education Policy - 2020

(ನೂತನ ರಾಷ್ಟ್ರೀಯ ಶಿಕ್ಷಣ ನೀತಿ–2020ರ ಕುರಿತಾಗಿರುವ ಲೇಖನಗಳ ಸಂಪಾದನಾ ಕೃತಿ)

ಸಂಪಾದಕರು

ಪ್ರೊ. ಸೈಯದ್ ಮುಯಿನ್

ಪ್ರಕಾಶಕರು

INFINITE LEARNING SOLUTIONS

ರಾಷ್ಟ್ರೀಯ ಶಿಕ್ಷಣ ನೀತಿ-2020 (ನೂತನ ರಾಷ್ಟ್ರೀಯ ಶಿಕ್ಷಣ ನೀತಿ-2020ರ ಕುರಿತಾಗಿರುವ ಲೇಖನಗಳ ಸಂಪಾದನಾ ಕೃತಿ)

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ಐ.ಎಸ್.ಬಿ.ಎನ್ : ***978-81-953311-6-1***

ಪ್ರಥಮ ಮುದ್ರಣ: 2021

ಅಳತೆ: 1/8 ಡೆಮ್ಮಿ

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National Education Policy 2020: Boon or bane?

- Dr. Yashavanthi K.

Introduction:

"If you want something new, you have to stop following things that are old"[1] - On July 29, 2020, the Ministry of Human Resource Development, following the works of Shri. TSR Subrahmanian committee and DK Kasturirangan Committee, scrapped the 34 year old education policy of India and thus came into action an idea of imparting universal high quality education, beginning with making students learn how to learn. For a country whose strength is its youth power, this was to be a revolution for it aims towards creative multidisciplinary learning approach in contrast to the content based learning system of 1986/92.

The Pros:

The primary aim of the education policy is that at the end of it all, we don't have a child in India who is deprived of education just because of his/her social or economic background, and through this policy around 2 crore students, who have dropped out of school due to various reasons are said to be streamlined back to education - facilitated by gender inclusion funds and special education zones for the underprivileged.

1 Peter F Drucker, Austrian-American Educator

The policy also sees a transition from the age old 10+2 system to a more holistic 5+3+3+4 - keeping the number of years of schooling the same, the policy breaks it forth into stages based on a child's cognitive development. The foundation stage, earlier a part of informal education will now be drawn into the policy -this makes sure that kids by the age of 6 have acquired basic numeracy and literacy skills, the timing coinciding with maximum brain development period. Experiential learning in middle stages ensures a break from the traditional rote based learning to play and activity based approaches - parents in future probably will have no trouble making kids to go to school. Focus will also be on vocational learning - we will no longer have "book worms" being produced by Indian schools for every student leaves school with a major vocational skill - this is also a huge step in preventing people from looking down at skill based jobs like carpentry. India also seems to be preparing kids for the future by teaching subjects like coding right from standard 6. Creation of multi-disciplinary education and research universities, at par with IIT and IIMs will go a long way in keeping up higher education with international standards.

Flexibility is another key feature of the policy. There would no longer be borders between the 'big 3' streams. Simply put forth, even if a parent stamps "My son will be an engineer" at the time of his birth, he can still pursue photography as a minor course. Further, the course offers multiple entry and exit points from the course in higher education, thus making ardent attempts to promote adult education.

The policy also aims at a better assessment process. Mark based evaluation is to be supplemented by peer based evaluation and self-evaluation which will go a long way in making students better at something other than mugging textbooks. Academic credit system will help keep a continuous track on student progress in contrast to annual cramming based exam system. Competency based evaluation

will promote better student attitude and help create better Indian citizens.

The National Book Promotion Policy, as a part of the education policy strives to promote book reading as a habit amongst the younger generation.

With the policy, the country is finally set to spend a whopping 6% of GDP on education, a major step in making education a priority creating a hope for seeing educated Ministers at the Cabinet.

The cons:

All good things being said so far, the education policy has been criticised at various front:

NEP is right now on papers. The implementation in our country is a huge task at hand. Training enough number of teachers to fulfil this dream is difficult, considering the fact that we have set to provide teachers for pre-school education, vocational learning etc. Providing an adequate infrastructure for this is a bigger quandary.

Language is the second barrier. Although not compulsory, the policy strives at teaching students in their regional languages with textbooks to be printed in local languages. The intentions were clear - students tend to learn better in their home language in addition to the fact that this will also help connect them to their culture in an era of rapid westernisation. But this has downsides - In a setting where an individual has to learn two languages, and English being an obvious priority for many, how do we create a common language for communication in the country; do we have enough resources for adopting a three language formula across the country; how do we train enough teachers in local languages; what happens to languages like Sanskrit/Urdu? Aren't we just accelerating their extinction; how will students from different states cope up with the language barrier in case of school transfers; if different schools teach students in different primary languages, aren't we just widening the already

existing communication barrier? The questions are many, the answer only lies in the future.

One other thing with the policy is that in a 4 year graduation course, students are being conferred benefits at the end of each year so that students who tend to drop out don't end up with nothing. When an individual can end up with a diploma within 2 years, why would he go ahead and complete his 4 year degree course? Are we going to create a huge number of voluntary dropouts?

Conclusion:

Theoretically, NEP is a wonderful idea with pros outweighing the cons anyday. The question is, will we be able to implement it in the right way? No doubt this requires a perfect co-ordination between the Centre and State. If implemented correctly, the policy will definitely revolutionalise education from kindergarten to universities. The future does seem bright. We just need to be patient for it.

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ಸಂಪಾದವಾಕೃತಿಯ ಬಗ್ಗೆ

2020ರ ರಾಷ್ಟ್ರೀಯ ಶಿಕ್ಷಣ ನೀತಿಕುರಿತಾಗಿಕನ್ನಡ ಭಾಷೆಯಲ್ಲಿ ಹೊರಬರುತ್ತಿರುವಂತಹ ಬಹುಶಃ ಪ್ರಥಮ ಲೇಖನಗಳ ಸಂಗ್ರಹವೆಂದು ಹೇಳಬಹುದು. ವಿವಿಧ ಲೇಖಕರು 2020ರ ರಾಷ್ಟ್ರೀಯ ಶಿಕ್ಷಣ ನೀತಿಯಕುರಿತಾಗಿ ತಮ್ಮ ಅಭಿಪ್ರಾಯಗಳನ್ನು ಪ್ರಾಥಮಿಕ ಮತ್ತು ಪ್ರಾಯೋಗಿಕ ಹಂತದಲ್ಲಿ ಗುರುತಿಸಿದ್ದು, ಹೊಸ ರಾಷ್ಟ್ರೀಯ ಶಿಕ್ಷಣ ನೀತಿಯ ಕುರಿತಾಗಿ ಕರ್ನಾಟಕದ ವಿವಿಧ ಸಂಶೋಧಕರು ತಮ್ಮ ವಿಷಯಜ್ಞಾನವನ್ನು ಹಂಚಿಕೊಳ್ಳುವುದರ ಮೂಲಕ ತಮ್ಮ ಅಭಿಪ್ರಾಯಗಳನ್ನು ಇಲ್ಲಿ ಹಂಚಿಕೊಂಡಿದ್ದಾರೆ. 2020ರ ರಾಷ್ಟ್ರೀಯ ಶಿಕ್ಷಣ ನೀತಿಯ ಪರಿಚಯಾತ್ಮಕ ಮಾಹಿತಿಯನ್ನು, ಸಾಧಕ-ಬಾಧಕಗಳನ್ನು, ಮಾತೃಭಾಷಾ ಬೋಧನೆ, ಪ್ರಾದೇಶಿಕತೆ, ಸಂಸ್ಕೃತಿ, ಪರಂಪರೆ ಮುಂತಾದ ವಿಷಯಗಳಜತೆಗೆ ಇದರ ಅನುಷ್ಠಾನಕ್ಕೆ ಇರುವ ಸವಾಲುಗಳು, ಪ್ರಾದೇಶಿಕ ಭಾಷೆಗಳ ಮೇಲೆ ಶಿಕ್ಷಣ ನೀತಿಯ ಪ್ರಭಾವ, ಭವಿಷ್ಯದಲ್ಲಿ ಉನ್ನತ ಶಿಕ್ಷಣ ಕ್ಷೇತ್ರಕ್ಕೆ ಹೊಸ ಶಿಕ್ಷಣ ನೀತಿಯ ಕೊಡುಗೆ, 1986ರ ಶಿಕ್ಷಣ ನೀತಿ ಮತ್ತು 2020ರ ಶಿಕ್ಷಣ ನೀತಿಯ ನಡುವಿನ ವ್ಯತ್ಯಾಸ-ಸಾಮ್ಯತೆಗಳನ್ನು ಗುರುತಿಸುವ ಪ್ರಯತ್ನ ಮಾಡಲಾಗಿದೆ. 2020ರ ರಾಷ್ಟ್ರೀಯ ಶಿಕ್ಷಣ ನೀತಿಯ ಕುರಿತ ವಿವಿಧ ಲೇಖನಗಳನ್ನು ಇಲ್ಲಿ ಸಂಪಾದಿಸಿ ನೀಡಲಾಗಿದೆ.

ಸಿಹಿಯ ರುಚಿಯಾಗಬೇಕಾದರೆ, ಮೊದಲು ಕಹಿಯ ಅನುಭವ 'ಇರಬೇಕು ಎಂಬ ಇಟಾಲಿಯನ್ ಗಾದೆಯಂತೆ ನೂತನ ಶಿಕ್ಷಣ ನೀತಿಯ ಉತ್ಕೃಷ್ಟತೆ ಅರಿವಾಗಬೇಕಾದರೆ ಇದರಲ್ಲಿರುವ ನ್ಯೂನ್ಯತೆಗಳನ್ನು ಸರಿಪಡಿಸಿ ಶ್ರೇಷ್ಠಮಟ್ಟದ ಶಿಕ್ಷಣ ನೀತಿ ರೂಪಿಸಿ ಇತರೆ ದೇಶಗಳಿಗೆ ಮಾದರಿಯಾಗುವಂತಹ ಶಿಕ್ಷಣ ನೀತಿಯ ಅನುಷ್ಠಾನಕ್ಕೆ ನಾಂದಿ ಹಾಡಬೇಕಿದೆ.

INFINITE LEARNING SOLUTIONS

ISBN 978-81-953311-6-1

9 788195 331161

BC-DNA: A GUI BASED PIPELINE FORNGS DATA ANALYSIS

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1. INTRODUCTION

Next Generation Sequencing (NGS) technology has evolved rapidly in the last five years, leading to the generation of hundreds of millions of sequences (reads) in a single run. The number of generated reads varies between 1 million for long reads generated ≈400 base pairs (bps) and 2.4 billion for short reads generated ≈75 bps. The invention of the high-throughput sequencers has led to a significant cost reduction of sequencing. NGS generally produces short reads or short read pairs meaning short sequences of <~200 bases. To compare DNA of the sequenced sample to its reference sequence - a sequence to which the subject is to be compared, there is a need to find the corresponding part of that sequence for each read in sequencing data. This is called aligning or mapping the reads against the reference sequence.

Alignment, also called mapping of reads (short DNA sequence), is an essential step in re-sequencing. Re-sequencing refers to acompletesequencing of the genome of DNA. An alignment of data from these re-sequenced organisms is a relatively simple method of detecting variation in samples. Genome sequence alignment and DNA/ RNA Sequence analysis help us to understand genetic variations, understanding various diseases, identification of mutations linked to different forms of cancer etc. The process of aligning these reads to a reference genome is time consuming and demands the development of fast and accurate alignment tools. However, the current available tools make different compromises between the accuracy and the speed of mapping.

Raw short DNA/RNA reads often come in a file format called FASTQ - a plain text format where each single read occupies four consecutive lines. For each of the short reads in the FASTQ file, a corresponding location in the reference sequence needs to be determined. This is achieved by comparing the sequence of the read to that of the reference sequence. A mapping algorithm will locate a location in the reference sequence that matches the DNA / RNA read while tolerating a certain amount of mismatch to allow subsequence variation detection.

RNA sequencing (RNA-Seq), a highly sensitive and accurate technique for measuring expression across the transcriptome is revolutionizing the study of the transcriptome. It is a powerful method for discovering, profiling, and quantifying RNA transcriptsthat provides visibility to previously undetected changes occurring in disease states in response to therapeutics under different environmental conditions and across a broad range of other study designs.

There are many software tools such as BBMap, BLAT, Mosaik, TMAP, NextGenMap, Bowtie etc, for short-read alignment and TopHat, Cufflinks, HISAT, DiffBind, Sailfish etc, for RNA-Seqanalysis tools. Bowtie - it is a reliable, convenient and fast tool compare to other short-read alignment tools and it supports running in parallel mode. Cufflink- is good for compute expression values because it contains a sophisticated algorithm for this calculation, which is far more accurate than other RNA-Seq analysis tools. This is the one of reason to include these modules in our project.

Bowtie is a fast short aligner based on the Burrows-Wheeler transform [1] and the FM (Full-text index in Minute Space) index [2]. An FM-index is a compressed full-text substring index based on the Burrows-Wheeler transform. Bowtie tolerates a small number of mismatches and works best when

aligning short reads to large genomes, though it supports arbitrarily small reference sequences and reads as long as 1024 bases. It is designed to be extremely fast for sets of short reads in the following situations:

(a) Many of the reads have at least one good, valid alignment.

(b) Many of the reads are relatively high-quality.

(c) The number of alignments reported per read is small (close to 1).

Cufflinks accepts the output of Bowtie Module in the SAM format in order to rebuild transcripts.

Cufflinks assembles transcripts, estimates their abundances, and tests for differential expression and regulation in RNA-Seq samples. It accepts aligned RNA-Seq reads and assembles the alignments into a parsimonious set of transcripts. Cufflinks then estimates the relative abundances of these transcripts based on how many reads support each one, taking into account biases in library preparation protocols.Cufflinks includes other modules such as Cuffdiff, Cuffnorm and Cuffcompare, each module discussed below:

- **Cuffdiff** is a highly accurate tool for performing comparisons of expression levels of genes and transcripts in RNA-Seq experiments. It not only tell us which genes are up- or down-regulated between two or more conditions and also tells which genes are differentially spliced or undergoing other types of isoform-level regulation.
- **Cuffcompare**helps us to compare assembled transcripts to a reference annotation so it will take the transcripts and reference annotation as an input. It tracks the cufflinks transcripts across multiple experiments.
- **Cuffnorm** is helpful to generate tables of expression values that are properly normalized for library size. Expression levels reported by Cufflinks in FPKM units are usually comparable between samples, but in certain situations applying an extra level of normalization can remove sources of bias in the data. Cuffnorm normalizes a set of samples to be on as similar scales as possible, which can improve the results we obtain with other downstream tools.

Cuffdiff, Cuffcompare, Cuffnorm takes the output of Cufflinks module as input for performing various RNA analysis.

All the above discussed modules are dependent on one another in terms of input/output (i.e., output of one module need to be given as input to another module) which has to be handled manually. However, the execution of each module is done separately based on users' interest. All the tools are Linux based i.e., they can be run on Linux only. Running each module needs installing all the required software tools and selecting necessary parameters manually. Lot of human intervention is required to passdata to each module and collect the output. All this processes comes with lot of difficulty for biologists who are not much familiar with Linux environment and execution of each module. In addition, biologists with no programming experience often find it difficult to perform parameter settings and convertdata format to the required format.

To overcome all these challenges, there is a need to develop a user friendly pipeline(tool) integrating all these modules to perform short read DNA sequence alignment and RNAsequence analysis facilitating large scale data analysis with minimum human intervention.

In this work, we have designed a Linux based pipeline(tool) with a user friendly GUI for short read alignment and RNAsequence analysis, connecting Bowtie, Cufflinks and other sub modules of Cufflinks such as Cuffdiff, Cuffcompare and Cuffnorm. This system facilitates to provide all the data and necessary parameters at once and allows user to go with the execution to get the final output thus significantly reducing human intervention. This system is designed with several functional GUI submodules which are flexible to be used in any combination or even can be used separately based on the user requirements and availability of input data. This user friendly tool is very easy to use and will allow biologists to focus more on data analysis without worrying to learn the execution of the tool.

2. LITERATURE SURVEY

Various studies have been conducted on DNA, RNA by using various data analysis tools such as Bowtie [1], TopHat and Cufflinks(Cuffdiff, Cuffcompare and Cuffnorm)[3] that allow biologists to identify new genes and new splice variants of known ones, as well as compare gene and transcript expression under various conditions etc.

Bowtie uses a different and novel indexing strategy to create an ultrafast, memory-efficient short read aligner geared toward mammalian re-sequencing. Bowtie aligns 35-base pair (bp) reads at a rate of more than 25 million reads per CPU-hour, which is faster than existing systems. Bowtie employs a Burrows-Wheeler index based on the full-text minute-space (FM) index, which has a memory footprint of only about 1.3 gigabytes (GB) for the human genome. The small footprint allows Bowtie to run on a typical desktop computer with 2 GB of RAM. The index is small enough to be distributed over the internet and to be stored on disk and re-used. Multiple processor cores can be used simultaneously to achieve even greater alignment speed.

The BWT (Burrows Wheeler Transformation) is a reversible permutation of the characters in a text. Although originally developed within the context of data compression, BWT-based indexing allows large texts to be searched efficiently in a small memory footprint. It has been applied to bioinformatics applications, including whole-genome alignment, tiling microarray probe design, and Smith-Waterman alignment to a human-sized reference. The Burrows-Wheeler transformation of a text T, BWT (T), is constructed as follows. The character $ is appended to T, where $ is not in T and is lexicographically less than all characters in T. The Burrows-Wheeler matrix of T is constructed as the matrix whose rows comprise all cyclic rotations of T$. The rows are then sorted lexicographically. BWT (T) is the sequence of characters in the rightmost column of the Burrows-Wheeler matrix (Figure 1a). BWT (T) has the same length as the original text T.

The FM Index

In 2000, six years after the BWT was published, Paolo Ferragina and Giovanni Manzini published a paper [2] describing how the BWT, together with some small auxilliary data structures, can be used as a space-efficient index of. It generally uses less than half the space required to store m5 integers. They named it the FM Index.

Cole Trapnell, Adam Roberts et al [3] described a protocol which explains about two software tools TopHat and Cufflinks for gene discovery and comprehensive expression analysis of high-throughput mRNA sequencing (RNA-seq) data. These tools allow biologists to identify new genes and new splice variants of known ones, as well as compare gene and transcript expression under two or more conditions. This protocol describes in detail how to use TopHat and Cufflinks and other sub modules in Cufflinks such as Cuffdiff, Cuffcompare and Cuffnorm to perform such analyses. It also covers several accessory tools and utilities that aid in managing data, including CummeRbund, a tool for visualizing RNA-seq analysis results.

They developed two popular tools that together serve all three roles, as well as a newer tool for visualizing analysis results. TopHat aligns reads to the genome and discovers transcript splice sites. Cufflinks uses this map against the genome to assemble the reads into transcripts. Cuffdiff, a part of the Cufflinks package, takes the aligned reads from two or more conditions and reports genes and transcripts that are differentially expressed using a rigorous statistical analysis. These tools are gaining wide acceptance and have been used in a number of recent high-resolution transcriptome studies. CummeRbund renders Cuffdiff output in publication-ready figures and plots. Cuffcompare and Cuffnorm is a part of Cufflinks.Cuffcompare tracks the cufflinks transcripts across multiple experiments and Cuffnorm normalizes a set of samples to be on as similar scales as possible which can improve the results obtained with other tools.

Galaxy[4] is an open source, web-based platform for data intensive biomedical research. It is a data integration, data and analysis persistence and publishing platform that aims to make computational biology accessible to research scientists that do not have computer programming experience. Although it was initially developed for genomics research which is largely domain agnostic and is now used as a

general bioinformatics workflow management system. It typically provide a graphical user interface for specifying what data to operate on, what steps to take, and what order to do them in. Galaxy is now also used for gene expression, genome assembly, proteomics, epigenomics, transcriptomics and host of other disciplines in the life sciences. It provides several tools for DNA/RNA sequence analysis like Bowtie, Cufflinks and other sub-modules in Cufflinks like Cuffcompare, Cuffdiff, Cuffnorm. The availability of various types of data analysis tools in Galaxy does not overcome the difficulty of running all the required tools in a user friendly and pipelined manner.

METHODOLOGY

The proposed system builds a pipeline (tool) based on most widely used DNA and RNA sequence analysis tools namely, Bowtie, Tophat and Cufflinks(various sub modules of cufflinks i.e,cuffdiff, cuffcompare, cuffnorm).

The proposed system consists of three main steps:

1. Building an index file of the user supplied reference genome.
2. Alignment of short DNA sequences with the reference genome.
3. Transcriptome assembly and isoform quantification from RNA-seq reads

The system works in the form of pipeline to accept inputs for all the independent modules connected and thus overcomes the difficulty of running each tool independently. In addition there is also an option to start the pipeline from any module, in case of availability of the input of a particular module.

Following figure shows the workflow of the pipeline, connecting different tools :

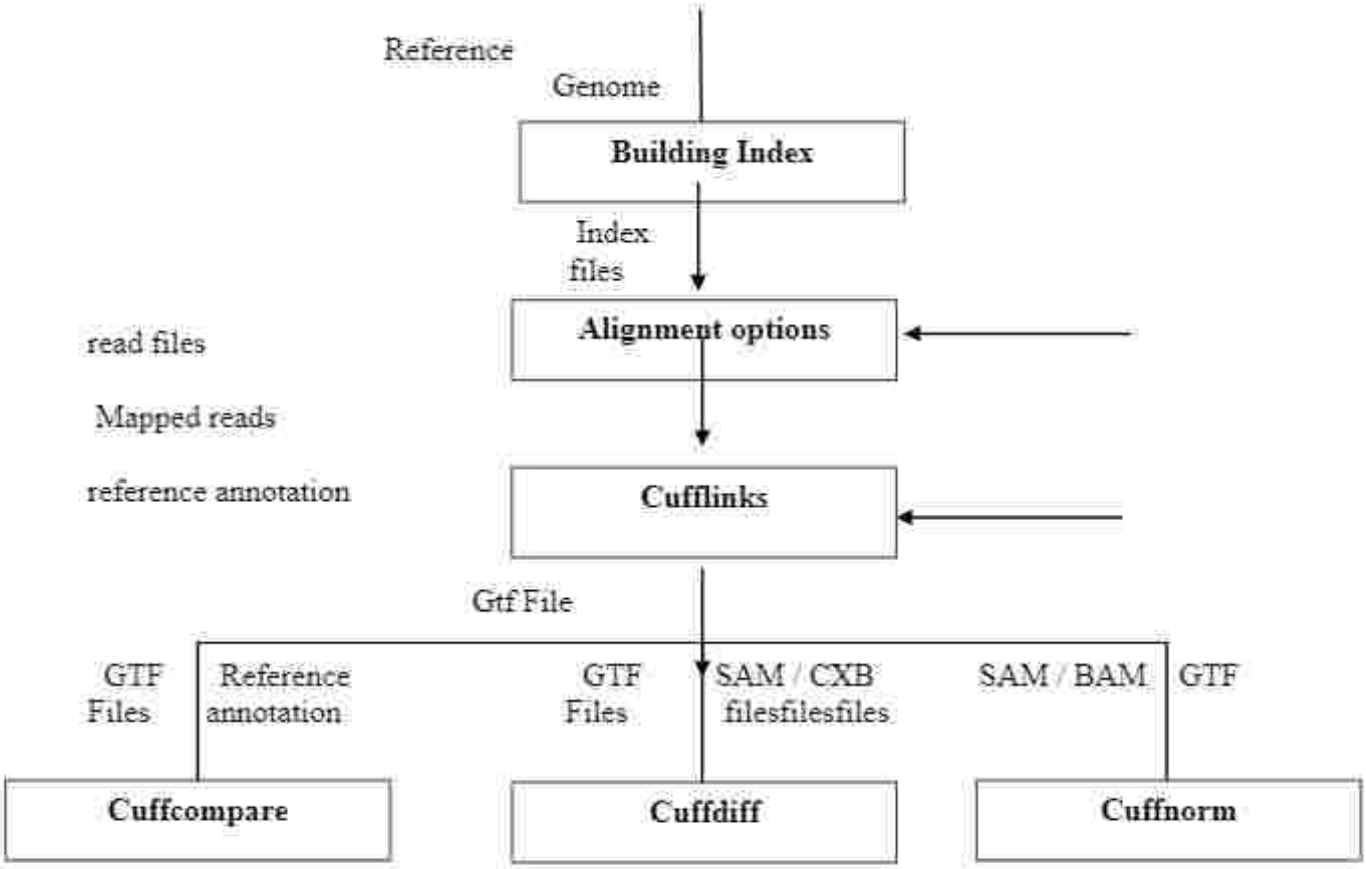

Figure 1: Describes the workflow of the pipeline

The workflow shown in Figure 1 is briefly discussed below.

Building index:

To build index file, the system takes reference genome as input, and a binary file is produced as output. This index file is later used for alignment process either by bowtie or tophat based on user interest.

Alignment options:

For aligning the input reads, If the user is interested to perform alignment with bowtie, then all the option (parameters) related to bowtie will be displayed.Uponselecting necessary parameters user can proceed with the execution of the program. User can provide either user defined index file or already built in index files and a read file as a input. The accepted reads (Aligned reads) are given as output in SAM format.

Cufflinks:

This option is provided to assemble transcripts, estimation of their abundances, and tests for differential expression and regulation in RNA-Seq samples. The module takes sorted SAM file or a bam file as an input. Along with SAM file cufflinks also take the reference annotation file as an input and will produced the output in the form of GTF files.

Cuffcompare:

This module takes transcripts and reference annotation as an input to compare assembled transcripts to a reference annotation. Cuffcompare tracks the cufflinks transcripts across multiple experiments to trace any variation in the transcripts. The output is produced in the form of .stats, .refmap, .gtfetc

Cuffdiff:

Cuffdiff is to find significant changes in transcript expression, splicing, and promoter use. it will takes a transcript annotation file produced by cufflinks, cuffcompare, or other source as a input along with a SAM file of aligned RNA-Seq reads. If more than two files are provided, Cuffdiff tests for differential expression and regulation between all pairs of samples.

Cuffnorm:

Cuffnorm is to generate tables of expression values that are properly normalized for library size. It will take a transcript annotation file produced by cufflinks, cuffcompare, or other source as a input along with a SAM file of aligned RNA-Seq reads.

Algorithms used in the above modules are described below:

1. Algorithms used to build index file.

- **Building Index:**

Input: Reference genome

Output: Index files

Step 1: Select either built-in index file or user defined reference genome FASTA format.

Step 2: If built-in index file:

Do nothing

Else:

Provide the file name for creating index file for reference genome.

Step 3: Create the index for the reference genome of that name.

2. Alignment of short DNA Sequence

Input:Index files

Output:Mapped reads

Step 1: Select the index file of reference genome.

Step 2: Select necessary options available in Bowtie.

Step 3: Select the read File in the FASTA or FASTQ format.

Step 4: Pass the read file which is to be either single end or Paired-end.

Step 5:Generate the output in the SAM format.

Step 6: Sort the output if needed.

3. Cufflinks:

Input:Mapped reads

Output:Transfrags in GTF

Step 1: Choose the SAM /BAM file generated by the Bowtie tool.

Step 2: If it is not in the sorted order:

Do Sorting using "sort"

Step 3: If needed pass the reference annotation along with the SAM files.

Step 4: Output in the form of GTF files

4. Cuffcompare or Cuffdiff or Cufffnorm

Input:Transcripts.gtf

Output: Comparition, Differencial expression and Normalization of transfrags.

Step 1: If Cuffcompare:

Pass output of Cufflinks along with reference annotation if needed.

Else if Cuffdiff:

Pass output of cufflinks along with minimum two SAM files.

Else if Cuffnorm:

Pass output of cufflinks along with minimum two SAM files.

Step 2: Generate be produced by different modules.

EXPERIMENTS AND RESULTS

4.1.Experiments:

Python version 3.4 and pycharm community editor (IDE) are used to implement the pipeline with the user friendly GUI.

Python is a widely used high-level, general-purpose, interpreted, dynamic programming language. Its design philosophy emphasizes code readability, and its syntax allows programmers to express concepts in fewer lines of codethan possible in languages such as C++ or Java. The language provides constructs intended to enable clear programs on both a small and large scale. Python supports multiple programming paradigms, including object-oriented, imperative and functional programming or procedural styles. It features a dynamic type system and automatic memory management and has a large and comprehensive standard library.

Python interpreters are available for many operating systems, allowing Python code to run on a wide variety of systems. Using third-party tools, such as Py2exe or Pyinstaller, Python code can be packaged into stand-alone executable programs for some of the most popular operating systems, so Python-based software can be distributed to, and used on, those environments with no need to install a Python interpreter.

PyCharm is an Integrated Development Environment (IDE) used for programming in Python. It provides code analysis, a graphical debugger, an integrated unit tester, integration with version control systems (VCSes), and supports web development with Django. PyCharm is developed by the Czech company JetBrains. It is cross-platform working on Windows, Mac OS X and Linux. PyCharm has a Professional Edition, released under a proprietary license and a Community Edition released under the Apache License. PyCharm Community Edition is less extensive than the Professional Edition.

We tried this system to create the index file of E-coli bacteria (approx 5 million bases long) and then tested the alignment of reads (approx 1000 reads each with length nearly 40 bases, both paired and single end) of the same organism . On matching the read with the reference genome, the output will be written in the file with the header information for each read such as gene name, version, ID, exon number and transcript ID. The sample file for E-coli reference genome is shown in the Figure E1.

Figure E1: E-coli reference genome.

Read File

This file contains many short DNA sequences, typically an output by a sequencing instrument.

Reads can be in the FASTA format, FASTQ format, or in a raw one-sequence-per-line format. The reads used in this example are a set of simulated reads included in the Bowtie package. Figure E2 shows read file in the FASTQ format.

The read files have the following criteria.

- Single reads must be submitted using a single Fastq file and can be submitted with or without read names.
- Paired reads must split and submitted using either one or two Fastq files. The read names must have a suffix identifying the first and second read from the pair
- The first line for each read must start with '@'.
- The base calls and quality scores must be separated by a line starting with '+'.

Figure E2: read file in the FASTQ format

4.2 Validation:

In order to guide the user to use this system efficiently and generated necessary error messages whenever required, we have performed validation at different levels. Some of the validation screen shorts and corresponding error messages are shown below.

Figure V1: This screen generates an error message "please select fasta format file only" if the reference genome file selected is other than FASTA format.

Figure V2: An error is raised if the user doesn't select any reference genome file.

Figure V3: An error is raised in case user supplies an invalid FASTA file.

Figure V4: This error is generated in Bowtie module if user does not supply any read file for alignment.

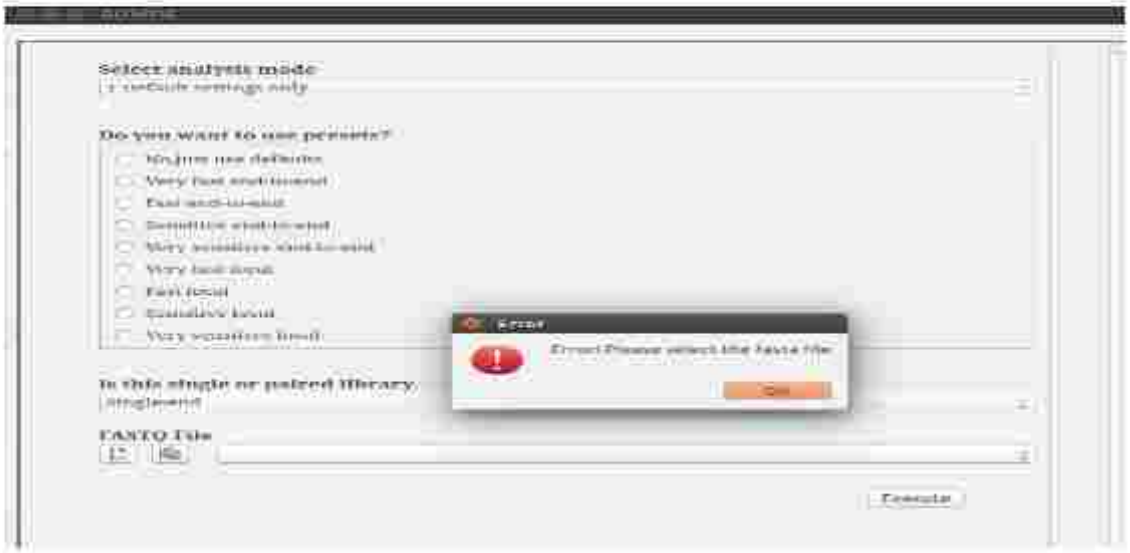

Figure V5: This error is generated in Bowtie module when the user select read file other than the FASTQ format.

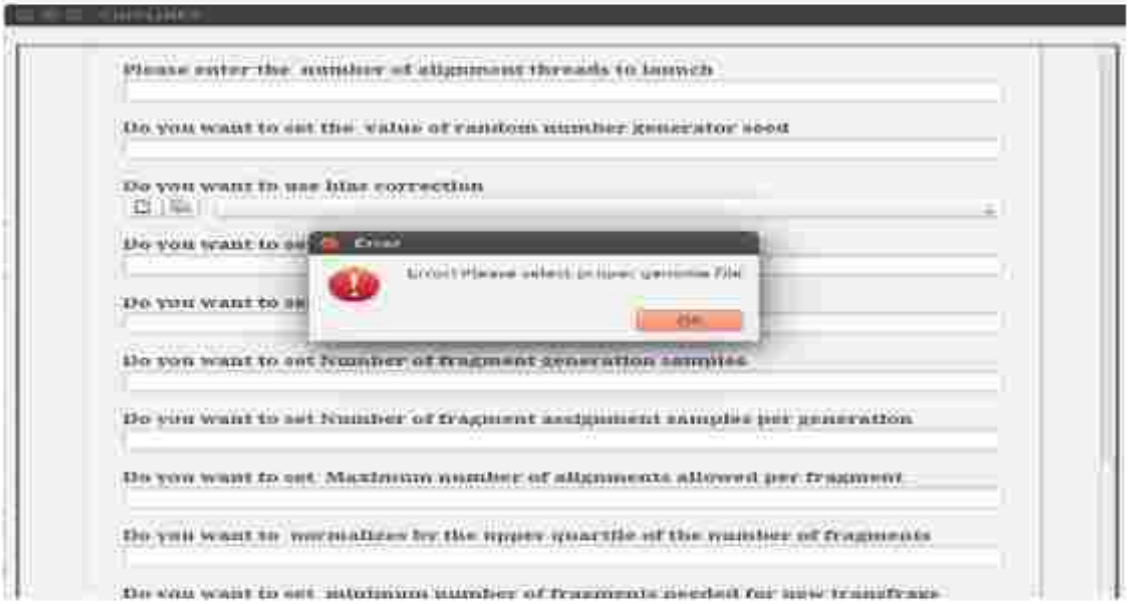

Figure V6: This error raised in the Cufflink module when the user select reference genome file other than FASTA format.

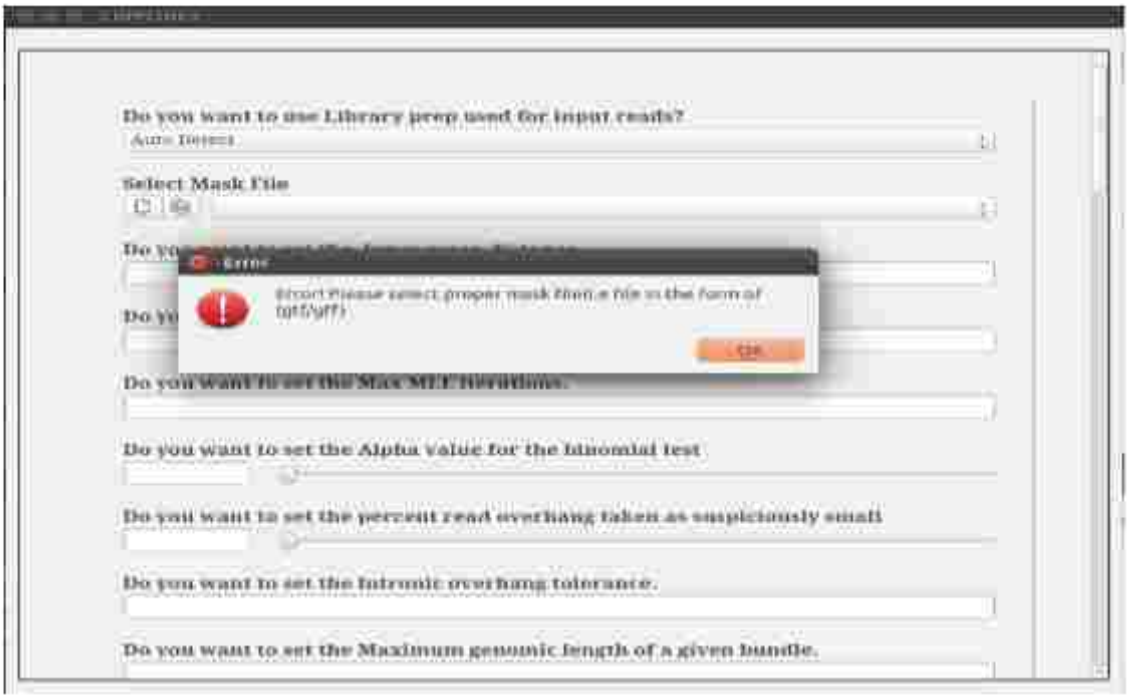

Figure V7: This error raised in the Cufflink module when the user select the Mask file other than GTF format.

4.3 Results and snapshots

1. Building index file:

A set of index files containing the index of the reference genome is produced as output . The index file format is unique to Bowtie, and FASTA formats are converted to this format using the Bowtie2-build tool which takes a collection of FASTA files for a reference genome and generate a collection of index files. Index files can then be used by bowtie to align reads to the reference genome. The same set of index files can be used across multiple runs of bowtie. The screen shot shown in Figure E3 shows the available options to build the index file.

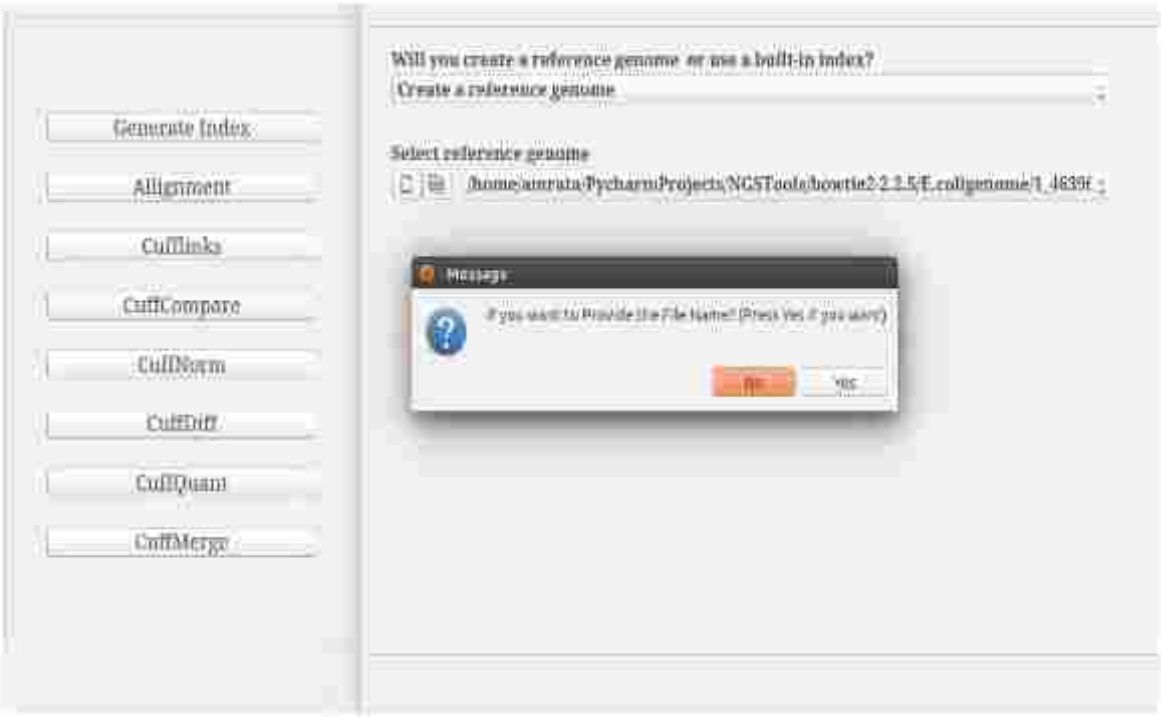

Figure E3: This screen shot shows set of options under Building index file.

2. Bowtie Module:

When invoking Bowtie, the user specifies an index file "basename," i.e. the prefix shared by all the index files, and the path(s) to the FASTQ read files to be aligned , and some additional parameters necessary to execute the module. Screen shot shown in Figure E4 shows the available options for alignment.

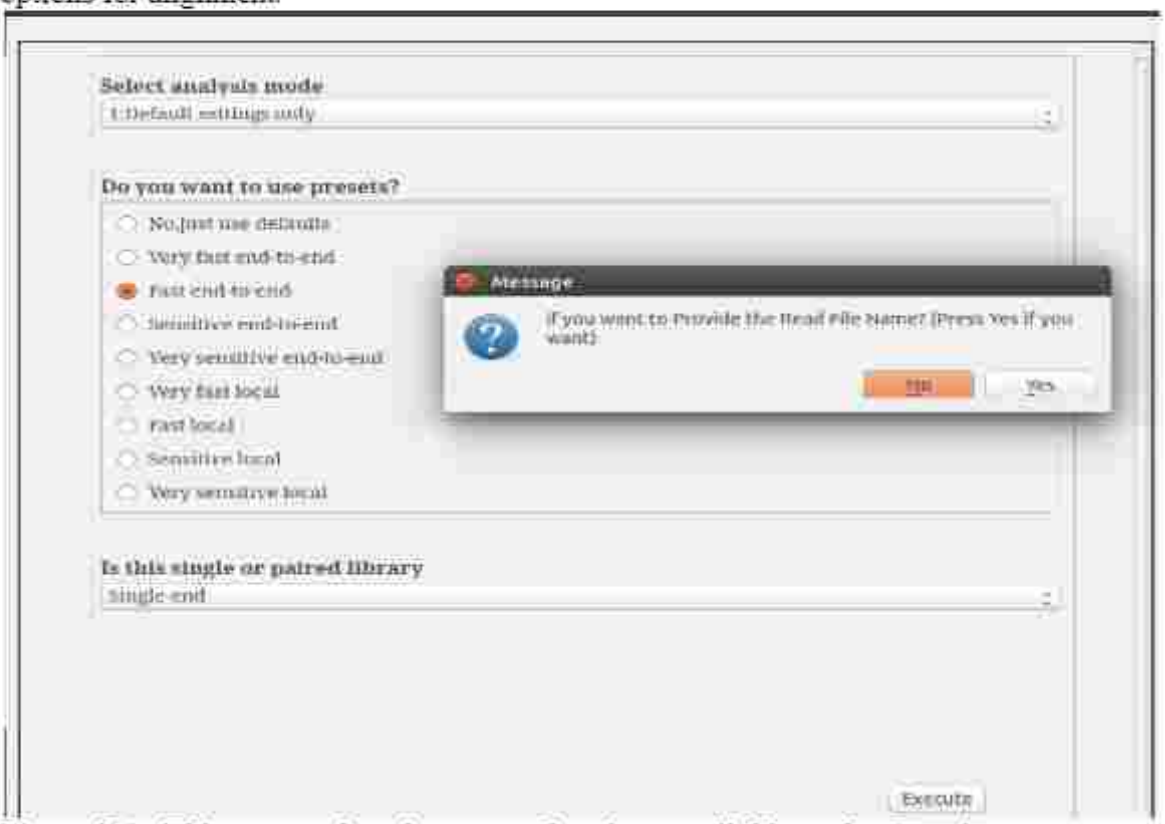

Figure E4: This screen shot shows set of options available under Bowtie.

3. Bowtie output:

The output file for an alignment consists of 8 fields, separated by tabs. The fields from left to right are:

- Read name
- Reference strand aligned to ("+" denotes forward strand, "−" denotes reverse strand)
- Name of reference sequence aligned to
- Offset of the leftmost position on the forward reference strand covered by the alignment
- Read sequence aligned (or its reverse complement, if the read aligned to the reverse strand)
- Quality sequence aligned (or its reverse, if the read aligned to the reverse strand)

Figure E5: This screen shot shows the Mapped reads of E_coli.

The output consists of two sets of lines those printed to the "standard out" file handle and those printed to the "standard error" file handle. Each line printed to "standard out" is a valid reportable alignment found by Bowtie. A valid alignment is one that satisfies the alignment policy specified in the−n, −l, −eor−voptions. A reportable alignment is one that is not suppressed by any other option such as the−k, −m,or−Moptions. Lines printed to "standard error" contain summary information about the entire alignment run,

6) Cufflinks:

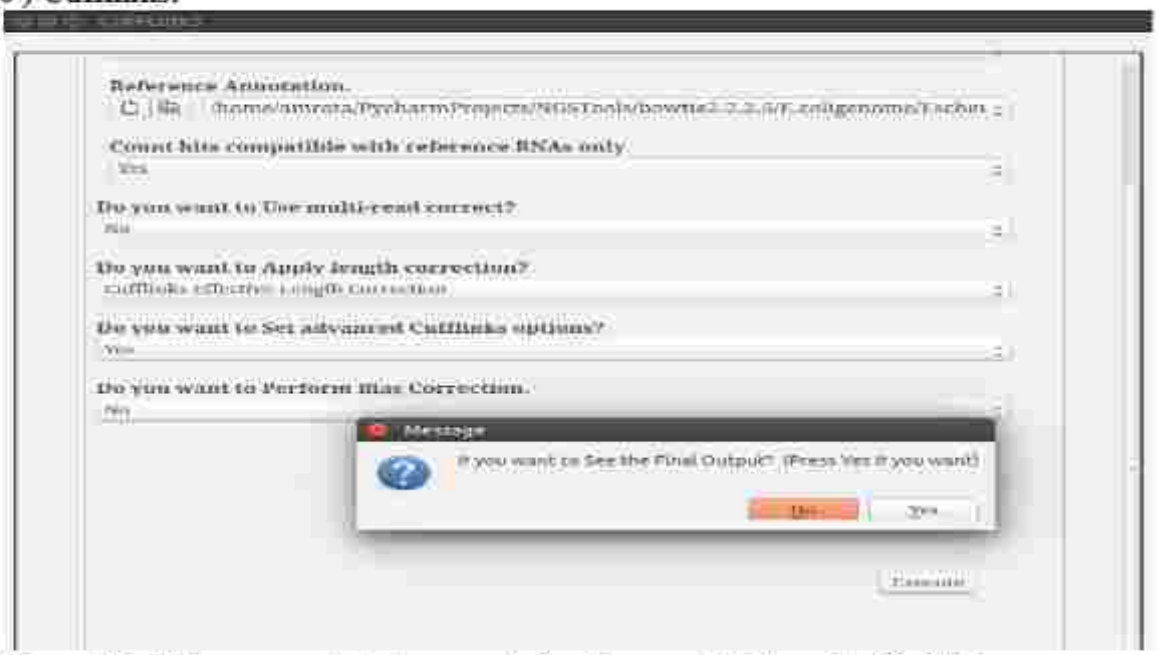

Figure E6: This screen shot shows set of options available under Cufflinks.

File of RNA-seq read alignments in SAM/BAM format is accepted as input.

As shown in Figure E6, reference genome annotation file can be submitted along with the SAM/BAM file. On selection of reference genome annotation file, Cufflinks will use this file to estimate isoform expression and will not assemble novel transcripts. The program will ignore alignments not structurally compatible with any reference transcript. The file can also be sent to the GTF guideparameter to enable Cufflinks to use the reference annotation based transcript (RABT) assembly algorithm.

7) Cufflinks output:

Figure E7 shows output in the format of GTF files and shows the label for the transcribed fragments (transfrags)

Figure E7 :This screen shot shows theoutput of Cufflink module.

This GTF file contains Cufflinks' assembled isoforms. The first 7 columns are standard GTF, and the last column contains attributes some of which are also standardized ("gene_id" and "transcript_id"). There is one GTF record per row, and each record represents either a transcript or an exon within a transcript.

8) CuffCompare:

Figure E8: Shows the options available under Cuffcompare for comparitions

cuffcompare requires at least one Cufflinks' GTF output file as input, and optionally can also take a "reference" annotation GTF/GFF file. Each sample is matched against this file, and sample isoforms are tagged as overlapping, matching, or novel where appropriate.

Figure E8:shows set of options available under Cuffcompare.

Some of the output file produced by Figure E8 will be described below:

1. <output.prefix>.stats
   this file contain various statistics related to the accuracy of the transcripts in each sample when compared to the reference annotation data.
2. <output.prefix>.combined.gtf
   Cufflinks cuffcompare reports a GTF file containing the "union" of all transfrags in each sample. If a transfrag is present in both samples, it is thus reported once in the combined GTF.
3. *.tmap
   These tab-delimited files list the most closely matching reference transcript for each Cufflinks transcript. There is one row per Cufflinks transcript.Etc.

4. CONCLUSION

The system is implemented to provide a tool with a user friendly GUI for DNA and RNA- seq analysis. The system overcomes the difficulty of running each module(tool) separately, eventually reducing human intervention at significant level. The system provides an easy access to submit data and set all the necessary parameters at once, with an additional advantage of running the system in a pipelined manner or a module separately depending on the availability of input data. The system is easy to use and require no prior knowledge of programming and thus allow users to perform data analysis in an easy and user friendly manner with no in-between human intervention while running the system in pipeline manner and minimum intervention while executing sub-modules. The system is currently under testing at Institute of Bioinformatics and Applied Biotechnology(IBAB), Bangalore.

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  http://www.ensembl.org
- For software development:
  www.wikipedia.com

RELEVANCE FEEDBACK USING MAXIMUM MARGINAL ANALYSIS FOR INTERACTIVE CBIR

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Introduction

Content-based image retrieval (CBIR) is one of the application of computer visualization techniques to the image retrieval problem, that is, the problem of searching for digital images in huge databases. CBIR is also well-known as query by image content (QBIC) and content-based visual information retrieval (CBVIR)

In "Content-based image retrieval" the search analyzes the contents of the image rather than the metadata such as keywords, tags associated with the image. The word "content" refer to colors [12], shapes [14], textures [13], or any other information that can be resulting from the image itself.

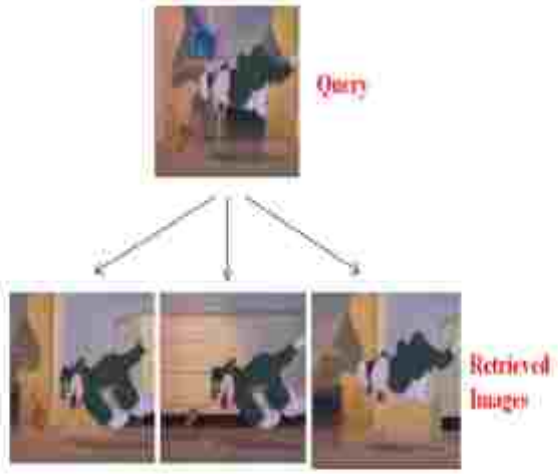

Fig 1.1 Content based image retrieval.

With lots of possible realistic applications, Content-Based Image Retrieval (CBIR) has attracted great attention in the past few years. But the performance is not acceptable, because in this method user perception subjectivity and high level concept is not well modeled. Different persons, or the same person under different circumstances, may perceive the same visual content differently. This is called human perception subjectivity. The subjectivity exists at various levels. For example, one person may be more interested in an image's color feature while another may be more interested in the texture feature.

To overcome this drawback many Relevance feedback method is developed. It takes the advantage of human computer interaction. In this method user selects the relevant images from previous retrieved result and also can label a few more images as new example for the retrieval engine. Drawback of this technique is it treats positive sample (relevant image) and negative sample (irrelevant images).To improve, support vector machine based RF is used to classify positive and negative samples. But it still ignores the information contained in negative sample and also doesn't take unlabeled sample into account. To explore solution to this problem in this project we are making use of semi supervised biased maximum margin analysis [1].

1.1. Application of CBIR

The CBIR technology has been used in some applications such as

- **Crime prevention:** To find out Criminals Automatic face recognition systems used by police forces.
- **Security Check:** In many organisation Finger print or retina scanning used for access privileges.
- **Medical Diagnosis:** CBIR used in a medical database of medical images to assist diagnosis by identifying related old cases.
- **Intellectual Property: CBIR technology is used in** Trademark image registration, So that a new candidate mark is compared with existing marks.

1.2 Problem statement

Content based image retrieval (CBIR) is the application used to search for digital image in large databases. In this method high level concept and user perception subjectivity cannot be well modeled, so many irrelevant images will be displayed in retrieved result .A variety of relevance feedback (RF) schemes have been developed to overcome this problem. Among them Support vector machine RF (SVM RF) is the most popular technique. Drawback of this technique is, it treats positive samples (relevant images) and negative samples (irrelevant images) equally. To explore solution to this problem, in this project we propose semi supervised biased maximum margin analysis to the traditional SVM RF scheme.

1.3 Motivation

Content-based image retrieval has been extensively used nowadays. It has many applications such as Web searching, Crime prevention, Biomedical etc.

In CBIR method high level concept of image and user perception subjectivity cannot be well modeled .A variety of relevance feedback (RF) schemes have been developed to overcome this problem. Among them Support vector machine RF (SVM RF) is the most popular technique. Drawback of this technique is, it treats positive samples (relevant images) and negative samples (irrelevant images) equally. To explore solution to this problem, in this project we propose and semi supervised biased maximum margin analysis to the traditional SVM RF Scheme.

The main aim of this system is to improve the existing content based image retrieval (CBIR) system, in such a way is to personalize the CBIR system based on user behaviors which in turn benefits the user very much.

1.4 Existing system

CBIR has attracted great attention in multimedia management from past few years. In this an image query is described using one or more example images and low level features (Color, Texture, and Shape). In this method high level concept and user perception subjectivity cannot be well modeled. A variety of relevance feedback (RF) schemes have been developed to overcome this problem. Among them Support vector machine RF (SVM RF) is the most popular technique. In this user will label relevant images (Positive feedback) and irrelevant images (negative feedback).Images which have not labeled by the user, system will select them as unlabeled samples. Drawback of this technique is, it treats positive feedback and negative feedback equally and also does not consider unlabeled samples.

Support vector machine is used to constructs a hyperplane or set of hyperplane in a high or infinite dimensional space, which can be worn for classification, regression. A good separation is achieved by the hyperplane that has the largest distance to the nearest training data point of any class (functional margin), given that in general the larger the margin the lower the generalization error of the classifier. There are many hyperplane that might classify the data. The best hyperplane is the one that represents the largest separation or margin between the two classes. In hyperplane, the distance from it to the nearest data point on each side is maximized. If such a hyperplane exists, it is known as a maximum margin hyperplane and the vectors closest to the hyperplane are called support vectors.

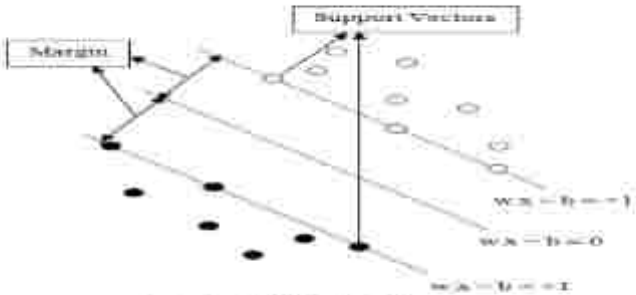

Fig 1.2 SVM Model

Fig 1.2 shows, the line w. X –b =0 is known as the margin of separation or marginal line. The circle and the shaded circle represent the positive and negative instances. One-class SVM is used to estimated the density of positive feedback samples. The density estimation method ignores any information contained in the negative feedback samples. Plagiaristic from one-class SVM, a biased SVM innate the qualities of one-class SVM but incorporated the negative feedback samples

Disadvantages of Existing System:

1. It treats the positive and negative feedbacks equally, which is not appropriate since the two groups of training feedbacks have distinct properties.

2. Most of the SVM-based RF techniques do not take into account the unlabeled samples, although they are very helpful in constructing a good classifier.

1.5 Proposed System

To explore solutions to these two problems in the current technology, we apply a semisupervised BMMA (SemiBMMA) for the traditional SVM RF schemes. It differentiates positive feedbacks from negative ones based on maximum margin analysis which develops maximum margin between positive and negative samples .And also can effectively integrate information of unlabeled samples.

Advantages of Proposed System:

1. The SemiBMMA differentiates positive feedbacks from negative ones.
2. SemiBMMA can effectively integrate information of unlabeled samples.

1.6 Organization of the Report

Chapter 1: Introduction

This Chapter gives brief introduction of Content based image retrieval, problem statement of the project, Existing system and the proposed system.

Chapter 2: Literature Survey

This chapter gives the information regarding Image processing,Image retrieval and also growth of traditional CBIR technology .

Chapter 3: Requirement Specification

This chapter gives the functional and nonfunctional requirements ,Hardware requirements and software requirements of the project .

Chapter 4: Design

This chapter gives detail of high level and low level design of the project with Data flow diagram

Chapter 5: Implementation

This chapter gives information of technology used and coding part.

Chapter 6: Testing

This chapter gives the details of test cases and scenario.

Chapter 7: Results and Performance Analysis

This Chapter gives detail of results and the performance of the proposed scheme.

Chapter 8: Conclusion and future work

This chapter gives the details of conclusion and future enhancement of the project.

Summary

This chapter gives the brief introduction to CBIR and problem statement, Existing System, motivation, proposed system of the project.

Literature survey

2.1 Image Processing

An image can be defined as an array, or a matrix, of square pixels (picture elements) which are arranged in columns and rows. Pictures are the most common way of conveying or transmitting information. A picture is equal to thousand words. Pictures give the information about emotions, positions, sizes and objects inter relationships. Human beings are good at gathering information from images, because of our inborn visual and mental abilities. Human receives about 75% information in the form of pictures.

Images are have to be digitized to place in a computer's memory or on some type of storage media such as a hard disk or CD-ROM. This digitization mechanism can be done via a scanner, or by a video camera linked to a frame grabber board in a computer. Once the image has been digitized, it can be operated by different image processing operations.

Image processing operations can be generally divided into three major categories, Image Compression, Image Enhancement and Restoration, and Measurement Extraction.

Image compression is well-known to most people. It involves reducing the quantity of memory needed to store a digital image.

Using Image Enhancement techniques can recover image defects, which could be caused by the digitization process or by faults in the imaging set-up (for example, bad lighting). Once the image is in good condition, the Measurement Extraction operations can be used to obtain useful information from the image.

Image restoration may be considered as reversing the harm done to an image by a known cause, for example taking out of blur caused by linear motion, removal of optical distortions and also removing periodic interference.

2.2 Image Retrieval

An **image retrieval** method is a computer system used for browsing, searching and retrieving images from a huge database of digital images. Most traditional and common methods of image retrieval make use some method of adding metadata such as captioning, keywords, or descriptions to the images so that retrieval can be done over the annotation words.

Discovery of the digital camera has given the common man the freedom to capture his world in pictures, and easily share them with others. One can today generate large numbers of images with content as diverse as family get-togethers and national park visits. Low-priced storage and easy Web hosting has fueled the metamorphosis of common man from a passive consumer of photography in the past to a current-day active producer.

Today, searchable image data exists with extremely different visual and semantic content, spanning geographically different locations, and is fast growing in size. All these factors have created innumerable possibilities and hence considerations for real-world image search system designers. As far as technological advances or research are concerned, growth in content-based image retrieval has been indubitably rapid. In recent years, there has been significant effort put into understanding the real world implications, applications, and constraints of the technology. In real-world application of the technology is presently limited. We devote this section to understanding to learn image retrieval in the real world and discuss user expectations, system constraints and requirements, and the research effort to make image retrieval a reality in the not-too-distant future. Designing an omnipotent real-world image search engine capable of serving all categories of users requires understanding and characterizing user-system interaction and image search, from both user and system points-of-view.

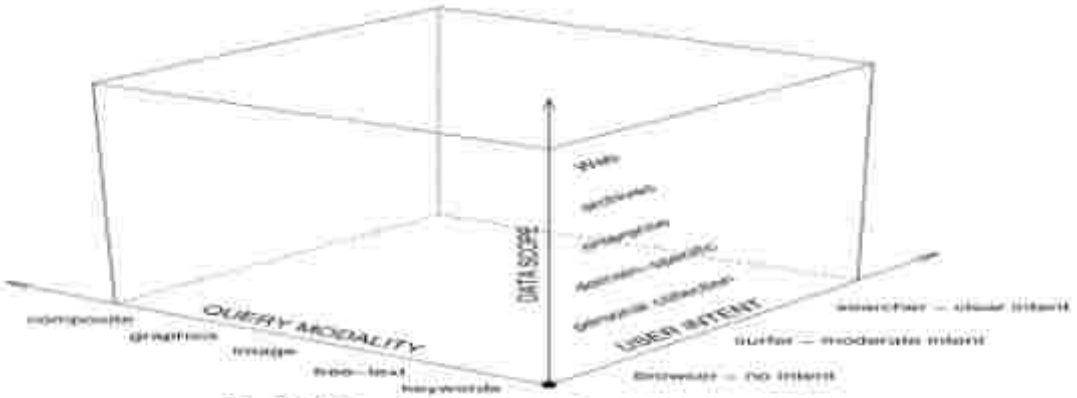

Fig 2.1 Visualizing image from user perspective

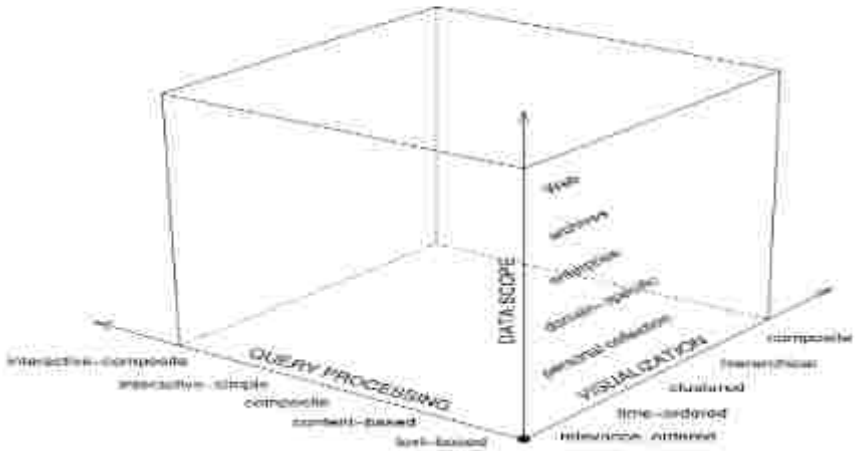

Fig 2.2 Visualizing image from user perspective

In Figure 2.1 and Figure 2.2, we propose one such dual characterization, and attempt to represent all known possibilities of interaction and search. From a *user perspective*, embarking on an image search, journey involves

considering and making decisions on the following fronts: (1) clarity of the user about what she wants, (2) where she wants to search, and (3) the form in which the user has her query. In an alternative view from an image retrieval *system perspective*, a search translates to making arrangements as per the following factors: (1) how does the user wish the results to be presented, (2) where does the user desire to search, and (3) what is the nature of user input/interaction. These factors, with their respective possibilities, form our axes for Figure 3. In the proposed user and system spaces, real world image search instances can be considered as isolated points or point clouds, and search sessions can consist of trajectories while search engines can be thought of as surfaces. The intention of drawing cubes versus free 3D Cartesian spaces is to emphasize that the possibilities are indeed bounded by the size of the Web, the nature of user, and ways of user-system interaction. We believe that the proposed characterization will be useful for designing context-dependent search environments for real-world image retrieval systems.

2.2.1 Search Methods

Image search is a specialized data search used to find images. To search for images, a user may provide query terms such as keyword, image file/link, or click on some image, and the system will return images "similar" to the query. The similarity used for search criteria could be meta tags, color distribution in images, region/shape attributes, etc.

Image Meta search - search of images based on associated metadata such as keywords, text, etc.

Content-based image retrieval (CBIR) – It is the application of computer vision to the image retrieval. CBIR aims at avoiding the use of textual descriptions and instead retrieves images based on their visual similarity to a user-supplied query image or user-specified image features.

2.3 CBIR

The term CBIR seems to have originated in 1992, when it was used by T. Kato to describe experiments into automatic retrieval of images from a database, based on the colors and shapes present.

During past few years, people have been substantially attracted towards Content-Based Image Retrieval (CBIR) because of its varied multimedia applications. CBIR is one of the most popular research areas of digital image processing. An image retrieval system designed to serve a personal collection should focus on features such as personalization, flexibility of browsing, and display methodology [2,3]. It is motivated by the explosive growth of image records and online accessibility of remotely stored images.

In CBIR, an image query is described using one or more example images and low-level visual feature (eg color[8], texture[8],shape],etc)are automatically extracted to represent the images in the database. In similarity measure, the query image feature vector and database image feature vector are compared using the distance metric. The images are ranked based on the distance value. The feature is defined as a function of one or more measurements, each of which specifies some quantifiable property of an object, and is computed such that it quantifies some significant characteristics of the object. We classify the various features currently employed as follows.

General features: Application independent features such as color, texture, and shape.

Global features: Features calculated over the entire image or just regular sub-area of an image.

Domain-specific features: Application dependent features such as human faces, fingerprints, and conceptual features. These features are often a synthesis of low-level features for a specific domain [9]

Most systems perform feature extraction as a preprocessing step, obtaining global image features like color, shape and texture. Typically, the color of an image is represented through some color model. There exist various color models to describe color information. A color model is specified in terms of 3-D coordinate system and a subspace within that system where each color is represented by a single point. The more commonly used color models are *RGB* (red, green, blue), *HSV* (hue, saturation, value).

Texture is not as well-defined as color features, some systems do not use texture features. However, texture provides important information in image classification as it describes the content of many real-world images such as fruit skin, clouds, trees, bricks,

and fabric. Hence, texture is an important feature in defining high-level semantics for image retrieval purpose. Texture representation methods can be classified into two categories: structural, and statistical [9].However, the low-level features captured from the image may not accurately characterize the high-level concept

Shape is a fairly well-defined concept. Shape features of general applicability include aspect ratio, circularity, Fourier descriptors, moment invariants, consecutive boundary segments, etc. Shape features are important image features though they have not been widely used as color and texture features. Shape features have shown to be useful in many domain specific images such as man-made objects. For color images used in most papers, however, it is difficult to apply shape features compared to color and texture due to the inaccuracy of segmentation. Despite the difficulty, shape features are used in some systems and has shown potential benefit for RBIR

The concept of relevance feedback was initially developed to improve document retrieval
[Rocchio1966]. In general, a document retrieval system presents a ranked set of documents relevant to the user's initial query and from there on iteratively solicits the user for feedback on the quality of the documents and uses the feedback to compose an improved set of documents. Since keywords in a query can be matched one-on-one with text in a document, it is relatively easy for the retrieval system to determine which documents are relevant and which not. This same technique can be applied to image retrieval – or multimedia retrieval in general – and hence it was also introduced into these fields Relevance Feedback (RF) was introduced as a powerful tool to enhance the performance of CBIR [4].

2.3.1 Relevance Feedback Technique in CBIR

Relevance Feedback (RF) techniques are used to adjust the query by user''s feedback. RF is a powerful technique used in traditional CBIR system. It is a process of automatically adjusting an existing query using information fed back by the user about the relevance of previously retrieved objects such that the adjusted query. The issue in relevance feedback is how to utilize the feedback information for improving the retrieval performance. After obtaining retrieval results, user provides the feedbacks for checking results are relevant or not relevant. If the results are not relevant, the feedback loop is repeated many times until the user is satisfied. The basic idea behind the RF scheme is to shift the burden of finding the right query formulation from the user to the system. In order to make this true, the user has to provide the system with some information, so that system can perform well in answering the original query. The concept of RF was introduced into CBIR from the concept of text based information retrieval in the 1998''s and then has become a popular technique in CBIR.

In this RF method Support Vector RF is the most popular technique. The Support Vector Machines (SVM) [5, 6, 7] based relevance feedback (SVM RF) has shown promising results owing to its good generalization ability. Drawback of relevance feedback technique is, it treats positive and negative sample equally and SVMRF based technique do not take into unlabeled sample.

To explore solution to this problem, we propose a semi-Supervised Biased Maximum Margin analysis [1] for the traditional SVMRF scheme. These schemes are mainly based on the concept that it treats the positive and negative feedback unequally. Also, labeled positive feedbacks are mapped as close as possible and negative feedbacks are separated from positive feedbacks by a maximum margin in reduced subspace.

The traditional SVM combined with SemiBMMA can better model the relevance feedback process and reduce the performance degradation caused by distinct properties of the two groups of feedbacks.

The SemiBMMA can incorporate the information of unlabelled samples into the relevance feedback and effectively alleviate the over fitting problem caused by the small size of labeled training samples. This method is used to deal with the unlabeled samples to assist with the supervised classification method. By this method we will be able to deal with unsupervised classification. This shows that this method is able to deal with the situation where labeled data points are abundance.

Sometimes both supervised and unsupervised methods do not able to obtain

efficient result, but semi-supervised approach gives the accurate result and focuses completely on efficiency which is the principle of semi-supervised classification. Semi-supervised method does their classification in three steps. Firstly it selects the labeled or un-labeled data points, i.e. data point selection. After selecting the data point it creates the initial classifier, which is useful in third step. And the last step is to clustering the data points to find classifier. Semi- supervised technique is best suited in much application and will give the
accurate results[11].

Several CBIR systems currently exist, and are being constantly developed. Examples are

- ***QBIC*** or ***Query By Image Content*** was developed by IBM, Almaden Research Centre, to allow users to graphically pose and refine queries based on multiple visual properties such as colour, texture and shape. It supports queries based on input images, user-constructed sketches, and selected colour and texture patterns [2].
- ***VIR Image Engine*** by Virage Inc., like QBIC, enables image retrieval based on primitive attributes such as colour, texture and structure. It examines the pixels in the image and performs an analysis process, deriving image characterization features .
- ***VisualSEEK*** and ***WebSEEK*** were developed by the Department of Electrical Engineering, Columbia University. Both these systems support colour and spatial location matching as well as texture matching.
- ***NeTra*** was developed by the Department of Electrical and Computer Engineering, University of California. It supports colour, shape, spatial layout and texture matching, as well as image segmentation.
- ***MARS*** or ***Multimedia Analysis and Retrieval System*** was developed by the Beckman Institute for Advanced Science and Technology, University of Illinois. It supports colour, spatial layout, texture and shape matching.
- ***Viper*** or ***Visual Information Processing for Enhanced Retrieval*** was developed at the Computer Vision Group, University of Geneva. It supports colour and texture matching.

Summary

This chapter gives the information regarding Image processing, Image retrieval and also growth of traditional CBIR technology.

System Requirement Specification

The System Requirement Specification (SRS) phase is an important steps comes in software development life cycle and it is a complete description of the behavior of the system to be developed. The purpose of this system requirement specification is to specify the user goal and task that need to be achieved.

A system requirements specification describes software system need to be developed. It provides a necessary requirement that helps in project development. It in includes Hardware requirement, software requirement, functional requirement, on functional requirement.

3.1 Purpose of the Project:

Human interactive systems have attracted a lot of research interest in recent years, especially for content-based image retrieval systems. The purpose of this system is to improve the existing content based image retrieval (CBIR) system, in such a way is to personalize the CBIR system based on user behaviors which in turn benefits the user very much.

3.2 Scope of the Project:

This project is mainly developed to retrieve the images based on user query. RF methods are used to interact with the system.

3.3 Hardware Requirement:

The hardware requirement specification gives the complete hardware requirement for the system, this section contains all hardware requirement detail sufficient to design a system to satisfy those requirement and tester to test that the system satisfies those requirements

The hardware requirements for the project are as follows:

Processor	:	Pentium IV
Hard Disk	:	160 GB
Ram	:	1 GB

3.4 Software Requirement:

Software requirements deal with defining software resource requirements and prerequisites that need to be installed on a computer to provide optimal functioning of an application. These requirements or prerequisites are generally not included in the software installation package and need to be installed separately before the software installed.

Operating system : Windows XP Professional.

Coding Language : MAT Lab

Database : Microsoft Office Access

3.5 Functional requirements

Functional requirement defines a function of a system and its component. A function is described as a set of inputs, the behavior, and outputs. Functional requirements may be calculations, technical details, data manipulation and processing and other specific functionality that define what system is supposed to accomplish. The functional requirements of the project are:

- **Database Collection:** To implement this project we need Collection of images. Here we collected 335 images of jpg format
- **User interface:** User to interact with the system user interface is required, so that he can enter the image and also can enter the feedback. We have developed using GUI in mat lab
- **Feature extraction:** It is method to extract the feature of images. This is required to retrieve the images from the database. It takes the input as an image and generates feature.

3.6 Non functional requirements

The Non Functional requirements specify the criteria that can be used to evaluate the operation of the system rather than the system behavior.

3.4.1 Performance requirement

- Usability

  A very interactive GUI is provided which helps the user to easily interact with the system. This application allows users to operate with little or no learning.

- Response Time

  It is the time a generic system or functional unit takes to react to a given input.

  Responsiveness, how quickly an interactive system responds to user input.

- **Safety Requirements**

  No harm is expected from the use of the product either to the OS or any data that resides on the system.

Summary

This chapter gives purpose and scope of the project and minimum hardware and software requirement needed for the project. It also specifies functional and non functional requirement of the project.

System Design

Systems design is the process of defining the components, modules, interfaces, and data for a system to satisfy specified requirements. Systems design could be seen as the application of systems theory to product development. The purpose of this phase is to get solution for the given problem by applying suitable plan.

The software Design Document provides us the detail of the project developed. System design identifies the modules that should present in the system. In our project there are three modules, which are given below.

4.1 Modules

They are three modules in our project which are given

- Feature Extraction
  - Color Features
  - Texture Features
  - Edge histogram Features
- Categorize and retrieving
- Feedback model

4. 2Module Description

4.2.1Feature Extraction:

Features are considered as the identity of the image. We concentrate on color features, Texture features, and Shape features.

➢ **Color Features:**

It is captured by averaging the intensities of pixels in a block, referred to as mean feature. Pixel Color Information is nothing but R, G, and B value. Mean component is calculated by following formula.

Mean component (R, G or B) = Sum of that component for all pixels /Number of pixels.

➢ **Texture feature**

- Gabor features

It captures a number of salient visual properties, including spatial localization, orientation selectivity, and spatial frequency selectivity, they are robust to illumination variations since they detect amplitude-invariant spatial frequencies of pixel gray values.

- Gabor wavelets (filters or functions):

Gabor wavelets are based on physiological studies of simple cells in the human visual cortex. The cells are selectively tuned to orientation as well as spatial frequency, and their response can be accurately enough approximated by 2D Gabor filters. Thus, the increased popularity of this approach is biologically well justified. A 2D Gabor wavelet transform is defined as the convolution of the image I(z):

Eq.1=>

$$\mathcal{J}_{\mathbf{k}}(\mathbf{z}) = \int\int \mathcal{I}(\mathbf{z}')\psi_{\mathbf{k}}(\mathbf{z}-\mathbf{z}')d\mathbf{z}'$$

with a family of Gabor filters

$$\psi_{\mathbf{k}}(\mathbf{z}) = \frac{\mathbf{k}^T\mathbf{k}}{\sigma^2}\exp(-\frac{\mathbf{k}^T\mathbf{k}}{2\sigma^2}\mathbf{z}^T\mathbf{z})\left(\exp(i\mathbf{k}^T\mathbf{z})-\exp(-\frac{\sigma^2}{2})\right), \quad (2)$$

where $\mathbf{z} = (x, y)$ and $\mathbf{k}$ is the characteristic wave vector:

$$\mathbf{k} = (k_\nu \cos\varphi_\mu \qquad k_\nu \sin\varphi_\mu)^T \quad (3)$$

with

$$k_\nu = 2^{-\frac{\nu+2}{2}}\pi, \quad \varphi_\mu = \mu\frac{\pi}{8}, \quad (4)$$

$$\nu = 0, 1, 2, 3, 4, \quad \mu = 0, \frac{\pi}{4}, \frac{\pi}{2}, \frac{3\pi}{4}.$$

- To get texture feature apply a set of Gabor filters with specific parameters such as frequency, sharpness of Gaussian envelope and different rotation angles. The object image undergoes convolution with these Gabor filters to produce Gabor jets. These Gabor jets are processed in various ways to form the feature vectors.

➢ **Shape feature**

To calculate the shape feature Edge Histogram method is used. It Captures edge or gradient structures that are characteristic of local shape. An image descriptor based on the image's gradient orientations. This descriptor is based on dominant edge orientations. Image will be divided into cells.

4.2.2 Categorize and retrieving

The test image features are fed to Multi-class SVM classifier to predict its category. Here, the test features are projected in the trained matrix feature space to predict its category.

I. Multiclass SVMs

SVMs are inherently two-class classifiers. In particular, the most common technique in practice has been to build $|\mathcal{C}|$ one-versus-rest classifiers (commonly referred to as "one-versus-all" or OVA classification), and to choose the class which classifies the test datum with greatest margin. Another strategy is to build a set of one-versus-one classifiers, and to choose the class that is selected by the most classifiers. While this involves building $|\mathcal{C}|(|\mathcal{C}|-1)/2$ classifiers, the time for training classifiers may actually decrease, since the training data set for each classifier is much smaller.

However, these are not very elegant approaches to solving multiclass problems. A better alternative is provided by the construction of multiclass SVMs, where we build a two-class classifier over a feature vector $\Phi(\vec{x}, y)$ derived from the pair consisting of the input features and the class of the datum. At test time, the classifier chooses the class $y = \arg\max_{y'} \vec{w}^T \Phi(\vec{x}, y')$. The margin during training is the gap between this value for the correct class and for the nearest other class, and so the quadratic program formulation will require that $\forall i \; \forall y \neq y_i \; \vec{w}^T \Phi(\vec{x}_i, y_i) - \vec{w}^T \Phi(\vec{x}_i, y) \geq 1 - \xi_i$. This general method can be extended to give a multiclass formulation of various kinds of linear classifiers. It is also a simple instance of a generalization of classification where the classes are not just a set of independent, categorical labels, but may be arbitrary structured objects with relationships defined between them.

4.2.3Feedback model:

In feedback model we proposed Semi BMMA classifier is trained using the extracted features. It takes the feature of images, which is given by user as relevant images.

I. Mathematical Concept SemiBMMA

- In each round of feedback iteration, there are n samples $P = \{p1,p2.....\ pn\} \varepsilon\ Rh$. For simplicity, we assume that the first $n+$ samples are positive feedbacks, $pi(1 \leq i \leq n+)$, the next $n-$ samples are negative feedbacks $pi(n+ +1 \leq i \leq n+ + n-)$, and all others are unlabelled samples $pi(n+ +n- +1 \leq i \leq n)$. Let $l(pi)$ be the class label of sample Pi. We denote $l(pi)=1$ for positive feedbacks, $l(pi)= -1$ for negative feedbacks and $l(pi)=0$ for unlabelled samples.

- To better show the relationship between the proposed approaches, we use the similar notations and equations in graph embedding frame work. Firstly, two different graphs are formed: 1) the intrinsic graph G, which characterizes the local similarity of feedback samples, 2) the penalty graph Gp, which characterizes the local discriminate structure of the feedback samples. For all positive feedbacks, we first compute the pair wise distance between each pair of positive feedbacks. Then for each positive feedback Pi, we find its ki nearest neighborhood positive feedbacks, which can be represented as a sample set Nis, and put an edge between $x1$ and its neighborhood positive feedbacks.

- The intrinsic graph measures the total average distance of the $|Nis|$ nearest neighborhood sample pairs, and is used to characterize the local within-class compactness for all the positive feedbacks. For the penalty graph Gp, its similarity matrix represents geometric or statistical properties to be avoided and is used as a constraint matrix in the graph embedding framework. In the BMMA, the penalty graph is constructed to represent the local separability between the positive class and the negative class. More strictly speaking, we expect that the total average margin between the sample pairs with different labels should be as large as possible. For each feedback sample, we find its $k2$ neighbor feedbacks with different labels and put edges between corresponding pairs of feedback samples For each unlabelled samples $pi(n+ + n- +1 \leq i \leq n)$, for each unlabelled samples we find its $k1$ nearest unlabelled samples which can be represented as a sample set $Niii$, and put an edge between the unlabelled pi and its neighborhood unlabelled

samples. This matrix term is known as Laplacian matrix.

II. SemiBMMA algorithm

Input: P = *{p1,p2..... pn}ϵ Rh*, stand for all feedback samples and unlabelled samples which include the positive set P+ , the negative sample set P- , and unlabelled samples .

Step 1: Construct the supervised intrinsic graph G and calculate the matrix value of positive feedbacks

Step 2: Construct the supervised penalty graph Gp and calculate the matrix value of negative feed backs.

Step 3: Construct the Laplacian regularizer and calculate the matrix value of unlabelled samples
Step 4: Calculate the projection matrix α: project all positive, negative and remaining samples in the database on to the reduced subspace respectively.

Output: Positive and Negative samples Y+ and Y- , in this reduced subspace.

4.2 High level Design

High level design gives overview of the project. Here we have used use case diagram and dataflow diagram to provide overview of the project

4.2.1 Use case diagram:

The use case diagram is used to identify the primary elements and processes that form the system. The primary elements are termed as "actors" and the processes are called "use cases." The use case diagram shows which actors interact with each use case.

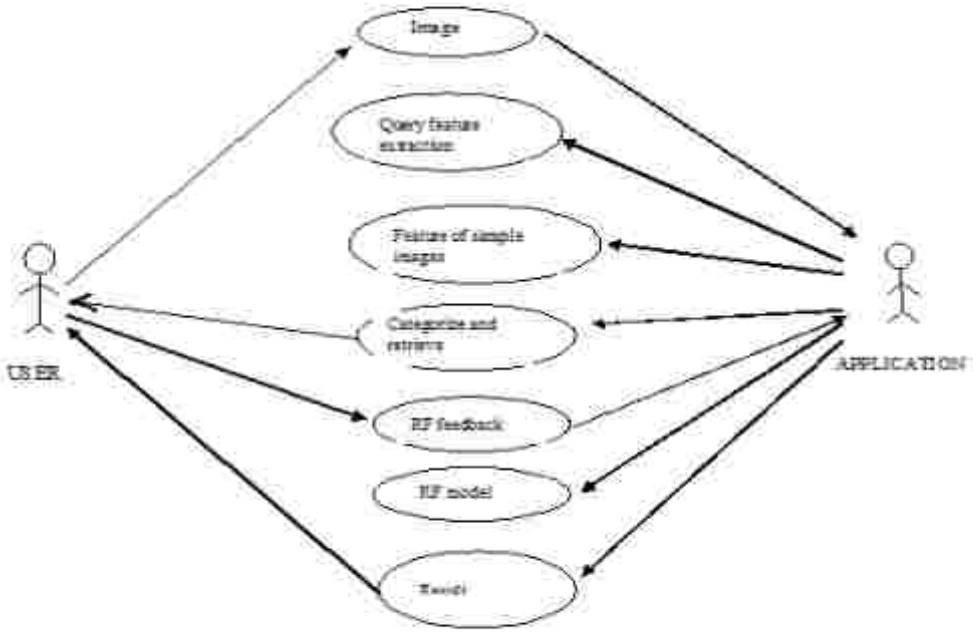

Fig 4.1 Use case diagram

The above diagram describes the user interaction with the processes, user enters the image to system .System retrieve the images and display. User observes the images and gives the feedback. System take this feedback gives the result once again

4.2.2 Data Flow Diagram

A Data Flow Diagram (DFD) is a graphical representation of the "flow" of data through an information system, modeling its *process* aspects. A DFD is often used as a preliminary step to create an overview of the system, which can later be elaborated. DFDs can also be used for the visualization of data processing..

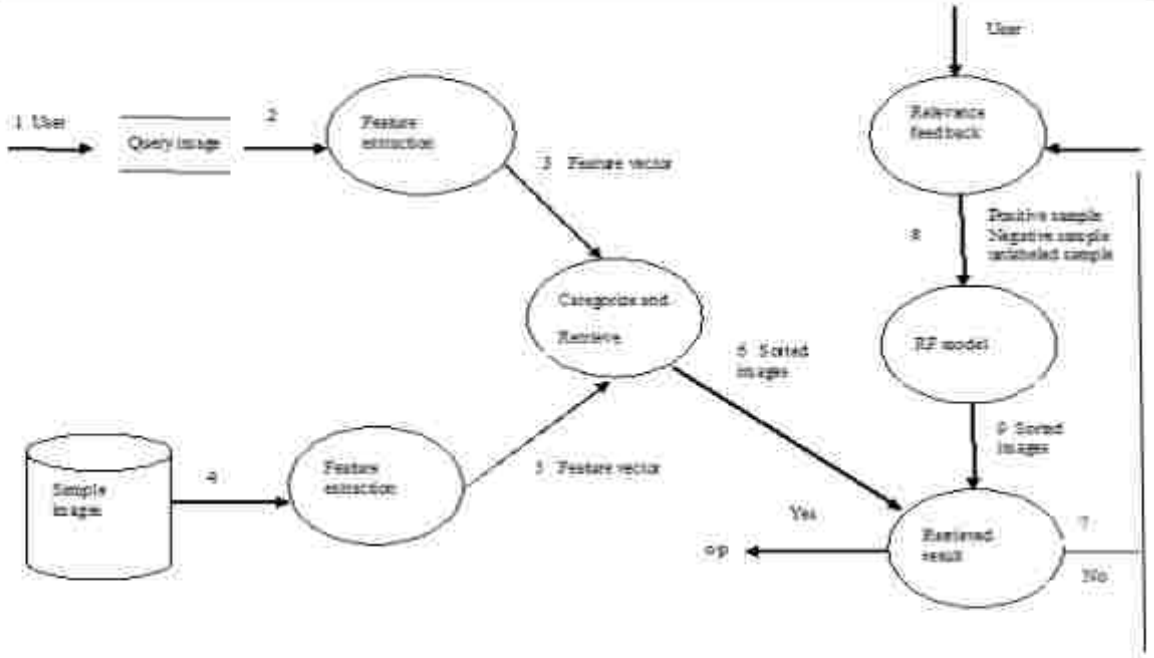

Fig4.2 Level1 Dataflow diagram

User enters query image, its features are extracted by feature module and this feature will be compared with the features in the database. Categorize and retrieve model extract the images which having similar feature of that query image. If user is not satisfied with the result he/she enters feedback. Feedback model consider this feedback information using SemiBMMA approach it will retrieve the images.

4.3 Low level design diagram

Large systems are decomposed into sub-system called as module. Low level design gives the internal logic of the system.

4.3.1 Sequence diagram

A sequence diagram represents the interaction between different objects in the system. The important aspect of a sequence diagram is that it is time-ordered. This means that the exact sequence of the interactions between the objects is represented step by step. Different objects in the sequence diagram interact with each other by passing "messages". The Sequence diagram of proposed system is given below.

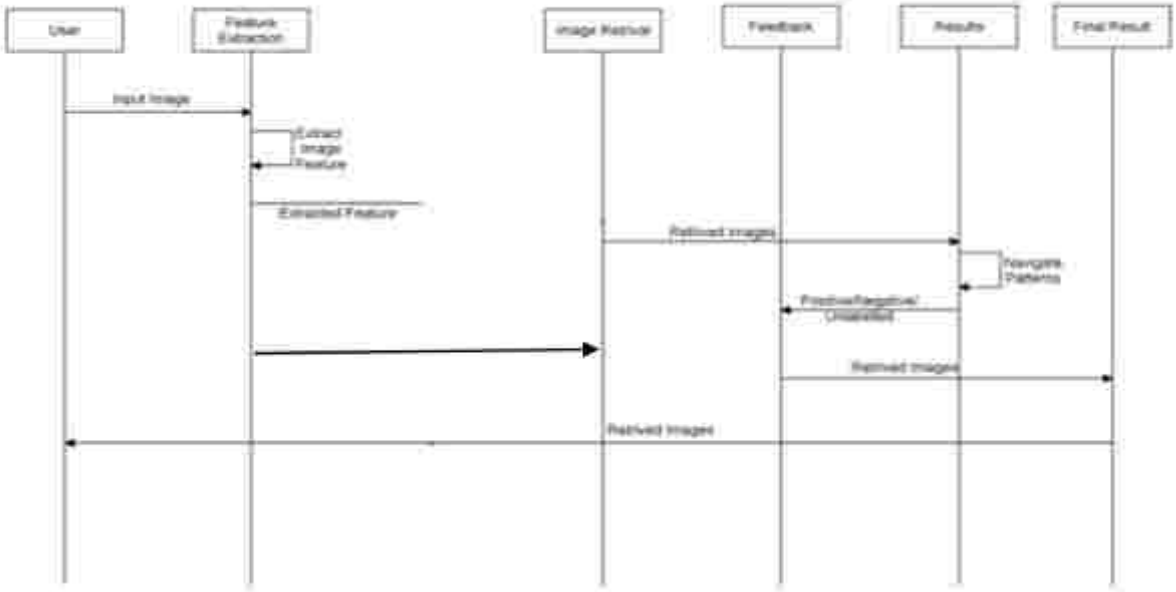

Fig4.3 Sequence diagram

4.3.2 Module design

Module1: Feature extraction module

In this Feature of images are retrieved. Here we are retrieving Color, Texture, Shape feature of the image using Color mean method, Gabor wavelets and Edge histogram respectively. Below fig4.4 Shows the level0 DFD for feature Extraction module.

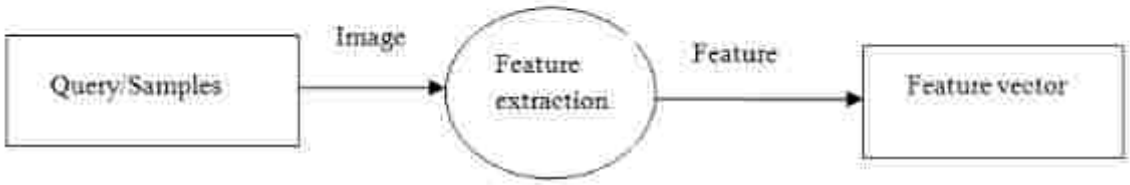

Fig4.4.Level 0 DFD for Feature extraction method

Module2:Categorize and retrieve

Categorize and retrieve function takes Feature of query image and feature of sample images as input. Here we are using multiclassSVM to match the similar images .This function Retrieve the images whose feature is matching with query image.

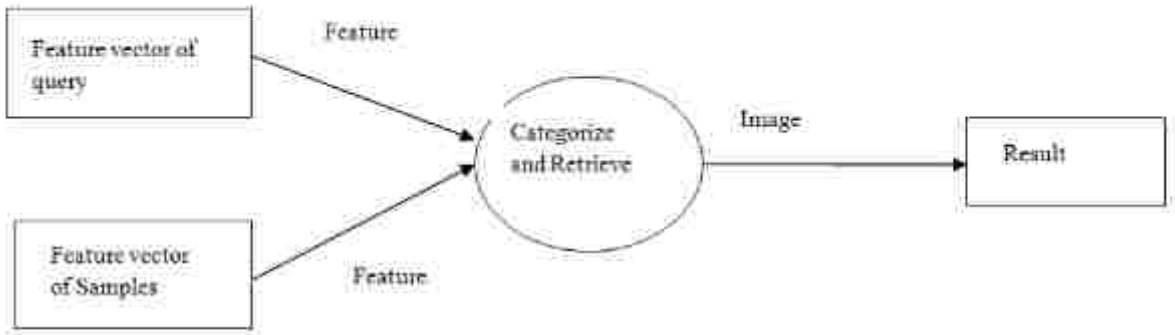

Fig4.5.Level 0 DFD for Categorize and Retrieve module

Module3: RF model

This RF model takes the Feature of feedback query and feature of database images as a input. Here RF model make use SemiBMMA approach and retrieve the images.

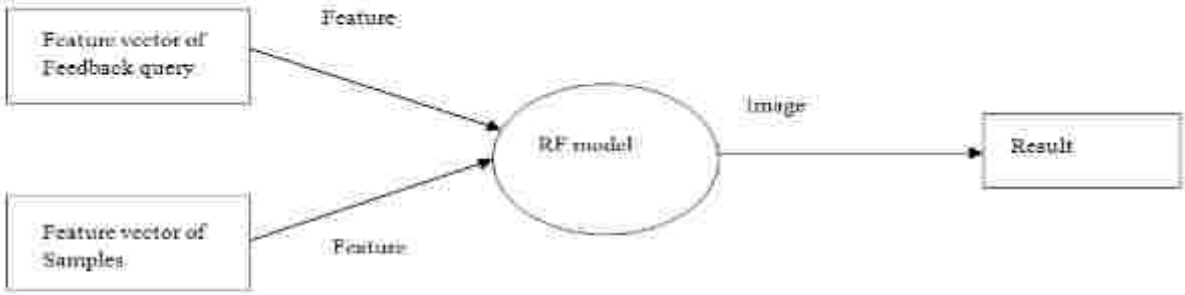

Fig4.6.Level 0 DFD for RF module

Summary

This chapter describe design phase. It includes High level design and low level design description with dataflow diagram

Implementation

5.1 Technology Used

The proposed work has been implemented in MATLAB. MATLAB (matrix laboratory) is a numerical computing environment. MATLAB (matrix laboratory) is a numerical computing environment and fourth generation programming language.

5.1.1 Mat Lab Key Features

- MATLAB provides a language and environment for numerical computation, data analysis, visualisation and algorithm development
- MATLAB provides functions that operate on
  Integer, real and Vectors and matrices
- Mathematical functions for linear algebra, statistics, numerical integration, and solving ordinary differential equations
- Built-in graphics for visualizing data and tools for creating custom plots

5.1.2 Working on MATLAB

When MATLAB opens, the screen should look something like what is pictured
in figure below.

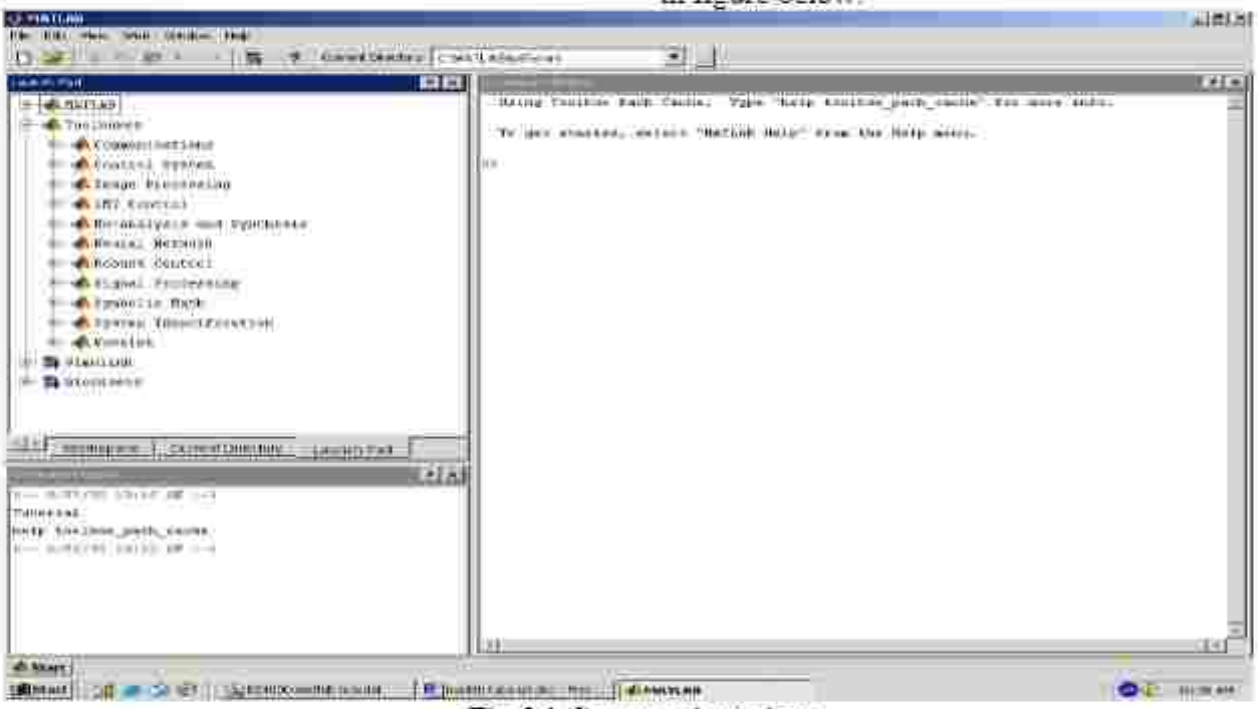

Fig 5.1 Command window

The **Command Window** is the window on the right hand side of the screen. This window is used to both enter commands for MATLAB to execute, and to view the results of these commands.

The **Command History** window, in the lower left side of the screen, displays the commands that have been recently entered into the Command Window. In the upper left hand side of the screen there is a window that can contain three different windows with tabs to select between them. The first window is the **Current Directory**, which tells the user which M-files are currently in use. The second window is the **Workspace** window, which displays which variables are currently being used and how big they are. The third window is the **Launch Pad** window, which is especially important since it contains easy access to the available toolboxes, of which, Image Processing is one. If these three windows do not all appear as tabs below the window space, simply go to **View** and select the ones you want to appear.

5.1.3 M-file

An M-file is a MATLAB document the user creates to store the code they write for their specific application. **Creating an M-file is highly recommended**, although not entirely necessary. An M-file is useful because it saves the code the user has written for their

application. It can be manipulated and tested until it meets the user's specifications. The advantage of using an M file is that the user, after modifying their code, must only tell MATLAB to run the M-file, rather than reenter each line of code individually.

5.1.4. Images

The first step in MATLAB image processing is to understand that a digital image is composed of a two or three dimensional matrix of pixels. Individual pixels contain a number or numbers representing what grayscale or color value is assigned to it. Color pictures generally contain three times as much data as grayscale pictures, depending on what color representation scheme is used. Therefore, color pictures take three times as much computational power to process. In this tutorial the method for conversion from color to grayscale will be demonstrated and all processing will be done on grayscale images. However, in order to understand how image processing works, we will begin by analyzing simple two dimensional 8-bit matrices.

5.2 Image Toolbox

The Image Processing Toolbox is a collection of functions that extend the capability of the MATLAB ® numeric computing environment. The toolbox supports a wide range of image processing operations.

5.2.1 Reading images

IPT accepts images of type TIFF, JPEG, GIF, BMP, PNG and XWD. It reads file using imread function. Filename is string of complete filename (i.e.path (if not in pwd) and extension).use quotes for strings!!

```
f=imread('picture.jpg');
f=imread('D:\images\picture2.jpg');
f=imread('..\images\picture3.jpg');
```

5.2.2 Conversion

It also provide function which convert image from one format to another,someof them are listed below

- gray2ind - intensity image to index image
- im2bw- image to binary
- im2double - image to double precision
- im2uint8 - image to 8-bit unsigned integers
- im2uint16 - image to 16-bit unsigned integers
- ind2gray - indexed image to intensity image
- mat2gray - matrix to intensity image
- rgb2gray - RGB image to grayscale
- rgb2ind - RGB image to indexed image

5.2.3 MATLAB and images

- The help in MATLAB is very good, use it!
- An image in MATLAB is treated as a matrix
- Every pixel is a matrix element
- All the operators in MATLAB defined on Matrices can be used on images: +, -, *, /, ^, sqrt, sin, cos etc.

- **MATLAB can import/export several image formats**
  - BMP (Microsoft Windows Bitmap)
  - GIF (Graphics Interchange Files)
  - HDF (Hierarchical Data Format)
  - JPEG (Joint Photographic Experts Group)
  - PCX (Paintbrush)
  - PNG (Portable Network Graphics)
  - TIFF (Tagged Image File Format)
  - XWD (X Window Dump)
  - MATLAB can also load raw-data or other types of image data
- **Data types in MATLAB**
  - Double (64-bit double-precision floating point)
  - Single (32-bit single-precision floating point)
  - Int32 (32-bit signed integer)
  - Int16 (16-bit signed integer)
  - Int8 (8-bit signed integer)
  - Uint32 (32-bit unsigned integer)
  - Uint16 (16-bit unsigned integer)
  - Uint8 (8-bit unsigned integer)

- **Images in MATLAB**
  - Binary images : {0,1}
  - Intensity images : [0,1] or uint8, double etc.
  - RGB images : m-by-n-by-3
  - Indexed images : m-by-3 color map

- Multidimensional images m-by-n-by-p (p is the number of layers)

5.3 Source code

5.3.1 Source code for module Feature extraction

This code Extract the color feature of training images

```
train_colorfea=zeros(335,256);
for i=1:335

fimage=imread(['database\',num2str(i),'.jpg']);
   fnimage=imresize(fimage,[256 256]);
   cimage=rgb2gray(fnimage);
   colorfea=mean(cimage);
   train_colorfea(i,:)=colorfea;
end
save train_colorfea train_colorfea
f7 = figure('NumberTitle','off','Name','Train Image Colour Feature','Position',[100 100 300 150]);
t7=
uitable('Data',train_colorfea,'Parent',f7,'Position',[20 20 250 100]);
```

This code extract the shape feature of training images

```
train_Hogfea=zeros(335,81);
for i=1:335

fimage=imread(['database\',num2str(i),'.jpg']);
   fnimage=imresize(fimage,[256 256]);
  hoimage=rgb2gray(fnimage);
Hogfea=HOG(hoimage);
train_Hogfea(i,:)=Hogfea';
end
save train_Hogfea train_Hogfea
f6 = figure('NumberTitle','off','Name','Train Image Edge Histogram Feature','Position',[100 100 300 150]);
t6=
uitable('Data',train_Hogfea,'Parent',f6,'Position',[20 20 250 100]);
```

5.3.2Code for categorize and Retrieve

This code retrieve images which matches features of query image given by the user

```
function
Categorizeandretrieve_Callback(hObject,
eventdata, handles)
% hObject    handle to Categorizeandretrieve (see GCBO)
% eventdata  reserved - to be defined in a future version of MATLAB
% handles    structure with handles and user data (see GUIDATA)
%%%
```

6.1 Types of Testing

I. System Testing:

The application is tested with respect to its typical working environment. Consequently for many processes no clear division between validation and system testing can be made. Specific tests which can be performed in either or both stages include the following.

II. Integration Testing:

Integration Testing can proceed in a number of different ways, which can be broadly characterized as top down or bottom up. In top down integration testing the high level control routines are tested first, possibly with the middle level control structures present only as stubs. Subprogram stubs were presented in section2 as incomplete subprograms which are only present to allow the higher Level control routines to be tested.

III. Unit Testing:

Unit testing deals with testing a unit as a whole. This would test the interaction of many functions but confine the test within one unit. The exact scope of a unit is left to interpretation. Supporting test code, sometimes called ***Scaffolding***, may be necessary to support an individual test. This type of testing is driven by the architecture and implementation teams. This focus is also called black-box testing because only the details of the interface are visible to the test. Limits that are global to a unit are tested here.

6.2 Test Cases

Module1: Feature Extraction

Sl # Test Case : -	UTC-1
Name of Test: -	Features Extraction of Training Images
Items being tested: -	"Features" button in GUI
Sample Input: -	Click on the Features button
Expected output: -	It should show all images in the training folder and features should be extracted using appropriate method
Actual output: -	Working as it is fine.
Remarks: -	Pass.

Sl # Test Case : -	UTC-2
Name of Test: -	Database Classification
Items being tested: -	"Database classification " button in GUI
Sample Input: -	Click on the Database classification button
Expected output: -	All training features should be classified as different types of classes.

Actual output: -	Working as it is fine.
Remarks: -	Pass.

Sl # Test Case : -	UTC-3
Name of Test: -	Query Image and Feature Extraction
Items being tested: -	"Select image and Feature Extraction button"
Sample Input: -	Click on Select image button
Expected output: -	One browse window should come and user should select the query image, then features of those images should be extracted using appropriate method.
Actual output: -	Working as it is.
Remarks: -	Pass.

Modul2:Categorize and retrieve

Sl # Test Case : -	UTC-1
Name of Test: -	Categorize and Retrieve
Items being tested: -	Categorize and Retrieve button
Sample Input: -	Click on Categorize and Retrieve button
Expected output: -	It should query to user"Enter number of images display (10-15)". Then user should enter the number of images. Click on button. It will retrieve those numbers of similar images of training dataset.
Actual output: -	Working fine
Remarks: -	Pass.

Module3:RF module

Sl # Test Case : -	UTC-1
Name of Test: -	Enter feedback

Items being tested: -	Enter feedback button
Sample Input: -	Click on Enter feedback button
Expected output: -	It should ask the feedback of retrieved images. User can enter the feedback of retrieved image numbers.
Actual output: -	Working fine
Remarks: -	Pass.

Sl # Test Case : -	UTC-2
Name of Test: -	Result
Items being tested: -	Result button
Sample Input: -	Result button
Expected output: -	Display images. It will come as user input of feedback.
Actual output: -	Working fine
Remarks: -	Pass.

Summary

This Chapter describe various types of testing procedure and test cases.

Chapter 7

Results and Performance Analysis

7.1 Performance Analysis:

The retrieved images are subjected to precision and recall analysis.

7.1.1Precision & Recall Analysis:

CBIR performance is analyzed by computing the values of precision and recall. Precision and Recall value calculated by following formula

Precision = Number of relevant images retrieved / Total number of images retrieved

Recall = Number of relevant images retrieved / Total number of relevant images in the database

To Compare SVM with our Proposed system we have taken SVM precesion value from the paper "Asymmetric Bagging and Random Subspace for Support Vector Machines-Based Relevance Feedback in Image Retrieval Dacheng Tao, Student Member, IEEE, Xiaoou Tang, Senior Member, IEEE, Xuelong Li, Member, IEEE, and Xindong Wu, Senior Member, IEEE". The fig shows precision curve with the Existing system SVM and Proposed System SemiBMMA.This shows SemiBMMA Works better than SVM.

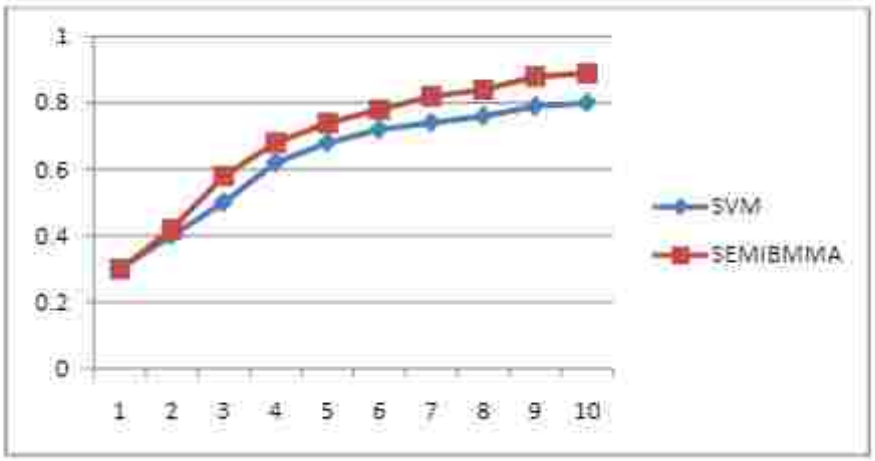

Fig 7.1 precision graph for SVM and SemiBMMA

7.2 Snapshots

Fig7.2, this is the Snapshot of main GUI. This GUI helps user to interact with the system very easily.

Fig7.2 Snapshots of main GUI

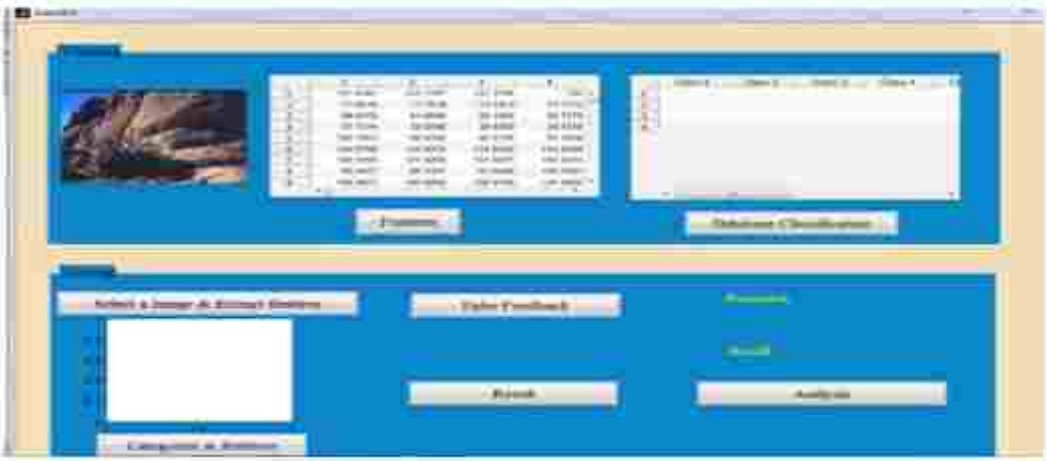

Fig7.3 snapshots for feature extraction

Fig7.3 shows feature of Database image. This will be generated after clicking the feature button feature of the database images are extracted.

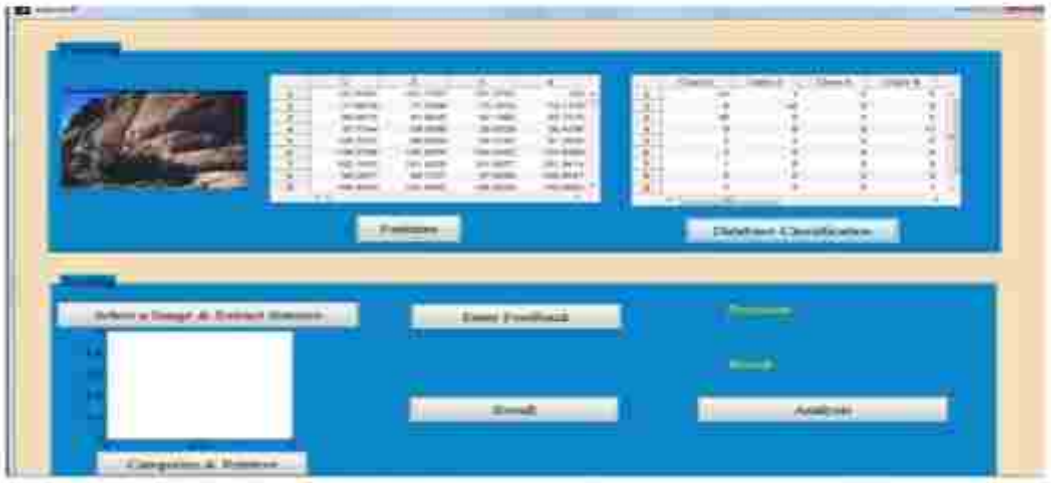

Fig 7.4 Classes of images

This shows the classification of images,here we have Ten Classes of images.Each classes having different number of images

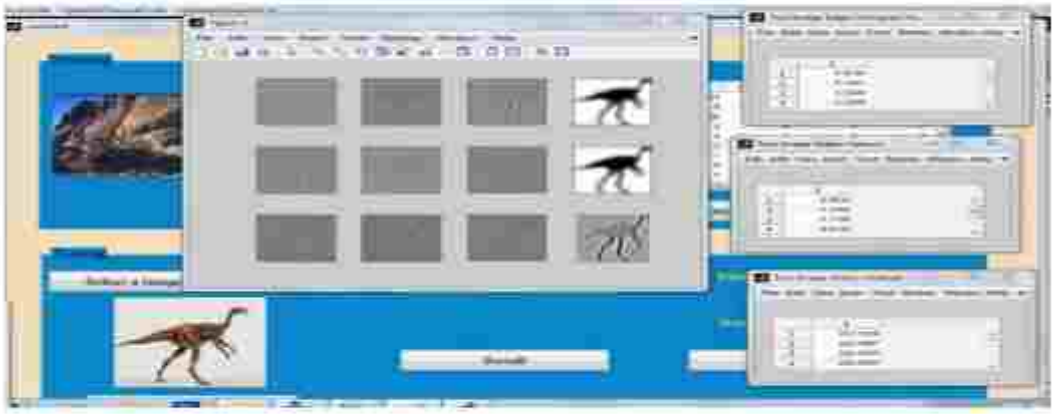

Fig 7.5 Query feature extraction

User can enter query image using select and Extract feature button. Here user has entered query image. The fig shows Color, Texture, Shape feature of query image.

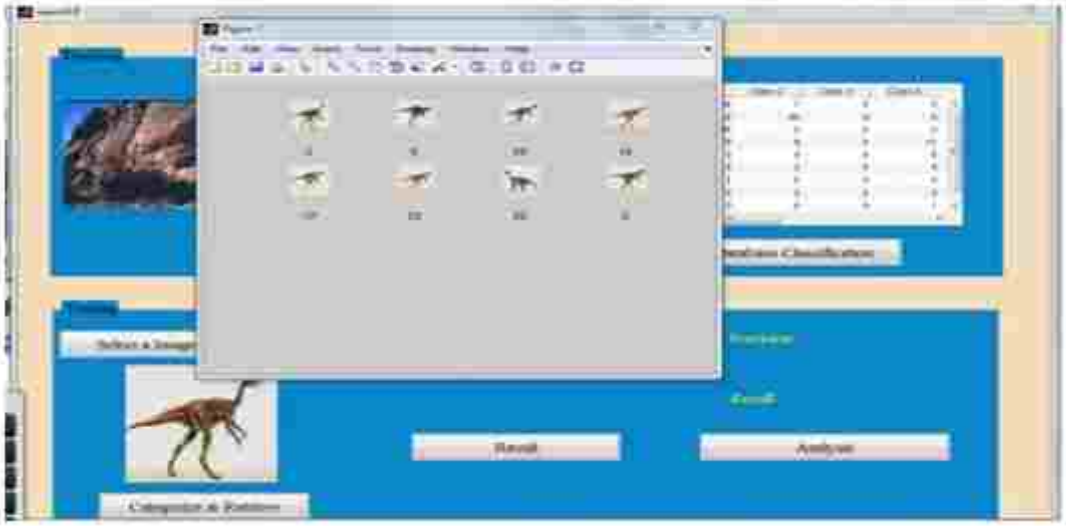

Fig7.6 Categorize retrieve

These are the images retrieved after clicking the Categorize and retrieve button .In this we can notice that we have entered dinosaur which having legs up .In retrieved images image no. 26 is not matching. So we go for RF model

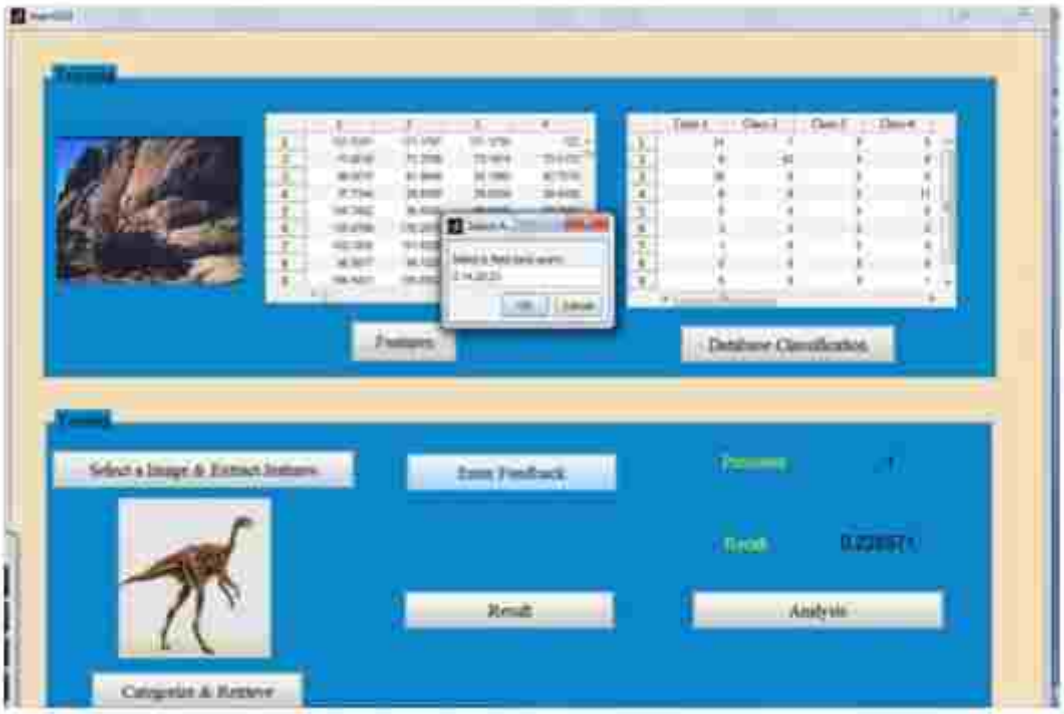

Fig 7.7 user feedback

The fig7.7 shows method of entering the feedback. Here we have entered images2, 14, 29, and 23 as relevant images. To enter this we need to click Enter feedback button

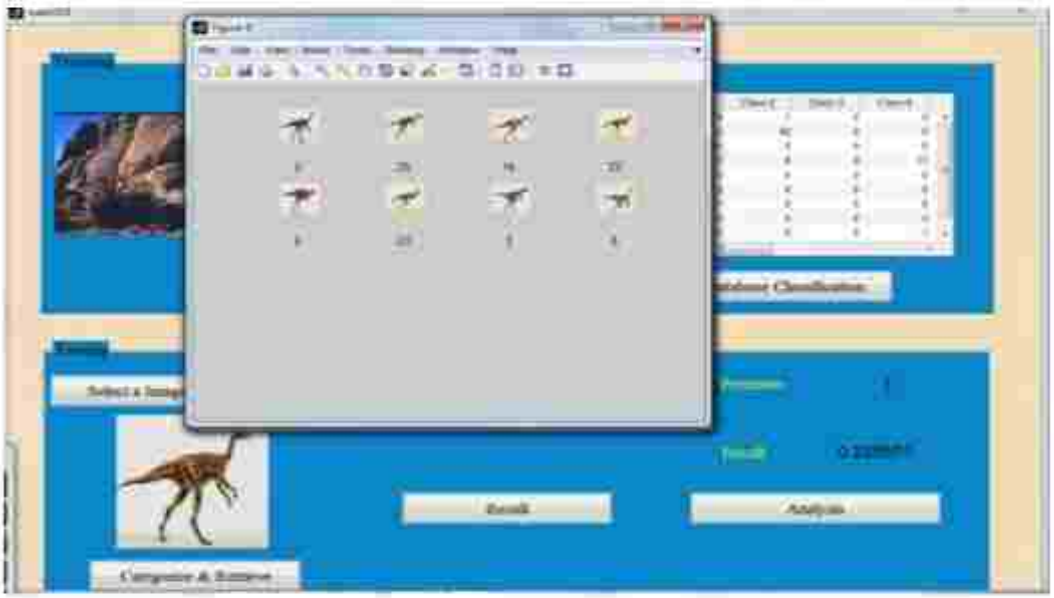

Fig 7.8 RF model

This fig7.8 shows images those are retrieved after giving feedback. In this all are relevant images.

Conclusion and Future Enhancement

Content based image retrieval (CBIR) is the application used to search for digital image in large databases. In this method high level concept and user perception subjectivity cannot be well modeled, so many irrelevant images will be displayed in retrieved result. To overcome this problem, we propose semisupervised biased maximum margin analysis.

We presented CBIR which uses SemiBMMA approach to relevance feedback module. It classify positive and negative sample and also it consider the information of unlabelled sample.

Future Enhancement

CBIR is still a developing science. To this project can use other feature extraction technique to improve the result. High quality of test database can be used for the better performance.

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APPLICATION PORTAL

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ABSTRACT

The main aim of this project is to help the students apply online for any degree courses, and later students may review application status. Admin may check the total number of request details issued, class-wise request details issued, and can accept or deny the application status based on the application details.

KEYWORDS: HTML-Hyper Text Markup Language., PHP-Hypertext Pre-Processor.

INTRODUCTION

Applicants may apply for a college admission process online via this project, and this project helps to know the student's Application status. Since it is a web-based application administrator can check the total number of applications submitted and can accept or deny the status of application.

SOFTWARE REQUIREMENT SPECIFICATION

Hardware Requirements:

- RAM :1 GB or above
- Hard disk :4 GB or above
- Processor :2.4GHZ or above

Software Requirements:

- Platform : Windows
- Front End :HTML
- Back End : PHP

SCOPE:

The scope of this project is to provide both Students and College with a good forum for having all processes online. This program offers online application for students, and they can check the application status.Since it's an online application, it lets the staff and the students use the time effectively.

PURPOSE:

The main purpose of this project is to minimize the administrative work of the teachers and to reduce the time of both the students and the teachers. This prevents administrative collection of student data and holds information in the system for every student.

Functional requirements:

Includes:

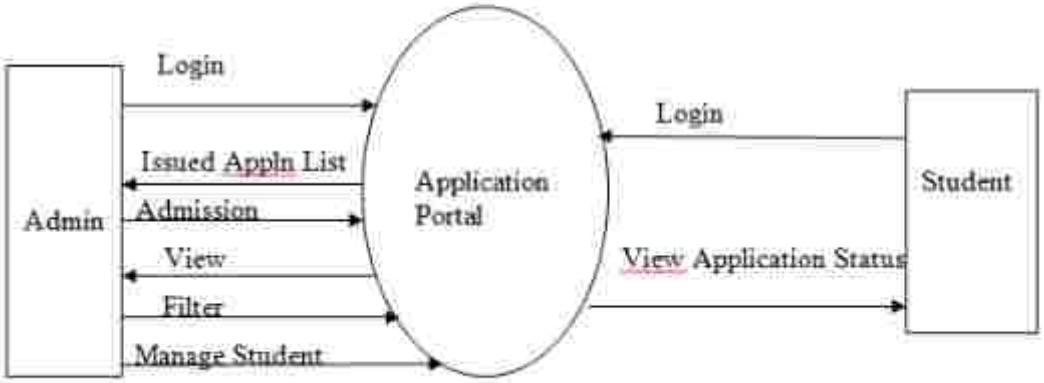
- **Login:**This module is used to login to the system.Here Admin or Student can login by entering their Id and password
- **Admin:**Admin can manage all activities like Registration, approve application, reject application, delete applicant's details, and update student details.
- **Student**:
  Student can login to the system by entering their Id and password and can check the status of application.

SYSTEM DEFINATION

Context Flow Diagram (CFD)

CFD is to show the interaction of the proposed software with external environments which includes several entities are source like user, other hardware, other software etc.

In the below figure CFD represent entire Software has single process with the input and output. Data indicated by incoming and outgoing arrows respectively.



15

Figure - 3.2: CFD of Application Portal.

3.5.2 Data Flow Diagram (DFD)

The Data Flow Diagram is also known as a Data Flow Graph orBubble Chart. A DFD serves the purpose of clarifying system requirementsand identifying major transformations. DFDs show the flow of data through asystem. It is an important modeling tool that allows us to picture a system as anetwork of functional processes.

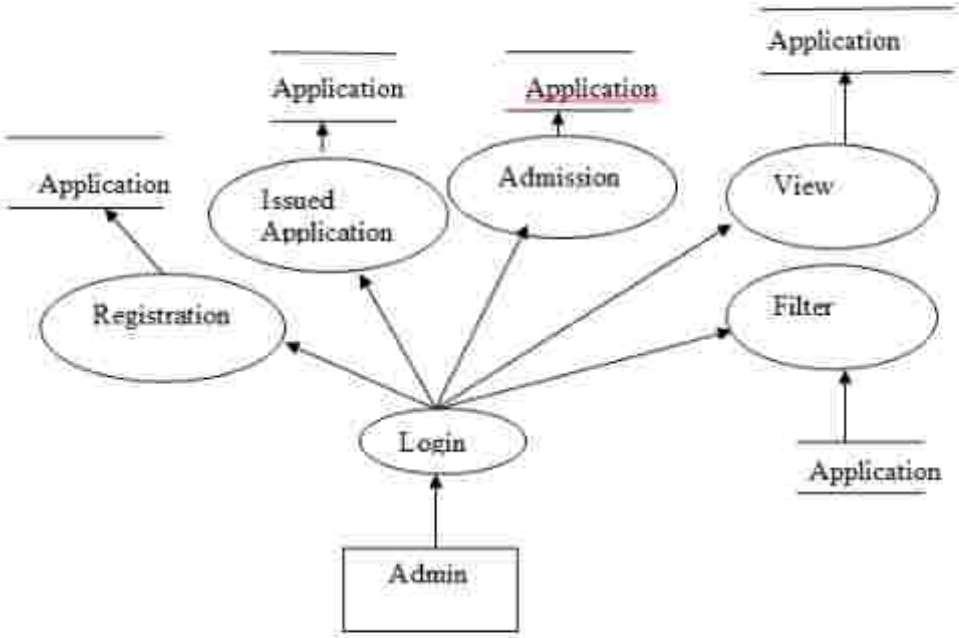
Data Flow Diagrams are well-known and widely used notation for specifying the functions of an information system. A full description of a system actually consists of a set of data flow diagrams. Process is further identified with a number that will be used for identification purpose. The development of DFD is done in several levels each process in lower level diagram can be broken into a more detail DFD in the next level.

DFD Symbols

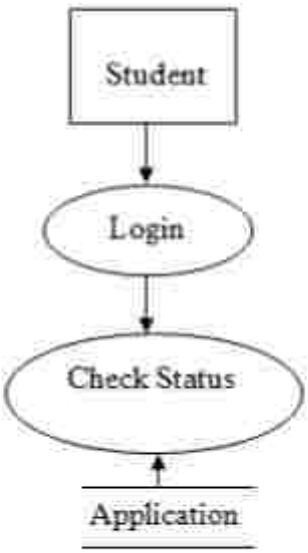
Symbol Notification	Object Name	Description
	Source or Sink	It is the net originator or consumer of data which interact with system
	Process	Agent that performs the transformation of the data from input to output
	Data Flow	It shows the direction of the data.
	Data Source	It shows the place where the data is stored.

3.5.3 Top level Data Flow Diagram of Performance Appraisal

Admin has right to make changes to database. Admin can add update,delete or search the information to table. Admin can store the Student details.



Admin Side DFD



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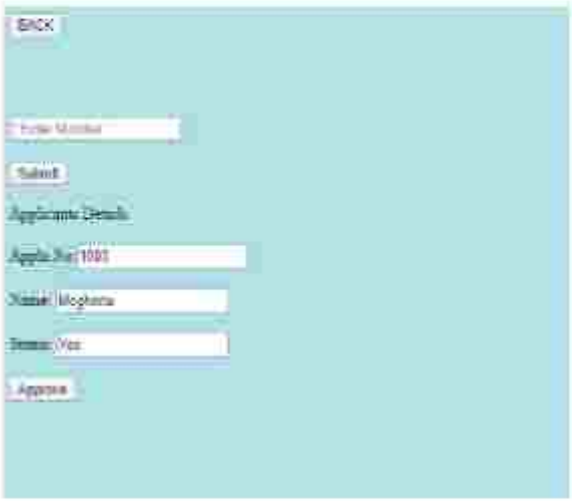

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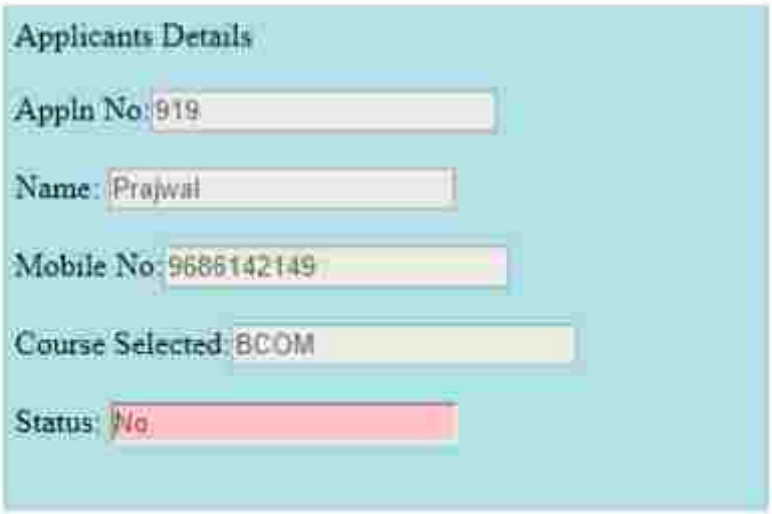

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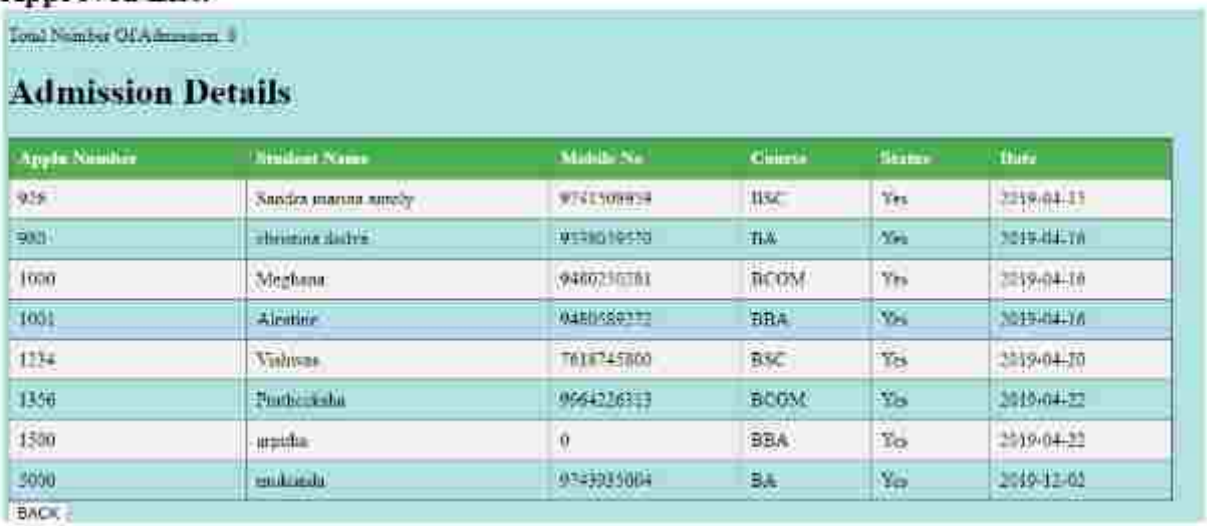

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Admission Details

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980	christina dadris	9538039570	BA	Yes	2019-04-16
1000	Meghana	9480230281	BCOM	Yes	2019-04-16
1001	Alestine	9480589372	BBA	Yes	2019-04-16
1234	Vishvas	7618745800	BSC	Yes	2019-04-20
1356	Pratheeksha	9964226313	BCOM	Yes	2019-04-22
1500	arpitha	0	BBA	Yes	2019-04-22
2000	mukunda	9743035004	BA	Yes	2019-12-02

BACK

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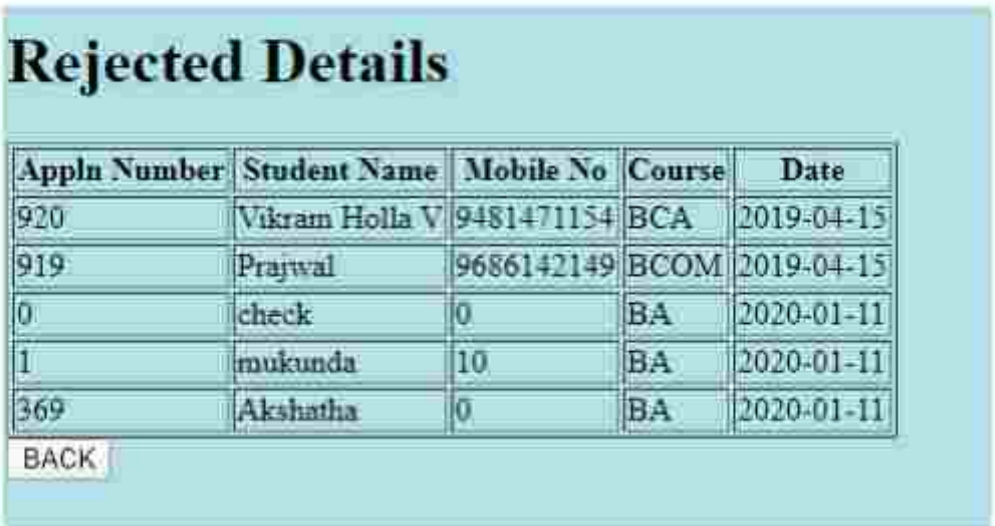

Rejected Details

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919	Prajwal	9686142149	BCOM	2019-04-15
0	check	0	BA	2020-01-11
1	mukunda	10	BA	2020-01-11
369	Akshatha	0	BA	2020-01-11

BACK

Filter:

BACK

BCA Submit

Filter Result

Appln Number	Student Name	Mobile No	Course	Date
920	Vikram Holla V	9481471154	BCA	2019-04-15
922	Shivani	7259876971	BCA	2019-04-15
927	Keerthik	9535669197	BCA	2019-04-15
928	Prathith	8296551043	BCA	2019-04-15
929	Pauthvi shetty	9008515259	BCA	2019-04-15
930	Shrindhi	8970433210	BCA	2019-04-15
936	Sangeetha	7829125852	BCA	2019-04-16
937	Krathika	7829125852	BCA	2019-04-16
950	Charthra	9071072445	BCA	2019-04-16
952	Srilaxmi R	7829735179	BCA	2019-04-16
964	Prathibha	9902671877	BCA	2019-04-16
969	Sanjana	9731630644	BCA	2019-04-16
978	kiran	9108750418	BCA	2019-04-16
982	sahana	7353318191	BCA	2019-04-16
1020	Dashami	9481754169	BCA	2019-04-16
1021	Ambika	1020	BCA	2019-04-16
1033	Sinchana d	9483577778	BCA	2019-04-16

Search By:

Search By Course All

Submit

Total Number Of Applications Issued: 1192

Total Amount: 119200 Rs

Applicants Details

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1	mukunda	10	BA	2020-01-11
369	Akshatha	0	BA	2020-01-11
915	Sinchana S	9663160329	BCOM	2019-04-15
916	sushanth n	9481517486	BCOM	2019-04-15
917	Deeksha k	9480276326	BSC	2019-04-15
918	Sowmya	9448596642	BCOM	2019-04-15
919	Prajwal	9686142149	BCOM	2019-04-15
920	Vikram Holla V	9481471154	BCA	2019-04-15
921	Bhagyashree	9310195439	BCOM	2019-04-15
922	Shivani	7259876971	BCA	2019-04-15
923	Shravya	9740966640	BCOM	2019-04-15
924	bharghav	8762318390	BCOM	2019-04-15
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Search By Course BSC

Submit

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Total Amount: 29400 Rs

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926	Sandra marina antoly	9741508959	BSC	2019-04-15
947	Chinthan kumar	9481144349	BSC	2019-04-16
949	Akshatha	6362192598	BSC	2019-04-16
951	Sneha	9739373486	BSC	2019-04-16
953	Prethi	9880989616	BSC	2019-04-16
956	Vaishnavi n pai	9480033078	BSC	2019-04-16
957	Adarsh k	7996416646	BSC	2019-04-16
958	Abhijith	953518961	BSC	2019-04-16
972	Vignesh	7259175218	BSC	2019-04-16
989	mahadevi	0	BSC	2019-04-16
1016	chethan	9482035982	BSC	2019-04-16
1018	R vinayak	7259168796	BSC	2019-04-16

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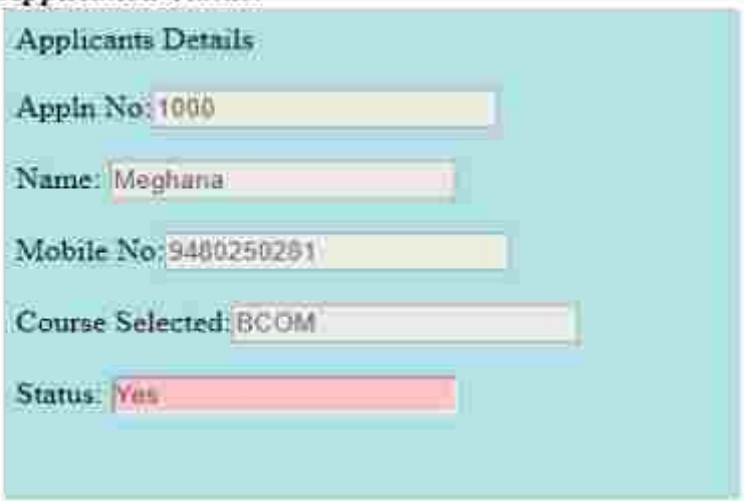
Application Status:



CONCLUSION

Application Portal is a web application that lets students apply for different courses online and check the status of the application.
This application also allows the staffs to quickly accept or reject the application status through online.

FUTURE ENHANCEMENT

- In future we can send notification to the applicants using mobilenumber.
- In future we can make complete admission procedure through online

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Text books referred

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Kamala Das and Women Empowerment

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Abstract:

Women are commonly portrayed as among the most oppressed people in the third world. All over the world women are always dominated by men on the basis of sex, gender and patriarchal views. The empowerment of woman begins when she becomes aware of the socio-psycho-cultural injustice that is being done to her and also how gender inequality and inequity affect her adversely in every sphere of her life. It starts when she becomes fully aware of her positive self-image, self-esteem, rights and duties, her capabilities and potentialities. The aim of empowerment of women is to empower women against patriarchy and its control and not against men. The idea is to provide both men and women with opportunities for their equal development. Women empowerment refers to increasing the spiritual, political, social educational, gender or economic strength of individuals and of women. It is the process of guarding them against all forms of violence. The poetry of Kamala Das extends our understanding of life, especially that of women's inward experience. Women's problems need a different lens and different semantic set to express women truly. Kamala Das is a liberated woman and a creative writer. It is undeniable that all the works of Das have stamp of her to identify herself and her liberated spirit. She was fighting for her life from the bondage of social values and morals which had been suppressing for a long time.

Keywords: *Kamala Das, poems, sexuality, rebel, self-expression, patriarchy, boldness and feminist.*

Women empowerment involves the building up of a society, a political environment, wherein women can breathe without the fear of oppression, exploitation, apprehension, discrimination and the general feeling of persecution which goes with being a woman in a traditionally male dominated structure. During the twentieth century, many Indian women poets have tried to voice their opinions through their writings. Some of these poets have been Toru Dutt, Sarojini Naidu and Kamala Das. This paper aims to explore the various aspects of Confessional poetry which I consider, as a way of realizing the empowerment of women with special reference to Kamala Das' poetical works. She seems to be a solitary visionary standing all alone and aloof like a feminine Columbus in the creative discovery of her passionate self. The poems of Kamala Das are a call to every Indian woman bogged down for centuries by age-old customs and time-honoured conventions.

Kamala Das was born in Punnayukulam, Trissur district in Kerala. She is the recipient of several prizes and awards: Asian World Poetry for Literature, Sahitya Academy Awards, and the PEN Asian Poetry Prize. She was shortlisted for Nobel Prize in 1984 along with Doris Lessing, Nadine Gordimer and Margaret Yourcenar. Her collection of poetry includes "Summer in Calcutta" (1965), "The Descendants" (1967), "The Old Playhouse and Other Poems" (1973), "Collected Poems"(1984). She has also a daring autobiography, "My Story" (1976).

Kamala Das is primarily considered to be a poet of feminine longings. Women are depicted in various roles like beloved, wife, sister, daughter, mother, mistress, grandmother and nymphomaniac. This picture of woman persona is really very complex. Her poetry reflects her restlessness as a sensitive woman who is moving in a male dominated society to champion the cause of woman. She has forcefully raised the voice against male tyrannies in her poems such as "An Introduction," "Summer in Calcutta", "Marine Drive," "A Relationship" etc.

In her poetry, one finds a woman being treated as a toy to play with. Woman figures in her poetry are just like a skeleton of flesh and bones. Kamala Das has not only portrayed the flux of mind and thoughts of a woman but also efficaciously projected the dreams and desires of Indian Woman. Kamala Das is pre-eminently a poet of love. Her poetry incarnates her quest for a fulfilling relationship and the anguish over her inability to find such a relationship inside or outside marriage. Her concept of love is all-inclusive where she wants not only physical but also emotional and spiritual fulfilment. Body- soul conflict also emerges as the central concern in many of her poems. Woman's instinctive fascination for man, her longing for a sacred and perfect love that goes beyond the joy of sex, the disillusionment that men only lust after her body can be seen in her

poems.The man-woman relationship in Kamala Das's poetry operates within this emotional triangle. Kamala depicts the entire class of women in Indian society. She herself expresses it when she affirms: ...."I am every Women who seeks love" (Summer in Calcutta)

Kamala Das rebels against the patriarchal forces imposing stereo typed role on women 'Dress in saris, be girl', a rebel against the male's inadequacy to provide a meaningful and fulfilling relationship. Kamala Das's poetry also accentuate women's psyche of rebellion against male supremacy and ego when she identifies love either with physical relationship or an unfulfilled longing. In 'A Man is a Season' she chides her husband for "letting your wife seek ecstasy in others' arms. There is no denying the fact that Kamala Das revolts against the masculine character of our civilization but she also shows her restlessness towards women's passive acceptance of subjugation as the appointed lot. In her poem "Afterwards" she gives voice to the secret hopes and fears of womankind when she says:

"Son of my womb,
Ugly in loneliness,
You work the world's bleary eye
Like a grit, your cleverness
Shall not be your doom
As ours was"(Summer in Calcutta)

Kamala Das has been celebrated as a 'champion of women's causes. Her writings reveal a strong feminist streak in various forms. Thevictimization of women is evident in her poems. She feels that the feminine mystique has always been exploited by man who treats her as a slave. The fact of male dominance has been reflected in her poem 'The Old Play House'. Like a feminist who seeks growth of self in a man-woman relationship, the poet went to her man:

"I came to you
But to learn
What I was
And by learning to grow."

Whenever she was with a man, she felt that it was only a violent physical relationship and the poet, always looked for tenderness. Kamala Das recalls the details of his sexual exploits with abhorrence. In 'The Swamp' she regrets:

"I am a puppet on his string and aver:
I shall rise one day
I shall stalk out of his bed."

Kamala Das exposes her restlessness of femininity in her poem "The Suicide" where she writes:

"But, I must pose I must pretend,
I must act the role of
A Happy Woman,
A Happy wife" (Descendants)

The contempt of woman's emotions is evident that even if a woman is not happy as a wife or as a woman she must pretend herself to be a happy wife. Kamala Das is not in favour of physical love that her strong husband showers or her rather she pines for emotional identity which is not afforded by him. The poetess hammers hard at her husband and articulates her intense desire of escaping from his clutches and attaining 'freedom'. This has been incorporated in the poem "Substitute":

Yet I was thinking, lying beside him,
That I loved, and was much loved,
It is physically thing, he said suddenly,
End it, I cried, End it, and let us be free.
This freedom was our last strange toy. (TheDescendants)

However, this 'freedom' does not provide her 'pride','joy' 'a sense of security' and 'a name' but in great despondency she spells out: After that love became aswivel-door, when one went out, another came in (Summer in Calcutta)

Kamala Das's poems are filled with a crystal-clear note and tone of a rebel woman as she speaks openly about her position in male dominated society. She has transcended the role of a poet and her books of poems become the language of a rebel woman who observes and examines the silences of Indian women and criticizes the patriarchal hegemony through her open and fiery lines. In Indian society where speaking of sex or passion is considered as dirty or taboo but Kamala Das uses the very things as medium of protest in her poems because these are the very things that the women are supposed to give unconditionally.She quite openly speaks about her subjugated position in society against patriarchal convention.She wrote chiefly of love, its betrayal, and the consequent anguish, and the Indian readers responded sympathetically to her guileless, guiltless frankness with regard to sexual matters. In "An Introduction" she rebels against those who ask her

"Don't write in English…
English is not your mother tongue."-
"Why not leave
Me alone, critics, friends, visiting cousins,
Every one of you-
Why not let me speak in
Any language I like."(An Introduction)

Though her language may sound funny because of half English and half-Indian but it voices her joys, longings and hopes and fits to her "as cawing is to crows or roaring to the lions."Then she describes her first encounter with a male as her body shows sign of changes- she became tall, her limbs swelled, and hair sprouted in her private parts.

She claims, "I was a child" and she asked for love and she was taken "into the bedroom and closed the door" after her marriage. She was not beaten there but her "sad woman-body felt so beaten" because she was not prepared for the significant changes that her body goes through because of pregnancy. "The weight of my breasts and womb crushed me. I shrank pitifully…" (An Introduction) So as a mean of protest like a rebel she wore a shirt, her brother's trousers, cut her hair short ignoring her womanliness against those who asked her to

"become a woman"-
"Dress in saris, be girl
Be wife…
Be embroider, be cook,
Be a quarreller with servants…
Be Amy, or be Kamala.
Or, better
Still, be Madhavikutty" (An Introduction,)

In "The Stone Age" Kamala Das frankly speaks about the futility of marital relationships where the husband takes the wife's identity and forced her to live in a dehumanized condition. According to Hindu beliefs marriages are made in heaven and marriage is the bonding of two souls for seven lifetimes. But the frequent use of "I" and "You" clearly indicates that there is no emotional bonding between them. She sarcastically calls her husband "Old fat spider, weaving webs of bewilderment" that snatched her full individuality and freedom and turned her into a lifeless showpiece of "a bird of stone, a granite dove" in his house. The husband almost ignored her comforts and wants and even disturbed her peace of mind through his inappropriate behaviour.

"You build round me a shabby room,
And stroke my pitted face absent-mindedly while
You read. With loud talk you bruise my pre-morning sleep,
You stick a finger into my dreaming eye."

So, the woman dissatisfied in her marital relationship goes against the moral code of society and seeks love through extramarital relationship "at another's door." She wilfully takes revenge against her husband who neglected and enslaved her to the position of lifeless showpiece. "For her ideal love is the fulfilment of the levels of body and mind. It is the experience beyond sex through sex. The tragic failure to get love in terms of sexual-spiritual fulfilment from her husband leads her to search for it elsewhere.

In the poem "The Freaks", shedepicts the torment and disappointment of a woman in sexual life through her confessional style. Society wants women to be submissive and passive in all aspects of life. A woman has to lead her conjugal life with a man with whom she has no emotional contact at all. But in this poem, there is a note of a rebel woman as in the very beginning of the poem the poet describes the man in question with some unattractive attributes. The woman is repulsive to her husband.

"He talks, turning a sun-stained
Cheek to me, his mouth, a dark
Cavern, where stalactites of
Uneven teeth gleam:..."

They want to make love and as he moves his fingers it arouses her "skin's lazy hungers" only but failed to communicate with her soul. her heart remains "an empty cistern". The image conveys her horror and repulsion in all its intensity. She feels that she may be unnatural and freakish because she does not behave like a normal submissive woman. So to hide her abnormality she puts on pose of "flamboyant lust". Like a submissive woman she does not remain quiet but speaks against the prevalent orthodox male dominion in societal conventions. Through the images of her repulsion and horror, she brings out emptiness of love and emotion and sterility of conjugal life in male dominated society.

In "The Old Playhouse" Kamala Das brings out the anxieties, frustrations and contemplations of a woman through the institution of loveless marriage. Through the image of a brilliant metaphor she points out the relationship between husband and wife through the historical phenomenon of colonialism with its practices and effects "You planned to tame a swallow, to hold her In the long summer of your love so that she would forget Not the raw seasons alone, and the homes left behind, but Also her nature, the urge to fly, and the endless Pathways of the sky." (The Old Playhouse)In her confessional tone of rebellion against patriarchal dominion she openly and unabashedly describes the position of woman and openly talks about sexuality. She becomes "the first Hindu woman to write frankly about sexual desire"

"You dribbled spittle into my mouth, you poured
Yourself into every nook and cranny, you embalmed
My poor lust with your bitter-sweet juices."(The Old Playhouse)

In "The Sunshine Cat" the poet mentions the pathos of a woman who failed to get real love either from her husband or from her lovers. They all loved her but denied her the spiritual thrills of love. Unfortunately, her husband whom she loved most even failed to satisfy her emotional needs. In the poem "The Prisoner" the poetess brings out the position of a woman through the comparison between a convict and a woman who indulged in sexual act. The convict in prison studies the conditions of its boundaries to escape and the woman indulged in sexual activity studies the trappings of her lover's body to escape from its snare.

As the convict studies His prison's geography

"I study the trappings
Of your body, dear love
For I must someday find
An escape from its snare."

Kamala Das feels that she was forced and conditioned to become a wife to perform the household chores and to serve in his needs .This kind relationship between husband and wife not only reduced her position to insignificant but also suffocated her physically and psychologically.

"Cowering Beneath your monstrous ego I ate
The magic loaf and Became a dwarf.
I lost my will and reason, to all your
Questions I mumbled incoherent replies."(The Old Playhouse)

In "The Looking Glass" Kamala Das searches for self-identity in the male dominant society where a woman has to give up everything to satisfy the male ego by accepting masculinity as superior to femininity. Dr. Sushil Kumar Mishra in his research article mentions that in the poem "the poet has presented utter sense of despair and dejection caused by man's dominance and exploitation."

To conclude it can be said that the poems of Kamala Das has a clear note of a rebel woman who raises her voice against the insensible and dehumanized treatment of women in all aspects of life in a male dominated society. "Her poems are revolt, and the revolt is the outcome of all her dissatisfaction and psychological traumas" (Sheeba).Throughout her poems, she speaks in an "aggressively individualistic" tone against the male dominion that makes the life of a woman passive and submissive to insignificant and lifeless. She examines the silences of women in male dominated society, feel the alienation of self and the burden of becoming a woman. She even experiences the lover's betrayal and dehumanized treatment of her husband. However, she does not remain quite like a submissive and obedient wife but questions the conventional role of woman in family and society and rebels against the patriarchal mores of society through fiery voice in her poems. Though apparently it seems that Kamala Das wrote about her life and her experiences because of the repetition of the first person singular "I" in her poems but it is not only about her life and her experience, they become the voice of every rebel Indian woman.

Kamala Das, in her poems, gives the first person account of women's sexual encounters; description of the private lives of women .This pictures the suffering of women. A close examination of the contribution made by Kamala Das through her poetry is specifically the relationship that prevailed between man and woman. As a woman she has been intensely conscious of herself; she is found focusing attention on woman in her different roles as a wife, a mother, a mistress and even as a prostitute. Her poetry concentrates on her own self-discovery and expressing the different layers of hypocrisy which got over quoted in today's life and she has been bitterly criticised for that by the high preachers of social morality. Her feelings and emotions are based on actual experiences of life. It would not be wrong to point out that whatever she has written is in confessional tone, exposing the raw moods of experience. In nutshell, the poetry of Kamala Das advocates freedom and self-respect for women. Kamala Das staunchly etches the emotional picture of woman and succinctly reiterates that she should not be treated as a commodity or a subaltern. She should be bestowed with respectable position in the society.

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Feminist Perspective in Shashi Deshpande's "That Long Silence"

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Abstract:

Feminism as movement might have originated in the West but with the deterioration in the status of women in India and the subsequent efforts made during the freedom struggle to pave the way for equal access to education and equal status, there arrives a need for feminist studies. Feminism has always meant independence of mind and spirit and body. Its theory is that men and women should be equal politically, economically and socially. It is difficult for a common man to understand female psyche in totality. Shashi Deshpande derives the title of her novel "That Long Silence" from the classic understatement by Elizabeth Robins made in speech to a world body. "That Long Silence" comes relatively close to real life experience. The novel achieves greater credibility from the fact that Jaya, the Protagonist, is a very well-read person, possessing a literary sensitivity which corresponds with her fictional role. Deshpande may not be a formal feminist in strict sense of the word, but it must also be observed that feminism can mean different things to different people.

Key words: *Feminism, discrimination, silence, exploitation and tradition.*

Shashi Deshpande was born in Karnataka and educated in Bombay and Bangalore. She published her first collection of short stories in 1978, and her first novel, 'The Dark Holds No Terror', in 1980. She won the Sahitya Akademi Award for the novel "That Long Silence" in 1990 and the Padma Shri award in 2009.

A true artist must have the capacity to have an insight into life and should be aware of his surroundings and environment. Shashi Deshpande was born and brought up in India and in an Indian family. She lives in India and she writes for Indian readers. She is concerned about Indian people and explores the complexities of their lives. Preference of male children, discrimination against girls and denial of freedom to choose the partner of life, restrictions on the choice of occupation are some of the ordeals a woman in India passes through. Gender discrimination takes a major role in Indian society.

In "That Long Silence", the writer has presented this phenomenon through the character of Jaya, who is known by two names; Jaya and Suhasini. Jaya, which means victory, is the name given by her father when she was born, and Suhasini, the name given after her marriage which means a "soft, smiling, placid, motherly woman". In the Indian context, once a girl gets married to a man, whether it be a love marriage or an arranged one, the husband takes complete control over her. Whether the husband follows the right path or wrong one, she has to blindly follow in his footsteps. Due to her sensitive nature, Jaya is very particular about moulding her tastes in order to suit those of the rest even if her superior intellect is not satisfied.

Shashi Deshpande's "That Long Silence" deals with the struggle of women in the tradition-bound, male-dominated, middle-class urban contemporary society in India. Deshpande derives the title of the novel "That Long Silence" from the epigraph of speech made by Elizabeth Robbins to a World body. "That Long Silence" is the story of Jaya, the protagonist, who remains a sufferer in her childhood and adulthood. As a young girl, she is chilled by her grandmother for her inquisitive and witty nature. For seventeen long years, Jaya managed to suppress her feeling, thinking that it is more important to be a good wife than a good writer. She perhaps would have remained in the shadow of her husband Mohan, for the rest of her life if it had not been for the jolt she received as her husband was arrested for misappropriation. Deshpande makes Jaya a writer of woman's magazine fiction. In Jaya's stories they lived happily even after although she knows the falsity of the view of life. Jaya is representative of the urban, middle-class women exposed to liberal western ideas. But she is unable to free herself entirely from the clutches of male chauvinist ideas. These ideas are a part and parcel of her culture.

The novel "That long Silence" is about a married couple - Jaya and Mohan who get separated in course of time and about Jaya who observes silence all through her married life only to break it in the end. The novel speaks of Jaya's disappointment in married life and her suffering in isolation. The husband and wife perform their duties mechanically. Jaya is also presented in the image of a worm crawling into the hole. She keeps her inner talent of creative writing to herself. She suffers the monotony of life caused by household activities. As a

writer, she has to present her views and ideas to the readers but she remains silent. Once after her marriage , when Jaya was on the threshold of acquiring name and fame Mohan displays his intolerance about a particular story written by Jaya. She knows well that the writer in her could not come to light because of her husband. Jaya did not want to annoy Mohan and take the risk of disharmony in her married life. To satisfy Mohan's ego and expectations, Jaya is forced to curb her own creative genius.

Jaya, the protagonist is well educated and well - cultured leads a quiet and contented life. But later hardships of life fiercely jolt her out of her complacency into gloomy state. Her silence is indication of alienation and apprehension rooted in every woman's soul in different forms. Her silence is often misunderstood by men as woman's contentment. Jaya, as a wife of Mohan begins her married life and struggles to put herself into the traditional mould. After the marriage, Jaya looks totally different. Jaya becomes Suhasini after her marriage. The high spirited and courageous Jaya is reduced to a proud wife and mother. She passes through excess of self-doubt, fears, guilt, smothered anger and silence towards articulation and affirmation. Jaya becomes a great loss to the society as her talents are just confined to the kitchen and household chores. The novel begins with Jaya silently following her husband Mohan to their Dadar flat.Jaya has stoically stood behind her husband for seventeen long years is shattered to hear the news that her husband is caught accepting bribe which she could not believe. Jaya begins her married life thinking that "A husband is a sheltering tree." An educated independent Indian woman like Jaya finds it difficult to reconcile herself to a new situation when her husband ignores her and crushes her ambition.

Jaya realizes that silence is the key to happiness. Though Jaya does not hold any good opinion about Vanitha mami yet she sincerely follows her advice and tries to perform her role as a true wife and when it comes to the question of a choice between her husband and family, and herself as an individual she unhesitatingly chooses her husband and family. She learns to suppress her own wishes and act according to her husband's wishes. To please her husband, Jaya appears to be a contented house wife married to an apparently caring man and having two normal healthy children.Jaya has friendship with Kamat, her neighbor. Kamat, unlike Mohan, is not good looking nor well groomed man. He is neither wealthy nor socially distinguished. But he is an Intellectual whose life is structured to loneliness, Jaya feels attracted towards him due to his intelligence. She very freely shares and exchanges her ideas with him.

As days pass by, Jaya gets suffocated with her own silence. She begins to write light humorous pieces about the travails of middle class housewife under an assumed name. But her stories do not impress her readers and the reason being, lack of strong emotions, according to her neighbour and friend, Kamat. Kamat unlike Mohan is a bitter critic and tells her how she could make them "forceful and hitting." Though Kamat knows full well that Jaya is capable of writing better stuff, he openly scoffs at her writing style. She feels totally at ease in friendship with him.Kamat clashes with Jaya's image of wife and mother. She feels so comfortable in his company which she does not experience when she is with Mohan. Their relationship develops into physical attraction. At one moment when Jaya recollects her father's death and becomes emotional, she finds herself in Kamat's arms. Kamat tries to console her. Jaya responding to his touch, comes unconsciously closer to him "There had been nothing but an overwhelming urge to respond to him with my body, the equally overwhelming certainty of my mind that I would not do so." But Jaya overcomes her desire only to safe guard her marital relations with Mohan.

Jaya suppresses her creative genius only to satisfy Mohan's ego and suffers silently. She has deliberately censored all the anger from the 30 story which she has made mostly impersonal. Moreover Jaya seems to approve her husband's opinion when she argues with Kamat "A women can never be angry. She can only be neurotic hysterical, frustrated." But Kamat cautions her "It will drag you down into a soft, squishy bog of self-pity. Take yourself seriously, woman. Don't skulk behind a false name. And work - work if you want others to take you seriously." She feels heart broken when Kamat suffers alone, unattended and dies suddenly. In her anxiety to perform her role as perfect wife and a caring mother, Jaya's identity is pushed to the background. She is transformed from a fiercely independent woman, to a dependent, helpless woman who needs male support at every stage of life. She compromises her stand for she is taught the importance and necessity of stable marriage and family. Jaya later starts writing under the title "Sita" only to satisfy people. Jaya receives a good response from readers and approval from her husband.

Mohan easily takes up the role of a protector, provider and custodian without trying to understand the real nature of her silence. "May be she had been an animal, only a nice obedient, domestic one, sitting on a cushion, doing as she was told. And in return she had been fed and sheltered. " Today's woman is obviously not just satisfied with the security and comforts of marriage. She wants recognition and respect as an independent entity, and does not like to be relegated to the position of a mere house keeper or even a breeder. The material comforts like food, clothing, shelter and even ornaments fail to keep her chained to her home and husband if she is neglected or taken for granted. Jaya when lives in isolation in her Dadar flat, probes into her long moments of silence. Away from her children and her husband, Jaya understands clearly the many aspects of her life and relationships that she has avoided or failed to realize earlier. Now she could take decision to write as she wishes. She says: "Well, I've achieved this. I'm not afraid anymore." Seeing the indifferent attitude of Jaya, Mohan accuses her of being cold towards him, especially when he is facing the biggest crisis of his professional life. His accusations make her hysterical and she bursts into a loud laughter. This hurts Mohan and he leaves the home without a word. To add to her despair, Jaya receives a message that her son Rahul who was on a holiday trip with his family friends was lost. There is no one who can console her.

It is here that Jaya tries to connect her past and present and analyses the situation and comes out of her emotional upheaval. Jaya has accepted mutely all these years in married life. She thinks she resembles Sita and Droupadi. Her dream is shattered when her husband Mohan is asked to leave his job while allegations of business malpractice against him are being investigated. Further, Mohan bursts out saying- "I did it for you, for you and children." Mohan even thinks of going underground and reappear when the enquiry is put off. He thinks that Jaya would accompany him like Sita, Savithri and Droupadi.Later Rahul returns.

The novel besides Jaya has also portrayed several other characters like Kusum, Jaya's mad cousin, Mohan's mother and many other victims of patriarchy and also their own silence. The novel grippingly discusses the plight of women who never broke their silence.Shashi Deshpande points out how even cultured society has been silent on woman's sufferings. For example, Jaya discovers that she does not figure in the family tree which her uncle, Ramu Kaka has prepared with great care. When Jaya asks her uncle why her name is not included in the family tree, he replies: "How can you be here? You don't belong to this family. You are married; you're now part of Mohan's family. You have no place here." Jaya's rational mind is baffled by the illogical argument because the family tree does not contain the name of any woman. Jaya is unable to digest the meaningless practice of the society where woman is totally delineated and ignored in the male-dominated society. Even highly educated and capable woman is invariably affected by her social status, as this male-dominated society treats her as an object or a possession but never as an individual.

Jaya becomes a show piece after her marriage. At times Jaya's social and familial responsibilities disturb her severely. She fails to establish a normal relationship with her husband. However, she overcomes this crisis after struggle and realizes that negation of one's emotional needs never makes a woman attain self-hood. Jaya feels that right decisions are required for peace, harmony and fulfillment in life. "That Long Silence" presents also other stereotype characters. The character of Kusum is portrayed as a counter-foil to Jaya, who mirrors the darker side of her psyche. Jaya tries to define herself negatively through the insanity of her mad cousin, Kusum, who is a deserted wife. Kusum, carrying an "aura of defeat about her from her birth" represents a life- style of women who are aware of their low position in their own society. Jaya accommodates and takes care of the insane Kusum despite several serious objections from her elders. After sometime when Kusum improves her health, Dilip, her brother takes her home. But unfortunately she commits suicide a day before her husband is supposed to take her home to establish his family. She symbolizes those women who submit to insults, injuries and humiliations with patience as they have been trained to have hidden faith in the virtues of patriarchy rather than faith in their own strength.

Vanitamami, represents another facet of the traditionally suppressed woman. In her entire life the only protest that she could register was the adoption of Kusum. Her ideas about marriage and husband are quite strange. She advises Jaya to tolerate her husband even if he would develop extra marital relations with other women and accept them as his mistress. She performs a number of pujas and undertakes fasting to conceive. The image of Saptagiri ajji also strengthens the traditional concept of docile wives and silent women. This widow is totally confined to her room. She is shocked and indignant at Jaya's behaviour and attitude towards

her husband. Mukta, Jaya's immediate neighbour at her Dadar flat, widowed at a very young age lives with her parents and a rebellious daughter, Nilima. Mukta is economically independent, firm and competent of handling any situation and yet she believes in superstitions. She expects her daughter to be like her. But Nilima is indifferent and rebellious. Muka is to some extent pious and Jaya is shocked at her futile self-imposed suffering by undertaking fasts for seven days of the week. Mukta rarely had her normal meal.

Jeeja, Jaya's maid servant is another typical example of suppression. She is battered about by her good for nothing drunken husband. She supports him without any protest and even provides him liquor with her hard-earned money. She bears no ill feeling though he takes up another woman. Nayana, the help-maid also views life with a calm impartiality. She craves for a male child, not because she expects any help from him in old age, but because she does not want her child, her daughter to be discriminated and harassed by the society. She is confident that a boy shall definitely enjoy at least status and maintain individuality, which are denied to a girl.

The novel also reveals all forms of oppression. Vimala, Mohan's sister tells the pathetic story of Mohan's mother looking at the framed photograph of Mohan's parents Jaya also feels, "The mother looks like any other woman of her time, staring blank faced at the world, the huge kum-kum on her forehead blotting out everything in that face but the blessed woman who dies with her husband yet living". This poor lady miserably suffered the domination of her senseless husband. She had to wait for him late in the night, and to cook the rice for him again as he wanted it fresh, hot and from an untouched vessel, as he refuses to eat what he called, "your children's disgusting leavings." The wife's long waiting for her husband in the night becomes a futile exercise when the man gets angry for not serving fresh chutney to eat, and throws the heavy brass plate at the wall and leaves the house in anger. This poor lady silently picks up the plate, removes the food scattered on the floor and sends her son, Mohan to the next door to borrow some chilies. She patiently and silently prepares fresh chutney, lights the fire, cooks rice again and sits down waiting for her husband. The children wake up to the unexpected storm that is created in the house, finally drift off to sleep again, "she was still sitting there in front of the fire, silent, motionless." The cruelty of the husband and the insensitivity of the son clearly show the discrimination and insubordination of women. Even her educated son who witnesses the incident never finds fault with his father .The novelist saw despair so great that it would not voice itself. Deshpande tells in the novel "I saw a struggle so bitter that silence was the only weapon. Silence and surrender."

Mohan" s sister Vimala is another victim of suppression and exploitation in this society. These suppressed women seek consolation in their obsession, human bondage leading to social degradation, ill-health and death. She is compelled to sacrifice her own needs and interests to those of her family. She has to bear her exploitation and suffering without protest. Silence is the only option left for such women in this rude patriarchal society. Women suffer and die without uttering a single word of protest. Vimala, Mohan's sister suffers from heavy bleeding and dies of ovarian tumor. She does not even disclose this to her mother-in-law. The novel attempts to portray the sufferings and deprivations of women in general by presenting various characters as stereotyped representatives of traditional womanhood. The strength of the novel lies in its bold analysis of the realities about the Indian womanhood. The novel seems to advocate that woman should be assertive and keep individuality and take her own decisions about her life and future. Thus the paper has probed into the inner most recesses of women to give a better perspective of their life.

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Role of women in Lahiri's "The Namesake" and "Unaccustomed Earth"

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Abstract:

The feminine consciousness is felt in almost all the novels JumpaLahiri. She offers us a glimpse into the lives of ostensibly content housewives who are nevertheless suppressed under the weight of male dominance. Her protagonists are stronger. Lahiri explores the cross-cultural experiences of dislocated women. She also highlights the maze of cultural plurality in her novels. The issues of identity and cultural clashes have already been vastly explored in her novels. In the era of globalization liberal thought was given importance all over the world and it was propagated by western education and culture. The women novelists revealed the new image of women struggling against the oppressive social norms of the western society. The "new woman" is free from conventional social and moral constraints. She possesses a heightened sense of individuality and self-awareness. She might belong to middle class or upper middle class, well-educated and self-conscious caught in dilemma, she struggles for fulfilment of her individuality. This is given utmost importance in her novels.

***Key words**: Feminine, patriarchal, conventional, oppression and diaspora.*

NilanjanaSudheshnaLahiri was born on July 11, 1967, in London, England, to mother Tapati and father Amar, a Bengali couple who immigrated to the United Kingdom from Calcutta, India. Lahiri's father, a university librarian, opted to move to the United States for work, eventually settling in South Kingstown, Rhode Island, when she was still a small child. JhumpaLahiri is a Pulitzer Prize-winning author known for works of fiction like "Interpreter of Maladies", "The Namesake", "Unaccustomed Earth" and "The Lowland". Lahiri is renowned for the elegance and poignancy of her prose, with the ability to subtly, mesmerizingly build an emotional connection to characters.

As a popular young writer of Indian background, she is a sort of representative figure for the female predicament in Diaspora. As a Diaspora writer, she deals with a multicultural society both from "inside" and "outside" seeking to find her native identity as well as the new identity in the adopted country. JhumpaLahiri's feminist approach is somewhat different from the other diaspora writers. She represents the different image of Indian woman and her marginalization in cultural context. Her female characters are not subjected to any economic exploitation by the patriarchy. Most of the women characters in her works belong to diaspora communities facing cultural dilemma.She presents the different aspects of feminine identity.

The novel"The Namesake" deals with the diverging experiences of two generations of immigrants. This novel can be said as a tribute to Indian Women who leave their country and spend their whole lives at home for the sake of husband and children. This paper focuses on the Diasporic women in the novel especially Ashima. She is a true representative of Indian womanhood. "The Namesake" is the story of AshimaBahaduri who becomes AshimaGanguli after her marriage with AshokeGanguli. After marriage they move to Boston. When the book opens we see an upset, homesick Ashima who is emotionally detached from her parents and other family members. She is trying to recreate the taste of her favourite Indian snack, thereby trying to recreate the past. Ashima represents what AvtarBrah terms 'the homing desire of the migrant'.

Ashima's immigrant experience, identity problems, the tension between India and the United States and between family tradition and individual freedom, the generation gap, the relationship between parents and children, the uneasy status of the immigrants are the major themes dealt with in "The Namesake". The first generation especially Ashima finds it very difficult to accustom to the host culture. "The Namesake" focuses on the journeys which are undertaken by AshimaGanguli both mentally and physically. Ashima was cent percent true to the roles assigned to her as a daughter, granddaughter, wife and a mother and emerges a true winner. The only reason why Ashima found herself in America was her marriage to Ashoke. Pregnancy period was hard for Ashima as she was alone and no one was there to soothe her in the alien land. She always felt lonely and the surroundings were unfamiliar which nearly killed her feelings. Ashima was the only Indian in the hospital

which made her more uncomfortable. She was afraid to raise a child in a country where she herself was an alien.

Ashima is nostalgic about her family in India. Once she says to Ashoke "I am saying I don't want to raise Gogol alone in this country. It's not right. I want to go back". Hearing this Ashoke feels guilty. Ashima is determined to face everything. She bears the pain and gives birth to a baby boy alone in the alien land. She was ready to suffer anything for the sake of her child's good future. She becomes depressed again when she was unable to hold fast to the practices of her culture i.e. assigning name to new born by her grandmother. After coming back home from hospital she becomes more restless as she has to manage the baby alone and this finally lends to sleep deprivation. Later, she gives birth to her second child and she adjusts with every situation for the sake of her children. Unlike other Indian mothers, Ashima gives full freedom to her children. She taught them Indian culture but never forced them to practice it. After her husband's death Ashima becomes exhausted and again she feels lonely. She feels that now she had become alone permanently. Another problem which comes to her life is her son's marriage.

Gogol marries a Bengali girl Moushumi which was Ashima's choice.Moushumi is a new generation Bengali born and raised in America's multicultural society and is a peculiar combination of Indian, American and French identities. Her education at New York University, her frequent visits to France and England changed her perspectives and her native cultural consciousness. She has little appreciation for India or Indians and is more westernized in her attitude. She has privately vowed that she would never be fully dependent on her husband. Their marriage relationship that developed in America's multicultural milieu ends in divorce.

Sonia, Ashima's daughter is the other Second generation immigrant. When Sonia visited Calcutta, she did not feel it as their home. Displacement and marginality in Sonia's case however trigger a less sense of alienation and nostalgia in her. She marries her boyfriend a half Chinese boy Ben. She decides to look after her mother after her father's death. Woman in Indian English fiction is depicted as the silent sufferer and upholder of the tradition and traditional values of family and society. Born and brought up in India,Ashima too upholds Indian values, traditions and culture even in America. For Ashima, her life is her husband and everything which belonged to him are priceless but for Moushmi things related to Gogol were mere commodities without any importance. Ashima is a true representative of Indian womanhood for whom marriage is divine and her husband the embodiment of all positive qualities.

Ashima always remembered to follow the words of her elders "not to eat beef or wear skirts or cut-off her hair or forget her family". They are considered as silent sufferers who have to dedicate their whole life for the sake of family. The second generation never tried to follow the culture of their parents. They live a life of their own. Like a traditional Indian wife in appearance and in ideologies, Ashima's life revolves around her husband and children and she sacrifices all her comforts for the sake of her family. She is true to her role assigned to her as a daughter, granddaughter, wife and a mother and emerges as a winner.

The title story "The Unaccustomed Earth" presents the shades of complexity in the relationship of a retired father and his daughter Ruma. Ruma is living in Seattle with her American husband and son Akash. After her mother's death, her father retires. In order to do away with isolation, he travels distant places of Europe, where he had never been. Before his next visit to Prague, Ruma's father visits her in Seattle. The whole story revolves round his visit to Seattle where the inner workings of both of the characters are minutely depicted. Ruma and her father are the two central characters who live their lives in their own ways and do not want any interference. The complexity in the relationship between Ruma and her father is depicted through a psychological analysis. Ruma's father sells the large house that he shared with his wife and shifts to a condominium. On one European trip, he meets Mrs.Bagchi, a Bengali woman who was a young widow at the age of twenty six. He establishes propinquity and hides this new relationship from Ruma.Ruma's relationship with her father has not been harmonious.

"Unaccustomed Earth" also deals with the generation gap, exposing the oppositional experiences of the first and the second generation immigrant.Lahiri also deals with the cultural division between American-born Indian children and their Bengali parents in this novel. Ruma's memories introduce us to her late mother who was an expatriate by nature. She died of heart failure as an aesthesia triggered the anaphylactic shock during her gallstone surgery. Throughout her stay in America, she clings to her ex-status. She longs for the regular trips to

India. Being the propagator of her traditions and nationality, Ruma's mother sincerely performs her duties as a wife and mother, and tries to extend her culture, ethics, religion and language to her children.

Even in America, Ruma's mother continues to dress in her bright colour saris, her dime-sized maroon bindi, and her jewels. She wants her children to learn Bengali. She had been strict so much so that Ruma had never spoken to her in English. Being an outsider and a victim of culture-based marginalization, "She is on the cusp created by the intersection of two cultures, which one identifies as the space of the exile". She continues to occupy this in-between space, quite distant from the present and clogged in the past. Swamped in her old culture she takes shelter in a multi-cultural existence. She manages to keep the Indian habits and lifestyle surviving in America. She feels outrageous at Ruma's decision to marry an American which jeopardizes her mother's Indian identity and values. As a result, she continues to warn Rumaagainst it: "You are ashamed of yourself, of being Indian that is the bottom line". Therefore, Ruma remains an emigre and never becomes an immigrant like Mrs.Bagchi. Mrs.Bagchi marries a boy she loved, but after two years of marriage he gets killed in a scooter accident.At twenty-six, she moves to America to decline her parents' decision of her remarriage. Being the victim of gender-based marginalization, she breaks all traditional bounds by adopting American lifestyle and subverts the patriarchal restrictions by deciding to remain single the rest of her life. She lives all alone and teaches at Stony Brook University. She wears Western clothing, cardigans and black pull-on slacks and styled her thick dark hair in a bun. Therefore, her immigrant character is contrary to Ruma'smothers who yearned for those trips to India and continued to dress in a sari.

Mrs.Bagchi has completely assimilated with the American culture by negating the insider-outsider conflict. She enters into a dialogic relation with the native culture and moves away from the periphery towards the centre. For Mrs.Bagchi identity is an invention: "which is never complete, always in process, and always continued within, not outside, representation." Breaking the Indian patriarchal code of a woman being an obedient daughter, a sincere wife and a responsible mother, Mrs.Bagchi lives a life free of any such limitations. Mrs.Bagchi's experience of displacement and her dual marginal status do not degenerate her identity but coax her to restructure a new self. Mrs.Bagchi stands for the opposite choice in life from Ruma's mother and all the other female characters in "Unaccustomed Earth". She immigrates to the USA by herself, completed a doctorate in Statistics and has been a lecturer at an American university for close to thirty years.

In her novels, Jhumpal.ahiri represented Indian women in manifold and conflicted position. She shows a considerable degree of cross-cultural sensitivity and a kind of ironic modernity, because of which she serves to separate the traditional from the westernized characters in her fiction. Her women characters are especially caught in immigrant situations. She has portrayed some of the problems engendered by the experience of migration and diaspora such as displacement, fragmentation, discrimination, marginalization and crisis of identity. While the first generation female immigrant feels proud of their cultural past, the second generation expresses its aberrations and deviations. In the process of self-actualization the former do not like to violate the cultural dignity of their past while the latter neither demand it nor demonstrate it, living as they do in the American plenitude of cultural availability.

Time also plays an important role, as gender issues involving first generation female immigrants might be rather different from those which the second generation female immigrants face. This difference may be related to the fact that first generation immigrants often have stronger connections and memories of their homeland than those of second generation. Unaccustomed Earth focuses on immigrant's adulthood and mixed marriages. Ruma, in the title story, marries an American and her relationship with her widowed father is fragile. All these culturally-exiled characters struggle initially to accept either the native or the adopted culture but later they decide to move on with the culture of the settled country as they have had enough of humiliating experiences in every phase of their lives.JhumpaLahiri sketches her characters in a very realistic manner.

The three important women of the short story, Ruma, Bagchi and Ruma's mother represent different key aspects of Indian diasporicwomanism. In the characterization of Ruma, all three key aspects can be found: feminism, womanhood and motherhood. Lahiri has portrayed efficiently and effectively the problems of immigrants in the migrated country, even after having found a place to settle in. She projects the difficulties faced by an Indian wife in a foreign culture. Living in the foreign land, Lahiri's female characters preserve their selves and try to establish their own identities as an Indian woman.

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International Journal of Humanities and Social Science Invention (IJHSSI)
ISSN (Online): 2319 – 7722, ISSN (Print): 2319 – 7714
www.ijhssi.org ||Volume 9 Issue 6 Ser. IV || June 2020 || PP 07-09

Morality, Happiness and Kural Literature

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ABSTRACT: *Morality concerns what is 'good or bad' or 'right or wrong' in human character and behavior. A moral person is one who chooses the 'right' and 'good' character and behavior over the bad. Happiness is a mental or emotional state of well-being. We all want to be happy. But how do you achieve it? Even if you don't have much happiness in your life, there are some steps you can take to increase your chances of finding it. They say success doesn't cause happiness, happiness causes success. Life is better all around when you are happy. And religion, of course, can provide such purpose for many people.*

KEYWORDS: *motality, positive, happiness, ethics, virtue and Thiruvalluvar.*

Date of Submission: 07-06-2020 Date of Acceptance: 22-06-2020

Many religions have value frameworks regarding personal behavior meant to guide adherents in determining between right and wrong. There exists a positive relationship between morality and happiness. Many philosophers hold that happiness result from morality.It is a virtue that is achieved after living uprightly. Morality can be defined as the state of being upright. It is acquired from living according to the moral standards and values of a society. Morality is a good judgment of behavior that distinguishes between good and bad decisions, actions, and general way of life.

Kant says that morality is not about becoming happy but rather about becoming worthy of happiness by heeding the call of duty. And those who do so can expect, with some level of certainty, that they will in fact attain happiness. Morality is not the doctrine of how we may make ourselves happy, but how we may make ourselves worthy of happiness. The purpose of morality is to teach you to enjoy yourself and live.This paper will look at the meaning of happiness, morality and religion and why many philosophers hold that in order to be happy, one has to be moral.

Happiness is a state of being contented with life and the progress one is making in life. According to Aristotle 'Happiness 'is not pleasure nor is it virtue. Happiness depends on acquiring a moral character, where one displays the virtue of courage, generosity, justice, friendship, and citizenship in one's life. Plato maintains a virtue –based' eudemonistic' conception of ethics. That is to say happiness or well being is the highest aim of moral thought and conduct, and the virtues are the requisite skills and dispositions needed to attain it.

Human happiness depends on the wide range of factors. Some of them are common to all individuals while others are specific. Good deeds make us feel better. It happens when we act fulfilling our moral standards. Plato argued that those who are happy are moral.' Moral' refers to what societies sanction as right and acceptable.It is good to understand that, for one to be happy, he must set realistic and achievable goals which he will be able to achieve within a given time limit.

All of us are expected to be responsible and accountable for our actions so that they do not harm anyone. We should follow our conscience in all our actions and decisions. Morality ensures that, people live in harmony with one another and treat each other with respect. It is also through morality that we are able to maintain a good relationship with our creator. Morality plays a huge role in our everyday decisions, it makes us good not only to ourselves but to the people around us (Hare 60).Fulfilling the purpose of life is important. Moral excellence can contribute to a happy life. Thus, being a moral person is essential to living a life of happiness. A person achieves happiness by possessing the dispositions (i.e. tendencies) to make the right choice at the right time in the right way.

Virtue ethics are normative ethical theories which emphasize virtues of mind, character and sense of honesty. Virtue ethicists discuss the nature and definition of virtues and other related problems that focus on the consequences of action. These include how virtues are acquired, how they are applied in various real life contexts, and whether they are rooted in a universal human nature or in a plurality of cultures. Virtue is generally agreed to be character trait, such as a habitual action or settled sentiment. Specifically, a virtue is a positive trait that makes its possessor a good human being. A virtue is thus to be distinguished from single actions or feelings. Rosalind Hursthouse says:

"A virtue such as honesty or generosity is not just a tendency to do what is honest or generous, nor is it to be helpfully specified as a 'desirable "or 'morally valuable 'character trait. It is, indeed a character trait—that is, a disposition which is well entrenched in its possessor, something that, as we say "goes all the way down", unlike a habit such as being a tea drinker—but the disposition in question, far from being a single track disposition to do honest actions, or even honest actions for certain reasons, is multi-track. It is concerned with many other actions as well, with emotions and emotional reactions, choices, values, desires, perceptions, attitudes, interests, expectations and sensibilities. To possess a virtue is to be a certain sort of person with a certain complex mindset. (Hence the extreme recklessness of attributing a virtue on the basis of a single action.)

Practical wisdom is an acquired trait that enables its possessor to identify the thing to do in any given situation. Unlike theoretical wisdom, practical reason results in action or decision. As John McDowell puts it, Practical wisdom involves a "perpetual sensitivity" to what a situation requires. There are several lists of particular virtues. Socrates argued that virtue is knowledge, which suggests that there is really only one virtue. The Stoics concurred, claiming the four cardinal virtues were only aspects of true virtue. John McDowell is a recent defender of this conception. He argues that virtue is a "perpetual capacity" to identify how one ought to act, and that all particular virtues are merely "specialized sensitivities "to a range of reasons for acting.

Thiruvalluvar, commonly known as Valluvar, was a celebrated Tamil poet and philosopher. He is best known for authoring the *Thirukkural*, a collection of couplets on ethics, political and economical matters, and love. The text is considered the greatest work of the Tamil literature and one of the finest works on ethics and morality. He is known by numerous honorific designations, such as Saint, First poet, Dive poet, Brahma, and Great Scholar.

Much of the information about Valluvar comes from legendary accounts, and little is known with certainty about his family background, religious affiliation, or birthplace. The life, culture and ethics of the Tamils are considered to be solely defined in terms of the values set by the Kural literature. The government and the poet of Tamil land alike venerate Valluvar and his work with utmost reverence. Various claims have been made regarding Valluvar's occupation. One tradition claims that he was a Paraiyar weaver. Another theory is that he must have been from the agricultural caste of Vellalars because he extols agriculture in his work. S. Vaiyapuri Pillai derived his name from "valluvan" (a Paraiyar caste of royal drummers) and theorized that he was 'the chief of the proclaiming boys analogous to a trumpet major of an army.

Thirukkural emphasises on the vital principles of non – violence, vegetarianism, casteless human brotherhood, absence of desires, path of righteousness and truth, and so forth, besides covering a wide range of subjects such as moral codes of rules, friendship, agriculture, knowledge and wisdom, sobriety, love and domestic. The *Thirukkural* has influenced several scholars across the ethical, social, political, economical, religious, philosophical, and spiritual spheres. Thiruvalluvar said that righteousness yields good reputation and wealth. True moral integrity lies in being flawless in thoughts. Righteousness is all about removing the four flaws – envy, desire, anger and harsh words. True joy blossoms only due to righteous deeds all else cause unhappiness and disrespect. The only way to live is to live righteously. Here are few couplets of Thiruvalluvar which say:

"It is compassion, the most gracious of virtues,
Which moves the world"?
"The immoral can no more earn respect"
"Those are fools however learned
Who have not learned to walk with the world".
"Although an act of help done timely might be small in nature, it is truly larger than the world itself".
"The wound made by hurting with fire will heal but the wound created by harsh words
Uttered using out tongue leaves an indelible scar".
"To reprove harm – doer, put him to shame by doing a good deed in return".

Thiruvalluvar said in *Thirukkural* that love is very important. Life without love will be stung by the righteous conscience like a body without boners that is burnt by the sun. A life without love in the heart is as futile as a dried up tree blossoming in a desert. Only a person, who follows the part of love, is in a state of living; it is just skeleton dressed with skin. To look at someone with kindness, to smile at them and say pleasant words, is a nice virtue. There are other meaningful couplets which support this:

"Uttering foul words, while there are the sweetest of words, is like going for the unripe fruits while there are a lot of ripe ones".
"If people scrutinize their own faults as they do the faults of others, mankind will be freed of all evil".
"Just as the hand rushes involuntarily to protect one's honour in case of accidental state of undress, so does a friend come to his friend's aid without being asked".

Good conduct becomes the seed for good will. A person who has envy has no wealth; a person who has no decorum has no growth. One attains eminence through decorum. Bad behaviour always yields agony. "There is a limit for everything. You can't just load tons and tons of peacock feathers in a cart considering its light weight. If you do, it will damage the axle of the cart". One who in his envy does not appreciate the wealth of others is known not to value virtue and his own wealth. Envy is a dammed ill that will destroy one's wealth. The foremost among all wise deeds, is to refrain from doing harmful deeds even to those who hate you. Thiruvalluvar says, "Vile deeds yield vile results; and hence vile deeds are more fearsome than fire". Thiruvalluvar feels that one has to make the best use of the opportunity one gets. It is said as:

"When the rare chance comes, seize it
to do the rare deed".

Clinging to wealth, out of avarice, is worse than the any other flaw. Water assumes the quality of the land; wisdom depends on the company one keeps." Sensuous are governed by the brain; reputation is determined by one's company". " Wisdom seems to stern from the mind: is shaped by the people around us". Purity of mind, and deeds, depends on the quality.

One may think that a thought to steal what belongs to others crossing his mind is not a great issue. It is not really so. It is a serious issue therefore by all means one has to remove that idea from an individual's mind.

"Anger destroys its holder

And, his boat his kith and kin shoulder"

Anger held for long by a person against others destroys him or her. Similarly an incessantly angry man is deserted by his kith and kin who could not put up with his anger. As a result he loses the protection he can count upon at times of need from his kith and kin. The kith and kin are like live boats.

To conclude, throughout history morality and religion have been interwined.Many argue that religion authored morality. Religion makes people to view morality as a set of objective truths.Happiness is the food to our life and it gives us direction. When we are happy, we get motivated to work more productively in order to be even happier. It is through happiness that we get the desire to help other members of the society to achieve their goals. It also directs us on the path to follow for more satisfaction hence we become successful in life.

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Prof.Meenakshy N.S.. "Morality, Happiness and Kural Literature." *International Journal of Humanities and Social Science Invention (IJHSSI)*, vol. 09(6), 2020, pp 07-09. Journal DOI-10.35629/7722

Applied Physics A (2020) 126:924
https://doi.org/10.1007/s00339-020-04107-y

Applied Physics A
Materials Science & Processing

Spectroscopic investigation of green synthesized ZnS nanoparticles encapsulated by sodium carboxy methyl cellulose

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Received: 24 June 2020 / Accepted: 23 October 2020
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Abstract

In this article, the capping action of Sodium carboxymethyl cellulose (NaCMC) on ZnS nanoparticles synthesized by microwave-assisted method is reported. The X-ray diffraction and electron diffraction studies corroborated nanocrystalline nature of cubic ZnS. Discontinuous cluster growth of particles was implied by optical absorption studies. This was reflected in transmission electron microscope images. Fourier-transform infrared studies confirmed NaCMC capping on the surface of ZnS nanoparticles. Effective encapsulation of ZnS nanoparticles by NaCMC was further supported by Raman scattering, thermal studies and photoluminescence studies. Surface modification of ZnS nanoparticles with NaCMC appear to be suitable for specific biomedical applications due to the nontoxicity of ZnS and NaCMC.

Keywords ZnS nanoparticles · Biopolymer · Microwave irradiation · Optical properties · Thermal properties

1 Introduction

ZnS belongs to II–VI semiconductors with a wide band gap of 3.68 eV for sphalerite bulk phase. In addition to its low production cost and non-toxicity, ZnS is a thermally and chemically stable compound possessing a high dielectric constant of 8.7 [1]. Consequently, nanostructured ZnS finds itself in various fields such as super capacitors [2], solar energy applications [3], optical devices such as LED [4], biomedical applications [5][5] and luminescent display systems [7]. However, the nanosized ZnS particles are highly unstable and tend to agglomerate due to the surface effects of smallness in size. Therefore, confining the growth of nanoparticles (NPs) and providing surface passivation are of prime importance in the nanoparticle research. Biodegradable biopolymers offer an excellent opportunity in this direction.

Among naturally occurring biopolymers cellulose is most abundant one. Its derivatives have several advantages such as recyclability, high viscosity, nontoxicity, biodegradability and cost effectiveness [8]. Sodium carboxy methyl cellulose (NaCMC) is a water-soluble cellulose derivative with carboxy methyl groups attached to some of hydroxyl groups of glucopyranose monomers of cellulose backbone. NaCMC has received ample scientific attention, due to its polyelectrolyte character [9]. In view of its high transparency, good film-forming property, large mechanical strength, non-toxicity and biodegradability, it is found suitable for applications such as medicine, flocculating agent, chelating agent, emulsifier, thickening agent, water-retaining agent, sizing agent, and film-forming material [10–12]. Recent reports on NaCMC reveal that it works as a stabilizer in the preparation of certain semiconducting nanosized materials like PbO nanoparticles [13], ZnO [14], CdS [15], ZnS [16] and some magnetic nanoparticles such as Fe_3O_4 [17, 18]. Increase in light emission intensity has been reported in ref [16]. for NaCMC stabilisation of ZnS films.

A detailed study of preparation of NaCMC-capped ZnS NPs and characterization is relatively less explored. In the present work, we report a novel synthesis approach for ZnS nanostructures using microwave-assisted aqueous precipitation technique. Microwave heating is a simple, fast and efficient method in which material heating takes place by dielectric heating [19]. In conventional heating, an external thermal source heats the reaction medium by a conductive heating. But microwave irradiation (MWI) causes efficient

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Published online: 06 November 2020

in-core volumetric heating by direct coupling of microwave (MW) energy with the molecules of solvents, reagents, catalysts, etc. that are present in the reaction mixture [19]. The quick and uniform heating of reaction mixture in MW heating induces fast homogeneous nucleation that leads to the formation of uniform sized small NPs [19], while prolonged hydrothermal conventional heating leads to form bigger particles with better crystallinity [20]. MW-assisted synthesis leads to the formation of more defects in the synthesized powders [21]. In unpassivated MW-synthesized nanoparticles, such defects on surfaces diminish the luminous intensity in them [22]. MW-assisted chemical reactions performed at the optimized reaction temperatures are found to be cleaner, produce less biproducts compared to conventionally heated processes [23].

Zinc acetate dihydrate (ZA) and thioacetamide (TA) were used as precursors for ZnS and NaCMC was used as the capping agent. The synthesis involves non-toxic precursors, solvent (water) and energy-saving principles of microwave heating such that most of the principles of green chemistry are followed. Very good photoluminescence behavior was exhibited by the properly capped sample.

2 Experimental

2.1 Chemicals

Zinc acetate dihydrate [$Zn(CH_3COO)_2.2H_2O$)], thioacetamide (CH_3CSNH_2) and sodium carboxy methyl cellulose (NaCMC) were purchased from Alfa Aesar (Germany). All chemical reagents were of pure analytical grade and used without further purification. Double distilled (DD) water was used as solvent.

2.2 Synthesis of samples

The synthesis procedure followed in the present work is similar to that explained in ref [24]. and [4] with certain modifications. About 0.025 g of NaCMC was dissolved in DD water and aged for 24 h. To 0.15 M zinc acetate aqueous solution, NaCMC solution was added and mixed well by stirring. Thioacetamide (TA) solution at a concentration of 0.27 M in water was added to this. Total volume of the mixture was maintained to be 100 ml. The mixture was subjected to microwave irradiation in a domestic microwave oven (LG model: MS-2049UW of 20 L capacity operating at frequency 2.45 GHz) for predetermined 6 min. The reaction was evidenced by a change in the color from clear to milky white. After cooling, ZnS was separated from solution by centrifugation. Sample was dried and named as S1. Experiment was repeated for different amounts like 0.05, 0.075 and 0.1 wt % of NaCMC addition and samples were named as S2, S3 and S4, respectively. At concentrations beyond 0.1 wt%, the solution was so viscous that collection of particles became difficult and the obtained sample was sticky. Pure sample of ZnS was also synthesized without the addition of NaCMC for comparison.

2.3 Characterization

X-ray diffraction (XRD) was carried out with Rigaku Miniflex 600 X-ray diffractometer with monochromatic copper–K_α radiation of wavelength 1.5402 Å. TEM analyses were done by JOEL JEM 2100 high-resolution transmission electron microscope (HRTEM) and UV–Vis absorption studies were carried out using SHIMADZU – 1800PC spectrophotometer for the dilute dispersion of sample in DD water. The ZnS powders were dispersed in KBr pellets and FTIR spectra was obtained with NICOLET– 6700 spectrophotometer. Photoluminescence (PL) spectra were obtained with Hitachi F-7000 Fluorescence Spectrophotometer. Raman scattering experiments were performed using BRUKER RFS 27:Stand-alone FT-Raman Spectrometer. The thermal analysis was done using the thermal analysis instrument SDT Q600 V20.9 Build 20 in nitrogen atmosphere at a heating rate of 3°K/min for pure ZnS, ZnS-NaCMC composite S2 and neat NaCMC.

3 Results and discussion

3.1 X-ray diffraction

XRD patterns of ZnS-NaCMC nanocomposites and pure ZnS are shown in Fig. 1. The diffraction peaks are observed for 2 θ values at 28°, 48° and 57°. The peaks are identified to originate from (111), (220) and (311) planes of the zinc blende structure of ZnS (JCPDS No. 01-072-4841). No peaks for other phases or elements are observed showing high purity of samples and the broad diffraction peaks is an indication of the particles in the nanometer dimension. The average nanocrystallite size (D) is determined for the prominent peak (111) using Scherrer equation:

$$D = \frac{0.9\lambda}{\beta \cos \theta}, \quad (1)$$

where λ is wavelength of incident X-rays; θ is angle of diffraction, β is full width at half maximum (FWHM) of Bragg peak. The NaCMC capped samples show slight increase in crystallite size compared to uncapped ZnS. Murugadoss et al. explained similar increase in crystallite size due to binding of surfactant on the ZnS nanoparticles [25]. But the nanocrystallites do not appear to change much in size with NaCMC concentrations. Interplanar separations (d_{hkl})

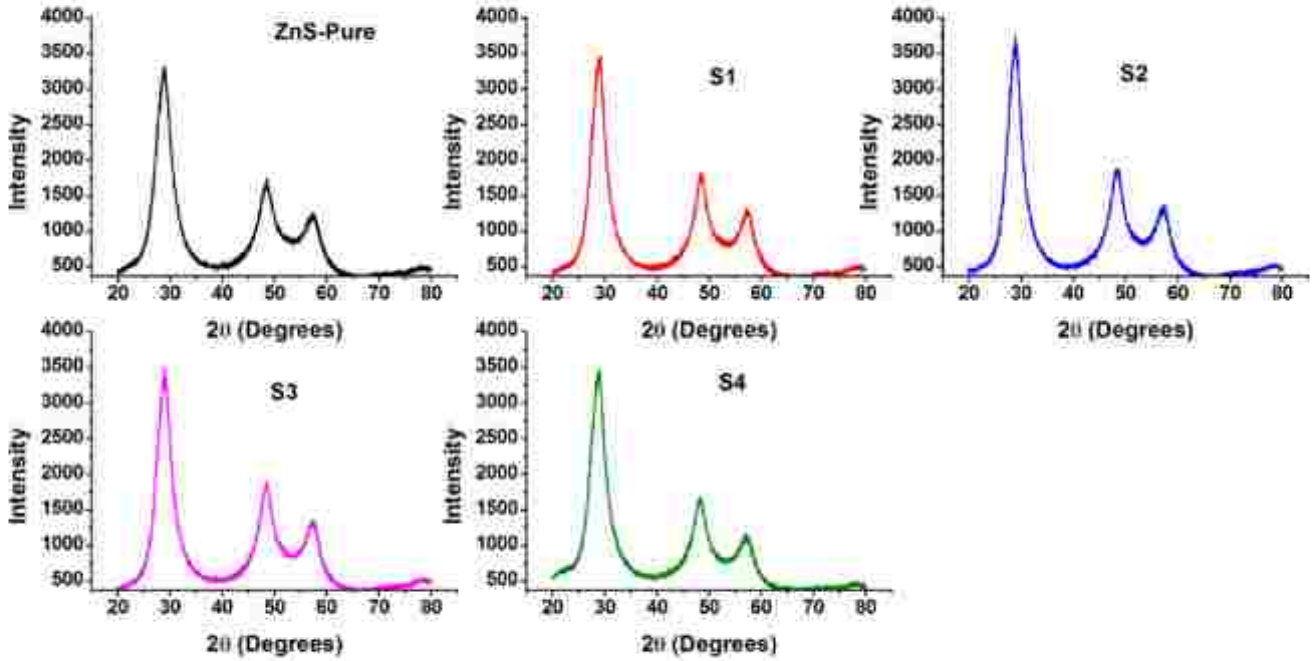

Fig. 1 XRD pattern for pure ZnS and ZnS-NaCMC composite samples

Table 1 Comparison of different parameters for pure and NaCMC-capped ZnS nanocrystals

Sample	NaCMC added (%wt.)	2θ (°)	Crystallite size D (nm)	Lattice constant a (Å)	Degree of crystallinity
ZnS-Pure	–	28.83	2.13	5.357	45.9
S1	0.025	28.86	2.27	5.352	58.1
S2	0.05	29.01	2.26	5.325	63.0
S3	0.075	28.93	2.27	5.339	56.8
S4	0.1	28.77	2.35	5.372	43.9

between the planes (hkl) are calculated using Braggs' law and lattice parameter '*a*' for cubic lattice is determined using:

$$a = d_{hkl} \times \sqrt{h^2 + k^2 + l^2}. \quad (2)$$

From the X-ray diffractogram, we have estimated degree of crystallinity using the ratio of area under crystalline peaks to the total area of crystalline peaks and amorphous regions [26]. The variation of nanocrystallite size, lattice parameter and degree of crystallinity for pure and NaCMC added ZnS samples are given in Table 1. Figure 2 depicts the variation of lattice constant and degree of crystallinity with NaCMC concentration. Lattice parameter is found to decrease with concentration of NaCMC, reaches minimum in the case of S2, and increases thereafter. The crystallinity increases with increase in concentration of NaCMC till 0.05% (S2) and decreases for further increase in concentration indicating good crystallinity for the sample S2. The improvement in crystallinity with NaCMC concentration is attributed to decrease in defects number due to the capping action of NaCMC, resulting in less imperfection in the crystallites. This continues up to 0.05 wt% concentration of NaCMC and thereafter crystallinity deceases due to aggregation of nanoparticles, seen in TEM micrograph.

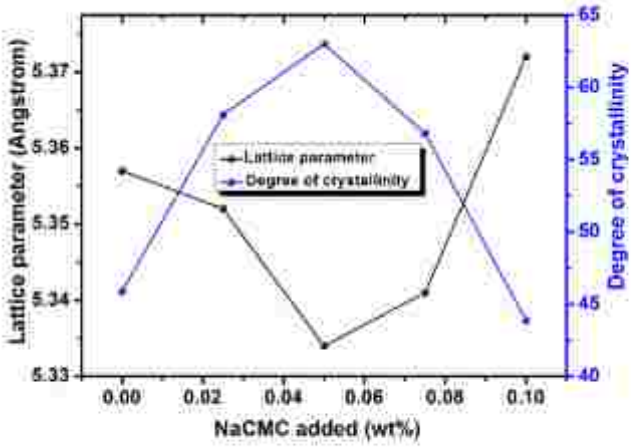

Fig. 2 Variation of lattice parameter and degree of crystallinity with NaCMC addition

3.2 UV–Vis spectroscopy

The plot of absorbance versus wavelength for all samples is shown in Fig. 3.

The excitonic absorption occurs at ~ 322 nm for pure ZnS while it occurs at ~ 332 nm for NaCMC-capped ZnS samples. These values are less than that for bulk counterpart which occurs at ~ 337 nm indicating that the particles are in nano-regime [28]. The appearance of sharp absorption maximum in Fig. 4 shows the monodisperse nature of nanoparticles [29]. With increasing concentration of NaCMC, the position of the absorption maximum remains almost same. This implies that nanoparticle growth is taking place not through Ostwald ripening, for, Ostwald ripening is recognized by the continuation of the excitonic absorption band towards larger wavelengths [30]. Instead, a well-defined absorption maximum occurs repeatedly, implying a discontinuous cluster growth of ZnS nanocrystals has taken place due to the anionic surfactant NaCMC. From XRD studies also, we observe that the size of coated NPs do not change much for the capped samples except for 0.1% NaCMC. The UV absorption curves show some absorption in the visible region and this is attributed to defect related states in the band gap [31].

From the studies above, it is apparent that sample S2 is better stabilized among the capped samples and this sample is selected for further analysis. To investigate about morphology, TEM and HRTEM images were taken for ZnS-pure, sample S2 and S4.

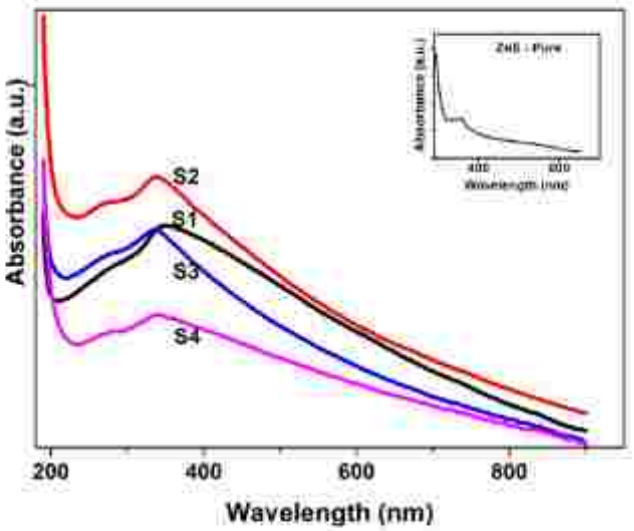

Fig. 3 Absorbance vs wavelength for S1, S2, S3 and S4. Inset is for pure ZnS sample

3.3 Electron microscopy

TEM and HRTEM images of ZnS-pure, samples S2 and S4 are shown.

TEM image shown in Fig. 4a for uncapped ZnS indicates the formation of solid spheres of size ~ 100 nm. The bigger size is due to the absence of capping agent. The lattice image (Fig. 4b) for ZnS-pure sample shows crystalline nature which is supported by SAED pattern. The SAED patterns in all cases indicate the polycrystalline behavior with phases (111), (220) and (311) of cubic ZnS.

In the case of sample S2, formation of spherical nanoclusters of near uniform size is shown by Fig. 5a. Each of these clusters can be seen to contain dispersed primary nanoparticles separated by a thin polymer layer.

In the HRTEM image of the coated nanoparticles (Fig. 5b), an ultrathin film of NaCMC polymer is clearly seen around ZnS nanoparticles and this film is bound intact to the nanoparticles. Good crystallinity of the sample is exhibited in the lattice image of the micrograph which was revealed by XRD studies also. Discontinuous lattice fringes indicate the polycrystallinity of the sample [32]. The size of NPs is estimated from the HRTEM image (Fig. 5b) the mean size is about 2.6 nm, which is similar to that of XRD results. It has been observed in nanoparticle physics that

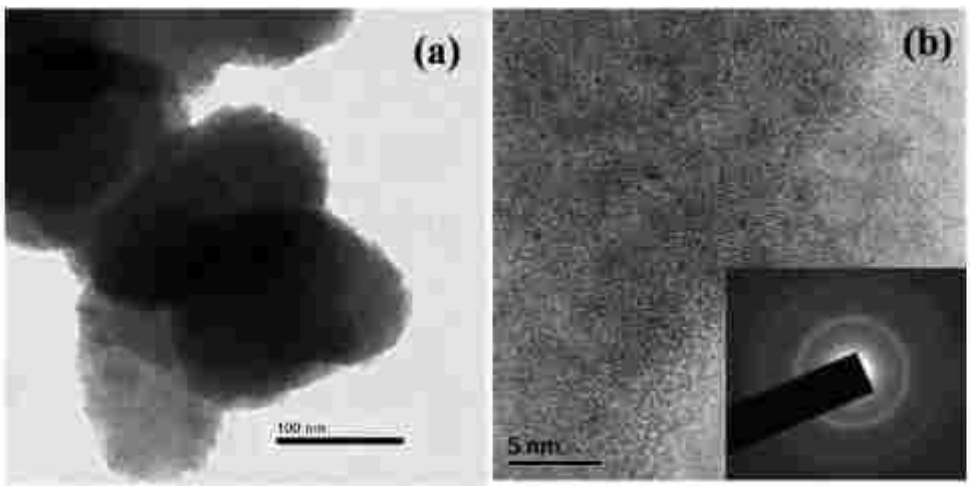

Fig. 4 **a** TEM image for ZnS-pure. **b** HRTEM image with inset showing electron diffraction pattern

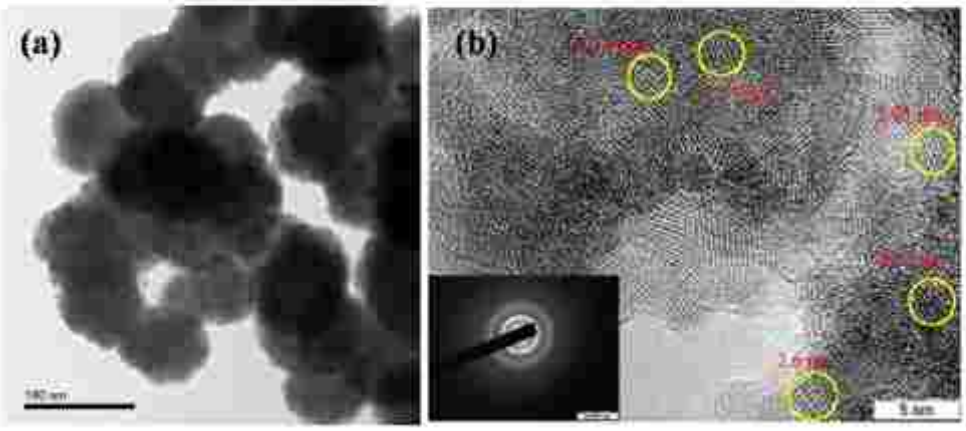

Fig. 5 **a** Dispersed primary particles in the nanoclusters of sample S2 **b** Clearly observable lattice fringes and inset of (**b**) is electron diffraction pattern for S2

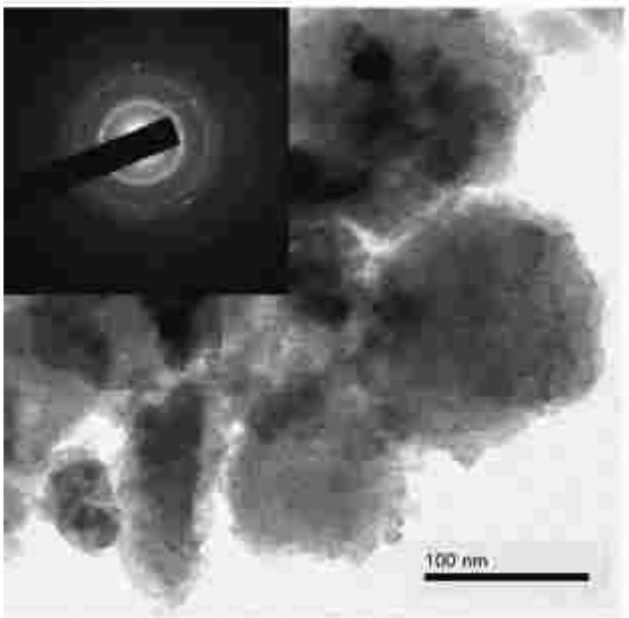

Fig.6 Aggregated NPs of sample S4 and inset is SAED pattern for S4

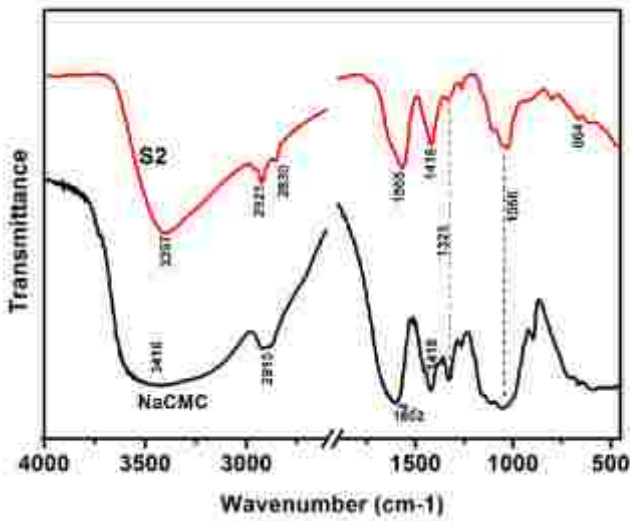

Fig. 7 FTIR spectra of NaCMC capped ZnS and pure NaCMC

semiconductor nanocrystals with crystallite size in the range of exciton Bohr radius show size dependent optical properties. The exciton Bohr radius for ZnS is about 2.5 nm.

Figure 6 shows the TEM image for sample S4. It reveals that, at high concentration of NaCMC, the ZnS NPs formed are aggregated in the matrix of NaCMC. However, the ZnS NPs formed in this case also exhibited cubic polycrystalline nature indicated by the diffraction pattern.

3.4 Fourier-transform infrared spectroscopy (FTIR)

FTIR is based on the principle that the chemical bonds can be excited at frequencies that are typical of the bonds and can provide valuable information about passivation of surface of nanoparticles by the polymer. Figure 7 shows the FTIR spectra for sample S2 and neat NaCMC. The broad absorption band at 3418 cm^{-1} for NaCMC corresponds to O–H stretching and the band at 2915 cm^{-1} corresponds to C-H stretching vibrations. The strong band at 1602 cm^{-1} and 1418 cm^{-1} are due to COO^- group [33]. The band at 1325 cm^{-1} is assigned to -OH bending vibrations [34, 35]. The characteristic –C-O stretching on polysachcharide skeleton is indicated by the absorption band at 1056 cm^{-1}. The band at 664 cm^{-1} is due to ZnS present in sample S2. The hydroxyl peaks of NaCMC shifted to lower wave number 3397 cm^{-1} for S2 indicating a strong interaction between hydroxyl groups of NaCMC and ZnS NPs [36]. The asymmetric and symmetric stretching vibrations at 2921 and 2849 cm^{-1} are due to –C–H vibrations and arise in S2 due to nanostructure formation [17, 37]. The band corresponding to COO^- shift to 1565 cm^{-1}. The presence of carboxyl and hydroxyl groups in the final ZnS-CMC compound is a strong confirmation that there is an interaction between zinc precursor and NaCMC molecule.

The growth of ZnS NPs and the capping action of polymer NaCMC may be understood from the chemical reactions involved in the synthesis. During synthesis, the Zn^{2+} ions formed in aqueous solution of zinc acetate make complexes with NaCMC added. This solution was microwave (MW) irradiated after the addition of thioacetamide (TA). MWI induces volumetric heating in the material due to inertial, elastic and frictional forces. The power absorbed by the material is represented by [38]:

$$P = 2\pi f \varepsilon_0 \varepsilon_r^{''} \tan\delta E^2, \quad (3)$$

where f is frequency (GHz), ε_0 is permittivity of free space,$\varepsilon_r^{''}$ is relative dielectric constant, tan δ is the loss factor and E is magnitude of internal field. As a result, MW irradiation affects the synthesis process in two ways. First, the polymer NaCMC decomposes during MWI to some extent and produce shorter chains which enable the Zn^{2+} ions to coordinate with –OH ligands or make bond with COO^- groups [39]. Second, it accelerates the decomposition of TA to provide S^{2-} ions as:

$$CH_3CSNH_2 + H_2O \xrightarrow{\text{MW irradiation}} CH_3CONH_2 + H_2S \quad (4)$$

$$H_2S \rightarrow 2H^+ + S^{2-} \quad (5)$$

As soon as S^{2-} ions become available, reaction between Zn^{2+} and S^{2-} ions takes place to form ZnS nuclei. ZnS nuclei formed grow into nanoparticles under the combining force between Zn^{2+} ions and S^{2-} ions within the cavities bound by the polymer chains [40]. NaCMC being anionic long chain polymer, provides electrostatic as well as steric stabilization. Hence, an increase in crystallite size is observed for NaCMC-capped samples compared to uncapped ZnS. At lower concentration of NaCMC, the availability of fewer $-CH_2COO^-$ ligands attached to NaCMC lead to incomplete coverage of ZnS NPs. For concentrations of NaCMC like, 0.05% the NaCMC serves as a shell and final particles formed are nearly spherical, possess uniform size and can disperse well in water [11]. For higher concentrations like 0.1%, the space between polymer chains becomes narrower as a result of increased viscosity [32]. The increased number of polymer chains now provides more carboxyl and hydroxyl linkages to Zn^{2+} ions leading to the formation of large number of ZnS nuclei in a small space. Hence, the decrease in crystallinity observed with samples S3 and S4 compared to S2 may be attributed to the aggregation.

3.5 Photoluminescence (PL) spectroscopy

The influence of NaCMC capping on the photoluminescence (PL) of ZnS NPs is investigated and PL graphs are shown in Fig. 8. The samples were excited at 250 nm. The

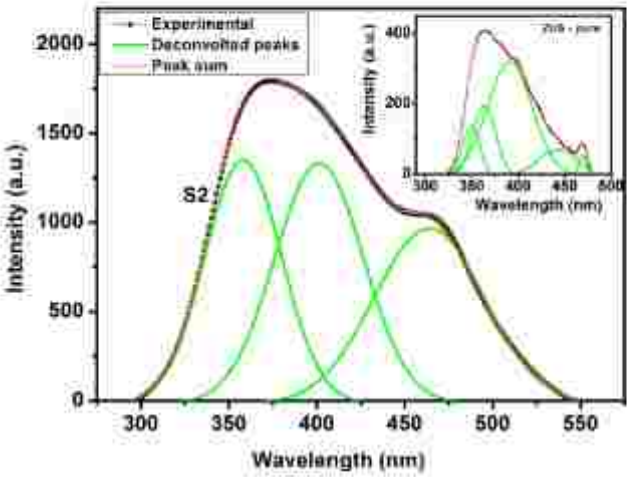

Fig. 8 Photoluminescence spectra for S2 and inset is for pure ZnS

luminescence observed with ZnS- Pure and sample S2 indicate visible emission. Hence emission phenomenon involves localized states in the band gap. The PL spectra obtained are broad and asymmetric, consisting of more than one component. Gaussian curve fitting was applied to deconvolute the PL peaks. The best Gaussian fit gave five peaks for pure ZnS. Weak emission at 350 nm is attributed to S interstitials [I_S] and peak at 363 nm is attributed to Zn interstitials [I_{Zn}].The strong peak centered at 391 nm is assigned to the recombination of electrons at the excess Zn present [41]. Peak at 442 nm is attributed to transition from surface sulfur vacancy [SV_S]. Emission peak near 469 nm is due to internal S vacancy [V_S] to internal Zn vacancy [V_{Zn}] [42].

In the case of NaCMC-capped sample, the peak at 355 nm is attributed to interstitial S [I_S] ions. As the radius of S ions is larger than that of Zn ions, interstitial S causes greater strain and possess less binding energy. Corresponding energy levels lie close to valence band and energy levels for Zn interstitials lie close to conduction band. Zn-related emission occurs at 399 nm. Peak near 470 nm is assigned due to internal S and Zn vacancies. Surface sulfur vacancy related emissions are not observed for NaCMC capped sample.

Energy-dispersive X-ray analysis showed that the amount of sulfur is less compared to zinc in the capped as well as uncapped samples which may give rise to sulfur vacancies at the surface causing Zn dangling bonds and form shallow donor levels. But in the emission spectra of capped sample, no band corresponding to surface sulfur vacancy is found indicating the strong coupling of dangling bonds of ZnS with NaCMC. As supported by FTIR, there is bonding between NaCMC and excess Zn^{2+} ions present on surface of ZnS nanoparticles.

The important difference between PL spectra of pure ZnS and S2 is in the number of PL peaks and their intensity. In pure-ZnS, due to surface sulfur and surface zinc related

5 emission peaks were observed, but on capping, these emissions were absent. The capped ZnS is having more PL intensity owing to controlled homogeneous growth of the nanoparticles in solution medium. The higher PL intensity in NaCMC-capped sample is attributed to better passivation of surface-related defects, leading to an increase in electron–hole recombination [43, 44]. The low PL intensity observed with ZnS-Pure is due to the presence of surface defects which cause nonradiative decay.

Schematic of the photoemission in S2 is represented by Fig. 9.

3.6 Raman scattering

Raman spectroscopy is a fast and useful technique to analyze surface properties of nanosized particles. Figure 10 corresponds to the room temperature Raman spectra of sample S2 and neat NaCMC obtained using excitation source of wavelength 1024 nm. The excitation energy is in off-resonance regime for ZnS. Bands observed for capped ZnS nanoparticles near 260 cm^{-1} and 343 cm^{-1} are assigned to transverse optical (TO) and longitudinal optical (LO) modes, respectively, for cubic phase of ZnS. For bulk ZnS, these bands were reported to occur at 276 cm^{-1} for TO and 351 cm^{-1} for LO modes [45].The larger Raman shift from bulk in the present study may be due to the effect of phonon confinement resulting from the small size of particles (≈2.3 nm). Some of the skeletal and carboxylate ion related vibrations due to NaCMC also occur in S2. The assignment of Raman vibrations for neat NaCMC and S2 are derived from the literature [46–48] and given in Table 2. The appearance of Raman modes of vibration for NaCMC along with that for ZnS in sample S2 indicates the interaction of NaCMC with ZnS NPs.

There were no Raman bands around 286 cm^{-1} corresponding to wurtzite phase [45]. This is in accordance with XRD results which show peaks corresponding to cubic ZnS only.

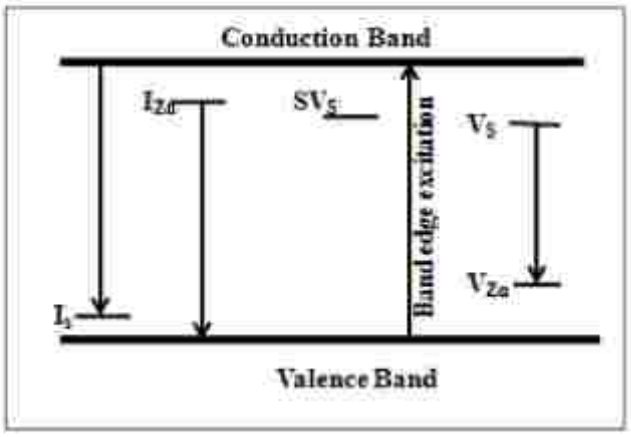

Fig. 9 Schematic of PL emission for S2

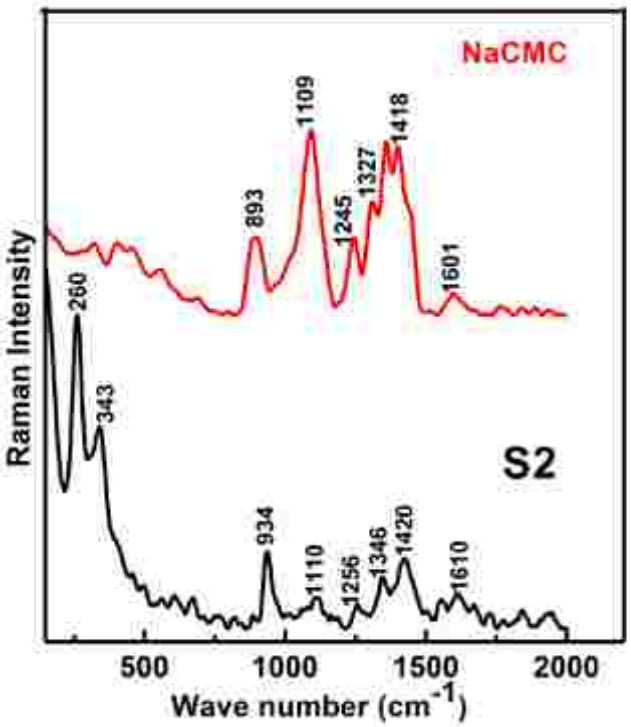

Fig. 10 Raman spectra for NaCMC and sample S2

3.7 Thermal properties

Thermo gravimetric analysis (TGA) plays an important role in determining thermal stability of the materials. To understand the thermal behavior of the ZnS-NaCMC composite, TGA were performed for ZnS-pure, sample S2 and neat NaCMC. TGA curves are shown in Fig. 11. In all curves, the initial loss in weight is due to the loss of adsorbed gases from the surface. For sample S2 and neat NaCMC, the second loss in weight occurs due to the loss of CO_2 from the Cellulose. In this temperature range, the decarboxylation of COO^- group in CMC takes place which demonstrates the decomposition of CMC [49]. Neat NaCMC experienced a 50% weight loss at a temperature of ~300 °C, whereas for sample S2, it was only 15% weight loss at temperature ~450 °C. The TGA curve for neat NaCMC is steep between 250°C and 300°C while sample S2 shows broader decomposition temperatures in the range 250°C–450°C, indicating a better thermal stability of S2 compared to NaCMC [50]. The drastic decrease in mass for pure ZnS and sample S2 beyond 600°C indicates the decomposition of ZnS into its constituents.

Table 2 Assignment of Raman bands for NaCMC and S2

Raman peak position in NaCMC (cm^{-1})	Raman peak position in Sample S2 (cm^{-1})	Approximate assignment
–	260	ZnS TO mode
–	343	ZnS LO mode
893	934	Cellulose backbone
1109	1110	-COC glycosidic stretching
1245	1256	CH_2 twisting mode
1327	1346	CH_2 wagging
1418	1420	Symmetric stretching of COO^-
1601	1610	Asymmetric stretching of COO^-

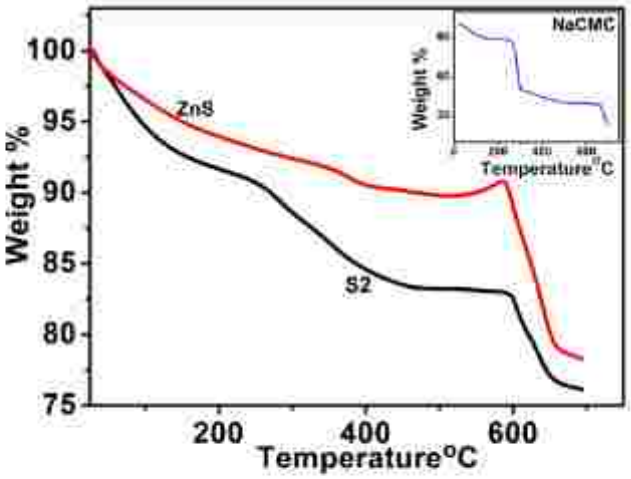

Fig. 11 TGA curves of ZnS-pure, sample S2 and inset is TGA curve for NaCMC

Some of the properties of the sample S2 are presented in the following Table 3 along with the results obtained in other published works.

In all, we have seen that, the ZnS nanoparticles when properly capped with NaCMC, becomes a good light emitter. By studying magnetic nature of these NPs, this work can be extended for targeted drug delivery.

4 Conclusions

In summary, microwave assisted synthesis of NaCMC capped ZnS NPs was carried out by chemical precipitation method. From the studies on structural and optical properties of samples, following conclusions were drawn:

- Powder XRD and TEM studies indicated that the synthesized samples of ZnS possessed sphalerite structure with average nanocrystallite size less than 3 nm. NaCMC-capped ZnS showed increase in nanocrystallite size compared to uncapped one. But it did not increase with concentration of NaCMC which was supported by UV-absorption studies. Blue shift of UV–Vis absorption peaks indicated quantum size effect.
- The surface shallow defect related emissions of ZnS were quenched with NaCMC capping. A very good enhancement in photoluminescence intensity was observed with NaCMC-capped sample compared to uncapped ZnS.
- FTIR and Raman studies suggested that capping action of NaCMC onto ZnS takes place through the linkages of –OH and COO^- ligands.
- The thermal studies also confirmed the interaction of NaCMC with ZnS.

Table 3 Comparison of some physical parameters of ZnS structures grown by different techniques

Ref	Method	Capping agent	Sulfur source	Crystallite size from XRD (nm)	Strain in crystal	Shape of nanostructure
Present work S2 –sample	Microwave irradiation	Sodium carboxy methyl cellulose	Thio acetamide	2.26	0.0612	Nanospheres
[51]	Chemical precipitation	–	Thio urea	4	–	Star like
			Sodium sulfide	4	–	Star like
[52]	Chemical precipitation and Chemical bath deposition	Ethylene diamine	Thioacetamide	4.5	–	No analysis done
				8	–	Thin film on Si substrate Isosceles triangular surface seen in AFM
				<4.5	–	Thin film on glass substrate Square like surface seen in AFM
[53]	Microwave Assisted synthesis	Tetrabutyl ammonium hydroxide	Thio urea	20.7	0.0010	Irregular spherical structures
[23]	Microwave Assisted synthesis	Polyvinyl pyrrolidone (PVP)	Na_2S	-	–	Particles with large aggregation effects
[54]	Chemical precipitation	L-cysteine	Na_2S	2.10	–	Monodispersed particles with less agglomeration after capping

Acknowledgements The authors thank Bhandarkars' Arts and Science college, Kundapura for sample preparation facilities, DST PURSE Laboratory, Mangalore University – Mangalore for thermal analysis, DST- SAIF centre, IIT Madras at Chennai for Raman scattering experiments, DST- SAIF centre at Karnatak University-Dharwad for FTIR and photoluminescence measurements and Manipal Academy of Higher Education—Manipal for other characterizations. Author Lalitha Devi B thanks the University Grants Commission, Government of India, for teacher fellowship.

Funding Open access funding provided by Manipal Academy of Higher Education, Manipal.

Compliance with ethical standards

Conflict of interest The authors declare that they have no conflict of interest.

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Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

ISSN Print: 2394-7500
ISSN Online: 2394-5869
Impact Factor: 5.2
IJAR 2020; 6(3): 25-28
www.allresearchjournal.com
Received: 23-01-2020
Accepted: 25-02-2020

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Impact of coalition politics on Indian parliamentary institutions (Indian experience)

Dr. Shubhakarachary

Abstract
The Parliament of India, is the supreme bilateral legislative body of Republic India and It is composed of the President of India and the two houses the Rajya Sabha (Council of States) and the Lok Sabha (House of the People). As we know that the President in his role as head of legislature has full powers to summon and prorogue either house of Parliament or to dissolve Lok Sabha. The president can exercise these powers only upon the advice of the Prime Minister and his Union Council of Ministers.
Those elected or nominated by the President to either house of Parliament are referred to as Members of Parliament (MP). The Members of Parliament, Lok Sabha are directly elected by the Indian public voting in Single-member districts and the Members of Parliament, Rajya Sabha are elected by the members of all State Legislative Assembly by proportional representation. The Parliament has a sanctioned strength of 543 (as called as Magic number to form government in central) in Lok Sabha and 245 (as called as Magic number to form government in state) in Rajya Sabha including the 12 nominees from the expertise of different fields of science, culture, art and history. The Parliament meets at Sansad Bhavan in New Delhi.

Keywords: Parliament of India, Rajya Sabha, Lok Sabha, Election.

1. Introduction
The roots of the demand for parliamentary system of governance in the country may arguably, be traced back to the early 20th century when Indian persistently demanded the establishment of parliamentary Institutions on the pattern of British Polity of afford an opportunity to them to associate themselves with the governmental activities in the country. Though the colonial rulers had consistently refused to accede to the wishes of natives on ground of the unsuitability of the Indian to run such kinds of Institutions as such for India, on the other, the resolve of the enlightened Indians for some sort of parliamentary systems to be established in the country become progressively hardened with every of the British India government for the same. Afterwards in most, if not all of the documents proposing the model of political set up for Independent India like Nehru report, Sapru report the draft constitution of three India published by socialites party and Hindu Mahasabha as well as by Individuals like Manavendranath Roy. The argument for parliamentary system of government figured prominently as the Ideal model of governance for India after Independence.
Austin reveals was what form of Political Institutions would foster or at least permit a social revolution? As Austin Informs further two competing system of political institutions were available to the framers to opt for first looking back in to the nations rich heritage and findings Indigenous Institutions capable of meeting the country's needs, the framers would base the constitution on the village and its panchayaths and erect upon them a superstructure of Indirect, decentralized government in the Ghandhian Manner and second, opting for the Euro – American constitutional traditions, reflected in the form of parliamentary system, though it meant continuing in the country had taken during the colonial period. The constituent assembly's decision in favour of latter option was arrived at with over whelming majority, with only one member rising a voice in favour of the village panchayath's though the broad confronts of his scheme of things also appeared to be in the moulal of representative democratic governance. Meaning of coalition Govt, Coalition means alliance, combination, Fedaration, Union of fusion in to one whole, A group formed by people from

several different groups, especially political ones agreeing to work together for a particular purpose. Coalition may be temporary combination between parties retaining distinctive principles for combined action.

According to Dictionary of govt and politics by P H. Collin: Coalition means "group of two or more political parties who come together to form a government, when no single party has a majority".

According to Rogar Scruton in his Dictionary of political thought defines the term coalition as "Political alliance of distinct parties or persons who preserve their political Identities".

The society today is undergoing fragmentation not just in terms of the caste, religion, economic factors but also in terms of class, lifestyle, professions etc depending on thesesocio-cultural and economic divisions, the needs and the interest of the masses vary. In such a situation, it is impossible for a single political party to cater to the variegated and heterogeneous needs of the people.

National parties may not always represent regional interest this result in the mushrooming of a multitude of parties, with each one representing the interest of a particular region or section. Each region or section prefers to choose its own representatives rather than a party which has a national magnitude. This situation results in factured verdict of the people which necessitates the formation of a coalition Government.

Sailent features of the coalition Government

1. The coalition Government may effectively represent mass interest. A variety of social spheres and sectional interest are brought in to the lime light of politics.
2. The minority and under privileged groups will have a say in Governmental functions.
3. Coalition Government may be an attempt in itself to bridge the socio-economic and cultural factors.
4. The decision taken may be balanced in approach since they are reached after continuous discussion and possible consensus between the member parties.

Reasons for the formation of coalition Government

1) Failure to obtain majority

Usually the coalition governments are formed when no single party is able to enjoy a majority in the legislature. A combination of some political groups are parties is essential to command majority these political parties or groups join together to form government. They do not lose their separate identity. They agree to a common minimum political, economic, and social programme and when differences arise, any group or party is to free to withdraw from coalition.

2) Pluralism

India is known for its pluralism and the entire society exhibits various level of pluralism in different walk of life. It is but natural that this pluralism is carried from the society to the political level. India is a sub-continent exhibiting diversity in language, religion, culture etc. coalition system is therefore the naturally corollary of a system depicting pluralist tendency. Moreover in India coalition is a natural system due to the Individualism of each individual. Multiplicity of political parties and pluralism are the effect of such a mentally of Indian.

3) Dominance of the congress party

One more reason highlighted by political scientists regarding the emergence of a coalition system relates to the role played by the congress party in the earlier decades after Independence. Its dictatorial functioning is supposed to have suppressed the emergence to pluralist tendencies. The regional parties have emerged as a consequence of such an attitude of rebellion the emergence of coalition system in India. These regional parties represents regional aspirations of the people of the region. These aspirations differ from state to state and coalition system is the one and system that could comfortably accommodate regional political parties.

4) Electoral System

Our electoral system along with the political system also encourages small political parties to contest the election and get represented in the legislature and the ministry moreover, minority communicate are able to get presented in the political system only through coalition system.

Impact of Coalition on Indian Politics

1. Instability

The parliamentary system of government functions successfully with two political parties. But in India the number of political parties have increased in number even at the state level. In Tamilnadu for instance there are DMK, AIADMK and the TMC. In Andra Pradesh there are TDP and NTR TDP and so on since the coalition is formed with many parties, the fate of such coalition governments hang in the balance depending on the withdrawal of support by one or other Sridharam has given the average life of the various coalition governments from 1977. According him the 33 coalition governments at the centre and states casted and average for 20 months and the 14 minority governments lasted for about 14 months. Thus the coalition governments failed to provide stable and good governance.

2. Weak and Ineffective

Since the coalitions are heterogeneous they are ineffective and unstable. When a system of coalition operates cabinet secrecy is also thrown to the winds. To secure a consensus within the parties is a very difficult task. The usual reason for detesting coalitions is due to the reason that they have come together only for power. Each coalition partner tends to suspect the other. If the government is efficient each constituent partner is worried that the other will get credit on the other hand, if it is ineffective, each partner will blame the other. And if the government had to take some unpopular decision. Then each one will blame the other and keep the distance is neither possible to take credit for the achievements of the parties in a coalition nor can they blame other parties for any kind of failure. Therefore the coalition has had the impact of creating a weak and ineffective governments.

3. Subordination of party Ideology to power

The next impact of coalition system is that there is a subordination of Ideology to power. In the Indian context there is a single party which is dominant in a coalition of several parties. So there is every chance and also the absolute necessity that the identify, agenda and the ideology of that party has to be merged with the remaining small partner or other words it needs to dilute its ideology or keep

some contentious issues in the back burner as was done by the BJP in deference to the wishes of the political parties joining it to form the government. Naturally the BJP subdued its distinct identify for the sake of maintaining the coalition of Article 370, Implementation of uniform civil code and building up Ram temple had to be shelved to winden the support base of BJP. In other words, the compulsions of coalition politics necessited such a move by BJP even the common minimum programme diluted for the sake of maintaining power. The coalition parties led by BJP had to show its commitment to inviting foreign direct investment opening up Indian market and privatizing many areas.

4. Narrow outlook parties

Another Impact of coalition on Indian politics, relate to the desire of political parties to maintain political power at any cost. Regional parties do not give up their parochial approach and therefore are narrow in their outlook. These regional parties tend to get support through populism. In this system, power shifts from the centre to the states. All the regional parties of the coalition have their stronger state agendas and thus national agenda is forgotten completely. As a result the state tend to become strong and the centre become weak.

5. Leadership of Prime – Minister undermined:

In a coalition prime – minister cannot take a strong decision even the smallest party in the coalition can hold the P.M to ransom the prime minister has to deal with heterogeneous group of power seekers who make no secret of their real intention. Such a PM cannot even choose his own cabinet. He has to consider the demands of so many parties, their leaders and select his team. Pressure is on the PM to allot certain portfolios to certain Individuals. The prime minister frequently depends on the consent of the constituent parties. This has an impact on Indian politics as the nations and foreign policy tends to be weak.

6. Power shifts from cabinet to the co-coordinator:

The next impact of the coalition in such a system is that power shifts from the cabinet to an extra constitutional authority like co-ordinator or steering committee. Despite all such developments does not last long it has been remarked by Disraeli one as follow "coalition through successful have always found that their triumph has been brief". A coalition is a weak and unstable government. Sometimes, the parties associated with other parties inspite of their Ideological differences. This lack of ideological affinity and cohesion creates lots of problems. The prime minister himself finds it extremely difficult to carry the entire cabinet as one body.

7. The regional parties deciding the fate of National parties:

A large number of regional parties have propitiated since 1989 resulting in the emergence of a confederation of regional parties. These regional parties are increasingly playing an important role in deciding the national players. That is why some regard coalition system as undemocratic since the smaller parties tend to exercise more power and authority deciding the fate of bigger parties.

8. Federal system more federal and real:

Federal system also tends to more federal and real when coalition system operates at the national and state level. Indian federation being extremely flexible has transformed due to the change in party system. Centralization of authority, misuse of article 356 are today rarely spoken of many political scientist have welcomed coalition politics and say that it has created a genuine democratic and federal structure with the aspirations of regional parties taken care of by the national parties just to retain power at the centre. Our federation today can truly be called as a co-operative and bargaining federalism. Governance through consensual approach is also adopted. Dialogue, debate and discussion have replaced the parliamentary majority and its dictatorship there in also general restructuring of centre state relationship.

Ground rules required to be followed to make coalition more effective

Since the coalition have to be accepted, as a reality in India there is a need to have a re look in to the continuation and plug the loopholes wherever possible to make it more effective is prevent the instability in governments. Size of the ministry in a coalition system need to be cut down. An effective methodology is required to make defections un attractive. Amendments need to be done in the Indian constitution to plug the loopholes in the electoral system. Which are misused by the party in power. Party reforms and electoral reforms require to be initiated make coalition more effective.

At present there is a need to provide ground rules for its operation so that stability is maintained, our parliamentary system has to work effectively with the multi-party system and also the coalition governments. Therefore the parties which joins together to form the government must have common minimum programme and all the members of the party should agree to abide by it. Major problems should be settled through consensus and agreement.

Since the coalition system implies the modification of the parliamentary system. The political parties should also develop the capability of separating national issue from state issues. The coalition politics at each level has to involve all parties and all kinds of politics. In this connection, the issue that has to be settled is, whether there should be a pre-electoral or post-electoral alliance. In the pre-electoral alliance, there may be understating regarding the sharing of seats but the post-electoral alliance is only a marriage of convenience and may break off soon. Today our party system at the national level could be called as the two dominant systems in a multiparty system since the Congress and BJP at the regional parties leading the allies or partners in sharing power. These two parties need to work out means through which coalition could remain effective and stable.

Whatever solution that is suggested, it is fact, that the coalition in India are Indicative of the pluralistic tendencies in India and Indian politics. It is a natural processes creating a unique system and it needs to be strengthened to make democracy more effective and representative.

Thus the coalition in India has both positive and negative impact on India politics. Even though there is a common minimum programme. Which binds the constituents there is often in fighting regarding its implementation misunderstanding is also common regarding the distribution of portfolios or office. Horse trading and defections are also common such problems arise in operating the reality of coalition politics. It makes democracy more participative as every small fractions get represented and heard in the

legislature. It also gives chance to regional parties to participate in national politics and there is a less chance of one party dominance, consensus, understanding, toleration become the watch words since the coalition system is a delicate balance of pluralistic elements.

Coalition experiments in India (Central Governments)

Year	Name of coalition	Head of the coalition governments	Parties in coalition	No of years in coalition
1977 Sixth Lok Sabha	Janatha Government	Morarji Desai	Janasangha, Bharathiya Lok Dal, Congress (s) socialist party, CFD, Ex-congressmen (Chandrashekhar Group) others (like Akali dal etc)	Two years
1979 Sixth Lok Sabha	Janatha Government	Charan Singh	CPI (M), CPI, Congress I	Six months
1989 Ninth Lok Sabha	National Front	V.P. Singh	Congress – I, CPI, CPI (M), RSP	One year
1990 Tenth Lok Sabha	Congress Government	Chandrashekhar	Congress-I, AIADMK, BSP, Muslim League, J & K National Conference, Kerak congress (M) shiromani Akali Dal, and few independent members.	Eight months
1996 Eleventh Lok Sabha	United Front Coalition	H.D. Devegouda	Janatha Dal, left parties, telugu Deshan and congress	Ten months
1997 Eleventh Lok Sabha	United Front Coalition	Inder Kumar Gujral	Janatha Dal, left parties, TDP and congress	One year
1998 Twentieth Lok Sabha	BJP Government	Atal Bihari Vajapayee	BJP, BJD, Trinamoola congress, samatha party, HVP, SAD, Shive-sena, TDP-Laxmi Parvathi, Lokshakthi, AIADMK, PMK, PDMK, TRC, Anenachat congress, Independents	One year Six months
1999 Thirteenth Lok Sabha	National Democratic Alliance (NDA)	Atal Bihari Vajapayee	Congress (I), lift parties, RJD, Samaja Vadi party, Lok Jana Shakthi, JMM, DMK, Nationalist congress party and others	Five years
2004 Fourteenth Lok Sabha	Union Progressive Alliance (UPA)	Dr Manmohan Singh	Congress (I), left paties, RJD, sanajvadi party, Lok Jana Shakthi, JMM, DMK, Nationalist congress party and others	Five years
2009 Fifteenth Lok Sabha	Union Progressive Alliance (UPA)	Dr. Manmohan Singh	Congress (I), left parties, RJD, Samajavadi party, Lok Jana Shakthi, JMM, DMK, Nationalist congress party and others	Five years
2014 Sixteenth Lok Sabha	BJP Government (NDA)	Narendra Modi	Samatha, BJP, SAD, AIDMK, BJD, TDP, LOK Jana Shakthi, ASSU, Shivasena	Five years
2019 Seventieth Lok Sabha	BJP Government (NDA)	Narendra Modi	BJP, AIADMK, JDL, LJP, YSR Congress, TRS, SAD	Till Date

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ಪ್ರತಿಬಿಂಬ
PRATIBIMBA – Multidisciplinary Kannada Research Journal of IIMRD
ISSN: 2582-2284
Vol-2 Issue 2, Sep-Oct 2020, 39-64
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IIMRD JOURNALS
www.iimrd.com

ಕರ್ನಾಟಕ ಏಕೀಕರಣದಲ್ಲಿ ಎಸ್. ನಿಜಲಿಂಗಪ್ಪನವರ ಪಾತ್ರ

ಶುಭಕರಾಚಾರಿ[1]

ಪೀಠಿಕೆ

ಇತಿಹಾಸದಿಂದ ಪಾಠ ಕಲಿಯದವನು ಇತಿಹಾಸವನ್ನು ಸೃಷ್ಟಿಸಲಾರ ಎಂದು ಡಾ. ಬಿ. ಆರ್. ಅಂಬೇಡ್ಕರ್‌ರವರ ಮಾತನ್ನು ನೆನಪಿಸಬೇಕಾದ ಸಾಮಾಜಿಕ ಸಂದರ್ಭ ನಮ್ಮ ಮುಂದಿದೆ. ರಾಷ್ಟ್ರಕವಿ ಕುವೆಂಪುರವರು ಹೇಳಿರುವಂತೆ ಭಾರತ ಜನನೀಯ ತನುಜಾತೆ ಜಯ ಹೇ ಕರ್ನಾಟಕ ಮಾತೆ ಎಂಬುದಾಗಿ ಬಣ್ಣಿಸಿದ್ದಾರೆ.ಸ

ಇಂತಹ ಕರ್ನಾಟಕದ ಅಡಳಿತ ಭಾಷೆಯಾಗಿ ಕನ್ನಡ ಬಳಸಿರುವುದಕ್ಕೆ ನಮಲ್ಲಿ ಲಭ್ಯವಿರುವ ಪುರಾತನ ಮಾಹಿತಿ ಎಂದರೆ ಬಹಳ ಪ್ರಾಚೀನವಾದಂತಹ ಹಲ್ಮಿಡಿ ಶಾಸನ (ಕ್ರಿ. ಶ. 450). ಈ ಶಾಸನವು ಕದಂಬ ವಂಶದ ರಾಜನಾದ ಕಾಕುಸ್ತವರ್ಮನು ಹೊರಡಿಸಿದ ರಾಜಾಜ್ಞೆಯಾಗಿತ್ತು. ಇದು ಹಳೆಗನ್ನಡದಲ್ಲಿದೆ. ಅಡಳಿತದಲ್ಲಿ ಕನ್ನಡ ಶಬ್ದವು ಬಳಕೆಯಾಗುತ್ತಿದ್ದ ರೀತಿಯ ಪ್ರಥಮ ಪರಿಚಯ ಈ ಶಾಸನದಿಂದ ಆಗುತ್ತದೆ. ಸರಿ ಸುಮಾರು 1500 ವರ್ಷಗಳ ಹಿಂದೆಯೇ ಕನ್ನಡ ಭಾಷೆ ಹೊಂದಿದ್ದ ಬೆಳವಣಿಗೆಯನ್ನು ಜ್ವಲಂತ ಉದಾಹರಣೆಯಾಗಿ ತಿಳಿಸುವ ದರ್ಪಣವೇ ಹಲ್ಮಿಡಿ ಶಾಸನ ಎಂದು ಗುರುತಿಸಬಹುದು. ಇಂತಹ ಭಾಷೆಯನ್ನಾಡುವ ಜನರೆಲ್ಲಾ ಒಂದಾಗಿ ಒಂದು ಪ್ರದೇಶದವನ್ನು ತಮ್ಮದಾಗಿಸಿಕೊಂಡು ಆ ಮೂಲಕ ಕನ್ನಡ ಏಕೀಕರಣಕ್ಕಾಗಿ ಮಾಡಿದ ಹೋರಾಟ ಸಾಮಾನ್ಯವಾದುದಲ್ಲ. ಇಂತಹ ಅಭೇದ್ಯವಾದಂತಹ ಕಾರ್ಯದಲ್ಲಿ ಹಗಲಿರುಳೆನ್ನದೆ ದುಡಿದವರಲ್ಲಿ ಆ ಮಾನವತಾವಾದಿ ಎಸ್. ನಿಜಲಿಂಗಪ್ಪನವರು ಪ್ರಮುಖರಾದವರು.

ಇಪ್ಪತ್ತನೆಯ ಶತಮಾನದಲ್ಲಿ ಕರ್ನಾಟಕದ ಇತಿಹಾಸದಲ್ಲಿ ಅವಶ್ಯವಾಗಿ ಗಮನಿಸಬೇಕಾದಂತಹ ವ್ಯಕ್ತಿ ನಿಜಲಿಂಗಪ್ಪ. ಕರ್ನಾಟಕದಲ್ಲಿ ಇವರ ಹೆಸರನ್ನು ಅರಿಯದವರಿಲ್ಲ. ಸ್ವಾತಂತ್ರ್ಯಪೂರ್ವ ಮತ್ತು ಸ್ವಾತಂತ್ರ್ಯ ನಂತರದ ವರ್ಷಗಳಲ್ಲಿ ರಾಷ್ಟ್ರಕ್ಕೆ ವಿಶೇಷವಾಗಿ ಕರ್ನಾಟಕ ರಾಜ್ಯಕ್ಕೆ ಅವರು ಸಲ್ಲಿಸಿದ ಸೇವೆ ಸ್ಮರಣೀಯ ಅವರ ರಾಜಕೀಯ, ಸಾಮಾಜಿಕ, ಆರ್ಥಿಕ ಚಿಂತನೆಗಳಿಂದ ಪ್ರಭಾವಿತರಾದವರ ಸಂಖ್ಯೆ ಅಸಂಖ್ಯಾತ ಇಂತಹ ವ್ಯಕ್ತಿಯ ಪರಿಚಯವಲ್ಲದೆ ಅವರ ಕಾರ್ಯ ಸಾಧನೆಗಳನ್ನು ವಿವರಾತ್ಮಕವಾಗಿ ಹಾಗೂ

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[1] ಮುಖ್ಯಸ್ಥರು, ರಾಜ್ಯಶಾಸ್ತ್ರ ವಿಭಾಗ, ಭಂಡಾರ್‌ಕಾರ್ಸ್ ಕಲಾ ಮತ್ತು ವಿಜ್ಞಾನ ಕಾಲೇಜು, ಕುಂದಾಪುರ, ಉಡುಪಿ ಜಿಲ್ಲೆ

ವಿಶ್ಲೇಷಣಾತ್ಮಕವಾಗಿ ಅರ್ಥ ಮಾಡುವುದು ಇಂದಿನ ಪೀಳಿಗೆಯ ರಾಜಕಾರಣಿಗಳಿಗೆ ಅಗತ್ಯವಾದಂತಹ ವಿಷಯ.

ಎಸ್. ನಿಜಲಿಂಗಪ್ಪನವರಿಗೆ ಸಂಬಂಧಿಸಿದಂತೆ ರಾಜಕೀಯ ಕ್ಷೇತ್ರಕ್ಕೆ ಸಂಬಂಧಿಸಿದ ವಿಷಯಗಳೇ ಹೆಚ್ಚು. ಇದಕ್ಕೆ ಕಾರಣ ಅವರ ಜೀವನವೆಲ್ಲಾ ರಾಜಕೀಯ ಕ್ಷೇತ್ರವೇ ಆಗಿತ್ತು. ಸ್ವಾತಂತ್ರ್ಯ ಹೋರಾಟಗಾರರಾಗಿ, ಸಂವಿಧಾನ ರಚನಾ ಸಮಿತಿ ಸದಸ್ಯರಾಗಿ, ಕರ್ನಾಟಕ ಮುಖ್ಯಮಂತ್ರಿಯಾಗಿ, ಸಂಸತ್ ಸದಸ್ಯರಾಗಿ, ಅಖಿಲ ಭಾರತ ಕಾಂಗ್ರೆಸ್ಸಿನ ಅಧ್ಯಕ್ಷರಾಗಿ, ಗಾಂಧಿವಾದಿಯಾಗಿ ಬೆಳೆದವರು. ಭಾರತದ ಮಾಜಿ ಪ್ರಧಾನಿ ಅಟಲ್ ಬಿಹಾರಿ ವಾಜಪೇಯಿಯವರು ಅವರ ಬಗ್ಗೆ ಮಾಡಿದ ಉದ್ಗಾರವೆಂದರೆ ನಿಜಲಿಂಗಪ್ಪನವರು ರಾಜಕೀಯ ನಡವಳಿಕೆಗೆ ಒಂದು ಘನತೆ – ಗಾಂಭೀರ್ಯ ತಂದುಕೊಟ್ಟ ಅಪ್ಪಟ ಪ್ರಜಾಪ್ರಭುತ್ವವಾದಿ, ಸ್ವಾಭಿಮಾನಿ, ರಾಷ್ಟ್ರನಿಷ್ಠ, ಪರಿಶುದ್ಧ ರಾಜಕಾರಣಿ ಎಂದಿದ್ದಾರೆ. ಇವರೆಲ್ಲರಿಗೂ ಅನುಕರಣೀಯ.

ನಿಜಲಿಂಗಪ್ಪನವರ ಬಾಲ್ಯ ಮತ್ತು ಶೈಕ್ಷಣಿಕ ಹಿನ್ನಲೆ

ನಿಜಲಿಂಗಪ್ಪನವರು ಹುಟ್ಟಿದ್ದು ಬಳ್ಳಾರಿ ಜಿಲ್ಲೆ, ಹರಪನಹಳ್ಳಿ ತಾಲೂಕಿನ ಹಲವಾಗಲು ಎಂಬ ಸಣ್ಣ ಗ್ರಾಮದಲ್ಲಿ 1902 ಡಿಸೆಂಬರ್, 10ರಂದು. ತಂದೆ ಅಡವಿಯಪ್ಪ, ತಾಯಿ ನೀಲಮ್ಮ. 1908ರಲ್ಲಿ ಅಡವಿಯಪ್ಪನವರು ಅಕಾಲ ಮೃತ್ಯುವಿಗೆ ತುತ್ತಾದರು. ಕುಟುಂಬದಲ್ಲಿ ಸಾಕಷ್ಟು ಕಷ್ಟನಷ್ಟಗಳನ್ನೂ ಅನುಭವಿಸಬೇಕಾಯಿತು. ನಿಜಲಿಂಗಪ್ಪನವರು ತನ್ನ ಅಜ್ಜ ಚೆನ್ನಮಲ್ಲಪ್ಪನ ಅಚ್ಚುಮೆಚ್ಚಿನ ಮೊಮ್ಮಗನಾಗಿದ್ದರು. ಬಿಡುವಿನ ಸಮಯದಲ್ಲಿ ಅಜ್ಜನ ಜೊತೆಯಲ್ಲಿ ಜಾತ್ರೆಗಳಿಗೆ, ಸಂತೆಗಳಿಗೆ ಭೇಟಿ ನೀಡುತ್ತಿದ್ದರು. ಚೆನ್ನಮಲ್ಲಪ್ಪ ಗ್ರಾಮದ ಹಿರಿಯರಾಗಿದ್ದರಿಂದ ಸಲಹೆ ಕೇಳಲು ಆಗಾಗ್ಗೆ ಗ್ರಾಮಸ್ಥರು ಅವರಲ್ಲಿಗೆ ಬರುತ್ತಿದ್ದರು. ಇಂತಹ ಸಂದರ್ಭದಲ್ಲಿ ಸಮಯೋಚಿತವಾಗಿ ವರ್ತಿಸುತ್ತಿದ್ದ ಚೆನ್ನಮಲ್ಲಪ್ಪನವರ ಗುಣ ನಿಜಲಿಂಗಪ್ಪರವರ ಎಳೆಯ ಮನಸ್ಸಿನ ಮೇಲೆ ಪ್ರಭಾವ ಬೀರಿತು.

ಪ್ರಾಥಮಿಕ ಶಿಕ್ಷಣ

ನಿಜಲಿಂಗಪ್ಪನವರ ಅಕ್ಷರ ಅಭ್ಯಾಸಕ್ಕಾಗಿ ಹಲವಾಗಲಿನ ಕೂಲಿ ಮಠಕ್ಕೆ ಸೇರಿಸಿದ್ದರು. ನಿಜಲಿಂಗಪ್ಪನವರ ಆಸಕ್ತಿ ಆಟೋಟದಲ್ಲಿದ್ದರೂ ಅವರ ಅಕ್ಷರ ಕಲಿಕಾ ಸಾಮರ್ಥ್ಯ ಮತ್ತು ಗ್ರಹಣಶಕ್ತಿ ಚುರುಕಾಗಿತ್ತು. ನಂತರ ಮುಂದಿನ ಶಿಕ್ಷಣಕ್ಕಾಗಿ ದಾವಣಗೆರೆಗೆ ಕಳುಹಿಸಿದರು. ದಾವಣಗೆರೆಯ ಜನಪ್ರಿಯ ಆಂಗ್ಲೋವರ್ನಾಕ್ಯುಲರ್ ಶಾಲೆಯಲ್ಲಿ ಶಿಕ್ಷಣ ಮುಂದುವರಿಸಿದರು. ಇವರು ಸಂಪ್ರದಾಯವಾದ ವೀರಶೈವ ಕುಟುಂಬದಲ್ಲಿ ಬೆಳೆದು ಬಂದವರಾಗಿದ್ದರು. ಅದಕ್ಕೆ ಪೂರಕವಾದ ಸಂಸ್ಕಾರವನ್ನು ಕೂಡಾ ಹೊಂದಿದ್ದರು. ವೀರಶೈವ ಧರ್ಮಕ್ಕೆ ಸಂಬಂಧಿಸಿದಂತೆ ನಡೆಯುತ್ತಿದ್ದ ಪ್ರವಚನಗಳಲ್ಲಿ ಭಾಗವಹಿಸುತ್ತಿದ್ದರೂ, ಹಲವಾರು ಮಹಾನ್ ವ್ಯಕ್ತಿಗಳ ಜೀವನ ಚರಿತ್ರೆಯನ್ನು ಓದಿ ಅಪಾರವಾದ ಜ್ಞಾನ ಸಂಪಾದನೆ ಮಾಡಿಕೊಂಡಿದ್ದರು.

ನಂತರ ಶಿಕ್ಷಣ ಮುಂದುವರಿಸಲು ಚಿತ್ರದುರ್ಗಕ್ಕೆ ಬಂದರು. 1915 ರಿಂದ 1926ರ ವರೆಗೆ ಸುಮಾರು 12 ವರ್ಷಗಳ ಕಾಲ ಚಿತ್ರದುರ್ಗದ ಚಿಕ್ಕವೀರಪ್ಪನವರ ಮನೆಯಲ್ಲಿದ್ದುಕೊಂಡು ಶಿಕ್ಷಣ ಮುಂದುವರೆಸಿದರು.

ಉನ್ನತ ಶಿಕ್ಷಣ

ಮುಂದಿನ ವಿದ್ಯಾಭ್ಯಾಸಕ್ಕಾಗಿ ಚಿತ್ರದುರ್ಗದಲ್ಲಿ ಅವಕಾಶವಿರಲಿಲ್ಲ. ಅವರು ಮೈಸೂರು, ತುಮಕೂರು ಅಥವಾ ಬೆಂಗಳೂರಿಗೆ ಹೋಗಬೇಕಿತ್ತು. ಇವರ ಅರ್ಜಿಯನ್ನು ಪುರಸ್ಕರಿಸಿದ ಕಾಲೇಜು ಶಿಕ್ಷಣ ಇಲಾಖೆ ತುಮಕೂರಿನ ಕಾಲೇಜಿನಲ್ಲಿ ಹೆಸರನ್ನು ನೊಂದಾಯಿಸಲು ಸೂಚಿಸಿತ್ತು. ಆದರೆ ನಿಜಲಿಂಗಪ್ಪನವರ ಗುರಿ ಇದ್ದದ್ದು ಬೆಂಗಳೂರಿನಲ್ಲಿ ಶಿಕ್ಷಣ ಪಡೆಯುವುದು. ಇವರ ಕೋರಿಕೆಯನ್ನು ಮನ್ನಿಸಿದ ಅಂದಿನ ಶಿಕ್ಷಣ ಇಲಾಖೆಯ ಮುಖ್ಯಸ್ಥರಾದಂತಹ ಸಿ. ಆರ್. ರೆಡ್ಡಿಯವರು ಬೆಂಗಳೂರಿನ ಕಾಲೇಜಿನಲ್ಲಿ ಶಿಕ್ಷಣ ಮುಂದುವರೆಸಲು ಅವಕಾಶ ನೀಡಿದರು. ಬೆಂಗಳೂರು ರೈಲು ನಿಲ್ದಾಣದ ಸಮೀಪವಿರುವ ತೋಟದಪ್ಪನವರ ಛತ್ರ ಅಂದು ವೀರಶೈವರ ವಿದ್ಯಾರ್ಥಿನಿಲಯವಾಗಿತ್ತು. ನಿಜಲಿಂಗಪ್ಪನವರು ಅಲ್ಲಿಗೆ ಸೇರಿಕೊಂಡರು. ಆ ಹೊತ್ತಿನಲ್ಲಿಯೇ ನಿಜಲಿಂಗಪ್ಪನವರ ಮನಸ್ಸು ಗಾಂಧೀಜಿಯವರ ಚಿಂತನೆಗೆ ಆಕರ್ಷಿತವಾಗಿತ್ತು. 1920ರಲ್ಲಿ ಹಿಂದೂ ಮತ್ತು ಮುಸ್ಲಿಮರ ಮಧ್ಯೆ ಭಾಂದವ್ಯ ಬೆಸೆಯಲು ಖಿಲಾಫತ್ ಚಳುವಳಿಯಲ್ಲಿ ಹಿಂದೂಗಳು ಪಾಲ್ಗೊಳ್ಳಬೇಕೆಂದು ಗಾಂಧೀಜಿಯವರು ಕರೆ ನೀಡಿದ್ದರು. ಹಾಗೂ ಗಾಂಧೀಜಿ ಸ್ವತಃ ಇದರಲ್ಲಿ ಪಾಲ್ಗೊಳ್ಳಲು ಬೆಂಗಳೂರಿಗೆ ಆಗಮಿಸಿದ್ದರು. ಇದು ಗಾಂಧಿಜೀಯವರ ಪ್ರಥಮ ದರ್ಶನವಾಗಿತ್ತು. ಇವರು ಗಾಂಧೀಜಿಯವರ ರಾಜಕೀಯ ಮತ್ತು ಸಾಮಾಜಿಕ ಚಿಂತನೆಗಳನ್ನು ಮುಂದೆ ಅನುಸರಿಸುವಲ್ಲಿ ಪ್ರಥಮ ಹೆಜ್ಜೆಯನ್ನು ಇಟ್ಟರು. ಬಿ.ಎ. ಪದವಿಯನ್ನು ಪಡೆಯಲು ಬೆಂಗಳೂರಿನ ಸೆಂಟ್ರಲ್ ಕಾಲೇಜಿಗೆ 1920–21ರ ಸಾಲಿನಲ್ಲಿ ಪ್ರವೇಶಾತಿಯನ್ನು ಪಡೆದರು. ಬಿ.ಎ. ಪರೀಕ್ಷೆಯನ್ನು ಪೂರ್ಣಗೊಳಿಸಿ ಮೈಸೂರು ವಿಶ್ವವಿದ್ಯಾಲಯದಿಂದ ಪದವಿ ಪಡೆದರು. ನಂತರ ಕಾನೂನು ಪದವಿಯನ್ನು ಪುಣೆಯಲ್ಲಿ ಪೂರೈಸಿದರು. ನಂತರ ನಿಜಲಿಂಗಪ್ಪನವರು 1927 ಮೇ 25ರಂದು ಮುರುಗೆಮ್ಮನವರನ್ನು ವಿವಾಹವಾದರು. ನಂತರ ವಕೀಲ ವೃತ್ತಿಯನ್ನು ಮುಂದುವರೆಸಿ ಚಿತ್ರದುರ್ಗದಲ್ಲಿ ಒಂದು ಸ್ವಂತ ಮನೆಯನ್ನು ನಿರ್ಮಾಣ ಮಾಡಿದರು.

ಕರ್ನಾಟಕದ ವಿಕೇಂದ್ರೀಕರಣ

ಆಧುನಿಕ ಕರ್ನಾಟಕದ ಇತಿಹಾಸದಲ್ಲಿ ಅತ್ಯಂತ ಮಹತ್ವದ ಸಂಗತಿ ಕರ್ನಾಟಕ ರಾಜ್ಯದಷ್ಟು ಭೌರವಾಗಿ ಛಿದ್ರಗೊಂಡಿದ್ದ ಭಾಷಾವಾರು ಪ್ರಾಂತ್ಯ ಭಾರತದಲ್ಲಿ ಮತ್ತೊಂದಿಲ್ಲ. ಈ ಸಂದರ್ಭದಲ್ಲಿ ಕರ್ನಾಟಕದ ಪೂರ್ವ ಇತಿಹಾಸ ಅಧ್ಯಯನ ಇಲ್ಲಿ ಅವಶ್ಯಕ ಹಾಗೂ ಅನಿವಾರ್ಯ.

"ಕಾವೇರಿಯಿಂದ ಮಾ ಗೋ
ದಾವರಿವರ ಮಿರ್ಪ ನಾಡದಾ ಕನ್ನಡದೊಳ್
ಭಾವಿಸಿದ ಜನಪದಂ ವಸು
ಧಾವಳಯ ವಿಲೀನ ವಿಶದ ವಿಷಯ ವಿಶೇಷಂ"

ಎಂಬುದಾಗಿ ನೃಪತುಂಗನು 'ಕವಿರಾಜಮಾರ್ಗ' ಕೃತಿಯಲ್ಲಿ ಸ್ಪಷ್ಟವಾಗಿ ಕರ್ನಾಟಕದ ವಿಸ್ತಾರವನ್ನು ಬಹಳ ಚೆನ್ನಾಗಿ ವರ್ಣಿಸಿದ್ದಾನೆ. 9ನೇ ಶತಮಾನದ ಈ ಕೃತಿಯಲ್ಲಿ ಕಾವೇರಿ ಮತ್ತು ಗೋದಾವರಿ ಮಧ್ಯೆ ಇದ್ದ ಭೂ ಪ್ರದೇಶದಲ್ಲಿ ಕನ್ನಡಭಾಷೆ ವ್ಯಾಪಕವಾಗಿ ಬಳಕೆಯಲ್ಲಿತ್ತು ಎಂಬ ಐತಿಹಾಸಿಕ ಸತ್ಯ ಇಲ್ಲಿ ತಿಳಿಯುತ್ತದೆ. ಅತ್ಯಂತ ಪ್ರಾಚೀನ ಭಾಷೆಗಳಲ್ಲಿ ಒಂದಾದ ಕನ್ನಡ ನೃಪತುಂಗನ ಕಾಲದಲ್ಲಿ ವಿಸ್ತಾರವಾಗಿ ಬೆಳೆದಿತ್ತೆಂಬುದು ನಿರ್ವಿವಾದ. ಮಧ್ಯಕಾಲೀನ ಮುಸ್ಲಿಮರ ಆಳ್ವಿಕೆ ಆಧುನಿಕ ವಸಾಹತು ಕಾಲದಲ್ಲಾದ ಅನೇಕ ರಾಜಕೀಯ ಸ್ಥಿತ್ಯಂತರ, ಕನ್ನಡಿಗರ ನಿರಭಿಮಾನ ಹಾಗೂ ಇತರೆ ಭಾಷೆಗಳ ಆಕ್ರಮಣದಿಂದಾಗಿ ಕನ್ನಡಿಗರ ಪ್ರಭಾವ ಹಾಗೂ ಮಹತ್ವ ಕ್ಷೀಣಿಸಿತು.

ಹೈದರಾಲಿ ಮತ್ತು ಟಿಪ್ಪು ಸುಲ್ತಾನರ ಕಾಲದಲ್ಲಿ ಪರ್ಷಿಯನ್ ಭಾಷೆಗೆ ವಿಶೇಷ ಪ್ರಾಶಸ್ತ್ಯ ನೀಡಿದುದರಿಂದ ಕನ್ನಡದ ಪ್ರಾಮುಖ್ಯತೆ ಮುಸುಕಾಯಿತು. ಮೈಸೂರು ಸಂಸ್ಥಾನ ಟಿಪ್ಪು ಸುಲ್ತಾನನ ಕಾಲದಲ್ಲಿ ವ್ಯಾಪಕವಾಗಿ ಹರಡಿದ್ದರೂ ಸಾಹಿತ್ಯ ಮತ್ತು ಭಾಷಾಭಿವೃದ್ಧಿಗೆ ರಾಜಾಶ್ರಯ ತಪ್ಪಿದ್ದರಿಂದ ಕನ್ನಡಕ್ಕೆ ಪ್ರೋತ್ಸಾಹ ಕನಿಷ್ಟವಾಯಿತು.

ಟಿಪ್ಪು ಸುಲ್ತಾನನ ಸೋಲು ಹಾಗೂ ಮರಣಾನಂತರ ಕರ್ನಾಟಕ ರಾಜಕೀಯ ವಿಭಜನೆ, ಕನ್ನಡದ ಬೆಳವಣಿಗೆಗೆ ಮತ್ತಷ್ಟು ಮಾರಕವಾಯಿತು. ಪರಭಾಷೆಗಳ ವಿಶೇಷವಾಗಿ ಮರಾಠಿ, ಉರ್ದು, ತೆಲುಗು, ತಮಿಳು ಇವುಗಳ ಆಕ್ರಮಣ ತಡೆಯಲು ಸಾಧ್ಯವಾಗಲಿಲ್ಲ. 19ನೇ ಶತಮಾನದ ಉದ್ದಕ್ಕೂ ಇದೇ ಪರಿಸ್ಥಿತಿ ಮುಂದುವರಿಯಿತು. 1799 ರ ಒಪ್ಪಂದದ ಪ್ರಕಾರ ಕೆಲವೇ ಕನ್ನಡ ಪ್ರದೇಶಗಳನ್ನು ಮಾತ್ರ ಮೈಸೂರು ಸಂಸ್ಥಾನಕ್ಕೆ ಸೀಮಿತಗೊಳಿಸಿ ಇಂದಿನ ಬೆಳಗಾವಿ, ಧಾರವಾಡ, ವಿಜಾಪುರ ಜಿಲ್ಲೆಗಳನ್ನು ಮರಾಠರಿಗೂ, ಉತ್ತರದ ತುದಿಯ ಜಿಲ್ಲೆಗಳಾದ ಬೀದರ್, ಗುಲ್ಬರ್ಗಾ ಮತ್ತು ರಾಯಚೂರುಗಳನ್ನು ಹೈದರಾಬಾದ್ ನಿಜಾಮನಿಗೂ, ಕೆನರಾ ಜಿಲ್ಲೆ (ಇಂದಿನ ಉತ್ತರಕನ್ನಡ, ದಕ್ಷಿಣಕನ್ನಡ ಹಾಗೂ ಉಡುಪಿ ಜಿಲ್ಲೆಗಳು) ಬಳ್ಳಾರಿ, ಉದಕಮಂಡಲ ಹಾಗೂ ಕೆಲವು ತಾಲೂಕುಗಳನ್ನು ಮದ್ರಾಸ್ ಪ್ರೆಸಿಡೆನ್ಸಿಯ ನೇರ ಆಡಳಿತಕ್ಕೆ ಒಪ್ಪಿಸಲಾಯಿತು. ಅದಲ್ಲದೆ ಅನೇಕ ಸಣ್ಣಪುಟ್ಟ ಸಂಸ್ಥಾನಗಳು ಕರ್ನಾಟಕದಲ್ಲಿ ನೆಲೆಗೊಂಡವು.

ಏಕೀಕರಣ ಚಳುವಳಿಯ ಪ್ರಾರಂಭ

ಕನ್ನಡ ಏಕೀಕರಣ ಚಳುವಳಿ ಪ್ರಾರಂಭಿಕ ವರ್ಷಗಳಲ್ಲಿ ಮುಂಬೈ ಪ್ರಾಂತ್ಯದಲ್ಲಿ ಸೇರಿ ಹೋಗಿದ್ದ ಕನ್ನಡ ಜಿಲ್ಲೆಗಳಿಗೆ ಮಾತ್ರ ಸೀಮಿತವಾಗಿತ್ತು. ಇಲ್ಲೂ ಸಹಾ ಇದು ಜನಸಾಮಾನ್ಯರ ಚಳುವಳಿಯಾಗದೆ ಕೇವಲ ಬೌದ್ಧಿಕ ವರ್ಗಕ್ಕೆ ಸೇರಿದ ವಿದ್ವಾಂಸರ ಚಳುವಳಿಯಾಗಿತ್ತು. ಈ ರೀತಿಯ ಬೌದ್ಧಿಕ ವರ್ಗ ಇಲ್ಲದೆ ಹೋದುದರಿಂದ ಕರಾವಳಿ ಪ್ರದೇಶದಲ್ಲಿ ಕನ್ನಡದ ಬಗ್ಗೆ ಯೋಚನೆ ಮಾಡುವವರೆ ಇರಲಿಲ್ಲ. 1881ರ ಆನಂತರ ಸಂಸ್ಥಾನದ ಸಾಹಿತಿಗಳು, ಜನಸಾಮಾನ್ಯರು ನಿರಭಿಮಾನಿಗಳಾಗಿರಲಿಲ್ಲ. ಮುಂಬೈ ಕನ್ನಡ ಪ್ರಾಂತ್ಯಗಳಲ್ಲಿ ಮರಾಠಿಗಳ ಹಾವಳಿ ಹೆಚ್ಚಾದುದರಿಂದ ಕನ್ನಡದ ಭಾಷಾ ಹಂಬಲ ಹೆಚ್ಚಾಯಿತು. ಮರಾಠಿಗರ ಆಕ್ರಮಣ ತಡೆಯಬೇಕಾದರೆ ಕನ್ನಡ ಭಾಷಿಕರೆಲ್ಲಾ ಒಂದಾಗುವುದು ಅನಿವಾರ್ಯವಾಯಿತು.

ಕನ್ನಡದ ಏಕೀಕರಣದ ಚಳುವಳಿಯನ್ನು ಅಧ್ಯಯನ ಮಾಡುವ ಸಂದರ್ಭದಲ್ಲಿ ಮೇಲಿನ ಎಲ್ಲಾ ಅಂಶಗಳನ್ನು ಗಮನದಲ್ಲಿಟ್ಟುಕೊಳ್ಳಬೇಕು. ಮೈಸೂರು ಸಂಸ್ಥಾನದ ದಕ್ಷಿಣ ಭಾಗದಲ್ಲಿ ಎಂದರೆ ಮೈಸೂರು, ಬೆಂಗಳೂರು, ಹಾಸನ, ಚಿಕ್ಕಮಗಳೂರು, ಮಂಡ್ಯ ಜಿಲ್ಲೆಗಳಲ್ಲಿ ಏಕೀಕರಣ ಚಳುವಳಿಯು ಒಂದು ಜನಾಂದೋಲನವಾಗಿರಲಿಲ್ಲ. ಆದರೆ ಮರಾಠಿ, ತೆಲಗು ಹಾಗೂ ತಮಿಳು ಭಾಷೆಗಳ ಅತಿಕ್ರಮಣಕ್ಕೆ ಒಳಗಾಗಿದ್ದ ಇತರೆ ಪ್ರದೇಶದಲ್ಲಿದ್ದ ಕನ್ನಡ ಭಾಷಿಕರ ಬಗ್ಗೆ ಅರಿವು ಮತ್ತು ಅನುಕಂಪ ಇದ್ದಂತೆ ತೋರುವುದಿಲ್ಲ. ಸ್ವಾತಂತ್ರ್ಯ ಪೂರ್ವದಲ್ಲಿ ಈಗಾಗಲೇ ಹೇಳಿರುವಂತೆ ಚಿತ್ರದುರ್ಗ ಜಿಲ್ಲೆಯ ಬೌದ್ಧಿಕ ವರ್ಗ ಧಾರವಾಡ ಜಿಲ್ಲೆಯ ಬೌದ್ಧಿಕ ವರ್ಗಕ್ಕೆ ಸಮೀಪದಲ್ಲಿತ್ತು ಹಾಗೂ ಪರಸ್ಪರ ಪ್ರಭಾವಕ್ಕೆ ಒಳಗಾಗಿತ್ತು. ಈ ಹಿನ್ನಲೆಯಲ್ಲಿ ಮಣಿಯಲ್ಲಿ ಶಿಕ್ಷಣ ಪಡೆದಿದ್ದ ನಿಜಲಿಂಗಪ್ಪನವರು ಮುಂಬೈ ಕನ್ನಡ ಜಿಲ್ಲೆಗಳ ಬೌದ್ಧಿಕ ವರ್ಗದ ಪ್ರಭಾವಕ್ಕೆ ಒಳಪಟ್ಟಿದ್ದು ಸ್ವಾಭಾವಿಕವಾಗಿತ್ತು. ಆದುದರಿಂದ ನಿಜಲಿಂಗಪ್ಪನವರು ಕರ್ನಾಟಕದ ಏಕೀಕರಣಕ್ಕೆ ಮಡಿಯುವಂತಾಯಿತು.

ಕನ್ನಡಿಗರನ್ನೆಲ್ಲಾ ಒಂದುಗೂಡಿಸುವ ಪ್ರಬಲ ಮಾಧ್ಯಮವಾಗಿ ಕನ್ನಡ ಭಾಷೆಯನ್ನು ಬೆಳೆಸುವ ಉದ್ದೇಶದಿಂದ 1890 ರಲ್ಲಿ ಕರ್ನಾಟಕ ವಿದ್ಯಾವರ್ಧಕ ಸಂಘವನ್ನು ಧಾರವಾಡದಲ್ಲಿ ಸ್ಥಾಪಿಸಲಾಯಿತು. ಈ ಸಂಸ್ಥೆಯು ಸುಮಾರು ಎರಡು ದಶಕಗಳ ಕಾಲ ಕನ್ನಡ ಭಾಷೆಯ ಬೆಳವಣಿಗೆಗೆ ಪೂರಕವಾದಂತಹ ಕಾರ್ಯಕ್ರಮಗಳನ್ನು ರೂಪಿಸಿತು. ಹಾಗೂ 'ವಾಗ್ಭೂಷಣ' ಎಂಬಂತಹ ಕನ್ನಡ ಪತ್ರಿಕೆಯನ್ನು ಪ್ರಾರಂಭಿಸಿತು. 1917ರಲ್ಲಿ ಕನ್ನಡ ಮಾತನಾಡುವ ಜಿಲ್ಲೆಗಳನ್ನು ಒಟ್ಟುಗೂಡಿಸಿ ಕನ್ನಡ ರಾಜ್ಯವನ್ನು ಸ್ಥಾಪಿಸಬೇಕೆಂಬ ಬೇಡಿಕೆಯನ್ನು ಬ್ರಿಟಿಷ್ ಸರ್ಕಾರದ ಮುಂದಿಡಲಾಯಿತು. ವಿದ್ಯಾವರ್ಧಕ ಸಂಘ ಬೆಳಗಾವಿ, ಬಿಜಾಪುರ, ಧಾರವಾಡ, ಉತ್ತರ ಕನ್ನಡ ಜಿಲ್ಲೆ ಮತ್ತು ದಕ್ಷಿಣ ಕನ್ನಡ ಜಿಲ್ಲೆಗಳನ್ನು ಒಟ್ಟಾಗಿ ಸೇರಿಸಿ ಕನ್ನಡ ರಾಜ್ಯವನ್ನು ಸ್ಥಾಪಿಸುವ ಕನಸಿನ ರೂವಾರಿಯಾಯಿತು.

ಈ ವಿದ್ಯಾವರ್ಧಕ ಸಂಘ ಕನ್ನಡದ ಬಗ್ಗೆ ಕಾಳಜಿಯಿಳ್ಳ ಕವಿಗಳು, ಲೇಖಕರು ಹಾಗೂ ಸಾರ್ವಜನಿಕ ವ್ಯಕ್ತಿಗಳನ್ನೂ ಹುರಿದುಂಬಿಸಿ ಕನ್ನಡ ನಾಡಿನ ವಿವಿಧೆಡೆಗಳಲ್ಲಿ ಕನ್ನಡ ಸಂಘವನ್ನು ಸ್ಥಾಪಿಸಲು ಅವಕಾಶ ಕೊಟ್ಟಿತು. ಹೈದರಾಬಾದ್ ಕರ್ನಾಟಕ, ಮದ್ರಾಸ್ ಕರ್ನಾಟಕ, ಮುಂಬೈ ಕರ್ನಾಟಕದ ಅನೇಕ ಪ್ರದೇಶಗಳಲ್ಲಿ ಕನ್ನಡಕ್ಕಾಗಿ ದುಡಿಯುವ ಸಂಘಟನೆಗಳು ಅಸ್ತಿತ್ವಕ್ಕೆ ಬಂದವು. ಆ ಮೂಲಕ ಹತ್ತಾರು ಸಂಖ್ಯೆಯಲ್ಲಿ ವಾಚನಾಲಯಗಳು, ಗ್ರಂಥಾಲಯಗಳು, ವ್ಯಾಯಾಮ ಶಾಲೆಗಳು, ನಾಡಹಬ್ಬ ಸಮಿತಿಗಳು ಅಸ್ತಿತ್ವಕ್ಕೆ ಬಂದವು. ಆಲೂರು ವೆಂಕಟರಾವ್‌ರವರು 'ಕರ್ನಾಟಕ ಗತವೈಭವ' ಕೃತಿಯನ್ನು ರಚಿಸಿದರು. ಕನ್ನಡಿಗರ ಏಳಿಗೆ ಏಕೀಕರಣದಿಂದ ಮಾತ್ರ ಸಾಧ್ಯ ಎಂಬ ಧೃಢನಿರ್ಧಾರವನ್ನು ಹೊಂದಿದರು. ಹೋದಡೆಯೆಲ್ಲಾ ಕನ್ನಡ ನಾಡಿನ ಬಗ್ಗೆ ಉಪನ್ಯಾಸಗಳನ್ನು ನೀಡಿ ಏಕೀಕರಣದ ಅನಿವಾರ್ಯತೆಯನ್ನು ಜನಮಾನಸದಲ್ಲಿ ಮೂಡುವಂತೆ ಮಾಡಲಾಯಿತು. ಅದೇ ಸಂದರ್ಭದಲ್ಲಿ ಕನ್ನಡನಾಡು ನುಡಿಯನ್ನು ಕುರಿತು ಜಾನ್ ಫೆಯಿತ್‌ಫುಲ್ ಫ್ಲೀಟ್, ಲೂಯಿಸ್ ರೈಸ್, ರೆವರೆಂಡ್ ಫಾದರ್ ಕಿಟ್ಟಲ್ ಮೊದಲಾದವರು ಕರ್ನಾಟಕದ ಇತಿಹಾಸದ ಬಗ್ಗೆ ಬೆಳಕನ್ನು ಚೆಲ್ಲಿದರು.

ಮೈಸೂರು ಸಂಸ್ಥಾನದಲ್ಲಿ ಕನ್ನಡದ ಪ್ರಗತಿ

ಅತೀ ಹೆಚ್ಚಿನ ಸಂಖ್ಯೆಯಲ್ಲಿ ಕನ್ನಡ ಭಾಷೆಯನ್ನು ಆಡುತ್ತಿದ್ದ ಜನಸಮೂಹವಿದ್ದದ್ದು ಮೈಸೂರು ಸಂಸ್ಥಾನದಲ್ಲಿ. ಇಲ್ಲಿ ಕನ್ನಡ ಸಾಹಿತ್ಯ ರಚನೆಗೆ ರಾಜಾಶ್ರಯವು ದೊರಕಿದ್ದು, ಕನ್ನಡ ಭಾಷೆ ಬೆಳೆಯಲು ಯಾವುದೇ ಅಡ್ಡಿ ಆತಂಕಗಳಿರಲಿಲ್ಲ. ರಾಜಾಶ್ರಯದಲ್ಲಿ 1915 ರಲ್ಲಿ ಬೆಂಗಳೂರಿನಲ್ಲಿ ಕನ್ನಡ ಸಾಹಿತ್ಯ ಸಮ್ಮೇಳನ ನಡೆಯಿತು. ನಾಡಿನ ಮೂಲೆ ಮೂಲೆಗಳಿಂದ ಪ್ರತಿನಿಧಿಗಳು ಈ ಸಮ್ಮೇಳನದಲ್ಲಿ ಭಾಗವಹಿಸಿ ಕನ್ನಡದ ಏಳಿಗೆಗಾಗಿ ಪಣ ತೊಟ್ಟರು. ಅದೇ ವರ್ಷ ಕನ್ನಡ ಸಾಹಿತ್ಯ ಪರಿಷತ್ತು ಬೆಂಗಳೂರಿನಲ್ಲಿ ಅಸ್ತಿತ್ವಕ್ಕೆ ಬಂದಿತು. ಆದರೆ ಈ ಕನ್ನಡ ಪರಿಷತ್ತು ಕನ್ನಡ ಸಾಹಿತ್ಯದ ಅಭಿವೃದ್ಧಿಗೆ ಮಾತ್ರ ಮೀಸಲಾಗಿದ್ದು ಕನ್ನಡಿಗರ ಸಮಸ್ಯೆಗಳ ಬಗ್ಗೆ, ಕನ್ನಡಿಗರ ಏಕೀಕರಣದ ಬಗ್ಗೆ ಯಾವುದೇ ಕಾರ್ಯಕ್ರಮವನ್ನು ಹೊಂದಿರಲಿಲ್ಲ. ರಾಜಾಶ್ರಯದಲ್ಲಿದ್ದುದರಿಂದ ಚಳುವಳಿಯಂತಹ ಕಾರ್ಯಕ್ರಮಗಳನ್ನು ಏಕೀಕರಣಕೋಸ್ಕರ ಹಮ್ಮಿಕೊಳ್ಳಲು ಸಾಧ್ಯವಿರಲಿಲ್ಲ. ಕನ್ನಡಿಗರನ್ನು ಒಗ್ಗೂಡಿಸಲು ಕನ್ನಡ ಸಾಹಿತ್ಯ ಪರಿಷತ್ತು ಯಾವುದೇ ಅರಿವು ಮೂಡಿಸುವ ಕಾರ್ಯಕ್ರಮ ರೂಪಿಸದೆ ಹೋದುದರಿಂದ ಅದಕ್ಕೆ ಪರ್ಯಾಯವಾಗಿ ಸಂಘಟನೆಯೊಂದು ಸ್ಥಾಪಿಸುವ ಅನಿವಾರ್ಯತೆ ಈ ಸಂದರ್ಭದಲ್ಲಿ ಉಂಟಾಯಿತು. ಆಲೂರು ವೆಂಕಟರಾಯರು ತಮ್ಮ ಸಹೋದ್ಯೋಗಿಗಳ ಜೊತೆಗೆ 1916 ರಲ್ಲಿ ಕನ್ನಡ ಸಾಹಿತ್ಯ ಪರಿಷತ್ತಿಗೆ ಪರ್ಯಾಯವಾಗಿ 'ಕರ್ನಾಟಕ ಸಭಾ' ಸ್ಥಾಪಿಸಿದರು. ಇದು ಕರ್ನಾಟಕ ಸಭಾ ಮುಂದಿನ ವರ್ಷಗಳಲ್ಲಿ ಕರ್ನಾಟಕ ಏಕೀಕರಣಕ್ಕೆ ಹೋರಾಡಿದ ಪ್ರಮುಖ ಸಂಘಟನೆಯಾಯಿತು. ಅನೇಕ ಮೌಲಿಕ ಪ್ರಕಟಣೆಗಳ ಮೂಲಕ ಕರ್ನಾಟಕ ಸಭಾ ಏಕೀಕರಣಕ್ಕೆ ಮಹತ್ವದ ಕೊಡುಗೆಯನ್ನು ನೀಡಿತು. ಪ್ರತಿಯೊಬ್ಬ ಕನ್ನಡಿಗನೂ ಕರ್ನಾಟಕದ ಏಕೀಕರಣಕ್ಕೆ ದುಡಿಯಬೇಕು ಎಂದು ಕರೆ ನೀಡಿದ "ಕನ್ನಡಿಗರ ಕರ್ತವ್ಯ" ಎಂಬ ಪುಸ್ತಕವನ್ನು 1917ರಲ್ಲಿ ಕರ್ನಾಟಕ ಸಭಾ ಪ್ರಕಟಿಸಿತು.

ಪ್ರಥಮ ಮಹಾಯುದ್ಧದ ಕಾಲದಲ್ಲಿ ಮುಂಬೈ ಪ್ರಾಂತ್ಯದಲ್ಲಿ ಬಾಲಗಂಗಾಧರ ತಿಲಕರು ಪ್ರಾರಂಭಿಸಿದ ಹೋಂ ರೂಲ್ ಚಳುವಳಿಯ ವಿಕೇಂದ್ರೀಕರಣಕ್ಕೆ ಒಂದು ಹೊಸ ಆಯಾಮವನ್ನು ನೀಡಿತ್ತು. ಈ ಸಂದರ್ಭದಲ್ಲಿ ತಿಲಕರು ಮತ್ತು ಮುಂಬೈ ಪ್ರಾಂತ್ಯದ ಇತರೆ ರಾಜಕೀಯ ನಾಯಕರು ಮುಂಬೈ ಕರ್ನಾಟಕದ ಇತರೆ ಜಿಲ್ಲೆಗಳಿಗೆ ಭೇಟಿ ನೀಡಿ ಹೋಂ ರೂಲ್ ಚಳುವಳಿಯು ವ್ಯಾಪಕವಾಗಿ ಹರಡಲು ಪ್ರಯತ್ನಿಸಿದರು. ಆ ಸಂದರ್ಭದಲ್ಲಿ ತಿಲಕರ ಅಭಿಮಾನಿಗಳಾಗಿದ್ದ ಆಲೂರು ವೆಂಕಟರಾಯರು, ಕಡಪ ರಾಘವೇಂದ್ರ ರಾವ್, ಮುದವೀಡು ಕೃಷ್ಣ ರಾವ್, ರಾಜ ಪುರೋಹಿತ್‌ರವರು ತಿಲಕರ ಹೋಂ ರೂಲ್ ಚಳುವಳಿಯಲ್ಲಿ ಭಾಗವಹಿಸಿದ್ದರು. ಹಾಗೂ ಕನ್ನಡ ನಾಡಿನಲ್ಲಿ ಕನ್ನಡದಲ್ಲಿಯೇ ಭಾಷಣ ಮಾಡಬೇಕೆಂದು ಬೇಡಿಕೆ ಮುಂದಿಟ್ಟರು. ಆಗ ಈ ಹೋಂ ರೂಲ್ ಚಳುವಳಿಯು ಮತ್ತೊಂದು ಅರ್ಥದಲ್ಲಿ ಸ್ವಯಂ ಆಡಳಿತವನ್ನು ಕಲ್ಪಿಸಿ ಕೊಡುವ ಪರಿಕಲ್ಪನೆಯಾಯಿತು. ಹೋಂ ರೂಲ್ ಚಳುವಳಿ ಯಶಸ್ವಿಯಾದರೆ ಕನ್ನಡ ಭಾಷಿಕರನ್ನೊಳಗೊಂಡ ಪ್ರತ್ಯೇಕ ರಾಜ್ಯ ಸ್ಥಾಪನೆಯಾಗುವ ಕನಸನ್ನೂ ಆಲೂರು ವೆಂಕಟರಾಯರು ಹಾಗೂ ಅವರ ಮಿತ್ರರು ಹೊಂದಿದ್ದರು. ಆದ್ದರಿಂದ ಕರ್ನಾಟಕ ಏಕೀಕರಣ ಚಳುವಳಿಯಲ್ಲಿ ಹೋಂ ರೂಲ್ ಚಳುವಳಿಯು ಅತ್ಯಂತ ಮಹತ್ವದ ಘಟ್ಟವಾಯಿತು. ಈ ಕಾಲಘಟ್ಟದಲ್ಲಿ ಈ ಚಳುವಳಿಯು ಕೇವಲ

ಧಾರವಾಡ ಜಿಲ್ಲೆಗೆ ಸೀಮಿತವಾಗಿತ್ತು. ಏಕೀಕರಣ ಚಳುವಳಿಯು ಪ್ರಬಲವಾದ ಹಾಗೆಲ್ಲ ಧಾರವಾಡವನ್ನೇ ಕೇಂದ್ರವಾಗಿಟ್ಟುಕೊಂಡು ಈ ಚಳುವಳಿಯು ಕನ್ನಡ ಭಾಷಿಕರಿದ್ದ ಮುಂಬೈ ಪ್ರಾಂತ್ಯದ ಎಲ್ಲಾ ಜಿಲ್ಲೆಗಳಿಗೂ ವ್ಯಾಪಿಸಿತು.

ಏಕೀಕರಣ ಮತ್ತು ಕಾಂಗ್ರೆಸ್

ಕರ್ನಾಟಕದ ಏಕೀಕರಣದ ಬಹುಪಾಲು ನಾಯಕರು ಕಾಂಗ್ರೆಸ್ ಪಕ್ಷದ ಸದಸ್ಯರಾಗಿದ್ದರು. ಇವರುಗಳು ಪ್ರಾಂತೀಯ ಮತ್ತು ರಾಷ್ಟ್ರೀಯ ಮಟ್ಟದಲ್ಲಿ ಹಿತಾಸಕ್ತಿಯ ಗುಂಪನ್ನು ಕಟ್ಟಿಕೊಂಂಡು ಭಾಷಾಧಾರಿತ ಪ್ರಾಂತ್ಯಗಳ ನಿರ್ಮಾಣಕ್ಕೆ ಕಾಂಗ್ರೆಸ್ ಮತ್ತು ಬ್ರಿಟಿಷ್ ಸರ್ಕಾರದ ಮೇಲೆ ಒತ್ತಡ ಹೇರಿದರು. ಪ್ರಥಮ ಮಹಾಯುದ್ಧ ಮುಗಿದ ವರ್ಷವೇ ಕೇಂದ್ರ ಶಾಸನ ಸಭೆಯಲ್ಲಿ ಭಾಷಾಧಾರಿತ ಪ್ರಾಂತ್ಯಗಳ ನಿರ್ಮಾಣಕ್ಕೆ ಅವಕಾಶ ಕೋರಿ ಖಾಸಗಿ ಗೊತ್ತುವಳಿಯನ್ನು ತರಲಾಯಿತು. ಬ್ರಿಟಿಷ್ ಸರ್ಕಾರದ ಅನೇಕ ಅಧಿಕಾರಿಗಳು ಇದಕ್ಕೆ ಸಹಮತವನ್ನು ಸೂಚಿಸಿದರು.

ಏಕೀಕರಣದಲ್ಲಿ ಮತ್ತೊಂದು ಪ್ರಮುಖ ಘಟ್ಟವೆಂದರೆ ಕಾಂಗ್ರೆಸ್ಸಿನ ನಾಗಪುರ ಅಧಿವೇಶನ. ಈ ಅಧಿವೇಶನ ನಡೆದಿದ್ದು 1920 ರಲ್ಲಿ. ಈ ಅಧಿವೇಶನ ಪ್ರಾರಂಭವಾಗುವ ಪೂರ್ವದಲ್ಲಿ ಕಡಪ ರಾಘವೇಂದ್ರ ರಾಯರು ಹಾಗೂ ಅವರ ಇತರ ಮಿತ್ರರು ಕರ್ನಾಟಕದ ಅನೇಕ ಜಿಲ್ಲೆಗಳಲ್ಲಿ ಪ್ರವಾಸ ಮಾಡಿ ಅಪಾರ ಹೆಚ್ಚಿನ ಸಂಖ್ಯೆಯಲ್ಲಿ ಪ್ರತಿನಿಧಿಗಳು ಕರ್ನಾಟಕದಿಂದ ನಾಗಪುರ ಅಧಿವೇಶನಕ್ಕೆ ತೆರಳಲು ಹುರಿದುಂಬಿಸಿದರು. ಪರಿಣಾಮವಾಗಿ ರಾಜ್ಯದ ಮೂಲೆ ಮೂಲೆಗಳಿಂದ 800ಕ್ಕೂ ಹೆಚ್ಚು ಪ್ರತಿನಿಧಿಗಳು ನಾಗಪುರ ಅಧಿವೇಶನದಲ್ಲಿ ಭಾಗವಹಿಸಿದರು. ಭಾಷಾಧಾರಿತ ಪ್ರಾಂತ್ಯಗಳ ನಿರ್ಮಾಣ ಇವರ ಒಕ್ಕೊರಲಿನ ಬೇಡಿಕೆಯಾಗಿತ್ತು. ಈ ವಿಷಯಕ್ಕೆ ನಾಗಪುರ ಅಧಿವೇಶನವು ಒಂದು ಮೂರ್ತ ರೂಪವನ್ನು ನೀಡಿತ್ತು. ಅಧಿವೇಶನದಲ್ಲಿ ಕಾಂಗ್ರೆಸ್, ಭಾಷೆಯ ಆಧಾರದ ಮೇಲೆ ಕಾಂಗ್ರೆಸ್ ಪ್ರಾಂತೀಯ ಸಮಿತಿಗಳನ್ನು ರಚಿಸುವ ಅತ್ಯಂತ ಮಹತ್ವದ ನಿರ್ಣಯವನ್ನು ಕೈಗೊಂಡಿತು. ಇದರ ಅನ್ವಯ 21 ಪ್ರಾಂತೀಯ ಕಾಂಗ್ರೆಸ್ ಸಮಿತಿಗಳನ್ನು ಅಸ್ತಿತ್ವಕ್ಕೆ ತರಲಾಯಿತು. ಕನ್ನಡ ಮಾತನಾಡುವ ಜಿಲ್ಲೆಗಳನ್ನು ಒಟ್ಟುಗೂಡಿಸಿ ಕರ್ನಾಟಕ ಕಾಂಗ್ರೆಸ್ ಪ್ರಾಂತೀಯ ಸಮಿತಿಗಳನ್ನು ರಚಿಸಲಾಯಿತು. ಇದೇ ಸಂದರ್ಭದಲ್ಲಿ ಕರ್ನಾಟಕ ಏಕೀಕರಣವನ್ನು ರಾಜಕಾರಣದ ಮೂಲಕ ಸಾಧಿಸುವ ಚಿಂತನೆಯು ಪ್ರಾರಂಭವಾಯಿತು. ರಾಜಕಾರಣಿಗಳ ಹಿತಾಸಕ್ತಿಯ ಗುಂಪೊಂದನ್ನು ರಚಿಸಿ ಆ ಮೂಲಕ ರಾಜಕೀಯ ಒತ್ತಡವನ್ನು ಸರ್ಕಾರದ ಮೇಲೆ ಹೇರಿ ಗುರಿ ಸಾಧಿಸುವುದು ಈ ಗುಂಪಿನ ಚಿಂತನೆಯಾಯಿತು. ಈ ರೀತಿಯ ಮನಸ್ಸುಗಳನ್ನು ಹೊಂದಿದ್ದ ಮೈಸೂರು ಸಂಸ್ಥಾನದ ದಿವಾನರಾಗಿದ್ದ ವಿ. ಪಿ. ಮಾಧವರಾವ್ ಅವರ ನೇತೃತ್ವದಲ್ಲಿ ಅಖಿಲ ಕರ್ನಾಟಕ ರಾಜಕೀಯ ಪರಿಷತ್ತನ್ನು ಸ್ಥಾಪಿಸಿದರು. ಇದರ ಪ್ರಥಮ ಸಭೆಯನ್ನು ಧಾರವಾಡದಲ್ಲಿ 1922 ರಲ್ಲಿ ನಡೆಸಲಾಯಿತು. ಈ ಸಭೆಯಲ್ಲಿ ಎರಡು ಸಾವಿರಕ್ಕೂ ಮಿಗಿಲಾಗಿ ಪ್ರತಿನಿಧಿಗಳು ಭಾಗವಹಿಸಿ ಕನ್ನಡ ಭಾಷಿಕರು ಇರುವ ಪ್ರದೇಶಗಳನ್ನು ಒಂದುಗೂಡಿಸಿ ರಾಜಕೀಯ ಮತ್ತು ಆಡಳಿತಾತ್ಮಕ ಘಟಕವನ್ನು ರಚಿಸಬೇಕೆಂಬ ಬೇಡಿಕೆಯನ್ನು ಬ್ರಿಟಿಷ್ ಸರ್ಕಾರದ ಮುಂದಿಟ್ಟರು. ನಾಗಪುರ ಅಧಿವೇಶನ ಮತ್ತು ಧಾರವಾಡದಲ್ಲಿ ನಡೆದ

ರಾಜಕೀಯ ಪರಿಷತ್‌ನ ಸಮ್ಮೇಳನ ಏಕೀಕರಣದ ಚಳುವಳಿಯಲ್ಲಿ ಪ್ರಥಮ ಸೋಪಾನವಾಯಿತು. ಬ್ರಿಟಿಷ್ ಸರ್ಕಾರ ಭಾಷಾಧಾರಿತ ಕರ್ನಾಟಕ ನಿರ್ಮಾಣಕ್ಕೆ ವಿಶೇಷವಾದ ಆದ್ಯತೆಯನ್ನು ನೀಡದಿದ್ದರೂ ಈ ದಿಶೆಯಲ್ಲಿ ಚಿಂತನೆ ಮಾಡುವ ಕಾಲವು ಸನ್ನಿಹಿತವಾಯಿತು.

ಏಕೀಕರಣ ಸಾಹಿತ್ಯ ಹಾಗೂ ಪತ್ರಿಕೋದ್ಯಮ

ಏಕೀಕರಣದಲ್ಲಿ ಸಹಾಯಕ್ಕೆ ಬಂದಂತಹ ಕ್ಷೇತ್ರಗಳೆಂದರೆ ಸಾಹಿತ್ಯ ಮತ್ತು ಪತ್ರಿಕೋದ್ಯಮ. ಈ ಸನ್ನಿವೇಶದಲ್ಲಿ ಕರ್ನಾಟಕದ ಪ್ರಾಚೀನ ವೈಭವಗಳನ್ನು ಚಿತ್ರಿಸುವ ಸಾಹಿತ್ಯವು ವಿಫುಲವಾಗಿ ಸೃಷ್ಟಿಯಾಯಿತು. ಧಾರವಾಡದಂತಹ ನಗರಗಳಲ್ಲಿ ಸಾಹಿತ್ಯ ಆಸಕ್ತರ ಗುಂಪೊಂದು ಸದಾ ಕ್ರಿಯಾಶೀಲವಾಗಿತ್ತು. ಈ ಗುಂಪು ನಾಟಕ ಮಾಧ್ಯಮವನ್ನು ಪರಿಣಾಮಕಾರಿಯಾಗಿ ಬಳಸಿದ್ದುಂಟು. ಧಾರವಾಡದಿಂದ ಪ್ರಕಟಿಸಲ್ಪಡುತ್ತಿದ್ದ 'ಕರ್ಮವೀರ" ಹಾಗೂ "ಜಯ ಕರ್ನಾಟಕ" ಪತ್ರಿಕೆಗಳು ಕರ್ನಾಟಕದ ಏಕೀಕರಣಕ್ಕೆ ಮುಖವಾಣಿಗಳಾಗಿದ್ದವು. ಕರ್ಮವೀರ ಕರ್ನಾಟಕದ ರಾಷ್ಟ್ರೀಯ ಆಂದೋಲನ ಹಾಗೂ ಏಕೀಕರಣ ಚಳುವಳಿಗೆ ಉತ್ಕೃಷ್ಟವಾದ ಕೊಡುಗೆಯನ್ನು ನೀಡಿತು. ಜಯ ಕರ್ನಾಟಕ ತನ್ನ ಸಾಮರ್ಥ್ಯವನ್ನು ಪೂರ್ಣವಾಗಿ ಏಕೀಕರಣ ಸಾಧನೆಗೆ ಮುಡುಪಾಗಿಟ್ಟಿತು. 1920–21ರ ಸಾಲಿನಲ್ಲಿ ಕರ್ನಾಟಕ ಪ್ರಾಂತೀಯ ಕಾಂಗ್ರೆಸ್ ಸಮಿತಿಯ ರಚನೆ ಹಾಗೂ ಕರ್ನಾಟಕ ರಾಜಕೀಯ ಪರಿಷತ್ ಸ್ಥಾಪನೆಯಿಂದಾಗಿ ಮುಂಬೈ ಕರ್ನಾಟಕ ಭಾಗದಲ್ಲಿ ಏಕೀಕರಣ ಚಳುವಳಿಯು ಪ್ರಬಲವಾಯಿತು.

ಬೆಳಗಾವಿಯ ಅಧಿವೇಶನ (1924) ಹಾಗೂ ಇತರ ಸಂಘಟನೆಗಳು

1924ರಲ್ಲಿ ಕಾಂಗ್ರೆಸ್ಸಿನ ಬೆಳಗಾವಿ ಅಧಿವೇಶನ. ಈ ಅಧಿವೇಶನವನ್ನು ಎರಡು ದೃಷ್ಟಿಕೋನಗಳಿಂದ ಪ್ರಮುಖವಾಗಿತ್ತು. ಮೊದಲನೆಯದಾಗಿ ಕರ್ನಾಟಕದಲ್ಲಿ ನಡೆದ ಪ್ರಥಮ ಕಾಂಗ್ರೆಸ್ಸಿನ ಅಧಿವೇಶನ, ಎರಡನೆಯದಾಗಿ ಏಕೀಕರಣದ ಚಳುವಳಿಗಾರರು ಇದನ್ನು ಒಂದು ಪ್ರಬಲ ವೇದಿಕೆಯನ್ನಾಗಿ ಪರಿವರ್ತಿಸಿಕೊಂಡರು. ಅದೇ ರೀತಿ ರಾಜಕೀಯ ಬಲಯುತವಲ್ಲೂ ಇದು ಬಹಳ ಮಹತ್ವಪೂರ್ಣವಾಗಿತ್ತು. ಗಾಂಧೀಜಿಯವರು ಈ ಅಧಿವೇಶನದ ಅಧ್ಯಕ್ಷರಾಗಿದ್ದು ಬಹಳ ಪ್ರಮುಖವಾದ ಮತ್ತು ಮರೆಯಲಾರದ ಘಟನೆ.

ನಂತರ 2 ವರ್ಷಗಳ ನಂತರ "ಕರ್ನಾಟಕ ಏಕೀಕರಣ ಸಂಘ" ಮತ್ತು "ಅಖಿಲ ಕರ್ನಾಟಕ ಏಕೀಕರಣ ಪರಿಷತ್" ಬೆಳಗಾವಿಯ ಕಾಂಗ್ರೆಸ್ ಅಧಿವೇಶನದ ಜೊತೆಯಲ್ಲಿಯೇ ಪ್ರಥಮ ಏಕೀಕರಣದ ಸಮ್ಮೇಳನ ನಡೆಯಿತು. ಸಿದ್ಧಪ್ಪ ಕಂಬಳಿಯವರು ಇವರ ಅಧ್ಯಕ್ಷರಾಗಿದ್ದು ಅಧ್ಯಕ್ಷೀಯ ಭಾಷಣದಲ್ಲಿ ಕರ್ನಾಟಕದ ಏಕೀಕರಣಕ್ಕೆ ಕನ್ನಡ ಭಾಷಿಕರೆಲ್ಲರೂ ಒಗ್ಗಟ್ಟಾಗಿ ಹೋರಾಡಬೇಕೆಂದು ಕರೆ ನೀಡಿದರು. ಈ ಸಮ್ಮೇಳನವು ಕರ್ನಾಟಕದ ಏಕೀಕರಣದ ಬಗ್ಗೆ ಅನೇಕ ಕಾರ್ಯಕ್ರಮಗಳನ್ನು ರೂಪಿಸಿತು. 1930 ರ ದಶಕದಲ್ಲಿ ಮೈಸೂರು ಸಂಸ್ಥಾನದಿಂದ ನಿಜಲಿಂಗಪ್ಪನವರು ಆಗಾಗ್ಗೆ ಸಮ್ಮೇಳನದಲ್ಲಿ ಭಾಗವಹಿಸಿ ಮೈಸೂರು ಸಂಸ್ಥಾನದಲ್ಲಿ ಏಕೀಕರಣದ ಚಳುವಳಿಗೆ ಜನಸಾಮಾನ್ಯರ ಹಾಗೂ ರಾಜಕೀಯ ನಾಯಕರ

ಬೆಂಬಲವಿದೆ ಎಂಬ ಅಂಶವನ್ನು ಎತ್ತಿ ತೋರಿಸಿದರು. ಬೆಳಗಾವಿ ಅಧಿವೇಶನ ಹಾಗೂ ಏಕೀಕರಣ ಚಳುವಳಿಯು ಕನ್ನಡ ನಾಡಿಗೆ ಪ್ರಥಮ ನಾಡಗೀತೆಯನ್ನು ಕಲ್ಪಿಸಿ ಕೊಟ್ಟಿತು. ಹುಯಿಲಗೋಳ ನಾರಾಯಣ ರಾವ್‌ರವರು ತಮ್ಮ ಜನಪ್ರಿಯ ಗೀತೆಯನ್ನು ಹಾಡಿದರು. ಈ ನಾಡಗೀತೆಯ ಪೂರ್ಣ ಪಾಠ ಈ ಕೆಳಗಿನಂತಿದೆ.

ಉದಯವಾಗಲಿ ನಮ್ಮ ಚೆಲುವ ಕನ್ನಡನಾಡು
ಬದುಕು ಬಲುಹಿನ ನಿಧಿಯು ಸದಭಿಮಾನದ ಗೂಡು

ರಾಜನ್ಯರಿಪು ಪರಶುರಾಮ ನಮ್ಮ ನಾಡು
ಆ ಜಲಧಿಯನೆ ಬಿಗಿದ ಹನುಮನುದಿಸಿದ ನಾಡು

ಒಬೆಯಿಂ ಮೆರೆದರಸುಗಳ ಶಾಹಸದ ಸೂಡು
ತೇಜವನು ನಮಗೀವ ವೀರವ್ರಂದದ ಬೀಡು

ಲೆಕ್ಕಿಗ ಮಿತಾಕ್ಷರರು ಬೆಳೆದು ಮೆರೆದಿಹ ನಾಡು
ಐಕ್ಯಗಾನ ಶಿಲ್ಪಕಲೆಯಚ್ಚರಿಯ ಕರುಗೋಡು

ಜೊಕ್ಕಮತಗಳ ಸಾಲಿದವರಿಗಿದು ನೆಲೆವೀಡು
ಬೊಕ್ಕಸವ ಕಣಜವೈ ವಿದ್ವತ್ತೆಗಳ ಕಾಡು

ಪಾವನೆಯರಾ ಕೃಷ್ಣ ಭೀಮೆಯರ ನಲುನಾಡು
ಕಾವೇರಿ ಗೋದೆಯರು ಮೈದೊಳೆವ ನಲುನಾಡು

ಅವಗಂ ಸ್ಫೂರ್ತಿಸುವ ಕಬ್ಬಿಗರ ನಡೆಮಾಡು
ಕಾವ ಗದುಗಿನ ವೀರನಾರಾಯಣನ ಬೀಡು

ಇದೇ ಸಮ್ಮೇಳನದಲ್ಲಿ ಕರ್ನಾಟಕ ಏಕೀಕರಣಕ್ಕೆ ಕನ್ನಡ ಭಾಷಿಕ ಏನು ಮಾಡಬೇಕು, ಆತನ ಜವಾಬ್ದಾರಿ ಏನೂ, ಅದರ ಅನಿವಾರ್ಯತೆ ಏನೂ ಹಾಗೂ ಕನ್ನಡ ನಾಡಿನ ಹಿರಿಮೆಯನ್ನು ಬಣ್ಣಿಸುವ "ಕನ್ನಡಿಗರ ಸರ್ವಸ್ವ" ಎಂಬ ಕೃತಿಯನ್ನು ಪ್ರಚುರ ಪಡಿಸಲಾಯಿತು.

ನಿಜಲಿಂಗಪ್ಪನವರು ಈ ಸಂದರ್ಭದಲ್ಲಿ ವಿದ್ಯಾರ್ಥಿಯಾಗಿದ್ದು ವ್ಯಾಸಂಗಕ್ಕಾಗಿ ಪುಣೆಯಲ್ಲಿದ್ದರು. ಕೆಲವು ಸ್ನೇಹಿತರೊಡಗೂಡಿ ಅವರು ಗಾಂಧೀಜಿಯನ್ನು ನೋಡಲು ಬೆಳಗಾವಿಗೆ ಆಗಮಿಸಿದ್ದರು. ಈ ವಿದ್ಯಾರ್ಥಿ ದೆಸೆಯಲ್ಲಿಯೇ ನಿಜಲಿಂಗಪ್ಪನವರಿಗೆ ಕರ್ನಾಟಕದ ಏಕೀಕರಣದ ಬಗ್ಗೆ ಸ್ಪಷ್ಟ ಕಲ್ಪನೆ ಇದ್ದಂತೆ ಕಂಡು ಬರುವುದಿಲ್ಲ.

ಏಕೀಕರಣ ಹಾಗೂ ಶಾಸನ ಸಭೆಗಳು

1924ರ ನಂತರ ಕರ್ನಾಟಕದ ಏಕೀಕರಣದ ಪ್ರಯತ್ನಗಳು ಅವಿರತವಾಗಿ ನಡೆದವು. ಕೇಂದ್ರೀಯ ಮತ್ತು ಪ್ರಾಂತೀಯ ಶಾಸನ ಸಭೆಗಳು ಹೊರಗು ಹಾಗೂ ಒಳಗೂ ಏಕೀಕರಣದ ಬಗ್ಗೆ ವ್ಯಾಪಕವಾದ ಚರ್ಚೆಗಳು ನಡೆದವು. ಕರ್ನಾಟಕದ ಏಕೀಕರಣಕ್ಕೆ ಸಂಬಂಧಿಸಿದಂತೆ ಮದ್ರಾಸ್ ಹಾಗೂ ಮುಂಬೈ ಪ್ರಾಂತೀಯ ಶಾಸನ ಸಭೆಗಳಲ್ಲಿ ಮಂಡಿಸಿದ ಗೊತ್ತುವಳಿಗಳನ್ನು ಕುರಿತಂತೆ ಚರ್ಚೆಗಳು ನಡೆದವು.

1919ರ ಮಾಂಟೆಗೋ ಚೆಲ್ಮಫರ್ಡ್ ಸಂವಿಧಾನ ಸುಧಾರಣೆ ಕಾಯ್ದೆಯ ಪ್ರಕಾರ ಪ್ರಾಂತೀಯ ಸರ್ಕಾರಗಳಲ್ಲಿ ದ್ವಿಮುಖ ಸರ್ಕಾರಗಳು ಅಸ್ತಿತ್ವಕ್ಕೆ ಬಂದಿದ್ದವು. ಕೆಲವು ವಿಷಯಗಳು ಶಾಸನಸಭೆಗೆ ಜವಾಬ್ದಾರಿ ಹೊಂದಿದ ಜನಪ್ರತಿನಿಧಿಗಳ ಕೈಯಲಿದ್ದವು. ಅವರು ಏಕೀಕರಣದ ಬಗ್ಗೆ ವಿಶೇಷ ಆಸಕ್ತಿಯನ್ನು ತೋರಿಸಿದರು. ಕೇಂದ್ರೀಯ ಶಾಸನ ಸಭೆಯಲ್ಲೂ 1929 ರಲ್ಲಿ ಕರ್ನಾಟಕ ಏಕೀಕರಣದ ಬಗ್ಗೆ ಗೊತ್ತುವಳಿಯೊಂದನ್ನು ಅನುಮೋದಿಸಿ ಮಂಡಿಸಲಾಯಿತು. ಚರ್ಚೆಯ ಸಮಯದಲ್ಲಿ ಸರ್ಕಾರವು ಪ್ರತಿನಿಧಿ ಭಾಷೆಯ ಆಧಾರದ ಮೇಲೆ ಪ್ರಾಂತ್ಯಗಳನ್ನು ಪುನರ್ ವಿಂಗಡಿಸುವ ಬಗ್ಗೆ ಸೂಕ್ತವಾದ ಶಿಫಾರಸ್ಸುಗಳನ್ನು ನೀಡಲು ಸೈಮನ್ ಆಯೋಗಕ್ಕೆ ಕೋರಲಾಗಿದೆ ಎಂದು ತಿಳಿಸಿದರು. ಸೈಮನ್ ಆಯೋಗದ ಶಿಫಾರಸ್ಸುಗಳನ್ನು ಅನುಸರಿಸಿ ಮುಂದೆ ಕ್ರಮ ವಹಿಸುವುದಾಗಿ ಸರ್ಕಾರದ ಪ್ರತಿನಿಧಿಗಳು ತಿಳಿಸಿದರು. ಭಾಷೆಯ ಆಧಾರದ ಮೇಲೆ ಪ್ರಾಂತ್ಯಗಳ ಪುನರ್ ವಿಂಗಡಣೆಗೆ ದೇಶದ ವಿವಿಧ ಪ್ರಾಂತ್ಯಗಳಿಂದ ಬೇಡಿಕೆ ಬಂದಿದ್ದರಿಂದ ಬ್ರಿಟಿಷ್ ಸರ್ಕಾರ ಈ ಬಗ್ಗೆ ತೀರ್ಮಾನಗಳನ್ನು ತೆಗೆದುಕೊಳ್ಳುವ ಅನಿವಾರ್ಯತೆ ಉಂಟಾಯಿತು. ಭಾಷಾಧಾರಿತ ಪ್ರಾಂತ್ಯಗಳ ರಚನೆಗೆ ಮತ್ತು ಸಮಗ್ರತೆಗೆ ಅಡ್ಡ ಬಂದಿದ್ದು ದೇಶಿಯ ಸಂಸ್ಥಾನಗಳು. ಈಗಾಗಲೇ ತಿಳಿಸಿರುವಂತೆ ಕರ್ನಾಟಕ ವಿವಿಧ ಪ್ರಾಂತ್ಯಗಳಲ್ಲಿ ಹಂಚಿ ಹೋಗಿತ್ತು. ರಾಯಚೂರು, ಗುಲ್ಬರ್ಗಾ, ಬೀದರ್, ಹೈದರಾಬಾದ್ ನಿಜಾಮನ ಆಳ್ವಿಕೆಯಲ್ಲಿದ್ದುದರಿಂದ ಮತ್ತು ಮೈಸೂರು ಸಂಸ್ಥಾನದ ಜಿಲ್ಲೆಗಳು ಒಡೆಯರ ಆಳ್ವಿಕೆಯಲ್ಲಿದ್ದುದರಿಂದ ಬ್ರಿಟಿಷ್ ಕರ್ನಾಟಕದ ಜಿಲ್ಲೆಗಳೊಂದಿಗೆ ಏಕೀಕರಣ ಪ್ರಕ್ರಿಯೆಗೆ ಒಳಪಡಿಸುವುದು ಸಾಧ್ಯವಿರಲಿಲ್ಲ. ಹೀಗಾಗಿ ವಿಸ್ತಾರವಾದ ಕನ್ನಡ ಮಾತನಾಡುವ ಭೂಭಾಗ ಏಕೀಕರಣ ಪ್ರಕ್ರಿಯೆಯಿಂದ ಹೊರಗುಳಿಯುವ ಆತಂಕ ಕನ್ನಡಿಗರನ್ನು ಕಾಡುತ್ತಿತ್ತು. ಮದ್ರಾಸ್ ಮತ್ತು ಮುಂಬೈ ಪ್ರಾಂತ್ಯಗಳ ಸರ್ಕಾರಗಳು ಕರ್ನಾಟಕದ ಏಕೀಕರಣಕ್ಕೆ ವಿರೋಧವಲ್ಲದಿದ್ದರೂ ಸಹಾನುಭೂತಿಯನ್ನು ಹೊಂದಿರುವುದಿಲ್ಲ. ಆದುದರಿಂದ ಬ್ರಿಟಿಷ್ ಪ್ರಾಂತ್ಯಗಳು ಕನ್ನಡ ಜಿಲ್ಲೆಗಳಲ್ಲಿ ಒಂದಾಗಲಿಲ್ಲ.

ಸೈಮನ್ ಆಯೋಗದ ವರದಿ ಭಾಷಾಧಾರಿತ ಪ್ರಾಂತ್ಯಗಳ ನಿರ್ಮಾಣದ ಬಗ್ಗೆ ಯಾವ ಶಿಫಾರಸ್ಸನ್ನು ಮಾಡಲಿಲ್ಲ. ಆದರೂ ಸೈಮನ್ ಆಯೋಗದ ವರದಿಯನ್ನು ಆಧರಿಸಿ ಜಾರಿಗೆ ತಂದ ಸಂವಿಧಾನ ಸುಧಾರಣೆಯಲ್ಲಿ ಕೇಂದ್ರ ಮಟ್ಟದಲ್ಲೂ ಕೂಡ ಕೆಲವು ವಿಷಯಗಳಿಗೆ ಸಂಬಂಧಿಸಿದಂತೆ ಸ್ವಾಯತ್ತತೆಯನ್ನೂ ಭಾರತೀಯರಿಗೆ ನೀಡಲಾಯಿತು. 1935ರ ಸಂವಿಧಾನದ ಪ್ರಕಾರ 1937 ರಲ್ಲಿ ಚುನಾವಣೆಗಳು ನಡೆದವು. ಈ ಚುನಾವಣೆಯಲ್ಲಿ ಸ್ಪರ್ಧಿಸಿದ ಕಾಂಗ್ರೆಸ್ ಪಕ್ಷ ಕರ್ನಾಟಕ ಪ್ರಾಂತ್ಯದ ರಚನೆಯ ಬಗ್ಗೆ ಸಹಾನುಭೂತಿ

ವ್ಯಕ್ತಪಡಿಸಿ ಕೇಂದ್ರದಲ್ಲಿ ಕಾಂಗ್ರೆಸ್ ಪಕ್ಷ ಸರಕಾರವನ್ನು ರಚಿಸಿದ ಸಂದರ್ಭದಲ್ಲಿ ಕರ್ನಾಟಕ ಏಕೀಕರಣದ ಬಗ್ಗೆ ಹಾಗೂ ಆಂಧ್ರಪ್ರದೇಶದ ನಿರ್ಮಾಣದ ಬಗ್ಗೆ ಸೂಕ್ತ ಕ್ರಮ ಕೈಗೊಳ್ಳುವುದಾಗಿ ತನ್ನ ಜಿನಾವಣಾ ಪ್ರಣಾಳಿಕೆಯಲ್ಲಿ ತಿಳಿಸಿತು. ಈ ಸಂವಿಧಾನದ ಪ್ರಕಾರ ಭಾರತದ ಪರಿಕಲ್ಪನೆ ಪ್ರಬಲವಾಯಿತು. ಈ ಹಿನ್ನಲೆಯಲ್ಲಿ ಏಕೀಕೃತ ಕರ್ನಾಟಕವೆಂದರೆ ಕನ್ನಡ ಭಾಷಿಕರಿರುವ ಎಲ್ಲಾ ಜಿಲ್ಲೆಗಳನ್ನು ಒಂದುಗೂಡಿಸುತ್ತದೆ ಎನ್ನುವ ಭಾವನೆ ಪ್ರಬಲವಾಯಿತು. ಹೈದರಾಬಾದ್ ಕರ್ನಾಟಕ, ಮುಂಬೈ ಕರ್ನಾಟಕ, ಕೊಡಗು, ಮೈಸೂರು ಸಂಸ್ಥಾನದ ಎಲ್ಲಾ ಜಿಲ್ಲೆಗಳು ಒಟ್ಟುಗೂಡಿದಂತೆ ವಿಶಾಲ ಕರ್ನಾಟಕದ ಬೇಡಿಕೆ ವ್ಯಕ್ತವಾದದ್ದು ಈ ಸಂದರ್ಭದಲ್ಲಿಯೇ. ಈ ಬೆಳವಣಿಗೆಯ ನಂತರ ಮೈಸೂರು ಸಂಸ್ಥಾನದಲ್ಲಿ ನಿರ್ಮಾಣವಾದ ಸನ್ನಿವೇಶದಿಂದ ಏಕೀಕರಣದ ದಾರಿ ಸುಗಮವಾಯಿತು. ಮೊದಲನೆಯದಾಗಿ ಹಿಂದುಳಿದ ವರ್ಗಗಳು ಚಳುವಳಿಯ ಪರವಾಗಿದ್ದು ಸಂಯುಕ್ತ ಪ್ರಜಾಪಕ್ಷ ಹಾಗೂ ಭಾರತೀಯ ರಾಷ್ಟ್ರೀಯ ಕಾಂಗ್ರೆಸ್ಸಿನ ಸಂಸ್ಥಾನದ ಘಟಕ ಒಟ್ಟುಗೂಡಿ ಮೈಸೂರ್ ಸ್ಟೇಟ್ ಕಾಂಗ್ರೆಸ್ ಎಂಬ ಹೊಸ ಪಕ್ಷದ ಉದಯವಾದ ಸನ್ನಿವೇಶ. ಇದು ನೇರವಾಗಿ ರಾಷ್ಟ್ರೀಯ ನಾಯಕರಾದಂತಹ ಗಾಂಧೀಜಿಯವರಿಂದ ನಿರ್ದೇಶಿಸಲ್ಪಟ್ಟಿತು. ಎರಡನೇ ಅಂಶವೆಂದರೆ ಮೈಸೂರು ಸಂಸ್ಥಾನದಲ್ಲಿರುವ ಏಕೀಕರಣದ ಬಗ್ಗೆ ಯೋಚಿಸಿ ಏಕೀಕರಣ ಸಂಘ ಎಂಬ ಚಳುವಳಿ ಸಂಘಟನೆಯೊಂದು ಬೆಂಗಳೂರಿನಲ್ಲಿ 1938 ರಲ್ಲಿ ಅಸ್ತಿತ್ವಕ್ಕೆ ಬಂದಿತು. ಮೈಸೂರು ಸಂಸ್ಥಾನದ ಜಿಲ್ಲೆಗಳೊಂದಿಗೆ ಮುಂಬೈ ಪ್ರಾಂತ್ಯ ಹಾಗೂ ಮದ್ರಾಸ್ ಪ್ರಾಂತ್ಯದ ಕನ್ನಡ ಜಿಲ್ಲೆಗಳನ್ನೂ ಮೈಸೂರು ಸಂಸ್ಥಾನದೊಂದಿಗೆ ಸೇರಿಸಿ ಏಕೀಕೃತ ಕರ್ನಾಟಕ ಸ್ಥಾಪನೆ ಮಾಡುವುದು ಈ ಸಂಘದ ಪ್ರಮುಖ ಉದ್ದೇಶವಾಗಿತ್ತು. ಬೆನಗಲ್ ರಾಮರಾವ್‌ರವರು ಏಕೀಕರಣ ಸಂಘದ ಅಧ್ಯಕ್ಷರಾಗಿ ಸಂಸ್ಥಾನದಾದ್ಯಂತ ಪ್ರವಾಸ ಮಾಡಿ ಏಕೀಕೃತ ಕರ್ನಾಟಕ ನಿರ್ಮಾಣದ ಅಗತ್ಯತೆಯನ್ನು ಮತ್ತು ಅನಿವಾರ್ಯತೆಯನ್ನು ಪ್ರಜೆಗಳಿಗೆ ತಿಳಿಸಿದರು.

1935ರ ಸಂವಿಧಾನದ ಪ್ರಕಾರ ನಡೆದ ಚುನಾವಣೆಯಲ್ಲಿ ಕಾಂಗ್ರೆಸ್ ಪಕ್ಷ ಅನೇಕ ಪ್ರಾಂತ್ಯಗಳಲ್ಲಿ ಹಾಗೂ ಕೇಂದ್ರದಲ್ಲಿ ಸರ್ಕಾರ ರಚಿಸಿತು. ಇದಕ್ಕೆ ಪೂರ್ವದಲ್ಲಿ ಕಾಂಗ್ರೆಸ್ ಪಕ್ಷವು ತತ್ವಶಃ ಭಾಷಾ ಆಧಾರಿತ ರಾಜ್ಯಗಳನ್ನು ರಚಿಸುವ ನೀತಿಗೆ ತನ್ನ ಒಪ್ಪಿಗೆಯನ್ನು ಸೂಚಿಸಿತು. ವಿಶೇಷವಾಗಿ ಕರ್ನಾಟಕದ ನಿರ್ಮಾಣಕ್ಕೆ ಬಹುಪಾಲು ಕಾಂಗ್ರೆಸ್ ನಾಯಕರು ತಮ್ಮ ಒಪ್ಪಿಗೆಯನ್ನು ಸೂಚಿಸಿದರು. ಕೆಲವು ಸದಸ್ಯರಿಂದ ವಿರೋಧವಿತ್ತು. ಮದ್ರಾಸ್ ಮತ್ತು ಮುಂಬೈ ಪ್ರಾಂತೀಯ ಶಾಸನ ಸಭೆಗಳಲ್ಲಿ ಏಕೀಕೃತ ಕರ್ನಾಟಕದ ನಿರ್ಮಾಣಕ್ಕೆ ಗೊತ್ತುವಳಿಯನ್ನು ಅನುಮೋದಿಸಲಾಗಿತ್ತು. ಈ ಸಂದರ್ಭದಲ್ಲಿ ಕರ್ನಾಟಕ ಏಕೀಕರಣದ ಬೇಡಿಕೆ ಒಂದು ನಿರ್ದಿಷ್ಟ ಸ್ವರೂಪವನ್ನು ಪಡೆಯುವ ಹಂತಕ್ಕೆ ಚಳುವಳಿಯು ಮುಟ್ಟಿತು. ಕೇಂದ್ರ ಸರ್ಕಾರ ಹಾಗೂ ಮದ್ರಾಸ್ ಮತ್ತು ಮುಂಬೈ ಪ್ರಾಂತೀಯ ಸರ್ಕಾರಗಳು ಈ ಬಗ್ಗೆ ನಿರ್ಣಯವೊಂದನ್ನು ತೆಗೆದುಕೊಳ್ಳುವುದು ಬಾಕಿ ಇತ್ತು. ಆದರೆ 1939ರಲ್ಲಿ ಭಾರತೀಯರ ಅನುಮತಿ ಇಲ್ಲದೆ ದೇಶವನ್ನು ಎರಡನೇ ಮಹಾಯುದ್ಧಕ್ಕೆ ಎಳೆದಿದ್ದನ್ನು ಕಾಂಗ್ರೆಸ್ ಪಕ್ಷ ಒಪ್ಪಲಿಲ್ಲ. ಆಗ ಕಾಂಗ್ರೆಸ್ ಸರಕಾರಗಳು ರಾಜೀನಾಮೆ ನೀಡಿ ಹೊರಬರುವುದಾಗಿ ಘೋಷಿಸಿತು. ಹಾಗೂ ಅದೇ ರೀತಿ ಮಾಡಿತು ಕೂಡಾ. ಇದರಿಂದ ಏಕೀಕರಣ ಕಾರ್ಯಕ್ಕೆ ಹಿನ್ನಡೆ ಉಂಟಾಯಿತು.

1924ರಲ್ಲಿ ಸ್ಥಾಪನೆಯಾಗಿದ್ದ ಅಖಿಲ ಕರ್ನಾಟಕ ಏಕೀಕರಣ ಪರಿಷತ್ತು ಪ್ರತಿ ವರ್ಷದ ಸಮ್ಮೇಳನಗಳನ್ನು ನಡೆಸಿಕೊಂಡು ಬಂದಿತ್ತು. ಆದರೆ ಉಪ್ಪಿನ ಸತ್ಯಾಗ್ರಹ, ಮಹಾಯುದ್ಧದ ಕಾಲ ಹಾಗೂ ಕ್ವಿಟ್ ಇಂಡಿಯಾ ಚಳುವಳಿಯ ಕಾಲದಲ್ಲಿ ಪರಿಷತ್ ಕ್ರಿಯಾಶೀಲವಾಗಿರಲು ಸಾಧ್ಯವಾಗಿರಲಿಲ್ಲ. 1944ರಲ್ಲಿ ಮಹಾಯುದ್ಧ ಮುಕ್ತಾಯಗೊಂಡ ನಂತರ ನಾಯಕರ ಪ್ರಯತ್ನ ಹಾಗೂ ವ್ಯಾಪಕ ಪ್ರವಾಸದ ಮೂಲಕ ಮತ್ತೊಮ್ಮೆ ಸಂಘಟನೆಗೊಂಡಿತು. ಇದಾದ ನಂತರ 10ನೇ ಅಖಿಲ ಕರ್ನಾಟಕ ಏಕೀಕರಣ ಪರಿಷತ್ತಿನ ಸಮ್ಮೇಳನ ಜೂನ್ 1946ರಲ್ಲಿ ಮುಂಬೈನಲ್ಲಿ ಸಮಾವೇಶಗೊಂಡಿತು. ಸರದಾರ್ ವಲ್ಲಭಭಾಯಿ ಪಟೇಲ್ ಈ ಸಮ್ಮೇಳನದ ಉದ್ಘಾಟನೆಯನ್ನು ನೆರವೇರಿಸಿದರು. ಹಾಗೂ ಕರ್ನಾಟಕ ಏಕೀಕರಣ ಸಾಧ್ಯವಾಗುವ ಕಾಲ ದೂರವಿಲ್ಲ ಎಂಬ ಹೇಳಿಕೆಯನ್ನು ನೀಡಿದರು. ಈ ಪ್ರಕ್ರಿಯೆಗೆ ಕಾಂಗ್ರೆಸ್ ಪಕ್ಷ ಹಾಗೂ ತಮ್ಮ ವಯಕ್ತಿಕ ಬೆಂಬಲವಿದೆ ಎಂದು ಅವರು ಘೋಷಿಸಿದರು. ಈ ಸಮ್ಮೇಳನದ ನಂತರ ಕರ್ನಾಟಕ ಅನೇಕ ನಗರ ಪಟ್ಟಣಗಳಲ್ಲಿ ಏಕೀಕರಣದ ಸಮ್ಮೇಳನಗಳು ನಡೆದವು.

ಯುದ್ಧದ ನಂತರ ಏಕೀಕರಣದ ಪ್ರಯತ್ನಗಳು

ಮಹಾಯುದ್ಧ ಮುಕ್ತಾಯಗೊಂಡ ನಂತರ, ವಸಾಹತುಶಾಹಿ ಸರ್ಕಾರ ಅಳಿಯುವುದು ಖಚಿತವಾಯಿತು. ಈ ಹಿನ್ನಲೆಯಲ್ಲಿ ಪೂರ್ಣ ಪ್ರಮಾಣದ ರಾಜಕೀಯ ಆಂದೋಲನ ಅಥವಾ ಚಳುವಳಿ ನಡೆಸಲು ಕಾಂಗ್ರೆಸ್ ಬಯಸಲಿಲ್ಲ. ಆದುದರಿಂದ 1946 ರ ನಂತರ ನಿಜಲಿಂಗಪ್ಪನವರು ಏಕೀಕರಣ ಚಳುವಳಿಯಲ್ಲಿ ತಮ್ಮನ್ನು ಪೂರ್ಣವಾಗಿ ತೊಡಗಿಸಿಕೊಂಡರು. ಕರ್ನಾಟಕದಾದ್ಯಂತ ಅಸ್ತಿತ್ವಕ್ಕೆ ಬಂದಿದ್ದ ಏಕೀಕರಣ ಹೋರಾಟ ಸಮಿತಿಗಳನ್ನು ಒಟ್ಟುಗೂಡಿಸಿ ವ್ಯಾಪಕವಾದ ಚಳುವಳಿ ನಡೆಸುವುದು. ಆ ಮೂಲಕ ಏಕೀಕರಣ ಸಾಧಿಸುವುದು ನಿಜಲಿಂಗಪ್ಪನವರ ಆಶಯ ಹಾಗೂ ಯೋಜನೆಯಾಗಿತ್ತು. ಈ ದಿಶೆಯಲ್ಲಿ ಅವರ ಅವಿರತ ಪ್ರಯತ್ನದ ಫಲವಾಗಿ 1946ರ ಆಗಸ್ಟ್‌ನಲ್ಲಿ ಕರ್ನಾಟಕದಾದ್ಯಂತ ಅಸ್ತಿತ್ವಕ್ಕೆ ಬಂದಿದ್ದ ಏಕೀಕರಣ ಹೋರಾಟದ ಸಮಿತಿಗಳು ಒಟ್ಟಾಗಿ ದಾವಣಗೆರೆಯಲ್ಲಿ ಸೇರಿದವು. ಈ ದಾವಣಗೆರೆ ಸಮ್ಮೇಳನವು ಏಕೀಕರಣದಲ್ಲಿ ಅತ್ಯಂತ ಪ್ರಮುಖವಾದ ಘಟ್ಟ. ಕರ್ನಾಟಕದ ಏಕೀಕರಣಕ್ಕೆ ಸಾಧನವಾಗಬಲ್ಲ ವಿವಿಧ ಹಿತಾಸಕ್ತಿಗಳು ಒಂದುಗೂಡಿದ ಸಮ್ಮೇಳನವಿದು.

ವಿವಿಧ ಪ್ರಾಂತ್ಯಗಳಲ್ಲಿ ಹಂಚಿ ಹೋಗಿದ್ದು ಕರ್ನಾಟಕದ ಭಾಗಗಳ ಶಾಸನ ಸಭಾ ಸದಸ್ಯರು, ಕರ್ನಾಟಕ ಪ್ರಾಂತೀಯ ಕಾಂಗ್ರೆಸ್ ಸಮಿತಿಯ ನಾಯಕರು ವಿವಿಧ ಏಕೀಕರಣ ಸಂಘಟನೆಯ ನಾಯಕರು ಈ ಸಮ್ಮೇಳನದಲ್ಲಿ ಭಾಗವಹಿಸಿದ್ದು ವಿಶೇಷವಾಗಿತ್ತು. ಯಾವುದೇ ಭಿನ್ನಾಭಿಪ್ರಾಯವಿಲ್ಲದೆ ಈ ಸಮ್ಮೇಳನದಲ್ಲಿ ಏಕೀಕರಣಕ್ಕೆ ಪೂರಕವಾದ ಕಾರ್ಯಕ್ರಮಗಳನ್ನು ಹಮ್ಮಿಕೊಳ್ಳಲು ನಿಶ್ಚಯಿಸಲಾಯಿತು. ಮುಂಬೈ ಪ್ರಾಂತೀಯ ಸರಕಾರದಲ್ಲಿ ಮಂತ್ರಿಗಳಾಗಿದ್ದ ಕನ್ನಡಿಗ ಮಲ್ಲನಗೌಡ ಪಾಟೀಲ್ ಈ ಸಮ್ಮೇಳನದ ಅಧ್ಯಕ್ಷತೆಯನ್ನು ವಹಿಸಿದ್ದರು. ಈ ಸಂದರ್ಭದಲ್ಲಿ ನಿಜಲಿಂಗಪ್ಪನವರು ತೋರಿದ ಪ್ರೌಢಿಮೆ ಅತಿಶಯವಾದದ್ದು ಯಾಕೆಂದರೆ ಮೈಸೂರು ಸಂಸ್ಥಾನದಿಂದ ಏಕೀಕರಣದ ಪರವಾಗಿ ಉನ್ನತ ನಾಯಕರಾರು ಭಾಗವಹಿಸಲಿಲ್ಲ. ಈ ಸಭೆಯು ಆಶ್ರಯದಲ್ಲೆ ನಿಜಲಿಂಗಪ್ಪನವರು ಏಕೀಕರಣ ಮಹಾ

ಸಮಿತಿಯನ್ನು ರಚಿಸಿ ವಿಕೇಂದ್ರೀಕರಣ ಚಳುವಳಿಗೆ ನಿರ್ದಿಷ್ಟವಾದ ಸ್ವರೂಪ ಹಾಗೂ ದಿಕ್ಕೂಚಿಯನ್ನು ನೀಡಲು ಕಾರಣಕರ್ತರಾದರು.

ದೇಶಿಯ ಸಂಸ್ಥಾನಗಳು ಮತ್ತು ಭಾಷಾಧಾರಿತ ಪ್ರಾಂತ್ಯಗಳು

ವಿಕೇಂದ್ರೀಕರಣ ಪ್ರಕ್ರಿಯೆಗೆ ಧಕ್ಕೆಯಾಗುವಂತಹ ಪ್ರತಿಗಾಮಿ ಬೆಳವಣಿಗೆಯೊಂದು ಉಂಟಾಯಿತು. ಅದೇನೆಂದರೆ ದಕ್ಷಿಣ ಭಾರತದಲ್ಲಿ ಇದ್ದ ದೇಶೀಯ ಸಂಸ್ಥಾನದ ರಾಜರುಗಳು ಒಮ್ಮೆಗೆ ಸೇರಿಕೊಂಡು ತಮ್ಮ ಅಸ್ತಿತ್ವ ಮತ್ತು ರಾಜಸತ್ತೆಯನ್ನು ಉಳಿಸಿಕೊಳ್ಳುವ ಪ್ರಯತ್ನವನ್ನು ಪ್ರಾರಂಭಿಸಿದರು. ಕರ್ನಾಟಕ ಪ್ರಾಂತ್ಯದಲ್ಲಿದ್ದ ಮೈಸೂರು ಸಂಸ್ಥಾನ ಹಾಗೂ ಸಣ್ಣಪುಟ್ಟ ದೇಶಿಯ ಸಂಸ್ಥಾನಗಳು ಈ ದೇಶಿಯ ಸಂಸ್ಥಾನಗಳ ಒಕ್ಕೂಟವನ್ನು ಸೇರಲು ಉತ್ಸುಕರಾಗಿದ್ದುವು. ಈ ಒಕ್ಕೂಟ ಅಸ್ತಿತ್ವಕ್ಕೆ ಬಂದಿದ್ದೆ ಆದರೆ ಕರ್ನಾಟಕ ವಿಕೇಂದ್ರೀಕರಣದ ಕನಸು ನುಚ್ಚು ನೂರಾಗುವ ಸಂಭವವಿತ್ತು. ಒಂದೇ ಭಾಷಿಕ ಪ್ರದೇಶದಲ್ಲಿ ಹಾಗೂ ಸ್ವತಂತ್ರ ಭಾರತದಲ್ಲಿ ಈ ಒಕ್ಕೂಟದ ರಚನೆಯಿಂದ ಕನ್ನಡ ನಾಡಿನ ಜನತೆಯ ಮಧ್ಯದಲ್ಲಿನ ವಿಶ್ವಾಸ, ಭಾಂದವ್ಯಕ್ಕೆ ಪೆಟ್ಟು ಬೀಳುವ ಸಂಭವವಿತ್ತು. ಈ ಒಂದು ಅಪಾಯವನ್ನು ಅರಿಯದೆ ಅನೇಕ ಮಂದಿ ಕಾಂಗ್ರೆಸ್ ನಾಯಕರು ಈ ಒಕ್ಕೂಟಕ್ಕೆ ತಮ್ಮ ಸಹಮತವನ್ನು ವ್ಯಕ್ತಪಡಿಸಿದರು. ಕರ್ನಾಟಕದ ಆರ್.ಆರ್. ದಿವಾಕರ ಹಾಗೂ ಆಂಧ್ರದ ಪಟ್ಟಾಭಿ ಸೀತಾರಾಮಯ್ಯ ದೇಶಿಯ ಸಂಸ್ಥಾನಗಳ ಒಕ್ಕೂಟದ ಪರವಾಗಿ ತಮ್ಮ ನಿಲುವನ್ನು ವ್ಯಕ್ತಪಡಿಸಿದರು. ಸ್ವಾತಂತ್ರ್ಯ ಪೂರ್ವದ ಭಾರತದಲ್ಲಿ ರಾಜಕೀಯ ವ್ಯವಸ್ಥೆ ಎಂದರೆ ಬ್ರಿಟಿಷ್ ಭಾರತ ಹಾಗೂ ಸಂಸ್ಥಾನಗಳ ಆಳ್ವಿಕೆಯನ್ನು ಮುಂದುವರೆಸುವುದಾಗಿತ್ತು. ಈ ರೀತಿಯ ಒಂದು ಒಕ್ಕೂಟದ ಸ್ಥಾಪನೆ ಪ್ರಜಾಪ್ರಭುತ್ವದ ಬೆಳವಣಿಗೆಗೆ ಹಾಗೂ ಭಾಷಾಧಾರಿತ ರಾಜ್ಯಗಳ ರಚನೆಗೆ ಮಾರಕವಾಗಬಹುದೆಂಬ ಸತ್ಯ ಹಾಗೂ ಪರಿವೆ ಈ ನಾಯಕರಿಗೆ ಇದ್ದಂತೆ ಕಂಡುಬರುವುದಿಲ್ಲ.

ಈಗಾಗಲೇ ವಿಕೇಂದ್ರೀಕರಣ ಚಳುವಳಿಯಲ್ಲಿ ತಮ್ಮನ್ನು ತೊಡಗಿಸಿಕೊಂಡಿದ್ದ ನಿಜಲಿಂಗಪ್ಪನವರು ಕರ್ನಾಟಕ ವಿಕೇಂದ್ರೀಕರಣ ಮಹಾ ಸಮಿತಿಯ ಉದ್ದೇಶ ದೇಶಿಯ ಸಂಸ್ಥಾನಗಳ ಒಕ್ಕೂಟದ ರಚನೆಯಿಂದಾಗಿ ವಿಫಲಗೊಳ್ಳುವ ಸಾಧ್ಯತೆಗಳಿವೆ ಎಂಬುದನ್ನು ತಕ್ಷಣದಲ್ಲಿಯೇ ಗ್ರಹಿಸಿ ಈ ಬಗ್ಗೆ ಮುಂಜಾಗ್ರತೆ ವಹಿಸುವಂತೆ ಕನ್ನಡಿಗರಿಗೆ ಕರೆ ನೀಡಿದರು. ಈ ಒಕ್ಕೂಟ ಅಸ್ತಿತ್ವಕ್ಕೆ ಬಾರದ ರೀತಿಯಲ್ಲಿ ಒಂದು ಒಕ್ಕೂಟದ ಬೇಡಿಕೆಯನ್ನು ತಿರಸ್ಕರಿಸುವಂತೆ ನಿಜಲಿಂಗಪ್ಪನವರು ಕೇಂದ್ರ ನಾಯಕರ ಮೇಲೆ ಒತ್ತಡ ಹೇರಿದರು.

ಮುಂದೆ ಭಾರತ ಒಕ್ಕೂಟದ ನಿರ್ಮಾಣಕ್ಕೆ ಕಾರ್ಯಕರ್ತರಾದಂತಹ ಸರ್ದಾರ್ ವಲ್ಲಭಭಾಯಿ ಪಟೇಲ್‌ರವರಿಗೆ ಪತ್ರ ಬರೆದು ದೇಶಿಯ ಸಂಸ್ಥಾನಗಳ ಒಕ್ಕೂಟವನ್ನು ಮಾನ್ಯ ಮಾಡಬಾರದೆಂದು ಕೋರಿದರು. ತಮ್ಮ ವಾದಕ್ಕೆ ಪೂರಕವಾಗಿ ಸ್ವತಂತ್ರ ಭಾರತದಲ್ಲಿ ಪ್ರಜಾಸತ್ತೆ ಬಲಗೊಳ್ಳಬೇಕಾದರೆ ರಾಜಪ್ರಭುತ್ವ ಕೊನೆಗೊಳ್ಳಬೇಕು. ರಾಜಪ್ರಭುತ್ವ ಕೊನೆಗೊಳ್ಳದಿದ್ದರೆ ಪ್ರಜಾಸತ್ತಾತ್ಮಕ ವ್ಯವಸ್ಥೆ ಶಿಥಿಲಗೊಳ್ಳುತ್ತದೆ. ಇಂತಹ ಸಂದರ್ಭದಲ್ಲಿ ಕಾಂಗ್ರೆಸ್ ಒಪ್ಪಿಕೊಂಡಿರುವ ಭಾಷಾಧಾರಿತ ರಾಜ್ಯಗಳ ನಿರ್ಮಾಣಕ್ಕೆ ಅವಕಾಶವಿರುವುದಿಲ್ಲ ಎಂಬ ಅಂಶವನ್ನು ಸ್ಪಷ್ಟಪಡಿಸಿದರು. ಇದೇ ರೀತಿಯ ವಾದವನ್ನು ಜವಹರಲಾಲ್ ನೆಹರು ಅವರ ಮುಂದಿಟ್ಟು ಅವರ ಸಮ್ಮತಿಯನ್ನು ಪಡೆಯಿಕೊಂಡರು. ದೇಶೀಯ

ಸಂಸ್ಥಾನಗಳ ಒಕ್ಕೂಟವನ್ನು ಬೆಂಬಲಿಸಿದ್ದ ನಾಯಕರಿಗೆ ನಿಜಲಿಂಗಪ್ಪನವರು ನೇರ ನುಡಿಗಳಲ್ಲಿ ಮುಂದಾಗಬಹುದಾದಂತಹ ಅಚಾತುರ್ಯದ ಬಗ್ಗೆ ಮನವರಿಕೆ ಮಾಡಿಕೊಟ್ಟರು. 1947ರ ಫೆಬ್ರವರಿಯಲ್ಲಿ ಪಟ್ಟಾಭಿ ಸೀತಾರಾಮಯ್ಯನವರಿಗೆ ಪತ್ರವನ್ನು ಬರೆದು ದೇಶೀಯ ಸಂಸ್ಥಾನಗಳ ಒಕ್ಕೂಟದ ರಚನೆಗೆ ಅವರು ನೀಡುತ್ತಿರುವ ಬೆಂಬಲ ಸರಿಯಾದ ಮಾರ್ಗವಲ್ಲವೆಂದು ತಿಳಿಸಿದರು. ಅವರ ಬೆಂಬಲದಿಂದ ಪ್ರಜಾಸತ್ತಾತ್ಮಕ ಜನಾಂದೋಲನ ದುರ್ಬಲವಾಗುವ ಸಾಧ್ಯತೆ ಇರುವ ಬಗ್ಗೆ ಅವರ ಗಮನವನ್ನು ಸೆಳೆದರು. ಪ್ರಜಾಸತ್ತಾತ್ಮಕ ವ್ಯವಸ್ಥೆಯಲ್ಲಿ ಜನಾಭಿಪ್ರಾಯಕ್ಕೆ ಮನ್ನಣೆ ನೀಡುವುದು ಅನಿವಾರ್ಯ. ಈ ದೇಶೀಯ ಸಂಸ್ಥಾನಗಳ ಒಕ್ಕೂಟದ ರಚನೆ ಪ್ರಜಾಸತ್ತಾತ್ಮಕ ವ್ಯವಸ್ಥೆಯ ಆಚರಣೆಯನ್ನು ಭಾರತದಲ್ಲಿ ರೂಢಿಗೊಳಿಸುತ್ತಿರುವ ಈ ಸಂದರ್ಭದಲ್ಲಿ ಬಹುಜನಾಭಿಪ್ರಾಯಕ್ಕೆ ವಿರೋಧವಾದುದು. ಅದನ್ನು ಪಟ್ಟಾಭಿಯವರು ಬೆಂಬಲಿಸುವುದು ಪ್ರಜ್ಞಾ ಪೂರ್ವಕ ಸೂತ್ರಗಳಿಗೆ ವಿರುದ್ಧವಾಗುತ್ತದೆ ಎಂದು ತಮ್ಮ ಪತ್ರದಲ್ಲಿ ತಿಳಿಸಿದರು.

ಕೇಂದ್ರ ನಾಯಕರಿಂದ ತಮ್ಮ ನಿಲುವಿಗೆ ಪೂರ್ಣ ಬೆಂಬಲ ದೊರಕಿದ ಹಿನ್ನಲೆಯಲ್ಲಿ ನಿಜಲಿಂಗಪ್ಪನವರು ಕರ್ನಾಟಕದಲ್ಲಿದ್ದ 17 ದೇಶೀಯ ಸಂಸ್ಥಾನಗಳಲ್ಲಿ ವ್ಯಾಪಕ ಪ್ರವಾಸ ಕೈಗೊಂಡು ಅಲ್ಲಿನ ಜನರಿಗೆ ಸಂಸ್ಥಾನಗಳ ಒಕ್ಕೂಟದಿಂದ ಪ್ರಜಾಸತ್ತಾತ್ಮಕ ವ್ಯವಸ್ಥೆಗೆ ಉಂಟಾಗುವ ಧಕ್ಕೆಯ ಬಗ್ಗೆ ಪರಿಚಯ ಮಾಡಿಕೊಟ್ಟರು. ಕರ್ನಾಟಕದ ಏಕೀಕರಣಕ್ಕೆ ಈ ಒಕ್ಕೂಟದ ರಚನೆ ಒಂದು ಬೊಡ್ಡ ಸವಾಲು ಎಂದೂ ಘೋಷಿಸಿದರು. ಈ ಹಿನ್ನಲೆಯಲ್ಲಿ ಒಕ್ಕೂಟವನ್ನು ತಿರಸ್ಕರಿಸಬೇಕೆಂದು ದೇಶೀಯ ಸಂಸ್ಥಾನದ ಜನರಿಗೆ ಕರೆ ನೀಡಿದರು. ದೇಶೀಯ ಸಂಸ್ಥಾನಗಳ ಈ ಪ್ರವಾಸ ಹಾಗೂ ದೇಶೀಯ ಸಂಸ್ಥಾನಗಳ ಒಕ್ಕೂಟದ ವಿರೋಧದ ನಡುವೆ ತಮ್ಮ ನಿಲುವನ್ನು ತೊರ್ಪಡಿಸಿ ತಮ್ಮನ್ನು ತಾವೇ ಏಕೀಕರಣದ ಚಳುವಳಿಯಲ್ಲಿ ತೊಡಗಿಸಿಕೊಂಡಿದ್ದರು ಎಂಬುದು ತಿಳಿಯುತ್ತದೆ.

1947ರಲ್ಲಿ ಬ್ರಿಟಿಷರು ಭಾರತಕ್ಕೆ ಸ್ವಾತಂತ್ರ್ಯ ನೀಡುವುದು ಖಚಿತವಾಗಿತ್ತು. ಸ್ವಾತಂತ್ರ್ಯದೊಂದಿಗೆ ರಾಷ್ಟ್ರೀಯ ಚಳುವಳಿಯು ಕೊನೆಗೊಳ್ಳುವ ಸಂದರ್ಭ ಬಂದಿತ್ತು. ರಾಷ್ಟ್ರೀಯ ಚಳುವಳಿಯೊಂದಿಗೆ ಸಮಾನಾಂತರವಾಗಿ ಬೆಳೆದು ಬಂದ ಏಕೀಕರಣ ಚಳುವಳಿ ತನ್ನ ಗುರಿಯನ್ನು ಮುಟ್ಟಲು ಸಾಧ್ಯವಾಗಿರಲಿಲ್ಲ. ಕಾಂಗ್ರೆಸ್ ಕಾರ್ಯಕರ್ತರ ಬೆಂಬಲ ಹಾಗೂ ಸಹಕಾರವಿಲ್ಲದೆ ಏಕೀಕರಣ ಚಳುವಳಿ ದುರ್ಬಲವಾಗುವ ಸಾಧ್ಯತೆ ಇತ್ತು. ಇದನ್ನು ಅರಿತಿದ್ದ ನಿಜಲಿಂಗಪ್ಪನವರು ರಾಷ್ಟ್ರೀಯ ಚಳುವಳಿಯಲ್ಲಿ ತೊಡಗಿಕೊಂಡಿದ್ದ ಎಲ್ಲಾ ಸಂಘಟನೆಗಳು, ಕಾರ್ಮಿಕರು, ಕೃಷಿಕರು, ವಿದ್ಯಾರ್ಥಿಗಳು, ಮಹಿಳೆಯರು ಹಾಗೂ ಇತರೆ ವರ್ಗದವರು ಏಕೀಕರಣ ಚಳುವಳಿಯನ್ನು ಗುರಿಮುಟ್ಟುವ ತನಕ ಮುಂದುವರೆಸಬೇಕೆಂದೂ ಹಾಗೂ ಮುಂದಿನ ದಿನಗಳಲ್ಲಿ ಚಳುವಳಿಯಲ್ಲಿ ಸಕ್ರೀಯವಾಗಿ ತೊಡಗಿಕೊಳ್ಳಬೇಕೆಂದು ನಿಜಲಿಂಗಪ್ಪನವರು ಕರೆ ನೀಡಿದರು. ರಾಜ್ಯ ಪುನಾ ಸಭೆಯ ಮುಂದೆ ಕರ್ನಾಟಕದ ನಿರ್ಮಾಣದ ಪ್ರಸ್ತಾವನೆಯನ್ನು ಪ್ರಬಲವಾಗಿ ಪ್ರತಿಪಾದಿಸಲು ಬೇಕಾದ ಎಲ್ಲಾ ಅಂಕಿ ಅಂಶಗಳನ್ನು ಸಿದ್ಧಪಡಿಸಲು ಅಪಾರ ಶ್ರಮವಹಿಸಿದರು. ವಿವಿಧ ಸ್ಥಳಗಳಿಂದ ಅಂಕಿ–ಅಂಶಗಳನ್ನು

ಸಂಗ್ರಹಿಸಲು ಕ್ರಮ ಕೈಗೊಂಡರು. ಇದೇ ಸಂದರ್ಭದಲ್ಲಿ ಕರ್ನಾಟಕ ಪ್ರಾಂತೀಯ ಕಾಂಗ್ರೆಸ್ ಸಮಿತಿಯು ಸಹ ಅದಷ್ಟೂ ಜರೂರಾಗಿ ಕರ್ನಾಟಕ ರಚನೆಯಾಗಬೇಕೆಂದು ಗೊತ್ತುವಳಿಯೊಂದನ್ನು ಸ್ವೀಕರಿಸಿ ಕೇಂದ್ರ ನಾಯಕರಿಗೆ ಕಳುಹಿಸಿತು.

1947 ಆಗಸ್ಟ್ 15ರಂದು ಭಾರತ ಸ್ವತಂತ್ರ್ಯವಾಯಿತು. ಜವಹರಲಾಲ್ ನೆಹರೂರವರ ಪ್ರಧಾನಮಂತ್ರಿಯಾದರು. ಆ ದಿನಗಳಲ್ಲಿ ಭಾರತ ಸರ್ಕಾರವು ಅನೇಕ ಸಮಾಲುಗಳನ್ನು ಎದುರಿಸಬೇಕಾಗಿ ಬಂತು. ಭಾರತದ ವಿಭಜನೆ ಹಾಗೂ ಪಾಕಿಸ್ತಾನದ ನಿರ್ಮಾಣ, ನಿರಾಶ್ರಿತರ ಸಮಸ್ಯೆ ಪ್ರತ್ಯೇಕತೆಯನ್ನು ಉಳಿಸಿಕೊಳ್ಳಲು ದೇಶೀಯ ಸಂಸ್ಥಾನಗಳು ನಡೆಸಿದ ಪ್ರಯತ್ನ ಕಾಶ್ಮೀರ ಸಮಸ್ಯೆ ಕೇಂದ್ರವನ್ನು ಕಾಡತೊಡಗಿತು. ಆ ಸಂದರ್ಭದಲ್ಲಿ ಭಾಷಾವಾರು ಪ್ರಾಂತ್ಯಗಳ ರಚನೆಗೆ ನೆಹರೂರವರ ಹೆಚ್ಚಿನ ಪ್ರಾಶಸ್ತ್ಯ ನೀಡಲು ಸಾಧ್ಯವಾಗಲಿಲ್ಲ. ಇದರಿಂದಾಗಿ ಏಕೀಕರಣ ಚಳುವಳಿಯು ಮತ್ತಷ್ಟು ದುರ್ಬಲವಾಯಿತು.

1947ರ ನವಂಬರ್ 27ರಂದು ಭಾಷಾವಾರು ಪ್ರಾಂತ್ಯದ ನಿರ್ಮಾಣದ ಬಗ್ಗೆ ಪ್ರಧಾನಿಯವರು ಆಂಧ್ರಪ್ರದೇಶ ಏಕೀಕರಣಗೊಳ್ಳಲು ಬೇಕಾದ ಎಲ್ಲಾ ಅಂಶಗಳನ್ನು ಒಳಗೊಂಡಿದೆ. ಆದ್ದರಿಂದ ಅದಷ್ಟು ಬೇಗ ಆಂಧ್ರ ಪ್ರಾಂತ್ಯವನ್ನು ರಚಿಸುವುದಾಗಿ ಘೋಷಿಸಿದರು. ಇದೇ ಸಂದರ್ಭದಲ್ಲಿ ಕರ್ನಾಟಕ ಪ್ರಾಂತ್ಯದ ರಚನೆಗೆ ವಿರೋಧ ಹಾಗೂ ಅಡೆತಡೆಗಳಿರುವುದರಿಂದ ತಕ್ಷಣದಲ್ಲಿ ಏಕೀಕರಣ ಸಾಧ್ಯವಿಲ್ಲ ಎಂಬ ಮಾತನ್ನು ಹೇಳಿದರು. ಈ ಹೇಳಿಕೆ ನಿಜಲಿಂಗಪ್ಪನವರಿಗೆ ಸಿಡಿಲು ಬಡಿದಂತಾಯಿತು. ಈ ಹೇಳಿಕೆಯನ್ನು ವಿರೋಧಿಸಿ ಕರ್ನಾಟಕ ಪ್ರಾಂತೀಯ ಕಾಂಗ್ರೆಸ್ ಸಮಿತಿ ಗೊತ್ತುವಳಿಯನ್ನು ಸ್ವೀಕರಿಸಿ ಏಕೀಕೃತ ಕರ್ನಾಟಕ ಪ್ರಾಂತ್ಯದ ರಚನೆ ಅನಿವಾರ್ಯ ಹಾಗೂ ಶೀಘ್ರವಾಗಿ ಕೇಂದ್ರ ಸರ್ಕಾರ ಈ ಬಗ್ಗೆ ಕ್ರಮಗೊಳ್ಳಬೇಕೆಂದು ಆಗ್ರಹಿಸಿತು. 1947ರ ಕೊನೆಯ ಭಾಗದಲ್ಲಿ ನಡೆದ ಅಖಿಲ ಕರ್ನಾಟಕ ಏಕೀಕರಣ ಸಮ್ಮೇಳನದಲ್ಲಿ ಸಕ್ರೀಯವಾಗಿ ಭಾಗವಹಿಸಿದ ನಿಜಲಿಂಗಪ್ಪನವರು ಕರ್ನಾಟಕ ಪ್ರಾಂತ್ಯದ ರಚನೆಯನ್ನು ಮುಂದೂಡಬಾರದು ಒಂದು ವೇಳೆ ಮುಂದೂಡಿದರೆ ಸರ್ಕಾರದ ವಿರುದ್ಧ ಕನ್ನಡಿಗರು ತೀವ್ರವಾದ ಹೋರಾಟ ನಡೆಸಲು ಕರೆ ನೀಡಿದರು. ಇದೇ ಸಂದರ್ಭದಲ್ಲಿ ನಿಜಲಿಂಗಪ್ಪನವರು ಆಂಧ್ರ ಪ್ರಾಂತ್ಯದ ರಚನೆಯನ್ನು ಸ್ವಾಗತಿಸುತ್ತಾ ಅಷ್ಟೆ ಹಳೆಯದಾದ ಕರ್ನಾಟಕ ಪ್ರಾಂತ್ಯದ ರಚನೆಯನ್ನು ಜೊತೆಜೊತೆಯಲ್ಲೆ ಮಾಡಬೇಕೆಂದು ಆಗ್ರಹಿಸಿದರು. ಆಂಧ್ರ ಮತ್ತು ಕರ್ನಾಟಕ ಗಡಿಯನ್ನು ನಿರ್ಧರ್ಷೆ ಮಾಡಲು ಒಂದು ಆಯೋಗವನ್ನು ಈ ಕೂಡಲೇ ರಚಿಸುವಂತೆ ಕೋರಿದರು.

ಕರ್ನಾಟಕದ ಏಕೀಕರಣದ ಸಮಯದಲ್ಲಿ ನಿಜಲಿಂಗಪ್ಪನವರಿಗೆ ಎದುರಾದ ಸಮಸ್ಯೆಗಳು

ನಿಜಲಿಂಗಪ್ಪನವರು ಪೂರ್ಣಕಾಲಿಕವಾಗಿ ಕರ್ನಾಟಕ ಪ್ರಾಂತ್ಯದ ರಚನೆಗಾಗಿ ಚಳುವಳಿ ನಡೆಸುತ್ತಿದ್ದಾಗ. ಈ ಬಗ್ಗೆ ಅಲ್ಲಲ್ಲಿ ಅಸಂಗತತೆಗಳು ಸಹ ಕಾಣಿಸಿಕೊಂಡವು. ಏಕೀಕರಣಕ್ಕೆ ಸಂಬಂಧಿಸಿದಂತೆ ಮುಂಬೈ ಕರ್ನಾಟಕ ಜಿಲ್ಲೆಗಳಲ್ಲಿದ್ದ ತೀವ್ರತೆ ಇನ್ನಿತರ ಜಿಲ್ಲೆಗಳಲ್ಲಿ ಇರಲಿಲ್ಲ. ವಿಶೇಷವಾಗಿ ಮೈಸೂರು ಸಂಸ್ಥಾನದಲ್ಲಿ ಕರ್ನಾಟಕ ಪ್ರಾಂತ್ಯ ರಚನೆಗೆ ಸಾಕಷ್ಟು ವಿರೋಧವೇ ಕಂಡುಬಂದಿತು. ಮೈಸೂರು ಸ್ಟೇಟ್ ಕಾಂಗ್ರೆಸ್ ಕರ್ನಾಟಕ ಪ್ರಾಂತೀಯ ಕಾಂಗ್ರೆಸ್ ಸಮಿತಿಯಲ್ಲಿ ವಿಲೀನಗೊಳ್ಳದೆ ತನ್ನ

ಸ್ಥಂತಿಕೆಯನ್ನು ಉಳಿಸಿಕೊಂಡಿತ್ತು. 1948ರ ಮಧ್ಯಭಾಗದಲ್ಲಿ ಮೈಸೂರು ಸಂಸ್ಥಾನಕ್ಕೆ ಪ್ರತ್ಯೇಕವಾದಂತಹ ಕಾಂಗ್ರೆಸ್ ಸಮಿತಿಯನ್ನು ರಚಿಸಬೇಕೆಂಬ ಬೇಡಿಕೆ ಕಾಣಿಸಿಕೊಂಡು ಈ ಬಗ್ಗೆ ಚರ್ಚೆಗಳು ಸಹಾ ನಡೆದವು. ಈ ಬೆಳವಣಿಗೆ ಕರ್ನಾಟಕ ಪ್ರಾಂತ್ಯದ ರಚನೆಗೆ ಅಡ್ಡಿ ಮಾಡುವ ಆತಂಕ ನಿಜಲಿಂಗಪ್ಪನವರಲ್ಲಿತ್ತು. ಆದುದರಿಂದ ನಿಜಲಿಂಗಪ್ಪನವರು ಮೈಸೂರು ಸಂಸ್ಥಾನದ ಮುಖಂಡರನ್ನು ಮನವೊಲಿಸುವ ಪ್ರಯತ್ನವನ್ನು ಮಾಡಬೇಕಾಯಿತು. ವಿಕೀಕರಣಗೊಂಡಲ್ಲಿ ಬಹುಸಂಖ್ಯಾತರಾಗಿ ಪ್ರಥಮ ಸ್ಥಾನದಲ್ಲಿದ್ದ ಒಕ್ಕಲಿಗರು ಪ್ರಾಮುಖ್ಯತೆಯನ್ನು ಕಳೆದುಕೊಂಡು ಎರಡನೇ ಸ್ಥಾನಕ್ಕೆ ಸೀಮಿತಗೊಳ್ಳಬಹುದೆಂಬ ಆತಂಕದಿಂದಾಗಿ ವಿಕೀಕರಣಕ್ಕೆ ಹೆಚ್ಚಿನ ಒಲವು ಹೊಂದಿರಲಿಲ್ಲ. ಆದರೆ ನಿಜಲಿಂಗಪ್ಪನವರು ತಮ್ಮ ಸತತ ಪ್ರಯತ್ನದ ಮೂಲಕ ಸಂಸ್ಥಾನದ ಪ್ರಭಾವಿ ಒಕ್ಕಲಿಗ ನಾಯಕರ ಮನವೊಲಿಸಿದರು. ಹಾರ್ನಳ್ಳಿ ರಾಮಸ್ವಾಮಿ, ಜಿ.ಎಸ್. ಹಾಲಪ್ಪ ಹಾಗೂ ಇತರೆ ಬುದ್ಧಿಜೀವಿಗಳನ್ನು ವಿಕೀಕರಣ ಚಳುವಳಿಯಲ್ಲಿ ತೊಡಗುವಂತೆ ಮಾಡಿದರು. ಒಕ್ಕಲಿಗ ನಾಯಕ ಎಚ್.ಕೆ. ವೀರಣ್ಣ ಗೌಡ ಅಂತಹವರ ಮನಸ್ಸನ್ನು ಸಹ ನಿಜಲಿಂಗಪ್ಪನವರು ಪೂರ್ಣವಾಗಿ ಗೆದ್ದುಕೊಂಡರು.

ಮೈಸೂರು ಸಂಸ್ಥಾನದ ಮುಖ್ಯಮಂತ್ರಿಗಳಾಗಿದ್ದು ಕೆ.ಸಿ. ರೆಡ್ಡಿಯವರು ಮೈಸೂರು ಸಂಸ್ಥಾನದ ವಿಕೀಕರಣದ ಪ್ರಕ್ರಿಯೆಗೆ ಅಡ್ಡ ಬರುವುದಿಲ್ಲ ಎಂಬ ಆಶ್ವಾಸನೆಯನ್ನು ನೀಡಿದರೂ ಸಹ ವಿಕೀಕೃತ ಕರ್ನಾಟಕ ಪ್ರಾಂತ್ಯ ಶ್ರೀ ಮನ್ಮಹಾರಾಜರ ಆಶ್ರಯದಲ್ಲಿ ಮುಂಯವರಿಯಬೇಕು ಎಂದು ಅಪೇಕ್ಷಿಸಿದರು. ಇದು ಪ್ರಜಾಪ್ರಭುತ್ವದ ಬೆಳವಣಿಗೆಗೆ ವಿರುದ್ಧವಾಗಿತ್ತಲ್ಲದೆ. ಕರ್ನಾಟಕ ವಿಕೀಕರಣಕ್ಕೆ ಪರತ್ತುಗಳನ್ನು ವಿಧಿಸಿದಂತಾಗುತ್ತದೆ ಎಂಬುವಾಗಿ ನಿಜಲಿಂಗಪ್ಪನವರು ಭಾವಿಸಿದರು. ಇದು ವಿಕೀಕರಣ ಪ್ರಕ್ರಿಯೆಗೆ ಹಾಗೂ ಪ್ರಯತ್ನಗಳಿಗೆ ಹಿನ್ನಡೆಯಾಯಿತು.

ಧರ್ ಆಯೋಗ

1948ರ ಪ್ರಾರಂಭದಲ್ಲಿ ಎಸ್. ನಿಜಲಿಂಗಪ್ಪ, ಆರ್.ಆರ್. ದಿವಾಕರ್, ಎಂ.ಪಿ. ಪಾಟೀಲ್ ಹಾಗೂ ಕೆ.ಆರ್. ಕಾರಂತ ಅವರು ದೆಹಲಿಗೆ ಭೇಟಿ ನೀಡಿ ಕೇಂದ್ರ ನಾಯಕರನ್ನು ಸಂಪರ್ಕಿಸಿ ಕರ್ನಾಟಕ ಪ್ರಾಂತ್ಯ ರಚನೆಗೆ ಬೇಡಿಕೆಯನ್ನು ಪ್ರಬಲವಾಗಿ ಪ್ರತಿಪಾದಿಸಿದರು. ಇದರ ಪರಿಣಾಮವಾಗಿ ಸಂವಿಧಾನ ರಚನಾ ಸಮಿತಿಯ ಅಧ್ಯಕ್ಷರಾದ ರಾಜೇಂದ್ರ ಪ್ರಸಾದ್‌ರವರು ಭಾಷಾಧಾರಿತ ಪ್ರಾಂತ್ಯಗಳ ರಚನೆಗೆ ಸಂಬಂಧಿಸಿದಂತೆ ಗುಣಾವಗುಣಗಳನ್ನು ಪರಿಶೀಲಿಸಿ ವರದಿ ನೀಡಲು ಧರ್ ಆಯೋಗವನ್ನು ನೇಮಿಸಿತು. ಈ ಆಯೋಗ ಭಾಷಾಧಾರಿತ ರಾಜ್ಯಗಳ ರಚನೆಗೆ ಪೂರಕವಾಗಿದ್ದ ಯಾವುದೇ ಅಂಶಗಳನ್ನು ಪರಿಗಣಿಸಲಿಲ್ಲ. ವಿಕೀಕರಣದ ಪರವಾಗಿದ್ದು ಪ್ರಬಲ ಜನಾಭಿಲಾಷೆಯನ್ನು ಲೆಕ್ಕಿಸದೆ ಭಾಷಾಧಾರಿತ ರಾಜ್ಯಗಳು ಭಾರತದ ಒಕ್ಕೂಟಕ್ಕೆ ಧಕ್ಕೆ ತರಬಹುದೆಂಬ ಆತಂಕವನ್ನು ವ್ಯಕ್ತಪಡಿಸಿದ್ದಲ್ಲದೆ ಈ ಸಮಸ್ಯೆಯನ್ನು ಹಾಗೂ ಅದರ ಪರಿಹಾರವನ್ನು ತಾತ್ಕಾಲಿಕವಾಗಿ ಯಥಾಸ್ಥಿತಿಯಲ್ಲಿ ಮುಂದುವರೆಸಲು ಶಿಫಾರಸ್ಸು ಮಾಡಿತ್ತು. ಧರ್ಮದ ಆಧಾರದ ಮೇಲೆ ವಿಭಜಿತವಾದ ಭಾರತ ಮುಂದೆ ಭಾಷೆಯ ಆಧಾರದ ಮೇಲೆ ಪ್ರಾಯಶಃ ಛಿದ್ರಗೊಳ್ಳಬಹುದೆಂಬ ಆತಂಕ ಅವರಲ್ಲಿತ್ತು. ಆದರೆ ಅಂತಹ ಭಾವನೆ ಆಧಾರ ರಹಿತವಾಗಿತ್ತು. ಧರ್

ಸಮಿತಿಯ ವರದಿಗೆ ಆಂಧ್ರ ಮತ್ತು ಕರ್ನಾಟಕದಲ್ಲಿ ವ್ಯಾಪಕ ವಿರೋಧ ವ್ಯಕ್ತವಾಯಿತು. ಈ ಹಿನ್ನಲೆಯಲ್ಲಿ 1948ರ ಡಿಸೆಂಬರ್‌ನಲ್ಲಿ ನಡೆದ ಕಾಂಗ್ರೆಸ್ಸಿನ ಜಯಪುರದ 55ನೇ ಅಧಿವೇಶನವು ಮೂವರು ಸದಸ್ಯರ ಸಮಿತಿಯನ್ನು ರಚಿಸಿ ಭಾಷಾಧಾರಿತ ಪ್ರಾಂತ್ಯಗಳ ನಿರ್ಮಾಣಕ್ಕೆ ಸಂಬಂಧಿಸಿದಂತೆ ಇರುವ ಎಲ್ಲಾ ಅಂಶಗಳನ್ನು ಕೂಲಂಕುಷವಾಗಿ ಪರಿಶೀಲಿಸಿ ವರದಿ ನೀಡುವಂತೆ ಕೋರಿತು. ಪಟ್ಟಾಭಿ ಸೀತಾರಾಮಯ್ಯನವರ ಅಧ್ಯಕ್ಷತೆಯಲ್ಲಿ ಜವಹರಲಾಲ್ ನೆಹರು ಹಾಗೂ ವಲ್ಲಭಬಾಯಿ ಪಟೇಲರನ್ನೊಳಗೊಂಡ ಈ ಮೂವರು ಸದಸ್ಯರ ಸಮಿತಿ 1949 ಏಪ್ರಿಲ್‌ನಲ್ಲಿ ವರದಿಯನ್ನು ನೀಡಿತು. ಹಾಗೂ ಆಂಧ್ರ ಪ್ರಾಂತ್ಯದ ರಚನೆಗೆ ಶಿಫಾರಸ್ಸು ಮಾಡಿತ್ತು. ಕರ್ನಾಟಕ ಪ್ರಾಂತ್ಯದ ರಚನೆಯ ಬಗ್ಗೆ ಯಾವುದೇ ಶಿಫಾರಸ್ಸನ್ನು ಮಾಡದೆ ಆ ಪ್ರಶ್ನೆಯನ್ನು ಮುಂದೂಡಲು ಸೂಚಿಸಿತು.

ಅಷ್ಟರಲ್ಲಾಗಲೇ ಭಾರತ ಒಕ್ಕೂಟದಲ್ಲಿ ದೇಶೀಯ ಸಂಸ್ಥಾನಗಳ ವಿಲೀನದ ಪ್ರಕ್ರಿಯೆಯನ್ನು ಪೂರ್ಣಗೊಳಿಸಿದ ಕೇಂದ್ರ ಗೃಹಮಂತ್ರಿಗಳಾದ ಸರ್ದಾರ್ ವಲ್ಲಭಬಾಯಿ ಪಟೇಲರು ದೇಶೀಯ ಸಂಸ್ಥಾನಗಳನ್ನು ಎ, ಬಿ ಮತ್ತು ಸಿ ಎಂಬ ಮೂರು ಸ್ತರದ ಪ್ರಾಂತ್ಯಗಳನ್ನಾಗಿ ನಿರ್ಮಾಣ ಮಾಡಿದ್ದರು. 20 ವಿವಿಧ ಘಟಕಗಳಲ್ಲಿ ಹಂಚಿ ಹೋಗಿದ್ದ ಕರ್ನಾಟಕ ಪ್ರಾಂತ್ಯಗಳನ್ನು ಒಗ್ಗೂಡಿಸಿ ಐದು ಪ್ರಾಂತ್ಯಗಳಿಗೆ ಸೀಮಿತಗೊಳಿಸಲಾಯಿತು. ಇದರಿಂದಾಗಿ ಕರ್ನಾಟಕ ಏಕೀಕರಣ ಪ್ರಥಮ ಹಂತ ಪೂರ್ಣವಾಯಿತು ಎಂದು ಅನೇಕ ನಾಯಕರು ಭಾವಿಸಿದರು.

ಪಟ್ಟಾಭಿ ಸೀತಾರಾಮಯ್ಯನವರ ಅಧ್ಯಕ್ಷತೆಯಲ್ಲಿ ಪರಿಶೀಲನೆ ನಡೆಸಿ ಸಲ್ಲಿಸಿದ ಸಮಿತಿಯ ವರದಿಯಲ್ಲಿ ಕರ್ನಾಟಕದ ನಾಯಕ ವರ್ಗದಲ್ಲಿ ಹಾಗೂ ಜನ ಸಾಮಾನ್ಯರ ಕರ್ನಾಟಕ ಏಕೀಕರಣದ ಬಗ್ಗೆ ಒಮ್ಮತದ ಅಭಿಪ್ರಾಯವಿಲ್ಲವೆಂದು ತಿಳಿಸಿತು. ಆರ್ಥಿಕ ಮತ್ತು ಜಾತಿ ಹಿನ್ನಲೆಯಲ್ಲಿ ಮೈಸೂರು ಸಂಸ್ಥಾನದ ಅನೇಕ ನಾಯಕರು ಏಕೀಕರಣಕ್ಕೆ ವಿರೋಧ ವ್ಯಕ್ತಪಡಿಸಿದರು.

ಆರ್ಥಿಕವಾಗಿ ಮುಂದುವರಿದಿದ್ದ ಮೈಸೂರು ಸಂಸ್ಥಾನದ ಸಂಪನ್ಮೂಲವನ್ನು ಹಿಂದುಳಿದ ಪ್ರದೇಶಗಳ ಅಭಿವೃದ್ಧಿಗೆ ಮೀಸಲಾಗಿಟ್ಟರೆ ಮೈಸೂರು ಸಂಸ್ಥಾನದ ಜಿಲ್ಲೆಗಳು ಆರ್ಥಿಕವಾಗಿ ಹಿನ್ನಡೆ ಕಾಣಬಹುದೆಂದು ಹಾಗೂ ಒಕ್ಕಲಿಗ ನಾಯಕರು ತಮ್ಮ ಸ್ಥಾನಮಾನಕ್ಕೆ ಚ್ಯುತಿ ಬರಬಹುದೆಂದು ಭಾವಿಸಿದರು. ಈ ಹಿನ್ನಲೆಯಲ್ಲಿ ಏಕೀಕರಣ ಸಾಧುವಲ್ಲ ಎಂಬ ಅಭಿಪ್ರಾಯ ಮೈಸೂರು ಸಂಸ್ಥಾನದಲ್ಲಿ ಹಾಗೂ ಮೈಸೂರು ಸಂಸ್ಥಾನದ ಕಾಂಗ್ರೆಸ್‌ನಲ್ಲಿ ವ್ಯಕ್ತಪಡಿಸಲಾಯಿತು. ಒಕ್ಕಲಿಗರ ಪ್ರಬಲ ನಾಯಕರಾದ ಕೆ.ವಿ. ಶಂಕರೇಗೌಡ, ಎಚ್.ಕೆ. ವೀರಣ್ಣ ಗೌಡ, ಕಡಿದಾಳ ಮಂಜಪ್ಪ ಹಾಗೂ ಇತರರು ಏಕೀಕರಣವನ್ನು ಬಹಿರಂಗವಾಗಿ ವಿರೋಧಿಸಿದವರಲ್ಲಿ ಪ್ರಮುಖರು. ಈ ನಾಯಕರ ಗುಂಪು ಮೈಸೂರು ಸಂಸ್ಥಾನವನ್ನು ಹೊರತುಪಡಿಸಿ ಉಳಿದ ಎಲ್ಲಾ ಕನ್ನಡ ಪ್ರದೇಶಗಳನ್ನೊಳಗೊಂಡ ಒಂದು ನೂತನ ಕರ್ನಾಟಕವನ್ನು ಸ್ಥಾಪಿಸುವುದು ಎಲ್ಲರಿಗೂ ಅನುಕೂಲಕರ ಎಂಬುದಾಗಿ ತಿಳಿಸಿತ್ತು. ಈ ವರ್ಗದ ನಾಯಕರ ಅಭಿಪ್ರಾಯದಲ್ಲಿ ಎರಡು ಕರ್ನಾಟಕ ರಾಜ್ಯಗಳನ್ನು ರಚಿಸುವುದರಿಂದ ಎಲ್ಲಾ ಬಗೆಯ ಸಮಸ್ಯೆಗಳನ್ನು ಬಗೆಹರಿಸಬಹುದು ಎಂಬುದಾಗಿತ್ತು.

ಇಂತಹ ಸನ್ನಿವೇಶದಲ್ಲಿ ಕರ್ನಾಟಕ ಪ್ರದೇಶ ಕಾಂಗ್ರೆಸ್ ಸಮಿತಿಯ ಅಧ್ಯಕ್ಷರಾದ ನಿಜಲಿಂಗಪ್ಪನವರು ಮೈಸೂರು ಸಂಸ್ಥಾನದ ಕಾಂಗ್ರೆಸ್ ನಾಯಕರನ್ನು ವಿಶೇಷವಾಗಿ ಒಕ್ಕಲಿಗ ಸಮುದಾಯದ ನಾಯಕರನ್ನು ಭೇಟಿ ಮಾಡಿ ವಿಕೀಕರಣದ ಬಗ್ಗೆ ಅವರಲ್ಲಿದ್ದಂತಹ ಅನುಮಾನಗಳನ್ನು ಬಗೆಹರಿಸಲು ಸತತವಾಗಿ ಶ್ರಮಿಸಿದರು. ಶಾಂತವೇರಿ ಗೋಪಾಲಗೌಡ ಹಾಗೂ ಎಸ್. ಜೆಸ್ಸಯ್ಯ ಅವರನ್ನು ವಿಕೀಕರಣದ ಪರವಾಗಿ ಮನಪರಿವರ್ತನೆ ಮಾಡುವುದರಲ್ಲಿ ಯಶಸ್ವಿಯಾದರು. ತದನಂತರ ಇನ್ನಿತರ ಒಕ್ಕಲಿಗ ನಾಯಕರೂ ಸಹ ವಿಕೀಕರಣಕ್ಕೆ ತಮ್ಮ ಬೆಂಬಲ ಸೂಚಿಸಿದರು. ಪರಿಣಾಮವಾಗಿ 1949ರ ಜನವರಿಯಲ್ಲಿ ಚಿತ್ರದುರ್ಗ ಜಿಲ್ಲೆಯ ಹರಿಹರದಲ್ಲಿ ಮೈಸೂರು ಸಂಸ್ಥಾನದ ಕಾಂಗ್ರೆಸ್ ನಾಯಕರು ವಿಕೀಕರಣದ ಬಗ್ಗೆ ತೀರ್ಮಾನ ಕೈಗೊಳ್ಳಲು ಸಭೆ ಸೇರಿದರು. ದೀರ್ಘ ಚರ್ಚೆಯ ನಂತರ 2 ಗೊತ್ತುವಳಿಗಳನ್ನು ಅನುಮೋದಿಸಲಾಯಿತು. ಮೊದಲನೆಯದಾಗಿ ಮೈಸೂರು ಸಂಸ್ಥಾನವನ್ನೊಳಗೊಂಡಂತೆ ಎಲ್ಲಾ ಕನ್ನಡ ಪ್ರದೇಶಗಳನ್ನು ಒಂದೂಗೂಡಿಸಿ ವಿಕೀಕೃತ ರಾಜ್ಯವನ್ನು ರಚಿಸಲು ಕರೆ ನೀಡಲಾಯಿತು. ಎರಡನೆಯದಾಗಿ ಮೈಸೂರು ಸಂಸ್ಥಾನದ ಮಹಾರಾಜರನ್ನು ವಿಕೀಕೃತ ರಾಜ್ಯದ ರಾಜ್ಯ ಪಾಲರನ್ನಾಗಿ ಆಯ್ಕೆ ಮಾಡುವ ಗೊತ್ತುವಳಿಯನ್ನು ಅನುಮೋದಿಸಲಾಯಿತು.

ಇದೇ ಸಂದರ್ಭದಲ್ಲಿ ಕರ್ನಾಟಕ ಪ್ರದೇಶ ಕಾಂಗ್ರೆಸ್ ಸಮಿತಿಯ ಸಭೆಯಲ್ಲಿ ಥರ್ ಸಮಿತಿಯ ವರದಿಯ ಶಿಫಾರಸ್ಸನ್ನು ವಿರೋಧಿಸಿ ಕರ್ನಾಟಕ ವಿಕೀಕರಣಕ್ಕೆ ಕೇಂದ್ರ ಸರ್ಕಾರ ಮುಂದಾಗಬೇಕೆಂದು ಗೊತ್ತುವಳಿಯೊಂದು ಕರೆ ನೀಡಿತು. ಹಾಗೂ ಮೈಸೂರು ಸಂಸ್ಥಾನವನ್ನು ವಿಕೀಕೃತ ಕರ್ನಾಟಕದಲ್ಲಿ ಸೇರ್ಪಡೆ ಮಾಡಬೇಕೆಂದು ಒತ್ತಾಯಿಸಲಾಯಿತು. ಈ ಎರಡೂ ಸಂದರ್ಭಗಳಲ್ಲಿ ನಿಜಲಿಂಗಪ್ಪನವರು ಅತ್ಯಂತ ಪ್ರಮುಖವಾದ ಪಾತ್ರವನ್ನು ನಿರ್ವಹಿಸಿದರು.

ಹೈದರಾಬಾದ್ ಕರ್ನಾಟಕ ಪ್ರದೇಶದಲ್ಲಿ ವಿಕೀಕರಣದ ಬಗ್ಗೆ ಪ್ರಬಲವಾದ ಚಳುವಳಿಯನ್ನು ಸಂಘಟಿಸಲು ಸ್ಥಳೀಯ ನಾಯಕರು ಮುಂದಾಗಲಿಲ್ಲ ಇಂತಹ ಸಂದರ್ಭದಲ್ಲಿ ನಿಜಲಿಂಗಪ್ಪನವರು ಈ ಭಾಗದ ನಾಯಕರು ಹಾಗೂ ಬುದ್ಧಿಜೀವಿಗಳನ್ನು ಭೇಟಿ ಮಾಡಿ ಕರ್ನಾಟಕ ರಾಜ್ಯ ನಿರ್ಮಾಣದ ಅನಿವಾರ್ಯತೆಯ ಬಗ್ಗೆ ಮನದಟ್ಟು ಮಾಡಿದರು. ಈ ಹಿನ್ನೆಲೆಯಲ್ಲಿ 1949ರ ಮಾರ್ಚ್ ಮೊದಲ ವಾರದಲ್ಲಿ ಅಖಿಲ ಕರ್ನಾಟಕ ಪರಿಷತ್ ಗುಲ್ಬರ್ಗಾದಲ್ಲಿ ಸಭೆ ಸೇರಿ ವಿಕೀಕೃತ ಕರ್ನಾಟಕದಲ್ಲಿ ಹೈದರಾಬಾದ್ ಸಂಸ್ಥಾನಕ್ಕೆ ಸೇರಿದ ಕನ್ನಡ ಪ್ರದೇಶಗಳನ್ನು ವಿಲೀನಗೊಳಿಸಬೇಕೆಂಬ ಗೊತ್ತುವಳಿಯೊಂದನ್ನು ಅಂಗೀಕರಿಸಿ ವಿಕೀಕರಣ ಪ್ರಕ್ರಿಯೆಗೆ ಸಮ್ಮತಿಯನ್ನು ಸೂಚಿಸಿತು. ಈ ಸಮಯದಲ್ಲಿ ಸಂವಿಧಾನ ಸಭೆಯು ಸಹ ಹೊಸ ಸಂವಿಧಾನವನ್ನು ಅಂತಿಮಗೊಳಿಸುವ ಕಾರ್ಯದಲ್ಲಿತ್ತು. ಈ ಎಲ್ಲಾ ಬೆಳವಣಿಗೆ ನಡುವೆ ನೆಹರೂರವರು ಕರ್ನಾಟಕ ವಿಕೀಕರಣದ ಬಗ್ಗೆ ನಿರ್ದಿಷ್ಟವಾದ ನಿಲುವನ್ನು ತೆಗೆದುಕೊಳ್ಳಲು ಬಯಸಲಿಲ್ಲ. ಭಾಷಾಧಾರಿತ ರಾಜ್ಯ ನಿರ್ಮಾಣದ ಕಲ್ಪನೆಯನ್ನು ಕೈ ಬಿಡುವ ಲಕ್ಷಣಗಳು ಕಾಣಿಸಿಕೊಂಡವು. ಆಗ ನಿಜಲಿಂಗಪ್ಪನವರು ಕೇಂದ್ರ ಸರ್ಕಾರದ ಧೋರಣೆ ಬಗ್ಗೆ ಅಸಮಧಾನ ವ್ಯಕ್ತಪಡಿಸಿದರು. ಒಂದು ವೇಳೆ ವಿಕೀಕರಣ ಸಾಧ್ಯವಾಗದಿದ್ದರೆ ಅದನ್ನು ಸಾಧಿಸಲು ಹೋರಾಟದ

ದಾರಿಯನ್ನು ಅನುಸರಿಸಬೇಕಾದೀತು ಎಂದು ಎಚ್ಚರಿಕೆ ನೀಡಿದರು. 1949ರ ಸಾಲಿನಲ್ಲಿ ಉದ್ದಕ್ಕೂ ವಿವಿಧ ಸಂಘಟನೆಗಳ ನಾಯಕರು ವಿವಿಧ ಸ್ಥಳಗಳಲ್ಲಿ ಸಭೆ ಸೇರಿ ಏಕೀಕೃತ ಕರ್ನಾಟಕದ ನಿರ್ಮಾಣಕ್ಕೆ ನಡೆಯುತ್ತಿದ್ದ ಚಳುವಳಿಯನ್ನು ಜೀವಂತವಾಗಿರಿಸಿದರು. ಆಗ ಸರ್ದಾರ್ ಪಟೇಲ್‌ರವರ ಅಧ್ಯಕ್ಷತೆಯಲ್ಲಿ ನೇಮಕವಾಗಿದ್ದು ತ್ರಿಸದಸ್ಯರ ಸಮಿತಿಯು ವರದಿ ಪ್ರಕಾರ ಆಂಧ್ರಪ್ರದೇಶ ರಚನೆಗೆ ಶಿಫಾರಸ್ಸು ಮಾಡಿದರು. ಅದನ್ನು ಕೂಡಾ ಕೇಂದ್ರ ಸರ್ಕಾರ ಅನುಷ್ಠಾನಗೊಳಿಸಲಿಲ್ಲ. ಇದರಿಂದಾಗಿ ತೆಲುಗು ಮಾತನಾಡುವ ಪ್ರದೇಶದಲ್ಲೂ ಏಕೀಕೃತ ಆಂಧ್ರ ನಿರ್ಮಾಣದ ಚಳುವಳಿ ಕೀವ್ರಗೊಂಡಿತು.

ಇದೇ ಸಂದರ್ಭದಲ್ಲಿ 1950 ಜನವರಿ 26ರಂದು ಭಾರತವು ಹೊಸ ಸಂವಿಧಾನವನ್ನು ಅಳವಡಿಸಿಕೊಂಡಿತು. ಇದೇ ಸನ್ನಿವೇಶದಲ್ಲಿ ನಿಜಲಿಂಗಪ್ಪನವರ ನೇತೃತ್ವದಲ್ಲಿ ನಿಯೋಗವೊಂದು ದೆಹಲಿಗೆ ಪ್ರಯಾಣ ಮಾಡಿ ಅಖಿಲಭಾರತ ಕಾಂಗ್ರೆಸ್ ಸಮಿತಿಯ ಅಧ್ಯಕ್ಷರಾದ ಡಾ॥ ರಾಜೇಂದ್ರ ಪ್ರಸಾದ್‌ರವರನ್ನು ಆದಷ್ಟೂ ಶೀಘ್ರವಾಗಿ ಕರ್ನಾಟಕ ನಿರ್ಮಾಣ ಮಾಡುವಂತೆ ಕೇಂದ್ರ ಸರ್ಕಾರದ ಮೇಲೆ ಒತ್ತಡ ಹಾಕಲು ಕೋರಿದರು. ಆಗ ನಿಜಲಿಂಗಪ್ಪನವರು ಆಂಧ್ರಪ್ರದೇಶದ ರಚನೆಯ ಜೊತೆಯಲ್ಲಿಯೇ ಏಕೀಕೃತ ಕರ್ನಾಟಕದ ರಚನೆಯಾಗಬೇಕೆಂದು ಇಲ್ಲವಾದಲ್ಲಿ ಕನ್ನಡ ಮಾತನಾಡುವ ವಿವಿಧ ಪ್ರಾಂತ್ಯಗಳ ಶಾಸನ ಸಭೆ ಸದಸ್ಯರು ತಮ್ಮ ತಮ್ಮ ಸ್ಥಾನಗಳಿಗೆ ರಾಜೀನಾಮೆ ನೀಡಲು ನಿರ್ಧರಿಸಿದ್ದಾರೆ ಎಂಬ ಅಂಶವನ್ನು ಸಹ ಕೇಂದ್ರ ನಾಯಕರ ಗಮನಕ್ಕೆ ತಂದರು.

ನೆಹರೂರವರನ್ನೂ ಎದುರು ಹಾಕಿಕೊಂಡಿದ್ದು

ನೆಹರೂರವರ ನೇತೃತ್ವದಲ್ಲಿದ್ದ ಕೇಂದ್ರ ಸರ್ಕಾರ ಮತ್ತು ಅಖಿಲ ಕರ್ನಾಟಕ ಕಾಂಗ್ರೆಸ್ ಸಮಿತಿಯು ಭಾಷಾಧಾರಿತ ಕರ್ನಾಟಕ ಪ್ರಾಂತ್ಯ ರಚನೆಯ ಬಗ್ಗೆ ಪರಸ್ಪರ ವಿರುದ್ಧವಾದ ನಿಲುವು ತಳೆದಿರುವುದು ಸ್ಪಷ್ಟವಾಯಿತು. 1951ರ ಪ್ರಥಮ ಸಾರ್ವತ್ರಿಕ ಚುನಾವಣಾ ಪ್ರಣಾಳಿಕೆಯಲ್ಲಿ ಕಾಂಗ್ರೆಸ್ ಪಕ್ಷವು ಭಾಷಾಧಾರಿತ ಪ್ರಾಂತ್ಯಗಳ ನಿರ್ಮಾಣಕ್ಕೆ ಬೆಂಬಲ ಮುಂದುವರೆಸುವುದಾಗಿ ಘೋಷಿಸಿತು. ಇದಕ್ಕೆ ವಿರುದ್ಧವಾಗಿ ಅನೇಕ ಸಂದರ್ಭಗಳಲ್ಲಿ ನೆಹರುರವರ ಭಾಷಾಧಾರಿತ ಪ್ರಾಂತ್ಯಗಳ ರಚನೆ ಭಾರತದ ಒಕ್ಕೂಟಕ್ಕೆ ಭಕ್ಕೆಯಿಂಟು ಮಾಡಬಹುದೆಂದು ಆತಂಕವನ್ನು ವ್ಯಕ್ತಪಡಿಸಿದ್ದರು ಹಾಗೂ ಈ ನಿರ್ಧಾರ ತೆಗೆದುಕೊಳ್ಳಲು ಸಮಯ ಪರಿಪಕ್ವವಾಗಿಲ್ಲ ಎಂಬ ಅಭಿಪ್ರಾಯ ವ್ಯಕ್ತಪಡಿಸಿದರು.

ಭಾಷಾಧಾರಿತ ಪ್ರಾಂತ್ಯಗಳ ರಚನೆಯನ್ನು ಕಾಂಗ್ರೆಸ್ ಪಕ್ಷ ಒಪ್ಪದೆ ಹೋದಲ್ಲಿ ಏಕೀಕರಣ ಚಳುವಳಿ ಪ್ರಬಲವಾಗಿದ್ದ ಪ್ರಾಂತ್ಯಗಳಲ್ಲಿ ಕಾಂಗ್ರೆಸ್ ಪಕ್ಷದ ಅಭ್ಯರ್ಥಿಗಳು ಚುನಾವಣೆಯಲ್ಲಿ ಸೋಲನ್ನು ಅನುಭವಿಸುವ ಆತಂಕ ಉಂಟಾಯಿತು. ಈ ಬಗ್ಗೆ ನಿಜಲಿಂಗಪ್ಪನವರು ನೆಹರೂರವರಿಗೆ ಮಾಹಿತಿ ನೀಡಿದುದಲ್ಲದೆ ಅಖಿಲ ಭಾರತ ಕಾಂಗ್ರೆಸ್ ಸಮಿತಿಯ ಅಧ್ಯಕ್ಷರಿಗೆ ಈ ಬಗ್ಗೆ ಪತ್ರ ಬರೆದು ಎಚ್ಚರಿಸಿದರು. ಈ ಬೆಳವಣಿಗೆಯನ್ನು ಆಂಧ್ರ ಮತ್ತು ಕರ್ನಾಟಕದ ಪ್ರಾಂತೀಯ ಕಾಂಗ್ರೆಸ್ ಸಮಿತಿಗಳ ನಾಯಕರು ಸಹ ಅಖಿಲ ಭಾರತ ಕಾಂಗ್ರೆಸ್ ನಾಯಕರ ಗಮನಕ್ಕೆ ತಂದಿದ್ದರು. ಈ ಹಿನ್ನಲೆಯಲ್ಲಿ ಅನಿವಾರ್ಯವಾಗಿ ಕಾಂಗ್ರೆಸ್ ಪಕ್ಷವು ಭಾಷಾಧಾರಿತ ಪ್ರಾಂತ್ಯಗಳ ರಚನೆಗೆ ತಮ್ಮ ಬೆಂಬಲವನ್ನು ಸೂಚಿಸಬೇಕಾಯಿತು. ಆದರೆ

ಈ ವಿಷಯದಲ್ಲಿ ನೆಹರೂರವರು ಯಾವುದೇ ರೀತಿಯ ಬೆಂಬಲವನ್ನು ಸೂಚಿಸಲಿಲ್ಲ. 1952ರ ಚುನಾವಣೆಯಲ್ಲಿ ಲೋಕಸಭೆ ಹಾಗೂ ಪ್ರಾಂತೀಯ ಶಾಸನ ಸಭೆಗೆ ಚುನಾವಣೆಗಳು ಜರುಗಿ ಕಾಂಗ್ರೆಸ್ ಪಕ್ಷ ಸ್ಪಷ್ಟ ಬಹುಮತ ಗಳಿಸಿತು. ನಂತರದ ದಿನಗಳಲ್ಲಿ ಪುರುಷೋತ್ತಮ ದಾಸ್ ಟಂಡನ್‌ರವರ ಅಧ್ಯಕ್ಷತೆಯಲ್ಲಿ ಅಖಿಲ ಭಾರತ ಕಾಂಗ್ರೆಸ್ ಸಮಿತಿಯು ಭಾಷಾಧಾರಿತ ಪ್ರಾಂತ್ಯಗಳ ರಚನೆಗೆ ಕ್ರಮ ಕೈಗೊಳ್ಳುವಂತೆ ನೆಹರೂರವರ ಮನಸ್ಸನ್ನು ಪರಿವರ್ತಿಸುವಲ್ಲಿ ವಿಫಲವಾಯಿತು. ಈ ಹೊತ್ತಿಗಾಗಲೇ ಆಂಧ್ರ ಮತ್ತು ಕರ್ನಾಟಕದಲ್ಲಿ ವಿವಿಧ ಸಂಘಟನೆಗಳು ಭಾಷಾಧಾರಿತ ಪ್ರಾಂತ್ಯಗಳ ರಚನೆಯನ್ನು ತೀವ್ರಗೊಳಿಸಿದ್ದರಿಂದ ಪ್ರಾಂತೀಯ ಸರ್ಕಾರಗಳು ಶಾಂತಿ ಹಾಗೂ ಸುವ್ಯವಸ್ಥೆಯನ್ನು ಕಾಪಾಡಲು ಸಾವಿರಾರು ಜನರನ್ನು ಬಂಧಿಸುವ ಪರಿಸ್ಥಿತಿ ಉಂಟಾಯಿತು.

1947ರಲ್ಲಿ ಕೊಡಗು ತನ್ನ ಪ್ರತ್ಯೇಕ ಸ್ಥಾನಮಾನವನ್ನು ಉಳಿಸಿಕೊಂಡಿದ್ದು ಕೆಲವು ಸಂಘಟನೆಗಳು ಹಾಗೂ ವ್ಯಕ್ತಿಗಳು ಕೊಡಗನ್ನು ಸಂಸ್ಕೃತಿ ಮತ್ತು ಭಾಷೆಯ ಆಧಾರದ ಮೇಲೆ ಕರ್ನಾಟಕದಲ್ಲಿ ವಿಲೀನಗೊಳಿಸಲು ವಿರೋಧ ವ್ಯಕ್ತಪಡಿಸಿದವು. ಆದರೆ ಕಾಂಗ್ರೆಸ್ಸಿನ ಪಕ್ಷದವರೆ ಆದ ಪೂಣಚ್ಚ ಅವರು ಕೊಡಗು ಪ್ರಾಂತ್ಯದ ಮುಖ್ಯಮಂತ್ರಿಯಾಗಿ ಆಯ್ಕೆಯಾದ ನಂತರ ತಮ್ಮ ಪ್ರಾಂತ್ಯವನ್ನು ಕರ್ನಾಟಕದಲ್ಲಿ ವಿಲೀನಗೊಳಿಸಿದರು. ಆ ಮೂಲಕ ವಿಕೀಕರಣ ಚಳುವಳಿಗೆ ನೆರವಾದರು.1952ರ ಜುಲೈ ಸಂಸತ್ ಅಧಿವೇಶನದಲ್ಲಿ ಭಾಷಾಧಾರಿತ ಪ್ರಾಂತ್ಯಗಳನ್ನು ರಚಿಸಲು ತಕ್ಷಣವೇ ಕ್ರಮ ಕೈಗೊಳ್ಳಬೇಕೆಂದು ವಿರೋಧ ಪಕ್ಷಗಳು ಅಗ್ರಹಿಸಿ ಮಂಡಿಸಿದ ನೊತ್ತುವಳಿಗಳ ಪರವಾಗಿ ಲೋಕಸಭೆಯಲ್ಲಿ ಕಾಂಗ್ರೆಸ್ ಸದಸ್ಯರಾಗಿದ್ದು ನಿಜಲಿಂಗಪ್ಪನವರು ವಾದಿಸಿದರು. ಈ ನಿಲುವಿನಿಂದಾಗಿ ನೆಹರೂರವರಿಗೆ ಇರುಸು ಮುರುಸು ಉಂಟಾಯಿತು.

ಆಂಧ್ರದ ವಿಕೀಕರಣ ಮತ್ತು ಪೊಟ್ಟಿರಾಮುಲು

ಕಾಂಗ್ರೆಸ್ ಪಕ್ಷದ ವಿಳಂಬ ನೀತಿ ಹಾಗೂ ನೆಹರುರವರ ನಿಲುವನ್ನು ವಿರೋಧಿಸಿ ಆಂಧ್ರ ದೇಶದಲ್ಲಿ ಚಳುವಳಿಗಳು ತೀವ್ರಗೊಂಡವು ಪೊಟ್ಟಿರಾಮುಲು ಆಂಧ್ರದ ವಿಕೀಕರಣಕ್ಕಾಗಿ ಹೋರಾಡಿದವರಲ್ಲಿ ಪ್ರಮುಖರು. ಆಂಧ್ರ ದೇಶವನ್ನು ರಚಿಸಲೇಬೇಕೆಂದು ಪಣತೊಟ್ಟರು ತಮ್ಮ ಬೇಡಿಕೆಯನ್ನು ಈಡೇರಿಸುವವರೆಗೂ ಅನ್ನ ಸತ್ಯಾಗ್ರಹ ಕೈಗೊಂಡರು. ಗಾಂಧೀಜಿಯವರ ಸತ್ಯಾಗ್ರಹ ಮಾರ್ಗವನ್ನು ಅನುಸರಿಸಿ 58 ದಿನಗಳ ದೀರ್ಘಕಾಲ ಅನ್ನ ಸತ್ಯಾಗ್ರಹದ ಮೂಲಕ ಆಂಧ್ರದ ವಿಕೀಕರಣಕ್ಕಾಗಿ ತಮ್ಮ ಪ್ರಾಣ ತ್ಯಾಗ ಮಾಡಿದರು.

ಇವರ ಮರಣಾ ನಂತರ ಆಂಧ್ರಪ್ರದೇಶದಾದ್ಯಂತ ವಿಧ್ವಂಸಕ ಚಳುವಳಿಗಳು ನಡೆದವು ಈ ಹಿನ್ನೆಲೆಯಲ್ಲಿ ಕೇಂದ್ರ ಸರ್ಕಾರವು ಆಂಧ್ರಪ್ರದೇಶದ ರಚನೆಗೆ ಒಪ್ಪಿ ಅದರ ನಿರ್ಮಾಣಕ್ಕೆ ಪೂರಕವಾಗುವಂತೆ ಆರ್ಥಿಕ ವಿಚಾರಗಳನ್ನು ಅಧ್ಯಯನ ಮಾಡಲು ಮತ್ತು ಗಡಿ ನಿಗದಿ ಮಾಡಲು ರಾಜಸ್ತಾನದ ಶ್ರೇಷ್ಠ ನ್ಯಾಯಾಲಯದ ನ್ಯಾಯಮೂರ್ತಿಗಳಾದ ಕೆ.ಎನ್. ವಾಂಛೂ ಸಮಿತಿಯನ್ನು ನೇಮಿಸಲಾಯಿತು. ಈ ಸಮಿತಿಯ ಒಂದು ತಿಂಗಳೊಳಗೆ ವರದಿ ನೀಡಬೇಕೆಂದು ಸೂಚಿಸಲಾಗಿತ್ತು. ಈ

ಆಯೋಗವು ಬಳ್ಳಾರಿ ಜಿಲ್ಲೆಯ ಬಗ್ಗೆ ಯಾವ ನಿರ್ದಿಷ್ಟ ನಿಲುವನ್ನು ತೆಗೆದುಕೊಳ್ಳಲು ಸಾಧ್ಯವಾಗಲಿಲ್ಲ. ಈ ಸಂದರ್ಭದಲ್ಲಿ ಕರ್ನಾಟಕ ಪ್ರಾಂತೀಯ ಕಾಂಗ್ರೆಸ್ ಸಮಿತಿಯ ಸದಸ್ಯರಾಗಿದ್ದು ನಿಜಲಿಂಗಪ್ಪನವರು ಮಾಂಭೋ ಆಯೋಗದ ಮುಂದೆ ಅಂಕಿ ಅಂಶಗಳ ಮೂಲಕ ತಮ್ಮ ವಾದವನ್ನು ಮಂಡಿಸಿದರು. ಸಮಗ್ರ ಬಳ್ಳಾರಿ ಜಿಲ್ಲೆಯನ್ನು ಕರ್ನಾಟಕಕ್ಕೆ ಸೇರಿಸಬೇಕೆಂದು ಆಗ್ರಹಿಸಿದರು. ಹೈದರಾಬಾದ್ ಮತ್ತು ಮದ್ರಾಸ್ ಸರ್ಕಾರದ ಸಹಯೋಗದಲ್ಲಿ ನಿರ್ಮಾಣ ಮಾಡಲು ಹೊರಟಿದ್ದ ತುಂಗಭದ್ರಾ ಆಣೆಕಟ್ಟಿನ ನಿರ್ಮಾಣ ಪೂರ್ಣಗೊಂಡಿರುವ ಕಾರ್ಯದ ಬಗ್ಗೆ ಆಣೆಕಟ್ಟಿನ ನೀರಿನ ಬಳಕೆಯ ಬಗ್ಗೆ ಸ್ಪಷ್ಟವಾದ ತೀರ್ಮಾನವನ್ನು ಮಾಂಭೂ ಆಯೋಗ ನೀಡಲು ಸಾಧ್ಯವಾಗಲಿಲ್ಲ. ಬಳ್ಳಾರಿ ಜಿಲ್ಲೆಯ ಆಲೂರು, ಆದೋನಿ ರಾಯದುರ್ಗ ತಾಲೂಕುಗಳಲ್ಲಿ ತೆಲುಗು ಮಾತನಾಡುವ ಜನರ ಸಂಖ್ಯೆ ಅಧಿಕವಾಗಿತ್ತು. ಅದೇ ರೀತಿ ಹರಪನಹಳ್ಳಿ, ಹಡಗಲಿ, ಹೊಸಪೇಟೆ, ಕೊಪ್ಪಳ, ಸಿಂಧೂರು ಮತ್ತು ಸಿರಿಗುಪ್ಪ ಈ ತಾಲೂಕುಗಳಲ್ಲಿ ಕನ್ನಡಿಗರು ಅಧಿಕವಾಗಿದ್ದರು

ಹೀಗಾಗಿ ಬಳ್ಳಾರಿ ಜಿಲ್ಲೆಯನ್ನು ಒಂದು ಘಟಕವನ್ನಾಗಿ ಪರಿಗಣಿಸಿ ಆಂಧ್ರಕ್ಕಾಗಲಿ, ಕರ್ನಾಟಕಕ್ಕಾಗಲಿ ಸೇರಿಸುವುದು ಈ ಸಮಿತಿಯಿಂದ ಸಾಧ್ಯವಾಗಲಿಲ್ಲ. ಅದೇ ರೀತಿ ಬಳ್ಳಾರಿ ತಾಲೂಕು ಮಿಶ್ರಭಾಷೆಯ ತಾಲೂಕು ಆದ್ದರಿಂದ ಈ ಬಗ್ಗೆ ನಿರ್ಣಯ ಕೈಗೊಳ್ಳಲು ಸಹ ಕಷ್ಟವಾಯಿತು. ಆದ್ದರಿಂದ 1953 ಏಪ್ರಿಲ್‌ನಲ್ಲಿ ಹೈದರಾಬಾದಿನ ನ್ಯಾಯಾಧೀಶರಾದ ಎಲ್.ಎಸ್. ಮಿಶ್ರರವರನ್ನು ಈ ಸಮಸ್ಯೆಯ ಅಧ್ಯಯನಕ್ಕೆ ನಿಯೋಜಿಸಲಾಯಿತು. ಬಳ್ಳಾರಿಯಲ್ಲಿದ್ದ ಕನ್ನಡ ಹಾಗೂ ತೆಲುಗು ಭಾಷಿಕರ ಸಂಖ್ಯೆಯನ್ನು ಪರಿಶೀಲಿಸಿ ತಮ್ಮ ಶಿಫಾರಸ್ಸನ್ನು ನೀಡಬೇಕಿತ್ತು. ಕರ್ನಾಟಕದ ಪರವಾಗಿ 222 ಮನವಿಗಳು ಆಂಧ್ರದ ಪರವಾಗಿ 132 ಮನವಿಗಳು ಸಲ್ಲಿಸಲ್ಪಟ್ಟವು. ಕರ್ನಾಟಕ ಪ್ರಾಂತೀಯ ಕಾಂಗ್ರೆಸ್ ಸಮಿತಿಯ ಪರವಾಗಿ ನಿಜಲಿಂಗಪ್ಪನವರು ಅಂಕಿ ಅಂಶಗಳ ಮೂಲಕ ಮನವಿ ಸಲ್ಲಿಸಿ ಬಳ್ಳಾರಿಯನ್ನು ಕರ್ನಾಟಕದಲ್ಲಿ ವಿಲೀನಗೊಳಿಸಬೇಕೆಂದು ಕೋರಿದರು. ಜನಸಂಖ್ಯೆ ಆಧಾರದ ಮೇಲೆ ಕನ್ನಡ ಮಾತನಾಡುವವರ ಪ್ರಮಾಣ ಶೇಖಡಾ 52.52 ತೆಲುಗು ಮಾತನಾಡುವವರ ಪ್ರಮಾಣ ಶೇಖಡಾ 22.19 ಇದರಿಂದಾಗಿ ಮಿಶ್ರರವರು ಬಳ್ಳಾರಿ ಜಿಲ್ಲೆಯು ಮೈಸೂರಿಗೆ ಸೇರಬೇಕೆಂದು ಒಪ್ಪಿಕೊಂಡರು. ಮಿಶ್ರ ವರದಿಯ ತರುವಾಯ ಆಂಧ್ರ ಪ್ರಾಂತ್ಯದ ನಿರ್ಮಾಣ ಬಹುತೇಕ ಖಚಿತವಾಯಿತು. ಆದರೆ ಏಕೀಕೃತ ಕರ್ನಾಟಕ ಪ್ರಾಂತ್ಯದ ರಚನೆ ಕನಸು ನನಸಾಗಿಯೇ ಉಳಿಯಿತು.

1953 ಏಪ್ರಿಲ್ 28ರಂದು ನೆಹರುರವರು ಬೆಳಗಾವಿಯಲ್ಲಿ ಜನರನ್ನು ಉದ್ದೇಶಿಸಿ ಮಾತನಾಡುತ್ತಾ ಕರ್ನಾಟಕ ಪ್ರಾಂತ್ಯದ ರಚನೆಗೆ ಈಗ ಯಾವುದೇ ವಿರೋಧವೂ ಇಲ್ಲ ಆದ್ದರಿಂದ ಆದಷ್ಟು ಶೀಘ್ರವಾಗಿ ತೀರ್ಮಾನ ತೆಗೆದುಕೊಳ್ಳುವುದಾಗಿ ಮತ್ತು ಗಡಿಗಳನ್ನು ನಿಗದಿ ಮಾಡುವುದಕ್ಕಾಗಿ ಒಂದು ಆಯೋಗ ರಚಿಸುವುದಾಗಿ ಘೋಷಿಸಿದರು.

1953 ಆಗಸ್ಟ್ 13ರಂದು ಆಂಧ್ರ ಪ್ರಾಂತ್ಯ ರಚನೆಗೆ ಸಂಬಂಧಪಟ್ಟ ಮಸೂದೆ ಲೋಕಸಭೆಯಲ್ಲಿ ಮಂಡಿಸಲಾಯಿತು. ಅದೇ ದಿನ ಕರ್ನಾಟಕದ ಏಕೀಕರಣದ ಪರ ಮಾತನಾಡಿದ ನಿಜಲಿಂಗಪ್ಪನವರು

ಬಳ್ಳಾರಿ ತಾಲೂಕನ್ನು ಹಾಗೂ ಬಳ್ಳಾರಿ ಜಿಲ್ಲೆಯ ಇತರ ಆರು ತಾಲೂಕುಗಳನ್ನು ಮೈಸೂರಿಗೆ ಸೇರಿಸುವುದನ್ನು ಸ್ವಾಗತಿಸಿದರು. ತಮ್ಮ ಸುಧೀರ್ಘ ಭಾಷಣದಲ್ಲಿ ನಿಜಲಿಂಗಪ್ಪನವರು ಮದ್ರಾಸ್ ಪ್ರಾಂತ್ಯಕ್ಕೆ ಸೇರಿದ ದಕ್ಷಿಣಕನ್ನಡ ಹಾಗೂ ಇತರೆ ಪ್ರದೇಶಗಳನ್ನು ಮೈಸೂರಿಗೆ ಸೇರಿಸಬೇಕೆಂದು ಪ್ರಬಲವಾಗಿ ಪ್ರತಿಪಾದಿಸಿದರು. ಭಾಷಾವಾರು ಪ್ರಾಂತ್ಯಗಳು ರಾಷ್ಟ್ರದ ಐಕ್ಯತೆಗೆ ಹಾನಿ ಎಂಬ ವಾದವನ್ನು ನಿಜಲಿಂಗಪ್ಪನವರು ತಮ್ಮ ಭಾಷಣದಲ್ಲಿ ಖಂಡಿಸಿದರು. ಆಗ ಸರ್ಕಾರವು ನಿಜಲಿಂಗಪ್ಪನವರ ನೇತೃತ್ವದಲ್ಲಿ ಒಂದು ಸಮಿತಿಯನ್ನು ರಚಿಸಲು ಬಯಸಿದಾಗ ನಿಜಲಿಂಗಪ್ಪನವರು ತಿದ್ದುಪಡಿಗಳನ್ನು ಒಪ್ಪಲು ಸಾಧ್ಯವಿಲ್ಲವೆಂದು ವಾದಿಸಿದರು. ಅಂತಿಮವಾಗಿ 1953 ಸೆಪ್ಟೆಂಬರ್ 13ರಂದು ಆಂಧ್ರ ರಾಜ್ಯ ನಿರ್ಮಾಣದ ಮಸೂದೆ ಲೋಕಸಭೆಯಲ್ಲಿ ಅಂಗೀಕೃತವಾಯಿತು.

1953 ಅಕ್ಟೋಬರ್ 1ರಂದು ಆಂಧ್ರ ರಾಜ್ಯ ಅಸ್ತಿತ್ವಕ್ಕೆ ಬರುವುದು ಖಚಿತವಾದ ನಂತರ ಮುಂಬೈ ಪ್ರಾಂತ್ಯದ ಕನ್ನಡ ಜಿಲ್ಲೆಗಳಲ್ಲಿ ಕೇಂದ್ರ ಸರ್ಕಾರದ ಧೋರಣೆಯ ಬಗ್ಗೆ ಅತೃಪ್ತಿ ಹೆಚ್ಚಾಯಿತು. ಈ ಹಿನ್ನಲೆಯಲ್ಲಿ ಅಖಿಲ ಕರ್ನಾಟಕ ರಾಜ್ಯ ನಿರ್ಮಾಣ ಪರಿಷತ್ 1953ರ ಸೆಪ್ಟೆಂಬರ್ ಮೊದಲ ವಾರದಲ್ಲಿ ಕರ್ನಾಟಕ ಸಪ್ತಾಹವನ್ನು ಆಚರಿಸಲು ಕರೆ ನೀಡಿತ್ತು. ಹಾಗೂ ಹಲವಾರು ವಿಧ್ವಂಸಕ ಕೃತ್ಯಕ್ಕೆ ಇದು ಸಾಕ್ಷಿಯಾಯಿತು. ಆಗ ನಾಯಕರೆಲ್ಲರನ್ನು ಬಂಧಿಸಲಾಯಿತು. ಈ ಹಿನ್ನಲೆಯಲ್ಲಿ ಬಂಧಿತರನ್ನು ಬಿಡುಗಡೆ ಮಾಡಲು ಹಾಗೂ ಏಕೀಕರಣ ಪ್ರಕ್ರಿಯೆಯನ್ನು ತ್ವರಿತವಾಗಿ ಪ್ರಾರಂಭಿಸಲು ನಿಜಲಿಂಗಪ್ಪನವರ ನಾಯಕತ್ವದಲ್ಲಿ ಕರ್ನಾಟಕ ಪ್ರಾಂತ್ಯ ಕಾಂಗ್ರೆಸ್ ಸಮಿತಿಯ ನಿಯೋಗವೊಂದು ದೆಹಲಿಗೆ ತೆರಳಿತು. ಈ ನಿಯೋಗವು ಪ್ರಧಾನಮಂತ್ರಿ ಹಾಗೂ ಗೃಹಮಂತ್ರಿ ಕೆ.ಎನ್. ಕಾಟ್ಜೂ ಹಾಗೂ ಇತರೆ ಸಂಸದೀಯ ನಾಯಕರನ್ನು ಸೆಪ್ಟೆಂಬರ್ 14ರಂದು ಭೇಟಿ ಮಾಡಿ ಬಂಧಿತರ ಬಿಡುಗಡೆ ಮತ್ತು ಕರ್ನಾಟಕ ಏಕೀಕರಣ ಪ್ರಕ್ರಿಯೆಯನ್ನು ಶೀಘ್ರವಾಗಿ ಪೂರ್ಣಗೊಳಿಸಲು ಒತ್ತಾಯಿಸಿದರು.

1953 ಅಕ್ಟೋಬರ್ 01ರಂದು ವಿಧ್ಯುಕ್ತವಾಗಿ ಭಾಷಾಧಾರಿತ ರಾಜ್ಯವಾಗಿ ಆಂಧ್ರಪ್ರದೇಶ ಅಸ್ತಿತ್ವಕ್ಕೆ ಬಂದಿತು. ಅದೇ ದಿನ ಬಳ್ಳಾರಿ ಜಿಲ್ಲೆಯ ಏಳು ತಾಲೂಕುಗಳು ಮೈಸೂರಿನಲ್ಲಿ ವಿಲೀನಗೊಂಡವು. ಅದೇ ಸಂದರ್ಭದಲ್ಲಿ ಕೋ. ಚೆನ್ನ ಬಸಪ್ಪರವರು ಬಳ್ಳಾರಿ ಜಿಲ್ಲೆಯ ಏಳು ತಾಲೂಕುಗಳು ಮೈಸೂರಿಗೆ ಸೇರಲು ಅವಕಾಶ ಕಲ್ಪಿಸಿಕೊಟ್ಟ ಮಿಶ್ರ ವರದಿಯನ್ನು ಕನ್ನಡಕ್ಕೆ ಅನುವಾದಿಸಿದರು.

ಫಜಲ್ ಅಲಿ ಆಯೋಗದ ನೇಮಕ

ವಿವಿಧ ರಾಜಕೀಯ ಪಕ್ಷಗಳು ಕೇಂದ್ರ ಸರ್ಕಾರದ ಮೇಲೆ ಸಂಸತ್ತಿನಲ್ಲಿ ಹೇಳಿಕೆ ನೀಡುವ ಮೂಲಕ ಪ್ರಬಲವಾಗಿ ಒತ್ತಡ ತಂದಿದ್ದರಿಂದ 1953 ಡಿಸೆಂಬರ್ 22ರಂದು ನೆಹರೂರವರು ರಾಜ್ಯ ಪುನರ್ವಿಂಗಡಣಾ ಆಯೋಗವೊಂದನ್ನು ನೇಮಿಸಿರುವುದಾಗಿ ಲೋಕಸಭೆಯಲ್ಲಿ ಪ್ರಕಟಿಸಿದರು. ಒರಿಸ್ಸಾದ ರಾಜ್ಯಪಾಲರಾಗಿದ್ದು ಫಜಲ್ ಅಲಿಯವರು ಈ ಆಯೋಗದ ಅಧ್ಯಕ್ಷರಾಗಿ ನೇಮಕಗೊಂಡರು. ರಾಜ್ಯಸಭಾ ಸದಸ್ಯರಾಗಿದ್ದ ವೈದ್ಯನಾಥ್ ಕುಂಜು ಮತ್ತು ಈಜಿಪ್ಟ್‌ನಲ್ಲಿ ಭಾರತದ ರಾಯಭಾರಿಯಾಗಿದ್ದು ಕೆ.ಎಂ. ಪಣಿಕ್ಕರ್‌ರವರನ್ನು ಸದಸ್ಯರನ್ನಾಗಿ ನೇಮಕ ಮಾಡಲಾಯಿತು. ಅದೇ ತಿಂಗಳ 29ರಂದು ಆಯೋಗದ

ನೇಮಕಾತಿಯ ಅಧಿಕೃತ ಆದೇಶವನ್ನು ಹೊರಡಿಸಲಾಯಿತು. ಜನಾಭಿಪ್ರಾಯಕ್ಕೆ ಹಾಗೂ ವಿಶೇಷ ಸಂದರ್ಭಗಳಲ್ಲಿ ರಾಜ್ಯ ಸರಕಾರಗಳ ಅಭಿಪ್ರಾಯಕ್ಕೆ ಮಾನ್ಯತೆ ನೀಡಿ ಭಾರತದಲ್ಲಿ ಭಾಷಾಧಾರಿತ ರಾಜ್ಯಗಳ ಪುನರ್ ವಿಂಗಡಣೆ ಮಾಡುವ ಮತ್ತು ಈ ರೀತಿ ನಿರ್ಮಾಣವಾಗಲಿರುವ ರಾಜ್ಯಗಳ ಗಡಿಗಳನ್ನು ನಿರ್ಣಯಿಸುವ ಅತ್ಯಂತ ಮಹತ್ವದ ಕಾರ್ಯಗಳನ್ನು ನಿರ್ವಹಿಸುವಂತೆ ಈ ಆಯೋಗಕ್ಕೆ ಸೂಚಿಸಲಾಯಿತು. ಸಮಗ್ರ ಹಾಗೂ ವೈಜ್ಞಾನಿಕ ಅಧ್ಯಯನ ನಂತರ ಹದಿನೆಂಟು ತಿಂಗಳೊಳಗಾಗಿ ಅಂದರೆ 1955 ಜೂನ್ 30ರೊಳಗಾಗಿ ತನ್ನ ವರದಿಯನ್ನು ಸಲ್ಲಿಸುವಂತೆ ಈ ಆಯೋಗಕ್ಕೆ ಸೂಚನೆ ನೀಡಲಾಯಿತು. ಮುಂದೆ ಈ ಅವಧಿಯನ್ನು ಮೂರು ತಿಂಗಳೊಳಗೆ ವಿಸ್ತರಿಸಿ ವರದಿ ಸಲ್ಲಿಸಲು ಅವಕಾಶ ಮಾಡಿಕೊಡಲಾಯಿತು. ನೆಹರೂರವರ ಈ ನಿರ್ಧಾರವನ್ನೂ ವರದಿ ಸಲ್ಲಿಸಲು ಅವಕಾಶ ಮಾಡಿಕೊಡಲಾಯಿತು. ನೆಹರೂರವರ ಈ ನಿರ್ಧಾರವನ್ನೂ ನಿಜಲಿಂಗಪ್ಪನವರ ನೇತೃತ್ವದಲ್ಲಿ ಕರ್ನಾಟಕ ಪ್ರಾಂತೀಯ ಕಾಂಗ್ರೆಸ್ ಹಾಗೂ ವಿಕೀಕರಣ ಪರ ಹೋರಾಡುತ್ತಿದ್ದ ಎಲ್ಲಾ ಸಂಘ ಸಂಸ್ಥೆಗಳು ಸ್ವಾಗತಿಸಿದವು.

ಬ್ರಿಟಿಷರ ವಿಸ್ತರಣಾ ನೀತಿ ಹಾಗೂ ಒಡೆದು ಆಳುವ ನೀತಿಯಿಂದಾಗಿ ಸಮಗ್ರವಾಗಿದ್ದ, ಅನೇಕ ಪ್ರಾಂತ್ಯಗಳು ಛಿದ್ರವಾಗಿದ್ದವು. ಈ ಬಗ್ಗೆ ಅಧ್ಯಯನ ಮಾಡುವ ಸಂದರ್ಭದಲ್ಲಿ ಮತ್ತು ರಾಜ್ಯಗಳ ಪುನರ್ ವಿಂಗಡಣೆ ಮಾಡುವ ಸಂದರ್ಭದಲ್ಲಿ ಈ ಕೆಳಕಂಡ ಪ್ರಮುಖ ಅಂಶಗಳನ್ನು ಗಮನದಲ್ಲಿಟ್ಟುಕೊಳ್ಳಲು ಸಹ ಆಯೋಗ ನಿರ್ಧರಿಸಿತು.

1. ನಿರ್ದಿಷ್ಟ ಪ್ರಾಂತ್ಯದ ಇತಿಹಾಸ
2. ಆ ಪ್ರಾಂತ್ಯದಲ್ಲಿ ಜನರಾಡುವ ಭಾಷೆ ಹಾಗೂ ಅದಕ್ಕಿತ ಭಾಷೆ
3. ರಾಜ್ಯ ನಿರ್ಮಾಣದಲ್ಲಿ ಆರ್ಥಿಕ ಸದೃಢತೆ
4. ಭೌಗೋಳಿಕ ಏಕತೆ
5. ಸಾಂಸ್ಕೃತಿಕ ಐಕ್ಯತೆ

ಈ ಸಂದರ್ಭದಲ್ಲಿ ಕರ್ನಾಟಕ ಪ್ರಾಂತೀಯ ಕಾಂಗ್ರೆಸ್ ಸಮಿತಿಯ ಅಧ್ಯಕ್ಷರಾಗಿದ್ದ ನಿಜಲಿಂಗಪ್ಪನವರ ಪಾತ್ರ ಅತ್ಯಂತ ಪ್ರಮುಖವಾದದು. ಈ ಆಯೋಗದ ಬಗ್ಗೆ ಇದ್ದ ಹತ್ತು ಹಲವು ಅನುಮಾನಗಳನ್ನು ನಿವಾರಿಸಿ ವಿಕೀಕರಣ ವಿರೋಧಿಸುತ್ತಿದ್ದು, ಮೈಸೂರು ರಾಜ್ಯದ ಕೆಲವು ನಾಯಕರನ್ನೂ ಸಮಾಧಾನ ಪಡಿಸಿ ಏಕಕಂಠದಿಂದ ಕರ್ನಾಟಕದ ವಿಕೀಕರಣದ ಬೇಡಿಕೆಯನ್ನು ಮನವಿಯ ಮೂಲಕ ಆಯೋಗಕ್ಕೆ ಸಲ್ಲಿಸಲು ಕ್ರಮವಹಿಸಬೇಕಿತ್ತು. ಕರ್ನಾಟಕ ಪ್ರಾಂತೀಯ ಕಾಂಗ್ರೆಸ್ ಸಮಿತಿಯು ತನ್ನ ವಿಶೇಷ ಅಧಿವೇಶನದಲ್ಲಿ ಆಯೋಗಕ್ಕೆ ಮನವಿ ಸಲ್ಲಿಸಲು ಹಾಗೂ ಆ ಬಗ್ಗೆ ಅಗತ್ಯ ಕ್ರಮವಹಿಸಲು ನಿಜಲಿಂಗಪ್ಪನವರಿಗೆ ಸಂಪೂರ್ಣ ಅಧಿಕಾರವನ್ನು ನೀಡಿತು.

ಫಜಲ್ ಅಲಿ ಆಯೋಗದ ವರದಿಯ ಅನುಷ್ಠಾನ

1955ರ ಅಕ್ಟೋಬರ್‌ನಲ್ಲಿ ಫಜಲ್ ಅಲಿ ಆಯೋಗ ಕೇಂದ್ರ ಸರ್ಕಾರಕ್ಕೆ ತನ್ನ ವರದಿಯನ್ನು ಸಲ್ಲಿಸಿ ಹದಿನಾರು ರಾಜ್ಯ ಹಾಗೂ ಮೂರು ಕೇಂದ್ರಾಡಳಿತ ಘಟಕಗಳನ್ನು ಪುನರ್ ಸಂಘಟಿಸಲು ಶಿಫಾರಸ್ಸು

ಮಾಡಿತು. ಏಕೀಕೃತ ಕರ್ನಾಟಕದ ನಿರ್ಮಾಣ ಸೂಕ್ತ ಹಾಗೂ ಅನಿವಾರ್ಯ ಎಂಬುದನ್ನು ಸಹ ವರದಿಯಲ್ಲಿ ಆಯೋಗ ತಿಳಿಸಿತು.

1956ರ ಏಪ್ರಿಲ್‌ನಲ್ಲಿ ಆಯೋಗದ ವರದಿಯನ್ನು ವಿಧೇಯಕ ರೂಪದಲ್ಲಿ ಅನುಮೋದನೆ ಕೊಡಿ ಲೋಕಸಭೆಯಲ್ಲಿ ಮಂಡಿಸಲಾಯಿತು. ಜಂಟಿ ಸಮಿತಿಯಲ್ಲಿ ಕರ್ನಾಟಕದ ಪರವಾಗಿ ನಿಜಲಿಂಗಪ್ಪನವರು ಸದಸ್ಯರಾಗಿದ್ದರೂ ಕರ್ನಾಟಕ ಕಳೆದುಕೊಂಡಿದ್ದ ಕೆಲವು ಪ್ರಮುಖ ಪ್ರದೇಶಗಳ ಬಗ್ಗೆ ಯಾವುದೇ ಬದಲಾವಣೆಯನ್ನಾಗಲೀ, ಸೂಚನೆಯನ್ನಾಗಲೀ ಅದು ನೀಡಲಿಲ್ಲ.

ಜಂಟಿ ಸಮಿತಿಯು ಪರಿಶೀಲಿಸಿದ ವಿಧೇಯಕವು 1956 ಆಗಸ್ಟ್ 10ರಂದು ಲೋಕಸಭೆಯ ತನ್ನ ಅಂಗೀಕಾರವನ್ನು ನೀಡಿತು. ಇದೇ ತಿಂಗಳ 23ರಂದು ರಾಜ್ಯಸಭೆಯೂ ಅನುಮೋದನೆಯನ್ನು ನೀಡಿತು. ನವೆಂಬರ್ 01ರಂದು ಕರ್ನಾಟಕವೂ ಸೇರಿದಂತೆ ಇತರ ಭಾಷಾಧಾರಿತ ರಾಜ್ಯಗಳು ಅಸ್ತಿತ್ವಕ್ಕೆ ಬರುವುದಾಗಿ ಘೋಷಿಸಲಾಯಿತು. ಏಕೀಕೃತ ಕರ್ನಾಟಕ ರಾಜ್ಯವು ಹೆಸರನ್ನೂ "ಕರ್ನಾಟಕ" ಎಂದೂ ನಾಮಕರಣವಾಗಬೇಕೆಂಬ ಬಹುಪಾಲು ಕನ್ನಡಿಗರ ಆಸೆ ಈಡೇರದೆ "ಮೈಸೂರು" ಎಂಬ ಹೆಸರಿನಿಂದ ಮುಂದುವರೆಯಲು ಅವಕಾಶ ಮಾಡಿಕೊಡಲಾಯಿತು.

ಮೈಸೂರು ರಾಜ್ಯ ಹಾಗೂ ಇತರೆ ಕನ್ನಡ ಜಿಲ್ಲೆಗಳು ಏಕೀಕೃತಗೊಂಡಿದ್ದರಿಂದ ಏಕೀಕೃತ ಮೈಸೂರು ರಾಜ್ಯಕ್ಕೆ ಅದೀಕೃತವಾಗಿ ಒಬ್ಬ ಮುಖ್ಯಮಂತ್ರಿಯನ್ನು ಆಯ್ಕೆ ಮಾಡುವುದು ಅನಿವಾರ್ಯವಾಗಿತ್ತು. ಮೈಸೂರು ಸಂಸ್ಥಾನದ ಪ್ರಜೆಯಾಗಿದ್ದರೂ ಇತರ ಕನ್ನಡ ಪ್ರದೇಶದಲ್ಲಿ ವಿಶೇಷವಾಗಿ ಮುಂಬೈ ಕರ್ನಾಟಕ ಪ್ರಾಂತ್ಯಗಳಲ್ಲಿ ಜನಪ್ರಿಯ ನಾಯಕರಲ್ಲಿ ಒಬ್ಬರಾಗಿದ್ದ ನಿಜಲಿಂಗಪ್ಪನವರು ಈ ಎರಡೂ ಕನ್ನಡ ಭಾಗಗಳನ್ನು ಒಟ್ಟುಗೂಡಿಸುವ ಒಂದು ಶಕ್ತಿಯಾಗಿದ್ದರು. ಏಕೀಕರಣಕ್ಕೆ ಒತ್ತಾಸೆ ನೀಡಿ ನೆಹರೂರಂತ ನಾಯಕರ ಅಸಮಧಾನಕ್ಕೆ ಗುರಿಯಾದರೂ ಅದನ್ನೂ ಲೆಕ್ಕಿಸದೆ ಮೈಸೂರು ಸಂಸ್ಥಾನದಲ್ಲಿದ್ದ ಏಕೀಕರಣ ವಿರೋಧಿಗಳ ಮನಸ್ಸನ್ನೂ ಪರಿವರ್ತಿಸಿ ಏಕೀಕರಣಕೋಸ್ಕರ ಸತತವಾಗಿ ಹೋರಾಡಿದ ನಿಜಲಿಂಗಪ್ಪನವರು ನೂತನ ರಾಜ್ಯದ ಮುಖ್ಯಮಂತ್ರಿಯಾಗಬೇಕೆಂಬ ಬಹುಜನರ ಅಪೇಕ್ಷೆಯಂತೆ 1956ರ ಅಕ್ಟೋಬರ್ 21ರಂದು ಏಕೀಕೃತ ಮೈಸೂರು ರಾಜ್ಯದ ಎಲ್ಲಾ ಶಾಸಕರೂ ಸಭೆ ಸೇರಿ ಸರ್ವಾನುಮತದಿಂದ ನಿಜಲಿಂಗಪ್ಪನವರನ್ನು ಏಕೀಕೃತ ಮೈಸೂರಿನ ಪ್ರಥಮ ಮುಖ್ಯಮಂತ್ರಿಯನ್ನಾಗಿ ಚುನಾಯಿಸಿದರು.

1956 ನವಂಬರ್ 01ರಂದು ವಿದ್ಯುಕ್ತವಾಗಿ ಮೈಸೂರು ರಾಜ್ಯದ ರಾಜಧಾನಿ ಬೆಂಗಳೂರಿನಲ್ಲಿ ನಡೆದ ಸಮಾರಂಭದಲ್ಲಿ ಏಕೀಕೃತ ಮೈಸೂರು ರಾಜ್ಯ ಅಸ್ತಿತ್ವಕ್ಕೆ ಬಂದಿತು. ಭಾರತದ ರಾಷ್ಟ್ರಪತಿ ಡಾ॥ ರಾಜೇಂದ್ರ ಪ್ರಸಾದ್‌ರವರು ನೂತನ ರಾಜ್ಯವನ್ನು ಉದ್ಘಾಟಿಸಿ ಈ ನೂತನ ರಾಜ್ಯದ ನಿರ್ಮಾಣ ಕನ್ನಡಿಗರ ಬಹುದಿನಗಳ ಕನಸನ್ನೂ ಸಾಕಾರಗೊಳಿಸಿದೆ ಎಂದರಲ್ಲದೆ ರಾಜ್ಯದ ಪುರೋಭಿವೃದ್ಧಿ ಆಗಲೆಂದು ಹಾರೈಸಿದರು. ಅದೇ ದಿನ ಎಸ್. ನಿಜಲಿಂಗಪ್ಪನವರು ಮೈಸೂರು ರಾಜ್ಯದ ಪ್ರಥಮ ಮುಖ್ಯಮಂತ್ರಿಯಾಗಿ ಪ್ರಮಾಣ ವಚನ ಸ್ವೀಕರಿಸಿದರು.

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IIMRD JOURNALS

IJCRT.ORG ISSN : 2320-2882

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

PETTY SAVINGS & INCOME OF RURAL WOMEN EMPOWERMENT (WITH REPRENCE TO KUNDAPUR TALUK)

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ABSTRACT:

Indian society and family is dominated by male and women are less involved and totally have been neglected while making decision making process especially in financial decision. Their family obligation, limited access to finance, gender discrimination in family, illiteracy, low management or more such issues etc are the most important hurdles in the path of empowerment. Rural women today have been suffering a lot due to the feeling of helplessness and lack of decision making capabilities in financial matters. Self help groups (SHG's) are the most recent development for them which could enable them to come forward to make them self dependent and self employed. These SHG's are informal groups of women where members pool their savings and re-lend in the groups on rational basis, depending upon the individual consumption, production or investment needs. But it's all operated very secretly keeping away a word from lead of the family. Thus SHGs have been able to provide rudimentary banking services to the members on cost effective basis and meet urgent micro-credit requirements in time as for as employment of women is concerned the women self help groups in India have been recognized as an effective strategy for the employment of women in rural as well as an effective strategy for the employment of women in rural comparatively urban areas, bringing women together from all spheres of life to fight for their rights. This study high-lights whether SHGs have succeeded in empowering women and making them socially, politically, culturally and economically strong and optimistic.

Key words: Self help Groups, Empowerment, domestic, credits, livelihood, Market, Micro-finance, Urban, Rural, Saving.

Introduction:

Dr. Radhakrishna said that "The progress of our land cannot achieved without involvement of our Mothers, wives, sisters and daughters in all stage of economic and social affairs, Involvement of women becomes essential". Development of the Nation Highly depends on development of rural economy. Rural women also play a major role as farmers, entrepreneurs etc. Micro-finance is an emerging sector in our country. Women contributes to their empowerment. It is widely assumed that micro-finance will have positive impact on women's livelihood in leading to higher income that will help women to better perform their productive roles as brokers of health, finance and education. It is in sharper focus today with government taking keen interest to ensure visible upliftment of rural women. The structure of SHGs is to provide mutual support to participants by assisting one another in saving money and help women and other people to build credit with other institution.

The movement of SHGs is most effective tool for financial inclusion was started by NABARD in 1984 initially with 500 Groups. This has been involved in the national movement with productive role of state governments gaining recognition from all the major stake holders in a development paradigm. Micro finance has evolved as a need based programme for empowerment and alleviation of poverty to the so far neglected groups especially women and has become one of the most effective interventions for their economic empowerment. In India NABARD has been playing a leading role in micro-financing programme from the last two decades. Micro-Finance is a type of banking service provided to unemployed or low income individuals. Otherwise have no other means of gaining financial services. So that they can start to earn their livelihood by themselves.

India has been facing the problem of rural poverty where about 70% of the Indian poor population lives in rural areas. Hence poverty remains an unceasing condition for majority of India's rural population. Poverty is very deep rooted among the members of scheduled castes, scheduled tribes and women in country's rural regions. A major cause of poverty among individuals and communities is lack of access to productive assets, financed resources, high level of illiteracy, Inadequate health care and extremely limited access to social services. Rural people often have just hand to mouth existence and have very few reserves for major expenses.

Rural women play a very significant role in domestic and socio-economic life in the society, and therefore National development is not possible without developing this segment. Providing economic support or loans to rural women helps them to empower not only economically but also socially and this strengthens the whole society in general. The success of rural development depends upon the active participation of rural women through SHGs. Micro-finance is considered as an entry point in the context of a wider strategy for women's social and economic empowerment. This enhance women's ability to influence or make decisions, self-confidence or role in household. Micro-finance is necessary to over

come exploitation. Micro finance suits the best to those with entrepreneurial capability. Its main aim is to provide means of livelihood, saving money, borrowing money and insurance.

The world bank estimates that more than 16 million people are served by some 7000 micro-finance institutions all over the world and about 500 million families benefit from these small loan making new business possible. In a gathering at Micro-Credit summit in Washington DC the goal was reaching 100 million of world's poorest people by credits from world leaders and major financial institutions.

During the 2005 was proclaimed as the international year of micro-credit by economic and social council of united Nations in call for financial and building sector to 'finance' the strong entrepreneurial spirit of the poor people around the world. World wide poverty is considered as one of the local constraints on the way to socio-economic advancement of the countries, especially the developing countries. Despite this impressive growth vast majority of our population is not able to meet their both ends. The people who still excluded from growth story are teaming millions who live in rural area excluded from organized credit and banking facilities and are under the constant threat of survival. Generally banks and organized credit agencies provide credit only to the people who is credit worthy. So naturally the rural people especially rural women are deprived from organized credit. The only way out is to organize themselves and help each other at the time of need so the concept of micro-finance and self help Groups enmated. It's a big boost when Mohammed Yunusof Grameen Bank of Bangladesh got noble prize.

In many developing countries, people are being increasingly pushed in to finding new ways of generating income. Regular wage-earning jobs are becoming harder to come by while pressure on many families to seek alternative means of support. Moreover the basic application of charges for basic service obliges even poor people to raise a minimum of cash in order to secure the family's livelihood. The individual households tends to depend on range of source of income, which combine to form its basis of substance. Million people under take activities like breeding chicken, selling vegetables at market or producing mats are the income generating activities which ensures the household its most essential cash income.

Recently finance institutions have become a burning issue among the policy makers the bankers and researchers. In order to promote inclusive growth it is considered as an integral part. Access to sage, easy and affordable financial services for poor, vulnerable groups disadvantages areas and lagging sectors for accelerated growth and for reducing income disparities and poverty. To take advantage of growth opportunities for economic development of inclusive financial system to provide equal opportunities to all in accessing financial services affordable costs is a pre-condition for achieving accelerated economic

growth opportunities without an inclusive financial system by poor vulnerable section of the community and small and petty enterprises.

Review of Literature:

Malhotra (2010) Highlights the fact that women may be empowered within one of the dimension be it economic, socio-cultural, Inter-personal, leagal, political and psychological. **Nageshwar Rao (2010)** watches that the goal before present day economy is to guarantee development with distributive equity tuned in to the vote based standards of the best satisfaction to the best number development cannot be considered as an end by itself until it interprets in to pay era, strengthening the entire populations of all regions and divisions.

Osmani and sen (2010) access to micro-finance help people to over come their poverty or crisis time, not only by giving them an opportunity of earning money or acquiring assets, but also giving them a chance to maintain their existing assets by discouraging them from selling land during the quandary period.

Rekha Goankar (2011) concludes that the SHGs significantly contribute towards the reduction of unemployment and poverty of the economic and lead to social transformation in terms of economic development and social change.

Dash Sridhar and Sherel Mendonsa's (2011) Study found that the local institutions play a very important role in the formation of SHGs and help them to perform better in terms of saving, mobilizing and utilizing credit.

Tanmoyee Banerjee, Chatterjee, (2012) Stated that Self employment held the key to continuity of employment. The study concluded that training significantly influenced various dimensions of empowerment and the trained group members were more likely to be both empowered as well as employed.

Vijayalakshmi Gowda, Jamina, Ray and Sajjan (2012) Concluded that self-help Groups Improved the standard of living of all families who have came in the projected areas.

Das and Shams (2012) Investigated and found that grants based approach has positive Impacts on MF participation of the ultra poor households. Self help Groups by mobilizing women around thirft and credit activities have resulted in economic self reliance there by changing their social attitude and status in society and family and has emerged as a key programming strategy for most of the women development activities.

Sathibama Y. (2013) Infer that the lots of micro-finances potential for empowerment makes women economically Independent and subsequently results in Higher prestige and self esteem.

Singh Y. (2013) was of the opinion that intervention of self help Groups bank linkage programme has brightened the lives of the rural people. The self help Groups movement has come to mean more than merely a provision of the financial services to the group members which are composed mainly of poor women.

Muralidhar A. Lokhande (2013) explored in his empirical analysis, after joining self help groups members confidence level has increased to a great extent with the help of field survey the author concluded that group association and access to financial services certainly brings positive change among group members leading to their socio-economic empowerment and they can come out of poverty.

Bhoopathy and Malhivanan (2014) suggested that Micro-Finance has profound influence on the economic status decision making power knowledge and self worthiness of women participants of self help groups.

Hota (2014) pointed out that the recent years self help groups approach has emerged to be one of the most aggressive and effective strategies for empowering rural women and alleviating rural poverty.

Jhawarand Chawla (2014) stated that the main aim of getting associated with self – help groups is to create a medium through which empowerment in self generated.

Chaula (2015) stated that the rural women were able to increase their savings and income through the help of self help groups. The study also emphasized the importance of self-help groups promoting institutions like banks and NGOs and opined that there is need to encourage and launch self-help groups in all village for betterment of poor particularly the tribal women.

Concept of self-help groups:

In the past decades, credit schemes for women were highly negligible. But today SHG's play a major role in improving lives of women folks and alleviating rural poverty. Formation of SHG's in India gained momentum in the early 1990 s when non-governmental organization (NGOs) including NABARD got involved in their formation and promotion. SHGs have increased in considerable numbers. Acquiring greater importance and significance and put up many new experiments in the field of rural development. However the significant development of SHG's shows that rural poor are indeed efficient to manage credit to mitigate poverty in the country. It plays a prominent role in assimilation and dissemination of knowledge about health, nutrition, literacy, women's rights, child care, education, adoption of new agricultural practices etc. it helps rural women to enhance their knowledge to produce wide range of products such as handicrafts, food products, handlooms and textiles, herbal products and artificial

jewellery. The SHGs is an informal organization of passion form the homogeneous poor section of the society and it is controlled and managed by the members itself. It is an association of 10 to 20 local individual members who are financially weak and from the same socio-economic backgrounds. The savings are kept in a account. This common fund is in the name of the SHG. This group then uses its savings to give loans to members to meet their emergency and other needs.

The members decide on savings per members, maximum size of loans, guarantee mechanism in loan sanction. The members can save small amount of money on monthly basis and once their group becomes able to lend money they can take loan as per their requirements which could make them start their small business and make them employable. For taking loan they have to give a prior notice in the meeting. So that they could get the loan at the right time. They fix small installment for repayment of loan which is very convenient for them to repay their borrowings with principal amount as well as interest. Every month all the women come together and hold meetings and make their monthly payment. They maintain simple records and documents, which exhibit meetings, savings and expenditures and store other extra activities.

It has been well recognized that self help supplemented with mutual help can be a powerful vehicle for poor people's efforts in socio-economic upward migration. Poor people need not only credit support but also do savings and other services. The concept of SHGs serves to underline the principle "For the people, by the people and of the people". SHG is a method of organizing the poor people and the marginalized to come together to solve their individual problem. The SHGs method is used by the government. NGOs and the others worldwide. The poor collect their savings and save it in banks. In return they receive easy access to loans with small rate of interest to start their micro unit enterprise. Thousands of poor and marginalized populations in India are building their lives and their families through this scheme. The ninth give year plan has given due recognition on the importance and relevance of SHGs. Method to implement developmental schemes at the grassroots level. SHGs Bank linkage programme is emerging as a cost effective mechanism for providing financial services to the 'unreached poor' which has been successful not only in meeting financial needs of rural poor women but also strengthen collective self help capacities of poor leading to their empowerment.

To elaborate more SHGs will comprise like minded Individuals who volunteer to save small amounts of money in a common pool out of which need based loans are given to members for meeting their emergent credit requirements based on priorities decided by the group. The group members take collective decisions on all matters including those relating to terms of credit viz purpose, size, interest rate and repayment period. The process helps to imbibe essentials of financial intermediation including prioritization of needs, setting terms and conditions and account keeping. As a result members learn to handle resources of a size that is much beyond their individual capacity. Thus SHGs is a group of people

having a common goal of socio-economic sustainable development, discussing their problems and resolving it through appropriate participatory decision making. SHGs promotes savings among members and use the pooled resources to meet the emerging needs of the members including the consumption needs. It has been identified as a tool to bridge the credit gap in the rural areas. SHG appears to be another interesting experience in rural credit delivery system in India. The SHGs are mostly voluntary into small groups of homogeneous rural poor, where members pooled savings are done within the groups of homogeneous rural poor and need basis.

NABARD defines as "a group of about 20 people from homogeneous class who come together for addressing their common problems. They are encouraged to make voluntary thrift on regular basis. They use this resource to make small interest bearing loans to their members "They play a very important role in differentiating between consumers credit and production credit, analyzing the credit and changes in the economy, culture and social position of the target groups providing easy access to credit and ensuring repayment setting viable norms for interest rates, writing off bad debts and assisting group members in getting access to normal credit institutions. Therefore SHGs micro credit to rural women for the purpose of making them enterprising women and encouraging them to enter in to entrepreneurial activities. Credit needs of rural women are fulfilled totally through SHGs. It enhance equality of status of women as participants, decision makers and beneficiaries in democratic, economic and cultural spheres of life.

The SHGs don't start with credit, but with savers group with regular, weekly or fortnightly targets. Each members of the group have to save small amount per month. The savings are re-deposited in a meeting on an appointed time every week, and the collected savings are lent to the members. In many groups, savings are entered in individual pass books. An account is opened with the main line bank to deposit any surplus savings. After some six months the banks where the savings were deposited examines the performance of the group and issue loans to the group. The SHGs in turn increase its capacity to manage high amount of finance, develop entrepreneurial and communication skills, logical ability, co-operative sense and finally income and employment generating confidence. These groups can create a unique, alternative, need based credit delivery mechanism by pooling their insufficient resources for catering to their consumption and occupational requirement.

SHGs movements has been the indication of many changes in the life of poor rural women in India these groups are activating collectively. They are measured as a new lease of life for women in villages for their social, economic and political empowerment. It has amply demonstrated that poor women save, use loans productively and do not default on repayment. So it is playing major role in removing poverty in rural India today. The government of India has been using SHGs for subsidy linked credit schemes for the poor.

TOTAL NUMBER OF SHGS LINKED AND PERFORMANCE OF SHGs.

	2013	2014	2015
Total number of SHG linked	73.17 lakh	74.29 lakh	77.12 lakh
Number of families reached	95 million	97 million	101 million
Total savings of SHGs	Rs. 8217 crores	Rs. 9897 crores	Rs. 11307 crores

Source: Sa-dhan Bharath Micro Finance Report 2014 & 2015.

Micro – finance:

The term Micro-finance is to recent origin and is commonly used in addressing issues related to poverty alleriation, financial support to micro entrepreneurs, gender development etc. the task force of supporlative policy and regulatory frame work of Micro finance. It has defined as "Provision of Thrift, credit and other credit services and products of very small amounts to the poor in rural or semi urban areas for enabling them to raise their income levels and improve their living standards the term 'micro' literally means 'small'. As per micro credit special cell of Reserve Bank of India, the borrowed amounts up to the limit of Rs. 25000/- could be considered as micro-credit products and this amount could be gradually increased upto 40000/- over the period of time.

Micro finance means providing very poor families with very small loans (micro – credit) to help them engage in productive activities. Over the time MF has come to include broader range of services as we have to come to realize that, poor that lack access to traditional financial institutions require a variety of financial products traditionally MF was focused on providing a very standard credit product.

Micro – Finance is the provision of financial services to low income clients or solidarity lending groups including consumers and self-employed, who traditionally lack access to banking and related services. It is not just giving micro credit to the poor rather it is an economic development tool whose objective is to assist poor to work their way out of poverty.

Growth of Micro-Finance in India

The history of Micro-Finance dates back to the establishment of Syndicate Bank in 1921. During the early years this bank concentrated on raising deposit in the form of daily / weekly basis and sanctioned micro loan to its clients for shorter period of time. But MF came in to lime light only when Dr. Yunus gave it a mass movement. He observed that the most villagers were unable to obtain credit at reasonable rate, so he began to lend them money from his own pocket allowing the villagers to buy materials for project like weaving bamboo tools, making pots (Newyork times, 1997) etc. Ten years later he set a Grameena Bank as a project in one of the places in Bangladesh in 1976 to assist poor families by providing credit to them.

Today MF has been widely spread all over the world as an effective tool to poverty eradication. It is found that MF has reached about 80 million households and about 2000000 MF institutions are operating in developing countries of Asia, Africa, Europe and Latin America. In India there are more than 1500 MFIS and 300 commercial banks reaching out to about 27.5 million people and India is one of the largest Emerging market in MF in the world and according to experts, the depth of out reach in India is phenomenal. The MF program in India has registered an exponential growth in last few years and 2.3 millions. SHGs have been credit linked covering approximately 32.3 million house holds. 8 out of 10 most productive MFI in south Asia are in India with a range of 469-28733 borrowers per staff members.

The MF initiative in private sector in India can be traced back to initiatives undertaken by Shri Mahila Seva. According to the latest research done by the world Bank, India is the home for almost one thirds of the world's poor. Though many central government and state government programmes are currently active in India. The Micro-finance plays a major contributor to financial inclusion. In the past few decades it has helped out remarkably to eradicate poverty. Reports show that the people who have taken MF has been able to increase their income and hence the standard of living. About the half of the Indian population does not have any accounts in banks and are deprived of Banking Services.

Following table shows the MF credit client during 2008-2011 (Figures in million)

		2008	2009	2010	2011
1.	Commercial Banks	41	39.2	45.2	43.3
2.	PACS borrowers	28.5	28.7	30	31
3.	SHG members	47.1	54	59.6	62.5
4.	MFI Clients	14.1	22.6	26.7	31.8
5.	Total	130.7	144.5	161.5	168.6

Source: SHG data provided by NABARD

Scope and Limitation of the study:

The present study is conducted in and around Kundapura and is limited only to 2 self-help groups. The study is confined to small area of Kundapura. Some of the respondents failed to provide the necessary satisfactory information. There can also be bias in response given by the respondents. The main occupation of the respondents were petty shops, papad and pickle manufacturing, tailoring, catering housemaids, agricultural labour, peons and attenders in school, colleges, banks etc. fruits, vegetable, fish and flower vendors, for the present study only 36 lady members were interviewed through a structured questionnaire with only few important questions. The questionnaire was divided in to 2 parts. In the first part some personal information of the respondents was collected with regard to their age, qualifications,

marital status, earnings, monthly income etc. In the second part of the questionnaire information was collected with regard to their respective groups.

Interpretation of data Analysis:

1. Age-wise breakup of the respondent

Table **Figure**

	Age – Group	Members
1.	23-30	4
2.	31-35	16
3.	36-40	13
4.	40 and more	03
	Total	**36**

Interpretation:

This shows that among 36 respondents 4 were between the age group 23-30 years, 16 were between the age group of 31-35 years, 13 were between the age group of 36-40 years and 03 belonged to the age group of more than 40 years.

2. Caste profile of the Respondents

Table **Figure**

	Members	Caste
1.	15	SC
2.	14	ST
3.	05	OBC
4.	02	General
5.	36	Total

Interpretation:

This shows that among 36 respondents a majority of 15 belonged to SC, 14 belonged to ST, 05 belonged to OBC and 02 belonged to General and other category.

3. Educational qualification of the respondents

Table **Figure**

1.	Illiterate	10
2.	Primary	07
3.	Higher Primary	12
4.	SSLC	05
5.	PUC / Degree	02
	Total	**36**

Interpretation:

Among 36 respondents, 10 were illiterate, 7 could complete till lower primary, 12 were educated till higher primary, 05 had completed their SSLC and only 02 of them could complete their PUC/Degree.

4. Types of family of the correspondents

Table **Figure**

	Types of family	**10**
1.	Joint Family	10
2.	Nuclear Family	26
	Total	**36**

Interpretation:

Among 36 respondents, 10 respondents belonged to joint family and remaining 26 belonged to nuclear family.

5. Martial Status of respondents

Table **Figure**

1.	Married	58%
2.	Unmarried	06%
3.	Widows	19%
4.	Divorces	06%
5.	Separated from their husbands	11%

Interpretation:

Among 36 respondents a majority 58% of them was married 06% were unmarried, 19% were widows, 06% were divorces and 11% were separated from their husbands.

6. Monthly income of the respondent's family:

Table **Figure**

	Monthly Income	**Members**
1.	Below 5000	4
2.	5000 to 8000	24
3.	9000 to 12000	4
4.	More than 12000	4

Interpretation:

Among 36 respondents 4 had family income below 5000, a majority of 24 respondents had family income of 5000 to 8000, 4 had an income of 9000 to 12000 and 4 had family income of more than 12000.

7. Amount of loan borrowed from the group:

Table **Figure**

	Loan Borrowed	Members
1.	Less than 10000	05
2.	11000 to 15000	10
3.	15000 to 20000	07
4.	More than 20000	14

Interpretation:

Among 36 respondents a majority of 14 of them have borrowed more than 20000/- 10 of them have borrowed 11000/- to 15000/-, 7 have borrowed 15000/- to 20000/- and 5 of them have borrowed less than 10000/-

8. Availed loans from other institutions other than SHGs:

Table **Figure**

	Banks	Members
1.	Co-Operative Bank	20
2.	Commercial Bank	12
3.	Money lenders	04

Interpretation:

Among 36 respondents a majority of 20 respondents have borrowed loans from Co-operative Banks other than with their respective SHGs, 12 have borrowed from commercial banks and remaining 4 have borrowed from money lenders in their localities.

9. Purpose of borrowing the loan:

Table **Figure**

	Purpose of borrowing loan	Members	Percentage
1.	To start an enterprise	04	11.11%
2.	Construction of house	02	05.55%
3.	Repairing of house	09	25%
4.	Marriage and other functions	5	13.88%
5.	Education	13	36.13%
6.	To repay old debts	03	08.33%
	Total	36	100%

Interpretation:

Among 36 respondents a majority of 13 respondents have borrowed loan for their children's education 9 of them for repairing their house, 5 have borrowed for marriage and other functions like festival, naming ceremony, to perform rentals of any of their family members etc. 04 they borrowed as they wanted to start a new enterprise, 3 to repay their old debts and remaining 2 had borrowed for the construction of their houses.

10. Reasons to join SHGs:

Table **Figure**

1.	To borrow loans for business	11	30.55%
2.	Inspired by success stories of SHGs	03	08.33%
3.	Compelled by friends / relatives	06	16.66%
4.	To save	14	38.88%
5.	To supplement family income	02	05.55%
6.	**Total**	**36**	**100%**

Interpretation:

Majority of the 14 respondents stated that they had joined the SHGs to save money for their requirements. 11 wanted to borrow loans to use for starting some business, 6 were compelled to join SHGs by their friends and relatives 3 of them were inspired by the success stories of SHGs and so they joined. Remaining 2 of them joined SHGs as they wanted to supplement their family income.

Key issues and challenges in Micro-finance Institutions:

1. **Negligence of Urban people:** It has been noted that the MFI's is pay more attention to rural areas than urban areas, However, the population of urban area 5 very large. Out of more than 800 MF's across India, only 6 are currently focusing their attention on urban poor. However, the population of urban poor in quite large demounting to more than 100 million with increase in urbanization. This number is expected to rise rapidly in the coming years. The MFI's also need to pay equal attention to urban poor because they too need financial assistance to increase their standard of living and for other active.
2. **Low educational level:** The level of education of the clients is very low. So it creates a problem with growth and expansion of the organization. Target group of MF' is mainly rural uneducated masses with less productivity.
3. **Language Barriers:** It makes communication with clients difficult. Further, the clients are not able to understand the policies and procedures clearly because of linguistic barriers.
4. **High Rate of Interests:** The poor already deprived of credit from formal sources, MFIs are charging high rate of interest which in difficult for the poor to pay. It has been argued that MF's are private entities and hence need to be financially sustainable. They do not receive any subsidized credit for their lending activities and that is why they need to recover their operational costs from their borrowers. Further MF's follow different patterns of charging interest rates.
5. **Late payments:** This issue usually occurs because of illiteracy of clients and they have no idea regarding the management of their debts they are unaware of the fact that a late payment increase their interest on loans. MFIs are negatively affected because borrowers are failing to make payments and hence their recovery rates are falling.
6. **Low outreach:** In India, MF' outreach is very low. It is jointly 8% compared to 65% in Bangladesh. Data shows that potential of MF's in increasing their outreach and scale of operations. It has been observed that MFIs programmes focus a great deal of attention on women. It is argued that women are better clients as they are more inclined to save than men. But in order to increase their outreach MF's cannot ignore men clients. Further small and marginal women workers are scattered over the rural geographical areas where communication facilities are limited.
7. **Fraud:** It is an issue that creates a problem in growth and expansion because its percentage is about 67% in MF's. Mismanagement of loans on part of clients creates problem of financial embezzlement on the part of the clients.
8. **Financial illiteracy**: Financial illiteracy becomes a very critical component therefore most of them borrow loans for unproductive purposes. This to inefficiency in the system. This also creates difficulty

in creating awareness of MF's and even more difficult to serve MFIs clients. So there is need to simultaneously focus on the financial literacy part besides delivery / access.

9. **Need of proper checking:** MF's provide credit to small business, farmers educational and housing loans etc. there is need for proper check of what the credit is approved for and is it really used with finely performance report. The out come in terms of production and income is the major challenge for the sustainability of the MF's.
10. **Political interference:** No doubts government is playing important role in building legal and regulation environment for MF's. However restrictive regulation and too much political interference may harm their sustainable growth.

CONCLUSIONS

The new millennium has thrown many challenges subjecting may nations to undergo transformation cutting across their established tradition and culture. Women are the vital Infrastructure and their empowerment would hasten the pace of social development. Investing in women's capabilities and empowering them to achieve their choices and opportunities is the definite way to contribute to the economic growth and the overall development. The empowerment of rural women leads to benefit not only to Individual women and women groups, but also to the families and community as a whole. To make SHGs really meaningful and successful, the government at different levels has to intervene in large scale not as provider of finance or provider of other inputs, but as facilitator and promoter. It is also thus important to view micro-credit programmes as a complement rather than a substitute for effective policies to be able to transform national and international development of women. The researcher presents this study with the fervent hope that this will draw the attention of the authorities, departments and organization concerned with micro-finance and self help groups on various issues in respect of the development of women empowerment.

The present challenge in to cover all rural households under the banner called SHGs for their upliftment and empowerment. But the long term prospects and sustainability of SHGs is depending upon its linkages with banks especially with the finance point of view with sufficient monitoring of SHGs and bank linkage programme it could be an effective means of solving the problem of credit in rural and backward areas considering financial inclusion as a major agenda, the need for re-designing the long tested strategies of SHGs movement need to be over emphasized. Scope for active participation community oriented organizations in institutional arrangement for financial product delivery to poor seems to be bright. Providing a mix of saving and credit services also would spawn a feedback effect. Earlier it is done it is better for the country.

Microfinance institutions has the potential to have powerful impact on women empowerment. In the present study although it has not empowered all women most women have experienced some degree of social, financial and economic empowerment it also expected to play a significant role in poverty alleviation and development of rural women allover India. MF's should also come up with more innovative product to suit the changing market needs. MFI's will henceforth bear in mind that they will stop competing among themselves, but with other similar sector in the economy. Their real success will depend on the potential, reach and transparency, both from financial side. Let the co-ordinate efforts of the stake holders with genuine focus on the poor contribute to the development of the whole country.

DOCUMENTS REQUIRED TO OBTAIN LOANS FROM SHGS:

1. Constitution documents which can be used as KYC are Recommendation letter / sanction letter / loan recommendation letter from Block development officer (BDO) or a class I Gazetted officer working in the same department.
2. Inter-se Agreement executed by all members of the SHG communicating their decision to open a saving account with the bank and identifying two or three members to jointly operate the account.
3. Identify proof of the SHG letter of certification from empanelled SHPI certified by NABARD official empowered at the village or taluk level.
4. Recommendation letter / sanction letter / loan recommendation letter from Block Development Officer (BDO) or a class I Gazetted officer working in the same department
5. SHG Registration certificate or copy of pass book of existing account with a public sector bank; or scheduled commercial bank.
6. Original letter of introduction from a bank official of a public sector Bank or copy of pass book / statement of an existing account with a Regional Rural Bank / Co-Operative Bank / Systematically Important NBFCS / Credit Co-Operative society along with a letter of introduction from SHPI / the village Sarpanch / Village Administrative Office (VAO).
7. KYC certification by dully empanelled Business correspondent of the Bank.
8. Address proof of the SHG.
9. Same as constitution Documents or same as Identity Documents if it contains the address.
10. Photographs of Authorized Signatories.
11. Identify and Address proofs of Anthorised signatories.
12. Voter ID Card
13. Bank pass book issued by SBI and its subsidiaries or Nationalized Banks where account has been opened at least 3 months prior can be accepted along with an account opening cheque drawn on the same account.
14. Sarpanch letter

DOCUMENT REQUIRED OTHER THAN KYC

- Duly filled Facility application form
- Loan allhorisation letter
- Direct Debit form / ECS mandate / PDC Declaration.
- Inter se agreement executed by all members of SHGs.
- SHPI Recommendation Letter.
- Repayment track record if the SHG has credit Linkage with any other bank.

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Current World Environment

An International Research Journal of Environmental Science

Physico-Chemical Analysis of Mangrove Soil, Kundapura, Karnataka, India

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DOI: http://dx.doi.org/10.12944/CWE.15.3.27

Abstract

The present study was carried out to determine the periodic variation in physico-chemical characteristics of mangrove soil samples. The soil samples had been accrued from four distinctive places of Kundapura mangrove areas in three seasons, monsoon, pre-monsoon and post-monsoon. Soil analysis pertaining to various variables such as total Nitrogen, Phosphorus, Potassium, pH and Electrical conductivity. Soil pH is assorted from 3.84 to 6.66. Electrical conductivity is assorted from 0.02 dSm-1 to 9.60 dSm-1. Available nitrogen is assorted from 30.7 kg/ha to 323 kg/ha. Available phosphorus concentration has ranged between 1.37 kg/ha and 47.27 kg/ha. Available potassium is differed from 117.43 kg/ha to 537.63 kg/ha. The results confirmed variations in all of the analyzed parameters of the soils amassed from four stations.

Keywords

Monsoon; Nitrogen; Phosphorus; Post-monsoon; Potassium; Pre-monsoon

Copy the following to cite this article:
Kumar K. M. V, Kumara V. Physico-Chemical Analysis of Mangrove Soil, Kundapura, Karnataka, India. Curr World Environ 2020;15(3).

DOI:http://dx.doi.org/10.12944/CWE.15.3.27

Copy the following to cite this URL:
Kumar K. M. V, Kumara V. Physico-Chemical Analysis of Mangrove Soil, Kundapura, Karnataka, India. Curr World Environ 2020;15(3). Available from: https://bit.ly/35Hf7rq

Article Publishing History

Received:	14-04-2020
Accepted:	06-11-2020

Reviewed by:

Hiteshi Tandon

Second Review by:

Deep Chakraborty

Final Approval by: Dr Hiren B Soni

Introduction

Mangroves are tropical plants which grow along the tropical coastlines of the world. They are found growing along shallow sheltered coasts. Mangroves are responsible for several economic as well as ecological services[1].

Mangroves are the most productive and biologically important ecosystems of the world, as they offer ecological balance, goods and offerings to humans; performs an essential position in nature with the aid of using nurturing ecological, safety and social services[2]. Like any other ecosystem mangrove ecosystem is likewise a cradle and predominant Bioresource for plenty beneficial bioingredients together with many different species which are directly or indirectly depending on the sustenance of mangrove ecosystem[3]. Marine ecosystems are numerous habitats, endowed with physical, chemical, and geographical versions in the ecosystems, wherein the gradation from relatively productive organisms to especially specialised organisms exists[4]. Mangrove wetlands are one of the world's most threatened ecosystems and are vital wetlands alongside tropical and subtropical coasts, mainly along deltas and bays in which rivers discharge freshwater and sediment to the sea that offer ecological security, environmental sustainability and economic prosperity[5].

Mangroves are salt lenient forest ecosystems of tropical as well as subtropical intertidal areas of the arena. There may be no additional group of plants with such relatively advanced morphological as well as physiological adaptations to severe situations[6]. Mangrove soils arise in coastal environments of tropical and subtropical regions and they will be originated from sedimentary material deposited via river as well as marine actions or from the amendment of the sedimentary substrate. The sediments are similarly reformed by means of organisms amended to flood, anaerobic as well as salt conditions. Soils of mangrove ecosystems are the end result of complicated interactions amongst abiotic elements, along with tidal oscillations and biotic factors. Soils offer vital nutrients for mangrove species growth and bodily structure for plant anchorage

and balance'.

Mangrove habitat is the breeding floor to fishes, crabs, shrimp species and mollusks. The trees are home to an array of nesting, breeding as well as migratory birds. When mangrove forests are vacant precious habitat is gone astray, intimidating the survival of myriad species. Hence there is a requirement of studying mangrove soil which supports the vegetation.

Materials and Methods

The domain of study is located at Kundapura, 440 km from Bangalore and 37 km from Udupi, at 13°37'24" N latitude and 74°41'30" E longitude and maximum elevation of 18 meters above sea level. Four study sites (Table:1) have been selected beside the backwaters of the Haladi River.

Table 1: Study Sites

Study sites	Latitude	Longitude	Elevation (Feet)
Herikudru	13°38'28"N	74°42'01"E	28'
Uppinakudru	13°39'21"N	74°41'59"E	25'
Jaladi	13°39'41"N	74°42'16"E	16'
Henmadi	13°40'46"N	74°41'20"E	32'

Notes: Monsoon (June to September); post-monsoon (October to January); pre-monsoon (February to May); Kg/ha: Kilogram per hectare; $dS.m^{-1}$: deciSiemens per meter; Min: Minimum; Max: Maximum; STD: Standard Deviation.

Herikudru

This region is a small island wherein the trees are planted through the local people to protect their agricultural fields from erosion.

Table 2: Physico-chemical parameters of Herikudru mangrove soil

Soil parameters	Monsoon		Post-monsoon		Pre-monsoon		Min	Max	Mean	STD
	2010	2011	2010	2011	2011	2012				
Soil pH	6.51	6.66	5.93	4.76	5. 91	5.68	4.76	6.66	5.9	0.75

Electrical Conductivity	1.85	4.83	2.51	4.02	8.08	8.08	1.85	8.08	4.89	2.68
Nitrogen	61.2	116	102	323	210	210	61.2	323	170.36	95.90
Phosphorus	32.30	36.41	30.29	25.27	2.37	1.37	1.37	36.41	21.33	15.50
Potassium	476.69	194.25	318.55	294.68	341.36	331.36	194.25	476.69	326.14	90.95

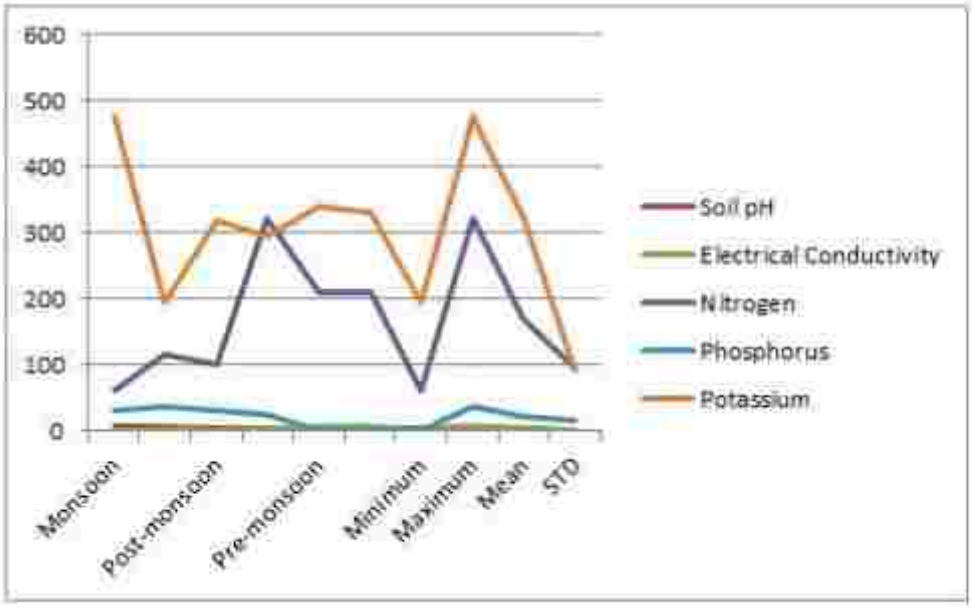

Figure 1: Graph showing Physico-chemical parameters of Herikudru mangrove soil

Figure 1: Graph showing Physico -chemical parameters of Herikudru mangrove soil

Click here to view figure

Uppinakudru

This location is completely under the tidal influx with numerous mangrove patches

Jalady

This area is absolutely under tidal influence with dense growth of mangroves

Table 3: Physico-chemical parameters of Uppinakudru mangrove soil

Soil parameters	Monsoon		Post-monsoon		Pre-monsoon		Min	Max	Mean	STD
	2010	2011	2010	2011	2011	2012				

Soil pH	5.30	6.34	5.91	4.76	6.43	6.43	5.30	6.43	5.86	0.69
Electrical Conductivity	1.92	7.49	5.40	4.02	4.25	3.25	1.92	7.49	4.38	1.90
Nitrogen	185.5	250	101	323	282	282	101	323	237.25	80.94
Phosphorus	9.48	47.27	22.82	25.27	15.46	17.46	15.46	47.27	22.96	13.14
Potassium	284.12	318.55	320	294.68	435.59	439.59	284.12	439.59	348.75	70.18

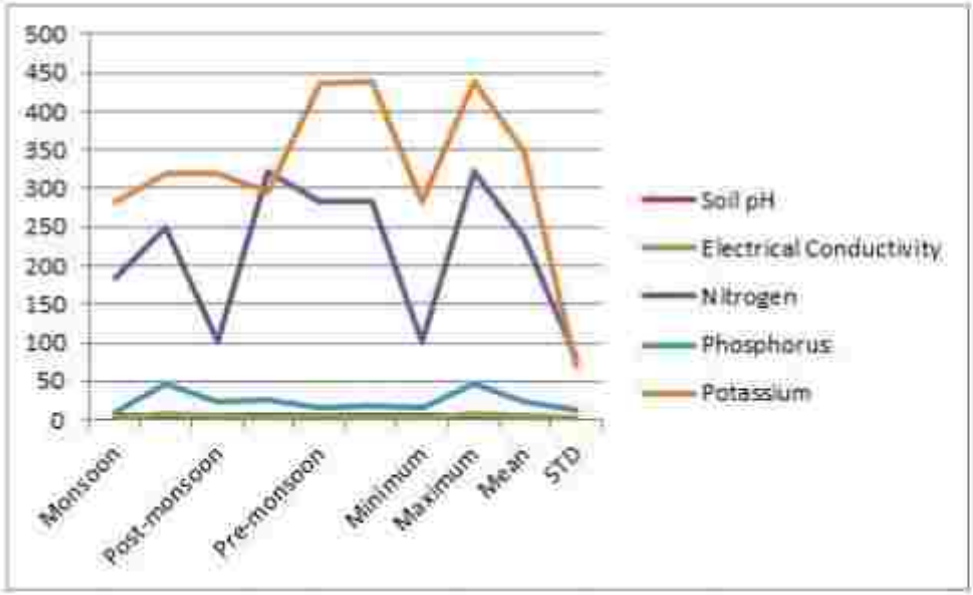

Figure 2: Graph showing Physico-chemical parameters of Uppinakudru mangrove soil

Figure 2: Graph showing Physico-chemical parameters of Uppinakudru mangrove soil

Click here to view figure

Hemmady

This region lies along the back waters of the river Haladi and the vicinity is absolutely under the tidal influence with good formations of mangroves.

Table 4: Physico-chemical parameters of Jaladi mangrove soil

Soil parameters	Monsoon		Post-monsoon		Pre-monsoon		Min	Max	Mean	STD
	2010	2011	2010	2011	2011	2012				
Soil pH	6.10	6.36	6.23	5.45	4.83	4.83	4.83	6.36	5.63	0.69

Electrical Conductivity	0.02	5.54	7.92	4.89	9.60	9.60	0.02	9.60	6.26	3.64
Nitrogen	80.0	173	130	229	168	168	80.0	229	158	49.66
Phosphorus	2.03	28.62	14.83	24.00	3.48	3.48	2.03	28.62	12.74	11.57
Potassium	537.63	117.43	307.41	468.33	292.79	294.79	117.43	537.63	336.39	148.53

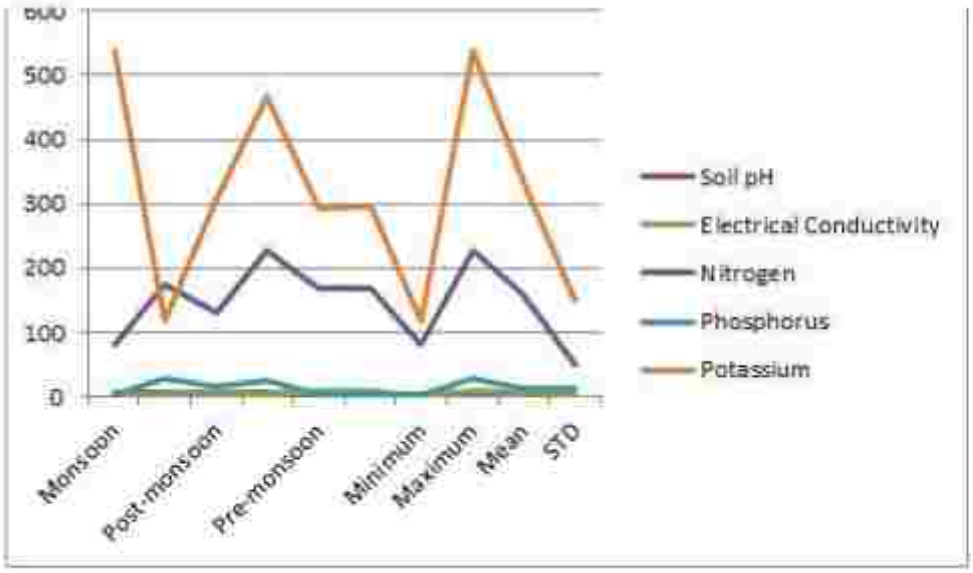

Figure 3: Graph showing Physico -chemical parameters of Jaladi mangrove soil

Click here to view figure

Figure 3: Graph showing Physico-chemical parameters of Jaladi mangrove soil

Table 5: Physico-chemical parameters of Hemmadi mangrove soil

Soil parameters	Monsoon		Post-monsoon		Pre-monsoon		Min	Max	Mean	STD
	2010	2011	2010	2011	2011	2012				
Soil pH	6.12	6.07	6.03	5.72	4.84	3.84	3.84	6.12	5.43	0.91
Electrical Conductivity	0.30	9.35	8.44	3.58	6.63	6.63	0.30	9.35	5.82	3.35
Nitrogen	30.7	261	130	243	229	229	30.7	261	187.11	89.23
Phosphorus	7.37	27.62	4.01	24.32	6.88	6.88	4.01	24.32	12.84	10.28

Potassium	450.57	215	287	425.44	446.29	441.29	215	450.57	377.59	101.02

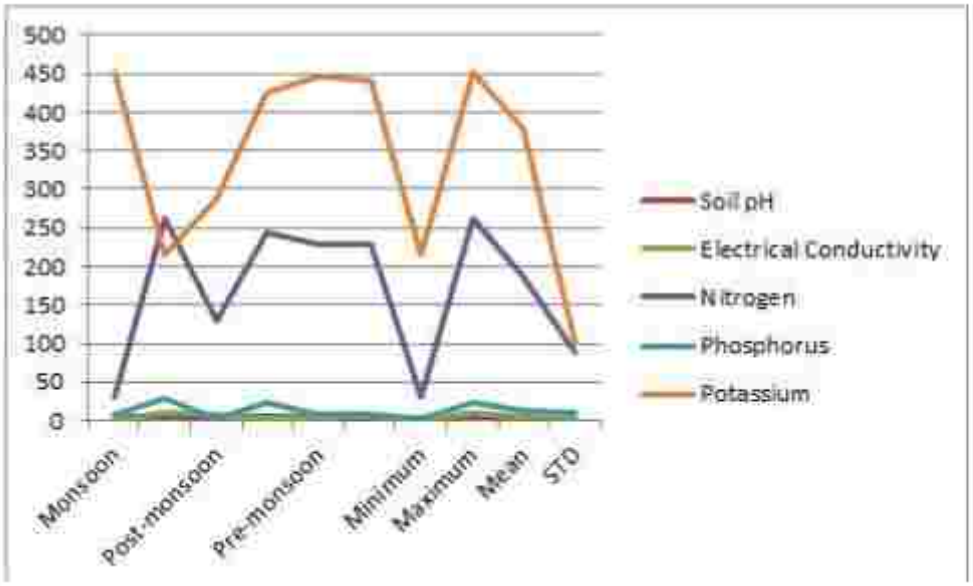

Figure 4: Graph showing Physico-chemical parameters of Hemmadi mangrove soil

Figure 4: Graph showing Physico-chemical parameters of Hemmadi mangrove soil

Click here to view figure

Sample Collection and Processing

Soil samples were collected in three seasons, monsoon, post-monsoon, and pre-monsoon, starting monsoon-2010 to pre-monsoon-2012 in four selected mangrove sites. The soil samples have been collected from the surface at a depth within 10-15 cm. The collected soil trials were fetched to the laboratory in a sterilized plastic bag, spread in a tray, air-dried at laboratory temperature, powdered, sieved at 2 mm size and stored in containers for further analysis.

Analysis of Soil Samples

Physico-chemical analysis of soil like pH, Electrical conductivity, Nitrogen, Phosphorus, Potassium was performed as per standard methods mentioned as follows:

Soil pH

Soil pH was determined at 1:2.5 ratio soil: water suspension by potentiometric method via glass

electrode, the H+ ion concentration was calculated using soil pH and expressed in moles H+ l-1 8.

Electrical Conductivity

Electrical conductivity which is a measure of soluble salts in soil was measured in the soil: water (1:2) extract using conductivity bridge8.

Available Nitrogen

20 grams of soil was distilled with 100 ml of 0.32N $KMnO_4$ and 100 ml of 2.5% NaOH. The ammonia released during distillation was trapped in 4% boric acid solution comprehending mixed indicator and titrated against standard H_2SO_4)[9].

Available Phosphorous

Available Phosphorus in the soil samples of acidic pH range was estimated by Bray's method using 0.03N NH_4F + 0.25N HCl for extraction of phosphorus. The extracted Phosphorus was then appraised by chlorostannous reduced molybdophosphoric blue colour method. The intensity of blue color was measured using spectrophotometer at 660 nm[4].

Available Potassium

5 grams of soil was extracted with 1N ammonium acetate extractant. Potassium content in the extract was determined by flame photometric method[9].

Results and Discussion

Mangrove soils are generally acidic in nature; mainly in those regions which get flooded occasionally and are positioned within the upper regions of the intertidal area. The soil will become loose due to the presence of fine sediment and decaying organic matter. In such situations, the soil turns into black and emits foul odor of H_2S due to anaerobic microbial activity within the soil. In the present investigation, pH, electrical conductivity, nitrogen, phosphorus and potassium of the mangrove sediment are analyzed and their values have been recorded.

The most essential factor of the mangrove sediment is soil pH that ranged between 3.84 -2012

on site-4) to 6.66 (monsoon-2011 on site-1). The soil pH is differed in all seasons and is slightly acidic in all the selected sites. The present study has documented the low pH value during summer season and high pH value during the rainy season. Acidity or alkalinity of the sediment is always dependent on the presence of Hydrogen ion concentration in the soil. Acidity and alkalinity level of mangrove soil has been reported by many scientists. The high value of pH throughout the rainy season is because of the inflow of rain water[10]. The soil acidity of south-eastern Brazil mangrove is because of the decomposition of mangrove litter[11]. The soil pH of Sundarbans is neutral to slightly alkaline condition of the field, however in a few localities the pH value of dried up soil samples drop to acidic[12] Acidic nature of soil was also reported in Chakaria of Sundarban region[13].

Electrical conductivity is differed from 0.02 dSm^{-1} (Monsoon-2010 in site-3) to 9.60 dSm^{-1} (Pre-monsoon-2012 in site-3). The present study documented higher value throughout pre-monsoon and minimal value throughout monsoon season. Similar results were reported in the mangroves of southeast coast of India which ranged between 5.6 to 6.2 dSm^{-1}[14]. Electrical conductivity of the soil has a tendency to lower in the direction of the inland, however normally the salinity of the soils employed by every forest community deliberated became low plus the adsorption site of the soils became subjugated through cations in the order of Ca > Mg > Na >K[15]. The electrical conductivity of a soil solution will increase with the increased concentration of ions[16]. High soil conductivity is because of the permeation of seawater throughout high tides, the evaporation of water as well as capillary rise of floor water in the course of low tides[17]. Electrical conductivity values of the mangrove soils were marginally lower because the soils under mangrove zones were subjected to regular inundation by tidal water and eventually maintained equilibrium, with the salinity of the estuarine water[18].

Available Nitrogen varied from 30.7 kg/ha (Monsoon-2010 in site-4) to 323 kg/ha (Post-monsoon-2011 in site-2). In the present study, a Nitrogen value in soil changed in all the seasons. High Nitrogen value is because of trapping of detritus by means of finer particles, resulting in a boom in bacterial population which will also become a cause for the excessive level of Nitrogen[19]. Excessive values of Nitrogen release from the decay of a huge quantity of phytoplankton[20]. Rich source of Nitrogen in sediment detritus due to activities of crab is also recorded and reported[21]. The present study revealed that the excessive value of Nitrogen is because of the greater amount of organic matter and low value of Nitrogen is because of the less amount of organic matter.

Available Phosphorus concentration ranged between 1.37 kg/ha (Pre-monsoon-2012 in site-1) and 47.27 kg/ha (Monsoon-2011 in site-2). The maximum value was recorded throughout the

monsoon and post-monsoon season and minimum value was recorded in the course of pre-monsoon season. The varied quantity of Phosphorus between 53.16 to 62.56 kg/ha in Sundarbans forest was recorded[22]. High concentration of inorganic Phosphates observed throughout the monsoon season was probably due to the encroachment of upwelling seawater into the bay, which increased the level of Phosphate[23]. Recorded low Phosphate value throughout summer season may be attributed to the limited flow of freshwater, excessive salinity and usage of Phosphate by Phytoplankton[24].

Available Potassium differed from 117.43 kg/ha (Monsoon-2011 in site-3) to 537.63 kg/ha (Monsoon-2010 in site-3). Reported the average Potassium values between 250 to 750 kg/ha in Sundarban mangroves in Bangladesh[25]. Potassium content within the soil becomes varied from soils significantly amongst samples especially in nutrient level. Potassium performs an important role within the regulation of photosynthesis and production of plant sugars which might be used for diverse plant metabolic desires[18]. All plants necessitate Potassium for keeping intracellular electric neutrality, osmotic regulation, enzyme activation, protein synthesis as well as photosynthetic metabolism[26]. In this research study, maximum amount of Potassium was recorded in all the study sites during all the seasons.

Conclusion

The present study documented the physico-chemical parameters of soil such as pH, electrical conductivity and available Nitrogen, Phosphorus and Potassium. All the study fields have acidic in nature that is due to inflow of freshwater, confined electrical conductivity is due to regular inundation by tidal water and rich source of available Nitrogen is because of massive amount of organic matter, Phosphorus is due to the runoff from agricultural and aquaculture fields and Potassium is due to influx of sea water. The findings of the present study provide baseline data of mangrove soil, which might be beneficial for further ecological evaluation, plantation activities and tracking of mangrove ecosystem.

Acknowledgement

I wish to express my heartfelt gratitude to the president, Principal, Governing Council and Management of Bhandarkars' Arts and Science College Kundapura for their support and financial assistance for the publication of my research article.

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IJCRT.ORG ISSN : 2320-2882

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

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A Socioeconomic and Educational conditions of Koragas (With reference of 100 selected families of Koragas in and around Kundapura in Udupi District)

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ABSTRACT:

The Koraga tribe is a primitive tribe or to say is one the oldest tribe of the region is found mainly on such regions on the part of Dakshina Kannada and Udupi districts of Karnataka and the Kasaragod district of Kerala, south India. These areas in Karnataka, are altogether often referred to as Tulu Nadu. They are also found in small numbers in adjoining districts of Uttara Kannada, Shimoga and Kodagu. The Koraga are classified by the Government of India as a Scheduled Tribe.

The Koraga, who numbered 16,071 according to the 2001 census of India, have their own language, classified as an independent Dravidian language, which is strongly influenced by Tulu, Kannada, Malayalam, languages commonly found in their area.

Tribal community is an integral part of Indian society. India has the second largest tribal population in the world next to Africa. Tribal population add upto 8.6% of the total population of the nation as per 2011 census. It means their population is more than 20 crores. In Karnataka we have 50 Tribal communities especially Soligas, Gondas, Valmikies, Jenu kurubas, Hakkipikkies, Marathi, Malekudiyas, Kadukurubas, Kammaras, Meda, Todas and others. The Jenukurubas and Koragas are considered as Primitive, vulnerable or aboriginal tribes of the regions. In an undivided South Kanara we have observed Four major tribal communities namely Marati / Marati Naiks Malekudiyas, Kammaras and Koragas. The population of these four tribals is less than 2 lakh.

KEYWORDS: Koraga Tribe, Total Population of Tribe, Scheduled Caste, Marati Naiks Malekudiyas, Kammaras and Koragas

OBJECTIVES OF THE STUDY

The specific objectives of Research paper is as follows:

1. To describe the Socioeconomic and Educational conditions of Koragas
2. To observe the transformation from tribal character to caste system in the above spheres of social life.

SLANT OF STUDY:

The information regarding the Research paper has been collected both by primary sources and secondary sources. They are as follows:

The **participant observation and Interview** schedule are used in this study. **Group discussion** was orgainsed to gain information about the various aspects of the way of life of Koragas. The information related to the past history was obtained through the **records maintained** by administrative bodies. The data was collected from various secondary sources like journals, census report, Encyclopedias, Manuals, Records maintained by the social welfare departments.

SCOPE OF STUDY:

The scope of the study is restricted only for the 14 selected villages and 100 koraga families of Kundapura Taluk, Udupi District. The total population of 100 selected families is consisting of 377 males and 381 females totally 758 members. The detail of selected villages, families, male and female population is as follows.

Table No: 1 List of selected villages, No. of families and Gender wise distributions of members of family

Sl.No.	Name of Villages	No of families	Gender wise Distributions of Members of families		
			Male	Female	Total
1.	Halady	08	30	34	64
2.	Koteshwara	15	68	59	127
3.	Kumbhashi	05	23	27	50
4.	Jadkal	15	50	56	106
5.	Bijady	06	15	19	34
6.	Haklady	04	16	12	28
7.	Golihole	02	04	05	09
8.	Kalavara	08	27	25	52
9.	Amavasebail	04	28	24	52
10.	Hallihole	05	18	17	35
11.	Nada	06	20	24	44
12.	Gujjadi	12	38	40	78
13.	Keradi	05	18	22	40
14.	Vandse	05	22	17	39
	Total	**100**	**377**	**381**	**758**

REVIEW OF EARLY LITERATURE:

The existence of the Koraga community. Can be traced through the works of various scholars, Anthropologists, Christian, missionaries, census enumerators, Ethnologists, Sociologists was studied for the presenting the paper done by from early 18th century which includes.

- **H.H. Wilson** in his 'Mackenzee' collection tries to give definition of Koraga tribal community.
- The first chronicle available about Koragas is that of **Francis Buchanan** (1801) who gives the general description of the Koragas and make the reference to the rule of their chieftain, Hubashika for short period.

The historical stories about Koragas was heard like Hinge on Hubashika as a hero, invader, Pariar king, chief of savages, king of mountain, slaves castes, king of koragas, koragas chieftain etc.

- **Sturrock** (1804) complied various caste and tribes of Dhakshina Kannada. This study shows that Koragas are the tribes, who lives in forest and Hills of undivided South Kanara District. His study reveals the some of their social institutions and practices that existed centuries ago.
- **Edger Thurston** (1909) gives a brief information about various customs traditions observed by Koragas about hundreds of years ago. But he does not analyse the problems, changes and development programmes of Koraga tribe.
- B.A. Saletore (1944) and Dr. Padhur Gururaj Bhat (1963) Explains Koragas are earlier inhabitants of Tulunadu. They give brief information about various customes and traditions observed by Koragas about a hundred years ago.
- Karnataka Government has published a brief account of the life and cultural practices of Koraga tribes in the form of reports in South Kanara District Gazetters (1973) ed. by K. Abhishanker) A hill tribes living in isolation.
- Dr. Mohammed Peer and Dr. V. Heggade (1982) in their evaluation report on the impact of various developmental programmes implemented during the decade 1980-1990 for the social and economic development of Koraga tribes in undivided South Kanara have briefly highlighted the present conditions of Koragas. Their report on Koragas based on the data obtained from households drawn from South Canara.
- **Hayavadana Rao** in his Mysore Gazetter tries to explain the brief account of cultural traditions of Koragas.

Apart from the studies available in the form of monographs, a few recent attempts have been made by various researches writes author of regional Language (Kannada) to contribute articles and write-ups in chronicles on of Koragas communities, in a most general way. Which includes ups in chronicles on incurring condition development.

Sri Ramakrishna T. Shetty : Koraga Grammar (1975), Prof Amrith Someshwara : Koragas (1982), Dr. Ramakrishna Shetty : Koragaru Adunudi (1985), Dr. Purushothama Belimale : Karavali Janapada (1990), Ondu parichayatmaka Kriti (1990), P. Kamalaksha : Dakshina Kannada Jilleya Harijana Mattu Girijanara Samajika Itihasa. (1994), Dr. Hi. Chi. Boralingayya : Karnataka Janapada Kalegala Kosha (1996), Dr. Arun Kumar : Seeme (1996), Dr. Gayathri Navada : 'Virachane' (1997), Dr. A.V. Navada : Koraga Budakattu Abhiruddhi Kalpane and Tulu pole (1997), Vasudevan C. : Koragas, The forgotten of the premitive tribes of Tulunadu (1998), Dr. Indira Heggade : Tulunadina Koragaru Samajika Arthika Sthitigati (2007), Dr. Raghavendra Acharya : Samajika Badalaraneyalli Koragaru, Unpublished Ph.D. Thesis, Kananda University, Hampi (2010), Sri. Gunapala Shetty : Mouna Matadidaga (2012), Dr. Gangadhar Daivadnya : Koragaru Samakalina Spandana (2012) , Dr. Hi. Chi. Boralingaiah and Dr. A.S. Prabhakar (ed) Karnatakada Budakattu Sachitra Kosha (2013), Dr. K. Sundara Naik : "Social transformation among the tribals of Dakshina Kananda" A article was published in Budakattu Adhyana kannada Vishwa Vidyalaya. (2011), Dr. K.M. Metri : 'Budakattu Kulakasabu' (2002) Forest Blosooms and the concert Jungle and 'Shukshma Adivasigalu (2017), Dr. Aravinda Malagati and

Dr. Odeyar. D. Heggade : 'Koraga Jananga' Vishslationatmaka Adyayana (2007), Dr. H.J. Lakkappa Gowda : Karnataka Budakattugalu, Dr. A.V. Navada : Koragaru and Tulu Polle (2013)

The above survey of the studies on Koraga tribes indicate that many attempts have been made in tribal studies on the way of life, changes and strategy of development. The reports published on the Koragas in the form of various articles are neither complete scientific nor Exhaustive. Therefore, these publications do not provide educational condition present economic and educational condition adequate information on Koraga community. However, these publications shows that the Koraga tribes have attracted the attention of Christian missionaries, Social reformers, Administrators, Anthropologists, medical scientist, sociologists and others. Hence, in the present study, an attempt is made to focus on the changes that have occurred among the Koragas and the factors like modern education, influence of western culture, Brahmins and upper classes way of life associated with these changes. For the purpose of study I have taken up the 100 Koraga tribal families of 14 villages of Kundapur taluk, Udupi District.

MEANING AND ORIGIN OF KORAGAS

The Koraga are a tribal community who are basically found mainly in the Dakshina Kannada, Udupi District of Karnataka and Kasaragod District of Kerala State. They are also found in small numbers in almost all districts of Karnataka. The Koragas are classified as a Primitive Tribes Groups by government of India.

The name 'Koraga' have many phonetic variations.

As for **CampBell** refers to them as 'Koras' or Koragars. While **Francis Buchanan** Calls them 'Corar' or 'Corowar'. It would appear to us that due to the Tulu accent of the term, the Koraga might have been referred by Buchnan as 'Corar' and 'Corowar'.

Therefore the earlier writers have referred Koraga, Korgas, Korar, Corar, Koragars to mean the same community. While the others have used 'Koragar' the Kannada Plural for Koraga. Likwise some authors have referred to the tribe as 'Koragars' the plural form in English. As In **Kannada** the word Koraga is the singular and 'Koragaru' is in the plural, in **Tulu** 'Korage' is used in the singular and 'Koragare' in the plural and in **Konkani** the word 'Korgo' is used in Singular and 'Korgar' and 'Koragaranche' in plural.

In the term Koraga 'Kora' the first part of their name refers to the 'sun' and the name may have originated from their conventional worship of the sun. There is a possibility that their name is a corruption of 'Koruvar' which in Tulu means the people of the hills. The etymological meaning of the 'Koraga' is not very clear.

- In the first census report of 1871 relating to South Kanara district. It was reported that they are properly 'no hill tribes' living exclusively in the forest of undivided south kanara with the exception of malekudiyas.
- In 1881 census report they were recognised as 'aboriginals'
- In 1891 census Koragas were treated as 'Forest and Hill tribes of South Kanara'
- In the census of 1921, 1931 and 1941 they were classified as 'Depressed classes'.
- In 1951 census they were classified as 'Scheduled Caste'.

- From 1961 to 1981 census report they were re-classified as 'scheduled Tribes'
- In 1986 they were classified as 'Primitive tribe groups'
- Koragas are called in different ways by different scholars, Sociologists Anthropologist and others.
- According to Ramappa Varmika 'Koragas' belong to slave class.
- Sir Herbert Risley called them 'aboriginals'.
- Dr. Elwin V. calls they were 'Original inhabitants of a land'.
- J.H. Hutton calls 'Primitive Tribes'.
- G.S. Ghurye describes them as so called 'Backward Hindus'
- Social reformer Jyothi Rao phule called 'Adipraja'.
- Narasimha Mehta, A Gujarath Saint called they were 'Girijana'
- Other Social reformer called Adivasis, Vanavasis, Antyaja
- Today we use the term 'Scheduled Tribe'.

Since the concept of untouchability has its roots in the ideas of cleanliness and hygiene it is the life style of Koragas who used to eat dead animals and the left over foods has forced other to keep themselves away from them. In Dakshina Kannada Koragas are considered as untouchables and the practice of social distance, keeping out of personal and social contact is followed in case of Koragas. Hence, Koragas are not allowed to mingle with others in any of the social functions as well as they are also not allowed to enter into places of worships the persons who touches a Koraga are considered to carry the risk of impurity.

Nomenclature

The names of Koragas are interesting and peculiar. Traditional minded Koragas prefer to use the traditional names of their ancestors. There is also a practice of naming the child after the grandparents in the male and female line.

The nomenclature is a part of Kinship system, constitutes a relation between generations. The various common names maintained in the lineage or family line shows that there is some significant similarity among the kinsmen. This further strengthen the bond of kinship.

It is interesting to note that certain names among traditional Koragas are commonly used for both boys and girls. They were originally worshippers of the sun and they are still called after the names of the days of the week - It as follows:

Table 02: Traditional Names of Koragas

Sl.No.	Days	Names
1.	Monday (Somavara)	Thoma, Soma
2.	Tuesday (Mangalavara)	Angara
3.	Wednesday (Budavara)	Budhe, Budha
4.	Thursday (Guruvara)	Guruva
5.	Friday (Sukravara)	Thukra, Tankara
6.	Saturday (Shanivara)	Taniya, Saniya, Chaniya
7.	Sunday (Adithyavara)	Aitha

Few names represent the names of both Flora and Fauna e.g.,

Males: Koraga, Pakira, Appu, Domba, Bomma, Hoova, Kampara, Kalu, Tukka, Nakura, Pijina, Tabura, Kupula, Chaniya, Chinkra, Chinkra, Naga, Tankara

Females: Nagi, Kakke, Korapolu, Tarmbe, Tambe, Bage, Kusu, Akku, Gubbi, Negi

Transition from tradition to modern secular nomenclature.

ECONOMIC CONDITIONS OF KORAGAS

(A). Koragas Settlement Patterns:

Koraga are mostly situated in the rural areas. Due to their low status in the rural areas, the Koraga settlements are located in the outskirt of the village, where they form group of their own or even separate hamlet. Since, the caste Hindu do not mix with them, they are forced to have their separate colonies far away from other houses.

The primitive shed used by the Koragas was called Kotta (Kotya - Tulu) or Koppa. The Koragas give reason that they were cursed by the spirit. (Bhuta) Kallurtti thus were not supposed to live in decent houses. They should not live under a roof. Koppa is a primitive structure, and a sort of improvised hut made of bamboos and covered with grass or coconut leaves.

The traditional Koppa is fast disappearing from the scene and now the community men resides in houses made of mud huts with thatched or Mangalore tiles roofs. In the cities and towns the design and construction of the houses of Koragas follows the same regional patterns as found among the communities belonging to lower economic and social strata.

(B) Age wise distribution of Koraga family

Age is an important factor which plays a crucial role in deterring the nature of action by an Individual. The success and failure of any actions depends largely on age factor. In this contact the study of age reflects the attitude and opinion on the various aspects of social life. It is necessary to know the age compositions of the members of 100 families to provide guidance and training regarding the action and interactions of tribal community.

Table No - 3: Age wise distribution of family

Sl.No.	Age Group (yrs)	Age wise distribution of members of the family		
		No of Male	No of Female	Total
1.	0-06	21	32	53
2.	07-17	120	142	262
3.	18-40	119	102	221
4.	41-60	90	71	161
5.	61 and above	27	34	61
	Total	**377**	**381**	**758**

The above Table No. 3 explain that majority of the members are between the age group of 07-17 years. The group which have higher number of female members are tend to be very active. The Data also shows that out of 758 members of family 221 people belong to the age group of 18-40 years. These members can be productive, pro-active to the group.

(C) Housing Patterns and ownership

In the present study the house ownership patterns explain that out of 100 family respondents 80 families lived in their own house. Where majority of family headmen reported that they live in Government sanctioned lands and builted houses. It is observed during the field work that Indira Awas Yojana, Pradhana Mantri Awas Yojana, Basava Vasathi Yojana, Ambedkar Yojana has helped these families to have their own shelter. The pattern of houses ownership explains us about the socio-Economic status of Koraga community. It is due to the traditional barriers on them as well as their life style which made them as more nugrant community as.

Table No 4 : Data of Housing Patterns

Sl.No.	Types of Houses	No of Houses	Percent
1.	Thatched Hat	02	
2.	Tiled	59	
3.	R.C.C (Half)	21	
4.	R.C.C (Full)	18	
	Total	**100**	

The Table No 4: Shows the types of Houses owned by families (Respondents) which helps us to know their standard of living and Economic conditions. Out of 100 family respondents most of them (59%) lives in tiled houses. Only (2%) family respondents lives in thatched huts. Only 21 families lives in half RCC and half tiled houses. The 18 families who are reported in RCC. In many cases the RCC houses are not completely built. Due to poor earning capacities it is difficult for them to build complete RCC houses.

The house ownership among the 100 families (Respondent). It in well known fact that house ownership pattern helps us to understand the economic status of the family.

(D) Occupational Status of Koraga:

According to Gurulingaiah "Occupation not only exhibits the economic position of a person but also represent the social status of an Individual. The socio-economic life of a particular group or individuals is predominantly determined by the nature and types of occupation. Occupation of tribal people is generally classified into traditional occupation and non-traditional or modern occupations. Traditional occupation are those occupation which are associated with the community. Even though occupational changes have taken place among the tribes today they depend on traditional occupation for their livelihood, such as food gathering, hunting, shift cultivation, cattle rearing and handicrafts etc."

During the field work it was observed that majority of the members continued their traditional occupation i.e. Basket making out of 570 members 64 males and 122 women totally 186 (32.63%) persons continued their traditional occupation Basket making. Most of them are working as daily wage earner like agriculture labourers, Mason, coolie, plantations, construction sites, working at factories etc. Only some of the members of family after their retirment are still engaging in the traditional occupation Basket making, collecting forest products and tribal handicrafts. About 14 men and 82 women totally 96 persons have mentioned their occupational status as beedi rolling. Beedi Industries is one of the earliest Industries in the district involving large number of women belonging to the lower strata of the society. Since beedi rolling can be done sitting at home it is very convenient for women as well as for tribal women to carry out their regular activities along with beedi rolling.

Table No 5: Occupational status of the family members of villages:

Sl.No.	Occupation	No. of members of family Engaged			Percentage
		Male	Female	Total	
1.	Basket Making	64	122	186	32.63
2.	Agriculture	03	04	07	01.22
3.	Agricultural Labours	46	16	62	10.87
4.	Mason	24	-	24	04.21
5.	Cooly (Helper to Mason)	48	12	60	10.52
6.	Petty shop	07	-	07	01.22
7.	Beedi rolling	14	82	96	16.84
8.	Driver	08	-	08	01.40
9.	Working at factory	39	03	42	07.36
10.	Working on contract basics at private companies	37	-	37	06.49
11.	Government Employee	05	06	11	01.92
12.	Retired Employee	06	01	07	01.22
13.	Engineer (I.T.I.)	07	01	08	01.40
14.	Teacher (Anganawadi)	02	07	09	01.57
15.	Tailoring	-	06	06	01.05
	Total	**310**	**260**	**570**	-

EDUCATIONAL QUALIFICATION OF KORAGAS:

Education is considered to be the basic institution which connects individual effectively to the social system. It is not only considered as basic institutions but also important factor in bringing about changes in the quality of life of people. As it is observed from many research studies, that education is powerful factor which brings changes in the lives of women. Higher the level of education of women, greater will be the possibilities of her accepting the modern values in the changing socio-cultural sphere. Education plays a significant role in improving the social status, quality of life, social awareness and economic life situation of tribal people.

It but we are aware as the fact to at education in India has remained outside the reach of large section of the population, especially for the marginalised sections of the Indian population specially for tribal's.

Primary education has been made free for all in our country and the tribes are getting a special incentives packages to make them avail the benefit of education. Women education was encouraged by providing financial assistance, through scholarship. Inspite of these programmes things did not change because most of the programmes of the government have not reached to the tribal communities.

The table shown above highlights the fact that women in Koraga tribe had access of education up to the primary level. Out of 705 respondents 158 women and 94 men studied up to primary level. This also reflects the fact that school drop out for girls is a very general trend. Generally it is associated with the factors like family and social position enjoyed by the women, general attitude towards education in particular for women education, availabilities of schools and infrastructural facilities, longer Distance, taboos and social restrictions on women so on.

On the other hand, out of 705 respondents 46 women and 21 men totally 67 members of 100 families had never attended school. We can say that there is negative trend towards the higher education of girls in Koraga tribes selected for the present study. It is only 3 women had attained the post graduation level of education.

Table No 6: Data of Educational Qualification of Koragas

Sl.No.	Education	No of Respondents		
		Males	Females	Total
1.	Primary	94	158	252
2.	Primary / Secondary	78	102	180
3.	High School	67	45	112
4.	Pre-University	17	26	43
5.	Graduation	28	13	41
6.	I.T.I /Diploma	04	01	05
7.	Post Graduation	01	02	03
8.	Engineering	-	01	01
9.	Medical	-	01	01
10.	Illiterate	21	46	67
	Total	**310**	**395**	**705**

Table No 6: Shows that Educational Qualification of 100 families (respondents). It is well known fact that in India girls education gets least priority among any social groups it is true in the case of Koraga tribal women that formal education for Koraga tribal women never welcomed by the community. Since their life around the nature and their activities related to the social living never demanded for formal education.

REASONS FOR THE SCHOOL DROPOUT AND ILLITERACY

1. There are so many resons for Dropout and illiteracy the main reason is poverty and patriarchy system.
2. In most of the interior villages there are more dropouts due to lack of schools near their house they have to travel far so this leads to dropouts of girls and the primary school children sufficient transport facilities available in the country and it also adds on to accessibility.
3. Sometimes the education system in our country also is the reason for dropout example. This schools becomes toxic to student barping students are suspended for minor infections or placed in "remdial classes".

   Many of the school lack adequate guidance are selling and the curriculum is not relevant to the needs of the students being taught.
4. Even lack of interest of a student can also be the riser for dropout of children.
5. Students parents are illiterate because of that reason they do not know the value of education
6. Inadequate Hostel facility
7. Health issues amongst tribal students this is one of the reason to leave the school
8. Class system has been affected on tribal community.
9. Their freedom has been snatched by disciplinary rules in schools.
10. Lack of interest.
11. Child marriage and psychological implications made them feel insecure.
12. Lack of teaching faculty to teach the children and understand their psychological condition.
13. Quality of the food supplied in schools is very poor
14. Because of the Nuclear family system children are supposed to work to feed themselves.
15. Because of religious rules, they migrate to various other places to take part in 'Kola', Nema and 'Jaatra' during festive seasons like 'Shravana' and 'Navavatri' and return before raining season.
16. Parents refuse to use systematically provided education for their children due to which literacy rate of these communities in Kundapura is very low.
17. There are many Koraga welfare organisations in Kundapura straining hard to convince Koraga people to send their children to school related to which they keep conducting meetings, discussions, pertaining to welfare of the children.
18. It gives them the knowledge about grammar of Kannada and English language.

Government has to take some interest the pigment of tribal community. As per the field work or survey the literacy rate of Koraga tribe and caste in the selected villages.

The statistics as follows:

- Primary students 252
- Higher primary 180
- High School 112
- University 43 graduation 41 post graduation 3 diploma and 67 are illiterate.

It is shown that no changes have been taken place amongst the people regarding their part in getting into education at Higher levels.

There are 67 students who have left the school in the middle of the academic year, in the beginning 544 students got admitted for 1 to 10th class so when we observe these are the reasons for their absence.

FINDING AND SUGGESTIONS

Government has to provide the facility for the students of Koraga community besides government has to provide like Scholarship, uniform, model School including give some facilities for the student of their parent in order to uplift the condition of theirs and make their lives and the condition better and also provide good hospitality and shelter where is it possible in the School and outside the premises and we need to find out the reason why these are the students are living the school and to find out the solution to make them to come school. To create such atmosphere for them to have good education and need to inculcate virtues of life. So from the society and NGO's have to contribute to make them most civilized and educated in the society by doing this way we can make their lives prosper and happy.

'Makkala Mane' at Dr Ambedkar Nagar in Kumbhashi, is organising various programme for the educational welfare of the Koraga children in Kundapura.

a. The organisation, tries to impart the importance of education to parents and children of Koraga community.
b. It conducts counseling to the children who are absent for the programe.
c. It organises them programes on Various topics such as need and importance of cleanliness, Handicrafts / arts, including sports and cultural activities.
d. Koraga community is not developed to the expected level but slowly they are reaching to the mainstream of the society. It is one of the saddest part of the development.
e. Koraga's culture & tradition has been changed by the modern touch, by the influence of Shista Parampare, their customs & tradition like baptism (Cradle Ceremony), Marriage, House Warming Ceremony, Funeral & Role of priest involved in their various aspects of the way of life.
f. Koraga language has been declaiming because of the influence of modern education.
g. Though Government has prohibited "Ajalu Paddhathi" but still it is practice in remote & interior place and in traditional Koraga families.
h. Government has to provide initiative to establish Koraga Tribal Research study centre either in Udupi district or South Canara district.
i. Government & NGO's have to organise programmes not for the sake programme, instead of that positive & qualitative programmes have to oraganise for the upliftment of Koraga community.

j. For the development of Koraga community to train their skills, government has to appoint & train people with in their community to teach & train their people.

k. Government has to sanction minimum 3 to 5 acres of land for agriculture and motivate them to do agriculture.

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International Journal of Applied Research

ISSN Print: 2394-7500
ISSN Online: 2394-5869
Impact Factor: 5.2
IJAR 2020; 6(2): 219-227
www.allresearchjournal.com
Received: 14-12-2019
Accepted: 17-01-2020

ರಾಮಚಂದ್ರ
ಸಹಾಯಕ ಪ್ರಾಧ್ಯಾಪಕರು
ಸಮಾಜಶಾಸ್ತ್ರ ವಿಭಾಗ
ಭಂಡಾರಿಕರ್ಸ್ ಕಾಲೇಜು – ಸಂಶೋಧನಾ ಕೇಂದ್ರ, ಕಡಬ

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ಒಡಕ್ಟು ಗುಣಲಕ್ಷಣವುಳ್ಳ ಮರಾಟಿ ಸಮುದಾಯದ ಅಧ್ಯಯನಗಳ ತಾತ್ವಿಕ ವಿಮೇಚನೆ (ಕರಾವಳಿ ಕರ್ನಾಟಕದ ಕುಂಬ್ರಿ ಮರಾಠಿ, ಮರಾಟಿ, ಮರಾಟಿ ನಾಯ್ಕ, ಕುಣುಬಿ, ಕುಡುಬಿ ಸಮುದಾಯಗಳನ್ನು ಅನುಲಕ್ಷಿಸಿ)

ರಾಮಚಂದ್ರ

ಪ್ರಸ್ತಾವಿಕ

ಭಾರತವು ಜಗತ್ತಿನ ಹಲವು ರಾಷ್ಟ್ರಗಳಲ್ಲಿ ಬೃಹತ್ ಜನಸಂಖ್ಯೆ ಹೊಂದಿರುವ ರಾಷ್ಟ್ರವಾಗಿದೆ. 2011ರ ಜನಗಣತಿಯ ಪ್ರಕಾರ ಒಟ್ಟು ಜನಸಂಖ್ಯೆ ಶೇಕಡಾ 8.6 ಬುಡಕಟ್ಟು ಜನಸಂಖ್ಯೆಯಿದೆ. ಬುಡಕಟ್ಟು ಜನರು ಬಂದು ರಾಷ್ಟ್ರದ ನಾಗರಿಕತೆಯ ಪ್ರಾರಂಭದಲ್ಲಿದ್ದ ಹಾಗೂ ಬಂಧುತ್ವ ಸಂಬಂಧಗಳಿಗೆ ಒತ್ತು ನೀಡಿ ಬೆಳೆದ ಸಂಸ್ಕೃತಿಯ ಸಮಾಜ. ಇವರನ್ನು ವಿವಿಧ ಗುಣಲಕ್ಷಣಗಳಿಗನುಗುಣವಾಗಿ ಆದಿವಾಸಿಗಳು, ಮೂಲನಿವಾಸಿಗಳು, ಬುಡಕಟ್ಟು, ಗಿರಿಜನ, ಬಂಧುತ್ವಜಗಡ ಎಂದೆಲ್ಲ ವ್ಯಾಖ್ಯಾನಿಸಲಾಗಿದೆ. ಬುಡಕಟ್ಟುಗಳನ್ನು ಭಾರತದ ಮುಖ್ಯವಾಹಿನಿಯ ಹಿಂದೂಗಳಿಗೆ ಹೋಲಿಸಿದಾಗ ಅವರ ಸಂಸ್ಕೃತಿ ಮತ್ತು ಆರ್ಥಿಕತೆ ಭಿನ್ನವಾಗಿ ಗೋಚರಿಸುತ್ತದೆ. ಕೆಲವೆಡೆ ಹಿಂದುಗಳಂತೆ ಕಂಡರೂ ಅವರ ವಿಶಿಷ್ಟ ಆಚರಣೆಗಳಿಂದ ಅಲ್ಲಲ್ಲಿ ಬೇರ್ಪಡುತ್ತಾರೆ. ಕರಾವಳಿ ಕರ್ನಾಟಕದಲ್ಲಿ ಕಂಡುಬರುವ ಮರಾಟಿ ಸಮುದಾಯಗಳಾದ ಮರಾಟಿ ನಾಯ್ಕ, ಮರಾಟಿ, ಕುಡುಬಿ, ಕುಣುಬಿ, ಕುಂಬ್ರಿ ಮರಾಠಿ, ಕ್ಷತ್ರಿಯ ಮರಾಠಿ, ಆರ್ಯ ಮರಾಠಿ ಹಿಂದುಗಳಂತೆ ಕಂಡು ಬಂದರೂ ಅವರ ಹಲವು ಧಾರ್ಮಿಕ ಆಚರಣೆಗಳು ವಿಶಿಷ್ಟವಾಗಿದೆ. ಪ್ರಸ್ತುತ ಲೇಖನದಲ್ಲಿ ಮರಾಟಿ ಸಮುದಾಯಗಳು ಅವುಗಳ ಬಗ್ಗೆ ಈಗಾಗಲೇ ಅಧ್ಯಯನ ಮಾಡಿರುವ ಕೃತಿಗಳ ತಾತ್ವಿಕತೆಯನ್ನು ವಿಶ್ಲೇಷಿಸಲಾಗಿದೆ.

ಅಧ್ಯಯನದ ಉದ್ದೇಶ

1. ಈ ಅಧ್ಯಯನವನ್ನು ಕರಾವಳಿ ಕರ್ನಾಟಕ ವ್ಯಾಪ್ತಿಗೊಳಪಟ್ಟ ಮೂರು ಜಿಲ್ಲೆಗಳಾದ ಉತ್ತರ ಕನ್ನಡ, ದಕ್ಷಿಣಕನ್ನಡ ಮತ್ತು ಉಡುಪಿ ಜಿಲ್ಲೆಯಲ್ಲಿ ವಾಸ್ತವ್ಯವಿರುವ ಮರಾಟಿ, ಮರಾಟಿ ನಾಯ್ಕ, ಕುಡುಬಿ, ಕುಣುಬಿ ಮತ್ತು ಕುಂಬ್ರಿ ಮರಾಠಿ ಸಮುದಾಯಗಳಿಗೆ ಮಾತ್ರ ಸೀಮಿತಗೊಳಿಸಲಾಗಿರುತ್ತದೆ.
2. ಮೇಲೆ ತಿಳಿಸಿದ ಮರಾಟಿ ಸಮುದಾಯಗಳಾದ ಕುರಿತು ಮಹಾತ್ಮಾಶಾಹಿ ಹಾಗೂ ಸ್ವತಂತ್ರೋತ್ತರ ಕಾಲಾವಧಿಯಲ್ಲಿ ನಡೆದ ಅಧ್ಯಯನಗಳಿಗೆ ಮಾತ್ರ ಸೀಮಿತಗೊಳಿಸಿ ವಿಶ್ಲೇಷಿಸಲಾಗಿದೆ.

ಅಧ್ಯಯನದ ವಿಧಾನ ಮತ್ತು ವ್ಯಾಪ್ತಿ

1. ಕರಾವಳಿ ಕರ್ನಾಟಕದ ಮೂರು ಜಿಲ್ಲೆಗಳಾದ ಉತ್ತರಕನ್ನಡ, ಉಡುಪಿ ಮತ್ತು ದಕ್ಷಿಣಕನ್ನಡ ಜಿಲ್ಲೆಯ ಆಯ್ದ ಗ್ರಾಮಗಳಲ್ಲಿ ವಾಸ್ತವ್ಯವಿರುವ ಮರಾಟಿ ಸಮುದಾಯಗಳ ಕುಟುಂಬಗಳನ್ನು ಹಲವಾರು ಬಾರಿ ಬೇಟಿ ಮಾಡಿ ಮಾಹಿತಿದಾತರಿಂದ ವಿಷಯ ಸಂಗ್ರಹಿಸಲಾಗಿದೆ.
2. ಮರಾಟಿ ಸಮುದಾಯಗಳ ಬಗ್ಗೆ ಈಗಾಗಲೇ ಅಧ್ಯಯನಗಳನ್ನು ಮಾಡಿರುವ ಅನುಷಂಗಿಕ ಮಾಹಿತಿಗಳ ಮೂಲಗಳಾದ ಅಧ್ಯಯನ ಗ್ರಂಥಗಳು, ಕೃತಿಗಳು, ನಿಯತಕಾಲಿಕೆಗಳು, ವರದಿಗಳು ಗಣಕೀಯಾಂಶಗಳು, ಮಹಾಪ್ರಬಂಧಗಳು, ದಿನಪತ್ರಿಕೆಗಳಿಂದ ಮಾಹಿತಿಗಳನ್ನು ಸಂಗ್ರಹಿಸಲಾಗಿದೆ. ಹಿಂಗೆ ಕ್ಷೇತ್ರಕಾರ್ಯ ಹಾಗೂ ಅನುಷಂಗಿಕ ಮಾಹಿತಿಗಳ ಮೂಲಗಳ ವಿಧಾನಗಳಿಂದ ಮಾಡಲಾಗಿದೆ. ಅಧ್ಯಯನದ ವ್ಯಾಪ್ತಿಯನ್ನು ಕರಾವಳಿ ಕರ್ನಾಟಕದ ಮೇಲಿನ ಮೂರು ಜಿಲ್ಲೆಗಳಿಗೆ ಮಾತ್ರ ಸೀಮಿತಗೊಳಿಸಿದೆ.

ಬುಡಕಟ್ಟು ಗುಣಲಕ್ಷಣವುಳ್ಳ ಮದಾಸ ಸಮುದಾಯಗಳು:

ಸ್ವಾತಂತ್ರ ಪೂರ್ವಕಾಲದಿಂದ ಪ್ರಾರಂಭಿಸಿ ಇವತ್ತಿನವರೆಗೆ ಭಾರತದಲ್ಲಿನ ಬುಡಕಟ್ಟುಗಳ ಕುರಿತು ಯಿರೋಪಿನ ಕ್ರೈಸ್ತ ಮಿಷನರಿಗಳು, ಮಾನವಶಾಸ್ತ್ರಜ್ಞರು, ಸಾಹಿತಿಗಳು, ಸಮಾಜಶಾಸ್ತ್ರಜ್ಞರು, ಚಿಂತಕರು, ಸಮಾಜಸುಧಾರಕರು ಮತ್ತಿತ್ತರರು ಈ ಸಮುದಾಯವನ್ನು ಒಂದು ಅಧ್ಯಯನದ ವಸ್ತುವನ್ನಾಗಿಸಿದ್ದಾರೆ. ಇವರೆಲ್ಲರು 'ಬುಡಕಟ್ಟು' ಎಂಬ ಪದವನ್ನು ಅವರದೇಯಾದ ಶೈಲಿಯ 'ಪದ'ದೊಂದಿಗೆ ಗುರುತಿಸಿಕೊಂಡಿದುಕ್ಕಾರೆ.

ಸರ್. ಹರ್ಬರ್ಟ್ ರಿಸ್ಲೆಯವರು ಬುಡಕಟ್ಟು ಜನ ಸಮುದಾಯವನ್ನು ಮೂಲನಿವಾಸಿಗಳು (Aboriginals) ಎಂದಿದ್ದಾರೆ (1901, ಪು. 218). ಸರ್.ಜೇಮ್ಸ್ ಜನಗಣತಿ ವರದಿಯಲ್ಲಿ 'ಬೆಟ್ಟ ಮತ್ತು ಕಾಡಿನ ಬುಡಕಟ್ಟು ಎಂದು ಕರೆದರು (1891, ಪು. 158). ಡಾ. ಜೆ.ಎಚ್. ಹಟ್ಟನ್‌ರವರು 'ಆದಿಮ ಬುಡಕಟ್ಟು' ಎಂಬುದಾಗಿ ಗುರುತಿಸಿದ್ದಾರೆ (1931: 391). ಲಕ್ಕರ್‌ದಾಸರವರು 'ಆದಿಪ್ರಜಾ' (2014: 267) ಡಾ.ಜಿ.ಎಸ್. ಘುರ್ಯೆ (1943: 21) ಅವರು 'ಹಿಂದುಳಿದ ಹಿಂದುಗಳು ಎಂಬುದಾಗಿ ಕರೆದಿರುವರು. ಡಾ. ವೇರಿಯರ್ ಎಲ್ವಿನ್‌ರವರು 'ರಾಷ್ಟ್ರದ ಮೂಲ ವಾರೀಸುದಾರರು' ಎಂಬುದಾಗಿ ಗುರುತಿಸಿದ್ದಾರೆ (1939: 519). 1901, 1911, 1921, 1931 ಮತ್ತು 1941ರ ಜನಗಣತಿಯ ವರದಿಗಳಲ್ಲಿ ಬುಡಕಟ್ಟು ಜನರನ್ನು ಕ್ರಮವಾಗಿ 'ಸರ್ವಜೀವಕಸಮವಾದಿಗಳು (ಅನಿಮಿಸ್ಟ್) ಬುಡಕಟ್ಟು ಸರ್ವಜೀವಕಸಮವಾದಿಗಳು (Tribal Animist) 'ಬೆಟ್ಟ ಮತ್ತು ಕಾಡಿನ ಬುಡಕಟ್ಟುಗಳು' (ಬೆಟ್ಟದ ಮತ್ತು ಕಾಡಿನ ಬುಡಕಟ್ಟುಗಳು) ಪ್ರಾಚೀನ ಬುಡಕಟ್ಟುಗಳು (Ancient tribes) ಮತ್ತು 'ಬುಡಕಟ್ಟುಗಳು' ಎಂದು ಕರೆಯಲಾಗಿದೆ. ಡಾ.ಆರ್.ಕೆ. ದಾಸ್ ಮತ್ತು ದಾಸ್ ಎಸ್.ಆರ್. ರವರು ಬುಡಕಟ್ಟು ಜನರನ್ನು 'Submerged humanity' ಎಂಬುದಾಗಿ ಮರು ನಾಮಕರಣಗೊಳಿಸಿರುವರು (1955: 29). ಗುಜರಾತ್‌ನ ಸಂತ ನರಸಿಂಹ ಮೇಹ್ತ ಅವರು 'ಗಿರಿಜನ' ಎಂಬುದಾಗಿ, ಮುಂದಕ್ಕೆ 'ಗಿರಿಜನ' ಪದವನ್ನು ಪೂಜ್ಯ ಗಾಂಧೀಜಿಯವರು ಸ್ವಾತಂತ್ರ ಹೋರಾಟದ ಕಾಲದಲ್ಲಿ ಪ್ರಚಲಿತಕ್ಕೆ ತಂದರು. ಒಂದು ನಿರ್ದಿಷ್ಟ ಭಾಷೆಯನ್ನು ಮಾತನಾಡುವ ಮತ್ತು ಸಾಮಾನ್ಯ ಜೀವನ ಪದ್ಧತಿಯನ್ನು ಹೊಂದಿಕೊಂಡು ಒಂದೇ ಪ್ರದೇಶದಲ್ಲಿ ವಾಸಿಸುವ ಸ್ಥಳೀಯ ಸಮುದಾಯಗಳ ಸಮೂಹವನ್ನು ಬುಡಕಟ್ಟು ಎಂದು ಕರೆಯಬಹುದಾಗಿದೆ. ಇಂಪೀರಿಯಲ್ ಗೆಝೆಟಿಯರ್ ನೀಡುವ ವಿವರಣೆಯಂತೆ "ಒಂದೇ ನಿರ್ದಿಷ್ಟ ಪ್ರದೇಶದಲ್ಲಿ ಅನೇಕ ಕುಟುಂಬಗಳು ಒಟ್ಟಾಗಿ ಜೀವಿಸುತ್ತಿದ್ದ ಸಾಮಾನ್ಯವಾಗಿ ಒಂದೇ ಭಾಷೆಯನ್ನಾಡುವ ಮತ್ತು ಹೊರ ಜಾಂಧವ್ಯದ ಜನರ ಸಮುದಾಯವನ್ನು" ಬುಡಕಟ್ಟು ಸಮೂಹ ಎಂದು ಕರೆಯಬಹುದಾಗಿದೆ.

ಪರಿಶಿಷ್ಟ ಪಂಗಡ ಅಥವಾ ಬುಡಕಟ್ಟು ಎಂದು ಘೋಷಿಸಲು ಕೆಲವು ಗುಣಲಕ್ಷಣಗಳನ್ನು ಕೇಂದ್ರ ಸರ್ಕಾರ ನಿಗದಿ ಮಾಡಿದೆ. ಭಾರತದಲ್ಲಿ ಆದಿಮ ಸಮುದಾಯಗಳನ್ನು ಪರಿಶಿಷ್ಟ ಪಂಗಡಗಳೆಂದು ಪರಿಗಣಿಸಲು 1953ರ ಪರಿಶಿಷ್ಟ ಜಾತಿ ಮತ್ತು ಬುಡಕಟ್ಟುಗಳ ಆಯೋಗವು ಈ ಕೆಳಗಿನ ಲಕ್ಷಣಗಳನ್ನು ಪಟ್ಟಿ ಮಾಡಿದೆ.

1. ನಾಗರಿಕ ಸಮುದಾಯದಿಂದ ದೂರವಿನ್ನು ಕಾಡು, ಬೆಟ್ಟ, ಪರ್ವತ ಅಥವಾ ಪರ್ವತದ ಅಂಚಿನಲ್ಲಿ ವಾಸಿಸುವವರು.
2. ನಿಗ್ರೋಯಿಡ್, ಆಸ್ಟ್ರೋಲಾಯಿಡ್, ಮಂಗೋಲಾಯಿಡ್ ಮತ್ತು ಕೊಕೇಷ್ಯಿಡ್ ಈ ನಾಲ್ಕು ಜನಾಂಗದಲ್ಲಿ ಯಾವುದಾದರು ಒಂದಕ್ಕೆ ಸೇರಿದವರು.
3. ಬುಡಕಟ್ಟು ಪ್ರತ್ಯೇಕ ಭಾಷೆಯನ್ನು ಹೊಂದಿರಬೇಕು.
4. ಪಿತೃಪೂಜೆ, ದೈವಗಳ ಆರಾಧನೆಯನ್ನು ಮಾಡುವ ಪ್ರಾಚೀನ ಆಚರಣೆಯನ್ನು ಹೊಂದಿರಬೇಕು.
5. ಪ್ರಾಚೀನ ಕಸುಬುಗಳಾದ ಬೇಟೆ, ಬೇಸಾಯ, ಕುಮ್ಕಿ ಕೃಷಿ ಮತ್ತು ಕಾಡುಕೃತ್ತಿಗಳನ್ನು ಸಂಗ್ರಹಿಸಿ ಜೀವನ ನಿರ್ವಹಿಸುವವರಾಗಿರಬೇಕು.
6. ಮಾಂಸವನ್ನು ಸೇವನೆಯನ್ನು ಮಾಡುವವರಾಗಿರಬೇಕು.

ಈ ಮೇಲಿನ ಅಂಶಗಳ ಆಧಾರದಲ್ಲಿ ಬುಡಕಟ್ಟು ಅಥವಾ ಆದಿವಾಸಿ ಸಮುದಾಯಗಳ ಬದುಕಿಗೆ ಪೂರಕವಾದ ವಾತಾವರಣ ಇವ್ಹಾಗಿದೆ. ಅಧ್ಯಯನದ ವ್ಯಾಪ್ತಿಯೊಳಪಟ್ಟ ಕರಾವಳಿ ಕರ್ನಾಟಕದ ಮೂರು ಜಿಲ್ಲೆಗಳಲ್ಲಿ ವೈವಿಧ್ಯಮಯ ಬುಡಕಟ್ಟು ಸಮುದಾಯಗಳನ್ನು ಗಮನಿಸಬಹುದಾಗಿದೆ. ಆದರೆ ಕೆಲವೊಂದರ ಬುಡಕಟ್ಟುಗಳ ಎಲ್ಲಾ ಗುಣಲಕ್ಷಣ ಹೊಂದಿದ್ದರೂ ಸಹ ಕುಣಬಿ, ಕುಂಬ್ರಿ ಮರಾಠಿ, ವಾರಾಟಿ, ದಕ್ಷಿಣಕನ್ನಡ ಜಿಲ್ಲೆಯಲ್ಲಿ ವಾಸ್ತವ್ಯವಿರುವ ಕುಡುಬಿ ಸಮುದಾಯಗಳನ್ನು ಬುಡಕಟ್ಟು ಸಮುದಾಯ ವರ್ಗಕ್ಕೆ ಸೇರಿಸಲಾಗಿಲ್ಲ. ಮದಾಸ ಸಾಮ್ಯ ಸಮುದಾಯದವರು ಮಾತ್ರ ಪರಿಶಿಷ್ಟ ಪಂಗಡದ ಸೌಲಭ್ಯಗಳನ್ನು ಕೆಲವೊಂದು ಇತಿಮಿತಿಗಳಲ್ಲಿ ಪಡೆದುಕೊಂಡಿರುವುದು ಕ್ಷೇತ್ರಕಾರ್ಯ ಸಂದರ್ಭದಲ್ಲಿ ಕಂಡುಬಂದಿರುತ್ತದೆ.

ಕರಾವಳಿ ಕರ್ನಾಟಕದಲ್ಲಿ ಹಲವಾರು ಬುಡಕಟ್ಟು ಹಿಂದೂ ಜಾತಿಗಳೊಂದಿಗೆ ಬೆರೆಯದೆ ಬಹಳ ಕಾಲ ಸ್ವತಂತ್ರವಾಗಿದ್ದು, ತಮ್ಮ ಪ್ರತ್ಯೇಕತೆಯ ಮೂಲಕ ತಮ್ಮದೇ ವಿಶಿಷ್ಟವಾದ ಸಂಸ್ಕೃತಿಯನ್ನು ಉಳಿಸಿಕೊಂಡು ವೈದಿಕ ನೆರಳು ಸಹ ಈ ಸಮಾಜದ ಮೇಲೆ ಬೀಳಲಿಲ್ಲ. ಕೆಲವೊಂದು ಸಂದರ್ಭದಲ್ಲಿ ಹಿಂದೂ ಜಾತಿಯೊಂದಿಗೆ ಭಾಗವಹಿಸಿದರೂ ತಮ್ಮ ಪರಂಪರೆ ಸಂಪ್ರದಾಯ, ಜೀವನಕ್ರಮಗಳನ್ನು ಉಳಿಸಿಕೊಂಡಿರುತ್ತಾರೆ. ಆದರೆ ಇತ್ತೀಚೆಗೆ ಕೆಲವೊಂದು ಬುಡಕಟ್ಟು ಸಮುದಾಯಗಳು ನಿಧಾನವಾಗಿ ಜಾತಿ ಸಮಾಜವಾಗಿ ಪರಿವರ್ತನೆಗೊಳ್ಳುತ್ತಿದೆ. ಇಲ್ಲಿ ನಿರ್ಮಲ್ ಕುಮಾರ್ ಬೋಸ್ ಅವರ ಅಭಿಪ್ರಾಯವನ್ನು ಉಲ್ಲೇಖಿಸಬೇಕಾಗುತ್ತದೆ. 'ಎಲ್ಲಿಯವರೆಗೆ ಬುಡಕಟ್ಟು ಸಮುದಾಯವು ತಮ್ಮ ಹುಟ್ಟು-ವಿವಾಹ-ಸಾವು ಇವುಗಳಿಗೆ ಬ್ರಾಹ್ಮಣ ಪುರೋಹಿತರಿಗೆ ಅವಕಾಶ ಮಾಡಿಕೊಡುವುದೋ ಆಗ ಬುಡಕಟ್ಟು ಸಮುದಾಯವು ತನ್ನ ಮೂಲ ಸ್ವರೂಪವನ್ನು ಕಳೆದುಕೊಂಡು ಜಾತಿಯಾಗಿ ಬದಲಾವಣೆಯಾಗುತ್ತದೆ.' **ಧೀರೇಂದ್ರನಾಥ ಮುಜುಂದಾರ್**ರವರು ಭಾರತದಲ್ಲಿ ಪರಿವರ್ತನೆಗೆ ಒಳಗಾಗಿರುವ ಬುಡಕಟ್ಟುಗಳನ್ನು ಮೂರು ಹಂತದಲ್ಲಿ ಗುರುತಿಸಿದ್ದಾರೆ.

- ❖ ಜಾತಿಗಳಾಗಿ ಸಂಪೂರ್ಣ ಪರಿವರ್ತಿತವಾಗಿರುವ ಬುಡಕಟ್ಟುಗಳು
- ❖ ಹಿಂದುಗಳೊಡನೆ ಭಾಗವಹಿಸಿಯೂ ತಮ್ಮ ಸಂಪ್ರದಾಯಗಳನ್ನೂ, ನಂಬಿಕೆಗಳನ್ನೂ ಉಳಿಸಿಕೊಂಡ ಬುಡಕಟ್ಟುಗಳು
- ❖ ಹಿಂದೂಧರ್ಮದ ಪ್ರಭಾವಕ್ಕೆ ಒಳಗಾಗದೆ, ಆ ಧರ್ಮದ ದಬ್ಬಾಳಿಕೆಯನ್ನು ಸಹಿಸದೆ ತಮ್ಮ ಸ್ವಾತಂತ್ರ್ಯಕ್ಕಾಗಿ ಪ್ರತ್ಯೇಕವಾಗಿ ಹೋರಾಡುತ್ತಿರುವ ಬುಡಕಟ್ಟುಗಳು.

ಆ) ಕುಂಬ್ರಿ ಮರಾಠಿ

ಕುಂಬ್ರಿ ಮರಾಠಿ ಸಮುದಾಯದವರು ಉತ್ತರಕನ್ನಡ ಜಿಲ್ಲೆಯ ಯಲ್ಲಾಪುರ, ಶಿರಸಿ, ಕುಮಟಾ, ಅಂಕೋಲಾ, ಸಿದ್ದಾಪುರ, ಹೊನ್ನಾವರ ಹಾಗೂ ಭಟ್ಕಳ ತಾಲೂಕುಗಳಲ್ಲಿ ಸಾಂದ್ರವಾಗಿ ಕಂಡುಬರುತ್ತಾರೆ. ಇವರು ಪಶ್ಚಿಮಘಟ್ಟಗಳ ಕಣಿವೆ ಪ್ರದೇಶಗಳಲ್ಲಿ ಚದುರಿದಂತೆ ವಾಸವಾಗಿದ್ದು, ಆರಂಭಕಾಲದಲ್ಲಿ ಕುಮೇರಿ ಕೃಷಿ ಪದ್ಧತಿಯನ್ನು ಅನುಸರಿಸುತ್ತಾ ಇತ್ತೀಚೆಗೆ ಒಂದೊಂದು ಕಡೆ ನೆಲೆನಿಂತಿರುವಂತೆ ಕಂಡುಬರುತ್ತದೆ.

ಕುಂಬ್ರಿ ಮರಾಠಿಗರು, ಶಿರಸಿ, ಸಿದ್ದಾಪುರ, ಕುಮಟಿ, ಹೊನ್ನಾವರ, ಭಟ್ಕಳ, ಯಲ್ಲಾಪುರದ ದಕ್ಷಿಣಭಾಗ, ಅಂಕೋಲಾ ತಾಲೂಕಿನ ಪೂರ್ವ ಭಾಗಗಳಲ್ಲಿ ನೆಲೆ ನಿಂತಿರುವುದನ್ನು ಕ್ಷೇತ್ರಕಾರ್ಯ ಸಂದರ್ಭದಲ್ಲಿ ಗುರುತಿಸಲಾಗಿದೆ. ಯಲ್ಲಾಪುರ ತಾಲೂಕಿನ ಕೆಳಾಸೆ, ಇಳೆಹಳ್ಳಿ, ಹೆಮ್ಮಾಡಿ, ಕೊಡ್ಲಗದ್ದೆ, ಅರೆಬೈಲು, ಸುಂಕನಾಳ, ಮಂಚಿಕೇರಿ, ಕೋಣೆಮನೆ, ಕೊಂಡೆಮನೆ, ಕನ್ನಡಗುಂದ, ಬೆಳಗೇರಿ, ಚಿಪಗೇರಿ ಕಡೆಗಳಲ್ಲಿ ಶಿರಸಿ ತಾಲೂಕಿನ ಬೆಡಸಗಾಂವ, ಎಕ್ಕಂಬಿ, ಬಿಸಲಕೊಪ್ಪ, ಮಳಗಿ, ಸೋಂದಾ, ಸಾಲ್ಕಣಿ, ವಾಜಗದ್ದೆ, ಜಡ್ಡಿಗದ್ದೆ, ದೇವನಹಳ್ಳಿ, ಬೆಣಂಗಾವ, ಮೇಲುಕೊಪ್ಪಲು, ಮತ್ತಿಘಟ್ಟಾ, ಸಮಲೆ, ಬಕನಗುಣಿ, ಕಲ್ಲಳ್ಳಿ, ಮುಂಡಗಾರುಗಳಲ್ಲಿ, ಸಿದ್ದಾಪುರ ತಾಲೂಕಿನ ನಿಲಕುಂದ, ಬಿರಲಮಕ್ಕಿ, ಕೋಟಗದ್ದೆ, ಹೆಗ್ಗರಣಿ, ಹಳ್ಳಿಬೈಲು, ಮಂಡಾನಗೆಳಲ್ಲಿ, ಕುಮಟಾ ತಾಲೂಕಿನ ಬಂಗಾಣಿ, ಮೊರಸ, ಕವಲೋಡಿ, ಸಾಂತಗಲ್, ಉಳವ್ಹರು ಮಠ, ಮೋಸಮನೆ, ನಾಗೂರು ಬಂಡಗಾರ, ಯೋಣ, ಹಳ್ಳಿಬೈಲುಗಳಲ್ಲಿ, ಹೊನ್ನಾವರ ತಾಲೂಕಿನ ಮಂಕಿ ಗೇರುಸೊಪ್ಪ, ಅಡಿಕೆಕುಳಿ, ಸಂಪೆಳ್ಳಿ ಹಡಿನಬಾಳಗಳಲ್ಲಿ, ಭಟ್ಕಳದ ಹಡಿಲು, ಹೆಬಳೆ ಕುಗಾರ ಕೊಪ್ಪಗಳಲ್ಲಿ ವಾಸ್ತವ್ಯ ನೆಲೆಗಳನ್ನು ಇವರನ್ನು ಗುರುತಿಸಲಾಗಿದೆ.

ಕುಂಬ್ರಿ ಮರಾಠಿಗರು ಅಲೆಮಾರಿ ಪಶುಪಾಲಕರು ಮತ್ತು ಕುಮ್ರಿ ಬೇಸಾಯ ಪದ್ಧತಿಯನ್ನು ರೂಢಿಸಿಕೊಂಡು ಬಂದಿರುವ ಮಲಿಗ ಸಮುದಾಯಕ್ಕೆ ಸೇರಿದವರು. 'ಕುಂಬ್ರಿ' ಎಂಬ ಪದವು 'ಕುಮ್ರಿ' ಎಂಬ ಪದದ ಸ್ಥಳೀಯ ಒಳಕೆಯ ರೂಪವಾಗಿದೆ. 'ಕುಮ್ರಿ' ಬೇಸಾಯ ಮಾಡುತ್ತಾ ಉತ್ತರಕನ್ನಡದ ಇಳಿಜಾರು ಕಣಿವೆಗಳಲ್ಲಿ ವಾಸಿಸುವ ಈ ಸಮುದಾಯ ಇಂದಿಗೂ ಜೆಲ್ಲೆಯ ಹಲವೆಡೆ ಕುಮ್ರಿ ಬೇಸಾಯ ಕ್ರಮವನ್ನು ಅನುಸರಿಸಿರುತ್ತಾರೆ. ಜನಾಂಗೀಕವಾಗಿ ಇವರಿಗೆ ಸಂಬಂಧಿಸಿರುವ ಬೇಸಾಯವನ್ನು ಇತರ ಸಮುದಾಯಗಳಾದ ಕುಣಬಿ, ಕುಡುಬಿ, ಮಾರಾಟಿ, ಮರಾಠಿ, ಅರ್ಬ ಮರಾಠಿ, ಕ್ಷತ್ರಿಯ ಮರಾಠಿ, ಮರಾಟಿನಾಯ್ಕ ಸಮುದಾಯದವರು ಸಹ ಕುಮ್ರಿ ಬೇಸಾಯಗಾರರಾಗಿರುವರು. ಈ ಸಮುದಾಯ ಕುಮ್ರಿ ಬೇಸಾಯ ಅನುಸರಿಸಿಕೊಂಡು ಬಂದ ಕಾರಣಕ್ಕೆ 'ಕುಮ್ರಿ ಮರಾಠಿ'ಗರು ಅಥವಾ 'ಕುಂಬ್ರಿ ಮರಾಠಿ'ಗರು ಎಂದು ಕರೆಯಲಾಗಿರುತ್ತದೆ. ಇವರು ಮೂಲತಃ ಸೈನಿಕ ಸಮುದಾಯ ಎಂಬುದಾಗಿ ಚರಿತ್ರೆಕಾರರು ಕರೆದಿದ್ದಾರೆ. ಅಲ್ಲದೆ, ಶಿವಾಜಿ ಸೈನ್ಯದಲ್ಲಿ ಈ ಸಮುದಾಯದವರು ಹೆಚ್ಚಿನ ಸಂಖ್ಯೆಯಲ್ಲಿದ್ದರು. ಶಿವಾಜಿಯು ಕರ್ನಾಟಕದ ಗಡಿ ಪ್ರದೇಶದಲ್ಲಿ ಕನ್ನ ರಾಜ್ಯ ವಿಸ್ತರಿಸುವ ಭಾಗವಾಗಿ ಈ ಸಮುದಾಯಗಳನ್ನು ಇಲ್ಲಿಗೆ ಪದೇ ಪದೇ ಮುನ್ನಡಿಸಿರಬಹುದೆಂದು ಅನೇಕ ಚರಿತ್ರೆಕಾರರು ಊಹಿಸಿರುತ್ತಾರೆ.

ಈ ಸಮುದಾಯದ ಜನಸಂಖ್ಯೆಯ ಕುರಿತು ನಿಖರವಾದ ಮಾಹಿತಿಗಳಿಲ್ಲ. 2011ರ ಜನಗಣತಿಯಲ್ಲಿಯೇ ಸಹ ಕುಂಬ್ರಿ ಮರಾಠಿಗರ ಕುರಿತು ನಿಖರವಾದ ಹಾಗೂ ಪ್ರತ್ಯೇಕವಾದ ಅಂಕಿಅಂಶಗಳು ಲಭ್ಯವಿಲ್ಲ. ಆದರೆ ಸಮುದಾಯದ ಹಿರಿಯರು, ಜನಪ್ರತಿನಿಧಿಗಳು ಸಭೆ ಸೇರಿ ಜಿಲ್ಲಾ ಮಟ್ಟದಲ್ಲಿ ಕುಂಬ್ರಿ ಮರಾಠಿ ಅಭಿವೃದ್ಧಿ ಸಂಘವನ್ನು ರಚಿಸಿಕೊಂಡು ಮಾಹಿತಿ ಸಂಗ್ರಹಿಸಿದ್ದು, ಉತ್ತರಕನ್ನಡ ಜಿಲ್ಲೆಯಲ್ಲಿ ಸುಮಾರು 15000 ರಿಂದ 16000 ಜನರು ಇರುವ ಬಗ್ಗೆ ಹೇಳಲಾಗುತ್ತಿದೆ.

ಇವರು ಹೆಣ್ಣಾಗಿ ವಾಸಿಸುವ ಪ್ರದೇಶಗಳಿಗೆ 'ಕೊಪ್ಪ' ಎಂದು ಕರೆಯುತ್ತಾರೆ. ಅಲ್ಲದೆ ಇವರು ಬೇರೆ ಬೇರೆ ಪ್ರದೇಶಗಳಿಗೆ 'ಕೊಪ್ಪ' ಎಂದು ಕರೆದರೆ ಕುಂಬ್ರಿ ಮರಾಠಿಗರ ಹಳ್ಳಿ ಎಂದರ್ಥ. ಎಂದೇ ಕಡೆ ಗುಂಪು ಗುಂಪಾಗಿರುವ ಇವರ ಸಮುದಾಯದ ಮುಖಂಡನನ್ನು 'ಗೌಡ' ಎಂದು ಕರೆಯುವ ವಾಡಿಕೆ ಇದೆ. ಸಮುದಾಯದಲ್ಲಿ ಉಂಟಾಗುವ ನ್ಯಾಯ ವ್ಯವಸ್ಥೆ, ಬಂದವರೆಲ್ಲರೂ ಕೂಡ ಕೈಗೊಳ್ಳುವ ಚಟುವಟಿಕೆಗಳು, ಹೊಂದಾಣಿಕೆ ಸಹಬಾಳ್ವೆಯೂ ಸೇರಿದಂತೆ ಸಹಜ ಹಾಗೂ ಸರಳ ಜೀವನ ನಿರ್ವಹಣೆಗೆ ಈ 'ಗೌಡ' ಸಲಹೆ ಮಾರ್ಗದರ್ಶನ ನೀಡುತ್ತಾರೆ. ಸಮುದಾಯದ ಆಚಾರ – ವಿಚಾರ, ಸಂಪ್ರದಾಯಗಳನ್ನು ಮೀರಿದರೆ ಶಿಕ್ಷೆ ವಿಧಿಸುವ ಪದ್ಧತಿಯೂ ಜಾರ್ಯಲ್ಲಿದೆ.

ಕುಂಬ್ರಿ ಮರಾಠಿಗರು ಶ್ರಮ ಜೀವಿಗಳು, ಕೃಷಿ ಹಾಗೂ ಅರಣ್ಯೋತ್ಪನ್ನಗಳ ಮೇಲೆಯೇ ಅವಲಂಬಿತರಾಗಿದ್ದವರು. ಇವರು ಸ್ಥಳಾಂತರ ಬೇಸಾಯ ಪದ್ಧತಿಯನ್ನು ರೂಢಿಸಿಕೊಂಡು ಆಹಾರ ಹಾಗೂ ರಕ್ಷಣೆಗಾಗಿ ಕಾಡಂಚಿನ ರಾಜ್ಯಗಳಿಗೆ ವಲಸೆ ಬಂದಿರುವುದ್ದಾಗಿದೆ. ಅವರ ಉಡುಗೆ – ತೊಡುಗೆ, ಆಹಾರ, ಭಾಷೆ ಹಾಗೂ ಕುಲ (ಬಳಿ) ಪದ್ಧತಿ, ಒಳಾಡಳಿತ, ರೂಢಿ-ಸಂಪ್ರದಾಯಗಳು, ಪ್ರಕೃತಿ ಆರಾಧನೆ, ಕುಲದೇವರು, ಶಕ್ತಿಯಾರಾಧನೆ, ಗಣಿಹಬ್ಬ, ಭೂಮಿ ಹುಣ್ಣಿಮೆ, ಸುಗ್ಗಿ, ಹೊಸಕ್ಕಿ ಹಬ್ಬ, ಕಣಹಬ್ಬ, ಮಾಷ್ಟಿ, ಮಾಸ್ತಿ ಆರಾಧನೆ, ಕುಲ / ಪ್ರೇತಾರಾಧನೆ ಮುಂತಾದಾಗಳಲ್ಲಿ ಕೃಷಿಗೆ ಅವಲಂಬಿತ ಹಬ್ಬಗಳನ್ನು ಭಯ ಭಕ್ತಿಯಿಂದ ಆರಾಧಿಸಿಕೊಂಡು ಬಂದಿರುವವರಾಗಿರುತ್ತಾರೆ.

ಕುಂಬ್ರಿ ಮರಾಠಿಗರು ಆರಂಭದಲ್ಲಿ ಸ್ಥಳಾಂತರ ಬೇಸಾಯವನ್ನು ಅವಲಂಬಿಸಿದ ಇವರು ಬರುಬರುತ್ತಾ ಒಂದೆಡೆ ನೆಲೆ ನಿಂತು ಕೃಷಿ ಚಟುವಟಿಕೆ ಕೈಗೊಂಡು ಬರುತ್ತಿರುವುದನ್ನು ಕ್ಷೇತ್ರಕಾರ್ಯ ಸಂದರ್ಭದಲ್ಲಿ ಗಮನಿಸಿರುವೆನು. ಆಧುನಿಕತೆ ಹಾಗೂ ನಾಗರಿಕತೆಯ ಪರಿಣಾಮವಾಗಿ ಕೃಷಿಯನ್ನು ಹೊರತುಪಡಿಸಿ ಇತರ ಕಸುಬುಗಳಲ್ಲಿ ತೊಡಗಿಸಿಕೊಂಡಿರುವುದನ್ನು ಕೂಡ ಗಮನಿಸಲಾಯಿತು. ಅರಣ್ಯೋತ್ಪನ್ನಗಳನ್ನು ಸಂಗ್ರಹಿಸಿ ಮಧ್ಯವರ್ತಿಯವರಿಗೆ ಮಾರಾಟ ಮಾಡಿ, ಉಳಿದ ಹಣದಲ್ಲಿ ಜೀವನಾವಶ್ಯಕ ವಸ್ತುಗಳನ್ನು ಖರೀದಿಸಿ ಜೀವನ ನಿರ್ವಹಿಸುತ್ತಿದ್ದಾರೆ.

ಕುಂಬ್ರಿ ಮರಾಠಿಗರು ಮೂಲತಃ ಕೃಷಿ ಪಂಥದವರಾಗಿದ್ದರೆಂದೂ ಇವರು ಪೂಜಿಸುವ 'ಮಹಾದೇವ' ಮತ್ತು ಕುರ್ಮಿನಾಥ ಅಥವಾ 'ಕಲ್ಲರಾಜ್' ಮುಂತಾದ ದೇವರನ್ನು ಆರಾಧಿಸುತ್ತಾರೆ.

ಇ) ಮರಾಟಿನಾಯ್ಕ

ದಕ್ಷಿಣಕನ್ನಡ, ಉಡುಪಿ, ಕೇರಳರಾಜ್ಯದ ಕಾಸರಗೋಡು ಜಿಲ್ಲೆಯಲ್ಲಿ ಮರಾಟಿಗರೆಲ್ಲರು ನಾಯ್ಕ / ನಾಯಕ ಎಂಬ ಕುಲನಾಮವನ್ನು ಹೊಂದಿದ್ದಾರೆ. ನಾಯ್ಕ/ನಾಯಕ ಎಂಬ ಅಂಕಿತದಿಂದ ಅಂತ್ಯಗೊಳ್ಳುವ ಹೆಸರುಳ್ಳವರೆಲ್ಲಾ ಮರಾಟಿಗರಲ್ಲ. ಈ ನಾಮ ಜೆಲ್ಲೆಯ ಇತರ ಸಮುದಾಯಗಳಾದ ಗೌಡ ಸಾರಸ್ವತ, ಬಂಟ, ಬಿಲ್ಲವ, ರಾಮಕ್ಷತ್ರಿಯ, ಪರಿವಾರ ಬಂಟ, ಪಾರ್ವಿ, ನಾಳದ ಕೊಂಕಣಿ, ಸಮಾನರ, ಮಲೆನಾಡಿನಒಕ್ಕಲಿಗ, ಬಯಲು ಸೀಮೆಯ ಒಕ್ಕಲಿಗ, ಬೇಡ, ಪಾಲ್ಬೇಕ, ಈಡಿಗ, ಇನ್ನೂ ಅನೇಕ

ಸಮುದಾಯಗಳಲ್ಲಿದೆ. ವಾಕ್ಯವಾಗಿ ನಾಯ್ಕ (ನಾಯಕ) ಎಂಬುದು ಗೌರವದ ಮುಖಂಡನಿಗಿರುವ ಹೆಸರು. ಸೈನಿಕ ವ್ಯವಸ್ಥೆಯಲ್ಲಿ ಜವಾಬ್ದಾರಿಯುತ ಒಂದು ನಿರ್ದಿಷ್ಟ ಹುದ್ದೆ ಅಲ್ಲದೆ. 'ನಾಯಕ' ಎಂಬುದು ಸಂಸ್ಕೃತ ಮೂಲಕ ಪದವಾಗಿದ್ದು.

ಮರಾಟಿಗರು ಮೂಲತಃ ಇಂದಿನ ಮಹಾರಾಷ್ಟ್ರ ರಾಜ್ಯದಿಂದ ಬಂದವರು. ಮರಾಠಿಯ ಉಚ್ಚಾರಣೆಯಾದರನ್ನು ಮಹಕನಾಡುವುದರಿಂದ 'ಮಹಾರಾಷ್ಟ್ರ' ಮೂಲ ಎಂದು ಹೇಳಿದರೆ ತಪ್ಪಾಗಲಾರದು. ಶಿವಾಜಿಯ ಅಥವಾ ಪೇಶ್ವೆಗಳ ಸೈನಿಕರಾಗಿಯೂ ಇರಲು ಸಾಧ್ಯವಿದೆ. ಸೇವಾದಳದಲ್ಲಿ ನಾಯ್ಕ (ನಾಯಕ್) ಎನ್ನುವ ಹುದ್ದೆಯಲ್ಲಿ ಮರಾಟಿಗರ ಪೂರ್ವಜರು ಸೇವೆ ಸಲ್ಲಿಸುತ್ತಿದ್ದುದರಿಂದ ರೂಢಿಗತವಾಗಿ 'ನಾಯಕರು' ಎಂಬ ಪದ ಹೆಸರಲ್ಲಿ ಸೇರಿರಲು ಸಾಧ್ಯವಿದೆ. ಬಳಸಿ ಬಂದ ಕಾಲದಲ್ಲಿ ಅವಿಭಜಿತ ದಕ್ಷಿಣಕನ್ನಡ ಜಿಲ್ಲೆಯ ತುಳುವರು ಮರಾಟಿಗರ ಮೂಲ ಇತಿಹಾಸ ತಿಳಿದು 'ಮರಾಟಿ ನಾಯ್ಕರು' ಎಂಬ ನಾಮಕರಣದಿಂದ ಕರೆಯಲು ಸಾಧ್ಯವಿದೆ. ಇವರ ಹೆಸರಿನ ಮುಂದೆ ನಾಯ್ಕ (ನಾಯಕ) ಎಂಬ ಕುಲನಾಮವಿದ್ದು ಅವರನ್ನು 'ಮರಾಟಿ ನಾಯ್ಕ್' ಎಂಬ ಜಾತಿ ಸೂಚಕ ಪದವನ್ನು ಬಳಸುತ್ತಾ ಬರಲಾಗಿದೆ. (ಮರಾಟಿಗರನ್ನು 1956ರ ಮೈಸೂರು ರಾಜ್ಯದ ಪರಿಶಿಷ್ಟ ಜಾತಿ ಮತ್ತು ಪರಿಶಿಷ್ಟ ಪಂಗಡದ ಆದೇಶಿತ ಪಟ್ಟಿಯ ಭಾಗ ಗಿಖಿಖಿಖ ಕ್ರಮಸಂಖ್ಯೆ 6 ಮತ್ತು 7 (4) ಪ್ರಕಾರ ಪರಿಶಿಷ್ಟ ಪಂಗಡದ ಪಟ್ಟಿಗೆ ಸೇರಿಸಲಾಗಿದೆ.)

ಭಾರತದ ಇತರ ಬುಡಕಟ್ಟು ಜನಾಂಗಗಳಂತೆ ಮರಾಟಿ ನಾಯ್ಕರು ಹಳ್ಳಿಗಳಲ್ಲಿ ತಮ್ಮದೇ ಆದ ವಾಸ್ತವ್ಯಗಳನ್ನು ಹೊಂದಿದ್ದು ಒಟ್ಟಾಗಿ ಒಂದೇ ಕಡೆ ವಾಸಿಸುತ್ತಿದ್ದಾರೆ. ಇವರು ಕೊಂಕಣಿ ಮರಾಠಿ ಮಿಶ್ರಿತ ಆಡುಭಾಷೆ ಮಾತನಾಡುತ್ತಾರೆ. ವಿಭಿನ್ನ ನಂಬಿಕೆ ಮತ್ತು ಆಹಾರ ನಿಷೇಧಗಳಿಂದಾಗಿ ಇವರು ಮಾಂಸಹಾರಿಗಳಾಗಿದ್ದಾರೆ.

ಪಿತೃಪ್ರಧಾನ ಅವಿಭಕ್ತ (Patriarchal Joint family) ಮತ್ತು ವಿಸ್ತರಿತ ಕುಟುಂಬ (ಇಣಣಿಟಿಜಿಜ ಈಟಿಟಿಟಿಟಿಜಿ) ಗಳು ಮರಾಟಿ ನಾಯ್ಕರಲ್ಲಿ ಕಾಣುವ ಮುಖ್ಯ ಕುಟುಂಬದ ಪ್ರಕಾರಗಳಾದರೂ ಅವುಗಳು ಇಂದು ಸಣ್ಣ ಅಣು ಕುಟುಂಬಗಳಾಗಿ (Nuclear Family) ಬದಲಾವಣೆಗೊಳ್ಳುತ್ತಿದೆ. ಇವರಲ್ಲಿ ಇಂದಿಗೂ ಅನೇಕ ಪ್ರಾಚೀನ ಹೆಸರುಗಳನ್ನು ಕಾಣಬಹುದು. ಗಂಡಸರಲ್ಲಿ ನಾಯ್ಕ ಹಾಗೂ ಹೆಂಗಸರಲ್ಲಿ 'ಬಾಯಿ' ಎಂಬ ನಾಮಕರಣದಿಂದ ಕೂಡಿಕೊಂಡಿರುತ್ತದೆ. ಇವರಲ್ಲಿ ಹಲವಾರು 'ಬಳಿ' ಕುಲಗಳನ್ನು, ವಿವಾಹವು ಬಳಿಯ ಹೊರಗೆ ನಡೆಯುತ್ತದೆ. ಮರಾಟಿ ನಾಯ್ಕರಲ್ಲಿ 96 ಬಳಿಗಳಿವೆ ಎಂಬ ನಂಬಿಕೆಯಿದೆ. ಎಲ್ಲಾ ಬುಡಕಟ್ಟು ಜನಾಂಗಗಳಲ್ಲಿ ಇರುವಂತೆ ಕುಲ ಲಾಂಛನದ (Totemism) ಲಕ್ಷಣಗಳು ಹೊಂದಿರುತ್ತದೆ.

ಮರಾಟಿ ನಾಯ್ಕರ ವಿವಾಹ ಪದ್ಧತಿ ಪ್ರಸ್ತುತ ಹಿಂದೂ ಸಂಪ್ರದಾಯ ರೀತಿಯಲ್ಲೇ ನಡೆಯುತ್ತಿದ್ದಾದರೂ ಅನೇಕ ಪ್ರಾಚೀನ ಬುಡಕಟ್ಟು ಸಂಸ್ಕಾರಗಳು, ವಿಧಿ ವಿಧಾನಗಳು, ರೂಢಿಗಳು, ಸಂಪ್ರದಾಯ ನಂಬಿಕೆಗಳನ್ನು ನಾವು ಕಾಣಬಹುದು. ಇವರಲ್ಲಿ 'ತೆಳ' ಎಂದು ಕರೆಯುವ ವಧುದಕ್ಷಿಣೆ ಪದ್ಧತಿಯನ್ನು ಅನುಸರಿಸುತ್ತಾರೆ. ಇತರ ಹಿಂದೂ ಸಮುದಾಯಗಳ ಹಾಗೂ ನೆರೆ ಹೊರೆಯವರ ಪ್ರಭಾವಗಳಿಂದ ವರದಕ್ಷಿಣೆ ಪದ್ಧತಿಯೂ ಇವರಲ್ಲಿ ರೂಢಿಯಲ್ಲಿದೆ. ಪಿತೃ ಆರಾಧನೆ, ಭೂತಾರಾಧನೆ, ಸರ್ವಚೇತನವಾದ, ಅಲೌಕಿಕ ಶಕ್ತಿ ಆರಾಧನೆ, ಕುಲದೇವತಾ ಆರಾಧನೆ ಇತ್ಯಾದಿಗಳು ಮರಾಟಿ ನಾಯ್ಕರ ಧರ್ಮದ ಮುಖ್ಯ ಗುಣಲಕ್ಷಣವಾಗಿದೆ.

ಮರಾಟಿ ನಾಯ್ಕ ಹಿಂದೆ ಅನೇಕ ವರ್ಷಗಳ ಕಾಲ ಕುಮೇರಿ ಬೇಸಾಯ (Shifting ultivation) ಮಾಡುತ್ತಾ ಕಾಡಿನಿಂದ ಕಾಡಿಗೆ ತಮ್ಮ ವಸತಿಯನ್ನು ಬದಲಾಯಿಸುತ್ತಿದ್ದರು. ಇದು ಇವರ ಅಲೆಮಾರಿ ಬುಡಕಟ್ಟು ಲಕ್ಷಣವನ್ನು ಸೂಚಿಸುತ್ತದೆ. ಹಾಗಾಗಿ ಮರಾಟಿಗರನ್ನು ಕುಂಬ್ರಿ ಮರಾಠಿಗರು ಎಂದು ಕರೆಯುವ ಮಾತಿದೆ. ಸಾಮಾನ್ಯವಾಗಿ ಇವರ ಪುರುಷರು ಬೇಟೆಯಾಡುವುದು ಅಕ್ಕಿ ಮುಡಿ ಕುಟ್ಟುವುದು, ಬಾವಿ ತೋಡುವುದು, ಮರ ಕಡಿಯುವುದು, ಕಂಬಳದ ಕೋಣಗಳನ್ನು ಸಾಕುವುದು, ಕರಕಾರಿ ಕೃಷಿ, ಕಾಡಿನಿಂದ ಜೇನು ಸಂಗ್ರಹಿಸುವುದು ಹಾಗೆಯೇ ಮಹಿಳೆಯರು ಚಾಪೆ ಕಂಬಾರಿಸುವುದು ಇತ್ಯಾದಿ ಕೆಲಸಗಳನ್ನು ಮಾಡಲು ಕನ್ನಡೇ ಆದ ದೇಹಿ ಚ್ಚಾಧ ಮತ್ತು ನೈಪುಣ್ಯತೆಗಳನ್ನು ಗಳಿಸಿದವರಾಗಿದ್ದಾರೆ.

ಕರ್ನಾಟಕ ರಾಜ್ಯದಲ್ಲಿ 1961ರಿಂದ ಭೂಸುಧಾರಣಾ ಕಾಯ್ದೆಯಿಂದಾಗಿ ಗೇಣಿಪದ್ಧತಿಯನ್ನು ಅನುಸರಿಸಿಕೊಂಡು ಹೋಗುತ್ತಿದ್ದ ಅನೇಕ ಮರಾಟಿ ನಾಯ್ಕ ಕುಟುಂಬಗಳಿಗೆ ತಮ್ಮ ಮಾಲಕರಿಂದ ಭೂಮಿ ಪಡೆಯಲು ಅನುಕೂಲವಾಯಿತು. ಆದರೆ ಕೆಲವು ಕುಟುಂಬಗಳಿಗೆ ಅತೀ ಕಡಿಮೆ ಭೂಮಿ ಲಭಿಸಿತು. ಇನ್ನು ಕೆಲವು ಈಡೆ ಭೂಮಿ ಸಿಗದೆ ವಿವಾದಗಳು ನಡೆದ ಮತ್ತು ನಡೆಯುತ್ತಿರುವ ಕುರಿತು ಕ್ಷೇತ್ರಕಾರ್ಯದ ಸಂದರ್ಭದಲ್ಲಿ ಗಮನಿಸಲಾಗಿದೆ. ಅಲ್ಲದೆ ಇವರ ಬಡತನ ಅನಕ್ಷರತೆ, ಅಜ್ಞಾನದಿಂದಾಗಿ ಇನ್ನೂ ಅನೇಕ ಕುಟುಂಬಗಳಿಗೆ ಭೂಸುಧಾರಣಾ ಯೋಜನೆಯಲ್ಲಿ ಭೂಮಿ ಪಡೆಯಲು ಅಸಾಧ್ಯವಾಯಿತು. ತಮ್ಮ ಭೂಮಾಲಕರೊಂದಿಗೆ ಹೋರಾಟ ಮಾಡಲು ವಿಫಲರಾದವರು ಬೇರೆಡೆ ಹೋಗಿ ಗುಡ್ಡ ಬೆಟ್ಟ ಪ್ರದೇಶದಲ್ಲಿ ನೆಲೆಸಬೇಕಾಯಿತು.

ಒಟ್ಟಾರೆ ಇವರು ಕ್ರಮದಿಂದ ಬುಡಕಟ್ಟು ರಾಜ್ಯದ ಒಂದು ಮುಖ್ಯ ಮೂಲ ಜನಾಂಗವೆಂದು ಪರಿಗಣಿಸಬಹುದು. ಈಗಾಗಲೇ ವಿವರಿಸಿದಂತೆ ಇವರು ಅರ್ಥಿಕವಾಗಿ ಕೃಷಿಕೇತರವಾಗಿ ತೀರಾ ಹಿಂದುಳಿದಿದ್ದು ಸಾಮಾಜಿಕವಾಗಿ ಕೆಳಮಟ್ಟದಲ್ಲಿದ್ದು ಹಾಗೂ ರಾಜಕೀಯವಾಗಿ ಅಸಂಘಟಿತರಾಗಿದ್ದಾರೆ.

೩) ಮರಾಟಿ

ಮರಾಟಿ ಬುಡಕಟ್ಟಿನವರನ್ನು ಮರಾಠಿ ಅಥವಾ ಮರಾಠ ಎಂಬುದಾಗಿ ಕೂಡ ಕರೆಯುತ್ತಾರೆ. ತಮ್ಮನ್ನು ತಾವು ಕ್ಷತ್ರಿಯರೆಂದು ಗುರುತಿಸಿಕೊಂಡು ಕ್ಷತ್ರಿಯ ಮರಾಠಿ ಎಂತಲೂ, 'ಅರ್ಯ', 'ಆರೇರ' ಎಂಬುದಾಗಿ ಗುರುತಿಸಿ ಆರ್ಯ ಮರಾಠ ಎಂಬುದಾಗಿ ಗುರುತಿಸಿಕೊಂಡಿರುವವರು. ಇವರು ಆಸ್ಪೃಶ್ಯರಲ್ಲ. ಬ್ರಾಹ್ಮಣೇತರ ಮರಾಟಿಗರು ಭಕ್ತವತ್ಸಲ ಶಿವಾಜಿ ಹಾಗೂ ಪೇಶ್ವೆಯರ ಕಾಲದಲ್ಲಿ ಸೈನ್ಯದಲ್ಲಿ ಸೈನಿಕರಾಗಿದ್ದು, ಕಾರಣಾಂತರಗಳಿಂದ ಕರ್ನಾಟಕ ಮತ್ತು ಕೇರಳ ರಾಜ್ಯದ ಬೆಟ್ಟ ಪರ್ವತದಂಚಿಗೆ ಗಿರಿಜನರಂಗಳಕ್ಕೆ ಬಂದು ಅಲ್ಲಿಯೇ ನೆಲೆಸಿದ್ದು ಕಾಲಕ್ರಮೇಣ ಬುಡಕಟ್ಟುಗಳನ್ನಾಗಿ ಪರಿಗಣಿಸಲ್ಪಟ್ಟಿದ್ದಾರೆ. ದಕ್ಷಿಣಕನ್ನಡದಲ್ಲಿ ನೆಲೆಸಿದವರು 'ಮರಾಟಿಗಳೆಂದು ಹಾಗೂ ಕೊಡಗು ಜಿಲ್ಲೆಯಲ್ಲಿ ನೆಲೆಸಿದವರನ್ನು 'ಮರಾಳಿಯವರೆಂದು ಕರೆಯುತ್ತಾರೆ. ಈಂದ್ರ ಹಾಗೂ ರಾಜ್ಯ ಸರ್ಕಾರ ಸ್ವಾತಂತ್ರ್ಯೋತ್ತರ ಕಾಲದಲ್ಲಿ ಇವರನ್ನು ಪರಿಶಿಷ್ಟ ಪಂಗಡದ ಪಟ್ಟಿಯಲ್ಲಿ ಪರಿಶಿಷ್ಟ ಪಂಗಡಕ್ಕೆ ಸೇರಿಸಿದ್ದುವರು.

15ನೇ ಶತಮಾನಕ್ಕೆ ಕರ್ನಾಟಕದ ಅವಿಭಜಿತ ದಕ್ಷಿಣಕನ್ನಡ ಜಿಲ್ಲೆಗೆ ವಲಸೆ ಬಂದಿರಬಹುದಾದ ಮರಾಟಿಗರ ಜನಸಂಖ್ಯೆ ಇಂತಿದೆ. ಮದ್ರಾಸ್ ಸರಕಾರ 1901ರಲ್ಲಿ ಜನಗಣತಿಯ ಪ್ರಕಾರ ದಕ್ಷಿಣಕನ್ನಡ ಜಿಲ್ಲೆಯಲ್ಲಿ ಇವರ ಜನಸಂಖ್ಯೆ 31,351 ಎಂದು ದಾಖಲಾಗಿರುತ್ತದೆ. 1931 ಹಾಗೂ 1941ರ ಜನಗಣತಿ ಪ್ರಕಾರ ಮದ್ರಾಸ್ ರಾಜ್ಯದಲ್ಲಿರುವ ಮರಾಟಿಗರ ಜನಸಂಖ್ಯೆ ಕ್ರಮವಾಗಿ 33,992 ಮತ್ತು 37,485. 1971ರಲ್ಲಿ 46,840. 1981–65,822. 1991ರಲ್ಲಿ 75,708. 2001ರಲ್ಲಿ 63,549 ಎಂಬುದಾಗಿ ದಾಖಲಾಗಿದೆ.

ಮರಾಠಿ, ಮರಾಠ ಇವುಗಳ ಮರಾಟಿ ಪದಗಳು ಮಹಾರಾಷ್ಟ್ರ ಮೂಲದವು. 'ಮರಕಾಟ' ಪದವು ಕನ್ನಡದ 'ಮರ' ಮತ್ತು 'ಕುಟ್ಟಿ' ಪದಗಳ ಸೊಬಾಕರ ಪದ ಹಾಗೂ ಮಹಾರಾಷ್ಟ್ರ, ಮರಾಠಿ ಪದವು ಮರಕಾಟ ಪದದಿಂದ ಸಂಸ್ಕರಿಸಲ್ಪಟ್ಟ ಪದ ಎಂಬುದಾಗಿ ಬಹುಶೀಕ ವಿದ್ವಾಂಸರ ಅಭಿಪ್ರಾಯವಾಗಿದೆ. 'ಮರವರ' ಹಾಗೂ ಹಟ್ಟಿಗಳು ಕನ್ನಡ ಪದಗಳಾಗಿದ್ದು ಶಂ.ಬಾ. ಜೋಷಿಯವರ ಅಭಿಪ್ರಾಯವಾಗಿದೆ. ಮರಾಟಿ ಬುಡಕಟ್ಟಿನವರನ್ನು ತುಳುವರು

ಮತ್ತು ಸ್ಥಳೀಯರು ಇದೆ ಮಾರಟಿ, ಕಾಡು ಮಾರಟಿ ಕರೆಯರು. ಪ್ರತಿವರ್ಷವಾಗಿ ಮಾರಾಟವು ಮಾರಾ, ಮಾರಿ, ಆದೇರು ಎಂಬ ಪದಗಳಿಂದ ಕರೆಯುವರು. ಇವರ ಹೆಸರುಗಳಿಂದಿಗೆ ಹೆಚ್ಚಾಗಿ ರಾವ್, ಜಿ, ಟಿ.ಜಿ. ಎಂಬೆಲ್ಲಾ ಕರೆಯುತ್ತಾರೆ. ಈ ಮೂರು ಪದಗಳು ಗೌರವ ಸೂಚಕ ಪದಗಳು ಇವರ ಹೆಸರಿನೊಂದಿಗೆ ಸುಲೀಕರಣಗೊಂಡಿರುತ್ತದೆ. ದಕ್ಷಿಣಕನ್ನಡ ಜಿಲ್ಲೆಯ ಮಂಗಳೂರು ತಾಲೂಕಿನ, ಮುಲ್ಕಿ ಹೋಬಳಿಯ ಕವಿತ್ತಾರು, ಯಕ್ಷಕಟ್ಟೂರು ಕೊಲ್ಲೂರು ಉಡುಪಿ ಜಿಲ್ಲೆಯ ಕಾರ್ಕಳ ತಾಲೂಕಿನ ಹಿರೆಯಂಗಡಿ ಜೋಡಾಟಕ್ಕೆ ಖ್ಯಾತವಾಗಿದೆ. ಕಾರ್ಕಳ ಪಟ್ಟಣ, ಗಾಣಿಗರಗಳಲ್ಲಿ ಸುಮಾರು 155 ಕುಟುಂಬಗಳು ವಾಸವಾಗಿರುವುದನ್ನು ಕ್ಷೇತ್ರಕಾರ್ಯಗಳಲ್ಲಿ ಪತ್ತೆಹಚ್ಚಲಾಗಿದೆ. ಇವರಲ್ಲಿ ಒಳ ಪಂಕ್ತಿ ಜನರಿದ್ದಾರೆ. ಸುಮಾರು ೫೫ ಒಳ ಇವರುಗಳು ಮಾತನಾಡುತ್ತಾರೆ ತಿಳಿಸಿದರು.

ಕ್ಷೇತ್ರಕಾರ್ಯ ಸಂದರ್ಭದಲ್ಲಿ ಲಭಿಸಿರುವ ಒಳಗಳು ಹೀಗಿದೆ. ಅಪ್ಪಣ್ಣ, ಬೆಣ್ಣಿ, ಬೆಣ್ಣೆಕಲ್, ಬೊಂಡ್ಲ ಚಿಣ್ಣಪ್ಪ, ಮೆಂಡ, ದೇವಕಲ್ಲು, ಜಗಕಾಮ, ಜಾರಪ್ಪ, ರಾಜೀವಣ್, ಪಾಲಾರು, ಸಿಂಧ್ಯ, ಸಕ್ಕರೆಕಾ, ಕಾಮಾಗ್, ಬಂಜೆಕಾರು, ಪಾಲ್ಗುಣ್, ಪಿಳ್ಳೆ ಮುಂತಾದ 27 ಒಳಗಳು ದೊರೆತಿವೆ. ಇವು ಇವರಲ್ಲಿ ಅಣ್ಣ ಹೆಸರುಗಳಾಗಿದ್ದು ಬಳಕೆಯಾಗುವುದು. ಇವುಗಳಲ್ಲಿ ಪೈಪಾಡಿಕ ಸಂಬಂಧ ದೆಳೆಸುವಲ್ಲಿ ಸಹಕಾರಿಯಾಗಿದೆ. ಪ್ರಾಚೀನಕಾಲದಲ್ಲಿ ಇದು ದಕ್ಷಿಣ ಪದ್ಧತಿಯು ಬದಲಾಗಿ ಪಶ್ಚಿಮಕ್ಕೆ ಪದ್ಧತಿ ಉಲಿಕಿನಿದೆ. ಸಮುದಾಯದ ಹಿರಿಯರು ಬದಲಾಗಿ ಬ್ರಹ್ಮಣರನ್ನು ಸಂಪ್ರದಾಯಕ ಕಾರ್ಯಗಳಿಗೆ ಕರೆಯಲಾಗುತ್ತಿದೆ.

ಆ) ಕುಲಾಚಿ

ಕುಟುಂಬಿಯರು ಪ್ರಮುಖವಾಗಿ ಕರ್ನಾಟಕದ ಕರಾವಳಿ ಪ್ರದೇಶ ವ್ಯಾಪ್ತಿಯು ಉಡುಪಿಕನ್ನಡ ಜಿಲ್ಲೆಯ ಕಾರಕಾಲ, ಹೊನ್ನಾವರ, ಅಂಕೋಲಾ, ಯಲ್ಲಾಪುರ, ಜೊಯಿಡಾ ತಾಲೂಕುಗಳಲ್ಲಿ ಸಾಂದ್ರವಾಗಿ ಕಾಣಿಸಿಕೊಳ್ಳುತ್ತಾರೆ. ಇವರು ಕೃಷಿ ಜೀವನ ನಡೆಸುವ ಜಾತಿ. ಈ ಜಾತಿಯ ಜನರನ್ನು ದೇಶದ ದೇಗ ಬೇರೆ ರಾಜ್ಯಗಳಲ್ಲಿ ವಿವಿಧ ಹೆಸರುಗಳಿಂದ ಕರೆಯುತ್ತಾರೆ ಕೇರಳ ರಾಜ್ಯದಲ್ಲಿ ಕುಡುಂಬಿ, ಮಧ್ಯಪ್ರದೇಶದಲ್ಲಿ ಕುಲಂಬಿ, ಕುರ್ಮಿ, ಆಹಿರ್, ಮಹಾರಾಷ್ಟ್ರದಲ್ಲಿ ಕುಣಬಿ, ಮರಾಠ ಕುಣಬಿ, ಆಹಿರ್, ಒಡಿಸ್ಸಾದಲ್ಲಿ ಕುಡುಂಬಿ, ಕುರ್ಮಿ, ಕುರ್ಮಿ, ತಮಿಳುನಾಡಿನಲ್ಲಿ ಕುರುಂಬ, ಕುರುಂಬೊ, ಗುಜರಾತ್‌ನಲ್ಲಿ ದೇಸಾ ಕುಣಬಿ, ಪಟೀದಾರ, ಆಹಿರ್ ಮತ್ತು ಗೋವಾದಲ್ಲಿ ಕುಣಬಿ ಇತ್ಯಾದಿ (2006 ಪುಟ: 2-3)

ಸುಮಾರು 400 ವರ್ಷಗಳ ಹಿಂದೆ ಕುಣಬಿಯವರು ಗೋವೆಯಿಂದ ವಲಸೆ ಬಂದಿರುವರು. ಕುಣಬಿಗಳಾತಿಯೇ ಮಾರಾಠಿ, ಮರಾಠಿ ಭಾಷ್ಯ ರಾಷ್ಟ್ರಕ್ಕಿಂತ ಗೌಡ ಸಾರಸ್ವತ ಬ್ರಹ್ಮಣ, ರೋಮನ್ ಕಿಥೋಲಿಕ್, ಮರಾಠ ಕುಣಬಿ ಮುಂತಾದ ಕೆಲವು ಸಮುದಾಯಗಳು ವಿವಿಧ ಕಾರಣಗಳಿಂದಾಗಿ ಗೋವಾ ಹಾಗೂ ಆಯಾಯ ಪ್ರದೇಶಗಳಲ್ಲಿ 15 ಹಾಗೂ 16ನೇ ಶತಮಾನದ ಸಮಯ ಕರಾವಳಿ ಕರ್ನಾಟಕಕ್ಕೆ ವಲಸೆ ಬಂದರು.

ಜೆರೋಮ್ ಗುಡ್ಡಾ ಇವರ ಅಭಿಪ್ರಾಯ ಸುಮಾರು 16ನೇ ಶತಮಾನದಲ್ಲಿ ಬ್ರಾಹ್ಮಣರು ಮತ್ತು ಇತರ ಹಿಂದೂ ಸಮುದಾಯಗಳವರು ಒಹುಗಂಪ್ಯಾದಲ್ಲಿ ಗೋವೆಯನ್ನು ತ್ಯಜಿಸಿ ಕರಾವಳಿಗೆ ತೆರಳಿ ನೆಲೆಸಿದರು(1936 : 34)

ಆಲ್ಬುಕರ್ಕಿಯೇ ಮಗ್ಗದಸಂಗಡವರು ಹೇಳುವಂತೆ ಕುಣಬಿಯವರು ಮುಂಡಾ ಆಸ್ಟ್ರಾಲ್ ಕುಲಕ್ಕೆ ಸೇರಿದ ಜನಾಂಗವಾಗಿರುವರು (1970 : 20) ಸ್ಟೀವನ್ ಫುಲ್ಲರವರ ಪ್ರಕಾರ ಕುಣಬಿಗಳು ಆಹಾರ ಸಂಗ್ರಹಿಸುವ ಮತ್ತು ಭೇಸಾಯಮಾಡುವ ದಕ್ಷಿಣ ಭಾರತದ ಒಂದು ಬುಡಕಟ್ಟು ಸಮುದಾಯವಾಗಿರುತ್ತದೆ. (1973 : 246)

ಕರಾವಳಿ ಕರ್ನಾಟಕದಲ್ಲಿ ಕುಣಬಿಯವರು ಗೋವಾ ಮೂಲದ ಬುಡಕಟ್ಟಿನವರು. ಇವರು ಸುಮಾರು 1304 ರಿಂದ 1599ರ ಸಮಯದಲ್ಲಿ ಮೋಸ್ಲೆಮರಿಂದ ಉಪ್ಪಳಕೆಯಿಂದ ದಬ್ಬಾಳಿಕೆ ಬಳಾಕಾರರ ಮತಾಂತರಕ್ಕೊಳಪಡಿಸಿದ ಗಂಡಾಂತರ ಬಂತು. ಇದನ್ನು ಪ್ರತಿಭಟಿಸಿ ಅಲ್ಲಿಂದ ತಪ್ಪಿಸಿಕೊಂಡು ಕಾರವಳಿ ಪ್ರದೇಶದ ಉತ್ತರಕನ್ನಡ, ಉಡುಪಿ ಹಾಗೂ ದಕ್ಷಿಣಕನ್ನಡ ಜಿಲ್ಲೆಗಳಿಗೆ ವಲಸೆ ಬಂದಿದ್ದಾರೆ.

ಇ) ಕುಲಾಚಿ

ಕುಟುಂಬಿಯವರು ಗೋವಾ ರಾಜ್ಯದ ಮೂಲ ನಿವಾಸಿಗಳಾಗಿದ್ದು ಸುಮಾರು ನಾಲ್ಕು ಶತಮಾನಗಳ ಹಿಂದೆ ಕರಾವಳಿ ಪ್ರದೇಶದ ಅವಿಭಜಿತ ಜಿಲ್ಲೆಗೆ ಹಾಗೂ ಉತ್ತರಕನ್ನಡ ಪ್ರದೇಶಕ್ಕೆ ವಲಸೆ ಬಂದು ನೆಲೆನಿಂತವರಾಗಿರುತ್ತಾರೆ. ಇವರ ನೆಲೆಗಳು ಹೆಚ್ಚಾಗಿ ಉಲಿಯಿಂದ ದೂರವಿದ್ದು ಪರ್ವತ, ಕಾಡಿನ ಹುಲ್ಲೆ ಅಥವಾ ಬೆಟ್ಟ ಪರ್ವತ, ಕಾಡಿನಂಚಿನಲ್ಲಿ ಕಂಡುಬರುತ್ತದೆ. ಕುಂಬಾರರ ತಾಲೂಕಿನ ಹಾಲಾಡಿ ಹೋಬೆಯಿಂದ ದಕ್ಷಿಣಕ್ಕೆ ವಾಸ್ತವ್ಯವಿರುವ ಉಡುಪಿ ತಾಲೂಕಿನ ಒಳಗೊಂಡು ಕುಡುಬಿಯವರನ್ನು ಗೋವೆ ಕುಡುಬಿಯವರೆಂದು ಕರೆಯುತ್ತಾರೆ. ಕುಂಬಾರರ ತಾಲೂಕಿನ ಹಾಲಾಡಿ, ಹಾರ್ಕಿ, ಹೆರೂರು, ಗೋಳಿಯಂಗಡಿ, ಹೊಸಂಗಡಿ, ಬಡಾರು, ಆವಾರು, ಹೊಸಂಗಡಿ, ಕಮಲಶಿಲೆ, ಬೆಳ್ಳೆ ಮುಂತಾದ ಗ್ರಾಮಗಳಲ್ಲಿ ವಾಸ್ತವ್ಯವಿರುವವರನ್ನು ಹೆಚ್ಚಾಗಿ ಗೋವೆ ಕುಡುಬಿಯವರೆಂದು ಕರೆಯುವರು. ಮಂಗಳೂರು ತಾಲೂಕಿನ ಬಾಳ, ಕೊಂಚಾಡಿಯ, ಮುಚ್ಚೂರು, ಎಡಪದವು, ಕುಪ್ಪವದವು, ಗಂಜಿಮಠ, ಮಂಜಪಾದಿ, ಬಂಟ್ವಾಳ ತಾಲೂಕಿನ ಕೆಲವೊಂದು ಗ್ರಾಮಗಳಾದ ರಾಯಿ, ಕೆಲ್ಲಿ, ಸಿದ್ಧಕಟ್ಟೆ ಪ್ರದೇಶದವರನ್ನು ಕೊಡಿಯಾಲ ಕುಡುಬಿ ಎನ್ನುವರು.

ಕುಂಬಾಮರ ಉತ್ತರಕ್ಕೆ ಕರ್ನಾಟಕ ತಾಲೂಕಿನ ಮಿಯ್ಯಾರು, ಹೆಜ್ಜಿ, ಸುರ್ಗೋಳಿ, ಕೆಮ್ಮಣ್ಣು, ಕಟ್ಟಿಂಗೆ, ಮುಂಡ್ಕಿನಿ, ಮಾಡಾವಿಕ್ಕಿ, ಮುಂಡ್ಕಿನಿ ದಕ್ಷಿಣದ ಕುಡುಬಿಯವರನ್ನು ನಾಡ ಕುಡುಬಿಯವರೆಂದು ಕರೆಯುತ್ತಾರೆ. ಕುಂಬಾಮರ ತಾಲೂಕಿನ ಸಿದ್ಧಾಪುರ, ಹೊಸಂಗಡಿ, ಹಲಸಿಮರ ಎಂಬಲ್ಲಿ ವಾಸ್ತವ್ಯವಿರುವ ಕೆಲವೊಂದು ಕುಡುಬಿ ಕುಟುಂಬದವರನ್ನು ಜೋಗಿ ಕುಡುಬಿಯವರೆಂದು ಕರೆಯುತ್ತಾರೆ. ಆದ್ದರಿಂದ ಕುಂಬಾಮರ ತಾಲೂಕಿನ ಉತ್ತರಕ್ಕೆ ಬೈಂದೂರು, ಕೊಲ್ಲೂರು, ಅರೆಶಿರೂರು, ಮಾಸ್ತಿಕಟ್ಟೆ ಮಾರ್ಗದಲ್ಲಿ ವಾಸ್ತವಿರುವ ಕುಡುಬಿಯವರನ್ನು ಅರೆಕುಡುಬಿಯವರೆಂದು ಕರೆಯುತ್ತಾರೆ.

ಕುಡುಬಿಯವರು 'ಇಂಡೋ-ಆರ್ಯನ್ ಭಾಷೆಗೆ ಸೇರಿದ ಕೊಂಕಣಿ ಭಾಷೆಯನ್ನು ಮಾತನಾಡುತ್ತಾರೆ. ಈ ಸಮುದಾಯದವರಲ್ಲಿ ದಕ್ಷಿಣಕನ್ನಡ ಜಿಲ್ಲೆಯ ಮಿಜಿಗಾಣಿ ಕುಳವರ ಇಮಜಿಕ - ಇಂಗ್ಲಿಷ್ ವ್ಯವಹಾರದ ಭಾಗವಾದ ಪೀಠಿಕೆಯಿಂದ ಕಾವ್ಯ ಆಡುವ ಭಾಷೆಯಲ್ಲಿ ತುಳು ಹಾಗೂ ಕನ್ನಡ ಶಬ್ದಗಳನ್ನು ಉಪಯೋಗಿಸುತ್ತಾರೆ. ಕುಡುಬಿ ಸಮುದಾಯದ ಮುದುಕರು ತಮ್ಮ ಹೆಸರಿನ ಮುಂದೆ 'ಕಾಯ್ಕ' ಮತ್ತು 'ಗೌಡ' ಎಂಬ ಅಣ್ಣ ಹೆಸರನ್ನು ಜೋಡಿಸುತ್ತಾರೆ ಹೆಂಗಸರು ಮಾಯಿ / ಮ್ಮಾ ಎಂಬ ಪದವನ್ನು ಸೇರಿಸಿಕೊಳ್ಳುತ್ತಾರೆ. ಇವರು ಹೆಚ್ಚಾಗಿ ಪ್ರಪಿಂಚ ವರ್ಗದವರಾಗಿದ್ದರಿಂದ ಮಾತಿನಲ್ಲಿ ಅಸಾಕಲವಾದ ಬಿಟ್ಟ ಬಳಿಗಳನ್ನು ತೋರುತ್ತಾರೆ. ಹಿರಿಯ ಕರೆಮಾತಿನ ಜನರು ಇಮಜಿಸ್ಥಾನಕ್ಕೆ ಕರೆದು ಹಿಂದೆ ಮುಟ್ಟು ಪಿಡುತ್ತಾರೆ. ಅವರಲ್ಲಿ ಮುಟ್ಟು ಕಕ್ಕಿಸಿಯಾಗಲು ಎಂಬ ನಂಬಿಕೆಯು ರಿವಾಮಿದೆ. ಹಿಂದೆ ಮುಟ್ಟು ಕಕ್ಕಿಸಿಕೊಂಡವರ ಜಾತಿ ಪಂಚಾಯತಿಗೆ ನಡೆಸಿ ದಂಡ ವಿಧಿಸುತ್ತಿದ್ದರು. ಇಂದು ಯಾವ ಜನಾಂಗ ಮುಟ್ಟನ್ನು ಕಕ್ಕಿಸಿಕೊಳ್ಳುತ್ತಾರೆ. ಮಹಿಳೆಯರ ವಿಶಿಷ್ಟವಾದ ಉಡುಪುಗಳಿಂದ ಕುಡುಬಿಯವರೆಂದು ಗುರುತಿಸಬಹುದು. ಇವರು ಬಿಗ್ಗ ಬಿಡ್ಡದ ಸೀರೆಯನ್ನು ಎದೆಯ ಮೇಲ್ಭಾಗದಲ್ಲಿ ಸುತ್ತಿ 'ಗಾಂಜಿ' ಹಾಕುತ್ತಾರೆ.

ಕುಡುಬಿ ಸಮುದಾಯದಲ್ಲಿ ವಂಶದ ಅಡ್ಡಹೆಸರು ಗೋತ್ರಗಳು ಬಳಿ, ಬಿಲ (ಕುಳುವದ) ಪದಗಳನ್ನು ಅಳವಿಯಲ್ಲಿದೆ. ಡಾ. ಆಲ್ವರು ಕುಮಾರ್ ಅವರು ಗೋವಾ ಕುಡುಬಿಯವರಲ್ಲಿ 36 ಒಳಗಳಿವೆ ಎಂಬುದಾಗಿ ಅಭಿಪ್ರಾಯಪಟ್ಟಿರುತ್ತಾರೆ. ಡಾ. ಬೈ. ರಮೇಂದ್ರನಾಥ ರಾವ್ ಅವರು ಕರಾವಳಿ ಕರ್ನಾಟಕದಲ್ಲಿ ವಾಸ್ತವ್ಯವಿರುವ ಕುಡುಬಿ ಬುಡಕಟ್ಟುಗಳಲ್ಲಿ ಸುಮಾರು 122 ಒಳಗಳಿವೆ ಎಂಬುದಾಗಿ ತಿಳಿಸಿದ್ದಾರೆ. ಡಾ.ಎಂ. ಶಾಮರಾವರು ಕುಡುಬಿಯವರಲ್ಲಿ 16 ಒಳಗಳನ್ನು ಗುರುತಿಸಿದ್ದಾರೆ ನಂತ ಕ್ಷೇತ್ರಕಾರ್ಯ ಸಂದರ್ಭದಲ್ಲಿ 20 ಒಳಗಳನ್ನು ಗುರುತಿಸಲಾಗಿದೆ. ಈ ಎಲ್ಲಾ ಒಳಗಳ ಪ್ರಾಣಿವಾಚಕಗಳು, ದಿಸೆಸಾಧ ಮತ್ತು ಭೌತ ವಸ್ತುಗಳು, ಗುಣಗಳಿಗೆ ಸಂಬಂಧಿಸಿದವುಗಳು ಅಧಿಕಾರ, ಸಾಮರ್ಥ್ಯ, ಸಂಖ್ಯೆಯಾಗಳಿಗೆ ಹೊಂದಿಕೆಯಾಗುವ ಬಂದಿರುವ ಒಳಗಳು ಹಾಗೂ 'ಕಾರ್' ಎಂಬ ಪ್ರತ್ಯಯಗಳಿಂದ ಅಂತ್ಯವಾಗುವ ಹೆಸರು ಹಾಗೂ ಕುಲಗಳು ಉದಾ: ಗುಜ್ಜಗೌಡ, ಕುಕ್ಕಾರ್, ಪಕ್ಕಾರ್, ಸಾಯ್ಕರ್, ಪಾಳಗಾರ್, ಮುಕ್ಕಾರ್, ಹೊಕ್ಕಾರ್, ಮೇಲಿಕ್ಕಾರ್, ಬಿಟ್ಟರ್, ತಿವಾಣ್, ಕೊಟ್ಟಕಾರ್ ಇತ್ಯಾದಿ.

ಕುಡುಬಿಯವರು ಸಿಕ್ಕಪಂಕ್ತಿಯ, ಸಿಕ್ಕಪ್ರಧಾನ, ಸಿಕ್ಕಮಾಲೆಯ ಕುಟುಂಬ ವ್ಯವಸ್ಥೆಯನ್ನು ಹೊಂದಿದವರಾಗಿದ್ದಾರೆ. ಅವಭಕ್ತ ಕುಟುಂಬ ವ್ಯವಸ್ಥೆಯನ್ನು ಹೊಂದಿದ್ದು, ಹಿಂದೆ ಒಂದೊಂದು ಕುಟುಂಬದಲ್ಲಿ 40ಕ್ಕಂತ ಹೆಚ್ಚು ಸದಸ್ಯರ ಸಂಖ್ಯೆ ಹೊಂದಿದ್ದು ಎಂದು ಕುಡುಬಿ ಸಮುದಾಯದ ಹಿರಿಯರು ನೆನಪಿಸಿಕೊಳ್ಳುತ್ತಿದ್ದಾರೆ. ಅವಿಭಕ್ತ ಕುಟುಂಬ ವ್ಯವಸ್ಥೆಯನ್ನು ಅವಲಂಬಿಸುವ ಇವರು ಒತ್ತು ಪಾರ್ (ಕುಟುಂಬ) ಒರಪಾರ್ (ದೊಡ್ಡ ಕುಟುಂಬ) ಅಥವಾ ಸಗಲೆ ಕುಟುಂಬ (ಒಂದೇ ಗುತ್ತಿನಿಗೆ ಸೇರಿದವರು) ಎಂದು ಕರೆಯುತ್ತಾರೆ. ಮಾನೆಯ ಹಿರಿಯ ವ್ಯಕ್ತಿಯೇ ಇಡೀ ಕುಟುಂಬದ ಸಾಮಾಜಿಕ, ಆರ್ಥಿಕ, ಆಚರಣೆಗಳನ್ನು ನಿಯಂತ್ರಿಸುವವನಾಗಿರುತ್ತಾನೆ. ಅವನು ಯಜಮಾನ ಧಾರ್ಮಿಕ, ವಿವಾಹ, ಉಪಾಕರ್ಮಗಳಾಗಲು ಇವರ ಮುಂದಾಳತ್ವದಲ್ಲಿ ಏರಾಗುತ್ತದೆ. ಅಕ್ಕಿಯ ಹಕ್ಕು ಸಾಮಾನ್ಯವಾಗಿ ಪಿತೃ ಪ್ರಧಾನವಾಗಿರುತ್ತದೆ. ಕುಟುಂಬದ ನಂತರ ಮನೆಯ ಹಿರಿಯ ಗಂಡು ಮಗನಿಗೆ ಬರುತ್ತದೆ.

ಕುಡುಬಿಯರ ಆರ್ಥಿಕ ವ್ಯವಸ್ಥೆಯು ಪ್ರಾಚೀನ ಕಾಲದಿಂದಲೇ ಬಂದು ಕೃಷಿಯನ್ನೆ ಬುಡಕಟ್ಟು ಕೃಷಿಯಾಗಿರುವ ಆಹಾರ ಸಂಗ್ರಹಣೆ, ಬೇಟೆ, ಕುಮರಿ

ಕೃಷಿ, ಕುಸುಬಿಗಳಿಂದ ಹಂಚಿ ಹಂಚಿಕಾಗಿ ವಿಕಾಸಗೊಂಡಿರುವುದಾಗಿದೆ. ಭಾಷಿಕವಾಗಿ ಈ ಮಾರ್ಪಾಡಿಗೆ ಭಾರತೀಯ ಆರ್ಯ ಬುಡಕಟ್ಟುಗಳು ಒಂದಕ್ಕೊಂದು ಕೊಡುಕೊಳ್ಳುವಿಕೆಗೆ ಅಧೀನ ಸೌಲಭ್ಯದಿಂದ ಮಾಡಿಕೊಂಡಿರುವರು. ಇವರ ಸಮುದಾಯವಿದಾದರು ಭೂಮಿಯನ್ನು ಅಕ್ರಮಿಸಿಕೊಂಡು, ಅವರ ಭೂಮಿಯಲ್ಲಿರುವ ಬುಡಕಟ್ಟುಗಳನ್ನು ಜೀತಕಾಳುಗಳಾಗಿ ದುಡಿಸಿಕೊಳ್ಳುತ್ತಾ ಬಂದಿರುತ್ತಾರೆ. ಬಹುಪಾಲು ಇವರು ಗೋವಾದಿಂದ ವಲಸೆಗಾರರಾಗಿ ಬಂದವರೇ ಆಗಿರುವರೆಂದು ಬುಡಕಟ್ಟರಲ್ಲಿ ಅಧೀನ ಸ್ಥಿತ್ಯಂತರಕ್ಕೆ ಒಳಗಾದರು. ಕರಾವಳಿ ಭಾಗಕ್ಕೆ ಮಳೆ ಬಂದು ಮೀನ್ಗಾರಿಕೆಯಲ್ಲಿರುವ ಬ್ರಾಹ್ಮಣರ ಹಾಗೂ ಭೂಮಾಲಿಕರು ಮತ್ತಿಗಳಲ್ಲಿ, ಕೊಟುವಲ್ಲಿ ಕೆಲಸಮಾಡುಗಾಗಿ ನೇಮಿಕೊಂಡರು. ಸಂತರ ಅವರ ಜಾತಿ ಹೆಸರಿಗೆ ತಕ್ಕಂತೆ ಮೂಲತಃ ಕುಮಿಳಿ ಕೃಷಿಯ ಅನುಭವವಿದ್ದಕಿಂದ ಕಾಲ್ಪ ವಾಸ್ತವವಿರುವ ಉಡುಪಿಯನ್ನಲ್ಲಿಯೇ ಗುಜ್ಜರಿಗಳು ಹಾಗೂ ಮಂಗಳೂರು ಮಾಡಿದ ಸುತ್ತಲಿಕೆಗಳನ್ನು ಬಳಸಿಕೊಂಡು ಕುಮಿಳಿ ಕೃಷಿ ಅಥವಾ ತೆಕ್ಕು-ಬೇಸಾಯ ಪದ್ಧತಿಯಲ್ಲಿ ಕೃಷಿ ಬೆಳೆ ಕೈಕೊಂಡು ಮಾಡಿ ಅಧಿಕ ಬೆಳೆಗಳನ್ನು ಬೆಳೆದರು. ಇದಿಗ ತಮ್ಮ ಮೂಲ ಕಸುಬುಗಳಿಂದ ಸ್ಥಿತ್ಯಂತರಗೊಳ್ಳಿರುವುದನ್ನು ಕ್ಷೇತ್ರಕಾರ್ಯ ಸಂದರ್ಭದಲ್ಲಿ ಕಂಡು ಬಂದಿರುತ್ತದೆ.

ಇವರು ಬಹುಸಂಖ್ಯಾತ ಕುಮಟಿಯರು ಅಕ್ಷರಸ್ಥರಾಗಿದ್ದು, ಶೈಕ್ಷಣಿಕವಾಗಿ ತೀರಾ ಹಿಂದುಳಿದವರಾಗಿದ್ದು, ಇವರು ವಾಸಿಸುವಂತ ರಚ್ಚು ಅರಣ್ಯವಾಗಿರುವುದರಿಂದ ಶಾಲೆಗಳು ಕುಂದು ದೂರದ ಅಂತರದಲ್ಲಿರುತ್ತದೆ. ಮಳೆಗಾಲದಲ್ಲಿ ಕೆಲವೊಮ್ಮೆರಂತೂ ಇಲ್ಲಿ ಶಾಲೆಗಳು ನಡೆಯುವುದಿಲ್ಲ. ಮಕ್ಕಳ ಮಾಸ್ಟರ್ಗಳ ಕೊರತೆಯಿಂದಲೂ ತಿಳಿಸಿಕೆಗೆ ಈ ಭಾಷೆಗಳಿಕ್ಕಿಲ್ಲದಿರುವುದರಿಂದ ಮಕ್ಕಳಿಗೆ ಮಾತೃಭಾಷೆ ಮಾಧ್ಯಮವು ಇಲ್ಲವಾಗಿದೆ.

ಕುಮಟಿಯವರು ವೈಕ್ತಿಕ ಆರಾಧಕರಾಗಿದ್ದು, ಸ್ಥಳೀಯ ಭೂತಾರಾಧನೆ, ನಾಗಾರಾಧನೆ, ಶಿಕ್ಷಾರಾಧನೆ, ಕುಲ ಆರಾಧನೆಗಳಿಂದ ಪ್ರಭಾವಿತರಾಗಿರುವುದು ಕಂಡುಬರುತ್ತದೆ. ಇವರು ಶಕ್ತಿದೇವತೆಯನ್ನು ಮತ್ತು ಗೋವಾದ ಮಲ್ಲಿಕಾರ್ಜುನ ದೇವರನ್ನು ಪೂಜಿಸುತ್ತಾರೆ. ಹೋಳಿ ಇವರು ಪ್ರಮುಖ ಹಬ್ಬವಾಗಿದೆ. ಈ ಸಂದರ್ಭದಲ್ಲಿ ಶಕ್ತಿ ಅಥವಾ "ಗೋವಾ ಅಮ್ಮ"ನನ್ನು ಪೂಜಿಸುವ ಸಂಪ್ರದಾಯ ಇರುತ್ತದೆ. ಆಲ್ಲದೆ ಸಮುಂಪಿಕೆಯಾಗಿ ಗುಮ್ಮಟೆ (ಗುಂಪೆಚಾಟ) ಕೋಲಾಟ (ಕೋಲಿ) ಜಡೆಕ್ಕ (ದೂಪಿಚಾಟ) ಎಂಬ ಹೆಸರಿನ ವಿವಿಧ ನೃತ್ಯಗಳನ್ನಾಡುವರು. ಇದೇ ಹಬ್ಬದ ಸಂದರ್ಭದಲ್ಲಿ ವಿಶಿಷ್ಟವಾದ ಹೊಗ ಬಣ್ಣ, ಅಬೀರು ಅಥವಾ ಮತ್ತು ಹಿಂದೂ ಸಂಪ್ರದಾಯ ಹಬ್ಬಗಳನ್ನು ಆಚರಿಸುತ್ತಾರೆ.

ಕುಮಟಿಯರು ವಿಶಿಷ್ಟ ಪಂಗಡಕ್ಕೆ ಸೇರಿದವಿರುವುದರಿಂದ ಬಾಹ್ಯ ಆಚ್ಚಾದ ಮೂಢನಂಬಿಕೆಗಳು, ಆಚಕ್ಕರಿಕೆ ಮತ್ತು ಅಪಾದನೆಗಳನ್ನು ಅನುಭವಿಸುತ್ತಿರುವ ಪ್ರಮುಖ ಸಮಸ್ಯೆಗಳಾಗಿವೆ. ಆದ್ದರಿಂದ ಸರಕಾರ ಸಂವಿಧಾನಾತ್ಮಕ ಸಮತ್ವ ಅವಕಾಶಗಳಿಕೆ ಮತ್ತು ರಕ್ಷಣೆ ಬದಿಗುವಂತೆ ಮಾಡುವುದಾಗಿರುವುದು ಇಂದಿನ ಆಗತ್ಯವಾಗಿದೆ.

೧. ಮಾರಾಟ ಸಮುದಾಯಗಳ ಅಧ್ಯಯನದ ಅವಶ್ಯಕತೆ:

ಡಾ.ಕೆ. ಸುಮತಿ ಬಾಯಿ: "ಕರಾವಳಿ ಕರ್ನಾಟಕ ಮಾರಾಟ ಜನಾಂಗ ಪರಂಪರೆ ಮತ್ತು ಆಧುನಿಕತೆ".(2008) ಮಾರಾಟ ಜನಾಂಗದ ಸಾಮಾಜಿಕ ಜೀವನ ವ್ಯವಸ್ಥೆ ಧಾರ್ಮಿಕ ಆಚರಣೆಗಳನ್ನು, ಅವರ ಜಾನಪದ ಮತ್ತು ಸಂಸ್ಕೃತಿ ಮುಂತಾದ ಮುಖಗಳನ್ನು ಅಧ್ಯಯನ ಮಾಡಿರುತ್ತಾರೆ. ಮಾರಾಟ ಜನಾಂಗವು ತನ್ನ ಪಾರಂಪರಿಕ ಬದುಕಿನಿಂದ ಆಧುನಿಕತೆಗೆ ಪ್ರವೇಶಿಸುವಾಗ ಎಂತೆಂಗುಹುದಾದ ಎಲ್ಲ ಬದಲಾವಣೆಗಳನ್ನು ಮತ್ತು ಆ ಸಮುದಾಯ ಎದುರಿಸುತ್ತಿರುವ ಕಷ್ಟ ಸೌಲಭ್ಯಗಳನ್ನು ಸಮುದಾಯದ ಒಳಗಿನವರಾಗಿ ವಿಶ್ಲೇಷಿಸಿದ್ದಾರೆ. ಆಲ್ಲದೆ, ಅದರಸ್ಥಾಪಿತ "ಮಾರಾ ಜನಾಂಗದ ಶೈಕ್ಷಣಿಕ ಸಾಂಸ್ಕೃತಿಕ ಭಾಷಿಕ ಮತ್ತು ಜಾತಿಕ ವಿಶೇಷತೆಗಳು" ಎಂಬ ಲೇಖನದಲ್ಲಿ ಮಾರಾ ಸಮುದಾಯವರ ಶಿಕ್ಷಣ, ಆರ್ಥಿಕ, ಸಾಂಸ್ಕೃತಿಕ, ಭಾಷಿಕ ಇವೆಲ್ಲಾ ಕ್ಷೇತ್ರಗಳಲ್ಲಾಗಿರುವ ಬದಲಾವಣೆಗಳನ್ನು ಸ್ಪಷ್ಟವಾಗಿ ವಿವರಿಸಿರುತ್ತಾರೆ. ಅವರದ್ದೇ ಮತ್ತೊಂದು ಲೇಖನ. "ಮಾರಾ ಜನಾಂಗದ ಜನಪದ ಕಲೆಗಳು" ಎಂಬ ಲೇಖನದಲ್ಲಿ ಮಾರಾ ಸಮುದಾಯದಲ್ಲಿ ಕಂಡುಬರುವ ಜನಪದ ಆಟಗಳನ್ನು ಪರಿಚಯಿಸಿ ವಿಶ್ಲೇಷಿಸಿದ್ದಾರೆ.

ಡಾ.ಎಸ್. ಮೋಹನ್ ಅವರು "ಬೈರವ ಆರಾಧನೆ" (2005) ಎಂಬ ಲೇಖನದಲ್ಲಿ ದಕ್ಷಿಣಕನ್ನಡದಲ್ಲಿ ವಾಸ್ತವ್ಯವಿರುವ ಮಾರಾ ಸಮುದಾಯದಲ್ಲಿನ ಮಾರಾ ಜಾನಪದ ಆರಾಧಿಸಿಕೊಂಡು ಬಂದಿರುವ ಬೈರವ ದೈವದ ಬಗ್ಗೆ ವಿವರಣೆ ನೀಡಿರುತ್ತಾರೆ. ಈತ ದುಷ್ಟಶಕ್ತಿಯ ನಿಗ್ರಹಕ ಮತ್ತು ಕಷ್ಟನಿವಾರಣೆಯ ಆಕಾಂಕ್ಷೆಯನ್ನು ಪೂರೈಸುವ ದೈವ ಎಂಬುದಾಗಿ ಅಭಿಪ್ರಾಯಪಟ್ಟಿರುತ್ತಾರೆ. ಅವರದ್ದೇಯಾದ ಮತ್ತೊಂದು ಲೇಖನ "ಮಾರಾ ಬುಡಕಟ್ಟಿನ ದೈವಾರಾಧನೆ" ಡಾ.ಕೆ.ಎಂ. ಮೇಘ್ತಿ ಡಾ: ಚೇಲಾರಾಮ (೫೦) ಬುಡಕಟ್ಟು ಅಧ್ಯಯನ ಸಂಪುಟ (4), ಸಂಚಿಕೆ 6) ಜನವರಿ–ಜೀನೆಯರ್ 2007 ಕ.ವಿ. ಹಂತ 197 ಅಧ್ಯಾಪಕರ ಸಂಚಿಕೆಯಲ್ಲಿ ಮಾರಾ ಬುಡಕಟ್ಟು ಸಮುದಾಯದವರು ಆರಾಧಿಸುವಂತ ದೈವದ ದೈವದ ಬಗ್ಗೆ ಪರಿಚಯಿಸುತ್ತಾರೆ. ಡಾ. ಆಲ್ಲದೆ ಇವರ ಮತ್ತೊಂದು ಲೇಖನ "ಕಣ್ಮರೆಯಾದ ಜನಪದ ಕುಣಿತ" – "ಬಾಳೆಕುಣಿತ" ಮಾರಾ ಬುಡಕಟ್ಟು ಸಮುದಾಯವಾಗಿರುವ ಮಾರಾ ಜನಾಂಗದಲ್ಲಿ ಪ್ರಚಲಿತವಿದ್ದ 'ಬಾಳೆಕುಣಿತ' ಕುಣಿತದ ವಿವರಣೆ ಹಾಗೂ ಇಂದು ಭಾಗಶಃ ಕಣ್ಮರೆಯಾಗಿರುವುದನ್ನು ವಿಶ್ಲೇಷಿಸಿದ್ದಾರೆ.

ಡಾ.ಎಂ.ಎಂ. ಕಲ್ಬುರ್ಗಿಯವರು ಸಂಶೋಧನೆ ಕರ್ನಾಟಕದ ಕೃಷಿಯಲ್ಲಾಗಳು ಎಂಬ ಕೃತಿಯಲ್ಲಿ ಮಾರಾ ಸಮುದಾಯವರನ್ನು ಕರ್ನಾಟಕದಲ್ಲಿ ಆಳಿದ "ಆಳರು" ಎಂಬುದಾಗಿ ಕರೆಯುತ್ತಾರೆ ಮತ್ತಾಯಸ್ಥಾನದಲ್ಲಿ 'ಮಾರಾಳ' ಎಂದು ಕರೆಯುತ್ತಾರೆ ಇವರ ಸಮುದಾಯದಲ್ಲಿರುವ ಉಪವಿಭಾಗಗಳ ಹೆಸರು ಹಾಗೂ ಈ ಸಮುದಾಯದವರು ಬಾಳುವ ರೀತಿಯ ವೀವರಣೆಗಳ ನಡೆಯಿಸಿಕೊಳ್ಳುತ್ತಾರೆ ಎಂಬುದಾಗಿ ತಿಳಿಸಿರುತ್ತಾರೆ.

ಶ್ರೀ ಕೃಷ್ಣಂಚಾರ್ ಪರಿಷತ್ತು 'ಗೊಂದಲ ಮತ್ತೆ ಸುಡುಕಾಡು (೫೦) **ವಿವಾಹ ಹಾಡುಗಳು**, **ಮೈಸೂರು** 1987 ಮಾರಾ ಜಾನ್ಯ ಸಮುದಾಯವು ಅಳವಡಿಸಿಕೊಂಡ ಹಾಗೂ ಬೆಸೆದಿರುವ ಬಾಂಧವ್ಯಗಳು. ಮಾರಾಟಿಗಳು ಮಹಾರಾಷ್ಟ್ರದಿಂದ ಬೆಂಗ ಬಂದವಾಗ ತಮ್ಮೊಂದಿಗೆ ತಂದು ಆಚರಿಸುವ ದೇವರನ್ನು ಈ ಪ್ರದೇಶಕ್ಕೆ ಕಂದಿರುವುದಾಗಿ ತಿಳಿಸಿರುತ್ತಾರೆ. ಆಲ್ಲದೆ ಗೊಂದಲ ಮೂಲಿಯ ಸುದೀರ್ಘ ವಿವರಣೆಯನ್ನು ನೀಡಿರುತ್ತಾರೆ.

ಡಾ. ಓ.ಪಿ. ಮೋಂಡೆಯಂಗಳ್ಳು ಮತ್ತು ಡಾ.ಎಸ್. ಪ್ರಭಾಕರ (೫೦) ಕರ್ನಾಟಕ ಬುಡಕಟ್ಟು ಸಂಶೋಧನೆಗಳು (2015). ಕರ್ನಾಟಕದ ಆದುಗುರಿತ ಬುಡಕಟ್ಟು ಬುಡಕಟ್ಟುಗಳು ಮತ್ತು ಅವರಲ್ಲಿ ಬುಡಕಟ್ಟುಗಳು ಒಟ್ಟು 33 ಬುಡಕಟ್ಟು ಸಮುದಾಯಗಳ ಅಧ್ಯಯನ ಸ್ಥಿತ್ಯಂತರಗಳನ್ನು ಅರ್ಥಮಾಡಿಸಲಾಗಿ ಜಿಲ್ಲಾವಾರು ಮಾರ್ಗಗಳ ಸುದೀರ್ಘ ಕ್ಷೇತ್ರಕಾರ್ಯವನ್ನು ಮುಂದಕ್ಕೆ ದಾಖಲಿಸಿದ್ದಾರೆ. ಮಾರಾ ಸಮುದಾಯಗಳಾಗಿರುವ ಮಾರಾ ಸಾಯ್ಯರು, ಮಾರಾ, ಕುಮಿಳಿ ಮಾರಾ, ಮಾರಾ ಭಾಷಿಕ ಪ್ರದೇಶ ಗಡಿಭಾಗದಿಂದ ಮಳೆ ಬಂದವರಾಗಿರುವ್ದಾರೆ ಎಂಬುದಾಗಿ ಅಭಿಪ್ರಾಯಪಟ್ಟಿರುತ್ತಾರೆ. ಆಲ್ಲದೆ ಇವರು ಆರಾಧಿಸುತ್ತಿರುವ ಮಹಾಪುರುಷರು ಗೊಂದಲಪ್ಪಜ್ಜ, ದೈವಾರಾಧನೆ ವಿವರಣೆ ಕೂಡ ಇರುತ್ತದೆ.

ಅಪ್ಪಾಜಿಗೌಡ ಟಿ.ಆರ್.ಎಂರವರ ಲೇಖನವು "Indians Streams Research Journal" vol. 4 issue 8 Sept. 2014 (ISBN 2230-7850) (www.isri.net) ಪ್ರಕಟಗೊಂಡಿರುವ ಲೇಖನದಲ್ಲಿ ಮಾರಾ ಸಮುದಾಯವು ಕನ್ನ ಭಾಷೆ, ಧಾರ್ಮಿಕ ಆಚರಣೆಗಳನ್ನು ಪ್ರಸ್ತಾಪಿಸಿ ಹೊರಬಿದ್ದು, ಪ್ರಸ್ತುತವಾದ ಅಸ್ಥಿತ್ವವನ್ನು ಹೊರಬಿಂಬಿಸಿರುತ್ತದೆ. ಆಲ್ಲದೆ ಇವರ ಸಮಸ್ಯೆಗಳನ್ನು ಎದುರಿಸುತ್ತಿದೆ ಎಂಬುದಾಗಿ ತಿಳಿಸಿರುವರು.

ಉಮಾದೇವಿ ಎಂ.ಡಿ. ಇವರು ಬರೆದ "ಬ್ಲೈಂಡ್ ಆಫ್ ಮೈಸೂರು" ಎಂಬ ಕೃತಿಯಲ್ಲಿ ಮಾರಾ ಬುಡಕಟ್ಟಿನ ಮಹಿಳೆಯರ ಭೌತಿಕ ಅಥವಾ ಮೌಲ್ಯ ಮಾರಾ ಭಾಷೆ, ದೈವಾರಾಧನೆಗಳನ್ನು ದಾಖಲಿಸಿರುವರು **ಡಾ.ಕೆ.ಎಂ. ಮೇಘ್ತಿ** ಸ್ವಾತ್ಯಾಕಾರು ಬುಡಕಟ್ಟು ಅಧ್ಯಯನ ವಿಭಾಗ, ಕನ್ನಡ ವಿಶ್ವವಿದ್ಯಾಲಯ ಹಂಪಿ ಇವರು ಮಾರಾಯರವರ ಸಂಖ್ಯೆ, ಕಾರ್ಯಕ್ಷೇತ್ರ – ಮುಲ್ಕಿ ಸಂಘಟನ ಅಸ್ಥಿತ್ವ ವಿಸ್ತರಿಸಿ ಮೊದಲ ಮಾರಾ ಬುಡಕಟ್ಟಿನ ಉಡುಪಿ ವರದಿ ನೀಡಿರುತ್ತಾರೆ. ಸದರಿ ವರದಿಯಲ್ಲಿ ಡಾ. ಮೇಘ್ತಿಯವರು ಮುಲ್ಕಿ ವಿಕ್ಷ ಕಾರ್ಕಳ, ಬೀಳಕ್ಕೂರು, ಕಸಿಂಗ, ಕಾಳಿಕಾಡಿ ಪ್ರದೇಶದಲ್ಲಿ ಕ್ಷೇತ್ರಕಾರ್ಯ ಕೈಗೊಂಡಾಗ ಬಳ್ಳಿಯಿಂದ ಮಾಹಿತಿಯ ಕೊಡುಕೊಳ್ಳಿ ಮಾರಾಯರವರ ಕುಟುಂಬ, ವಿವಾಹ ಧಾರ್ಮಿಕ ಸಂಸ್ಥೆಗಳ ವಿವರಗಳನ್ನು ನೀಡಿರುತ್ತಾರೆ.

ರಸೆಲ್ ಆರ್.ವಿ. ಇವರ "The Tribes and Caste of the Central Provinces of India" Vol. IV Cosmo Publication, Delhi 1975 ಎಂಬ ಕೃತಿಯಲ್ಲಿ ಮಾರಾಗಳು ದಕ್ಷಿಣ ಭಾರತದ ಸೈನಿಕ ಮಾರ್ಗಕ್ಕೆ ಸೇರಿದ ಜನಸಮುದಾಯವೆಂದರು. ಮಾರಾಠಿ ಸಮುದಾಯವು ಮುಂಬಯಿ ಪ್ರಾಂತ್ಯ, ಇವರ ಬಳಿ ಆಥವಾ ಬೆಳಗಾಂ ಜಿಲ್ಲೆ, ಆಲಂಗಿ ಮುಂತಾದ ಅಂಶಗಳ ಮಾಹಿತಿಯನ್ನು ಒದಗಿಸಿರುತ್ತಾರೆ.

ಪ್ರೊ.ಕೆ.ಎಂ. ಮೇಘ್ತಿ "ಸಿದ್ಧಿ ಆದಿವಾಸಿಗಳು", ಕರ್ನಾಟಕ ಆದಿವಾಸಿ ರಕ್ಷಣಾ ವೇದಿಕೆ (ರಿ.) 2017 ಕರ್ನಾಟಕ ಆದಿವಾಸಿ ರಕ್ಷಣಾ ವೇದಿಕೆಯ ವಿಶೇ

ಅವಿಭಾಜ್ಯ ದಿಕ್ಸೂಚಿಯಲ್ಲಿ ಸಂಪರ್ಕವಿದೆ. ಈ ಕೃತಿಯು ಲೇಖಕರಿಗೊಂಡಿದೆ. ಈ ಕೃತಿಯು ಮುಖ್ಯವಾಗಿ ಸೂಕ್ಷ್ಮ ಅವಿಭಾಗಳಾದ ಹಾಸ್ಯಗಾರಿಕೆಯ ಲೇಖನ, ಗಂಭೀರ, ಗೀತೆಗಳು, ಕಥೆಗಳು, ಕವನಗಳು, ಅನುಭವ, ಅಭಿಪ್ರಾಯ, ಮಾರ್ಗದರ್ಶನ, ಮೀಮಾಂಸೆ, ಪತ್ರಿಕೆಯ, ಯುವಜನ, ಸೂಚನೆಗಳು ಮುಂತಾದ ಬರಹಗಳು ಸಮುದಾಯಗಳ, ವೈದ್ಯಕೀಯ ವಿಷಯದ ಬರಹಗಳಿಗಳಾದ ಕಾಮಾಲೆ, ಕಣ್ಣಿಯಲ್ಲ, ಕುಂಬಳ, ಮೂಲಾಧಾರ, ಮೂಲಾಧಾರ, ಸಿದ್ಧ ಹಾಗೂ ಜೀವಕಾರಣ ಮತ್ತು ಕೊರಗ ಅವಿಭಾ ಬರಹಗಳಿಗಳ ಸಮಗ್ರ ಮಾಹಿತಿಯನ್ನು ನೀಡುತ್ತದೆ. ಇಲ್ಲದೆ ಸೂಕ್ಷ್ಮ ಬರಹಗಳು ಸಮುದಾಯದ ರಕ್ಷಣೆಗೆ ಮತ್ತು ಅಭಿವೃದ್ಧಿಗೆ ಕೈ ಜೋಡಿಸಿ ಸಹಕರಿಸುತ್ತಿರುವ ಅವಿಭಾಜ್ಯ ರಕ್ಷಣಾ ಕರ್ತವ್ಯಕ್ಕಿದ್ದ ಪ್ರಯತ್ನಿಸಲ್ಪಟ್ಟಿವೆ. ಮಾಹಿತಿಯು ಉಪಯುಕ್ತವಾಗಿದೆ. ಈ ಎಲ್ಲಾ ದೃಷ್ಟಿಯಿಂದ ಅಧ್ಯಯನಕಾರರಿಗೆ, ಪರಿಚಯಾತ್ಮಕರಿಗೆ ಹಾಗೂ ಸಮುದಾಯಗಳ ಸಂಶೋಧನೆಗೆ ಉತ್ತಮ ಗ್ರಂಥವಾಗಿರುವುದು.

ಕರ್ನಾಟಕದ ಮುಖ್ಯ ಗಣಿಗಳು ಮತ್ತು ಖನಿಜಗಳು ಅವರ 'The Kumtis - Kumdbis of India' Pritam Prakashan, Paji Fard, margao, Goa 2006ರ ಗ್ರಂಥದಲ್ಲಿ ಕುಮಟಿ ಸಮುದಾಯವನ್ನು ಒಂದು ಕೃಷಿ ಜೀವನ ನಡೆಸುವ ಸಮುದಾಯವಾಗಿರುತ್ತದೆ. ದೇಶಾದ್ಯಂತ ವಾಸ್ತವ್ಯವಿರುವ ಈ ಸಮುದಾಯವನ್ನು ಬೇರೆ ಬೇರೆ ಭಾಷೆಗಳಲ್ಲಿ ಹೆಸರಿ ಕರೆಯುವುದಾಗಿದೆ ಎಂಬುದಾಗಿ ತಿಳಿಸಿರುತ್ತಾರೆ ಹಾಗೂ ಈ ಸಮುದಾಯದ ಆರ್ಥಿಕತೆಯ ಬಗ್ಗೆ ತಿಳಿಸಿರುವರು. ಡಾ. ಹಿ.ಚಿ. ಬೋರಲಿಂಗಯ್ಯ 'ನಿತ್ಯದ ನಾಡಿಗೆ ಕುಮಟಿ' (1991) ಮತ್ತು ಕುಮಟಿಯವರು (2010) ಎಂಬ ಕೃತಿಯಲ್ಲಿ 'ಮೂಲಾಧಾರ ಪ್ರದೇಶದಲ್ಲಿ ವಾಸ್ತವ್ಯವಿರುವ ಕುಮಟಿಯವರ ಕುರಿತು ಪರಿಚಯಿಸಿದ್ದಾರೆ. ಜರ್ನಿಸ್ ಟೂ ಕೋಸ್ಟಲ್ – 'Journey from Madas to coastal Karnataka' ಎಂಬ ಗ್ರಂಥದಲ್ಲಿ 'ಕುಮಟಿಗಳು ಕರ್ನಾಟಕದ ಮೂಲ ಬರಹಗಳು' ಎಂಬುದಾಗಿ ತಿಳಿಸಿದ್ದಾರೆ. ವಾಸ್ತವಿಕ ವಿಕೋಪದಿಂದಾಗಿ ಗೋವಾಕ್ಕೆ ಬರಲು ಹೊಸಿ ಕರ್ನಾಟಕದ ಮೊಗವಾಸಿಗಳು ಅಲ್ಲಿಂದ ಕಾರವಾರದಲ್ಲಿ ಮತ್ತು ಕರ್ನಾಟಕದ ಹೊರಭಾಗ ಭಾಗಕ್ಕೆ ವಾಸವಾಗಿರುವರು ಎಂಬುದಾಗಿ ತಿಳಿಸಿರುವರು. **ಪ್ರೊ. ಎಸ್.ಡಿ. ನಾಯಕ್ : 'ಕೊಂಕಣದ ಕುಮಟಿಯವರು'** ಕರ್ನಾಟಕ ಕೊಂಕಣಿ ಸಾಹಿತ್ಯ ಅಕಾಡೆಮಿ, ಮಂಗಳೂರು 2008, ಕೃತಿಯಲ್ಲಿ ಕುಮಟಿಯ ಮೂಲತಃ ಗೋವಾ ರಾಜ್ಯದಿಂದ ಕರಾವಳಿ ಕರ್ನಾಟಕಕ್ಕೆ ಬರಲು ಬಂದು ನೆಲೆ ನಿಂತ ಜನ ಸಮುದಾಯ ಎಂಬುದಾಗಿ ತಿಳಿಸಿದ್ದಾರೆ. ಅಲ್ಲದೆ ಕುಮಟಿಯರ ಬಗ್ಗೆ ನಡೆದ ಅಧ್ಯಯನ ಸಮುದಾಯದ ಹಿನ್ನೆಲೆಯ ಕುರಿತು ವಿಸ್ತಾರವಾಗಿ ತಿಳಿಸಿದ್ದಾರೆ.

ಡಾ. ರವೀಂದ್ರ ಜೆ.ಕೆ. : ಮುಂಬಯಿ ಕುಮಟಿಗಳು, ಚಳಿಗಾಲ ಪ್ರಕಾಶನ, ಕೇರ್ಗದ್ದೆ ತಿಪಟೂರು (2008) ಕೃತಿಯಲ್ಲಿ ಉತ್ತರಕನ್ನಡ ಜಿಲ್ಲೆಯಲ್ಲಿ ವಾಸ್ತವ್ಯವಿರುವ ಕುಮಟಿಗಳು ಮಹಾರಾಷ್ಟ್ರದ ಸಾಂಗ್ಲಿ, ಕೊಲ್ಹಾಪುರ, ಸೊಲ್ಹಾಪುರ, ಪುಣೆಯಲ್ಲಿ, ಗೋವಾ, ಬಾಗಲಕೋಟೆ ಹಾಗೂ ಗೋವಾ ರಾಜ್ಯದ ಬೇರೆ ಬೇರೆ ಸ್ಥಳಗಳಿಂದ ಬಂದು ಕರ್ನಾಟಕದ ಕರಾವಳಿ ಹಾಗೂ ಮಲೆನಾಡಿನ ಪ್ರದೇಶದ ಜಿಲ್ಲೆಗಳಲ್ಲಿ ನೆಲೆಸಿದ್ದಾರೆ. ಇವರ ಸಾಂಸ್ಕೃತಿಕ ಆಚರಣೆಯನ್ನು ಮತ್ತು ಸಮುದಾಯದಲ್ಲಿ ಆಗಿರುವ ಬದಲಾವಣೆಯನ್ನು ತಿಳಿಸಿದ್ದಾರೆ. ಡಾ. ಸವಿತಾ ನಾಯಕ : 'ಉತ್ತರಕನ್ನಡ ಜಿಲ್ಲೆಯ ಕುಮಟಿ ಬರಹಗಳು – ಪ್ರಾಚೀನ ಕಲೆ' ಎಂಬ ಮಹಾಪ್ರಬಂಧದಲ್ಲಿ ಉತ್ತರಕನ್ನಡ ಜಿಲ್ಲೆಯಲ್ಲಿರುವ ಬರಹಗಳು ಮತ್ತು ಜೀವನಕಲೆಯ ವಿಷಯದಲ್ಲಿ ಕುಮಟಿ ಸಮುದಾಯವನ್ನು ಪರಿಚಯಿಸಿದ್ದಾರೆ. ಎಸ್.ಡಿ. ಬಂಡಿಗೆ ಅವರ 'ಫ್ಲೈಟ್ಸ್ ಆಫ್ ಮೈಸೂರ್' ಎಂಬ ಕೃತಿಯಲ್ಲಿ ಕುಮಟಿಯರ ಕುರಿತು ವಿವರಣೆ ನೀಡಿದ್ದಾರೆ. ಇವರ ಪ್ರಕಾರ ಉತ್ತರಕನ್ನಡ ಜಿಲ್ಲೆಯಲ್ಲಿ ಕುಮಟಿ ಸಮುದಾಯದವರು ವಾಸ್ತವ್ಯವಿದ್ದು ಇವರ ಜನಸಂಖ್ಯೆಯ ವಿವರಗಳನ್ನು ನೀಡಿರುತ್ತಾರೆ. ಇವರು ಆರ್ಥಿಕವಾಗಿ, ಶೈಕ್ಷಣಿಕವಾಗಿ ಹಿಂದುಳಿದವರಾಗಿದ್ದಾರೆ. ಇವರು ಮುಂಡಗ, ಕನ್ನಡ, ತುಳು ಭಾಷೆ ಮಾತನಾಡುತ್ತಾರೆ. ಇವರ ಆಹಾರ ಪದ್ಧತಿ, ಬೇಟೆ, ಸಾಂಸ್ಕೃತಿಕ ಆಚರಣೆಗಳ ಬಗ್ಗೆ ಬೆಳಕು ಚೆಲ್ಲಿದ್ದಾರೆ.

ಎಚ್.ಕೆ. ಪಟ್ಟಣಶೆಟ್ಟಿ ಅವರು **'ಕಾಸ್ಟ್ ಆಂಡ್ ಟ್ರೈಬ್ಸ್ ಆಫ್ ಸೌತ್ ಇಂಡಿಯಾ'** ಎಂಬ ಗ್ರಂಥದಲ್ಲಿ ಕುಮಟಿ ಸಮುದಾಯದವರು ಬರಹಗಳು ಎಂಬುದಾಗಿ ಮೊದಲ ಹೇಳಿಕೆಯನ್ನು ಗುರುತಿಸಿದ್ದಾರೆ. ಸಮಾಜ ವಿಜ್ಞಾನಿಗಳ ಹಿಂದೆಯೇ ಕುಮಟಿ ಸಮುದಾಯದವರ ವಿವಿಧ ಧಾರ್ಮಿಕ, ಸಾಂಸ್ಕೃತಿಕ ಆಚರಣೆಗಳನ್ನು ಸಂಪ್ರದಾಯ ಮತ್ತು ಪದ್ಧತಿಗಳನ್ನು ವಿವರಿಸುತ್ತಾ ಸಮುದಾಯವನ್ನು ಪರಿಚಯಿಸಿದ್ದಾರೆ. ಈ ಸಮುದಾಯದ ಬಗ್ಗೆ ಸಾಂಸ್ಕೃತಿಕ ವಿವರಣೆ ನೀಡಿರುವುದರಿಂದ ಮುಂದಿನ ಸಂಶೋಧನಾತ್ಮಕ ಅಧ್ಯಯನಕ್ಕೆ ಉಪಯುಕ್ತವಾಗಿರುತ್ತದೆ. ಆರ್.ಇ. ಎಮೆನೋವ್ ಅವರ **'ದಿ ಟ್ರೈಬ್ಸ್ ಆಂಡ್ ಕ್ಯಾಸ್ಟ್ಸ್ ಆಫ್ ಬಾಂಬೆ'** (1975) ಎಂಬ ಗ್ರಂಥದಲ್ಲಿ ಉತ್ತರಕನ್ನಡ ಜಿಲ್ಲೆಯ ಜಿಲ್ಲೆಯಲ್ಲಿರುವ ಸಮುದಾಯಗಳ ಬಗ್ಗೆ ಪರಿಚಯಿಸಿರುತ್ತಾರೆ. ಈ ಕೃತಿಯಲ್ಲಿ ಕುಮಟಿಯವರು ಜೀವನ ಕೃಷಿ, ಆಹಾರ ಪದ್ಧತಿ, ಮದುವೆ ಸಾಂಸ್ಕೃತಿಕ ಆಚರಣೆಗಳ ಬಗ್ಗೆ ಸ್ಪಷ್ಟವಾಗಿ ಪರಿಚಯಿಸಿದ್ದಾರೆ. ಸಂಸ್ಕೃತಿಯನ್ನು ಆಧಾರಿಸಿ ಕೃಷ್ಣ ಅಯ್ಯರ್ ಅವರ 'ದಿ ಮೈಸೂರ್ ಟ್ರೈಬ್ಸ್ ಆಂಡ್ ಕ್ಯಾಸ್ಟ್ಸ್' ಸಂ: II (1928) ಕೃತಿಯಲ್ಲಿ ಕುಮಟಿಗಳ ಬಗ್ಗೆ ಪರಿಚಯಿಸಿರುವ 'ಆರ್ ಕುಮಟಿ'ಗಳ (ಮಾರಾಟ ಕುಮಟಿ) ಸಂಕ್ಷಿಪ್ತವಾದ ವಿವರಣೆಯಿರುತ್ತದೆ. ಕುಮಟಿ ಸಮುದಾಯದ ಆರ್ಥಿಕ ರಚನೆ, ವಿವಾಹದ ವಿಧಿ-ನಿಷೇಧಗಳು, ಬರಹಗಳು ಒಳಾಡಳಿತ ವ್ಯವಸ್ಥೆ, ಧಾರ್ಮಿಕ ಆಚರಣೆ, ಕುಮಟಿಯ ಬೇಕಾಯ ಮುಂತಾದ ವಿಷಯಗಳ ಬಗ್ಗೆ ಅಧ್ಯಯನ ನಡೆಸಿದ್ದಾರೆ.

ಎಂ.ಎ. ಶೆಟ್ಟಿಗಾರವರು : 'ಹೊಸ ಫ್ರೈಡ್ ಆಫ್ ಆಫ್ಸ್ ಸಂ: II 1984ರಲ್ಲಿ ಗುಜರಾತ್ ರಾಜ್ಯದ ಸೂರತ್ ಜಿಲ್ಲೆಯ ಮಾಣಗತ್, ಬಂದ್ರಾ ಕುಟುಂಬಗಳಲ್ಲಿ ಗೋವರ್ಷಾದ ಜಿಲ್ಲೆ ಮತ್ತು ಪಾಂಡೆ ಸುತ್ತಮುತ್ತಲಿನ ಬಾಪಿವಿಧಾನದ ಕೆಲವು ಪ್ರದೇಶಗಳಲ್ಲಿ ಕುಮಟಿ ಜಾತಿಯ ಸಮುದಾಯದವರು ವಾಸಿಸುವರು ಎಂಬುದಾಗಿ ತಿಳಿಸಿರುವರು. ಡಾ. ಎಂ. ಜ್ಞಾನಿ ಭಟ್ ಎನ್. ಅವರು 'ಕೆನರಾ ಮಿಷನ್ ಪಬ್ಲಿಕೇಷನ್ ಸಂಸ್ಥೆಯಲ್ಲಿ 1995, 'ಗೋಕರ್ಣಂ ಪ್ರಾಂತ ಎತ್ನೋಸಾಯನ್ಸ್ ಸ್ಟಡಿ ಆಫ್ ಕುಮಟಿಸ್' ಎಂಬ ವಿಷಯದಲ್ಲಿ ದಕ್ಷಿಣಕನ್ನಡ ಜಿಲ್ಲೆಯಲ್ಲಿ ವಾಸಿಸುತ್ತಿರುವ ಕುಮಟಿಯವರು ಕೃಷಿ ಕಾರ್ಯ ಮಾಡುವವರು ಎಂದು ಪರಿಚಯಿಸಿದ್ದಾರೆ. ಪ್ರೊ. ಎಸ್. ಜಿ. ಭಟ್ಟ ಗೌಡ ಅವರ 'ಕರ್ನಾಟಕ ಬರಹಗಳು' ಸಂಪುಟ: 1 ಮತ್ತು ಸಂ: 2ರಲ್ಲಿ (1998) ಉತ್ತರಕನ್ನಡ ಜಿಲ್ಲೆಯ ಅವಿಭಾಜ್ಯ ಆದಿಮಾ ಸಮುದಾಯಗಳ ಕುರಿತು ಸಂಕ್ಷಿಪ್ತವಾದ ಬರಹಗಳಿವೆ. ಇದರಲ್ಲಿ ಡಾ. ಆರ್ಯಾಯ ಕುಮಾರ್ ಶೆಣೈ ಅವರ 'ಕುಮಟಿಯವರು' ಎಂಬ ಲೇಖನದಲ್ಲಿ ಈ ಸಮುದಾಯದ ಅಧ್ಯಯನದ ಬಗ್ಗೆ ಉಲ್ಲೇಖ ಹಾಗೂ ಕುಮಟಿ ಸಮುದಾಯವನ್ನು ಬರಹಗಳು ಎಂಬುದಾಗಿ ಗುರುತಿಸಿದ್ದಾರೆ. ಗೋವಾದ ಕುಮಟಿಯರ ಮೂಲವಲ್ಲಿ, ಭಾಷೆ, ಆಹಾರ ಪದ್ಧತಿ, ಮದುವೆ ಪದ್ಧತಿ, ಧಾರ್ಮಿಕ ನಂಬಿಕೆ ಮತ್ತು ಆಚರಣೆಗಳು, ಸ್ಥಾಯಿ ಪದ್ಧತಿ, ಸಾಂಸ್ಕೃತಿಕ ಕರಗಳ ವಿವರಗಳು ನೀಡಿರುತ್ತದೆ.

ಕೆ.ಎಸ್. ಸಿಂಗ್ : ಪೀಪಲ್ ಆಫ್ ಇಂಡಿಯಾ – ಕರ್ನಾಟಕ ಸಂ: 26 **ಮಾಹಿತಿ:** ಇ 2003 ಕೃತಿಯಲ್ಲಿ ಕುಮಟಿಯವರು ಮುಂಬಯಿ ಗೋವಾ ರಾಜ್ಯದವರಾಗಿರುತ್ತಾರೆ 16ನೇ ಶತಮಾನದಲ್ಲಿ ಕರ್ನಾಟಕ ಕರಾವಳಿ ಪ್ರದೇಶಕ್ಕೆ ಹಾಗೂ ಕೇರಳ ರಾಜ್ಯಕ್ಕೆ ವಲಸೆ ಬಂದಿರುವ ಸಮುದಾಯವಾಗಿದೆ. ಈ ಕೃತಿಯಲ್ಲಿ ಕುಮಟಿ ಸಮುದಾಯದ ವಿವಾಹ ಪದ್ಧತಿ, ಮೃತ ಪುರುಷರಿಗೆ ಬಗ್ಗೆ ಕೃಷಿ, ಪರಿಸರಗೊಳಪಡಿಸಿ ಪೂಜಾ ವಿಧಾನಗಳ ಬಗ್ಗೆ ಮಾಹಿತಿ ನೀಡಿರುತ್ತಾರೆ. ಭಂಡಾರ್‌ಕಾರ್ ಕಾಲೇಜು ಕುಂದಾಪುರ ಇದ್ದಿಂದ ಬೆಳ್ಳಿ ಹಬ್ಬದ ಸ್ಮರಣ ಸಂಚಿಕೆ 1998ರಲ್ಲಿ ಶ್ರೀಮತಿ ಸಾಯಿಕ್ಷಿ ನಾಯಕ ಇವರು 'ಕವಿತೆ ಕಟ್ಟು ಕಥೆ ಕುಮಟಿ ವಿವಾಹ' ಎಂಬ ಲೇಖನದಲ್ಲಿ ಕುಮಟಿ ಸಮುದಾಯದ ವಿವಾಹ ಪದ್ಧತಿಯ ಕುರಿತು ವಿಶ್ಲೇಷಿಸಿರುತ್ತಾರೆ. ಡಾ. ವೈ. ರವೀಂದ್ರನಾಥ ರಾವ್ ಅವರ 'ಫ್ಲೈಟ್ಸ್ ಟ್ರೈಬಿಸ್ ಆಫ್ ಆಂಧ್ರ, ಪಿ. ಸ್ಟಡಿ ಆಫ್ ಕುಮಟಿಸ್ ಆಫ್ ನೆಕ್ಸ್ ಇಂಡಿಯಾ' ಎಂಬ ಕೃತಿಯಲ್ಲಿ ಆಯಿಫಾಕ್ಸ್ ದಕ್ಷಿಣಕನ್ನಡ ಜಿಲ್ಲೆಯಲ್ಲಿ ವಾಸಿಸುತ್ತಿರುವ ಕುಮಟಿ ಸಮುದಾಯಗಳ ವಾಸ್ತವ್ಯದ ನೆಲೆಗಳು, ಪ್ರಮುಖ ಕಾಯಿದೆ ವ್ಯವಸ್ಥೆ, ಬಂಧುತ್ವದ ಪದ್ಧತಿ, ಒಳಮದುವೆ, ನಂಬಿಕೆ ಮತ್ತು ಆಚರಣೆಗಳು ಮುಂತಾದ ವಿಷಯಗಳ ಬಗ್ಗೆ ವಿಶ್ಲೇಷಣಾತ್ಮಕ ವಿವರಗಳಿವೆ.

ಡಾ. ಎಚ್ಸ್. ಪ್ರಭಾಕರ ಅವರು ರಚಿಸಿರುವ **'ಆದಿವಾಸಿ ಅಟ್ಲಾಸ್'** ಎಂಬ ಕೃತಿಯಲ್ಲಿ ಕರ್ನಾಟಕ ರಾಜ್ಯದಲ್ಲಿರುವ ಬರಹಗಳಿಗಳ ಬಗ್ಗೆ ವಿಸ್ತೃತವಾದ ಮಾಹಿತಿಯನ್ನು ಒದಗಿಸಿರುವರು.

- ಈ ಕೃತಿಯಲ್ಲಿ ಶ್ರೀಮತಿ ವಿಜಯಲಕ್ಷ್ಮೀ ಆರ್. ಅವರು 'ಕರ್ನಾಟಕ ಬರಹಗಳು ನೆಲೆಗಳು' ಎಂಬ ಲೇಖನದಲ್ಲಿ ಕುಮಟಿಯವರ ನೆಲೆಗಳು, ಭಾಷೆ, ಒಳವರ್ಗಗಳು, ವೃತ್ತಿ ಮೀಮಾಂಸಾಯಿ, ಆಚಾರ – ವಿಚಾರ, ಮುಂತಾದ ಅಂಶಗಳ ಪದ್ಧತಿಗಳ ವಿವರಣೆ ಇರುತ್ತದೆ. ಅಲ್ಲದೆ ಈ ಸಮುದಾಯವನ್ನೊಳಗೊಂಡು ಬರಹಗಳು ಸಮುದಾಯ ಎಂಬುದಾಗಿ ವಿಶ್ಲೇಷಿಸಿರುವರು.
- ಅಲ್ಲದೆ ಅದೇ ಕೃತಿಯಲ್ಲಿ ಜಿ.ಸಿ. ಮಹೇಂದ್ರ ಕುಮಾರ್ ಅವರ 'ಬರಹಗಳು ಜನಾಂಗದಲ್ಲಿ ಸಂಪೂರ್ಣ ಪರಿಚಯ' ಎಂಬ ಲೇಖನದಲ್ಲಿ ಉತ್ತರಕನ್ನಡ ಜಿಲ್ಲೆಯಲ್ಲಿ ವಾಸ್ತವ್ಯವಿರುವ ಕುಮಟಿ ಜನಾಂಗದ ಸಾಮಾಜಿಕ ಬದುಕಿನ ಸಮಗ್ರ ವಿವರಣೆ ಇರುತ್ತದೆ.

ಎಸ್.ಜಿ. ಹಾಸಬಿಯ : ಆಯ್ದ ಕೆಲವು ಕರ್ನಾಟಕ ಹಿಂದುಳಿದ ವರ್ಗಗಳ ಆಯೋಗದ ವರದಿ (ಸಂ: 1) ಮತ್ತು (2) 1973 ಸಮಿತಿಯವರನ್ನು ಜಾತಿ ಸಮೀಕ್ಷೆ ನಡೆಸಲಿರುವುದು ತಿಳಿದು ನಂತರ ಬಂದಿರುವ ಇವರನ್ನು ಹಿಂದುಳಿದ ಜಾತಿಯ ವ್ಯಾಪ್ತಿಯಲ್ಲಿ ಸೇರಿಸಿದೆ. ಆದರೆ 1983ರ ಇವರ ಕರಡು ಪಟ್ಟಿಯನ್ನು ಬಿಡಲಿಲ್ಲ. ಇವರೆಲ್ಲರು ಸರಕಾರ ಪಶುಗಣತಿಯ ಜಾತಿಗಳೆಂದು – 'ಕರ್ನಾಟಕ ಭಾಗದ ಅಥವಾ ದಕ್ಷಿಣ ಮಹಾರಾಷ್ಟ್ರ ಸಂಸ್ಥಾನಗಳ ಭಾಗ : 13 ಎಂಬ ಗ್ರಂಥದಲ್ಲಿ ಕಾಣುವ ಸಮುದಾಯಗಳು ಕರೆಸಿಕೊಂಡ ಹಾಲುಮತ ಇವರ ಜನಸಂಖ್ಯೆಗಳ ಬಗ್ಗೆ ಕುರಿತು ವಿವರಿಸಿರುತ್ತಾರೆ. (1983-84 : 438-441) ಕರ್ನಾಟಕ ಸ್ಟೇಟ್ ಗೆಜೆಟಿಯರ್ ಉತ್ತರಕನ್ನಡ ಜಿಲ್ಲೆ – 1985 ಎಂಬ ಕೃತಿಯಲ್ಲಿ ಉತ್ತರಕನ್ನಡ ಜಿಲ್ಲೆಯಲ್ಲಿರುವ ಸಮುದಾಯಗಳ ಕೆಲವರಿಯರು ನಿಸರ್ಗವಾಗಿ ಕಾಣುವ ಸಮುದಾಯದ ಕುರಿತು ಸ್ಪಷ್ಟವಾಗಿ ಅರಿತುಕೊಳ್ಳಬಹುದಾಗಿದೆ. ಕರ್ನಾಟಕ ರಾಜ್ಯ ಸರ್ಕಾರ ಅಧಿಸೂಚನೆ II 2002ರ ಪ್ರಕಾರ ಕುರುಬರಿಗಳನ್ನು ಪ್ರವರ್ಗ – 1ರಲ್ಲಿ ಸೇರಿಸಲಾಗಿದೆ. (ಸರಕಾರಿ ಆದೇಶ ಸಂಖ್ಯೆ – ಸಕಲ/225 ಬಿಸಿಎ 2000 ಬೆಂಗಳೂರು – 30 ಮಾರ್ಚ್ 2002) ಗವರ್ನಮೆಂಟ್ ಆಫ್ ಗೋವಾ, ಎಪ್ರಿಲ್ 22 2003ರ ಆದೇಶದಲ್ಲಿ ಗೋವಾ ಸರಕಾರ ಆ ರಾಜ್ಯದಲ್ಲಿ ಹಾಲುಮತ ಕುರುಬ ಸಮುದಾಯವನ್ನು ಹಾಗೂ ಶೇಷವ ಮತ್ತು ಗಾವಡ ಮುಂತಾ ಸಮುದಾಯಗಳನ್ನು ಪರಿಶಿಷ್ಟ ಪಟ್ಟಿಗೆ (ಪರಿಶಿಷ್ಟ ಜಾತಿ) ಎಂದಾಗಿ ಹೆಸರಿಸಲಾಗಿದೆ. (ಆದೇಶ : ಡೈರೆಕ್ಟರ್ ಆಫ್ ಸೋಷಿಯಲ್ ವೆಲ್‌ಫೇರ್, ಗವರ್ನಮೆಂಟ್ ಆಫ್ ಗೋವಾ ಎಪ್ರಿಲ್ 22, 2003)

ಡಾ. ಆರ್. ಇಂದಿರಾ – 2001, ಅರಣ್ಯಾಧಿವಾಸಿಗಳು ಮತ್ತು ಮಹಿಳಾ ಸಶಕ್ತೀಕರಣ, 'ಅರಣ್ಯಾಧಿವಾಸಿಗಳು ಯೋಜನೆಗಳಲ್ಲಿ ಮೂಲ ನಿವಾಸಿ ಮಹಿಳೆಯ ಪಾತ್ರ' ಎಂಬ ಲೇಖನದಲ್ಲಿ ಜೇನುಕುರುಬ ಕಾಡುಗೊಲ್ಲರ ಕುರಿತು ಸಮುದಾಯದವರು ವಾಸ್ತವ್ಯವಿರುವ ಗ್ರಾಮಗಳ ಬಗ್ಗೆ ಮಾಹಿತಿಯನ್ನು ಪಡೆದು ರಚನೆಯಲ್ಲಿ ನೀಡಿರುತ್ತಾರೆ. ಡಾ. ಹಿ.ಚಿ. ಶಾಂತಿ – 'ಗಿರಿಜನ ಸಿರಿ' – 2003. ಪೆಟ್ರೋ. ಜೆ.ಕೆ. ಮಿಂಡೋಲಾ ಅಧ್ಯಯನದ ಸಂಪುಟದಲ್ಲಿ ಎ.ಸಿ. ಬೆರೆಕ ಇವರ 'ಕರ್ನಾಟಕದಲ್ಲಿ ಬುಡಕಟ್ಟುಗಳ ಅಧ್ಯಯನ' ಎಂಬ ಲೇಖನದಲ್ಲಿ ಕಾಡುಗೊಲ್ಲ ಸಮುದಾಯದ ಜೀವನ ವಿಧಾನಗಳ ಸ್ಪಷ್ಟವಾದ ವಿವರಣೆಯಿದೆ. ಪೆಟ್ರೋ. ಜೆ. ಮೆಲು ಸುಬ್ಬಯ್ಯ – ಕನ್ನಡ ನಿಘಂಟು ಸಂ: 2, 1976ರ ಕೃತಿಯಲ್ಲಿ ಕಾಡುಗೊಲ್ಲ ಸಮುದಾಯದವರು ಒಕ್ಕಲು ಕಸ ಮಾಡುತ್ತಿರುವ ಜಾತಿಗಳಲ್ಲಿ ಒಂದಾಗಿರುತ್ತದೆ. ಆದ್ದರಿಂದ ಕಾಡುಗೊಲ್ಲ ಸಮುದಾಯದಲ್ಲಿ ಕುಳವಾಡಿ, ಮಾರಾಠಿ, ಕೊಂಕಣಿ ಕಾಡುಗೊಲ್ಲ ಎಂಬ ಪ್ರಭೇದಗಳಿವೆ ಎಂಬುದಾಗಿ ತಿಳಿಸಿರುತ್ತಾರೆ. ಪಿ. ವಿ. ಪ್ರಕಾಶ ಇವರ ಕಾಡುಗೊಲ್ಲ ಜನಾಂಗದ ಸಂಗ್ರಹ ಎಂಬ ಕೃತಿಯಲ್ಲಿ ಕಾಡುಗೊಲ್ಲರ ಸಾಂಸ್ಕೃತಿಕ ಜೀವನದ ಕುರಿತಾಗಿ ವಿವರಣೆ ಇದೆ. ಆದ್ದರಿಂದ ಇವರ ವಾಸ್ತವ್ಯವಿರುವ ಮನೆಯ ಬಗ್ಗೆ, ಜೀವನ ವಿಧಾನಗಳ ಬಗ್ಗೆ ಮಾಹಿತಿ ಒದಗಿಸಿದ್ದಾರೆ. ಈ ಕೃತಿಯು ಕೊಂಕಣಿ ಭಾಷೆಯಲ್ಲಿ ಇರುವುದು.

ಹಿಂಗೆ ಸ್ವಾತಂತ್ರ್ಯ ಪೂರ್ವ ಮತ್ತು ನಂತರದ ಈ ಪುಟ್ಟದಲ್ಲಿ ಮಾರಾಟ ಸಮುದಾಯಗಳನ್ನು ಗಮನಾರ್ಹ ಒಳಗೊಳಪಿರುವುದಲ್ಲದೆ ಹಾಗೂ ಹೊರಗೊಳಪಿರುವುದಲ್ಲೂ ಅಧ್ಯಯನ ಒಳಪಟ್ಟಿದೆ.

ಮೇಲಿನ ಎಲ್ಲ ಲೇಖನಗಳು, ಕೃತಿಗಳು, ಸಂಶೋಧನಾ ಗ್ರಂಥಗಳು ಮಾರಾಟ ಸಮುದಾಯದ ಕುರಿತು ಉಪಯುಕ್ತ ಮಾಹಿತಿಗಳನ್ನು ಒದಗಿಸುತ್ತವೆ. ಈ ಎಲ್ಲ ಕೃತಿಗಳು ಹಾಗೂ ಲೇಖನಗಳಿಂದ ಮಾರಾಟ ಸಂಸ್ಕೃತಿಗೆ ಹೆಚ್ಚಿನ ಮಾಹಿತಿಯನ್ನು ಸಂಗ್ರಹಿಸಬಹುದು.

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Published: 13 September 2019

Individual and combined effects of organophosphate and carbamate pesticides on the cricket frog *Fejervarya limnocharis*

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Environmental Geochemistry and Health **volume 42**, pages1767–1774 (2020)Cite this article

- **377** Accesses
- **4** Citations

Abstract

Many amphibians use water bodies associated with agro-ecosystem for breeding and thus are exposed to multiple chemicals. *Fejervarya limnocharis* is a common frog occurring in rice paddy fields. The timings of pesticide application generally coincide with the tenure of the occurrence of tadpoles in shallow waters of paddy fields. Malathion and carbaryl are frequently used in rice paddy fields to control leafhoppers and rice bugs, respectively. Therefore, effects of mixtures of malathion and carbaryl insecticides on the survival of tadpoles and emergence of froglets of *Fejervarya limnocharis* were studied in the laboratory using combinations of three concentrations of carbaryl (0, 25, 50 µg l^{-1}) with four concentrations of malathion (0, 100, 250, 500 µg l^{-1}). Both malathion and carbaryl were found to be toxic to tadpoles. A reduction in tadpole survival and froglet emergence was recorded with increasing concentrations of carbaryl and malathion. We found significant interaction between carbaryl and malathion on tadpole survival and froglet emergence. Tadpoles exposed to combination of pesticides showed early emergence as froglets compared to control. The extent of toxicity and pesticide interactions are varied when mixed in different concentrations. The reduction in survival, froglet emergence and delay in emergence of metamorphs can occur in rice paddy field as both pesticides are used simultaneously. Therefore, combinations of pesticides may have significant negative effects on the frog population of agro-ecosystems, which requires further confirmation through appropriate field experiments.

ಪ್ರತಿಬಿಂಬ

PRATIBIMBA – Multidisciplinary Kannada Research Journal of IIMRD
ISSN: 2582-2284
Vol-2 Issue 2, Sep-Oct 2020, 11-26
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ಕೊರಗ ಬುಡಕಟ್ಟು ಸಮುದಾಯದ ಸಾಮಾಜಿಕ, ಆರ್ಥಿಕ ಮತ್ತು ಶೈಕ್ಷಣಿಕ ಬದಲಾವಣೆಗಳು: ಒಂದು ಅಧ್ಯಯನ

ರಾಮಚಂದ್ರ[1] ಮತ್ತು ಡಾ.ಗಂಗಾಧರ ದೈವಜ್ಞ[2]

ಪೀಠಿಕೆ

ಭಾರತದಲ್ಲಿನ ಪಾಶ್ಚಾತ್ಯ ಕಾಲದಿಂದ ಪ್ರಾರಂಭಿಸಿ ಇವತ್ತಿನವರೆಗೆ, ಯುರೋಪಿನ ಕ್ರೈಸ್ತ ಮಿಷನರಿಗಳು, ಮಾನವಶಾಸ್ತ್ರಜ್ಞರು, ಸಾಹಿತಿಗಳು, ಸಮಾಜಶಾಸ್ತ್ರಜ್ಞರು, ಚಿಂತಕರು, ಸಮಾಜ ಸುಧಾರಕರು ಮತ್ತಿತ್ತರರು ಕೊರಗ ಬುಡಕಟ್ಟು ಸಮುದಾಯವನ್ನು ಒಂದು ಅಧ್ಯಯನದ ವಸ್ತುವನ್ನಾಗಿಸಿದ್ದಾರೆ.

ಕೊರಗ ಬುಡಕಟ್ಟು ಹಿಂದೂ ಜಾತಿಗಳೊಂದಿಗೆ ಬೆರೆಯದೆ ಬಹಳಕಾಲ ಸ್ವತಂತ್ರವಾಗಿದ್ದರೂ ಕೂಡ ಇತ್ತೀಚೆಗೆ ಕೊರಗ ಬುಡಕಟ್ಟು ನಿಧಾನವಾಗಿ ಜಾತಿ ಸಮಾಜವಾಗಿ ಪರಿವರ್ತನೆಗೊಳ್ಳುತ್ತಿದೆ. ಇಲ್ಲಿ ಬೋಸ್ ಅವರ ಅಭಿಪ್ರಾಯವನ್ನು ಉಲ್ಲೇಖಿಸಬೇಕಾಗುತ್ತದೆ. 'ಬುಡಕಟ್ಟು ಸಮುದಾಯವು ತಮ್ಮ ಹುಟ್ಟು-ವಿವಾಹ-ಸಾವು ಇವುಗಳಿಗೆ ಬ್ರಾಹ್ಮಣ ಪುರೋಹಿತರಿಗೆ ಅವಕಾಶ ಕೊಡುವುದೋ ಆಗ ಬುಡಕಟ್ಟು ತನ್ನ ಮೂಲ ಸ್ವರೂಪವನ್ನು ಕಳೆದುಕೊಂಡು ಜಾತಿಯಾಗಿ ಬದಲಾವಣೆಯಾಗುತ್ತದೆ.' ಪ್ರಸ್ತುತ ಕರ್ನಾಟಕ ರಾಜ್ಯದ ದಕ್ಷಿಣ ಕನ್ನಡ ಮತ್ತು ಉಡುಪಿ ಜಿಲ್ಲೆಯಲ್ಲಿ ದಟ್ಟವಾಗಿಯೂ ಹಾಗೂ ಇತರ ಕಡೆಗಳಲ್ಲಿ ಚದುರಿದಂತೆ ಹರಡಿಕೊಂಡಿರುವ ಆದಿಮ ಬುಡಕಟ್ಟಾದ ಕೊರಗ ಜನ ಸಮುದಾಯದಲ್ಲಿನ ಸಾಮಾಜಿಕ, ಆರ್ಥಿಕ ಮತ್ತು ಶೈಕ್ಷಣಿಕ ಬದಲಾವಣೆಗಳನ್ನು ಪ್ರಸ್ತುತ ಲೇಖನದಲ್ಲಿ ವಿವರಿಸಲಾಗಿದೆ.

ಅಧ್ಯಯನದ ಉದ್ದೇಶಗಳು

- ಕೊರಗ ಬುಡಕಟ್ಟು ಸಮುದಾಯದಲ್ಲಿ ಪ್ರಸ್ತುತ ಇರುವ ಸಾಮಾಜಿಕ, ಆರ್ಥಿಕ, ಶೈಕ್ಷಣಿಕ ಸ್ಥಿತಿಗತಿಗಳನ್ನು ವಿಶ್ಲೇಷಿಸುವುದು.
- ಆರ್ಥಿಕ ಹಾಗೂ ಶೈಕ್ಷಣಿಕ ಹಿಂಬಿಳುವಿಕೆಗೆ ಕಾರಣಗಳನ್ನು ತಿಳಿದುಕೊಳ್ಳುವುದು.

ಅಧ್ಯಯನದ ವ್ಯಾಪ್ತಿ

ಉಡುಪಿ ಜಿಲ್ಲೆಯ ಕುಂದಾಪುರ ತಾಲೂಕಿನ ವ್ಯಾಪ್ತಿಯೊಳಪಟ್ಟ ಆಯ್ದ 14 ಹಾಡಿಗಳನ್ನು ಪ್ರಸ್ತುತ ಅಧ್ಯಯನಕ್ಕೆ ಒಳಪಡಿಸಲಾಗಿದೆ. ಈ ತಾಲೂಕಿನ 68 ಹಾಡಿಗಳಲ್ಲಿ ಕೊರಗ ವಾಸ್ತವ್ಯದ ನೆಲೆಗಳಿವೆ. ಅವುದು ದಟ್ಟವಾಗಿ ನೆಲೆಯಾಗಿರುವ ಹಾಡಿಗಳಾದ ಕೋಟೇಶ್ವರ, ಜಪ್ತಿಲ್, ಗುಜ್ಜಾಡಿ, ಅಮಾಸೆಬೈಲು, ಹಾಲಾಡಿ,

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[1] ಸಹಾಯಕ ಪ್ರಾಧ್ಯಾಪಕರು, ಭಂಡಾರ್‌ಕಾರ್ಸ್ ಕಾಲೇಜು, ಕುಂದಾಪುರ

[2] ಪ್ರಾಧ್ಯಾಪಕರು, ಬುಡಕಟ್ಟು ಅಧ್ಯಯನ ವಿಭಾಗ, ಕನ್ನಡ ವಿಶ್ವವಿದ್ಯಾಲಯ, ಹಂಪಿ

ಕಾಳಾವರ ಮತ್ತು ವಿರಳವಾಗಿ ವಾಸ್ತವ್ಯವಿರುವ ಗ್ರಾಮಗಳಾದ ಬೀಜಾಡಿ, ಹಕ್ಲಾಡಿ, ಗೋಳಿಹೊಳೆ, ನಾಡ, ಕೆರಾಡಿ, ವಂಡ್ಸೆ, ಕುಂಭಾಶಿ, ಹಳ್ಳಿಹೊಳೆ ಗ್ರಾಮಗಳನ್ನು ಆಯ್ಕೆ ಮಾಡಲಾಗಿದೆ. ಈ ಹದಿನಾಲ್ಕು ಹಾಡಿಗಳಲ್ಲಿ (14) ಒಂದು ನೂರು ಕುಟುಂಬಗಳನ್ನು (100) ಮಾತ್ರ ಅಧ್ಯಯನ ಮಾಡಲಾಗಿದೆ.

ಕೋಷ್ಟಕ 1: ಅಧ್ಯಯನಕ್ಕೆ ಆಯ್ಕೆಗೊಂಡ ಗ್ರಾಮಗಳು, ಕುಟುಂಬಗಳ ಸಂಖ್ಯೆ ಹಾಗೂ ಆ ಕುಟುಂಬಗಳಲ್ಲಿರುವ ಲಿಂಗವಾರು ಜನಸಂಖ್ಯೆಯ ವಿವರ:

ಕ್ರ.ಸಂ.	ಗ್ರಾಮಗಳ ಹೆಸರು	ಕುಟುಂಬಗಳ ಸಂಖ್ಯೆ	ಕುಟುಂಬದಲ್ಲಿ ವಾಸ್ತವ್ಯವಿರುವ ಜನಸಂಖ್ಯೆ		
			ಗಂಡು	ಹೆಣ್ಣು	ಒಟ್ಟು
1.	ಹಾಲಾಡಿ	08	30	34	64
2.	ಕೋಟೇಶ್ವರ	15	68	59	127
3.	ಕುಂಭಾಶಿ	05	23	27	50
4.	ಜಡ್ಕಲ್	15	50	56	106
5.	ಬೀಜಾಡಿ	06	15	19	34
6.	ಹಕ್ಲಾಡಿ	04	16	12	28
7.	ಗೋಳಿಹೊಳೆ	02	04	05	09
8.	ಕಾಳಾವರ	08	27	25	52
9.	ಅಮಾಸೆಬೈಲು	04	28	24	52
10.	ಹಳ್ಳಿಹೊಳೆ	05	18	17	35
11.	ನಾಡ	06	20	24	44
12.	ಗುಜ್ಜಾಡಿ	12	38	40	78
13.	ಕೆರಾಡಿ	05	18	22	40
14.	ವಂಡ್ಸೆ	05	22	17	39
ಒಟ್ಟು		**100**	**377**	**381**	**758**

ಅಧ್ಯಯನದ ವಿಧಾನ

'ಸಾಮಾಜಿಕ, ಆರ್ಥಿಕ ಮತ್ತು ಶೈಕ್ಷಣಿಕ ಬದಲಾವಣೆಯಲ್ಲಿ ಕೊರಗ ಬುಡಕಟ್ಟು' ಎಂಬ ಪ್ರಸ್ತುತ ಅಧ್ಯಯನವು ಕ್ಷೇತ್ರ ಕಾರ್ಯಾಧಾರಿತ ಅಧ್ಯಯನವಾಗಿದೆ. ಈ ಅಧ್ಯಯನಕ್ಕೆ ಸಂಬಂಧಿಸಿದಂತೆ ಕುಂದಾಪುರ ತಾಲೂಕಿನ ಮೇಲೆ ತಿಳಿಸಿದ ಹದಿನಾಲ್ಕು ಗ್ರಾಮಗಳಲ್ಲಿ ವಾಸ್ತವ್ಯವಿರುವ ಕೊರಗ

ಬುಡಕಟ್ಟುವಿನಲ್ಲಿ ಆದ ಸಾಮಾಜಿಕ, ಮುಖ್ಯವಾಗಿ ಆರ್ಥಿಕ ಮತ್ತು ಶೈಕ್ಷಣಿಕ ಸ್ಥಿತಿಗಳು ಹಾಗೂ ಬದಲಾವಣೆಯ ಮಾಹಿತಿಯನ್ನು ಪಡೆಯಲಾಗಿದೆ. ಕ್ಷೇತ್ರಗಳಿಗೆ ಭೇಟಿಕೊಟ್ಟು ಕಾರ್ಯಕಲಾಪಗಳನ್ನು ಕೂಲಂಕುಷವಾಗಿ ಅವಲೋಕಿಸಿ ಮಾಹಿತಿಯನ್ನು ಸಂಗ್ರಹಿಸಲಾಗಿದೆ. ಪ್ರಾಥಮಿಕ ಮಾಹಿತಿಯ ಮೂಲಗಳಾದ ಸಂದರ್ಶನ, ಪ್ರಶ್ನಾವಳಿ ಹಾಗೂ ಅನುಷಂಗಿಕ ಮಾಹಿತಿಯ ಮೂಲವಾಗಿರುವ ಕಾಲೂಕು ಪಂಚಾಯತ್‌ನಲ್ಲಿ ಲಭ್ಯವಿರುವ ಮಾಹಿತಿ, ಜನಗಣತಿ ವರದಿ, ಜಿಲ್ಲಾ ಝೆಟಿಯರ್, ಪ್ರಕಟಿತ ಮತ್ತು ಅಪ್ರಕಟಿತ ಮಹಾಗ್ರಂಥಗಳು ಮತ್ತು ಲೇಖನಗಳಿಂದ ಮಾಹಿತಿಯನ್ನು ಪಡೆದು ಕಿರುಪ್ರಬಂಧವನ್ನು ಸಿದ್ಧಪಡಿಸಲಾಗಿದೆ.

ಸಾಹಿತ್ಯ ಅವಲೋಕನ

ಸ್ಟರಕ್ ಮತ್ತು ಎಂ.ಟಿ. ಮಾಲ್ ಹೌಸ್‌ರವರು (1875) ಜಿಲ್ಲಾ ಮ್ಯಾನ್ಯುಯಲ್ ರಚನೆಯ ಸಂದರ್ಭ ಕ್ಷೇತ್ರಕಾರ್ಯದ ಆಧಾರದಲ್ಲಿ ಕೊರಗರ ಮೂಲದ ಬಗ್ಗೆ, ಸಾಮಾಜಿಕ ಅಂಶಗಳ ಬಗ್ಗೆ ಮಾಹಿತಿಗಳನ್ನು ನೀಡಿದ್ದಾರೆ. ಈ ಮಾಹಿತಿಗಳು ಹೆಚ್ಚು ಪ್ರಾಮಾಣಿಕವಾಗಿದ್ದು ಪೂರ್ವಗ್ರಹ ರಹಿತವಾಗಿವೆ. ಒಂದು ಶತಮಾನದ ಪೂರ್ವದಲ್ಲಿ ಈ ಸಮುದಾಯದ ಬಗ್ಗೆ ಇದೆ ಜೀವನ ವಿಧಾನಗಳ ವಿವರಗಳನ್ನು ದಾಖಲಿಸಿರುವುದು ಇಂದಿನ ಅಧ್ಯಯನಕ್ಕೆ ಗಮನಾರ್ಹ ಕೊಡುಗೆ ಎಂದು ಹೇಳಬೇಕಾಗಿದೆ.

ಉಳ್ಳಾಲ ರಾಘವೇಂದ್ರ ರಾವ್‌ರವರು (1886) ಮದರಾಸ್ ಕ್ರಿಶ್ಚಿಯನ್ ಕಾಲೇಜಿನ ಮ್ಯಾಗಜಿನ್‌ನಲ್ಲಿ ಬರೆದ 'ಕೊರಗರು' ಎಂಬ ಇಂಗ್ಲೀಷ್ ಲೇಖನವು ಕೊರಗ ಸಮುದಾಯದ ಸಾಮೂಹಿಕ ಚಹರೆಯನ್ನು ಅಧಿಕೃತವಾಗಿ ದಾಖಲಿಸಿದ್ದಾರೆ. ಕೊರಗ ಸಮುದಾಯದ ಅಜ್ಞಾನ, ಮೌಢ್ಯ, ಸೀಮಿತ ಲೋಕದೃಷ್ಟಿಯ ಜೊತೆಗೆ ಅವರ ಜೀವನವು ಪ್ರಕೃತಿಗೆ ಬದ್ಧವಾಗಿರುವ ಮಾಹಿತಿಗಳೆಲ್ಲವನ್ನು ದಾಖಲಿಸಿದ್ದಾರೆ.

ಎಡ್ಗರ್ ಥರ್ಸ್ಟನ್‌ರವರು (1909) ತಮ್ಮ "ದಿ ಕಾಸ್ಟ್ ಎಂಡ್ ಟ್ರೈಬ್ಸ್ ಆಫ್ ಸದರನ್ ಇಂಡಿಯಾ"ದ ಮೂರನೇ ಸಂಪುಟದಲ್ಲಿ ಕೊರಗರ ಜೀವನ ಪದ್ಧತಿಯ ವಿವರಗಳನ್ನು, ಸವಿವರವಾಗಿ ದಾಖಲಿಸಿದ್ದಾರೆ. ಇವರು ಸ್ಟರಕ್ ಹಾಗೂ ಮಾಲ್ ಹಾಸ್‌ರವರ ಮಾಹಿತಿಗಳನ್ನು ಹೆಚ್ಚಾಗಿ ಬಳಸಿಕೊಂಡಿರುವುದು ಕಂಡುಬರುತ್ತವೆ. ಅಲ್ಲದೆ ಇವರ ಬರವಣಿಗೆಯು ಮಾನವ ಕುಲಶಾಸ್ತ್ರೀಯ ವಿವರಗಳನ್ನು ಒಳಗೊಂಡಿದೆ.

ಪ್ರೊ. ಅಮೃತ ಸೋಮೇಶ್ವರರು (1982) ಬರೆದ 'ಕೊರಗರು' ಮೇಲಿನ ಗ್ರಂಥಕ್ಕಿಂತ ಹೊಸದಾದ ಅನೇಕ ಮಾಹಿತಿಗಳು ನೀಡುತ್ತದೆ. ಕೊರಗರ ಜೀವನಾವರ್ತನ ಹಾಗೂ ವಾರ್ಷಿಕಾವರ್ತನದ ವಿವರಗಳು ದಾಖಲಾಗಿದೆ. ಇವರ ಕ್ಷೇತ್ರಕಾರ್ಯಧಾರಿತ ಹಾಗೂ ಮಾನವ ಕುಲಶಾಸ್ತ್ರೀಯ ಮಾಹಿತಿಗಳು ಬ್ರಿಟಿಷರ ಪೂರ್ವಾಹತು ಕಾಲದ ಮಾಹಿತಿಗಳಿಗೆ ವಿರುದ್ಧವಾಗಿರುವುದು ಕಂಡುಬಂದಿದೆ. ಅವರು ನೀಡಿರುವ ಮಾಹಿತಿಗಳನ್ನು ಆಧಾರವಾಗಿ ಬುಡಕಟ್ಟು ಸಮುದಾಯವೊಂದು ಜಾತಿಯಾಗಿ ಸ್ಥಿತ್ಯಂತರಗೊಳ್ಳುವುದನ್ನು ಗುರುತಿಸಲಾಗಿದೆ. ಆದರೆ ಈ ಕೃತಿಯಲ್ಲಿ ಕೊರಗರ ಆರ್ಥಿಕ-ಸಾಮಾಜಿಕ ಜೀವನದಲ್ಲಿ ಆದ ಬದಲಾವಣೆಯ ಅಧ್ಯಯನವನ್ನು ವಿಶೇಷವಾಗಿ ಗುರುತಿಸಿಲ್ಲ. ರಾಮಕೃಷ್ಣ ಟಿ. ಕೆಟ್ಟಿ (1975) ಅವರು ಪೂನ ವಿಶ್ವವಿದ್ಯಾಲಯಕ್ಕೆ 'Koraga Grammar' ಎಂಬ ಮಹಾಪ್ರಬಂಧವನ್ನು 1975ರಲ್ಲಿ ಪಿ.ಎಚ್.ಡಿ.

ಪದವಿಗಾಗಿ ಸಲ್ಲಿಸಿದ್ದಾರೆ. ಈ ಮಹಾಪ್ರಬಂಧದಲ್ಲಿ ಐದು ಪ್ರಾದೇಶಿಕ ಕೊರಗರ ಭಾಷೆಗಳನ್ನು ಅಧ್ಯಯನಕ್ಕೆ ಒಳಪಡಿಸಿದ್ದಾರೆ. ಪ್ರಾದೇಶಿಕ ಭಾಷಾ ಭಿನ್ನತೆ, ಕೊರಗ ಭಾಷೆಯ ವಿಶೇಷತೆಯನ್ನು ಅವರು ದಾಖಲಿಸಿದ್ದಾರೆ.

ಆರವಿಂದ ಮಾಲಗತ್ತಿ ಮತ್ತು ಒಡೆಯರ್ ಡಿ. ಹೆಗ್ಗಡೆಯವರು ಬರೆದ "ಕೊರಗ ಜನಾಂಗ: ವಿಶ್ಲೇಷಣಾತ್ಮಕ ಅಧ್ಯಯನ" ಪುಸ್ತಕವನ್ನು ದಕ್ಷಿಣ ಕನ್ನಡ ಜಿಲ್ಲಾ ಪರಿಷತ್ತು ಪ್ರಕಟಿಸಿದೆ. ಕೊರಗ ಸಮುದಾಯದ ಹುಟ್ಟಿನಿಂದ ಸಾವಿನ ತನಕದ ಜೀವನಾವರ್ತನ ಹಾಗೂ ವಾರ್ಷಿಕಾವರ್ತನದ ವಿವರಗಳು ದಾಖಲಿಸಿದ್ದಾರೆ. ಈ ಕೃತಿಯು ಕೊರಗ ಸಮುದಾಯದ ಪ್ರಸ್ತುತತೆ ಮತ್ತು ಅವರ ಲೋಕದೃಷ್ಟಿಯ ನೈಜ ಚಿತ್ರಣ ದೊರೆದಿದೆ. ಪಿ. ಕಮಲಾಕ್ಷ ಅವರ 'ದಕ್ಷಿಣ ಕನ್ನಡ ಜಿಲ್ಲೆಯ ಹರಿಜನ ಮತ್ತು ಗಿರಿಜನರ ಸಾಮಾಜಿಕ ಇತಿಹಾಸ' ಎಂಬ ಕೃತಿಯಲ್ಲಿ ಕೊರಗ ಸಮುದಾಯವನ್ನು ಸ್ಥೂಲವಾಗಿ ಪರಿಚಯಿಸಲಾಗಿದೆ. ಅವಿಭಜಿತ ದಕ್ಷಿಣಕನ್ನಡ ಜಿಲ್ಲೆಯಲ್ಲಿ ಕೊರಗರ ವಾಸ್ತವ್ಯದ ನೆಲೆಗಳನ್ನು, ಬಳಿಪದ್ಧತಿಯನ್ನು, ಒಳಪಂಗಡಗಳನ್ನು ಮತ್ತು ನಂಬಿಕೆ–ಸಂಪ್ರದಾಯಗಳನ್ನು ಪರಿಚಯಿಸಿರುತ್ತಾರೆ. ಪುರುಷೋತ್ತಮ ಬಿಳಿಮಲೆಯವರು ರಚಿಸಿದ 'ಕರಾವಳಿ ಜಾನಪದ' 'ಕೊರಗರು' ಒಂದು ಪರಿಚಯಾತ್ಮಕ ಕೃತಿ ಯಲ್ಲಿ ಕೊರಗರ ಕುಟುಂಬ ರಚನೆ, ಜೀವನಾವರ್ತನೆ, ವಾರ್ಷಿಕಾವರ್ತನ ವಿವರ, ಕೊರಗರು ಭಾಗವಹಿಸುವ ಕಂಬುಲದ ಸೂಕ್ಷ್ಮ ನೋಟ ಹಾಗೂ ಈ ಸಮುದಾಯವನ್ನು ಕುರಿತು ಬೇರೆ ಬೇರೆ ಕಡೆ ದಾಖಲಾಗಿರುವ ಮಾಹಿತಿಗಳನ್ನು ಒಂದು ಕಡೆ ವ್ಯವಸ್ಥಿತವಾಗಿ ಕ್ರೋಢೀಕರಿಸಲಾಗಿದೆ. ಮಹಮ್ಮದ್ ಖೀರ್ ಅವರು ದಕ್ಷಿಣ ಕನ್ನಡ ಜಿಲ್ಲಾ ಪರಿಷತ್ತುಗಾಗಿ "ಕೊರಗ ಸಮುದಾಯದ ಆರ್ಥಿಕ, ಸಾಮಾಜಿಕ, ಶೈಕ್ಷಣಿಕ ಸ್ಥಿತಿಗತಿ"ಗಳನ್ನು ವೈಜ್ಞಾನಿಕವಾಗಿ ವರದಿ ಬರೆದಿದ್ದಾರೆ. ಅವರು ಯಾವುದೇ ಪೂರ್ವಗ್ರಹವಿಲ್ಲದೆ ಒಟ್ಟು ಸಮಾಜಶಾಸ್ತ್ರಜ್ಞನ ದೃಷ್ಟಿಕೋನದಿಂದ ಕೊರಗರ ಜೀವನ ವಿಧಾನವನ್ನು ಕ್ಷೇತ್ರಕಾರ್ಯ ಆಧಾರಿತ ಅಂಕಿಸಂಖ್ಯೆಗಳ ಮೂಲಕ ವಿಶ್ಲೇಷಿಸಿದ್ದಾರೆ. ಬೋರಲಿಂಗಯ್ಯ ಅವರು ಸಂಪಾದಿಸಿದ 'ಕರ್ನಾಟಕ ಜನಪದ ಕಲೆಗಳ ಕೋಶ' ರಲ್ಲಿ ದಕ್ಷಿಣ ಕನ್ನಡ ಜಿಲ್ಲೆಯ ಮೂಲ ನಿವಾಸಿಗಳಾದ ಕೊರಗರ ಕುಣಿತಗಳನ್ನು ಪಾಡ್ದನ ಸಹಿತವಾಗಿ ವಿವರಿಸಿರುವುದನ್ನು ಕಾಣಬಹುದು. ಕುಂದಾಪುರ ಪರಿಸರದ ಕೊರಗರ "ಚುಣ್ಣ" ವೇಷದ ಪರಿಚಯವು ಇಲ್ಲಿದೆ.

ಲಕ್ಕಪ್ಪಗೌಡ. ಹೆಚ್.ಜೆ. ಅವರು ಸಂಪಾದಿಸಿದ 'ಕರ್ನಾಟಕದ ಬುಡಕಟ್ಟುಗಳು' ಕೃತಿಯಲ್ಲಿ ಡಾ.ಎ.ವಿ. ನಾವಡ ಅವರ 'ಕೊರಗರು' ಎಂಬ ಲೇಖನವಿದೆ. ಈ ಲೇಖನದಲ್ಲಿ 'ಕೊರಗ' ಪದದ ನಿಷ್ಪತ್ತಿ, ಕುಟುಂಬ, ವಿವಾಹ, ಕೊರಗ ಭಾಷೆ ಮುಂತಾದ ಮಾಹಿತಿಗಳು ಕಂಡುಬರುತ್ತದೆ. ಸಿ. ವಾಸುದೇವನ್ ಅವರ Koragas: The Forgotten of the primitive tribes of Tulunadu ಕೃತಿಯಲ್ಲಿ ಕೊರಗ ಸಮುದಾಯದ ಉಗಮಕ್ಕೆ ಪೌರಾಣಿಕ, ಐತಿಹಾಸಿಕವಾದ ಮಾಹಿತಿಯನ್ನು, ಒದಗಿಸುತ್ತಾ, ಅವರ ಆಚರಣೆ ಸಂಪ್ರದಾಯ, ಒಳಪಂಗಡಗಳು, ಬಳಿಪದ್ಧತಿ, ಸಾಕ್ಷರತೆ, ವಿವಾಹ ಹಾಗೂ ಕುಟುಂಬಗಳ ಮಾಹಿತಿಗಳನ್ನು ದಾಖಲಿಸಿದ್ದಾರೆ.

ಮೇಕ್ರಿ ಕೆ.ಎಂ. ಅವರ 'ಬುಡಕಟ್ಟು ಕುಲಕಸುಬುಗಳು ಎಂಬ ಕೃತಿಯಲ್ಲಿ ರಾಜ್ಯದ 49 ಬುಡಕಟ್ಟು ಜನರ ಸ್ಥೂಲ ಪರಿಚಯವಿದೆ. ಕೊರಗ ಸಮುದಾಯದ ಕುಲಕಸುಬುಗಳ ಮೇಲೆ ಬೆಳಕು ಚೆಲ್ಲುತ್ತದೆ. ಈ ಕೃತಿ ಅಲ್ಲದೆ, ಅವರು ಸಂಪಾದಿಸಿದ ಮತ್ತೊಂದು ಇಂಗ್ಲೀಷ್ ಕೃತಿ "Forest Blossoms and the concrete Jungle" ಈ ಕೃತಿಯಲ್ಲಿ ಡಾ.ಕೆ. ಸುಂದರ ನಾಯ್ಕರ ಲೇಖನ 'Social transformation among the tribal's of Dakshina Kannada' ದಲ್ಲಿ ಕೊರಗ ಸಮುದಾಯದ ಮಾತೃಮೂಲ ಕುಟುಂಬ, ದೈವ ಆರಾಧನೆ, ಕೊರಗರ ವಿವಾಹ, ಸಾಂಸ್ಕೃತಿ ಅಂಶಗಳ ಬಗ್ಗೆ ವಿವರಣೆಯಿದೆ. ಅಲ್ಲದೆ ಇತ್ತೀಚೆಗೆ, ಮೇಕ್ರಿಯವರು ರಚಿಸಿದ 'ಸೂಕ್ಷ್ಮ ಅದಿವಾಸಿಗಳು' ಎಂಬ ಕೃತಿಯಲ್ಲಿ ಆದಿಮ ಬುಡಕಟ್ಟುಗಳು ಎಂಬ ವಿಭಾಗದಲ್ಲಿ ಕೊರಗ ಸಮುದಾಯದ 2011ರ ಜನಗಣತಿಯ ಆಧಾರದಲ್ಲಿ ರಾಜ್ಯದಲ್ಲಿರುವ ಜನಸಂಖ್ಯೆ, ಮಾತೃಪ್ರಧಾನ ಕುಟುಂಬ, ವಿವಾಹ ಮತ್ತು ಧಾರ್ಮಿಕ ಆಚರಣೆ, ಒಳಪಂಗಡ, ಬಳಿಪದ್ಧತಿ ಮುಂತಾದ ಅಂಶಗಳ ಬಗ್ಗೆ ಪರಿಷ್ಕೃತವಾದ ಹೆಚ್ಚಿನ ಮಾಹಿತಿಗಳನ್ನು ದಾಖಲಿಸಲಾಗಿದೆ.

ಗಂಗಾಧರ ದೈವಜ್ಞ ಅವರು ಸಂಪಾದಿತ 'ಕೊರಗರು ಸಮಕಾಲೀನ ಸ್ಪಂದನ' ಕೃತಿಯಲ್ಲಿ ಕರ್ನಾಟಕ ರಾಜ್ಯ ಎರಡನೇ ಬುಡಕಟ್ಟು ಸಮ್ಮೇಳನದಲ್ಲಿ ಮಂಡಿತವಾದ ಲೇಖನಗಳಿವೆ. ಬಹುತೇಕ ಲೇಖನಗಳು ಕೊರಗ ಸಮುದಾಯದವರೇ ಮಂಡಿಸಿರುವುದು ಈ ಕೃತಿಯ ವೈಶಿಷ್ಟವಾಗಿದೆ. ಕೊರಗರ ಚರಿತ್ರೆ, ಸಂಸ್ಕೃತಿ, ನ್ಯಾಯಪದ್ಧತಿ ಹಾಗೂ ವರ್ತಮಾನದಲ್ಲಿ ಕೊರಗ ಸಮುದಾಯದ ಮುಂದಿರುವ ಸವಾಲುಗಳು, ಸಮಸ್ಯೆಗಳು ಮತ್ತು ಪರಿಹಾರಕ್ಕಾಗಿ ಸಲಹೆಗಳ ಬಗೆಗೆ ಲೇಖನಗಳು ಬೆಳಕು ಚೆಲ್ಲುತ್ತವೆ. ಮೋರಲಿಂಗಯ್ಯ ಮತ್ತು ಪ್ರಭಾಕರ.ಎ.ಎಸ್. ಅವರು ಸಂಪಾದಿತ "ಕರ್ನಾಟಕದ ಬುಡಕಟ್ಟು ಸಚಿತ್ರ ಕೋಶ" ದಲ್ಲಿ ಛಾಯಚಿತ್ರಗಳ ಮೂಲಕ ಕೊರಗ ಬುಡಕಟ್ಟು ಸಮುದಾಯದವರನ್ನು ಪರಿಚಯಿಸುತ್ತಾ ಅವರ ಸಮಸ್ಯೆಗಳನ್ನು ವಿಶ್ಲೇಷಿಸಿದ್ದಾರೆ.

ಅಲ್ಲದೆ, ಗುಣಪಾಲ ಶೆಟ್ಟಿ ಸಂಪಾದಿಸಿದ ಕೃತಿ 'ಮೌನ ಮಾತಾದಾಗ' ಇಂದಿರಾ ಹೆಗ್ಗಡೆಯವರ 'ತುಳುನಾಡಿನ ಕೊರಗರು ಸಾಮಾಜಿಕ, ಆರ್ಥಿಕ, ಸ್ಥಿತಿಗತಿ ಅರುಣ ಕುಮಾರ್‌ರವರ 'ಸೀಮೆ' ಗಾಯತ್ರಿ ನಾವಡ ಅವರ 'ವಿರಚನೆ' ನಾವಡ. ಎ.ವಿ. ಅವರ ಕೊರಗ ಬುಡಕಟ್ಟು ಅಭಿವೃದ್ಧಿ ಒಂದು ಪರಿಕಲ್ಪನೆ ಹಾಗೂ ಅವರದೇ ಮತ್ತೊಂದು ಕೃತಿ ತುಳುಪೊಲಿ ರಾಮಕೃಷ್ಣ ಶೆಟ್ಟಿ ಕೊರಗರ ಆಡುನುಡಿ ಕರ್ನಾಟಕ ರಾಜ್ಯ ಕೋಶ 4, ಜನಸಮುದಾಯ ಇವುಗಳಲ್ಲಿ ಕೊರಗ ಸಮುದಾಯದ ಪರಿಚಯಾತ್ಮಕ ಬರಹಗಳು ಕಂಡುಬಂದಿರುತ್ತದೆ.

ಕರ್ನಾಟಕದ ಆದಿಮ ಬುಡಕಟ್ಟು ವ್ಯಾಪ್ತಿಯೊಳಗಿನ 'ಕೊರಗರ' ಬಗೆಗೆ ಅನೇಕ ಅಧ್ಯಯನಗಳು, ಬರಹಗಳು, ಸಂಪ್ರಬಂಧಗಳು ನಡೆದಿವೆ. ವಸಾಹತು ಕಾಲದಲ್ಲಿದ್ದ ಬ್ರಿಟಿಷರ ಸ್ವಾರ್ಥಕ್ಕಾಗಿ ನಡೆದ ಅಧ್ಯಯನಗಳಾದರೆ, ಸ್ವಾತಂತ್ರ್ಯೋತ್ತರ ಎಪ್ಪತ್ತರ ದಶಕದಿಂದಲೂ ಕೊರಗರ ಪರಿಚಯಾತ್ಮಕವಾದ, ಸಂಶೋಧನಾತ್ಮಕವಾದ, ಜಾನಪದೀಯ, ಮಾನವಶಾಸ್ತ್ರೀಯ, ಸಮಾಜ ಶಾಸ್ತ್ರೀಯ ಅಧ್ಯಯನ ನಡೆದಿರುವುದನ್ನು ಗಮನಿಸಬಹುದಾಗಿದೆ.

ಕೊರಗರು: ಪರಿಶಿಷ್ಟ ಜಾತಿ, ಪರಿಶಿಷ್ಟ ಪಂಗಡ ಹಾಗೂ ಆದಿಮ ಬುಡಕಟ್ಟು ಸ್ಥಾನಮಾನ

ಭಾರತ ಸರಕಾರ 1950ರ ಆದೇಶದಲ್ಲಿ ಕೊರಗರನ್ನು ಪರಿಶಿಷ್ಟ ಜಾತಿಯ ಪಟ್ಟಿಯಲ್ಲಿ ಕಾಣಿಸಿದರೆ, 1956ರಲ್ಲಿ ರಾಷ್ಟ್ರಪತಿಯವರ ಆದೇಶದಂತೆ ಪರಿಶಿಷ್ಟ ಪಂಗಡದ ಪಟ್ಟಿಗೆ ವರ್ಗಾಯಿಸಲಾಯಿತು. ಈ ಪಟ್ಟಿಯಲ್ಲಿ ಕ್ರಮಸಂಖ್ಯೆ 9ರಲ್ಲಿ ಕೊರಗ ಬುಡಕಟ್ಟು ಕಾಣಬಹುದು. ಮುಂದೆ 1976ರ ಪರಿಶಿಷ್ಟ ಜಾತಿ ಮತ್ತು ಪರಿಶಿಷ್ಟ ಪಂಗಡ (ತಿದ್ದುಪಡಿ) ಆದೇಶದಂತೆ ಕೊರಗ ಬುಡಕಟ್ಟಿನ ಪ್ರಾದೇಶಿಕ ಮಿತಿಯನ್ನು ಕರ್ನಾಟಕ ರಾಜ್ಯಾಂಶತ ದಿನಾಂಕ: 27.07.1977ರಂದು ವಿಸ್ತರಿಸಲಾಯಿತು. 1985–86ರ ಸಾಲಿನಿಂದ ಕೊರಗರನ್ನು ದಕ್ಷಿಣ ಕನ್ನಡ ಜಿಲ್ಲೆಯ 'ಆದಿಮ ಬುಡಕಟ್ಟು' (Primitive Tribe) ಎಂಬುದಾಗಿ ಕೇಂದ್ರ ಸರ್ಕಾರ ಪರಿಗಣಿಸಿದೆ.

ಜನಸಂಖ್ಯೆ

2011ರ ಜನಗಣತಿಯ ಪ್ರಕಾರ ಕರ್ನಾಟಕ ರಾಜ್ಯದಲ್ಲಿ ಕೊರಗ ಬುಡಕಟ್ಟಿನ ಒಟ್ಟು ಜನಸಂಖ್ಯೆ 14,794 – ಇವುಗಳಲ್ಲಿ ಪುರುಷರು 7,210 ಮತ್ತು ಸ್ತ್ರೀಯರು 7,584. ಉಡುಪಿ ಜಿಲ್ಲೆಯನ್ನೊಳಗೊಂಡ ಅವಿಭಜಿತ ದಕ್ಷಿಣಕನ್ನಡ ಜಿಲ್ಲೆಯಲ್ಲಿ ಕೊರಗ ಬುಡಕಟ್ಟಿನ ಜನಸಂಖ್ಯೆ ಒಟ್ಟು 13597 ಇವುಗಳಲ್ಲಿ ಗ್ರಾಮೀಣ ಜನಸಂಖ್ಯೆ 8919 ಮತ್ತು ನಗರ ಜನಸಂಖ್ಯೆ 4678.

ಕೊರಗರ ಕುಟುಂಬ – ಮಾತೃಮೂಲ ಕುಟುಂಬ ಪದ್ಧತಿ

ಪ್ರಾಚೀನ ಕಾಲದಿಂದಲೂ ಭಾರತದಲ್ಲಿ ಅವಿಭಕ್ತ ಕುಟುಂಬ ಪದ್ಧತಿಯೇ ಹೆಚ್ಚಾಗಿ ಅಸ್ತಿತ್ವದಲ್ಲಿತ್ತು, ಕ್ರಮೇಣ ಅನೇಕ ಕಾರಣಗಳಿಂದಾಗಿ ಇದು ಬದಲಾಗುತ್ತಾ ವಿಭಕ್ತ ಕುಟುಂಬಗಳತ್ತ ಸಾಗಿತು. ಇವರು ಮಾತೃವಂಶೀಯ ಅವಿಭಕ್ತ ಕುಟುಂಬ ಪದ್ಧತಿಯನ್ನು ಹೊಂದಿದ್ದು, ಒಂದೊಂದು ಕುಟುಂಬದಲ್ಲಿ ಸದಸ್ಯರ ಸಂಖ್ಯೆ 40–50ಕ್ಕೂ ಹೆಚ್ಚು ಇರುತ್ತಿದ್ದುದಾಗಿ ಕೊರಗ ಬುಡಕಟ್ಟಿನ ಹಿರಿಯರು ನೆನಪಿಸುತ್ತಾರೆ. ಆದರೆ ಆಧುನಿಕ ಶಿಕ್ಷಣ ಪ್ರಭಾವದಿಂದ, ವಲಸೆಯ ಪ್ರವೃತ್ತಿಯಿಂದಲೂ, ಆಳಿಯ ಕಟ್ಟಿನಲ್ಲಿನ ಬದಲಾವಣೆ, ಅವರ ಅವಿಭಕ್ತ ಕುಟುಂಬಗಳೆಲ್ಲವೂ ಬಹಳಾವಣೆಗಳಾಗುತ್ತಾ ಬಂದಿತು. ಈ ಬಗ್ಗೆ ಹದಿನಾಲ್ಕು ಗ್ರಾಮಗಳಲ್ಲಿ ಕ್ಷೇತ್ರಕಾರ್ಯದ ಸಂದರ್ಭದಲ್ಲಿ ಯಾವ ಯಾವ ವಿಧದ ಕುಟುಂಬಗಳಲ್ಲಿ ವಾಸಿಸುತ್ತಿದ್ದಾರೆ ಎಂಬ ಮಾಹಿತಿಯನ್ನು ಸಂಗ್ರಹಿಸಿದ್ದು, ಅಧ್ಯಯನಕ್ಕೊಳಪಟ್ಟ 100 ಕುಟುಂಬಗಳಲ್ಲಿ ವಿಭಕ್ತ ಕುಟುಂಬ ಪದ್ಧತಿ ಕಡೆಗೆ 64 ಕುಟುಂಬಗಳು ಮತ್ತು 36 ಕುಟುಂಬಗಳು ಅವಿಭಕ್ತ ಕುಟುಂಬದ ಪದ್ಧತಿಯನ್ನು ಅನುಸರಿಸುತ್ತಿರುವುದು ಕಂಡುಬರುತ್ತದೆ.

ಕೊರಗದಲ್ಲಿ ಮಹಿಳೆಯರು ಸ್ವತಂತ್ರ ಸ್ಥಾನಮಾನಗಳನ್ನು ಹೊಂದಿದ್ದಾರೆ. ಕುಟುಂಬ ನಿರ್ವಹಣೆಯ ಜವಾಬ್ದಾರಿಯನ್ನು ಕೊರಗ ಮಹಿಳೆಯರೇ ನಿರ್ವಹಿಸುವುದರಿಂದ ಸಹಜವಾಗಿ ಅಧಿಕಾರ ದೊರೆಯುತ್ತದೆ.

ಮೂಲತಃ ಸ್ತ್ರೀ–ಪುರುಷರಾಧಿಯಾಗಿ ಕೊರಗರೆಲ್ಲರೂ ಶ್ರಮ ಜೀವಿಗಳು ಅತ್ಯಂತ ಕಠಿಣ ತಮ್ಮ ಜೀವನವನ್ನು ನಡೆಸಿಕೊಂಡು ಬಂದವರು. ಕೊರಗ ಮಹಿಳೆಯರು ಕ್ರಿಯಾಶೀಲರಾಗಿದ್ದು, ಜವಾಬ್ದಾರಿಯುತ ಜೀವನ ನಡೆಸುವಲ್ಲಿ ಅತ್ಯಂತ ಮುತುವರ್ಜಿ ವಹಿಸುತ್ತಾರೆ.

ಸಮೀಕ್ಷೆಗೊಳಪಟ್ಟ ಹದಿನಾಲ್ಕು ಗ್ರಾಮಗಳಲ್ಲಿ **ವೈವಾಹಿಕ ಸ್ಥಾನಮಾನದ ಸ್ವರೂಪವನ್ನು** ಸಂಗ್ರಹಿಸಿದ್ದು ಅದನ್ನು ಈ ಕೆಳಗಿನ ಕೋಷ್ಟಕದಲ್ಲಿ ನೀಡಲಾಗಿದೆ.

ಕೋಷ್ಟಕ 2: ಕೊರಗ ಸಮುದಾಯದ ವೈವಾಹಿಕ ಸ್ಥಾನಮಾನ

ಕ್ರಮ ಸಂಖ್ಯೆ	ವೈವಾಹಿಕ ಸ್ಥಾನಮಾನ	ಪುರುಷರು	ಮಹಿಳೆಯರು	ಒಟ್ಟು
1.	ವಿವಾಹಿತರು	169	180	349
2.	ಅವಿವಾಹಿತೆ	26	34	60
3.	ವಿಚ್ಛೇದಿತ/ಪರಿತ್ಯಾಗ	06	07	13
4.	ವಿಧವೆ/ವಿಧುರ	12	09	21
ಒಟ್ಟು		**213**	**230**	**443**

ಕೊರಗ ಬುಡಕಟ್ಟಿನಲ್ಲಿ ತಾಯಿಯೊಬ್ಬಳು ಹೆಣ್ಣು-ಗಂಡು ಮಕ್ಕಳೆಲ್ಲರೂ ತನ್ನ ತಾಯಿಯ ಬಳಿಯನ್ನು ಹೊಂದಿರುತ್ತಾರೆ. ಆಸ್ತಿಯ ಹಕ್ಕು, ಉತ್ತರಾಧಿಕಾರ, ವಂಶ ಪಾರಂಪರ್ಯ ಮುಂತಾದವುಗಳು ಮಾತೃ ವಂಶೀಯತೆಯನ್ನು ನಿರ್ಧರಿಸುತ್ತದೆ. ಮಗನಿಗೆ ಅನುಭೋಗದ ಅಧಿಕಾರವಿರುತ್ತದೆಯೇ ಹೊರತು ಪರಭಾರೆ ಮಾಡುವ ಅಧಿಕಾರ ಇರುವುದಿಲ್ಲ. ಸಂಪ್ರದಾಯ ಆಚರಣೆಯಲ್ಲಿ ಹಿರಿಯ ಮಹಿಳೆಗೆ ಗೌರವ-ಮನ್ನಣೆ ದೊರೆಯುತ್ತದೆ.

ಇಂದಿನ ಕೊರಗ ಕುಟುಂಬಗಳಲ್ಲಿನ ಮಾತೃ ಪ್ರಧಾನ ವ್ಯವಸ್ಥೆಯಲ್ಲಿ ಕೆಲವೊಂದು ಬದಲಾವಣೆಗಳಾಗಿವೆ. ಅತ್ಯಂತ ವೇಗ ಪಡೆದಿರುವ ಬದಲಾವಣೆ ಆರ್ಥಿಕ ಸ್ಥಿತಿಗತಿ, ತಂತ್ರಜ್ಞಾನ, ಮಾಧ್ಯಮ ಮತ್ತು ಇನ್ನಿತರ ಕಾರಣಗಳಿಂದ ಯುವ ಜನತೆ ಪರಂಪರೆಯಿಂದ ಬಂದದೆಲ್ಲವನ್ನು ಮೂಢನಂಬಿಕೆ ಎಂದು ದೂರೀಕರಿಸುತ್ತಿರುವುದನ್ನು ಗಮನಿಸಬಹುದು. ಕೊರಗರ ಕೆಲವು ಸಾಮಾಜಿಕ ಸಂಘಟನೆಗಳು ಮಾತೃ ಮೂಲೀಯ ಕುಟುಂಬ ಪದ್ಧತಿಯನ್ನು ಉಳಿಸಿಕೊಂಡು ಹೋಗುವ ನಿಟ್ಟಿನಲ್ಲಿ ಕಾರ್ಯೋನ್ಮುಖವಾಗಿರುವುದು ಗಮನಾರ್ಹ.

ಕೊರಗ ಸಮುದಾಯದ ವಯೋಗುಂಪುವಾರು ಜನಸಂಖ್ಯೆ

ಸಮುದಾಯದ ಶೈಕ್ಷಣಿಕ ಮತ್ತು ಆರ್ಥಿಕ ಅಂಶಗಳನ್ನು ಅರಿಯಲು ಆ ಸಮುದಾಯದ ಜನರ ವಯೋಮಾನಗಳನ್ನು ತಿಳಿಯುವುದು ಅತ್ಯಾವಶ್ಯಕವಾಗಿರುತ್ತದೆ. ಈ ಅಂಶಗಳನ್ನು ಅರಿಯಲು ಈ ಕೆಳಗಿನಂತೆ 5 ಭಾಗಗಳಾಗಿ ವಯೋಮಾನದ ವಿಂಗಡಣೆಯನ್ನು ಮಾಡಲಾಗಿದೆ. ಮೊದಲನೆಯದಾಗಿ ಹುಟ್ಟಿದ ಮಗುವಿನಿಂದ ಆರು ವರ್ಷದೊಳಗಿನ ಮಕ್ಕಳು, ಎರಡನೆಯದಾಗಿ ಆರು ವರ್ಷದ ಮೇಲ್ಪಟ್ಟು ಹಾಗೂ ಹದಿನೇಳು ವರ್ಷದೊಳಗಿನ ಮಕ್ಕಳು, ಮೂರನೆಯದಾಗಿ ಹದಿನೇಳು ವರ್ಷಗಳ ಮೇಲ್ಪಟ್ಟು ಹಾಗೂ ನಲ್ವತ್ತು ವರ್ಷದೊಳಗಿನ ಜನರನ್ನು, ನಾಲ್ಕನೆಯದಾಗಿ 40 ವರ್ಷ ಮೇಲ್ಪಟ್ಟು ಹಾಗೂ 60

ವರ್ಷದೊಳಗಿನವರನ್ನು ಕೊನೆಯದಾಗಿ 60 ವರ್ಷ ಮೇಲ್ಪಟ್ಟು ವೃದ್ಧರು ಹೀಗೆ ಐದು ಹಂತದಲ್ಲಿ ವಯೋಗುಂಪುಗಳಾಗಿ ವರ್ಗೀಕರಿಸಲಾಗಿದೆ.

ಅಧ್ಯಯನಕ್ಕೆ ಆಯ್ಕೆಗೊಳಿಸಿದ ಕೊರಗರ ಒಂದು ನೂರು ಕುಟುಂಬಗಳಲ್ಲಿ 0 ರಿಂದ 17ರ ವಯೋಮಾನದ ಮಕ್ಕಳು ಒಟ್ಟು 315. ಇವರಲ್ಲಿ ಗಂಡು ಮಕ್ಕಳು 141 ಮತ್ತು ಹೆಣ್ಣು ಮಕ್ಕಳು 174. 18ರ ಮೇಲ್ಪಟ್ಟು 40 ವರ್ಷದ ಒಳಗಿನ ಒಟ್ಟು 221 ಇದರಲ್ಲಿ ಪುರುಷರು 119 ಮತ್ತು ಮಹಿಳೆಯರು 102. 40ರ ಮೇಲ್ಪಟ್ಟು ಹಾಗೂ 60ರ ಒಳಗಿನ ವಯೋಮಾನದವರು ಒಟ್ಟು 161. ಇದರಲ್ಲಿ ಪುರುಷರು 90 ಮಹಿಳೆಯರು 71, 60ರ ಮೇಲ್ಪಟ್ಟು ವಯೋಮಾನದವರು ಒಟ್ಟು 61 ಇದ್ದಾರೆ. ಇವರಲ್ಲಿ ಪುರುಷರು 27 ಹಾಗೂ ಮಹಿಳೆಯರು 34 ಆಗಿರುತ್ತದೆ.

ಕೋಷ್ಟಕ 3: ಕೊರಗರ ಬಡಕಟ್ಟಿನ ವಯೋ ಗುಂಪುವಾರು ಜನಸಂಖ್ಯಾ ವಿವರ

ಕ್ರ.ಸಂ.	ವಯೋಗುಂಪು (ವರ್ಷಗಳಲ್ಲಿ)	ವಯೋ ಗುಂಪುವಾರು ಜನಸಂಖ್ಯಾ ವಿವರ			
		ಗಂಡು	ಹೆಣ್ಣು	ಒಟ್ಟು	ಶೇಕಡಾವಾರು
1.	0–06	21	32	53	06.99
2.	07–17	120	142	262	34.56
3.	18–40	119	102	221	29.15
4.	41–60	90	71	161	21.24
5.	60ರ ಮೇಲ್ಪಟ್ಟು	27	34	61	08.04
	ಒಟ್ಟು	**377**	**381**	**758**	**99.98**

ಕೊರಗರ ಆರ್ಥಿಕ ಸ್ಥಿತಿಗತಿಗಳು

ಕೊರಗ ಸಮುದಾಯವು ಊರ ಹೊರಗೆ ಕಾಡು ಅಂಬುಗಳಲ್ಲಿ ವಾಸ ಮಾಡುತ್ತಾ ಅಲ್ಲಿ ದೊರೆಯುವ ಬಳಲು, ಬಿದಿರುಗಳನ್ನು ಬಳಸಿಕೊಂಡು ಅದರಿಂದ ಅನೇಕ ವಸ್ತುಗಳ ತಯಾರಿಕೆಯಲ್ಲಿ ತೊಡಗುತ್ತಿದ್ದರು. ಕೊಜಂಟಿ, ಎಲಿಬೂರು, ಚೆನ್ನಬೂರು, ಅಡ್ಡೆಬೂರು, ಮಾರೇರಿಬೂರು, ಇಲ್ಲಿಬೂರು (ತುಳು ಪದಗಳು) ಮುಂತಾದ ಬಳಲುಗಳಿಂದ ವಿವಿಧ ಗಾತ್ರದ ಬುಟ್ಟಿಗಳು, ಮೀನು ಹಿಡಿಯುವ ಕುತ್ತರಿ, ಭತ್ತ ತುಂಬಿಡುವ ಕದಿಕೆ, ತೊಟ್ಟಿಲು, ಮೊರ ಇತ್ಯಾದಿ ತಯಾರಿಸುತ್ತಾರೆ. ಅಲ್ಲದೆ ಇವರ ವಂಶಪಾರಂಪರ್ಯ ವೃತ್ತಿ ಜೊತೆಗೆ ಜೇನು, ಔಷಧೀಯ ಬೇರು, ನಾರು, ತೊಗಟೆಗಳ ಸಂಗ್ರಹ ಇವರ ಉಪ ಕಸುಬು. ಕುಲಕಸುಬಾದ ಬುಟ್ಟಿ ಹೆಣೆದು ಕೊಡುವ ಕೊರಗನಿಂದ ಊರಿನ ಎಲ್ಲಾ ಸಮುದಾಯದವರು ಅನುಕೂಲತೆಗಳನ್ನು ಪಡೆದರು. ಬೆಳೆದ ಬೆಳೆಗಳನ್ನು ಸಂಗ್ರಹಿಸಲು, ಕಾಪಿಡಲು,

ಮಾರಾಟ ಮಾಡಲು ಬೇಕಾದ ಸಲಕರಣೆಗಳನ್ನು ಕೊರಗರಿಂದ ಪಡೆದು ಅವರಿಗೆ ದವಸ ಧಾನ್ಯಗಳನ್ನು ಹಣ ರೂಪದಲ್ಲಿ ನೀಡುತ್ತಾ ಬಂದರು. ಕೃಷಿ ಜಗತ್ತಿಗೂ ಕೊರಗರ ಕುಲಕಸುಬುಗೆ ಅವಿನಾಭಾವ ಸಂಬಂಧವನ್ನು ಮರೆಯುವಂತಿಲ್ಲ.

ಮೂಲ ಕಸುಬುವಿನಿಂದ ಇವರಿಗೆ ನಿರಂತರವಾದ ಆದಾಯವನ್ನು ಪಡೆಯಲು ಸಾಧ್ಯವಾಗಲಿಲ್ಲ. ಅಭಿವೃದ್ಧಿವೆಂಬ ಮೂಲಮಂತ್ರ ಕೊರಗರನ್ನು ನಿರ್ಗತಿಕರನ್ನಾಗಿಸಿತು. ಅವರ ಉತ್ಪಾದನಾ ಕ್ಷೇತ್ರ ಮತ್ತು ಉತ್ಪಾದನಾ ಮಾಧ್ಯಮ ಕ್ಷೀಣಿಸುತ್ತಾ ಬಂತು. ಆಧುನೀಕತೆ, ಔದ್ಯಮೀಕರಣ, ನಗರೀಕರಣದ ಪ್ರಭಾವ ಬಿಡಕಟ್ಟು ಸಮುದಾಯವಾದ ಕೊರಗರನ್ನು ಬಿಡಲಿಲ್ಲ. ಇದರ ಪರಿಣಾಮ ಅವರು ಇತರ ವೃತ್ತಿಗಳನ್ನು ಅವಲಂಬಿಸಬೇಕಾಗಿತು.

ತೀರಾ ಗ್ರಾಮೀಣ ಪ್ರದೇಶದ ಕೊರಗರ ಸ್ಥಿತಿ ತುಂಬಾ ಶೋಚನೀಯ. ಅವರಿಗೆ ಬೆತ್ತದ ಕೆಲಸ ಬಿಟ್ಟು ಇನ್ನೇನೂ ಬರುತ್ತಿಲ್ಲ. ಕೃಷಿ ಕೆಲಸದ ನೈಪುಣ್ಯತೆಯೂ ಅವರಿಗಿಲ್ಲ ಅದರೆ ಇತರ ಜಾತಿಯ ಸಮುದಾಯದವರು ಕೃಷಿ ಕೆಲಸದಲ್ಲಿ ಬಳಸಿಕೊಳ್ಳಲು ಇಷ್ಟಪಡುತ್ತಿಲ್ಲ. ಮನೆ ಮಂದಿಯೆಲ್ಲಾ ತಮ್ಮ ಮೂಲ ಕುಲಕಸುಬಿನಲ್ಲಿ ದುಡಿದರೂ ಕೂಡ ಮನೆಯ ಸದಸ್ಯರ ಹೊಟ್ಟೆ-ಬಟ್ಟೆಗೆ ಸಾಕಾಗದಿರುವ ದುಸ್ಥಿತಿಯೂ ಇವರ ಉದ್ಯೋಗದಲ್ಲಿ ಕಂಡುಬರುತ್ತದೆ.

ಕೊರಗರ ವೃತ್ತಿ ಮತ್ತು ಉದ್ಯೋಗಗಳಲ್ಲಿ ಸಾಕಷ್ಟು ಬದಲಾವಣೆಯನ್ನು ಇತ್ತೀಚಿನ ದಿನಗಳಲ್ಲಿ ಕಾಣಬಹುದಾಗಿದೆ. ತಮ್ಮ ಕುಲಕಸುಬನ್ನು ಮುಂದುವರಿಸಿಕೊಂಡು ಹೋಗುವುದು ಅಪ್ಪಾಗಿ ಕಂಡುಬರುತ್ತಿಲ್ಲ. ಕೆಲವೊಂದು ಸಾಂಪ್ರಾದಾಯಿಕ ಕುಟುಂಬಗಳಲ್ಲಿ ಮಾತ್ರ ಈ ಕುಲಕಸುಬನ್ನು ಮುಂದುವರಿಸಿಕೊಂಡು ಹೋಗುತ್ತಾರೆ. ಈ ಸಾಂಪ್ರಾಯಿಕ ಕುಲಕಸುಬು ಕುಂದಾಪುರ ತಾಲೂಕಿನ ಕೆಲವೊಂದು ಗ್ರಾಮಗಳಾದ ಹೆಮ್ಮಾಡಿ, ಮರವಂತೆ, ನಾಗೂರು, ತಲ್ಲೂರು, ಅರೆಹೊಳೆ, ಪಡುಕೋಣೆ, ಕಂಬದಕೋಣೆ, ಕುಂಭಾಶಿ, ಸಾಸ್ತಾನ, ಕೋಟ ಇತ್ಯಾದಿ ಪ್ರದೇಶಗಳಲ್ಲಿ ಬುಟ್ಟಿ ಮಾಡುವವರು ಕಂಡುಬರುತ್ತಾರೆ.

ಕಾಡು ನಾಶವಾಗಿರುವುದು ಅವರ ಪರಂಪರಾಗತ ಕುಲಕಸುಬಿಗೆ ಪೆಟ್ಟು ಬಿದ್ದಿದೆ. ಇಂದು ಅರಣ್ಯ ಇಲಾಖೆಯ ನಿರ್ಬಂಧದಿಂದಾಗಿ ಹಾಗೂ ಅವರು ತಯಾರಿಸಿದ ಕರಕುಶಲ ವಸ್ತುಗಳಿಗೆ ಮಾರುಕಟ್ಟೆಯಲ್ಲಿ ಬೇಡಿಕೆ ಕುಸಿತದಿಂದಾಗಿ ಕೊರಗರು ಈ ಕರಕುಶಲ ಕಲೆಯನ್ನು ಕೈ ಬಿಡುತ್ತಿದ್ದಾರೆ.

ಇಂದು ಉದ್ಯೋಗ ಕ್ಷೇತ್ರದಲ್ಲಿ ಸ್ವಲ್ಪ ಮಟ್ಟಿನ ಬದಲಾವಣೆ ಕಂಡುಕೊಂಡಿದ್ದಾರೆ. ಗ್ರಾಮ ಪಂಚಾಯತ್ ಕಛೇರಿ, ನಗರಿ/ಅರೆ ನಗರಗಳಲ್ಲಿ ಸಫಾಯಿ ಕೆಲಸಗಳಲ್ಲಿ ಭಾಗಿಯಾಗುತ್ತಾರೆ. ಹಾಸ್ಟೆಲ್ ವಾರ್ಡನ್, ಅಂಗನವಾಡಿ ಶಿಕ್ಷಕಿ, ಅಡುಗೆ ಕೆಲಸ ಮಾಡುವರು. ಕಸ ಎತ್ತುವ, ಗುಡಿಸುವ, ವಾಹನದ ಡ್ರೈವರಾಗಿ ದುಡಿಯುತ್ತಾರೆ. ಮಹಿಳೆಯರು ಬೀಡಿ ಕಟ್ಟುವ, ಕೃಷಿ ಕೆಲಸ ಇತ್ಯಾದಿಗಳಲ್ಲಿ ತೊಡಗಿಸಿಕೊಂಡಿದ್ದಾರೆ. ಸ್ವಲ್ಪಮಟ್ಟಿನ ಸರ್ಕಾರಿ ಉದ್ಯೋಗಗಳಲ್ಲಿಯೂ ಕಂಡುಬರುತ್ತಾರೆ.

ಕೋಷ್ಟಕ 4: ಸಮೀಕ್ಷೆಗೊಳಪಟ್ಟ ಕುಂದಾಪುರ ತಾಲೂಕಿನ ಹದಿನಾಲ್ಕು ಗ್ರಾಮಗಳಲ್ಲಿ ಲಿಂಗವಾರು ಕಸುಬುಗಳು ಮತ್ತು ವೃತ್ತಿಗಳನ್ನು ಈ ಕೆಳಗಿನ ಕೋಷ್ಟಕದಲ್ಲಿ ಕಾಣಬಹುದು.

ಕ್ರ.ಸಂ.	ವೃತ್ತಿಗಳು	ವೃತ್ತಿ ನಿರತ		ಒಟ್ಟು	ಶೇಕಡಾವಾರು
		ಮಹಿಳೆ	ಪುರುಷರು		
1.	ಕುಲಕಸುಬು (ಬುಟ್ಟಿನೇಯ್ಗೆ)	122	64	186	32.63
2.	ಕೃಷಿ	04	03	07	01.22
3.	ಕೃಷಿ ಕಾರ್ಮಿಕ	16	46	62	10.87
4.	ಗಾರೆ ಕೆಲಸ ಮೇಸ್ತ್ರಿ	–	24	24	04.21
5.	ಗಾರೆ ಕೆಲಸಕ್ಕೆ ಸಹಾಯಕ – ಕೂಲಿ	12	48	60	10.52
6.	ವ್ಯಾಪಾರ (ಸಣ್ಣ)	–	07	07	01.22
7.	ಬೀಡಿ ಕಾರ್ಮಿಕ	82	14	96	16.84
8.	ಡ್ರೈವರ್	–	08	08	01.40
9.	ಕಾರ್ಖಾನೆ	03	39	42	07.36
10.	ಖಾಸಗಿ ಸಂಸ್ಥೆ ನೌಕರ (ಗುತ್ತಿಗೆ ಆಧಾರದಲ್ಲಿ)	–	37	37	06.49
11.	ಸರ್ಕಾರಿ ನೌಕರಿ	06	05	11	01.92
12.	ನಿವೃತ್ತ ನೌಕರ	01	06	07	01.22
13.	ಇಂಜಿನಿಯರ್ (ಐ.ಟಿ.ಐ)	01	07	08	01.40
14.	ಶಿಕ್ಷಕ (ಅಂಗನವಾಡಿ ಪ್ರಾಥಮಿಕ ಶಾಲಾ)	07	02	09	01.57
15.	ಟೈಲರಿಂಗ್	06	ಇಲ್ಲ	06	01.05
ಒಟ್ಟು		**260**	**310**	**570**	

ಕೊರಗ ಬುಡಕಟ್ಟುವಿನ ಆರ್ಥಿಕ ಅಭಿವೃದ್ಧಿಯ ಬಗ್ಗೆ ಸಮುದಾಯದ ಒಳಗಿನವರಾದ ಅವರು ನೀಡುವ ಅಭಿಪ್ರಾಯವನ್ನು ಈ ಕೆಳಗಿನಂತೆ ಕ್ರೋಢೀಕರಿಸಲಾಗಿದೆ.

- ಕುಲಕಸುಬಿಗಾಗಿ ಕಚ್ಚಾ ವಸ್ತುಗಳನ್ನು ಸುಲಭವಾಗಿ ಸಿಗುವಂತೆ ಸಹಕರಿಸುವುದು.
- ಸ್ವ–ಉದ್ಯೋಗಕ್ಕಾಗಿ ತರಬೇತಿ ನೀಡುವುದು, ಸಾಲ ಸೌಲಭ್ಯವನ್ನು ನೀಡುವುದು, ಈಗ ನೀಡುತ್ತಿರುವ ಸಾಲ ಸೌಲಭ್ಯದ ಮೊತ್ತವನ್ನು ಹೆಚ್ಚಿಸಬೇಕಾಗಿದೆ.

- ಕುಡಿಯುವ ನೀರಿನ ಸೌಲಭ್ಯ ಹಾಗೂ ವಿದ್ಯುತ್‌ಚ್ಛಕ್ತಿ ಸೌಲಭ್ಯ ಒದಗಿಸಬೇಕು.
- ಸರ್ಕಾರದಿಂದ ಕೃಷಿ ಭೂಮಿಯನ್ನು ಒದಗಿಸುವುದು. ಈಗಾಗಲೇ ಇರುವ ಕೃಷಿ ಭೂಮಿಗೆ ನೀರಾವರಿ ಸೌಲಭ್ಯವನ್ನು ಒದಗಿಸುವುದು.
- ಶಾಶ್ವತ ಉದ್ಯೋಗವನ್ನು ನೀಡುವುದು. ಗುತ್ತಿಗೆ ಆಧಾರದಲ್ಲಿ ದುಡಿಯುವ ವ್ಯವಸ್ಥೆಯನ್ನು ರದ್ದುಗೊಳಿಸಬೇಕಾಗಿದೆ.
- ವೃದ್ಧಾಪ್ಯ ವೇತನ ಹಾಗೂ ವಿಧವಾ ವೇತನವನ್ನು ಸಕಾಲದಲ್ಲಿ ನೀಡುವುದು.
- ಅರಣ್ಯ ಇಲಾಖೆಯವರು ನೀಡುವ ಕಿರುಕುಳವನ್ನು ತಪ್ಪಿಸಲು ಸೂಕ್ತ ಕ್ರಮ ಕೈಗೊಳ್ಳಬೇಕು. ಇತರರು ಮಾಡುವ ಕೆಲವೊಂದು ಅರಣ್ಯಕ್ಕೆ ಸಂಬಂಧಿತ ಅಪರಾಧ ಕೃತ್ಯಕ್ಕೆ ತಮ್ಮನ್ನು ಬಲಿ ಕೊಡುವುದು ತಪ್ಪಬೇಕು ಎಂಬುದಾಗಿ ಅಭಿಪ್ರಾಯ ಪಡುತ್ತಾರೆ.
- ಈಗಾಗಲೇ ಸರ್ಕಾರ ನೀಡಿರುವ ಕೃಷಿ ಭೂಮಿಯನ್ನು ಕೊರಗರು ಸಮರ್ಪಕವಾಗಿ ಉಪಯೋಗಿಸಿಕೊಳ್ಳಲು ತರಬೇತಿ ನೀಡಬೇಕು. ಉದಾ: ಕಾರ್ಕಳ ತಾಲೂಕಿನಲ್ಲಿ ಆ ಪ್ರಯತ್ನ ನಡೆದಿರುವುದನ್ನು ಗಮನಕ್ಕೆ ತರುವೆನು. ಬಜಗೋಳಿ, ಸಾಣೂರು ಮುಂತಾದ ಪ್ರದೇಶದಲ್ಲಿ ಕೊರಗರಿಗೆ ನೀಡಿದ ಸರ್ಕಾರಿ ಭೂಮಿಯಲ್ಲಿ ಮಲ್ಲಿಗೆ ಕೃಷಿಯನ್ನು ಮಾಡುತ್ತಾರೆ. ಇದನ್ನು ಕುಂದಾಪುರ ತಾಲೂಕಿನ ಕೆಲವು ಗ್ರಾಮಗಳಿಗೆ ವಿಸ್ತರಿಸಬೇಕು.

ಶೈಕ್ಷಣಿಕ ಸ್ಥಿತಿಗತಿಗಳು

ಒಂದು ಸಮುದಾಯದ ಸಾಮಾಜಿಕ–ಆರ್ಥಿಕ ಪ್ರಗತಿಗೆ ಶಿಕ್ಷಣವು ಬಹಳ ಮುಖ್ಯವಾಗಿದ್ದು, ಕೊರಗ ಬುಡಕಟ್ಟಿನಲ್ಲಿರುವ ಶೈಕ್ಷಣಿಕ ವಿಚಾರಗಳನ್ನು ಅಧ್ಯಯನ ಮಾಡಲಾಗಿದ್ದು, ಹದಿನಾಲ್ಕು ಗ್ರಾಮಗಳಲ್ಲಿರುವ ಕೊರಗರು ಶಿಕ್ಷಣದ ಬಗ್ಗೆ ಹೊಂದಿರುವ ಅಭಿಪ್ರಾಯ, ಹೆಣ್ಣು ಮಕ್ಕಳಿಗೆ ಶಿಕ್ಷಣ ಕೊಡಿಸುವ ಬಗೆಗಿನ ಸಮರ್ಥನೆ, ಶಿಕ್ಷಣವನ್ನು ಮಧ್ಯದಲ್ಲಿಯೇ ಬಿಟ್ಟುಬಿಡಲು ಅವರ ಅಭಿಪ್ರಾಯ ಮುಂತಾದ ಅಂಶಗಳನ್ನು ಈ ಅಧ್ಯಯನದಲ್ಲಿ ಕೊಡಲಾಗಿದೆ.

ಮಕ್ಕಳ ಶಾಲಾ – ಕಾಲೇಜಿನ ವಿವರ

ಕೊರಗರು ಶಿಕ್ಷಣಕ್ಕೆ ಹೆಚ್ಚಿನ ಮಹತ್ವ ನೀಡಬೇಕು ಎಂಬ ಅಭಿಪ್ರಾಯವಿದ್ದರೂ, ತಮ್ಮ ಮಕ್ಕಳನ್ನು ಉತ್ತಮವಾದ ಶಾಲಾ ಕಾಲೇಜುಗಳಲ್ಲಿ ಓದಿಸಲು ಇಚ್ಛೆ ಪಡುತ್ತಾರೆ. ಹೆಣ್ಣು ಮಕ್ಕಳ ವಿವಾಹಕ್ಕೆ ಪ್ರಥಮ ಪ್ರಾಶಸ್ತ್ಯವನ್ನು ನೀಡಿದರೂ, ನಂತರದ ಪ್ರಾಶಸ್ತ್ಯವನ್ನು ಶಿಕ್ಷಣ ಕೊಡುತ್ತಿರುವುದು ಇವರ ಸಾಮಾಜಿಕ ಜವಾಬ್ದಾರಿಯನ್ನು ತೋರಿಸಿ ಕೊಡುತ್ತದೆ. ಅದರೂ ಕೂಡ ವಿದ್ಯಾರ್ಥಿಯು ತನ್ನ ಶಿಕ್ಷಣವನ್ನು ಅರ್ಧದಲ್ಲಿಯೇ ನಿಲ್ಲಿಸುತ್ತಾರೆ. ಅಧ್ಯಯನಕ್ಕೆ **ಒಳಪಟ್ಟ ಹದಿನಾಲ್ಕು ಗ್ರಾಮಗಳಲ್ಲಿ ಶೈಕ್ಷಣಿಕ ಮಟ್ಟ** ಈ ಕೆಳಗಿನಂತಿವೆ:

ಕೋಷ್ಟಕ 5: ಕೊರಗ ಬುಡಕಟ್ಟು ಸಮುದಾಯದ ಶೈಕ್ಷಣಿಕ ವಿವರ

ಕ್ರ.ಸಂ.	ಶೈಕ್ಷಣಿಕ ಹಂತ	ಸಾಕ್ಷರರ ಸಂಖ್ಯೆ		
		ಗಂಡು	ಹೆಣ್ಣು	ಒಟ್ಟು
1.	ಪ್ರಾಥಮಿಕ	94	158	252
2.	ಮಾಧ್ಯಮಿಕ	78	102	180
3.	ಪ್ರೌಢಶಿಕ್ಷಣ	67	45	112
4.	ಪದವಿ ಪೂರ್ವ	17	26	43
5.	ಪದವಿ	28	13	41
6.	ಐಟಿಐ / ಡಿಪ್ಲೋಮಾ	04	01	05
7.	ಸ್ನಾತಕೋತ್ತರ	01	02	03
8.	ಇಂಜಿನಿಯರಿಂಗ್	–	01	01
9.	ವೈದ್ಯಕೀಯ	–	01	01
10.	ಇತರ (ಅನಕ್ಷರಸ್ಥರು)	21	46	67
	ಒಟ್ಟು	**310**	**395**	**705**

ಅಧ್ಯಯನಕ್ಕೆ ಆಯ್ಕೆಯಾಗಿರುವ ಗ್ರಾಮಗಳಲ್ಲಿನ ಸಾಕ್ಷರರಲ್ಲಿ ಶೈಕ್ಷಣಿಕ ಹಂತವನ್ನು ಗಮನಿಸಿದ್ದಾಗ ಪ್ರಾಥಮಿಕ 252 ಮಾಧ್ಯಮಿಕ 180 ಇನ್ನುಳಿದ ಹಂತಗಳಾದ ಪ್ರೌಢ 112 ಪದವಿಪೂರ್ವ 43 ಪದವಿ 41 ಸ್ನಾತಕೋತ್ತರ 03 ಶಿಷ್ಟಿದ್ದು, ಡಿಪ್ಲೋಮಾ 05 ಜನರು ಹಾಗೂ 67 ಜನರು ಅನಕ್ಷರಸ್ಥರ ಇರುವುದು ಕ್ಷೇತ್ರಕಾರ್ಯ ಸಂದರ್ಭದಲ್ಲಿ ಅಂಕಿ ಅಂಶಗಳ ಮಾಹಿತಿಯಿಂದ ತಿಳಿದು ಬರುತ್ತದೆ.

ಮೇಲಿನ ಆಯ್ದ ಗ್ರಾಮಗಳಲ್ಲಿ **ಶೈಕ್ಷಣಿಕ ಪ್ರಗತಿಯನ್ನು ಗಮನಿಸಿದರೆ** ಶೈಕ್ಷಣಿಕ ಮಟ್ಟದಲ್ಲಿ ಸಾಕಷ್ಟು ಬದಲಾವಣೆ ಆಗದೇ ಇರುವುದು ಕಂಡುಬರುತ್ತದೆ.

1 ರಿಂದ 10 ತರಗತಿಯವರಿಗೆ **544** ಜನ ವಿದ್ಯಾರ್ಥಿಗಳು ದಾಖಲಾದರೆ ಈ ತರಗತಿಗಳನ್ನು ಪೂರ್ಣಗೊಳಿಸುವುದರ ಒಳಗೆ **67** ವಿದ್ಯಾರ್ಥಿಗಳು ಶಾಲೆಯನ್ನು ಮಧ್ಯದಲ್ಲಿ ಬಿಟ್ಟಿದ್ದಾರೆ.

ಇದಕ್ಕೆ ಸಂಬಂಧಪಟ್ಟ ಕಾರಣಗಳೇನು ಎನ್ನುವುದನ್ನು ವಿದ್ಯಾರ್ಥಿಗಳ ದೃಷ್ಟಿಯಲ್ಲಿ ಗಮನಿಸಿದಾಗ

- ಅರಣ್ಯ ಪ್ರದೇಶದಲ್ಲಿ ವಾಸ ಮಾಡುವುದು ಇಲ್ಲಿನ ವಿದ್ಯಾರ್ಥಿಗಳು ಶಾಲೆಗೆ ಹಾಜರಾದ ಕೂಡಲೇ ಕಟ್ಟುನಿಟ್ಟಿನ ಶಿಸ್ತು ಸಹಿಸಲಾಗದೇ ಇರುವುದರಿಂದ ಶಾಲೆಯನ್ನು ಅರ್ಧದಲ್ಲಿಯೇ ಬಿಡುತ್ತಾರೆ.

- ಸಾಮಾಜಿಕವಾಗಿ ಇತರ ಸಮುದಾಯದ ಜನರ ಸಂಪರ್ಕವಿದ್ದರೂ ಶಿಕ್ಷಣದ ಮಹತ್ವದ ಬಗ್ಗೆ ಅರಿವು ಇಲ್ಲದೆ ಇರುವುದು.
- ಚಿಕ್ಕ ವಯಸ್ಸಿನಲ್ಲೇ ಹೆಣ್ಣು ಮಕ್ಕಳಿಗೆ ವಿವಾಹ ಮಾಡಬೇಕು ಎಂಬ ಮನಃಸ್ಥಿತಿ ಹೆಣ್ಣು ಮಕ್ಕಳ ದಾಖಲಾತಿ, ಹಾಜರಾತಿಗಳು ಇಂದಿಗೂ ಕಡಿಮೆ ಮಟ್ಟದಲ್ಲಿರುವುದು ಕಂಡುಬಂದಿದೆ.
- ತಾವು ವಾಸಿಸುವ ಕಾಲೋನಿ ಹಾಗೂ ಪರಿಸರದಲ್ಲಿ ವ್ಯಾಸಂಗಕ್ಕೆ ಪೂರಕವಾದ ವಾತಾವರಣ ಇಲ್ಲದೆ ಇರುವುದು.
- ಗಿರಿಜನ ವಿದ್ಯಾರ್ಥಿಗಳ ಮಾನಸಿಕ ಸ್ಥಿತಿಯನ್ನು ಅರಿತು ಬೋಧಿಸುವ ಶಿಕ್ಷಕರ ಕೊರತೆ ಕಂಡುಬಂದಿರುತ್ತದೆ.
- ಶಾಲೆಗಳಲ್ಲಿ ಕೊಡುವ ಆಹಾರ ಉತ್ತಮವಾಗಿಲ್ಲದೆ ಇರುವುದು.
- ವಿಭಕ್ತ ಕುಟುಂಬದ ಜೀವನದಿಂದಾಗಿ ಕುಟುಂಬ ನಿರ್ವಹಣೆ ಹಾಗೂ ಕುಟುಂಬದ ಜವಾಬ್ದಾರಿಯನ್ನು ಹೊರಬೇಕಾಗಿರುವುದರಿಂದ ಕೂಲಿ ಕಾರ್ಮಿಕರಾಗಿ ದುಡಿಯಬೇಕಾದ ಅನಿವಾರ್ಯತೆ ಮಕ್ಕಳಿಗೆ ಇರುವುದು.
- ನೂರಾರು ವರ್ಷಗಳಿಂದ ಹೇರಲ್ಪಟ್ಟ ಧಾರ್ಮಿಕ ಮನೋಭಾವನೆ. ಉದಾ: ಶ್ರಾವಣ ಮಾಸ, ನವರಾತ್ರಿಯ ಸಂದರ್ಭದಲ್ಲಿ ಇವರು ವಲಸೆ ಹೊರಟರೇ ಮತ್ತೆ ತಿರುಗಿ ಬರುವುದು ಜಾತ್ರೆ, ನೇಮ, ಕೋಲ ಇತ್ಯಾದಿ ಮುಗಿಸಿ ಮಳೆಗಾಲ ಪ್ರಾರಂಭವಾಗುವ ಮುಂಚಿತವಾಗಿ.
- ಕುಂದಾಪುರ ತಾಲೂಕು ವ್ಯಾಪ್ತಿಯಲ್ಲಿರುವ ಆಶ್ರಮ ಶಾಲೆಯಂತಹ (ಮಕ್ಕಳ ಮನೆ) ಶೈಕ್ಷಣಿಕ ವ್ಯವಸ್ಥೆಯನ್ನು ಉಪಯೋಗಿಸಿಕೊಳ್ಳಲು ವಿದ್ಯಾರ್ಥಿಯ ಪಾಲಕರು, ಪೋಷಕರು ನಿರಾಕರಿಸುವ ಮನೋಭಾವ ಇತ್ಯಾದಿ ಹತ್ತು ಹಲವು ಕಾರಣಗಳಿಂದಾಗಿ ಈ ಸಮುದಾಯದ ಶೈಕ್ಷಣಿಕ ಪ್ರಗತಿ ಕುಂಠಿತವಾಗಿದೆ ಎಂಬುದು ಕ್ಷೇತ್ರ ಕಾರ್ಯದ ಮೂಲಕ ತಿಳಿದುಬಂದಿದೆ.

ಕುಂದಾಪುರ, ಕುಂಭಾಶಿ, ಮರವಂತೆ ಇತ್ಯಾದಿ ಪ್ರದೇಶಗಳಲ್ಲಿ ಕೊರಗಾಭಿವೃದ್ಧಿ ಸಂಘಗಳು, ಕೊರಗ ಮಕ್ಕಳ ಶಿಕ್ಷಣಕ್ಕಾಗಿ ಸಭೆಗಳನ್ನು ನಡೆಸಿ ಅದಕ್ಕೆ ಸೂಕ್ತ ಪರಿಹಾರವನ್ನು ಕಂಡುಕೊಳ್ಳುತ್ತಿದ್ದಾರೆ. ಇವರು ತಮ್ಮ ಸಮುದಾಯದವರ ಮನೆಗಳಿಗೆ ತೆರಳಿ ಪೋಷಕರ ಮನವೊಲಿಸಿ ಮಕ್ಕಳನ್ನು ಶಾಲೆ ಕರೆ ತರುವ ಪ್ರಯತ್ನವನ್ನು ಮಾಡುತ್ತಿದ್ದಾರೆ. ಕುಂಭಾಶಿ ಸಮೀಪದಲ್ಲಿರುವ **ಡಾ. ಅಂಬೇಡ್ಕರ್ ನಗರದ "ಮಕ್ಕಳ ಮನೆ"** ಕೊರಗರ ಮಕ್ಕಳ ಶಿಕ್ಷಣಕ್ಕಾಗಿ ಹಲವಾರು ಕಾರ್ಯಕ್ರಮಗಳನ್ನು ಹಮ್ಮಿಕೊಂಡಿರುವುದು.

1. ಕೊರಗರ ಪ್ರಮುಖ ಮುಖಂಡರನ್ನು, ಪೋಷಕರು ಕರೆಸಿ ಶಿಕ್ಷಣದ ಮಹತ್ವದ ಬಗ್ಗೆ ಹಾಗೂ ಮಕ್ಕಳಿಗೆ ತಿಳಿಸುವರು.
2. ಗೈರು ಹಾಜರಾದ ಮಕ್ಕಳಿಗೆ ಅಪ್ತ ಸಮಾಲೋಚನಾ ಕಾರ್ಯಕ್ರಮ ಒದಗಿಸುವರು.
3. ಮಕ್ಕಳಿಗೆ ಶುಚಿತ್ವದ ಮಹತ್ವ, ಕರಕುಶಲ ಕಲೆಗಳ ಬಗ್ಗೆ ಜ್ಞಾನ ನೀಡುವುದು. ಕ್ರೀಡೆ ಮತ್ತು ಸಾಂಸ್ಕೃತಿಕ ಕಾರ್ಯಕ್ರಮಗಳನ್ನು ನಡೆಸುವರು.

4. ಮಕ್ಕಳಿಗೆ ಕನ್ನಡ ಭಾಷೆಯ ಅಕ್ಷರ ಅಭ್ಯಾಸ, ವ್ಯಾಕರಣ, ಇಂಗ್ಲೀಷ್ ಭಾಷೆಯ ಬಗ್ಗೆ ತಿಳುವಳಿಕೆ ಮೂಡಿಸಲಾಗುತ್ತದೆ.

ಕೊರಗ ಬುಡಕಟ್ಟುಮಿನ **ಶಿಕ್ಷಣದಲ್ಲಿ ಇಳಿಮುಖವಾಗಲು ಕಾರಣವೇನು** ಎಂಬುದಾಗಿ ಕೊರಗ ಸಮುದಾಯದ ಮಾಹಿತಿದಾರರು ನೀಡಿದ ಮಾಹಿತಿಯನ್ನು ಈ ಕೆಳಗಿನಂತೆ ಕ್ರೋಡೀಕರಿಸಲಾಗಿದೆ.

- ಕೊರಗರ ವಾಸ್ತವ್ಯದ ಮನೆಗೆ ಹಾಗೂ ಶಾಲೆಗೂ ಇರುವ ನಡುವಿನ ಅಂತರ ಜಾಸ್ತಿ ಇರುವುದರಿಂದ ಪೋಷಕರು ತಮ್ಮ ಮಕ್ಕಳನ್ನು ಮುಖ್ಯವಾಗಿ ಹೆಣ್ಣು ಮಕ್ಕಳನ್ನು ಶಾಲೆಗೆ ಕಳುಹಿಸುತ್ತಿಲ್ಲ.
- ವಿದ್ಯಾರ್ಥಿಗಳ ಪೋಷಕರು ಅನಕ್ಷರರಾಗಿರುವುದರಿಂದ ಶಿಕ್ಷಣದ ಮಹತ್ವ ಹಾಗೂ ಮಕ್ಕಳ ಶಿಕ್ಷಣದ ಬಗ್ಗೆ ಕಾಳಜಿ ಕಡಿಮೆ ಇರುವುದರಿಂದ.
- ಮಹಿಳಾ ಶಿಕ್ಷಣದ ಕೊರತೆ ಮತ್ತು ವಸತಿ ನಿಲಯದ ಸಮಸ್ಯೆ
- ಆರೋಗ್ಯದ ಸಮಸ್ಯೆ, ಅಪೌಷ್ಟಿಕತೆಯಿಂದ ಬಳಲುವ ಮಕ್ಕಳು ಶಾಲೆಯನ್ನು ಮಧ್ಯದಲ್ಲಿಯೇ ನಿಲ್ಲಿಸುವರು ಅಥವಾ ಗೈರುಹಾಜರಾಗುತ್ತಾರೆ.
- ಶ್ರೇಣೀಕೃತ ಸಮಾಜದ ವ್ಯವಸ್ಥೆಯ ಪರಿಣಾಮ ಕೊರಗ ಬುಡಕಟ್ಟುಮಿನ ಮೇಲೆ ಪರಿಣಮಿಸಿದೆ.
- ಮಕ್ಕಳಿಗೆ ಪ್ರೇರಣಾದಾಯಕದ ಕಲಿಕಾ ವಾತಾವರಣದ ಕೊರತೆ.

ಸರ್ಕಾರಿ ಸವಲತ್ತುಗಳಾದ ವಿದ್ಯಾರ್ಥಿ ವೇತನ, ಸಮವಸ್ತ್ರ, ಆಶ್ರಮ ಶಾಲೆ, ಮಾದರಿ ಶಾಲೆ ಹೆತ್ತವರಿಗೆ ಸೌಲಭ್ಯಗಳನ್ನು ನೀಡುವುದರಿಂದ ಕೊರಗರ ಶೈಕ್ಷಣಿಕ ಬದಲಾವಣೆ ಅಲ್ಪ ಪ್ರಮಾಣದಲ್ಲಿ ಸಾಧ್ಯವಾಗಬಹುದು. ವಿದ್ಯಾರ್ಥಿಗಳನ್ನು ಮಾನಸಿಕವಾಗಿ ಸಿದ್ಧಗೊಳಿಸಬೇಕಾಗಿದೆ. ಶಾಲೆಯ ಒಳಗೆ ಹಾಗೂ ಅವರು ವಾಸ್ತವ್ಯವಿರುವ ಊರಿನಲ್ಲಿ ಸಮಾನತೆ ದೊರೆಯಬೇಕು. ಶಾಲೆಗೆ ಬರುವಂತಹ ಪ್ರೋತ್ಸಾಹದಾಯಕ ಅಂಶಗಳು ಯಾವುವು? ಕೊರಗರ ಮಕ್ಕಳು ಶಾಲೆಗೆ ಗೈರುಹಾಜರಾಗುವುದಕ್ಕೆ ಏನು ಕಾರಣ ಮತ್ತು ಪರಿಹಾರಗಳೇನು? ಸಮಾಜ ಹಾಗೂ ಸೇವಾ ಸಂಸ್ಥೆಗಳ ಪಾತ್ರವೇನು? ಎಂಬುದರ ಬಗ್ಗೆ ವ್ಯಾಪಕವಾದ ಅಧ್ಯಯನ ನಡೆಸಿ ಅದಕ್ಕೆ ತಕ್ಕದಾದ ಪರಿಹಾರ ಕಂಡುಕೊಂಡರೆ ಕೊರಗರಲ್ಲಿ ಶೈಕ್ಷಣಿಕ ಕ್ರಾಂತಿ ತರಲು ಸಾಧ್ಯವಿದೆ.

ಅಧ್ಯಯನದ ಫಲಿತಗಳು

1. ಆದಿಮ ಬುಡಕಟ್ಟುಗಳಲ್ಲಿ ಒಂದಾದ ಕೊರಗರು ನಿಧಾನಗತಿಯಲ್ಲಿ ಅಭಿವೃದ್ಧಿಯ ಪಥದಲ್ಲಿದ್ದಾರೆ. ನಿರೀಕ್ಷಿತ ಮಟ್ಟದಲ್ಲಿರದೇ ಇರುವುದು ಖೇದಕರ.
2. ಕೊರಗರ ಜೀವನಾವರ್ತನ ಆಚರಣೆಗಳಲ್ಲಿ ಆಧುನಿಕತೆಯ ಸ್ಪರ್ಶವಾಗುತ್ತಿದೆ. ನಾಮಕರಣ, ವಿವಾಹ, ಗೃಹಪ್ರವೇಶ, ಅಂತ್ಯ ಸಂಸ್ಕಾರ, ಧಾರ್ಮಿಕ ಆಚರಣೆಗಳಲ್ಲಿ ಶಿಷ್ಟ ಪರಂಪರೆ, ಬ್ರಾಹ್ಮಣ ಪುರೋಹಿತರ ಪಾತ್ರ ಪ್ರವೇಶಿಸಿದೆ.
3. ಕೊರಗರ ಮಾತೃಭಾಷೆ 'ಕೊರಗ ಭಾಷೆ' ನಶಿಸುತ್ತಿದೆ. ಬಹುಸಂಖ್ಯಾತರ ಭಾಷೆಗಳ ಪ್ರಭಾವದಿಂದ ಮತ್ತು ಆ ಭಾಷೆಯ ಬಗ್ಗೆ ಅವರಿಗಿರುವ ಕೀಳರಿಮೆಯಿಂದ ನಿಧಾನವಾಗಿ

ನಾಶವಾಗುತ್ತಿದೆ. ಈ ಬಗ್ಗೆ ಭಾಷೆ ಉಳಿಸಲು ಕೊರಗರು ಮುತುವರ್ಜಿ ವಹಿಸುತ್ತಿದ್ದು ಸಣ್ಣ ಪ್ರಮಾಣದಲ್ಲಿ ಭಾಷಾ ಕಲಿಕೆಯು ಪ್ರಾರಂಭವಾಗಿದೆ.

4. ಅಮಾನವೀಯ ಪದ್ಧತಿಯಾದ 'ಅಜಲು ಪದ್ಧತಿ'ಯು ಕಾನೂನಿನಾತಕವಾಗಿ ನಿಷೇಧಿಸಿದರೂ, ಕೆಲವು ಪ್ರದೇಶಗಳಲ್ಲಿ ಗೌಪ್ಯವಾಗಿ ನಡೆಯುತ್ತದೆ ಎಂದು ಮಾಹಿತಿದಾರರು ತಿಳಿಸುತ್ತಾರೆ.
5. ಕೊರಗ ಸಮುದಾಯದಲ್ಲಿ ಅಪೌಷ್ಟಿಕತೆಯ ಜೊತೆಗೆ ಅನೇಕ ಕಾಯಿಲೆಗಳು ಕಂಡುಬರುತ್ತದೆ. ಕಾಯಿಲೆಗಳಿಗೆ ಚಿಕಿತ್ಸೆಯನ್ನು ನೀಡುವ ಬಗ್ಗೆ ಸರ್ಕಾರ ಹಾಗೂ ಸರ್ಕಾರೇತರ ಸೇವಾ ಸಂಘಗಳು ಪ್ರಯತ್ನಿಸುತ್ತದೆ.

ಸಲಹೆಗಳು

1. ಆದಿಮ ಬುಡಕಟ್ಟು ಸ್ಥಾನಮಾನ ನೀಡಿ ವರ್ಗೀಕರಿಸಲ್ಪಟ್ಟಿದ್ದರಿಂದ ಕೊರಗರಿಗೆ 'ಪ್ರತ್ಯೇಕ ಒಳ ಮೀಸಲಾತಿ' ನೀಡಬೇಕು.
2. ಕೊರಗರ ಭಾಷೆ, ಸಂಸ್ಕೃತಿ, ಅನನ್ಯತೆಗಳನ್ನು ಅಧ್ಯಯನ ಮಾಡುವ ಸಲುವಾಗಿ ಅವಿಭಜಿತ ದಕ್ಷಿಣ ಕನ್ನಡ ಜಿಲ್ಲೆಯಲ್ಲಿ ಯಾವುದಾದರೂ ಒಂದು ಶೈಕ್ಷಣಿಕ ಸಂಸ್ಥೆಯಲ್ಲಿ 'ಕೊರಗ ಸಂಶೋಧನಾ ಪೀಠ' ಸ್ಥಾಪಿಸಬೇಕು.
3. ಕೊರಗ ಸಮುದಾಯ ಕಲ್ಯಾಣದಲ್ಲಿ ತೊಡಗಿರುವ ಸರಕಾರೇತರ ಸೇವಾ ಸಂಸ್ಥೆಗಳು 'ಸೇವಾ ಕಾರ್ಯಕ್ರಮಕ್ಕಾಗಿ ಕಾರ್ಯಕ್ರಮಗಳು' ಎಂಬ ಮನೋಭಾವ ಬಿಟ್ಟು, ಕಾರ್ಯಕ್ರಮದಿಂದ ಗುಣಾತ್ಮಕ ಬದಲಾವಣೆಗಳನ್ನು ವೈಜ್ಞಾನಿಕವಾಗಿ ಅಧ್ಯಯನ ಮಾಡಿ ಮುಂದಿನ ಯೋಜನೆ ರೂಪಿಸಬೇಕು.
4. ಕೊರಗ ಸಮುದಾಯದ ಅಭಿವೃದ್ಧಿಗಾಗಿ ಅವರದ್ದೇ ಸಮುದಾಯದ ಕಾರ್ಯಕರ್ತರನ್ನು ನಿರ್ಮಿಸಬೇಕು. ಅವರಿಗೆ ಕೌಶಲ್ಯ ತರಬೇತಿ ನೀಡಿ ಅವರ ಮೂಲಕ ಪ್ರಯತ್ನಿಸಬೇಕು.
5. ಕೊರಗ ಬುಡಕಟ್ಟಿನ ಅಭಿವೃದ್ಧಿಗೆ ಶಿಕ್ಷಣವೊಂದೇ ಪರಿಹಾರ. ಈ ದಿಕ್ಕಿನಲ್ಲಿ ಅವರಿಗೆ ಹೆಚ್ಚಿನ ವಿದ್ಯಾರ್ಥಿ ವೇತನ ನೀಡಬೇಕು.
6. ಕೊರಗರ ಆರ್ಥಿಕಾಭಿವೃದ್ಧಿಗಾಗಿ ಕನಿಷ್ಟ 3 ರಿಂದ 5 ಎಕ್ರೆ ಕೃಷಿ ಜಮೀನು ನೀಡಬೇಕು. ಜೊತೆಗೆ ಕೃಷಿ ಮಾಡುವಂತೆ ಪ್ರೇರೇಪಿಸಿ ಅನುಷ್ಠಾನಗೊಳಿಸಬೇಕು.

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"COALITION POLITICS IN KARNATAKA"

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ABSTRACT

In the context of contemporary political realities, coalition government it seems has come to stay as an essential features of Indian polity. Coalition polities centres round political parties as it involves games played by the latter to gain the maximum pay off. It became relevant when no single party is able to reach power by itself. In such circumstances one party join another one or more parties to fight the elections and to form government.

Coalition or party alliance may be pre-election or post-election phenomenon. Some parties may cluster together pool their resources and work jointly to maximize their gain by defeating the rivals in the elections processes. If there is a single alliance fighting against individual rival parties. The possibility of alliance winning more seats than the rivals in stronger. If two equal strong alliances are pitted against each other the effect will be that of strong two party system. Either of them getting a majority to form the government. If more than two alliance contest. The result will be either in favour of one of them or none at all. With no alliance being able to win a majority in the last situation a government is possible only by means of a further coalition of two or more alliances.

Keywords: Parliament, Coalition, Vidhanasabha, Vidhana Parishad, Election, Democracy, Election Commission, Federal system etc.

Introduction

Let we begin four different propositions in the particular article one proposition is the fact that the "Mantra of coalition politics" viewed or analysed from the perspective of social categories in other words political coalition of social categories has become the hall mark of Indian politics. Secondly "coalition politics"cannot be identified with the arrival of independence or treated as post-colonial phenomenon alone rather it has to be located in anti-colonial struggle and also in the resistance to hegemonic character of the nationalist

movement visa-versa different social categories. The third proposition is the fact that Indian politics has given rise to multiple social locations which can be constructed as "national" and that these social coalition are translation into larger "coalition politics" and finally Indian politics in general Karnataka in particular is now aiming at forming "coalition politics of new type ". Particularly making or taking social movements bas primary forces or actors. It's in this context our article argues that the "mantra" of coalition politics now aims at providing and locating political spaces for different social categories. Fourthly it also argues that there are no single social coalition at present in India and that they cannot make absolute claim over the region of politics or the social categories that it represents. More than that in not static in nature it is changing according to the nature of democratic politics. Finally the experiment that is underway in Karnataka is a phenomenon reflecting antipathy to the existing coalition politics, Coalition today is the buzz word in politics it is here to stay despite several explanations for coalition formation defining "coalition" it is difficult task .Cambridge advanced dictionary defines it as the union of different political parties or groups for a particular purpose. Which is more intriguing is the addition of a time frame. "Usually for a limited time" the phrase used in the dictionary. It also add to say that "coalitions" have its own peculiar set of problems and uses the term "coalition" to define an organized opposition "by forming a coalition rebels and the opposite parties defeated the government". Thus the above meaning of coalition in the dictionary is not a mere cockade nor a cockeyed explanation without a purpose Infact they in nutshell explain the matrix of coalition.

In a country like India, where parliamentary system of government is adopted. Coalition is seen and understood as the maturity of Indian political system. The voters nationalise the emerging new class/caste leadership on one side and the failure of political parties in their functioning and internal democracy the crisis of leadership to hold a party or a system together on the other side. It is in other words a shift in "power" from the traditional sovereign upper caste base to the pluralistic neo-formations of downtrodden masses. It is also seen as emerging due to the various socio-political and cultural upsurges that are witnessed in a developing society where social mobility ,media effectiveness,attempts at electoral reforms . Issues of fairness, maximising party advantages and increase in bureaucratic hold and such other factors are influencing the voters , citizens and the people alike. However these instances may be. It is certain that conditions are here to say until and unless the political polarization is complete in India.

Meaning of Coalition:

Etymologically coalition means, a combinations of bodies or parts in to one body. It also means to grow together. It means cooperative arrangements of sharing power. It seems to be the fundamental of the political processes in most cultures and most periods of history coalition behaviour has been closely linked to the question "who gets what, when and how?". In order to achieve their goals. People very often find themselves in situations which encourage or require them to form, maintain or dissolve a coalition. Whether one seeks to understand the patterns of government in multiparty system or the attainment of power by the leader of a major faction of political party. It is likely that attention paid to coalition formation will yield truthful insights. Almost two hundred years ago James Madison based on his argument in favour of mankind the new nation as large as possible upon the larger number of different bases for forming coalitions which an extensive territory would provide. More recently, when civil rights leaders have tried to formulate common strategies, they have controlled the many problems of coalition politics. Since representation here forms the basis of such coalitions.

Basic issues of Coalition:

In understanding coalition it is important that one carves out some basic framework after carefully analysing the working of coalitions across several countries. They must then be sorted out because, in some cases 'political coalition' may only be a kind of political situations which was prevailed for a temporary period. Coalition of political parties in legislatures are only one type : there are many other coalition types whichare not to be identified exclusively with coalition government is second the kind of activities involving in training coalition and the kind of behaviour a coalition this activity and behaviour will vary with teacher of a particular concrete case such as the institution setting the history culture mad learning activities of individual involving and the use in tore and so on in the third instance which of course in related to the second observe action is that the nature of the benefits rewards satisfaction values or payoff which political party individual received in coalition also will have an effect on the behaviour of a party or the individual hence it should not be assumed that it will be the same in all situation what he rewards a loss or profit means concrete will surely vary from one case to another and more so it is a comparative study fourthly the nation of coalition which has been used as neither static nor convention coalition are seen as event in a gauge would not lead one to expect to find them may also have to be

taken in to account before arriving at general form work to facilitate easy understanding of the contents of the subject matter it I. In primarily use full to define a coalition somewhat indirectly by first specifically what is called a coalition situation actors whose preferences in the issue in question are not identical more precisely it in not the case that one out came would produce maximum satisfaction for all the actors in the situation find that there is incentives for the cooperation in the sense that by cooperation at least two acts can each activists on outcome preferable to that which would result in each were to act alone given thus a definition of coalition situation it seems easier to define a coalition in terms it cooperation between actors in a coalition situation who have communicated and agreed to coordinate the actions and by coalition behaviour mean simply action which is involve in coalition formation or coalition maintenance or action which implements a strategy which has been agreed upon by the member of a coalition.

Ground rules required to be followed to make coalitions government

Since the coalition have to be accepted as a reality in India there is a need to have a re look into its continuation and plug the loop holes where ever possible to make it more effective to prevent the instability in government size of the ministry in a coalition system needs to be cut down An effective methodology is required to make defections unattractive amendments need to be done in Indian constitution to plug the loopholes in the electoral system which are misused by the party in power Party reforms and electoral reforms require to be initiated to make coalition more effective.

At present there is a need to provide ground rules for its operation so that stability is maintained. Our parliamentary system has to work effectively with the multiparty system and also the coalition government. Therefore the parties which join together to form the government must have common minimum programme and all the members of the party should agree to abide by a major problem should be settled through consensus and agreement. Since the coalition system implies the modification of the parliamentary system. The political parties should also develop the capability of separating National issues from state issues. The coalition politics at each level has to involve all parties and all kinds of politics.In this connection the issue that has to be settled is whether there should be pre electoral alliance there may understand regarding the sharing of seats but the post electoral alliance is only a marriage of convenience and may break off soon.

Coalition Governments in Karnataka:

Following coalition existed in Karnataka which are follows: **(1980 to 1990)**

At the end of 1983 state assembly election Ramakrishna Hegde the leader of the Janatha party, become the first non- Congress chief minister of Karnataka . The Janatha party had emerged as a single largest party with 95 seals. To reach the majority the party was backed by BJP, (18 seats)the CPI, the CPICM,(3 seats each) and other independent candidates. The government in1983 headed by Ramakrishna Hegde of Janatha party was formed also with the support of Kranthi Ranga which was headed by S.Bangarappa. Therefore started coalition politics in 1983. The government however was considered as a majority government than a coalition government. Ramakrishna Hegde was the chief minister between 1983 and 1988, but the term was not continuous. His first and second term casted only one year each whole the third one gave him two years as chief minister in 1984. The Janatha party was defeated his government putting an end to a short coalition. He was succeeded by S.R Bommai who managed one year term.

H.D Devegowda of JD(s) was the chief minister of the government in 1996 but after he was made the chief minister J.H Patel completed the term and it was the first time that a non-Congress chief minister completed full term. In 1990. S.M Krishna took over as the chief minister and he dissolved the house and went for election. Four months before the completion of his tenure. But the government could not sustain itself. After that for nearly two decades, Karnataka did not have any coalition government. The people of the Karnataka , however could not differentiate between the Janata party and Kranthi Ranga as both parties bought the elections under the same symbol a farmer holding a plough.

2000 to 2020: The first coalition was formed only in 2004 by Congress and Janatha Dal(S) with N. Dharam Singh as the chief minister after the collapse of the Congress JD(S) alliance Kumaraswamy formed after keeping the party legislators in a resort to prevent them from switching to the Congress which started the resort politics. B.S Yadiyurappa was the deputy chief minister and the coalition started working on the basis of power sharing plans. This was first time that BJP had been a part of any government in the state in the south. The JD(s) and BJP made a power sharing agreement in which leaders from both parties would serve as chief minister. H.D Kumaraswamy had promised BJP that the two parties would share the CM'S post for 20 months each. However after completing his agreed 20 months

period as the C.M. Kumarswamy refused to hand over the chief ministership to BJP 'S B.S. Yadiyurappa when Kumaraswamy refuse to give up the chief minister's post the BJP decided to withdraw support before the term was complete.As a result the government collapsed leading to presidents rule followed by elections later. B.S. Yadiyurappa returned to power with majority and formed the government with the support of independents.

In May 2018 assembly elections threw up an inconclusive verdict.The BJP emerged as the single largest party with 104 seats but was short of the simple majority by nine seats in the 224 member assembly.When the Congress lost majority.It formed the coalition government with JD(s) offering the chief minister's post to JD(s) . The Congress with 78 seals and JD(s) with 37 seats,decided to form an alliance to keep the BJP out of the power at the same time the congress had its national corruption and the JD(s) was out of power for 10 years HD Kumarswamy not only become chief minister but his party men secured many politics.

The coalition politics in Karnataka is represented by the three major political parties the Indian National congress, Janatha Dal(s) and Bharathiya Janatha Party. The Janatha Dal(s) and Indian National Congress led coalition government was in power inthe state since May 2018. H D Kumarswamy of JD(s) was the Chief Minister from 23/05/2018 till 23/07/2019. The relationship between partners were under the controluntil the announcement of the general elections in March. The rift intensified when disagreement surfaced over seat sharing. This disagreement intensified after the defeat of the alliance especially of the H D Devegowda in Tumkur and K. Nikhil in Mandya both belonging to JD (s) the coordinationcommittee headed by Siddaramaiah was in effective in controlling the interference of HD Revanna in the administration of other departments, It failed to evolve consensus on issue grappling the coalition ego clashes between leaders was another factor which made coalition ineffective.There were difference between H. Vishwanath and Mr. Siddaramaiah on constitution of the coordination panel. Expansion of the cabinet and the introduction of two ministers into his ministry. It caused resistant not only among the legislator inthe alliance but also among many senior MLA's, the political crisis was created with MLAs resignation from the alliance. The Supreme Court interimruling not compelling resigned MLA'sto attend the assembly worsened the situation and this forced the chief minister to move the confidence motion which ended 14 month rule. The BJP worked hard to increase the rift and tried to expand its strength.Finally 15 rebel members submitted their resignation 12 from the congress and 3 from the JD(s) and independent which led to the collapse of the coalition government. Internal dissent and attempts destabilize the

government took a toll as H.D Kumarswamy led Congress- Janatha Dal(s) coalition failed the floor test.The confidence motion called by Kumarswamyi desperate attempt brought to the end 425 days old government which was forth coalition inthe state.

Reason for the collapse of coalition government in 2019

The coalition government formed after the general election in 2018 collapse after 14 month in Karnataka when the chief minister HD Kumaraswamy lost the trust vote in Karnataka assembly the political crisis was referred by the resignation of the markers of the ruling congress and Janatha Dal (secular).

Following are the reasons for its Collapse:

1. In May 2018 assembly elections the BJP emerged as the single largest party with 104 seats ,but it was short on simple majority by the g seats in the 224 members assembly
2. Former Chief Minister Siddaramaraiah failed to support the alliance completely as the alliance was the result of the decision made by the congress high command .therefore he was accused of harming the alliance.
3. JD(s) is primarily a South Karnataka player the primary contest in the 10 district of Karnataka including Chamarajanagar, Hassan and Tumkur was between alliance parties.
4. The congress accommodated the JD(s) to ensure that the BJP would be reduced to the minimum in the Lokasabha elections of 2019. But when the result were announced on May 23, the BJP had won at least 26 of the 28 seats in Lokasabha polls this created doubt relating to the coalition. Some of the MLA's became rebels.
5. After the good result of Karnataka in the Lokasbha polls. The local leaders mounted attack on the opportunities alliance and decided to take advantages of issue in the coalition partners.
6. B.S Yadiyurappa, a Lingayata strong man wanted to take revenge against Kumaraswamy for his betrayed in not giving CM's chair as an agreement in the earlier coalition. So he reclaimed his right full chairs of being the CM of Karnataka.
7. During the JD(s) congress coalition,Bangalore was neglected as the JD(s) has a rural base. Therefore the people of Bangalore elected the BJP in the by-elections.
8. H.D. Devegowda family which controls JDs has six of us family members in active politics.
9. Dominance of National parties.

10. Inability of regional parties to grow in strength.

IMPACT OF COALITION ON KARNATAKA POLITICS

Coalition system has had a great impact on Karnataka politics. In multifarious ways. There are as follows:

1) **INSTABILITY**: In Indian states the number of politics parties which are regional have increased in number. Since the condition of formed with many parties. The fate of such conditions government hang in the balance depending on the withdrawal of support by one or other. Thus the condition government fail to provide stable and good governance.
2) **WEAK AND INEFFECTIVE**: Since the coalition are heterogeneous they are in effect weak and unstable. To secure consensus within in parties is a different task. Many coalition have come together only for power. Each coalition has come together only for power and so each coalition partner lends to suspect the other. If the government is efficient each consistent partner lends to suspect to other. If the government is efficient each constituent partner is worried. That the other will get credit. On the other hand if it is in ineffective each partner will blame other. Therefore the coalition government creates weak and ineffective govt.
3) **SUBORDINATION OF PARTY IDEOLOGY TO POWER**: In coalition system there in the subordination of ideology to power since there in the absolute necessity that the identity, agenda and ideology of parties need to be merged with the other partner of the location. There is the need to dilute its ideology or keep some conditions issues in the back burner for the sake of maintaining the condition.
4) **LEADERSHIP OF THE CHIEF MINOSTER UNDERMINED**: In the coalition system chief minster cannot take a strong decision. He has to deal with heterogeneous group of power seekers who make no secrets of their real intention. Such a Chief Minister cannot even choose his own cabinet. He has to consider the demand of all the constitution parties their leaders and select his team. Pressure on ChiefMinister to allot portfolios to certain individuals. Lot of diplomacy is required to carry on such a system. The Chief Minister frequently depends on the contest of the constitution parties to carry on the business of the government which make his position weak and pitiable.

5) **POWER SHIFTS FROM CABINET TO THE CO-ORDINATION COMMITTEE:**
In coalition system power shifts from the cabinet to an extra constitutional authority like the co-ordination or steering committee. Despite all such developments, a coalition government does not last long. A coalition in a weak and unstable government. Moreover there is bound to be secret enmity between one another which may lead to antagonism of the worst kind. Due to such differences the chief minister might have to give important positions to insignificant members.

Conclusion:

Despite the negative impact of the coalition government provide the only feasible and reliable alternative and provide a safeguard against the collapse of the democratic set up. It makes democracy more participative as every small faction get represented and heard. Consensus, understanding and tolerance become the watch words in coalition system especially in the legislative business. As pointed out by N.C Sahni"one of the major effects of coalition politics has been that it has promoted compromise in politics and checked regionalism. It also relived the government of the restraints and responsibilities which are imposed on the ruling party by the opposition benches under the bi-party system.

In Karnataka coalition system of government had not been successful as it of recent origin. In comparative politics literature we tend to distinguish between ideological coalitions and also of convenience which tend not to have coherent policy agendas and are divided from walk in. Moreover in Karnataka,the coalitions are post-poll alliances just to retain power or to keep the other party away from the power. It attempts to have been made to run the government with different models of coalition but they have not been effective in completing the full term of 5 years.

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IMPORTANCE OF WORK - LIFE BALANCE

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Introduction

There was a time when the boundaries between work and home were fairly clear. Today, however, work is likely to invade our personal life – and maintaining work-life balance is no simple task. Still, work-life balance isn't out of reach. In today's dynamic world, life without technology is meaningless. Technology, which basically refers to bringing together tools that ease creation. It is also used to exchange information. It has a major goal of making tasks easier to execute as well as solving many mankind's problems. As technology continues to advance and direct even more easiness in our lives, there is a need to stress how advantageous it has been to our lives. Technology has its effects on business operations. Technological infrastructure affects the culture, efficiency and relationships of a business.

Research Problem

The advancements to access information, communicate with one another, and complete tasks have allowed for flexibility in the workplace. It has also created a lack of distinction between work and family time. It is important to draw a distinction between work and life. People who are constantly tied to their jobs deal with the symptoms of stress and burnout. If a person doesn't have a time to relax and recharge, their ability to do their job decreases and their performance level suffers. Thus, from a management point of view, it is important to encourage a person to take time off from work instead of putting in long hours. Creating a schedule that allows a person to do activities they enjoy will help them to be better employees, friends, and family members. Without creating a work-life balance, a person isn't able to take time to enjoy the life they have worked so hard to create. They aren't available for friends and family members, and often take their stress out on the ones they love. They can also suffer from illness and physical disorders

Objectives of the Study

Maintaining a work-life balance is about separating your personal and professional lives without allowing one to encroach upon the other. Both are important, neither should be neglected. A 'work life' balance refers to an employee's ability to maintain a healthy balance between their work roles, their personal responsibilities, and family life. Companies are increasingly recognizing the importance of helping their employees to achieve this balance as more staff is experiencing conflict between their work and personal roles. In today's age, many workers are seeing their personal responsibilities increase, from childcare and elderly care, to volunteer work, and family commitments. This comes at a time when their work responsibilities are also increasing, resulting in a conflict between personal and work commitments and an increase in stress.

Summary of Findings

There is difficulty in achieving a work life balance because of the changing landscape in how and where employees are expected to work. As more and more companies embrace the technological age and move into globalization, work is no longer restricted to the workplace. Employees can work from almost any location with the use of laptops, tablets, and smart phones and telecommuting is on the increase. Employees can access work emails and assignments meaning that they can also be accessible to employers and clients. Although there are multiple benefits to this flexible working pattern, it can run the risk of blurring the lines between work and personal life.

The result of a poor balance between work and personal life not only affects employees, but it also affects the companies that they work for. Employee stress can increase to the level of burnout, resulting in lower productivity at work, a higher potential for stress related health problems and absenteeism, with the associated costs related to these being passed on to the company. In addition to this, employees may also experience poor personal and co-worker relationships and reduced job satisfaction.

There are several ways in which companies can help to encourage a work life balance for their employees, both in the policies that they implement and in ensuring that managers actively encourage employees to take advantage of these policies. Offering employees flexible working options helps employees design their work pattern to fit their personal commitments, ultimately reducing conflict between work and personal responsibilities. Flexible working options include allowing employees to work from home, adjust their working hours to meet personal commitments, use remote working, compressed work weeks, and job sharing. Managers should encourage staff to use annual leave

and help employees to set boundaries by encouraging staff not respond to work related emails and calls during non-working hours. Some organizations are also implementing wellness programs, which include offering stress reduction and time management workshops, while others are creating wellness centers on the work site, helping to connect employees with physicians, mental health counselors, or on-site gyms.

An employee's satisfaction in their personal life and their ability to meet personal commitments greatly affects their success as a worker, which greatly benefits any company. Helping employees to achieve a good work life balance increases work satisfaction, increases their loyalty to their employer, and helps employers to achieve career longevity. A company which recognizes these benefits and implements policies to promote a work life balance is one which will not only see an increase in the productivity of their workforce but which also sees increased retention of staff and reduction in costs associated with high turnover.

Suggestions

It's unfortunate that not all employers place enough importance on mental health in the workplace. If you do notice that you have been acting out of character lately then it may be time to start assessing your work-life balance. Studies reveal that those who maintain a steady work-life balance are much more productive than those who do not. A positive way of life automatically leads to amazing results. Healthy social atmosphere give an individual to think in a healthy manner. They will also be motivated to utilize their skills and knowledge in an effective and most appropriate way, which helps in the extraction of favorable outcomes for the organization itself. In order to have a healthy mind of employees, organizations are involved in providing different facilities to their employees such as the holidays, vacations, leaves, tours and other ways through which employees get relaxed and have a healthy time with their families .

Work Family Conflict takes place when the demands of work come in conflict with the time attention given to family. Workplace characteristics like the number of hours worked per week, the amount and frequency of overtime required, an inflexible work schedule, unsupportive supervisor, and an inhospitable organizational culture create conflict between the work and family role. Family-work conflict is also a type of inter-role conflict in which family and work responsibilities are not compatible. Both Work Family Conflict and Family Work Conflict basically result from an individual trying to meet an overabundance of conflicting demands from the different domains. Personal nature and work –life balance doesn't only depend on organization's policies for managing the work-life balance of employees, but it also depends over the nature of an employee that how much focused and determined they are with

their own work. When an employee utilizes the facilities and favors provided by the organization negatively, the purpose would not be served of having the incentives to have a healthy social life.

Conclusion

A good work-life balance is very important in our life. Working is necessary and hard working is surely not bad but we need to find the right balance to keep our body healthy. Some rest is always necessary and that is something that the so called "workaholics" many times forget. Setting healthy boundaries is essential for a healthy work life balance. We must stay attuned to our patterns of working. In today's world, managing work life balance can be tough if you don't know what you're doing. Work is such a large part of your life that it can seem easier to forgo the other areas such as recreation, spirituality and family, to name just a few. But it's important that you find enough time to enjoy all different aspects of your life, otherwise you can burn out.

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International Journal of Applied Research

ISSN Print: 2394-7500
ISSN Online: 2394-5869
Impact Factor: 5.2
IJAR 2019; 5(11): 180-183
www.allresearchjournal.com
Received: 28-09-2019
Accepted: 30-10-2019

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Differentiated teaching, learning and comprehension activities in a mixed ability class: A challenge

Rohini HB and Sharan SJ

Abstract
English is recognised to be, in Indian minds, a socially well respected and a standardised way of living. In present times, English is the most preferred language. Though Language learning is a natural process for all, the students of other languages, are required to put effort in learning a foreign language. The students of rural and semi-urban areas in India face such problems for English is not their mother-tongue. Nowadays most of the institutions are filled with heterogeneous classes where students of different levels of attention, interest, learning styles, speed, maturity, types of intelligence are formed to be in groups which pose direct challenges to teachers. Teachers' main objective is to connect with all the students by interacting and monitoring them in various other ways to achieve effective teaching. Students of the rural areas assume English as a subject study and do not realize the need and importance of English as a language of communication used around the world. A systematic approach should be followed in order to solve the hurdles. Moreover the teachers should aim teaching not just for knowledge but skill. This paper deals with the problem of teaching English in mixed ability classes to achieve better results in the teaching and learning of English.

Keywords: English language, language learning, mother-tongue, students, teachers & hurdles

Introduction

In a multilingual and multicultural country like India, classes of mixed ability groups are a feature of every small town and village. Mixed ability classrooms that accommodate students having different learning styles, interests, prior knowledge, attitudes, strengths, personalities and skills, are commonly found. There is a pedagogic challenge associated with providing equal opportunities to different groups of students, who may be high-ability students consisting of 25% of the class, low ability students consistmg of 25% or the average-ability students constituting the rest 50% percent of the class. At the same time, achieving quality standards has led to performance based segregation known as ability grouping. The implications of ability grouping include negative effect on the self-concept of low-ability students.

Grouping of students of different ability levels is one of the most frequently suggested ways. There are different ways of grouping. As Peter Hubbard and others say, "the teacher's first task is to organise groups that are either representative of different ability levels, or mixed so that each is a small cross-section of the class as a whole".

However, these experts, like many others, admit that doing justice to a mixed ability class involves cost, both in terms of money and time. They say: "Teacher-produced material is very demanding on time and energy and it will not be possible to cater in this way for each lesson. It is necessary to have a wide choice of books and visuals, especially graded readers and it is very necessary for the teacher in this situation to be given adequate time for preparation and good facilities for duplication".

Hubbard and others might be talking about a classroom of the west, where the strength of a typical class could be much smaller than that of an Indian classroom.

Education has been the primary factor in the more formal transmission of English around the world. In our country we come across classrooms overflowing with students, especially in schools and colleges which have a name. There the students think as we all know that English plays the major role in the field of communication globally. An understanding of and a command over English language is the most important determinant of access to higher education, employment possibilities and social opportunities.

Acquiring adequate knowledge in English for learners is inevitable in the present scenario. Language learning is a natural process for the natives. Learners who are of rural backgrounds face a number of problems. Here in India, English is taught as the second language in educational institutions. So, students find themselves unable to make proper sentence, and do not know proper pronunciation, spellings and grammatical rules. In most of the situations, majority of students interact in mother tongue inside the classrooms. In this case Good teachers of English might try group work, pair work, etc., with the limited resources and time available to them. However, a large number of college teachers do not do so because of their apprehension that they won't be able to complete the syllabus on time.

Grammar – Translation method is one of the important methods of teaching English in most of the cases. Over the time we have witnessed the growing importance of English language in all walks of life. Because of rapidly increasing web of educational facilities, rural areas too, have been enjoying the facilities of the institutions. But it has neither helped in raising the level of learners, nor made them learn English as a language. Now in the rural and semi-urban areas, study of English language begins at an early age. In Mixed ability level teaching, the teacher is required to make proper plans to teach every learner, who has different ideas, potentialities, skills, interests and learning needs. Though most institutions are usually multi-ability level, teachers find teaching such classes a very difficult and challenging task as it involves planning lessons which include various other of tasks corresponding to a variety of learning styles and abilities. The classroom is the only environment for the learners, where they should use this chance as much as possible. However, some of the students find it difficult to speak in the target language for many reasons, ranging from interest to confidence, from age to knowledge. Other students, however, would like to express everything they think or feel by using the new language. As a result, some students may take many turns, while others do not speak for the entire lesson. Teachers need to identify the problems of mixed ability classes and try to come out with the solutions of eliminating them.

Teachers' Problems in Teaching English as Second Language in a Mixed Ability Class

- A teacher might have difficulties in finding appropriate teaching materials and resources that suit the needs, individual language level and interest of all students.
- The tasks included in the lesson should correspond to the language level, and abilities of learners.
- Slow learners can't participate because the tasks are too difficult for them.
- Every learner has individual interests and needs which form their attitude to the subject matter.
- The teacher does not know his/her students level of interests and needs.
- Some of the learners have difficulties speaking the target language for various reasons, while other learners are willing to express their thoughts and ideas in the target language. As a result some students participate actively in the lesson and others do not.
- Extrovert learners tend to occupy the teachers attention while shy learners are suppressed.
- Students work with different pace – those who are more advanced cope quickly with the tasks or get impatient when the teacher has to repeat an explanation, while students who have a lower level of knowledge and skills complete tasks more slowly.
- Active learners finish the tasks given quickly whereas the weaker one cannot complete in time and may lose their confidences. Consequently, mixed abilities may result in classroom management problems.

Remedies to Overcome the Problems of Teaching in a Mixed Ability Class

- The teacher should adapt some of the materials to make the language simple.
- Design simple teaching materials.
- Use visual teaching materials to grab the students' attention and to motivate them to get interested in the subject.
- Reduce the number of choices or should not give the more difficult choices in multiple level exercises.
- Include open-ended tasks which help learners work at their own pace.
- Mix and form groups of weaker and stronger students and make them work with more complicated tasks, whereas the weaker students would understand how stronger students deal with a task.
- Try to know the learners, their language level and interests. Try to find every single student's strength by offering a variety of activities.
- Try to find the strengths and preferred learning style of everyone. Involve and encourage the shy learners. Extra work should be given of something that the students would enjoy doing on their favourite topic. They would be more enthusiastic to work on such projects.

The learners from rural areas do not realize the importance of English as a language of communication and they lack the confidence to speak in English. The main reason is that they have been taught the language through grammar – translation Proceedings of the

This method makes them dependent on their mother-tongue. So, they need more practice for testing their proficiencies.

Sample Analysis

A set of ten students of first year studying in Degree College, was randomly selected for testing. A questionnaire containing ten questions of English grammar with a translation passage was given to them to answer. The errors committed by them were analysed and classified to find out their sources.

Course: B.C.A

Strength: 74

Sample group size: 20

No. of fast learners: 10

No. of slow learners: 10

Sample Question practice:

Questions on Punctuation

Punctuate the following sentences and use capital letters wherever necessary.

a. raju said ravi i like sweets

b. john asks martis where is George

Questions on Spelling
Underline the words with correct spellings:
a. tough, tuf, taugh
b. color, colur,couler
c. innocent, inocent, inosent

Questions on VOCABULARY
a) A list of words is given. The students are asked to group them under village and city.
The words are: parks, cars, trees, shops, animals, mauls, waterfalls, flowers, reapers road, and complexes

b) Write plurals of the following:
Woman, child, information

c) Write synonyms for the following:
Gratitude, humiliation, intelligent

d) Write antonyms for the following:
Respect, strong, comfortable

e) Write one word substitute:
- Small animal like a mouse.
- Stones used for paving.

Questions on Structures
a) Supply the appropriate form of word:
i. Geetha ---------- a song in the party yesterday. (Sing, sang, sung)
ii. It ---------- since morning. (Present perfect continuous tense)

b) Fill in the blanks with appropriate words:
i. The chief guest ---------- the prizes to the winners.
ii. My friends ----------
iii. She is ---------- today. (Is intelligent, gave up, are playing, gave away)

c) Make questions from the answers so as to get underlined word as answer
i. children are playing cricket.
ii. Tippu Sultan fought courageously with his enemies

d) Make negative sentences without changing the meaning
i. The knife is sharp.
ii. Samuel is very rich.

e) Change into indirect form:
i. Tom said,"I was swimming when my friend called me"
ii. The visitor said to the attender, "please take me to the office"

f) Change the following sentences as per direction given in the bracket:
i. In spite of his illness, he attended the class (to compound)
ii. He sold his father's house. (to complex)

h) Use appropriate linkers:
i. He is very rich_____unhappy. (and/but)
ii. He cannot walk_____he was weak. (Therefore/because)

Such practices will help them enjoying their play with language. They can understand the importance of grammar. They can enjoy these exercises and they can also strengthen their skills, once their interest is aroused, they show tremendous improvement. Apart from such practices, the following strategies can also be adopted in the English language learning class.

Organise your classroom with LSRW speaking, listening reading and writing experiences as authentic as possible.
Some experts wholeheartedly believe that, when it comes to language learning, the words "classroom" and "authentic" are incompatible. This is probably true in many situations. However, I do think that it's possible to strategically incorporate authentic speaking and listening time into your lessons AND meet your learning objectives at the same time. Build opportunities for your students to talk about things that interest them. This will show them that you're interested in what they have to say and what they like.

Talk less and make your students speak more.
As a teacher of English language learners, you probably know all the research regarding decreasing TTT and ensuring that student talking time is maximized. The research behind this is substantial to say the least, and I dare not attempt to touch on all of it here. However, I do want to point out that the more opportunities you give your students to speak in class, the more likely it is that they'll be using the language as often as possible outside of the classroom.

Form English speaking groups on the basis of their English knowledge.
We know that, in order to learn a language, students have to practice speaking to others in authentic situations. Setting up peer groups is one fun way to facilitate and encourage this. Just as content area teachers assign group projects pertaining to their content area, ESL teachers can assign group projects with the goal of increasing the amount of time students spend in meaningful communication outside of class.

Create in-class strategies that effectively translate to outside practice.
Sure, our primary responsibility is classroom instruction. Most of us have no interest in following our students everywhere they go. It's useful to focus on in-class strategies and ideas that simultaneously benefit students outside the classroom.

Use technology to motivate student interest.
Research clearly indicates that motivation is a huge factor in a student's ability to learn a second language. I mean, that's just common sense, right? Some students may come to your class intrinsically motivated and require very little from you to build interest. Others will require a large degree of extrinsic motivation, and you may need to be creative to find out what excites them.

Conclusion
It's not just about teaching a foreign language, it's about giving your students a well-rounded and complete in-class learning experience. Ultimately, by shaking things up and incorporating different teaching techniques in your classrooms, you students will walk in never knowing what to expect from that day's lessons. They will stay fresh, enthusiastic and motivated when they know that each

class will have new activities and fun learning adventures in store.

This will play out a bit differently in each unique class. No classroom is the same, and every student is unique. The animated classroom you enjoy for your morning class may be drastically different from — if not directly at odds with — your evening class. Because an ESL classroom is always dynamic and evolving, it's important for you to develop your ESL teaching strategies around your students.

Students with English as a second language (ESL) constitute a significant percentage of the population of our nation's schools. This population continues to increase more rapidly than that of native English speaking students. The language minority population has a high dropout rate. These students are also among the lowest ranking in academic achievement and expectations. They represent an at-risk population faced with a wide range of challenges.

This presents a unique challenge for teachers as we strive to help these students achieve in learning the English language and the academic material specified in our content area learning standards. Every teacher who teaches subject matter in English to ESL students is not only a teacher of the content area but is a teacher of English as well. As educators, we must continually reflect on our teaching and update our practice to address the needs of this population, placing a strong emphasis on the human side of teaching. We must continually focus on these students and find effective ways to arrange their learning to help them achieve.

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International Journal of Kannada Research
www.kannadajournal.com

ISSN: 2454-5813
IJKR 2019; 5(4): 96-103
© 2019 IJKR
www.kannadajournal.com
Received: 25-08-2019
Accepted: 27-09-2019

ಡಾ ಶುಭಕರಾಚಾರಿ
ಸಹಾಯಕ ಪ್ರಾಧ್ಯಪಕರು
ಭಂಡಾರ್‌ಕಾರ್ಸ್ ಆರ್ಟ್ಸ್ ಮತ್ತು
ಸಾಯನ್ಸ್ ಕಾಲೇಜು
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ಕಮ್ಮಾರರ ಬದುಕಿನ ಸ್ಥಿತ್ಯಂತರಗಳು (ಮಂಗಳೂರು, ಉಡುಪಿ ಜಿಲ್ಲೆ, ಕೊಳ್ಳೆಗಾಲ ತಾಲೂಕನ್ನು ಅನುಲಕ್ಷಿಸಿ)

ಡಾ ಶುಭಕರಾಚಾರಿ

ಕ್ರಿಪೂ. ಯುಗದಿಂದ ಇಡೀ ವಿಶ್ವ ಉತ್ಪಾದನಾ ವ್ಯವಸ್ಥೆಗೆ ತಮ್ಮದೆ ಆದಂತಹ ಕೊಡುಗೆಗಳನ್ನು ನೀಡುತ್ತಲೇ ಬಂದಿದೆ. ಮೂಲ ಮಾನವ ಕೃಷಿಯ ಮೂಲಕ ಆಹಾರ ಉತ್ಪಾದನೆ ಪ್ರಾರಂಭಿಸಿದ ಮೇಲೆ ಅವನ ಉತ್ಪಾದನೆ ಬೇಕಾಗುವ ಅನೇಕ ಕೃಷಿ ಉಪಕರಣಗಳನ್ನು ಸೃಷ್ಟಿಸುವ ಮೂಲಕ ತಮ್ಮ ಅಸ್ತಿತ್ವವನ್ನು ಕಮ್ಮಾರರು ಗುರುತಿಸಿಕೊಳ್ಳ ತೊಡಗಿದರು. ಪ್ರಕೃತಿಯ ಕೊಡುಗೆಯಾದ ಬೆಂಕಿಯನ್ನು ಬಳಸಿಕೊಂಡು ಸಾವಿರಾರು ವರ್ಷಗಳವರೆಗೆ ಅನೇಕ ನಿಕ್ಷೇಪಗಳನ್ನು ಪತ್ತೆ ಹಚ್ಚಿ ಅದನ್ನು ಸಂಸ್ಕರಿಸುವಲ್ಲಿ ಯಶಸ್ವಿಯಾದರು. ಕಮ್ಮಾರರು ಕಬ್ಬಿಣದ ಕೋಧನೆ ಮತ್ತು ಸಂಸ್ಕರಣೆಯನ್ನು ಕಂಡುಕೊಂಡ ಮೇಲೆ ಉತ್ಪಾದನಾ ವ್ಯವಸ್ಥೆ ಮತ್ತು ಕಮ್ಮಾರರ ಘನತೆ ಗೌರವಗಳು ಅಭಿವೃದ್ಧಿ ಹೊಂದ ತೊಡಗಿದವು.
ಕರ್ನಾಟಕ ರಾಜ್ಯ ಪರಿಶಿಷ್ಟ ಜಂಗಡಗಳ ಕಲ್ಯಾಣ ನಿರ್ದೇಶನಾಲಯಗಳ ಪ್ರಕಾರ ಅವಿಭಜಿತ ದಕ್ಷಿಣಕನ್ನಡ ಹಾಗೂ ಕೊಳ್ಳೆಗಾಲ ತಾಲೂಕುಗಳಲ್ಲಿ ಕಮ್ಮಾರ, ಕೊರಗ, ಮಲೆಕುಡಿಯ, ಮರಾಠಿ ಬುಡಕಟ್ಟುಗಳಿವೆ. ಈ ಬುಡಕಟ್ಟುಗಳಲ್ಲಿ ಕಮ್ಮಾರ ಬುಡಕಟ್ಟು ಪ್ರಮುಖವಾದದ್ದು.

ಅಧ್ಯಯನದ ಉದ್ದೇಶ

1. ಕಮ್ಮಾರ ಸಮುದಾಯದ ಸಾಮಾಜಿಕ ಅಂಶಗಳಾಗಿರುವ ಕುಟುಂಬ, ವಿವಾಹ, ಬಂಧುತ್ವ ಪದ್ಧತಿಗಳನ್ನು ಮತ್ತು ಅವರ ಆರ್ಥಿಕ ಹಾಗೂ ಶೈಕ್ಷಣಿಕ ಸ್ಥಿತಿಗತಿಗಳನ್ನು ವಿಶ್ಲೇಷಿಸುವುದು.
2. ಕಮ್ಮಾರರ ವಿವಾಹ ಮತ್ತು ಬಂಧುತ್ವಗಳಲ್ಲಿ ಆಗಿರುವ ಬದಲಾವಣೆಗಳನ್ನು ಗುರುತಿಸಿ ಕಾರಣಗಳನ್ನು ವಿಶ್ಲೇಷಿಸುವುದು.

ಅಧ್ಯಯನದ ವ್ಯಾಪ್ತಿ

ಮಂಗಳೂರು ಮತ್ತು ಉಡುಪಿ ಜಿಲ್ಲೆಯ ಹಾಗೂ ಕೊಳ್ಳೆಗಾಲ ತಾಲೂಕಿನ ವಿವಿಧ ಗ್ರಾಮಗಳಲ್ಲಿ ವಾಸ್ತವ್ಯವಿರುವ ಕಮ್ಮಾರ ಕುಟುಂಬಗಳನ್ನು ಅಧ್ಯಯನಕ್ಕೆ ಒಳಪಡಿಸಲಾಗಿದೆ.

ಅಧ್ಯಯನದ ವಿಧಾನ

ಪ್ರಸ್ತುತ ಅಧ್ಯಯನವು ಕ್ಷೇತ್ರ ಕಾರ್ಯಾಧಾರಿತ ಅಧ್ಯಯನವಾಗಿದೆ. ಪ್ರಾಥಮಿಕ ಮಾಹಿತಿಗಳ ಮೂಲಗಳಾದ ಪ್ರಶ್ನಾವಳಿ, ಸಂದರ್ಶನ ಮತ್ತು ಅವರುಗಳು ವಾಸವಿರುವ ಗ್ರಾಮಗಳಿಗೆ ಭೇಟಿ ನೀಡಿ ಕೂಲಂಕುಶವಾಗಿ ಅವಲೋಕಿಸಿ ಮಾಹಿತಿಗಳನ್ನು ಸಂಗ್ರಹಿಸಲಾಗಿದೆ. ಅನುಷಂಗಿಕ ಮಾಹಿತಿಯ ಮೂಲಗಳಲ್ಲಿರುವ ಮಾಹಿತಿಗಳನ್ನು ಪಡೆದು ಈ ಪ್ರಬಂಧವನ್ನು ಸಿದ್ಧಪಡಿಸಲಾಗಿದೆ.

ಮುಖ್ಯ ಪದಗಳು

ಕಮ್ಮಾರ, ಬದಲಾವಣೆ, ಸ್ಥಿತ್ಯಂತರಗಳು, ವಿವಾಹ, ಬಂಧುತ್ವ, ಕುಟುಂಬ, ರಕ್ತಸಂಬಂಧ.

ಅಧ್ಯಯನದ ಉದ್ದೇಶ, ವ್ಯಾಪ್ತಿ ಮತ್ತು ಮಹತ್ವ

ಪ್ರಸ್ತಾವನೆ

ಕ್ರಿಪೂ. ಯುಗದಿಂದ ವಿಶ್ವಕ್ಕೆ ಹಾಗೂ ಮಾನವನ ಕುಲಕ್ಕೆ ಉತ್ಪಾದನಾ ವ್ಯವಸ್ಥೆಗೆ ಹಾಗೂ ನಾಗರಿಕತೆಗೆ ತಮ್ಮದೆ ಆದಂತಹ ಕೊಡುಗೆಗಳನ್ನು ಕಮ್ಮಾರ ಸಮುದಾಯವು ನೀಡುತ್ತಲೆ ಬಂದಿದೆ.

ಮೂಲ ಮಾನವ ಕೃಷಿಯ ಮೂಲಕ ಆಹಾರ ಉತ್ಪಾದನೆ ಪ್ರಾರಂಭಿಸಿದ ಮೇಲೆ ಅವನ ಉತ್ಪಾದನೆಗೆ ಬೇಕಾಗುವಂತಹ ಅನೇಕ ಕೃಷಿ ಉಪಕರಣಗಳನ್ನು ಸೃಷ್ಟಿಸುವ ಮೂಲಕ ತಮ್ಮ ಅಸ್ತಿತ್ವವನ್ನು ಕಮ್ಮಾರರು ಗುರುತಿಸಿಕೊಳ್ಳ ತೊಡಗಿದರು. ಪ್ರಕೃತಿಯ ಕೊಡುಗೆಯಾದಂತಹ ಬೆಂಕಿಯನ್ನು ಬಳಸಿಕೊಂಡು ಸಾವಿರಾರು ವರುಷಗಳವರೆಗೆ ಅನೇಕ ನಿಕ್ಷೇಪಗಳನ್ನು ಪತ್ತೆ ಹಚ್ಚಿ ಅದನ್ನು ಸಂಸ್ಕರಿಸುವಲ್ಲಿ ವಿಶಿಷ್ಟರಾದರು. ಈ ಸಮುದಾಯವು ಕಬ್ಬಿಣದ ಶೋಧನೆ ಮತ್ತು ಸಂಸ್ಕರಣೆಯನ್ನು ಕಂಡುಕೊಂಡ ಮೇಲೆ ಉತ್ಪಾದನಾ ವ್ಯವಸ್ಥೆ ಮತ್ತು ಕಮ್ಮಾರರ ಘನತೆ ಗೌರವಗಳು ಅಭಿವೃದ್ಧಿ ಹೊಂದ ತೊಡಗಿದವು.

ಈ ವೃತ್ತಿಯನ್ನು ಅನುಸರಿಸುತ್ತಿದ್ದ ಸಮುದಾಯವು ವೇದ ಕಾಲಕ್ಕಿಂತ ಪೂರ್ವದಲ್ಲಿಯೇ ಇದ್ದಿತು. ಇವರು ವೇದ ಕಾಲಕ್ಕಿಂತಲೂ ಹೊದಲೆ ಮಾನವನಿಗೆ ಬೇಟೆಯಾಡಲು, ಆತ್ಮರಕ್ಷಣೆ ಮಾಡಿಕೊಳ್ಳಲು ಬೇಕಾದ ಅನೇಕ ಆಯುಧಗಳನ್ನು ಸಿದ್ಧಪಡಿಸಿ ಪೂರೈಸುತ್ತಿದ್ದರು. ಬೇಟೆ ಸಂಸ್ಕೃತಿಯ ಎರಡನೇ ಹಂತದಲ್ಲಿ ಮಷ್ಟ ಪ್ರಾಣಿಗಳಿಂದ ರಕ್ಷಿಸಿಕೊಳ್ಳಲು ಆಯುಧಗಳನ್ನು ಸಿದ್ಧಪಡಿಸುತ್ತಿದ್ದರು. ಮೂಲ ಮಾನವನು ಬೇಟೆಯಿಂದ ಕೃಷಿಯನ್ನು ಕಂಡುಕೊಂಡ ಮೇಲೆ ಕೃಷಿಗೆ ಬೇಕಾದಂತಹ ಅನೇಕ ಉಪಯುಕ್ತವಾದ ವಸ್ತುಗಳನ್ನು ತಯಾರಿಸುವಲ್ಲಿ ಕಮ್ಮಾರರು ನಿರತರಾದರು ಎಂದು ತಿಳಿಯುತ್ತದೆ. ದಕ್ಷಿಣ ಭಾರತದಲ್ಲಿ ನೆಲೆಸಿರುವ ಕಮ್ಮಾರರು ದ್ರಾವಿಡ ಸಂಸ್ಕೃತಿಯಿಲ್ಲಿ ಗುರುತಿಸಿಕೊಂಡರು. ಬೆಂಕಿಯ ಮೂಲಕ ಕಬ್ಬಿಣ ಕರಗಿಸಿಕೊಂಡು ಅದರಿಂದ ಅನೇಕ ವಸ್ತುಗಳನ್ನು ತಯಾರಿಸಿಕೊಳ್ಳಲು ಸಾಧ್ಯ ಎಂಬುದನ್ನು ಆರಿತ ಮಾನವ ಆ ಬೆಂಕಿಯನ್ನು "ಕಾಳಿ" ಎಂದೂ ಆರಾಧಿಸುತ್ತಿರುವುದನ್ನು ಕಾಣಬಹುದೆ. ತಮ್ಮ ಕುಲುಮೆಯನ್ನು ಕೂಡಾ ಕಾಳಿ ಎಂದು ಆರಾಧಿಸುವುದು ಕಂಡು ಬರುತ್ತದೆ.

ಕೃಷಿ ಉತ್ಪಾದನೆ ಹೆಚ್ಚಾಗುತ್ತಾ ಕಮ್ಮಾರರ ವೃತ್ತಿಗಳು ಹೆಚ್ಚಿನ ಪ್ರಮಾಣದಲ್ಲಿ ಬೆಳೆಯ ತೊಡಗಿದವು. ರಾಜ ಮಹಾರಾಜರಿಗೆ ಈ ಕಮ್ಮಾರರು ಸಿದ್ಧಪಡಿಸಿ ಕೊಡುತ್ತಿದ್ದರು. ಇದರಿಂದಾಗಿ ಕಮ್ಮಾರಿಕೆ ವೃತ್ತಿ ಒಂದು ಕಾಲಕ್ಕೆ ಅತ್ಯಂತ ಶ್ರೇಷ್ಠವಾದ ವೃತ್ತಿಯಾಗಿ ಹೊರ ಹೊಮ್ಮಿತ್ತು. ಈ ಎಲ್ಲಾ ಕಾರಣಗಳಿಂದಾಗಿ ಕಮ್ಮಾರರು ನಾಡಿನ ಜನರ ಅವಶ್ಯಕತೆಗಳನ್ನು ಪೂರೈಸುವಲ್ಲಿ ಪ್ರಮುಖ ಪಾತ್ರವಹಿಸಿದ್ದರು. ಶಿಲ್ಪಗಳಿಗೆ ಶಿಲೆಗಳನ್ನು ಕೆತ್ತಲು ಕಬ್ಬಿಣದ ಚಕ್ಕಿ, ಚಕ್ಕ ಚಕ್ಕಿ ಆಯುಧಗಳನ್ನು ಮಾಡಿಕೊಡುತ್ತಿದ್ದರು. ಈ ಕಮ್ಮಾರರು ಎಲೆ ಮರೆಯ ಕಾಯಿಯಂತಿದ್ದರೂ ಇವರು ಈ ನಾಡಿಗೆ ನೀಡಿದ ಕೊಡುಗೆ ಅಪಾರವಾದಂತಹದ್ದು.

ಇಂದು ಜಾಗತೀಕರಣ, ನಗರೀಕರಣ, ವೈಜ್ಞಾನಿಕರಣಗಳ ಭರಾಟೆಯ ನಡುವೆ ಇಂದು ತಮ್ಮ ಮೂಲ ವೃತ್ತಿಗಳ ಮೂಲಕವೇ ಈ ಸಮುದಾಯ ಬದುಕುತ್ತಿದೆ. ವೈಜ್ಞಾನಿಕರಣದಿಂದಾಗಿ ಇವರ ವೃತ್ತಿಯು ನಿರ್ಲಕ್ಷಕ್ಕೊಳಪಟ್ಟಿದೆ. ಈಗ ಕೃಷಿಗೆ ಬೇಕಾಗಿರುವ ಉಪಕರಣಗಳನ್ನು ಮಾತ್ರ ಕಮ್ಮಾರರು ತಯಾರಿಸುತ್ತಾರೆ. ಆದರೆ ಮಾರುಕಟ್ಟೆಯಲ್ಲಿ ಈ ಎಲ್ಲಾ ವಸ್ತುಗಳು ಕಡಿಮೆ ಬೆಲೆಗೆ ದೊರೆಯುವುದರಿಂದ ಕೃಷಿಕರು ಕಮ್ಮಾರರನ್ನು ಬಿಟ್ಟು ನೇರವಾಗಿ ನಗರ ಪ್ರದೇಶಗಳಿಂದ ಖರೀದಿಸುತ್ತಿದ್ದಾರೆ. ವೈಜ್ಞಾನಿಕರಣದ ಮುಂದೆ ಕಮ್ಮಾರರ ಪಾರಂಪರಿಕ ವೃತ್ತಿಗಳು ನಿಲ್ಲಲಾರದೇ ಮಾಯವಾಗುತ್ತಿವೆ.

ಕರ್ನಾಟಕದಲ್ಲಿ ವಾಸಿಸುತ್ತಿರುವ ಎಲ್ಲಾ ಕಮ್ಮಾರರ ಬದುಕು ಅತಂತ್ರ ಸ್ಥಿತಿಯಲ್ಲಿದೆ ಎಂದು ಹೇಳಬಹುದು. ಕರ್ನಾಟಕ ಸರ್ಕಾರ ಮಂಗಳೂರು, ಉಡುಪಿ ಹಾಗೂ ಚಾಮರಾಜನಗರ ಜಿಲ್ಲೆಯ ಕೊಳ್ಳೆಗಾಲ ತಾಲೂಕಿನಲ್ಲಿ ವಾಸಿಸುತ್ತಿರುವ ಕಮ್ಮಾರರನ್ನು ಮಾತ್ರ ಪರಿಶಿಷ್ಟ ಪಂಗಡಕ್ಕೆ ಸೇರಿಸಿದೆ. ಆದರೆ ಈ ಪ್ರದೇಶದಲ್ಲಿರುವ ಕಮ್ಮಾರರಿಗೆ ಪರಿಶಿಷ್ಟ ಪಂಗಡದ ಸೌಲಭ್ಯಗಳು ಇರುವುದು ಗೊತ್ತಿಲ್ಲ ಹಾಗೂ ಅದರ ಸದುಪಯೋಗವನ್ನು ಈ ಸಮುದಾಯ ಪಡೆದಿಲ್ಲ ಎಂಬುದು ಕ್ಷೇತ್ರಕಾರ್ಯಕ್ಕೆ ಹೋದಂತಹ ಸಂದರ್ಭದಲ್ಲಿ ಗಮನಿಸಲಾಗಿದೆ.

ಈ ಕಮ್ಮಾರಿಕೆ ವೃತ್ತಿಯನ್ನು ಮಾಡುವವರೆಲ್ಲರೂ ವಿಶ್ವಕರ್ಮರೇ ಆಗಿದ್ದಾರೆ. ಕಮ್ಮಾರಿಕೆ ವೃತ್ತಿಯು ವಿಶ್ವಕರ್ಮ ಜನಾಂಗದ ಇತರೆ ವೃತ್ತಿಯ ಜನರು ಅವರನ್ನು ಕೀಳಾಗಿ ಕಾಣುತ್ತಿದ್ದರು ಎಂಬ ಮಾಹಿತಿಯನ್ನೂ, ಕ್ಷೇತ್ರಕಾರ್ಯದ ಸಂದರ್ಭದಲ್ಲಿ ವ್ಯಕ್ತಪಡಿಸಿದರು. ಈ ಮಂಗಳೂರು ಮತ್ತು ಉಡುಪಿ ಭಾಗದ ವಿಶ್ವಕರ್ಮರು ಸಾಮಾನ್ಯವಾಗಿ ವೈದಿಕ ಧರ್ಮದೊಂದಿಗೆ ಗುರುತಿಸಿಕೊಳ್ಳುತ್ತಿದ್ದಾರೆ. ಕಮ್ಮಾರರು ವಿಶ್ವಕರ್ಮರೇ ಆಗಿರುವುದರಿಂದ ಅವರನ್ನು ವೈದಿಕ ಧರ್ಮ ಆಕರ್ಷಿಸುತ್ತಿರುವುದರಿಂದ ಕಮ್ಮಾರರು ಪರಿಶಿಷ್ಟ ಪಂಗಡಕ್ಕೆ ಸರ್ಕಾರವು ನೀಡುತ್ತಿರುವ ಸೌಲಭ್ಯಗಳನ್ನೂ ಪಡೆದುಕೊಳ್ಳುತ್ತಿಲ್ಲ. ನಾವು ಈ ಸೌಲಭ್ಯ ಪಡೆದುಕೊಂಡರೆ ವಿಶ್ವಕರ್ಮ ಜನಾಂಗದ ಇತರೆ ಕಸಬುಗಳನ್ನು ಮಾಡುತ್ತಿರುವ ಜನರಿಂದ ದೂರ ಉಳಿಯುತ್ತೇವೆ. ನಮ್ಮ ಸಾಮಾಜಿಕ ಸ್ಥಾನಮಾನಗಳಿಗೆ ಧಕ್ಕೆ ಉಂಟಾಗುತ್ತದೆ ಎಂಬ ಭಯ ಹಾಗೂ ಆಂತರಿಕ ಕಮ್ಮಾರರಲ್ಲಿದೆ. ಆದರೆ ಚಾಮರಾಜನಗರ ಜಿಲ್ಲೆಯ ಕೊಳ್ಳೆಗಾಲ ತಾಲೂಕಿನ ಅನೇಕ ಕಮ್ಮಾರ ಕುಟುಂಬಗಳು ಪರಿಶಿಷ್ಟ ಪಂಗಡದ ಸೌಲಭ್ಯಗಳನ್ನು, ತಮ್ಮದಾಗಿಸಿಕೊಂಡು ಆಧುನಿಕ ಜಗತ್ತಿನಲ್ಲಿ ಬದುಕಲು ಪ್ರಯತ್ನಿಸುತ್ತಿರುವುದನ್ನು ಕಾಣುತ್ತೇವೆ.

ಆಧುನಿಕ ಯಂತ್ರೋಪಕರಣಗಳು ಬಂದ ಮೇಲೆ ನಿರಂತರವಾಗಿ ಮಡಿಯುತ್ತಿರುವ ಕಮ್ಮಾರರ ಕೆಲಸಗಳನ್ನು ಕಿತ್ತುಕೊಂಡಿದ್ದರೂ ಪಾರಂಪರಿಕ ಜ್ಞಾನ ಮತ್ತು ಸಂಸ್ಕೃತಿಯಲ್ಲಿ ಹೊಸ ರೂಪ ಪಡೆದುಕೊಳ್ಳಲು ಅನುಕೂಲ ಮಾಡಿಕೊಟ್ಟಿದೆ. ಆಧುನಿಕ ಜಗತ್ತಿಗೆ ಮುಖಾಮುಖಿಯಾಗುತ್ತಾ ಅವರ ಬದುಕಿನಲ್ಲಿ ಸಾಮಾಜಿಕವಾಗಿ, ಶೈಕ್ಷಣಿಕವಾಗಿ, ಸಾಂಸ್ಕೃತಿಕವಾಗಿ, ಆರ್ಥಿಕವಾಗಿ, ರಾಜಕೀಯವಾಗಿ ಹಾಗೂ ಧಾರ್ಮಿಕವಾಗಿ ಹೇಗೆ ಸ್ಥಿತ್ಯಂತರಗಳನ್ನು ಕಾಣುತ್ತಿದ್ದಾರೆ ಎಂಬುದನ್ನು ಈ ಅಧ್ಯಯನದಲ್ಲಿ ಕಂಡುಕೊಳ್ಳಲಾಗಿದೆ.

ವರ್ತಮಾನ ಕಾಲದಲ್ಲಿ ಕಮ್ಮಾರರ ಸ್ಥಿತಿಗತಿಗಳು ಹೇಗಿವೆ. ಆಧುನಿಕತೆ ಮತ್ತು ನಿತ್ಯಪರಿವರ್ತನಾಶೀಲವಾದ ಸಮಾಜದಲ್ಲಿ ವರ್ತಮಾನದಲ್ಲಿ ತನ್ನ ಅಸ್ತಿತ್ವ ಕಂಡುಕೊಳ್ಳಲು ಯಾವ ಯಾವ ಸವಾಲುಗಳನ್ನು ಎದುರಿಸಬೇಕಾಗಿದೆ ಎಂಬುದನ್ನು ಕಂಡುಕೊಳ್ಳಲು ಪ್ರಯತ್ನಿಸಲಾಗಿದೆ. ಈ ಸಮುದಾಯಗಳು ಹಂತ ಹಂತವಾಗಿ ತಮ್ಮ ಮೂಲ ವೃತ್ತಿಯನ್ನು ಕ್ಕಿ ಬಿಡುತ್ತಿವೆ. ಇವರ ಜೀವನ ಶೈಲಿಯ ಮೇಲೆ ಯಾವ ಬದಲಾವಣೆಗಳಾಗಿವೆ. ಯುವ ಪೀಳಿಗೆಯು ತನ್ನ ಮೂಲ ವೃತ್ತಿಯಿಂದ ಹೇಗೆ ದೂರ ಸರಿಯುತ್ತಿದೆ ಎಂಬುದನ್ನು ವ್ಯಕ್ತಪಡಿಸಲಾಗಿದೆ.

ಅಧ್ಯಯನದ ಉದ್ದೇಶ

ಉಡುಪಿ, ಮಂಗಳೂರು ಮತ್ತು ಕೊಳ್ಳೆಗಾಲ ತಾಲೂಕಿನ ಕಮ್ಮಾರರನ್ನು ಕುರಿತು ಸಮಗ್ರವಾದ ಅಧ್ಯಯನವೇ ನಡೆದಿಲ್ಲವೆಂದೇ ಹೇಳಬಹುದು. ಆಧುನಿಕ ಯಂತ್ರಗಳ ಹಾವಳಿಯಲ್ಲಿ ಕಮ್ಮಾರಿಕೆ ವೃತ್ತಿಯಿಂದ ಹಂತ ಹಂತವಾಗಿ ವಿಮುಖರಾಗುತ್ತಿರುವುದನ್ನು ಕಾಣುತ್ತೇವೆ. ಈ ಸಮುದಾಯವು ಆರ್ಥಿಕವಾಗಿ ಕುಗ್ಗುತ್ತಾ ತನ್ನ ಅಸ್ತಿತ್ವವನ್ನೇ ಕಳೆದುಕೊಳ್ಳುತ್ತಿದೆ. ಒಂದು ಹಂತದಲ್ಲಿ ಉತ್ಪಾದನೆ ಮತ್ತು ಆರ್ಥಿಕತೆಯಲ್ಲಿ ಅತ್ಯಂತ ಪ್ರಬಲವಾಗಿದ್ದು ಈ ಸಮುದಾಯವು ಇಂದು ತನ್ನೆಲ್ಲ ಬದುಕನ್ನು ಕಳೆದುಕೊಳ್ಳುತ್ತಿದೆ. ಆರ್ಥಿಕವಾಗಿ ಕ್ಷೀಣಿಸುತ್ತಾ ಹೋದಂತೆ ಮತ್ತು ಆಧುನೀಕತೆಗೆ ತೆರೆದ ಬಿದ್ದಾಂತೆ ಅದು ಅವರ ಪಾರಂಪರಿಕ ಸಂಸ್ಕೃತಿ, ಆಚಾರ – ವಿಚಾರ, ಪಾರಂಪರಿಕ ಜ್ಞಾನ, ವೃತ್ತಿ, ಉಡುಗೆ–ತೊಡುಗೆ, ಆಚರಣೆ, ಆರಾಧನೆ ಮುಂತಾದವುಗಳ ಮೇಲೆ ಅನೇಕ ಪ್ರಭಾವಗಳನ್ನು

ಜೀರಿದೆ. ಕಮ್ಮಾರರ ಬದುಕಿನ ಮೇಲಾದ ಪರಿಣಾಮಗಳನ್ನು ಸಮಗ್ರವಾಗಿ ಅಧ್ಯಯನ ಮಾಡುವ ಉದ್ದೇಶವನ್ನು ಇಲ್ಲಿ ಕೈಗೊಳ್ಳಲಾಗಿದೆ.

ವ್ಯಾಪ್ತಿ

ಕರ್ನಾಟಕದ ಮಂಗಳೂರು, ಉಡುಪಿ ಹಾಗೂ ಚಾಮರಾಜ ನಗರ ಜಿಲ್ಲೆಯ ಕೊಳ್ಳೇಗಾಲ ತಾಲೂಕಿನಲ್ಲಿಯ ಪ್ರತಿಯೊಂದು ಗ್ರಾಮದಲ್ಲಿ ಸಾಮಾನ್ಯವಾಗಿ ಕಂಡು ಬರುವ ಕಮ್ಮಾರ ಕುಟುಂಬಗಳನ್ನು ಈ ಅಧ್ಯಯನಕ್ಕೆ ಬಳಸಿಕೊಳ್ಳಲಾಗಿದೆ.

ಸಂಶೋಧನಾ ವಿಧಾನಗಳು

ಈ ಅಧ್ಯಯನಕ್ಕೆ ವಿಸ್ತೃತವಾದ ಪ್ರಶ್ನಾವಳಿಯನ್ನು ಸಿದ್ಧಪಡಿಸಿ ಈ ಪ್ರಶ್ನಾವಳಿಯನ್ನು ಕ್ಷೇತ್ರಕಾರ್ಯದಲ್ಲಿ ಬಳಸಿಕೊಳ್ಳಲಾಗಿದೆ. ಸಮರ್ಪಕ ಮಾಹಿತಿದಾರರಿಂದ ಮಾಹಿತಿಯನ್ನು ಪಡೆದುಕೊಳ್ಳಲಾಗಿದೆ. ಅದಲ್ಲದೆ ಅನ್ಯ ಸಮುದಾಯದ ಮಾಹಿತಿದಾರರಿಂದಲೂ ಮಾಹಿತಿ ಪಡೆಯಲಾಗಿದೆ. ವೈಜ್ಞಾನಿಕ ಅಧ್ಯಯನಕ್ಕಾಗಿ ಆಡಿಯೋ, ವೀಡಿಯೋ ಹಾಗೂ ಛಾಯಾಚಿತ್ರಗಳನ್ನು ತೆಗೆಯಲಾಗಿದೆ. ಒಂದು ಕ್ರಮಬದ್ಧವಾದ ಅಧ್ಯಯನ ತಿಸ್ತಿಗೆ ಒಳಪಟ್ಟು ಸಂಗ್ರಹಿಸಿದ ಮಾಹಿತಿಯನ್ನು ಇಲ್ಲಿ ವಿಶ್ಲೇಷಣೆ ಮಾಡಲಾಗಿದೆ.

ಇಲ್ಲಿಯವರೆಗೆ ನಡೆದ ಅಧ್ಯಯನಗಳ ಸಮೀಕ್ಷೆ

ಕಮ್ಮಾರ ಮತ್ತು ವಿಶ್ವಕರ್ಮರನ್ನು ಕುರಿತಾದ ಅಧ್ಯಯನಗಳು ಕಡಿಮೆ ಪ್ರಮಾಣದಲ್ಲಿ ನಡೆದಿವೆ. ಕೆಲ ಸಮಾಜಶಾಸ್ತ್ರ ಅಧ್ಯಯನಕಾರರು ವಿಶ್ವಕರ್ಮದ ವೃತ್ತಿಗಾರ ಬಗೆಗೆ ವಿವರಿಸಲು ಪ್ರಯತ್ನಿಸಿದ್ದಾರೆ.

1. Jan Brower, The makers of the world

ಹಾಲೆಂಡ್ ದೇಶದ ಮಾನವಶಾಸ್ತ್ರಿ ಜಾನ್ ಬ್ರೋವರ್ ಎಂಬ ವಿದ್ವಾಂಸ ದಕ್ಷಿಣಭಾರತದಲ್ಲಿಯ ವಿಶ್ವಕರ್ಮರ ಐದು ವೃತ್ತಿಗಳಾದ ಕಮ್ಮಾರ, ಬಡಿಗ, ಕಂಬುಗಾರ ಶಿಲಾಶಿಲ್ಪ ಹಾಗೂ ಸುವರ್ಣ ಶಿಲ್ಪಗಳನ್ನು ಕುರಿತು ಅಧ್ಯಯನ ಮಾಡಿದ್ದಾರೆ. 1985ರಲ್ಲಿ ಕ್ಷೇತ್ರಕಾರ್ಯ ಪ್ರಾರಂಭಿಸಿ ಸುಮಾರು 10 ವರ್ಷಗಳವರೆಗೆ ಅಧ್ಯಯನ ಮಾಡಿ ವೃತ್ತಿಗಳು, ಇದಕ್ಕೆ ಸಂಬಂಧಿಸಿದ ಆಚಾರ ವಿಚಾರ ಮತ್ತು ಸಂಪ್ರದಾಯಿಗಳನ್ನು ವಿವರಿಸಿದ್ದಾರೆ. ಜಾನ್‌ಬ್ರೋವರ್ ತಮ್ಮ ಗ್ರಂಥದಲ್ಲಿ ಕಮ್ಮಾರಿಕೆ ಕುರಿತ ವಿವರಗಳನ್ನು ನೀಡಿದ್ದಾರೆ. (ಪುಟ ಸಂಖ್ಯೆ 55 ರಿಂದ 70ರ ವರೆಗೆ)

ಕಬ್ಬಣ ತಯಾರಿಸುವುದು

ಇವರು ಅಭಿಪ್ರಾಯ ಪಡುವಂತೆ ಕಮ್ಮಾರರು ಕಬ್ಬಿಣ ಎನ್ನುವ ಪದವನ್ನು ಬಳಸುತ್ತಾರೆ. ಇದರ ಅಂಗ್ಲಪದ ಖಣಿಟಿ. ಇದನ್ನು ಕರ್ಬುನ್, ಕಬ್, ಗಿರಿಜಾ ಎಂದು ಕರೆಯುತ್ತಾರೆ. ಇದರ ಶಬ್ದಾರ್ಥ ಬೆಟ್ಟುಗುಡ್ಡಗಳಲ್ಲಿ ಹುಟ್ಟಿದವನು ಎಂದೂ ವಿಶ್ವಕರ್ಮದ ಪ್ರಕಾರ ಕಬ್ಬಿಣದ ಅದಿರು ಎಂದರೆ ಮಹಾಕಾಳಿಯ ಪ್ರತಿರೂಪ, ಕಬ್ಬಿಣವು ಒಂದು ಕಚ್ಚಾವಸ್ತು ಇದರ ಪ್ರತಿರೂಪವೇ 'ಕಾಳಿದೇವತೆ' ಕಮ್ಮಾರರು ಈ ದೇವತೆಯನ್ನು ಸದಾ ಆರಾಧಿಸುತ್ತಾ ಜೀವನ ಸಾಗಿಸುತ್ತಿದ್ದರು ಎಂದಿದ್ದಾರೆ.

ಕಮ್ಮಾರರಿಗೆ ಕಬ್ಬಿಣದ ಅದಿರಿನ ಜ್ಞಾನ ಮತ್ತು ಪರಿಚಯವಿವು ತಮ್ಮ ಪೂರ್ವಿಕರಿಂದ ತಿಳಿದಿರುತ್ತದೆ. ಇವರು ಕಬ್ಬಿಣದ ಅದಿರನ್ನೂ ಅದಿರುಕಲ್ಲು ಎನ್ನುತ್ತಾರೆ. ಇದು ಒಂದು ರೀತಿಯ ಮಣ್ಣು ಮತ್ತು ಮರಳು ಮಿಶ್ರವಾಗಿರುವಂತಹ ಕಲ್ಲು. ಈ ಅದಿರನ್ನು ಗುಡ್ಡ ಬೆಟ್ಟುಗಳಿಂದ ತೆಗೆದು ತಂದು ಮಣ್ಣಿ ಮಾಡಿ ನೀರಿನಿಂದ ತೊಳೆಯಲಾಗುತ್ತದೆ. ನಂತರ ಉರಿಯುವ ಬೆಂಕಿಗೆ ಹಾಕಿ ಆ ಮೂಲಕ ಕಬ್ಬಿಣವನ್ನು ತೊಳೆಸುತ್ತಾರೆ.

ಆ) ಆಯುಧಗಳು

ಇವರು ತಯಾರಿಸುವ ಆಯುಧಗಳಲ್ಲಿ ಖಡ್ಗಗಳು ತುಂಬಾ ಪ್ರಸಿದ್ಧವಾದವುಗಳು ಕೆಲವಾರು ಖಡ್ಗಗಳನ್ನು ಇವರು ಸಂಪೂರ್ಣವಾಗಿ ಕಬ್ಬಿಣದಿಂದಲೇ ತಯಾರಿಸುತ್ತಿದ್ದರು. ಇನ್ನೂ ಕೆಲವು ಖಡ್ಗಗಳಿಗೆ ಮರದಿಂದ ಹಿಡಿಗಳನ್ನು ಜೋಡಿಸಿ ತಯಾರಿಸುತ್ತಿದ್ದರು. ಈ ಖಡ್ಗಗಳು ಇಂದೂ ಕೂಡ ಬೇಡರ ಆಯುಧಗಳಾಗಿವೆ. ಇದು ದುಷ್ಟ ಸಂಹಾರದ ಪ್ರತಿರೂಪಗಳು. ಈ ರೀತಿಯ ಖಡ್ಗಗಳ ತಯಾರಿಕೆಯಲ್ಲಿ ಕಮ್ಮಾರರು ಸಿದ್ಧ ಹಸ್ತರು.

ಇ) ಎತ್ತಿಗೆ ಬಂಡಿಗೆ ಬೇಕಾಗುವಂತಹ ವಸ್ತುಗಳು

ಮಾನವನು ನಾಗರಿಕತೆಯನ್ನು ಹೊಂದಲು ಬಹಳ ಮುಖ್ಯವಾಗಿ ಇರುವ ಆಧಾರ ಸ್ತಂಭಗಳು ಎಂದರೆ ಚಕ್ರಗಳು. ಈ ಚಕ್ರಗಳು ಅವಿಷ್ಕಾರವಾದೊಡನೆ ನಾಗರಿಕತೆಯು ತನ್ನ ವಿರಾಟ್ ರೂಪವನ್ನು ತೋರಿಸಲು ಪ್ರಾರಂಭಿಸಿತು ಎನ್ನಬಹುದು.

ಎತ್ತಿನ ಬಂಡಿಗೆ ಸಂಬಂಧಿಸಿದ ಚಕ್ರ, ಪಟ್ಟಿ, ಕೀಲು, ಗುಮ್ಮಟ ಕಟ್ಟು, ಬಳೆ, ದೂರಿ, ಭೀಮ ಹೊಳೆ, ಹೊಳೆ, ಬೌಕದ ಕಟ್ಟಿ ಇನ್ನೂ ಮುಂತಾದವುಗಳನ್ನು ಕಮ್ಮಾರರು ಮಾಡಿಕೊಡುತ್ತಾರೆ.

2. Anantha Krishna Iyer ಅವರು ತಮ್ಮ The Mysore Tribes and castes (Volume 3) ಎಂಬ ಗ್ರಂಥದಲ್ಲಿ ವಿಶ್ವಕರ್ಮರನ್ನೂ ಕುರಿತು ಉಲ್ಲೇಖಿಸಿದ್ದಾರೆ. ವಿಶ್ವಕರ್ಮರ ವೃತ್ತಿಗಳನ್ನು ಕುರಿತು ವಿವರಣೆ ನೀಡಿದ್ದಾರೆ. ವಿಶ್ವಕರ್ಮರಲ್ಲಿ ಉಪಜಾತಿಗಳಿವೆ. ಅವರು ತಮ್ಮ ಪಂಗಡಕ್ಕೆ ಮೀಸಲಾದ ವೃತ್ತಿಯ ಜೊತೆಗೆ ಇತರೆ ಪಂಗಡದವರು ನಿರ್ವಹಿಸುತ್ತಿರುವ ವೃತ್ತಿಗಳನ್ನು ಇವರು ನಿರ್ವಹಿಸುತ್ತಾರೆ. ಮತ್ತು ವಿಶ್ವಕರ್ಮರು ನಾವು ಬ್ರಾಹ್ಮಣರಿಗಿಂತಲೂ ಹೆಚ್ಚಿನ ಸ್ಥಾನಮಾನಗಳನ್ನು ಉಳ್ಳವರು ಎಂದು ತಿಳಿಸುತ್ತಾ ನಾವು ನಾವು ಇರವ ಬ್ರಹ್ಮನಿಂದ ನೇರವಾಗಿ ಸೃಷ್ಟಿಗೊಂಡಿದ್ದೆವು, ಆದರೆ ಬ್ರಾಹ್ಮಣರು ಸಾವಿಗೀಡಾದ ಋಷಿಗಳ ವಂಶದಿಂದ ಬಂದವರು ಆದ್ದರಿಂದ ನಾವು ಬ್ರಾಹ್ಮಣರಿಗಿಂತ ಹೆಚ್ಚಿನ ಮಾನ್ಯತೆಯನ್ನು ಪಡೆದುಕೊಂಡವರು ಎಂದು ಹೇಳಿದ್ದಾರೆ ಎಂದು ಖಭಿಜಿ ತಮ್ಮ ಗ್ರಂಥದ 4ನೇ ಸಂಪುಟದ 435ನೇ ಪುಟದಲ್ಲಿ ಹೇಳಿದ್ದಾರೆ.

3. Anand J. Koomaraswamy ಅವರ Arts and crafts of India ಎಂಬ ಪುಸ್ತಕದಲ್ಲಿ ವಿಶ್ವಕರ್ಮರ ವೃತ್ತಿಗೆ ಸಂಬಂಧಿಸಿದ ಮಾಹಿತಿಗಳನ್ನು ನೀಡಿದ್ದಾರೆ. ಇವರ ಅಭಿಪ್ರಾಯದ ಪ್ರಕಾರ ದಕ್ಷಿಣ ವಿಷಯಕ್ಕೆ ಸಂಬಂಧಿಸಿದಂತೆ ಪಾಂಚಾಲರನ್ನು (Smith) ಕುರಿತಾದ ಮಾಹಿತಿಯನ್ನು ನೀಡುವ ಪುಸ್ತಕ ನಾಕ್ಸ್ (ಟಿಪ್ಪಣಿ) ರವರ ಛಾಯಾಚಿತ್ರಿಕರಿಸಿದ Relation of the Land Seylon ಎಂಬ ಈ ಕೃತಿಯಲ್ಲಿ 19ನೇ ಶತಮಾನದಲ್ಲಿ ಸಿಲೋನಿನಲ್ಲಿ ವಾಸಿಸುತ್ತಿದ್ದ ಕಮ್ಮಾರ, ಬಡಿಗ ಹಾಗೂ ಅಕ್ಕ ಸಾಲಿಗರ ಸಾಮಾಜಿಕ, ಆರ್ಥಿಕ ಜೀವನದ ಕ್ರಮಗಳು ಹೇಗಿದ್ದವೆಂಬ ಮಾಹಿತಿಯನ್ನು ದಾಖಲಿಸಲಾಗಿದೆ ಎಂದು ಕುಮಾರಸ್ವಾಮಿಯವರು ತಿಳಿಸುತ್ತಾರೆ.

4. Edgar Thurston ರವರ caste and tribes of south India ಎಂಬ ಕೃತಿಗಳ ಸಂಪುಟಗಳಲ್ಲಿ ವಿಶ್ವಕರ್ಮರ ಬಗ್ಗೆ ಉಲ್ಲೇಖಿಸಿದ್ದಾರೆ. ಪಾಂಚಾಳ ಅಥವಾ ಕಮ್ಮಾಲಸ ಎಂಬ ಐದು ವರ್ಗದ ವೃತ್ತಿಮೂಲ ಸಮುದಾಯಗಳನ್ನು ವಿಶ್ವಕರ್ಮರೆಂದು ಕರೆಯುತ್ತಾರೆ. ವಿಶ್ವಬ್ರಹ್ಮ, ವಿಶ್ವಕರ್ಮ ಈ ಪದಗಳು "ಕಮ್ಮಾಲನ" ಪದಕ್ಕೆ ಸಮಾನ ಪದಗಳೆಂದು ಹೇಳುತ್ತಾ ಕಮ್ಮಾಲಾನರೆಂದರೆ ಶಿಲ್ಪಿಗಳ ದೈವವಾದ ವಿಶ್ವಕರ್ಮನ ಐದು

ಮುಖಗಳಿಂದ ಹುಟ್ಟಿದ ಐದು ವರ್ಗ ಎಂದು ತಿಳಿಸಿದ್ದಾರೆ.

5. ರಾಜಶೇಖರ ಬಡಿಗೇರ, "ಅವರ ಸಂಶೋಧನೆ" ಎಂಬ ಗ್ರಂಥದಲ್ಲಿ ಒಟ್ಟು 18 ಲೇಖನಗಳಿದ್ದು ಇದರಲ್ಲಿ "ಕಮ್ಮಿಕುಲ ಮತ್ತು ಬಸವಣ್ಣ ವಾಜಿವಂಶ ಮತ್ತು ಕನ್ನಡ ಸಾಹಿತ್ಯ, ಕಮ್ಮಿಕುಲ ಒಂದು ವಿಶ್ಲೇಷಣೆ" ಎಂಬ ಲೇಖನ ಪ್ರಮುಖವಾಗಿದೆ. ವಿಶ್ವಕರ್ಮಿಯರು ಮತ್ತು ಅವರ ವೃತ್ತಿಗಳಿಗೆ ಸಂಬಂಧಿಸಿದ ಮಾಹಿತಿ ಈ ಕೃತಿಯಲ್ಲಿ ದೊರೆಯುತ್ತದೆ.

6. ಡಾ॥ ಆರ್.ಜಿ. ಕುಮಾರ್ ಅವರ "ಮುದ್ದೆ ಕಂಬಾರರು" ಎಂಬ ಗ್ರಂಥ ಉತ್ತರ ಕರ್ನಾಟಕದಲ್ಲಿ ಹಾಸುಹೊಕ್ಕಾಗಿರುವ ಮುದ್ದೆ ಕಂಬಾರರ ಸಂಪೂರ್ಣ ವಿವರಗಳನ್ನೊಳಗೊಂಡ ಮಾಹಿತಿಯನ್ನು ನೀಡುತ್ತದೆ.

7. ಡಾ॥ ಗಂಗಾಧರ ದೈವಜ್ಞ ಅವರು "ತಿರಸಂಗಿ ಕಾಳಮ್ಮ ಸಾಂಸ್ಕೃತಿಕ ಅಧ್ಯಯನ" ಎಂಬ ಗ್ರಂಥದಲ್ಲಿ ತಿರಸಂಗಿ ಕಾಳಮ್ಮನನ್ನು ವಿಶ್ವಕರ್ಮಿಯರು ತಮ್ಮ ಕುಲದೈವವಾಗಿ ಪಡೆಯಲಿಕ್ಕೆ ಕಾರಣಗಳೇನು, ವಿಶ್ವಕರ್ಮಿಯರು ಭಾರತೀಯ ಸಂಸ್ಕೃತಿಗೆ ನೀಡಿದ ಕೊಡುಗೆ ಕುರಿತು ವಿಶ್ಲೇಷಣೆ ಮಾಡಿದ್ದಾರೆ.

8. ಡಾ॥ ವಾಸುದೇವ ಬಡಿಗೇರ ಅವರು "ತಿರಸಂಗಿ ಕಾಳಮ್ಮ ಸಾಂಸ್ಕೃತಿಕ ಅಧ್ಯಯನ (ಚಾರಿತ್ರಿಕ ಅಧ್ಯಯನ) ಎಂಬ ಗ್ರಂಥದಲ್ಲಿ ತಿರಸಂಗಿಯ ಪ್ರಾಚೀನತೆ, ಕಾಳಮ್ಮ ಈ ಪ್ರದೇಶದಲ್ಲಿ ನೆಲೆಗೊಳ್ಳಲು ಕಾರಣಗಳು ಈ ಪ್ರದೇಶದಲ್ಲಿರುವಂತಹ ಆದಿ ಮಾನವನ ನೆಲೆಗಳು, ಕಬ್ಬಿಣ ತಯಾರಿಕೆ ಇನ್ನೂ ಮುಂತಾದವುಗಳ ಬಗ್ಗೆ ವಿವರಗಳನ್ನು ನೀಡುತ್ತಾರೆ.

9. ಡಾ॥ ವಾಸುದೇವ ಬಡಿಗೇರ ಅವರ "ಸಂಡೂರು ಪರಿಸರದ ಕಾರ್ತಿಕೇಯ ತಪೋವನ" ಎಂಬ ಗ್ರಂಥದಲ್ಲಿ ಬಳ್ಳಾರಿ ಜಿಲ್ಲೆಯಲ್ಲಿನ ಆದಿ ಮಾನವನ ನೆಲೆಗಳು, ಕಬ್ಬಿಣ ತಯಾರಿಕೆ ಸಂಬಂಧಿಸಿದ ಕುರುಹುಗಳು ಮತ್ತು ಕಾರ್ತಿಕೇಯ ತಪೋವನದ ಬಗ್ಗೆ ವಿವರವಾದ ಮಾಹಿತಿಗಳನ್ನು ನೀಡಿದ್ದಾರೆ.

ಪದನಿಷ್ಪತ್ತಿ

ಕಮ್ಮಾರ ಎಂಬ ಪದವು ಕಬ್ಬಿಣ ಕೆಲಸವನ್ನು ನಿರ್ವಹಿಸುವವನು ಎಂಬ ಅರ್ಥ ನೀಡುತ್ತದೆ. ಕರಿದು-ಹೊನ್-ಕರ್ಬೊನ್ ಎಂಬ ಪದವು ತುಳುಭಾಷೆಯಲ್ಲಿ ಕರ್ಬ ಆಗಿ ಉಳಿದಿದೆ. ಕನ್ನಡದಲ್ಲಿ ಕಬ್ಬಿಣ ಎಂದು ಕರೆಯುತ್ತಾರೆ. ಇತಿಹಾಸಕಾರರ ಪ್ರಕಾರ ಕಬ್ಬಿಣವು ಇತರೆ ಲೋಹಗಳ ನಂತರ ಕಂಡುಡ ಹಿಡಿದುಬಿಟ್ಟ ಲೋಹ. ಚರಿತ್ರೆಕಾರರು ಕಬ್ಬಿಣದ ಯುಗವನ್ನು ಕ್ರಿ.ಪೂ. 2000 ದಿಂದ ಪ್ರಾರಂಭವಾಯಿತು. ಎಂಬುದಾಗಿ ಅಭಿಪ್ರಾಯ ಪಡುತ್ತಾರೆ. ಕಬ್ಬಿಣವು ಕ್ರಿ.ಪೂ. 1000 ಹೊತ್ತಿಗೆ ಗ್ರೀಸ್ ದೇಶವನ್ನು ಪ್ರವೇಶಿಸಿತು ಎನ್ನುತ್ತಾರೆ. ವೇದಗಳಲ್ಲಿ ಕಮ್ಮಾರರು ವಿವಿಧ ಬಾಣಗಳನ್ನು ಹಾಗೂ ಆಯುಗಳ ತುದಿಗೆ ಕಬ್ಬಿಣದ ಅಲಗು ಜೋಡಿಸಿ ತಯಾರಿಸುತ್ತಿದ್ದರು.

ಕಮ್ಮಾರ ಎಂದರೆ ವೇದ ಸಂಹಿತೆಗಳ ಪ್ರಕಾರ ಶಿಲ್ಪಿ, ಈ ಅರ್ಥವನ್ನು ಸೂಚಿಸುವಂತೆ ಈ ಶಬ್ದವು ವೇದಗಳಲ್ಲಿ ಅನೇಕ ಬಾರಿ ಬಳಕೆಯಾಗಿದೆ. ವೇದಗಳಲ್ಲಿ ಶಿಲ್ಪಿಗಳನ್ನು ದಿವಾನಿಃ, ರಥಕಾರಃ ಎಂದು ಇವರೊಂದಿಗೆ ಉಲ್ಲೇಖಿಸಿ ಇವರನ್ನೆಲ್ಲಾ ಮನೀಷಿಣಾ ಎಂದು ವರ್ಣಿಸಿದೆ. ಕರ್ಮಾರ (ಲೋಹಕಾರ) ಇವರು ಗ್ರಾಮದ ಮುಖ್ಯಸ್ಥರು ಮತ್ತು ಸೂತರು ಎಲ್ಲರೂ ಸೇರಿ ರಾಜ್ಯವನ್ನೂ ರಾಜರನ್ನೂ ರೂಪಿಸುವವರಾಗಿದ್ದಾರೆ ಎಂದು ಹೇಳಿದೆ. ರಾಜಕೃತಃ ಶಬ್ದಕ್ಕೆ ರಾಜನನ್ನು ನಿರ್ಮಾಣ ಮಾಡುವವರು (ಮಟಿರಿ ಬುಚ್ಚಾಜಾತಿ) ಹೀಗೆಯೇ ಕರ್ಮಾರನು ಬೆಂಕಿಯಿಂದ ಖನಿಜವನ್ನು ಕರಗಿಸುತ್ತಿದ್ದುದರಿಂದ ಇವನನ್ನು "ಧಮಾತ್ಯ" ಎಂದು ಸಂಭೋದಿಸಿದೆ. ಬೆಂಕಿಯ ಮೇಲೆ ಇರಿಸಲು ಸಾಧ್ಯವಾಗುವಂತಹ ಪಾತ್ರೆ (ಫರ್ನೆಯಿಸಮಾಯಿ) ತಯಾರಿಸುತ್ತಿದ್ದರು. ಯಜ್ಞದಲ್ಲಿ ಸೋಮಪಾನಕ್ಕಾಗಿ ಬಳಸುವ ಮರದ ಪಾತ್ರೆಯಾದ 'ಚಮಸ'ವನ್ನೂ ಕೂಡ ಆಗಾಗ ಇವರು ಸುತ್ತಿಗೆಯಿಂದ ಬಡಿದು ಕಬ್ಬಿಣದಲ್ಲಿ (ಆಯೋಹತ) ತಯಾರಿಸುತ್ತಿದ್ದರು.

ಪಾಳಿ ಭಾಷೆಯಲ್ಲಿ ಕಮ್ಮಾರ ಶಬ್ದವನ್ನು ಲೋಹಗಾರ ಎಂಬ ಅರ್ಥದಲ್ಲಿ ಕಬ್ಬಿಣ, ಬೆಳ್ಳಿ, ಬಂಗಾರ ಇತ್ಯಾದಿ ಲೋಹಗಳಲ್ಲಿ ಕೆಲಸ ಮಾಡುವವರು ಎಂದು ಬಳಸಲಾಗಿದೆ. ಇವರು ಸಾಮಾಜಿಕವಾಗಿ ಬಹು ಪ್ರಯೋಜನಕಾರಿಗಳಾದುದರಿಂದ ಜನರು ಮತ್ತು ರಾಜ ಇವರಿಗೆ ಗೌರವ ಕೊಡುತ್ತಿದ್ದರು.

ತಮಿಳಿನಲ್ಲಿ ಕಮ್ಮಾಲನ್ ಎಂಬ ಪದವನ್ನೂ ಶಿಲ್ಪಿ ಅಥವಾ ತಂತ್ರಜ್ಞ ಎಂಬ ಅರ್ಥದಲ್ಲಿ ಬಳಸುತ್ತಾರೆ. ಇದು ಕುಲವಾಚಕವಾಗಿದ್ದು ತಟ್ಟಾನ್ (ಸ್ವರ್ಣಶಿಲ್ಪಿ) ಕನ್ನಾನ್ (ಕಂಚಿನ ಶಿಲ್ಪಿ) ತಚ್ಚನ್ (ಕಾಷ್ಠಶಿಲ್ಪಿ) ಸರ್ಪನ್ (ಶಿಲಾಶಿಲ್ಪಿ) ಕೊಲ್ಲನ್ ಅಥವಾ ಕರುವಾನ್ (ಕಬ್ಬಿಣದ ಶಿಲ್ಪಿ) ಎಂಬ ಪಂಚಶಿಲ್ಪಿಗಳು ಗುಂಪಿಗೆ ಸಾಮಾನ್ಯ ಪಂಚಕಾರಂಕೇ ಅರ್ಥವನ್ನು ಅನುಸರಿಸಿದ್ದು.

ವಿಷ್ಣುಶೇಶ್ವರನು ಯಜ್ಞವಲ್ಕ್ಯ ಸೂತ್ರಕ್ಕೆ ಭಾಷ್ಯವನ್ನು ಬರೆಯುತ್ತಾ ಕರ್ಮಾರ ಎಂದರೆ ಲೋಹಕಾರ ಮತ್ತು ತಕ್ಷಕ (ಬಡಗಿ) ಎಂದು ಹೇಳಿದ್ದಾನೆ.

ಕಬ್ಬಿಣದಿಂದಲೇ ಸೃಷ್ಟಿ ಎನ್ನುತ್ತಾರೆ. ಶಿಶುವು ತಾಯಿಯ ಗರ್ಭದಿಂದ ಹೊರ ಬಂದ ಕೂಡಲೆ ನಾಭಿನಾಳವನ್ನು ಕತ್ತರಿಸಿದಾಗ ಮಗುವಿನ ಹುಟ್ಟು ಆಗುತ್ತದೆ. ತಾಯಿಬಿಂದ ಮಗುವನ್ನು ಬೇರ್ಪಡಿಸುವ ಸಾಧನ ಕತ್ತಿ ಆದುದರಿಂದಲೇ ಕಬ್ಬಿಣದಿಂದ ಸೃಷ್ಟಿ ಎಂಬ ಮಾತಿಗೆ ಹಿಂದಾ ಅರ್ಥವಿದೆ.

ಕಬ್ಬಿಣವೇ ವ್ಯವಸಾಯಕ್ಕೆ ಮೂಲ, ಉಳುಮೆ ಮಾಡಬೇಕಾದರೆ ನೇಗಿಲುಬೇಕು. ಈ ನೇಗಿಲದ ಮೊನೆಗೆ ಕಬ್ಬಿಣದಿಂದ ಮಾಡಿದ ಕುಳ (ಮೊನೆ) ಬೇಕು. ಈ ಕುಳದಿಂದ ಮಣ್ಣು ಸೀಳಾಗಿ ಭೂಮಿ ಹದವಾಗಿ ವ್ಯವಸಾಯಕ್ಕೆ ಅಣಿಯಾಗುತ್ತದೆ. ಅದೇ ರೀತಿ ಹತ್ತಿಯಿಂದ ನೂಲು ತೆಗೆಯಬೇಕಾದರೆ ತಕಲಿ (ಕದಿರು) ಬೇಕು. ಇದು ಕಬ್ಬಿಣದಿಂದ ತಯಾರಿಸಿದ್ದು ಇದರಿಂದ ಬಟ್ಟೆಯನ್ನು ಸಿದ್ಧಪಡಿಸಲು ಸಾಧ್ಯ.

ಕಬ್ಬಿಣವೇ ಬರವಣಿಗೆಗೆ ಮೂಲ. ಒಲೇ ಗರಿಯಲ್ಲಿ ಬರೆಯಲು ಕಬ್ಬಿಣದ ಕಂಟೀಬೇಕು. ಮಸಿಯಲ್ಲಿ ಬರೆಯಲು ಕಬ್ಬಿಣದ ಮೊನೆ (ನಿಬ್) ಬೇಕು. ವ್ಯಾಪಾರಕ್ಕೆ ತಕ್ಕಡಿ ನಿರ್ಮಾಣಕ್ಕೆ ಕಬ್ಬಿಣದೇಕು. ಹೀಗೆ ಕಬ್ಬಿಣದಿಂದಲೆ ನಾಗರಿಕತೆಯ ಆರಂಭ ಮತ್ತು ಬೆಳವಣಿಗೆ ಎಂದು ಧೈರ್ಯದಿಂದ ಹೇಳಬಹುದು. ಕರ್ಮಾರ ಎಂಬ ಪದವು ವೇದ ಕಾಲದಲ್ಲಿ ಲೋಕ ಶಿಲ್ಪಿಗಳಾಗಿದ್ದು ಮತ್ತೆ ಪುರಾಣದಲ್ಲಿ ಕಾತ್ಯಾಯನ ಸೂತ್ರಗಳಲ್ಲಿ ಕರ್ಮಾರರು ಎಂದು ಉಲ್ಲೇಖಿತವಾಗಿದೆ. ಕಬ್ಬಿಣದ ಕೆಲಸಗಾರರು ಉಳಿದವರಿಗಿಂತ ಹೆಚ್ಚು ಶ್ರಮಜೀವಿಗಳಾದ ಕಾರಣ ಇವರನ್ನು ಕರ್ಮಕಾರರು ಎಂದು ಕರೆದಿರಬಹುದು.

ಪಾಂಚಾಲರು ಎಂಬುದು ಐದು ಸಮುದಾಯಗಳನ್ನು ಒಟ್ಟಿಗೆ ಸೇರಿಸಿ ಹೇಳುವ ಪದವಾಗಿದೆ. ಸಂಸ್ಕೃತದ ಎಂಬ ವೃತ್ತಿ ಸೂಚಕ ಪದಗಳು, ಮೆಲ್ನೋಟಕ್ಕೆ ಜಾತಿ ಸೂಚಿಕಗಳಂತೆ ಭಾಸವಾಗುತ್ತದೆ. ಆದರೆ ಈ ಐದಗಳ ಒದುಕಿನ ವಿವರ ವಿನ್ಯಾಸಗಳನ್ನು ಹಾಗೂ ಪರಂಪರೆಯನ್ನು ಅಧ್ಯಯನ ಮಾಡಿದರೆ ಈ ಐದು ವೃತ್ತಿಗಳು

ಒಂದೇ ಜಾತಿಯ ಜನ ನಿರ್ವಹಿಸುತ್ತಾರೆ ಎಂಬುದು ಗೋಚರಿಸುತ್ತದೆ. ಇವರಲ್ಲಿರುವ ಗೋತ್ರಗಳು ಈ ಕೆಳಗಿನಂತಿವೆ.

	ದೈವ	ಮೂಲ ಪುರುಷ	ಗೋತ್ರ	ವೃತ್ತಿ
1.	ರುದ್ರ	ಮನು	ಸಾನಗ	ಲೋಹ
2.	ವಿಷ್ಣು	ಮಯ	ಸನಾತನ	ಕಾಷ್ಠ
3.	ಬ್ರಹ್ಮ	ತ್ವಷ್ಟ	ಅಹಭೂನ	ಕಾಂಸ್ಯ, ಕಂಚು
4.	ಇಂದ್ರ	ಶಿಲ್ಪಿ	ಪ್ರತ್ನ	ಶಿಲಾ
5.	ಸೂರ್ಯ	ದೈವಜ್ಞ	ಸುಪರ್ಣಾಶ್ವ	ಸ್ವರ್ಣ

ಭಗವಾನ್ ವಿಶ್ವಕರ್ಮನ ಪ್ರಥಮ ಮುಖವಾದ ಸದ್ಯೋಜಾತ ಮುಖದಿಂದ ಉತ್ಪನ್ನವಾದ ಮನುವು ಶುಭಕರ್ಮಗಳ ಕಂಕಣದಿಂದ ಬ್ರಹ್ಮರ್ಷಿ ಎಂದು ಕರೆಯಲ್ಪಟ್ಟನು. ಈತನ ಗೋತ್ರವು ಸಾನಗ. ಉಪಗೋತ್ರಗಳು ಇಪ್ಪತ್ತೈದು. ಈತನು ತಿಳಿದ ಪ್ರಮುಖ ವೇದ ಋಗ್ವೇದ. ಉಪವೇದ ಆಯುರ್ವೇದ ಈತನು ಅಕ್ಷಕಾಯನ ಸೂತ್ರವನ್ನು ಅಧ್ಯಯನ ಮಾಡಿ ಲೋಹ ಸಂಹಿತೆಯಲ್ಲಿ ಪ್ರವೀಣ ನೆನಿಸಿ ಕಬ್ಬಣ ಸಂಬಂಧಿ ಶಿಲ್ಪದಲ್ಲಿ ಪರಿಣಿತನಾದನು. ತ್ರಿಕೋನ ಕುಂಡದಲ್ಲಿ ಯಜ್ಞ ಮಾಡುತ್ತಾ ರುದ್ರನ ಉಪಾಸಕನಾಗಿ ಅಖಿಲ ಬ್ರಹ್ಮಾಂಡದ ನಿವಾಸಿಗಳಿಗೆ ಲೋಹ ಶಿಲ್ಪಗಳ ರಚನೆ ಮಾಡಿ ಸಮಾಜಕ್ಕೆ ಉಪಕಾರಿಯಾಗಿರುತ್ತಾನೆ.

ವಿಶ್ವಕರ್ಮನ ದ್ವಿತೀಯ ಮುಖವಾದ ವಾಮದೇವ ಮುಖದಿಂದ ಬ್ರಹ್ಮರ್ಷಿ ಮಯನು ಉತ್ಪನ್ನನಾದನು. ಈತನ ಗೋತ್ರ ಸನಾತನ. ಉಪಗೋತ್ರಗಳು ಇಪ್ಪತ್ತೈದು. ಈತನು ತಿಳಿದ ಪ್ರಮುಖ ವೇದ ಯಜುರ್ವೇದ, ಉಪವೇದ ಧನುರ್ವೇದ. ಈತನು ಅಪಸ್ತಂಭ ಸೂತ್ರ ಸಂಹಿತೆಯನ್ನು ಅಧ್ಯಯನ ಮಾಡಿ ಚೌಕಾಕಾರದ ಕುಂಡದಲ್ಲಿ ಯಜ್ಞ ಮಾಡುತ್ತಾ ಭಗವಾನ್ ವಿಷ್ಣುವಿನ ಉಪಾಸಕನಾಗಿ ಕಾಷ್ಠಶಿಲ್ಪದಲ್ಲಿ ವಿಚಾರಂಗತನಾಗಿದ್ದನು.

ವಿಶ್ವಕರ್ಮನ ತೃತೀಯ ಅಘೋರ ಮುಖದಿಂದ ಬ್ರಹ್ಮರ್ಷಿ ತ್ವಷ್ಟ ಉತ್ಪನ್ನನಾದನು. ಈತನ ಗೋತ್ರ ಅಹಭೂನ, ಉಪಗೋತ್ರಗಳು ಇಪ್ಪತ್ತೈದು. ಈತನು ತಿಳಿದ ಪ್ರಮುಖ ವೇದ ಸಾಮವೇದ, ಉಪವೇದ ಗಾಂಧರ್ವವೇದ, ಪ್ರಶ್ನಾಯನ ಸೂತ್ರವನ್ನು ಅಧ್ಯಯನ ಮಾಡಿ ತಾಮ್ರ ಸಂಹಿತೆಯಲ್ಲಿ ಪರಿಣಿತನಾಗಿದ್ದನು. ಈತನು ಗೋಲಾಕಾರದ ಕುಂಡದಲ್ಲಿ ಯಜ್ಞ ಮಾಡುತ್ತಾ ಬ್ರಹ್ಮದೇವನ ಉಪಾಸಕನಾಗಿ ತಾಮ್ರಕ್ಕೆ ಸಂಬಂಧಿಸಿದ ವಸ್ತುಗಳ ನಿರ್ವಾಣದಲ್ಲಿ ಅದ್ವಿತೀಯ ಪರಿಣಿತನಾಗಿದ್ದನು.

ವಿಶ್ವಕರ್ಮನ ಚತುರ್ಥ ತತ್ಪುರುಷ ಮುಖದಿಂದ ಬ್ರಹ್ಮರ್ಷಿ ಶಿಲ್ಪಿಯು ಉತ್ಪನ್ನನಾದನು. ಈತನ ಗೋತ್ರ ಪ್ರತ್ನ, ಉಪಗೋತ್ರಗಳು 25 ಈತನು ತಿಳಿದ ಪ್ರಮುಖವೇದ ಅಥರ್ವಣ ವೇದ, ಉಪವೇದ ಶಿಲ್ಪವೇದ, ಭೋಧಾಯನ ಸೂತ್ರವನ್ನು ಅಧ್ಯಯನ ಮಾಡಿ ಶಿಲ್ಪ ಸಂಹಿತೆಯಲ್ಲಿ ಪರಿಣಿತನಾದನು. ಷಟ್ಕೋಣ ಕುಂಡದಲ್ಲಿ ಯಜ್ಞ ಮಾಡುತ್ತಾ ಇಂದ್ರನ ಉಪಾಸಕನಾಗಿ ಶಿಲಾ ಶಿಲ್ಪದಲ್ಲಿ ಅದ್ಭುತ ಪ್ರಗತಿ ಸಾಧಿಸಿದನು. ಈತನ ವಂಶಜರು ಅನೇಕ ಪ್ರಕಾರದ ಶಿಲ್ಪಗಳಲ್ಲಿ ಪರಿಣಿತಿ ಹೊಂದಿದ್ದರಲ್ಲದೆ ದೇವಾಲಯ, ವಿಶಾಲಭವನ, ಜಲಾಶಯಗಳ ನಿರ್ವಾಣದಲ್ಲಿ ಪ್ರವೀಣರಾಗಿದ್ದರು.

ವಿಶ್ವಕರ್ಮನ ಪಂಚಮ ಈಶಾನ ಮುಖದಿಂದ ಬ್ರಹ್ಮರ್ಷಿ ದೈವಜ್ಞನು ಉತ್ಪನ್ನನಾದನು. ಈತನ ಗೋತ್ರ ಸುಪರ್ಣಶ್ವ, ಉಪಗೋತ್ರಗಳು 25 ಈತನು ತಿಳಿದ ವೇದ ಸೂಕ್ಷವೇದ (ಪ್ರಣವ ವೇದ) ಉಪವೇದಗಳಾಗಿ ಇತಿಹಾಸ, ಮರಣ ಮೊದಲಾದವುಗಳನ್ನು ಅಭ್ಯಾಸ ಮಾಡಿದನು. ಖಾತ್ಯಾಯನ ಸೂತ್ರವನ್ನು ಅಧ್ಯಯನ ಮಾಡಿ ಸ್ವರ್ಣ ಶಿಲ್ಪದಲ್ಲಿ ಕುಶಲನಾಗಿದ್ದನು. ಅಷ್ಟ ಕೋಣ ಕುಂಡದಲ್ಲಿ ಯಜ್ಞ ಮಾಡುತ್ತಾ ಸೂರ್ಯ ಭಗವಾನ್‌ನನ್ನು ಆರಾಧಿಸುತ್ತಾ ಬಂಗಾರದ ವಸ್ತುಗಳ ನಿರ್ವಾಣದಲ್ಲಿ ಪರಿಣಿತಿಯನ್ನು ಹೊಂದಿದ್ದಾನೆ. ಈ ಪ್ರಕಾರ ಐದು ಬ್ರಹ್ಮರ್ಷಿಗಳು ಕಬ್ಬಣ, ಮರ, ತಾಮ್ರ, ಶಿಲೆ, ಬಂಗಾರ ಇವುಗಳಲ್ಲಿ ಲೌಕಿಕ ವಸ್ತುಗಳನ್ನು ನಿರ್ಮಿಸಿ ಲೋಕ ವಿಖ್ಯಾತರಾದರು. ಇವರು ತಯಾರಿಸಿದ ವಸ್ತುಗಳು ಪ್ರಾಣಿ ಮತ್ತು ಮನುಷ್ಯರೆಲ್ಲರಿಗೂ ಉಪಯುಕ್ತವಾದವುಗಳು ಇವುಗಳ ಸಹಾಯದಿಂದ ಯಜ್ಞ, ಪೂಜೆ, ಉಪಾಸನೆ ಮಾಡುತ್ತಾ ಧರ್ಮ, ಅರ್ಥ, ಕಾಮ, ಮೋಕ್ಷಗಳೆಂಬ ನಾಲ್ಕು ಫಲಗಳನ್ನು ಪಡೆಯುವಲ್ಲಿ ಸಕಲರೂ ಸಫಲರಾಗುತ್ತಿದ್ದರು.

ಕರ್ಮಾರರ ಕುಲುಮೆಗಳ ರಚನೆ

ಎಡ್ಗರ್ ಥರ್ಸ್ಟನ್‌ರವರ ಪ್ರಕಾರ ಕರ್ಮಾರರು ಪ್ರಾಚೀನ ಕಾಲದಿಂದಲೂ ಕಬ್ಬಣ ತಯಾರಿಸುವ ವೃತ್ತಿಯಲ್ಲಿ ತೊಡಗಿಕೊಂಡವರು. ಇವರ ಕಾರ್ಯಾಗಾರ ಕುಲುಮೆಗಳು ಸಾಮಾನ್ಯವಾಗಿ ಉತ್ತರ ದಿಕ್ಕಿನ ಕಡೆಗೆ ಮುಖ ಮಾಡಿಕೊಂಡಿರುತ್ತಿದ್ದುದನ್ನು ಕಾಣಬಹುದು ಎಂದಿದ್ದಾರೆ.

1. ಅಡಿಗಲ್ಲು
2. ತಿದಿ
3. ಕುಲುಮೆ
4. ಕೆಲಸ ಮಾಡುವ ಕರ್ಮಾರ ಕುಳಿತುಕೊಳ್ಳುವ ಕಲ್ಲು
5. ನೀರಿನ ಬಾವಿ
6. ತಿದಿ ಎಳೆಯುವವನು
7. ಕಬ್ಬಣ ಬಡಿಯುವವನು
8. ದೇವರ ಫೋಟೋಗಳು, ಹೆಣ್ಣಾಗಿ ಕಾಳಿಕಾಂಬ ಮತ್ತು ವಿಶ್ವಕರ್ಮರ ಫೋಟೋಗಳು
9. ಅಗ್ನಿಷ್ಟಿಕೆ

ಕರ್ಮಾರರು ಪ್ರಾಚೀನ ಕಾಲದಿಂದಲೂ ತಿದಿಯನ್ನು ಉಪಯೋಗಿಸುತ್ತಿದ್ದರು. ಆದರೆ ಅದರ ಸ್ಥಾನದಲ್ಲಿ ಇಂದು ಆಧುನಿಕವಾದ ಬ್ಲೋವರ್‌ಗಳು ಬಂದಿವೆ. ಕೆಲವು ಕುಲುಮೆಗಳನ್ನು ನಾಲ್ಕು ಕಂಬ ಹಾಕಿ ಅದರ ಮೇಲೆ ತೆಂಗಿನ ಗರಿಗಳನ್ನು ಹಾಕಿ ಕುಲುಮೆ ತಯಾರಿಸುತ್ತಿದ್ದರು. ಆದರೆ ಇತ್ತೀಚೆಗೆ ಹುಲ್ಲು ಅಥವಾ ಹೆಂಚನ್ನು ಹೊದಿಸುತ್ತಾರೆ.

ಆಹಾರ ಪದ್ಧತಿ

ಇವರ ಆಹಾರ ಪದ್ಧತಿ ಒಂದು ಕಾಲಕ್ಕೆ ವಿಶಿಷ್ಟವಾಗಿತ್ತು. ನೈಸರ್ಗಿಕವಾದ ಹಾಗೂ ಹೆಚ್ಚು ಪ್ರೋಟೀನ್ ಕೆಲೋರಿಸ್ ಇರುವ ಗೆಡ್ಡೆ ಗೆಣಸುಗಳನ್ನು ಬಳಸುತ್ತಿದ್ದರು. ಇವುಗಳು ದೇಹಕ್ಕೆ ಹೆಚ್ಚು ಶಕ್ತಿಯನ್ನು ಕೊಡುತ್ತಿದ್ದವು. ಶ್ರಮಜೀವಿಗಳಾದ ಇವರು ದಿನಕ್ಕೆ ನಾಲ್ಕು ಬಾರಿ ಆಹಾರ ಸೇವಿಸುತ್ತಾರೆ. ಇತ್ತೀಚಿಗೆ ಇವರಲ್ಲಿನ ಶಾರೀರಿಕ ಶಕ್ತಿ ಕುಂದುತ್ತಾ ಹಾಗೂ ರೋಗರುಜಿನಗಳ ದಾಸರಾಗುತ್ತಿದ್ದಾರೆ.

ಕರಾವಳಿ ಪ್ರದೇಶದ ಕರ್ಮಾರರಿಗೆ ಕುಚಲಕ್ಕಿ ಪ್ರಮುಖ ಆಹಾರವಾಗಿದೆ. ಇವರು ಅಕ್ಕಿಯಿಂದಲೇ ಅನೇಕ ಪದಾರ್ಥಗಳನ್ನು ನಿರ್ವಹಣೆಸಿಕೊಳ್ಳುತ್ತಾರೆ. ಅದರಲ್ಲಿ ಅಕ್ಕಿ ಗಂಜಿ, ನೀರ ಗಂಜಿ, ಅನ್ನ, ಅಕ್ಕಿರೊಟ್ಟಿ, ದೋಸೆ, ಇಡ್ಲಿ, ಅಕ್ಕಿ ಕಡುಬು ಮುಂತಾದವುಗಳನ್ನು ತಯಾರಿಸುತ್ತಾರೆ. ಹಬ್ಬ ಹುಣ್ಣಿಮೆ, ಜಾತ್ರೆಗಳಲ್ಲಿ ಸಿಹಿ ಕಡುಬು ಮಾಡುತ್ತಾರೆ. ತರಕಾರಿಗಳನ್ನೆಲ್ಲಾ ಸೇರಿಸಿ ಸಾಂಬಾರು ತಯಾರಿಸುತ್ತಾರೆ. ಕೊಬ್ಬರಿ ಹಾಗೂ ಕೊಬ್ಬರಿ ಎಣ್ಣೆಯನ್ನು ಹೆಚ್ಚಾಗಿ ಬಳಸುತ್ತಾರೆ.

ನವರಾತ್ರಿ, ದೀಪಾವಳಿ, ಯುಗಾದಿ ಮುಂತಾದ ಸಂದರ್ಭಗಳಲ್ಲಿ

ವಿಶೇಷವಾಗಿ ಸಿಹಿ ಅಡುಗೆ ಮಾಡುತ್ತಾರೆ. ಋತುಮಾನಕ್ಕೆ ತಕ್ಕಂತೆ ಆಹಾರ ಸ್ಟಕರಿಸುವ ಕ್ರಮ ಒಂದು ಕಾಲಕ್ಕಿತ್ತು. ಬೇಸಿಗೆಯಲ್ಲಿ ಲಿಂಬೆಹಣ್ಣಿನ ಪಾನಕ, ಬೇಸಿಂಡೆ ಪಾನಕ, ಕಲ್ಲಂಗಡಿ ಜ್ಯೂಸ್, ಮಜ್ಜಿಗೆ ಮುಂತಾದವುಗಳನ್ನು ಹೆಚ್ಚಾಗಿ ಬಳಸುತ್ತಾರೆ.

ಕಮ್ಮಾರರು ತಯಾರಿಸುತ್ತಿದ್ದ ವಸ್ತುಗಳು

ಆಯುಧಗಳು:

ಮಾನವ ಮೊದಲಿಗೆ ಕಬ್ಬಿಣ ಬಳಸಿಕೊಂಡದ್ದು ಆಯುಧ ನಿರ್ಮಾಣಕ್ಕಾಗಿ. ಆತ್ಮರಕ್ಷಣೆ ಮತ್ತು ಆಹಾರ ಸಂಪಾದನೆಗಾಗಿ, ಮಾನವನಿಗೆ ಆಯುಧಗಳು ಅನಿವಾರ್ಯವಾಗಿದ್ದುವು. ಕನ್ನಡ ಸಾಹಿತ್ಯದಲ್ಲಿ ಹಲವಾರು ವಿವಿಧ ಆಯುಧಗಳನ್ನು ಹೆಸರಿಸಿದ್ದಾರೆ. ಚಕ್ರ ಬೈಂಡಿವಾಳ್, ಬ್ರುಕುಂಡಿ, ದೃಘನ, ದಶಕಂಟಕ, ಮುಸಲ, ಮೌಷ್ಟಿಕ, ಮಯಿೂಖ ಲಗಂಡ, ಲವಿತ್ರ, ಗರಿಘ, ಪ್ರಾಸಪಾಶ, ಶಕ್ತಿ, ಶತಘ್ನಿ, ಸೀರ, ಸ್ಫೂನ, ಕೋಮರ, ಗದೆ, ಗೋಪೀರ್ಷ, ಅಮುಕ್ತ, ವಜ್ರ, ಅಸ್ತರ, ಅತಿಧೇನುಕ, ಪಟ್ಟಸ, ಮುದ್ಗರ, ಪಿಣಾಕ, ಕುಂತ, ಕಾಳರಾತ್ರಿ, ಯಾಪನ, ನಳಿಕಾ, ಇವು ಪ್ರಾಚೀನ ಯುದ್ಧಗಳಲ್ಲಿ ಬಳಸುತ್ತಿದ್ದರು.

ಆನೆಗಳನ್ನು ಹೆದರಿಸುವ 'ಹಸ್ತಯಂತ್ರ' ಕತ್ತು ಸೈನ್ಯವನ್ನು ಸೂಚಿಸುವ 'ಸಂಘಟ್ಟ' ಎಂಬ ಅಗ್ನಿಯಂತ್ರ, ಬೆಂಕಿ ಉರಿಸುವ ಪರ್ಜನ್ಯಕ ಎಂಬ ಉದಕಯಂತ್ರ, ಗೋಡೆ ಉರುಳಿಸುವ "ಉದ್ಘಾತಿಮಾ" ಕಲ್ಲು ಎಸೆಯುವ 'ಅಸ್ಫೋಟಿಮ', ನಡೆಯುವವರನ್ನು ಎಡವಿಸುವ 'ವಿಶ್ವಾಸಘಾತಿ' ಹೀಗೆ ಹಲವು ಯಂತ್ರಗಳ ಹಿಂದೆ ಯುದ್ಧದಲ್ಲಿ ಬಳಲ್ಪಡುತ್ತಿದ್ದವು.

ಆಧುನಿಕ ಯುದ್ಧ ಸಾಮಗ್ರಿಗಳ ತಯಾರಿಕೆಗೆ ಕಬ್ಬಿಣ ಬೇಕೆ ಬೇಕು. ಕೊಡಲಿ, ತುಪಾಕಿ, ಪಿರಂಗಿ, ರೈಫಲ್, ಪಿಸ್ತೂಲ್, ಟ್ಯಾಂಕರ್ ಮುಂತಾದವುಗಳು. ಒಂದು ಕಾಲಕ್ಕೆ ಹಳ್ಳಿಯ ಕಮ್ಮಾರರು ಕೊಡಲಿ ಮತ್ತು ಪಿಸ್ತೂಲ್‌ಗಳ ತಯಾರಿಕೆಯಲ್ಲಿ ಪರಿಣಿತರಾಗಿದ್ದರು. ಘಟಿಯಂತ್ರ, ತೈಲಯಂತ್ರ, ಇಕ್ಷುಯಂತ್ರ, ತುಲಾಯಂತ್ರ ಇವೆಲ್ಲಾ ಕಮ್ಮಾರರ ಸಂಶೋಧನೆಗಳು ಕತ್ತಿ ಎಲ್ಲಾ ಕಾರ್ಖಿಗಳಿಗೂ ಅಗತ್ಯ ಇವುಗಳಲ್ಲಿ ಬಹಳಷ್ಟು ವಿಧಗಳಿವೆ. ಹುಲುನಾಡಿನ ಕಮ್ಮಾರರು ಅಮೇ ಕತ್ತಿ, ಇಡೆಗತ್ತಿ, ಉಳಿಕತ್ತಿ, ಕರ್ಗತ್ತಿ, ಒಡ್ಡತ್ತಿ, ಕಡ್ಡತ್ತಿ, ಕೆಯಿಕತ್ತಿ, ಗೆಜ್ಜೆತ್ತಿ, ತರ್ಕತ್ತಿ, ಪರ್ವತ್ತಿ, ನಾರತ್ತಿ, ಪಂಕಿದಕತ್ತಿ, ಬಾಯ್‌ಕತ್ತಿ, ಬಾಳ್ಳತ್ತಿ, ಬಿಟ್ಟುಗತ್ತಿ, ಬಿಸತ್ತಿ, ಮುಟ್ಟತ್ತಿ, ಮುಳ್ಳುಕತ್ತಿ, ಮೇಸೆಕತ್ತಿ, ದಬ್ಬಾಕತ್ತಿ, ಇನ್ನೂ ಮುಂತಾದವುಗಳು.

ಯುದ್ಧದಲ್ಲಿ ಬಳಸುವ ತಳವಾರ್‌ಕತ್ತಿ, ಬಾಳ್‌ಕತ್ತಿ, ಬಂದ್ರಾಯುಧ, ಮಚ್ಚು, ಕೊಡಲಿ ಬಾಣ, ಶಲ್ಯ, ಶೂಲ, ತ್ರಿಶೂಲ, ಭರ್ಜಿಗಳ ತಯಾರಿಕೆಯಲ್ಲಿ ಇವರು ಸಿದ್ಧಹಸ್ತರು.

ವೃವಸಾಯದ ಉಪಕರಣಗಳು

ವೃವಸಾಯಿಕೆ ಬೇಕಾದಂತಹ ಉಪಕರಣಗಳನ್ನು ಕಮ್ಮಾರರು ತಯಾರಿಸುತ್ತಿದ್ದರು. ಇದರಲ್ಲಿ ನೇಗಿಲು ಅತ್ಯಂತ ಪ್ರಮುಖವಾದದ್ದು. ರಾಮಾಯಣ ಮತ್ತು ಮಹಾಭಾರತದಲ್ಲಿ ನೇಗಿಲ ಉಪಯೋಗದ ಬಗ್ಗೆ ಉಲ್ಲೇಖಗಳಿವೆ. ಬಲರಾಮನಿಗೆ ನೇಗಿಲೆ ಪ್ರಮುಖ ಆಯುಧ ನೇಗಿಲಗಳಲ್ಲಿ ಸಣ್ಣ ನೇಗಿಲು, ದೊಡ್ಡ ನೇಗಿಲು, ಎಡೆ ನೇಗಿಲು, ಬರಡೀ ನೇಗಿಲು, ಕಬ್ಬಿಣದ ನೇಗಿಲು ಹೀಗೆ ಹಲವಾರು. ನೇಗಿಲಿನಲ್ಲಿ ಮಣ್ಣನ್ನು ಆಳಕ್ಕೆ ಸೀಳುವ ಕುಳ (ಪಕೋರು) ಇದನ್ನು ಕಬ್ಬಿಣದಿಂದ ಮಾಡುತ್ತಾರೆ.

ದಕ್ಷಿಣಕನ್ನಡದಲ್ಲಿ ಹುಲಗೆಯನ್ನು ಬಳಸುತ್ತಾರೆ. ಉತ್ತರ ಕರ್ನಾಟಕದಲ್ಲಿ ಇದನ್ನು ಗುಂಟೆ ಎನ್ನುತ್ತಾರೆ. ಬೀಜ ಬಿತ್ತಲು ಕೂರಿಗೆಯನ್ನು ಮಾಡುತ್ತಾರೆ. ಮಣ್ಣನ್ನು ಆಗೆಯಲು ಮತ್ತು ತುಂಬುವ ಗುದ್ದಲಿ ಉಪಯೋಗಿಸುತ್ತಾರೆ. ಎರಡೂ ಕಡೆ ಚೂಪಾದಂತಹ ಕೊಡಲಿ ಇದೆ. ಕುಡಗೋಲುಮು ಮಚ್ಚು, ಉಜ್ಜೀರಿ ಇನ್ನಿತರ ಸಾಧನಗಳು.

ಚಕ್ಕಡಿಗಳ ತಯಾರಿಕೆ

ಚಕ್ರದ ಸಂಶೋಧನೆಯಾದ ನಂತರ ವಾಹನಗಳ ತಯಾರಿ ನಡೆಯಿತು. ಚಕ್ರದ ನಿರ್ಮಾಣ ಮರಗೆಲಸದವರ ಸಾಧನೆಯಾದರೆ ಆ ಚಕ್ರದ ಸುತ್ತ ಕಬ್ಬಿಣದ ಪಟ್ಟಿಯನ್ನು ಹೊಂದಿಸಿ ಚಕ್ರ ಸವೆಯದಂತೆ ಮಾಡಿದ ಕುಶಲತೆ ಕಮ್ಮಾರರದ್ದು. ವಾಹನಗಳಲ್ಲಿ ಮೊದಲು ಕಂಡುಹಿಡಿದಿರುವುದು ಬಂಡಿ ಬಂಡಿಗೆ ಚಕ್ರ ಜೋಡಿಸಿದಾಗ ಚಕ್ರ ಉರುಳಿ ಹೋಗದಂತೆ ಕಬ್ಬಿಣದ ಕೀಲು (ಕಣಾಣಿ) ಬೇಕು. ಕಮ್ಮಾರರು ಪುರಾಣ ಕಾಲದಲ್ಲಿ ವಿಮಾನ ತಯಾರಿಕೆಯಲ್ಲಿಯೂ ಪರಿಣಿತರಿದ್ದಾರೆಂಬ ಉಲ್ಲೇಖ ಕೆಲ ಗ್ರಂಥಗಳಲ್ಲಿ ದೊರೆಯುತ್ತದೆ.

ವೃತ್ತಿ ಉಪಕರಣಗಳು:

ಮರಿ, ಕಂಬಿ, ಕಲ್ಲು, ಚೆಲ್ಲ, ಇತರೆ ವೃತ್ತಿಯವರಿಗೆ ಅವರವರ ವೃತ್ತಿಗೆ ಬೇಕಾದ ಉಪಕರಣಗಳ ತಯಾರಿಕೆಗೆ ಕಬ್ಬಿಣವೇ ಬೇಕು. ಅಡಿಗಲ್ಲು, ಸುತ್ತಿಗೆ, ಚಾಣ, ಕತ್ತರಿ, ಇಕ್ಕಳ, ದಂಡಾಸು, ಕಂಬುಜ್ಜಿ, ಕೆತ್ತನೆಯ ಸಾಮಗ್ರಿಗಳು, ಮರ ಕೆಲಸದವರು ಬಳಸುವ ಕೀಸುಳಿ, ಗಟ್ಟುಳಿ, ಕೋಲು ಉಳಿ, ತಿರುಳಿ, ಪಾಚಿ, ಕೊಡತಿ, ಬೈರಿಗೆ, ಗರಗಸ, ವೈಸ್, ಸ್ಕ್ರಾನರ್, ಕಟ್ಟಿಂಗ್, ಪ್ಲೇಯರ್ ಮುಂತಾದ ವಸ್ತುಗಳನ್ನು ಕಮ್ಮಾರರು ತಯಾರಿಸುತ್ತಿದ್ದರು.

ಗೃಹೋಪಯೋಗಿ ಉಪಕರಣಗಳು

ಮಂಚ, ಕುರ್ಚಿ ಮುಂತಾದ ಪೀಠೋಪಕರಣಗಳು. ಬೆಟ್ಟಿಗೆ ಕವಾಟುಗಳು, ತಿಜೋರಿಗಳು ಇಂದು ತಯಾರಿಲ್ಪಡುತ್ತವೆ. ಕಬ್ಬಿಣವನ್ನು ಪರಿಷ್ಕರಿಸಿ ಸ್ಟೀಲ್ ಕಂಡುಹಿಡಿಯಲ್ಪಟ್ಟ ಬಳಿಕ ಎಲ್ಲಾ ಅಡುಗೆ ಪಾತ್ರೆಗಳು ಸ್ಟೀಲ್‌ನಿಂದಲೇ ತಯಾರಾಗುತ್ತಿವೆ.

ಕಲಾತ್ಮಕ ಕೆಲಸಗಳಿಗೆ ಅವಕಾಶ ಕಡಿಮೆಯಾದರೂ ಅವಕಾಶ ಸಿಕ್ಕಿದಾಗಲೆಲ್ಲಾ ಕಮ್ಮಾರರು ತಮ್ಮ ಕೌಶಲ್ಯವನ್ನು ತೋರಿಸದೇ ಹಿಂದುಳಿಯಲಿಲ್ಲ. ಇವರ ಚಾಕಚಕ್ಯತೆಯ ಪ್ರದರ್ಶನ ಬೀಗಗಳ ತಯಾರಿಕೆಯಲ್ಲಿ ನಡೆಯಿತು. ನೂರಾರು ವಿಧಗಳು ಬೀಗಗಳನ್ನು ನಿರ್ಮಿಸಿಕೊಟ್ಟು ರಕ್ಷಣೆಯನ್ನು ಸುಲಭಗೊಳಿಸಿದರು. ಕತ್ತರಿ, ಅಡಕತ್ತರಿ, ಇಲಿ ಕತ್ತರಿ ಅವರ ಕುಶಲತೆಯನ್ನು ತೋರಿಸುವ ನಿದರ್ಶನಗಳಾಗಿವೆ.

ಉಪಸಂಹಾರ

ಆದಿ ಮಾನವ ಬೇಟೆಯಿಂದ ಆಹಾರ ಉತ್ಪಾದನೆಯನ್ನು ಕಂಡುಕೊಂಡ ಘಟ್ಟವನ್ನೇ ಅವನ ಬದುಕಿನ 'ಸುವರ್ಣಕಾಲ' ಎಂದು ಹೇಳಬೇಕಾಗುತ್ತದೆ. ಮೂಲ ಮಾನವ ಕೃಷಿ ಹಾಗೂ ಕಬ್ಬಿಣವನ್ನುಕಂಡುಕೊಂಡ ಮೇಲೆ ಅವನಿಗೆ ಹೊಸದೊಂದು ಜಗತ್ತು ಸೃಷ್ಟಿಸಲು ಅನುಕೂಲವಾಯಿತು. ಬೆಂಕಿಯ ಮೂಲಕ ಕಬ್ಬಿಣವ ಅದಿರನ್ನೂ ಸಂಸ್ಕರಿಸಿ ಅದರಿಂದ ಅನೇಕ ಆಯುಧಗಳನ್ನು ಹಾಗೂ ಕೃಷಿ ಉಪಕರಣಗಳನ್ನು ಸಿದ್ಧಪಡಿಸಿ ಕ್ರಿಯೆಯನ್ನೆ ಮಾಡಿದ. ಕಬ್ಬಿಣವನ್ನು ಸಂಸ್ಕರಿಸುವ ಕಲೆಯನ್ನು ಚೆನ್ನಾಗಿ ಕರಗತ ಮಾಡಿಕೊಂಡಿದ್ದ. ಇದನ್ನು ಸಂಸ್ಕರಿಸಲು ಬೆಂಕಿ ಅತಿ ಮುಖ್ಯ ಹೀಗಾಗಿ ಬೆಂಕಿಯನ್ನೆ ಅವನು ತನ್ನ ಆರಾಧ್ಯ ದೈವವಾಗಿ ಪೂಜಿಸಕೊಂಡಿದ್ದ. ಬೆಂಕಿಯ ಮೂಲಕ ಅಸ್ತಿತ್ವವನ್ನು ಕಂಡುಕೊಂಡ ಕಮ್ಮಾರರು ಬೆಂಕಿಯನ್ನು ಕಾಳಿ ಎಂದು ಪೂಜಿಸ ಕೊಡಗಿದರು. ಕಮ್ಮಾರರು ಬೆಂಕಿ, ಕಬ್ಬಿಣ ಮತ್ತು ಕುಲುಮೆಯನ್ನು ಕಾಳಿಯ

ಪ್ರತಿರೂಪ ಎಂದು ಸೂಚಿಸಿದರು.

ಬೇಟೆ ಸಂಸ್ಕೃತಿಯಿಂದ ಕೃಷಿ ಸಂಸ್ಕೃತಿಕ ಮನುಷ್ಯ ಆಹಾರ ಉತ್ಪಾದನೆಯನ್ನು ಕಂಡುಕೊಂಡ ಮೇಲೆ ಅದಿ ಮಾನವ ಕಬ್ಬಿಣವನ್ನು ಕಂಡುಕೊಂಡ. ಅದರಲ್ಲಿ ಹಲವಾರು ಕೃಷಿ ಉಪಕರಣಗಳನ್ನು ಮಾಡತೊಡಗಿದ. ಬೇಡಿಕೆ ಹೆಚ್ಚಾದಂತೆಲ್ಲಾ ಈ ವೃತ್ತಿಯನ್ನು ಕಯಾರಿಸಲಿಕ್ಕಿಂದೆ ಮೀಸಲಾದ ಕುಟುಂಬಗಳು ಬೆಳೆಯಿ ತೊಡಗಿದವು.

ಇತಿಹಾಸ ಕಾಲದಲ್ಲಿ ದೊಡ್ಡ ದೊಡ್ಡ ಸಾಮ್ರಾಜ್ಯಗಳು ತಲೆ ಎತ್ತಿ ಅವುಗಳ ಅಳಿವು – ಉಳಿವು ಯುದ್ಧವನ್ನು ಅವಲಂಬಿಸಿದರೆ ಯುದ್ಧದ ಸೋಲು ಗೆಲುವುಗಳು, ಶಸ್ತ್ರಾಸ್ತ್ರಗಳನ್ನು ಅವಲಂಬಿಸಿತು. ಆಗ ಕಮ್ಮಾರರ ಬೇಡಿಕೆ ಅಧಿಕವಾಯಿತು. ರಾಜ ಮಹಾರಾಜರ ಸಂಪರ್ಕ ದೊರೆತು ಕಮ್ಮಾರರ ಸ್ಥಿತಿಗತಿಗಳು ಉತ್ತಮಗೊಂಡವು.

ಭಾರತ ಸರ್ಕಾರವು 1956ರಲ್ಲಿ ಜಾಮರಾಜ ನಗರ ಜಿಲ್ಲೆಯ ಕೊಳ್ಳೇಗಾಲ ತಾಲೂಕು ಮಂಗಳೂರು ಮತ್ತು ಉಡುಪಿ ಅವಿಭಜಿತ ದಕ್ಷಿಣಕನ್ನಡ ಜಿಲ್ಲೆಯಲ್ಲಿ ವಾಸಿಸುತ್ತಿರುವ ಕಮ್ಮಾರ ಸಮುದಾಯವನ್ನು ಪರಿಶಿಷ್ಟ ಪಂಗಡದ ಪಟ್ಟಿಗೆ ಸೇರಿಸಿತು. ಆದರೆ ಈ ಸೌಲಭ್ಯವನ್ನು ಉಡುಪಿ ಮಂಗಳೂರಿನ ಕಮ್ಮಾರರು ಪಡೆಯಿಲೇ ಇಲ್ಲ ಎಂದು ಹೇಳಬಹುದು. ಕಾರಣ ಇವರು ವೈದಿಕ ಧರ್ಮವನ್ನು ಅವಲಂಬಿಸಿದರು. ಈ ಸೌಲಭ್ಯ ಪಡೆದುಕೊಂಡರೆ ಸಮಾಜದಲ್ಲಿ ನಮ್ಮ ಪ್ರತಿಷ್ಠೆ ಕಡಿಮೆಯಾಗುತ್ತದೆ ಎಂಬ ಭಾವನೆ ಅವರಲ್ಲಿ ಸೃಷ್ಟಿಯಾಗಿದೆ. ಕೊಳ್ಳೇಗಾಲದಲ್ಲಿರುವ ಕಮ್ಮಾರರು ಅಲ್ಪಸ್ವಲ್ಪ ಪರಿಶಿಷ್ಟ ಪಂಗಡದ ಸೌಲಭ್ಯ ಪಡೆದಿದ್ದಾರೆ. ಇತ್ತೀಚೆಗೆ ಕಮ್ಮಾರರು ತಮ್ಮ ಮಕ್ಕಳಿಗೆ ಶಿಕ್ಷಣ ಕೊಡಿಸಲು ಮುಂದಾಗುತ್ತಿದ್ದಾರೆ.

ಸಮುದಾಯದ ಮಾಹಿತಿದಾರರ ವಿವರಗಳು

ಕ್ರ.ಸಂ.	ಹೆಸರು	ವಯಸ್ಸು	ಊರು	ತಾಲೂಕು	ಜಿಲ್ಲೆ
1.	ಗೋಪಾಲ ಆಚಾರ್ಯ	45	ಕೊಳ್ಳೇಗಾಲ	ಕೊಳ್ಳೇಗಾಲ	ಜಾಮರಾಜ ನಗರ
2.	ಗಣಪಯ್ಯ ಆಚಾರ್ಯ	50	ಹಾಡಾಮರ	ಕೊಳ್ಳೇಗಾಲ	ಜಾಮರಾಜ ನಗರ
3.	ರಾಮಚಾರಿ	37	ಕಣ್ಣೂರು	ಕೊಳ್ಳೇಗಾಲ	ಜಾಮರಾಜ ನಗರ
4.	ಮಂಜೇಶ್ವರಾಚಾರಿ	57	ಹುಲಗೂರು	ಕೊಳ್ಳೇಗಾಲ	ಜಾಮರಾಜ ನಗರ
5.	ಸಿದ್ದಪ್ಪಾಚಾರಿ	33	ಕಾಮಗೆರೆ	ಕೊಳ್ಳೇಗಾಲ	ಜಾಮರಾಜ ನಗರ
6.	ಶ್ರೀನಿವಾಸ ಆಚಾರ್ಯ	47	ಹೆಬ್ರಿ	ಕಾರ್ಕಳ	ಉಡುಪಿ
7.	ಕೇಶವ ಆಚಾರ್ಯ	57	ಸಾಣೂರು	ಕಾರ್ಕಳ	ಉಡುಪಿ
8.	ಗೋಪಾಲ ಆಚಾರ್ಯ	42	ಹೆಬ್ರಿ	ಕಾರ್ಕಳ	ಉಡುಪಿ
9.	ಅಚ್ಯುತ ಆಚಾರ್ಯ	40	ಹೆಬ್ರಿ	ಕಾರ್ಕಳ	ಉಡುಪಿ
10.	ಆಚ್ಚಿ ಆಚಾರ್ಯ	57	ಸಾಣೂರು	ಕಾರ್ಕಳ	ಉಡುಪಿ
11.	ಆಚ್ಚಮ್ಮಯ್ಯ ಆಚಾರ್ಯ	65	ಹೆಮ್ಮುಂಜೆ	ಕುಂದಾಪುರ	ಉಡುಪಿ
12.	ಪ್ರಭಾಕರ ಆಚಾರ್ಯ	50	ಶಿರಿಯಂತೇಶ್ವರ	ಕುಂದಾಪುರ	ಉಡುಪಿ
13.	ಆನಂದ	50	ಕುಂದಾಪುರ	ಕುಂದಾಪುರ	ಉಡುಪಿ
14.	ಪುಟ್ಟಯ್ಯ ಆಚಾರ್ಯ	65	ಆಲೂರು	ಕುಂದಾಪುರ	ಉಡುಪಿ
15.	ಲಕ್ಷ್ಮೀ ನಾರಾಯಣ	56	ಗೋಪಾಡಿ	ಕುಂದಾಪುರ	ಉಡುಪಿ
16.	ಕರುಣಾಕರ	35	ಮುಂಡಾಜೆ	ಬೆಳ್ತಂಗಡಿ	ಮಂಗಳೂರು
17.	ದಿನೇಶ ಆಚಾರ್ಯ	23	ಉಜಿರೆ	ಬೆಳ್ತಂಗಡಿ	ಮಂಗಳೂರು
18.	ಕೃಷ್ಣಯ್ಯ ಆಚಾರ್ಯ	45	ಉಜಿರೆ	ಬೆಳ್ತಂಗಡಿ	ಮಂಗಳೂರು
19.	ಜನಾರ್ಧನ ಆಚಾರ್ಯ	45	ಕುಕ್ಕುಂದ	ಸುಳ್ಯ	ಮಂಗಳೂರು
20.	ಗಿರೀಶ ಆಚಾರ್ಯ	33	ಸುಬ್ರಹ್ಮಣ್ಯ	ಸುಳ್ಯ	ಮಂಗಳೂರು
21.	ರಾಮಣ್ಣ ಆಚಾರ್ಯ	56	ಕುಕ್ಕುಂದೂರು	ಸುಳ್ಯ	ಮಂಗಳೂರು
22.	ಲಿಂಗಪ್ಪ ಆಚಾರ್ಯ	65	ಕೊಕ್ಕಡ	ಪುತ್ತೂರು	ಮಂಗಳೂರು
23.	ಪುರುಷೋತ್ತಮ ಆಚಾರ್ಯ	49	ಕುಂಟ್ಯಾನ	ಪುತ್ತೂರು	ಮಂಗಳೂರು
24.	ಶ್ರೀಧರ	31	ಈಶ್ವರ ಮಂಗ	ಪುತ್ತೂರು	ಮಂಗಳೂರು
25.	ನಾರಾಯಣ ಆಚಾರ್ಯ	50	ಕೆಮ್ಮಿಂಜೆ	ಪುತ್ತೂರು	ಮಂಗಳೂರು
26.	ಸೀತಾರಾಮ ಆಚಾರ್ಯ	55	ಸೂರಿಂಜೆ	ಮಂಗಳೂರು	ಮಂಗಳೂರು
27.	ದೇವಿದಾಸ ಆಚಾರ್ಯ	45	ಕೊಕ್ಕಟ್ಟು	ಮಂಗಳೂರು	ಮಂಗಳೂರು
28.	ಸಂತೋಷ	25	ಪಡುಬಿದ್ರಿ	ಉಡುಪಿ	ಉಡುಪಿ
29.	ಮಂಜುನಾಥ ಆಚಾರ್ಯ	35	ಸೇನಾಪುರ	ಕುಂದಾಪುರ	ಉಡುಪಿ
30.	ಸೀತ ಆಚಾರ್ಯ	55	ಕಂಡ್ಲೂರು	ಕುಂದಾಪುರ	ಕುಂದಾಪುರ
31.	ವಿಠ್ಠಲ ಆಚಾರ್ಯ	52	ಸಂತೆಕಟ್ಟೆ	ಉಡುಪಿ	ಉಡುಪಿ
32.	ಕೃಷ್ಣಯ್ಯ ಆಚಾರ್ಯ	54	ಕರ್ಕೆ	ಉಡುಪಿ	ಉಡುಪಿ
33.	ಅಚ್ಯುತ ಆಚಾರ್ಯ	60	ನಲ್ಲೂರು	ಕಾರ್ಕಳ	ಉಡುಪಿ
34.	ಬಾಲೋದರ ಆಚಾರ್ಯ	55	ಮೀಯಾರು	ಕಾರ್ಕಳ	ಉಡುಪಿ
35.	ಗಣಪತಿ	38	ಬಜಗೋಳಿ	ಕಾರ್ಕಳ	ಉಡುಪಿ

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ISSN Print: 2394-7500
ISSN Online: 2394-5869
Impact Factor: 5.2
IJAR 2020; 6(1): 140-144
www.allresearchjournal.com
Received: 08-11-2019
Accepted: 12-12-2019

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Ethos of terrorism

Dr. Shubhakarachary

Abstract
The concept of terrorism is not a new phenomenon. The term originated In France and entered the English Language in 1795 after the region of terror. Its usage dependent on the domain concern of particular age. Even in the very first century there was 'Shinrikyo' a terrorist group based on religion operating in Palestine.
Terrorism means an armed violent movement directed against government as well as non – government involving premeditated attacks with arms, ammunition and explosive against civilians and resorting to tactics of intimidation such as hostage taking and hijacking but not seeking territorial control. They are encouraged by some countries, external powers to create instability in other countries. They indulge in looting, kidnapping, murder, shooting, arson and other unlawful activities by serve their purpose to creating instabilities or deterring the innocents.
In the recent decades life in the world has become insecure because of global terrorism. The law and order enforcing agencies throughout the world find themselves helpless in meeting the growing challenge posed by global terrorism. One is exposed to the danger of becoming a victim of the terrorist activity. Terrorist are sometimes compared to snakes, which may be hiding at the most unlikely places, waiting for the targets most vulnerable to their attacks.

Keywords: English language, ethos, terrorism

Introduction

International Terrorism

International terrorism happens to be one of the most major problems currently being faced by international community. It has been posing a serious threat to the security of all states, particularly to the international peace and security. Since the last decade of 20th century, it has been a keen objective of mankind to bring an end to terrorism which has been adversely affecting the resources and power of such states as a result of directly facing this menace. Its has several form (cross border terrorism, fundamentalist, terrorism, Jihadi terrorism, Narco terrorism, ethnic terrorism ISIS terror and some other forms). Terrorism has put strain immense on international relations. The term international terrorism is used to refer the about types.
Terrorism involves the use of rai force and violence in the form of killing of the people, particularly killing of officials and leaders of the states, abduction for ransoms, hijacking of aeroplanes, Narcotic smuggling and ethnic and selected killings. Terrorism has been the standard weapon of certain fundamentalists, extremists, militants, sub-nationalists, revolutionaries, Jihadis and revolutionary armed groups. These use terrorism for securing their narrow goals as well as projecting their Darochial interests. They believe that by creating fear sand terror, they can be successful in their missions.
International terrorism also uses similar methods for highlighting its professed views and demands as well putting pressure for securing the release of terrorists being detained by some states. In fact terrorism in its all dimensions has been spreading in a big way for the past few decades and it has been assuming more and more dangerous proportions. in sports is especially imports is especially imp if you participate regularly. The purpose of the study was to find out the parental attitude towards female participation in sports.

Definition

Terrorism can best be defined as the systematic use of terror in a variety of ways as a means of gaining the desired ends by force.

The learners English Dictionary
"Terrorism: The policy of use of violence and intimidation for political purpose".

The long man modern English Dictionary
"Terrorism: The policy of using acts inspiring terror as a method of ruling or conducting political opposition".

The United States Department of Defence
"Terrorism: The unlawful use or threatened use of force or violence against individuals or property to coerce or intimidate governments or societies, of to achieve political, regions or ideological objectives".

Classification of Terrorism

1. **Nationalistic Terrorism:** These share the goal of self – determination and reject the label of 'terrorist' such groups are found originally all over the world. Ex Irish Republican Army (IRA) the Palestine Liberation Organization (PLO) The Liberation Tigers of Tamil Eelam (LTTE).
2. **Ideological terrorism:** This category aims to transform the social, economic and political system of the country in the light of their particular ideology. Ex. Japanese Red Army, the Italian Red Brigade, the West German Red Army
3. **Single issue Terrorism:** This terrorism is committed by Individuals of small groups attempting to exert pressure on public authorities to concede some privilege to a large group with which the terrorists sympathies. This group may include animal's rights activists 'Right to liters' and Jewish Defence Leagne.
4. **State terrorism:** The government itself uses terrorism illegitimately, violence on its citizens. This represents a deliberate strategy of domination, claiming as it does its rights to deny rights to everyone. Some argue that more people have been killed by state terrorism than by any other type of human conflict.
5. **State Sponsored Terrorism:** This category may be called 'state sponsored terrorism' or proxy war or surrogate war. This is a special method of warfare in which a sovereign state uses surrogates to disrupt and create political stability. In another country this rarity of terrorism obtains in Kashmir the sponsor being Pakistan.

Causes for terrorism

1. **Political Cause:** The terrorism arises out of political grievances or political ambitions some people or groups of people having political grievance or ambitions which they cannot get redressed or infilled through normal constitutional processes resort to terrorism methods as a short cut to success. In Assam and Tripura the political factors that led to insurgency cum-terrorism included the failure of government to control large scale illegal immigration of Muslim from Bangladesh.
2. **Economic causes:** Some people take to the gun because they feel they have been economically exploited. Naxal terrorism largely belongs to this in some cases, failure to get justice through lawful means pushesh people in the lap of terrorist's outfits. Sometimes young person's become terrorists because they harbor a feeling of having been discriminated against and treated as second class citizens.
3. **Religions causes:** In Punjab some Sikh elements belonging to different organizations took to terrorism to demand the creation of an Independent state called Khalistan for the Sikhs. In Jammu and Kashmir Muslims belonging to different organizations took to terrorism for conflicting objectives, some terrorism groups such as Jammu and Kashmir liberation front want Independence for the state including all territory presently part of India, Pakistan and China.

The basic factor behind terrorism
After second world war ushered the international system a new structure, the international community realized that an urgent need to preserve, protect, defined and pursue international peace and security. The U.N was established to safeguard global peace and security for this purpose collective security system was incorporated in charter however securing of these objectives came under a big strain. When a cold war broke out between two super powers. The USA and (erstwhile) USSR and their respecting blocks, followed by intense rivalry, arms race, Nuclear Arms races alliance politics and un healthy competition in the international relations resulted in the international system becoming stressful, conflictual and confrontational in which local wars, proxy wars, ethnic wars, use of violence, coercion and force and terrorism came to be the order of a day. Arms supply, sales and deployment were practiced as a means for increasing one's Influence as well as disputes, local wars and war like tensions. In the process there developed a huge but illegal arms trade in International market which provided a good ground for emergence of international terrorism as these arms easily found their way in to the hands of terrorism.

Emergence of International terrorism
During 1960s some terrorist groups surfaced in Europe – Red Brigades in Italy and Red Army Faction in West Germany. Both these groups wanted destruction of the current political and economic system in their home countries for the development of new systems. In Northern Ireland, Roman Catholic and protestant Extremists started to use violence as a mean to secure their desired objectives.
1960 – 80 both the super power and their allies did not hesitate to use violent and terror tactics to achieve their respective goals. Their policies and actions gave a big boost to the production of weapons. The availability of more and more sophisticated arms and ammunition in the illegal market made it possible for several terrorist groups to acquire and use these for intensifying and spreading their terrorist activities. The arms race gave birth to the culture of violence with in every such society which was living with internal conflict and all states which were yet to develop politically stable systems of governance some states started using proxy wars by supporting, arming and funding the terrorist/military groups existing and operating in their rival states. All this made terrorism a hard and sad reality of international relations. During 1960-80 the terrorist groups became more trained and organized groups of terrorists.
In 1980s a new dimension came to be added to the International terrorism with the emergence of religions, fundamentalist and Jihadis. The Jihadis adopted the goal of liberating regions which were once ruled by Muslims as well as tried to project themselves as groups trying to secure the rights of Muslims living in various states. Particularly in

non-Muslim states. These Jihadis began describing themselves as warriors of Islam with their major establishment in Afghanistan, Sudan, Egypt, Pakistan and some countries of central Asia, West Asia and Middle East. The Afghanistan crisis provided a rich and fertile ground for the origin and growth of Islamic terrorism in International relations. The Afgan jihadis (Taliban) were initially organized, trained, armed, funded and supported by some states like the USA and Pakistan for fighting the 'evil forces' of the USSR. They later on found it convenient and necessary to work as the warriors of Islam and crusader for spreading Islam and protecting the rights of the Muslims. After the soviet pulled out, these groups were successful in controlling the state and society in Afghanistan. They enforced fundamentalist Islamic rules and got big support from Pakistan ISI and several Islamic organizations.

Afghan – Pakistan region came to be the central place for training of Jihadis. This area became the head quarter of At Qaeda and Taliban's. These emerged as highly motivated, organized, terrorist groups and began operating in different part of the world. India, unfortunately came to experience the activities of these terrorist groups in two of its states – Punjab and Jammu & Kashmir.

Terrorism in its Dirty from

During the 1990 the world witnessed, with grave concern the spread of terrorism to several parts of the world. Kyrgyzstan, Russia, China, India, Tajikistan, Uzbekistan, Saudi Arabia, Egypt, Algerian part of Africa and South East Asia and other regions of the world became victims of terrorism. Terrorism became transnational and got the name International terrorism. Afghanistan – Pakistan region, and some states of Africa emerged as major breeding grounds for well-armed, trained, and organized, terrorist groups capable of striking in different parts of the world.

In 1990s India began facing a grave menace of cross – border terrorism. Egypt, Algeria, Russia and several other states also began living with serious threats to their security from several terrorist groups, several others like Harkat – Ul – Ansav, Lashkar-e-Toiba and Taliban's of Afghanistan emerged as highly motivated and organized terrorist group in addition Osama-Bin-Laden emerged as the top patron of terrorism in the world. All over the world around fifty terrorist groups got engaged actively in using terrorism for achieving their political and religion directed goals.

In 2001, the world witnessed with disbelief and horror the terrorist attack on the twin towers of World Trade Centre USA, in December 2001 Indian parliament experienced the ugly face of terrorism, Chechnya, Algeria, India, USA, UK, Spain and several other states came to experience the terrorist violence in a big way. On 7 and 21 July 2005 International terrorism struck terror in London, In 2013 it again surfaced in Boston, USA the world now realizes the urgent need to fight the forces of terror.

Cross border terrorism

The terrorism being a transnational enterprise is much prone to the viral spreading of conflict and violence in to the other countries. Several areas, with otherwise no relation to the conflict get drawn in.

1. Relative to conventional war, this type of terrorism has bar great reach in terms of damage done.
2. Terrorist incident may lead to open conventional war with very little warning times. Particular terrorist incidents may be used by a state to launch what is infact a premeditated decision to go to war.
3. The blurring of lines between what is terrorism and what is war may also lead to rapid escalation in to war.
4. The closer co-operation apparent between terrorism and organized crime (e.g. Narco – terrorism) also points to a further erosion of authority of the state from within.
5. The just war panoply that under writes terrorism ensure that kind of action is set to continue and spread in to areas of low development and education.
6. Terrorist group can use the ideologies of right of determination, national liberation war, freedom movement, ethnic interest of minorities and human rights of particular ethnic groups. For justifying their resort to terrorism for securing their goals from a state, which is considered by them to be an enemy state.
7. A major power can use the opportunity provided by the operation of terrorist groups against states in the form of a war against a state as a cloak to intervene in this situation.

International terrorism knows no boundary. It can strike at Washington, New Delhi, Moscow, Madrid Bali, Cairo and London and in fact at any place. It is the enemy of all.

Efforts being made by the UN to meet the menace of International Terrorism

In 1970s that the international community became aware of the growing of international terrorism and consequently of the need to initiate steps for meeting this danger.

The UN adopted a text on international terrorism on 18th December 1972 in the 2114th plenary meeting of General Assembly. The text was prefaced as "measures to prevent International terrorism which endangers or takes innocent human lives or jeopardizes fundamental freedoms of the underlying causes of these forms of terrorism and acts of violence which cause some people to sacrifice human lives. Including their own in an attempt to effect radical changes". Faith in the Declaration of principles of International law concerning friendly relations and co-operation among states in accordance with the charter of the United Nations was reaffirmed and resort to violence and terrorism was condemned. The object of the text was to encourage co-operation among member states against terrorism. The resolution was adopted by the UN General Assembly with roll call vote 80 members voted in favor 37 against, 17 abstained from voting and 5 remained absent.

UN Ad-hoc committee for defining terrorism

The UN General Assembly decided to establish an Ad-hoc community for considering, created by the president of the UN Central Assembly in 1973. Despite failing to agree upon a definition of International Terrorism this committee was however successful in suggesting some measures for preventing terrorism. Its report formed an important document as bar as several countries tried to discuss various dimensions of international terrorism and find the ways and means for preventing it. The subcommittee created by this ad-ho committee for examining the definition, cause and prevention of terrorism. The NAM group defined international terrorism as acts of violence committed by a group of individuals which endanger human lives or Jeopardize Fundamental Freedom the effort of which are not confined to one state.

France defined international terrorism as heinous act of barbarianism committed in foreign territory.

In the last decade of 20th century, the world witnessed a big increase in the acts of international terrorism. Several parts of the world became infested with the activities of several organized international terrorist outfits, religions terrorism, Narco – terrorism, cross border terrorism came to be a big menace. It started posing a grave threat to international peace and security.

On 9th December 1999 the UN General Assembly adopted in its resolution. The international convention for suppression on its financing of terrorism. Its purpose was to prevent states from providing a direct or an indirect financial or other help to international terrorist and fits. Each state under took the obligation to refrain from providing assistance to terrorists' organization. It was agreed that each will ball and control terrorist organizations carrying activities from their territory / region.

International legislation against terrorism

1. Convention for the suppression of unlawful seizure of Aircraft, adopted at the Hague on December 1970.
2. Convention for the suppression of unlawful acts against the safety of civil Aviation, Adopted at Montreal on 23 Sept 1971.
3. Convention on prevention and punishment of crimes against Internally protected persons, including diplomatic Agents, adopted by the General Assembly of UN on 14th December 1973.
4. International Convention against the taking of Hostages adopted by the General Assembly of UN on 17th December 1979.
5. Convention on physical protection of Nuclear material, adopted at Vienna on 3rd March 1980.
6. Protocol for the suppression of unlawful Acts of violence at Airports serving international civil Aviation, supple monetary to the convention for the suppression of unlawful acts against the safety of civil aviation, done at Montreal on 24th February 1988.
7. Convention for the suppression of unlawful acts against the safety of maritime navigation done at Rome on 10 March 1988.
8. Protocol for suppression of unlawful acts against the safety of fixed platforms located on the continental shelf, adopted at Rome on 10 March 1998.
9. International convention for the suppression of Terrorism Bombings, adopted by the General Assembly of UN on 15th December 1997.

Terror attacks

On September 11, 2001 the ugly and very dangerous face of terrorism was seen when terrorist attacked against the twin towers of the world trade Centre New York and the Pentagon building in Washington which caused a heavy loss of life and property.

In India the terrorist struck first at Jammu Kashmir Assembly building on 1st October 2001 and then on 13th December 2001 against the Indian parliament.

On March 20, 2003 the US launched a new war against Iraq and described at as a coalition war against Terrorism and weapons of mass Destruction.

In 2004 Russia experienced two big and inhumane terrorist attacks which again brought in to focus the need for fighting international terrorism.

On 7th and 21th July 2005 International terrorism struck London when several bomb blasts were made in running trains and stations. This came in as a reminder and warning signal to the G-8 summit leaders who were meeting in Scotland on 7th July 2005.

May 2008 Terrorism serial bomb blasts in Jaipur Delhi as well as some other Indian cities again demonstrated the big danger being posed by terrorism.

The 26 November clearly showed that Pakistan was the CPI – Centre of International terrorism and most of the terrorism was flowing from Afghanistan – Pakistan area in to the other parts of the world.

The growth of International terrorism has become the hard and sad reality of contemporary times and has assumed very dangerous proportions as well as is posing a danger to International peace and security. The danger of International terrorism can be listed under as has been done by Tara Kartha (world focus, January 2000).

a. Terrorism being a transnational enterprise is much prone to spreading the bacillus of conflict and violence in to other countries.
b. Terrorism Incident may lead to open conventional war with a very little warning time. Particular terrorist incidents may be used by a state to launch what is in fact premeditated decision to go to war.
c. The blurring of lines between what is terrorism and what is war may also lead to rapid escalation in to war.
d. The closer co-operation apparent between terrorism and organized crime (e.g. Narco – Terrorism) also points to a further erosion of the authority of the state, with one using force to achieve its objectives and the other corrupting the state from within.
e. The just war panoply that under writes terrorism ensures that this kind of action in set to continue and spread in to areas of low development and education.
f. Terrorism group can use the ideologies of right to determine National liberation war, freedom movement, ethnic Interests of minorities and human rights of a particular ethnic group for justifying their resort to terrorism for securing their goals from a state. Which is considered by them to be an enemy of the state.
g. A major power can use the opportunity provided by the co-operation of terrorism group against state in the form of war against the state as a cloak to intervene in the situation, in the name of preserving peace, security and stability in the regions.

Today elimination of terrorism, particularly ISIS terrorism constitute the top item on the agenda of international relations, recently ISIS has suffered a defeat in Fallujah and it is expected that it will also face a defeat in other parts of Syria and Iraq. However there is every need to form a global coalition against terrorism. Which is the enemy of human kind.

Terrorism is the enemy of mankind and it needs total elimination. The international community must unite and act fast against this menace. An International convention against terrorism must be immediately adopted and operationalized for the purpose. However, at the same time, efforts must be made to guide all human beings, including the mis-directed, and misled young men and women related with terrorism towards the process of making a peaceful and prospers world – reinforcing terrorism cannot help any person or group, it can only harm and destroy its

protagonists, perpetrators, supporter & followers this lesson must be taught to the terrorists and their instigators helpers and for this purpose means and efforts must be undertaken.

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International Journal of Science and Research (IJSR)
ISSN: 2319-7064
ResearchGate Impact Factor (2018): 0.28 | SJIF (2018): 7.426

Insects Diversity of Kundapura Taluk, Udupi, Karnataka, India

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Abstract: *We quantified diversity of insects at Kundapura from February 2017 to March 2018. Field observations were made once in ten days for a year. Identified the species based on their colour of wings, markings, body shape, habit, wing shape, and structure of legs. During one year survey at three different sites such as cropland, plantation and forest,we recorded 69 species of 23 families and 8 orders. In three study areas, higher species richness was recorded at plantation with more number of species in order Lepidoptera indicating availability and access to food plants. In Cropland contains Order Lepidoptera only. The present study reveals that the plantation provides suitable environmental conditions for insects.*

Keywords: Lepidoptera, Cropland, Plantation, Forest, Insects

1. Introduction

Insects are the world's most diverse group of animals on Earth, in terms of both taxonomic diversity and ecological function. Insects represent the vast majority of species in terrestrial and freshwater ecosystem. They have adopted for almost every conceivable type of environment from the equator to the arctic and from sea level to the snowfield of highest mountains, on land, in air and water and almost everywhere [14].

Insects diversity accounts for a large proportion of all biodiversity on the planet- over half of the estimated 1.5 million organism species are classified as insects [15]. The great number of insect species and individuals were created by a number of factors including their long geological history, the capability of flight, their small size that allows survival in many various habitats, their ability to store sperm for delayed fertilization, and their general adaptive abilities to the environment. Insects have remarkable fertility and reproductive abilities, which have usually vast numbers of individuals in nature. The class insect will constitute the dominant group of animal kingdom representing 80-92% of the entire animal kingdom. Insects play an important role in terrestrial ecosystems as herbivores, pollinators, decomposers, predators and parasites [22].

The presence of insects at a particular habitat depends on a wide range of factors, the availability of food and climatic conditions suitable for egg laying and suitable flowers for feeding of adults govern the distribution of insects [2].Animals particularly insects are considered to pollinate nearly 70% of trees in lowland tropical rain forest [5,10].
In India nearly 59,353 species of insects belonging to 619 families constituting nearly 6.83% of the world insect fauna have been reported. Butterflies are one of the most important assemblages of insects that act as biodiversity indicators as well as nature's gardeners. Owing to habitat destruction for developmental activities in urban environment and unscientific management of natural resources, much of our native butterflies are fast disappearing and at present, their survival is under threat [1].

2. Materials and Methods

Study area: To accomplish the present study following three study sites were selected based upon the vegetation patternin and around Kundapura.
Site 1: Mullikatte
Site 2: Hosadu
Site 3: Movadi

Figure 1: Geographical location of study area

Table 1: Study sites

Study sites	Latitude	Longitude
Site-1. Mullikatte	13°41'21"N	74°40'18"E
Site-2.Hosadu	13°41'30"N	74°40'31"E
Site-3. Movadi	13°41'55"N	74°38'14"E

Site1: Mullikatteis a village located a distance of 10 kms from Kundapura in which the cropland was selected for observing insect diversity. Vegetation type of the cropland is *Orizasativa* (paddy).

Site 2: Hosaduis a village located a distance of13 kms from Kundapurain which the plantation was selected for observing insect diversity.Vegetation type of the plantation is *Cocosnucifera* (Coconut), *Anacardiumoccidentale* (Cashew plant), *Mangiferaindica* (Mango tree).

Site 3: Movadiis a village located a distance of 13 kms from Kundapura in which theforest was selected for observing

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insect diversity. Vegetation type of the forest is *Anacardiumoccidentale*(Cashew plant), *Terminalia paniculata* (Hunalu), *Mangiferaindica* (Mango), *Acacia arabica* (acacia), *Vitexnegundo* (Nukkesoppu), *Ixoracoccinea* (Jungle geranium), *Artocarpus hirsute* (Hebbelasu), *Aporosalindleyana* (Salle).

Data Collection

Field work was conducted from February 2017 to March 2018. Species were observed by visual method. Field survey with the fixed paths while collecting data of the species and capturing the photos at three distinct habitats, forest, plantation and cropland in Kundapura. Field observations were made once in ten days for a year. Identified the species based on their colour of wings, markings, body shape, habit, wing shape, and structure of legs. Captured the photos of insects by using a Samsung J 7 prime smart phone and identified the species by referring books.

3. Results and Discussion

During one year survey at three different sites were mentioned, 69 species belonging to 23 different families of eight orders were recorded (Table -2). Of these individuals of Lepidoptera order were found to be dominant with 56 species followed by Odonata with two species, Blattodea with two species, Coleoptera with three species, Diptera with one species, Hemiptera with one species, Hymenoptera with three species and Mantodea with one species. 30 hymenopterans with 30 generaand 28 species spread over nine families were recorded in the University of Agricultural Sciences, Dharwad[16].140 species of butterflies were recorded in Kavvayi river basin Kerala[7].

We have recorded 69 species with orders are as follows. Lepidoptera is the most abundant order of the Western Ghats, it's an order of class insects that includes moths and butterflies, 56 moth and butterfly species of this order were recorded from this area during the study period. 94 species of butterflies were recorded in Manikkunnumalaforest of Western Ghats, Wayanad, Kerala[12]. 318 species of moths belonging to 19 families were recorded in the Silent Valley National Park, India[8].59 species of butterflies belonging to 48 genera and 5 families were recorded in Trishna Wildlife Sanctuary[13].

Odonata is an order of carnivorous insects, encompassing the dragonflies and the damselflies. Two species of dragonflies and damselflies were recorded. 48 species of odonates which includes 31 species of Anisoptera (dragonflies) and 17 species of Zygoptera (damselflies)were recorded in Chinnar Wildlife Sanctuary, Sourthern Western Ghats of India[6]. Blattodea is an order of insect that contains the cockroaches and termites. We have recorded twoBlattodea species. Coleoptera is an order of insects. Beetles are identified under these groups. We have recorded three beetle species. 18 Species of beetles belonging to 7 families were recordedin coffee, pepper and coconut plantation of chikkamagaluru[3]. True flies are insects of the order dipteral. It is a large order containing an estimated 10, 00,000 species. But only one species has been recorded in our study area.

Hemiptera is an order of insects. It contains nearly 50,000 to 80,000 species in the world. We have recorded only one species. Hymenoptera is a one more large order of insects. Over 1,50,000 living species has been recorded in all over the world [18].Three species are found in our study area. Montodea is an order of insects. That contains over 2400 species in about 430 genera in 15 families. The largest family is the mantidae. Only one species has been recorded. A complete checklist of insect species is given in Table 2.

Table 2: Order wise distribution of insects species observed from the study site along with their status (C= Common, NR= Not Rare, LC= Locally Common, R= Rare, NC= Not Common and UC= Uncommon).

Order	Family	Common Name	Scientific Name	Status
Lepidoptera	Geometridae	Geometrinae Moth	*Aporandriaspecularia*	R
		Problepsis Vulgaris	*Problepsis vulgaris*	C
		Blue Tiger Moth	*Dysphaniapercota*	C
	Erebidae	EudocimaHomaena (Female)	*Eudocimahomaena*	R
		Owlet Moth	*Spiramaretorta*	C
		Tussock Moth	*Orgyiarecens*	C
		Little virgin tiger moth	*Grammiavirguncula*	C
		Black Headed Wasp Moth	*Erezoaangustipenna*	R
	Eupterotidae	Monkey Moth	*Eupterotelineosa*	UC
	Uraniidae	Under winged moth	*Micronia aculeata*	C
	Crambidae	Crambid Moth	*Herpetogrammalicarsisalis*	LC
		Hydrilla Leaf Cutter Moth	*Parapoynxdiminutalis*	C
	Pieridae	Psyche	*Leptosiannina*Fabricius	C
		Three Spot Grass Yellow	*Eurema hlanda*Boisduval	C
		Common Emigrant	*Catopsiliapomona*Fabricius	C
		Mottled Emigrant	*Catopsiliagyranthe*Linnaeus	C
		Common Jezebel	*Delias eucharis* Drury	C
		Common Wanderer	*Pareroniavaleria*Cramer	C
		Common Grass Yellow	*Eurema hecabe*Linnaeus	R
	Nymphalidae	Common Crow	*Euploea core* Cramer	C
		Tawny Coster	*Acraea violae*Fabricius	C
		Common Evening Brown	*Melanitisleda*Linnaeus	C
		Grey Pansy	*Junoniaatlites*Linnaeus	LC
		Great Egg Fly	*Hypolimnasbolina*Linnaeus	C

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		Rustic	*Cupha erymanthis* Drury	C
		Common Baron	*Euthalia aconthea* Cramer	C
		Long Branded Bushbrown	*Mycalesis visala* Moore	C
		Nigger	*Orsotriaena medus* Fabricius	C
		Tamil Oak Blue	*Arhopala bazaloides* Hewitson	LC
		Common Palm Fly	*Elymnias hypermnestra* Linnaeus	C
		Common Lascar	*Pantoporia hordonia* Stoll	C
		Peacock Pansy	*Junonia almana* Linnaeus	C
		Chocolate Pansy	*Junonia iphita* Cramer	C
		Plain Tiger	*Danaus chrysippus* Linnaeus	C
		Dark Evening Brown	*Melanitis phedima* Cramer	NR
	Lycinidae	Red Pierrot	*Talicada nyseus* Guerin-Meneville	LC
		Red Spot	*Zesius chrysomallus* Hubner	NR
		Gram Blue	*Euchrysops cnejus* Fabricius	C
		Common Pierrot	*Castalius rosimon* Fabricius	C
		Commom Cerulean	*Jamides celeno* Cramer	C
	Papilionoidae	Common Rose	*Atrophaneura aristolochiae* Fabricius	C
		Blue Mormon	*Papilio polymnestor*	C
		Common Blue Bottle	*Graphium sarpedon* Linnaeus	C
		Common Jay	*Graphium doson* C & R Felder	LC
		Common Mormon	*Papilio polytes* Linnaeus	C
		Common Mime	*Chilasa clytia* Linnaeus	C
	Hespiridae	Bush Hopper	*Ampittia dioscorides* Fabricius	LC
		Rice Swift Skipper	*Borbo cinnara* Wallace	C
		Small Branded Swift	*Pelopidas mathias*	C
		Indian skipper	*Spialia galba*	C
		Grass Demon	*Udaspes folus* Cramer	C
	Libellulidae	Pied Paddy Skimmer	*Neurothemis tullia*	NR
		Fulvous Forest Skimmer	*Neurothemis fulvia*	C
		Green Marsh Hawk	*Orthetrum sabina*	NC
		Spine Tufted Skimmer	*Orthetrum chrysis*	NC
		Ground Skimmer	*Diplacodes trivialis*	LC
Odonata	Calopterygidae	Clear Winged Forest Glory	*Vestalis gracilis*	NR
	Coenagrionidae	Blue Fronted Dancer	*Argia apicalis*	NC
Hemiptera	Fulgoroides	Lantern bug	*Kalidasa lanata*	R
Hymenopters	Vespidae	Potter Wasp	*Eumenes species*	C
	Sphecidae	The Blue Mud Dauber	*Chalybion californicum*	C
	Formicidae	Red Ant	*Oecophylla smaragdina*	LC
Mantodea	Mantidae	Praying Mantis	*Mantis*	R
Coleopters	Scarabaeoidea	Asiatic Rhinoceros Beetle	*Oryctes rhinoceros*	C
		Shining Leaf Chafer Beetle	*Chrysophora chrysochlora*	R
	Cerambycidae	Long Horn Beetle	*Cerambycidae species*	UC
Diptera	Muscidae	House Fly	*Musca domestica*	LC
Blattodea	Blattidae	Cockroaches	-------	C
	Termitidae	Termites	-------	C

In the present study, the highest numbers of observed insects species belonged to order Lepidoptera (81.16%), Similar observationswere made by [17], followed by Hymenoptera (4.35%), Coleoptera (4.35%), Odonata (2.90%),Blattodea (2.90%), and the least number of species were observed under orders Diptera (1.45%), Hemiptera (1.45%), and Mantodea (1.45%) (Table- 3, fig- 2).

Table 3: Order-wise distribution of insect species

Sl.No	Order	No. of species	Percentage of species
1	Blattodea	2	2.90%
2	Coleoptera	3	4.35%
3	Diptera	1	1.45%
4	Hemiptera	1	1.45%
5	Hymenoptera	3	4.35%
6	Lepidoptera	56	81.16%
7	Mantodea	1	1.45%
8	Odonata	2	2.90%

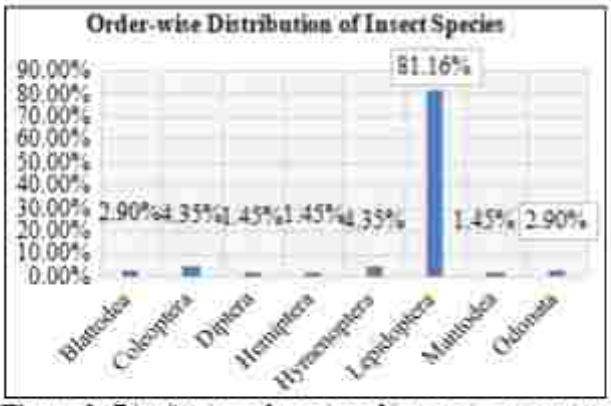

Figure 2: Distribution of species of insects in respective orders

Seasonality: Spring is the prime time for insects to strive and to increase their populations. Some insects are common for only a few months and some are common for throughout the year because they are very sensitive to the changes in the

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habitat and climate conditions. The highest number of specieswere recorded in monsoon there are 56 species, which is decreased to 30 species in post- monsoon and in pre- monsoon only 20 species.

Table 4: Number of species and individuals recorded in different seasons

S.No.	Season	No. of individuals	No. of species	Percentage of individuals	Percentage of species
1	Monsoon	580	56	73.14%	81.16%
2	Post-monsoon	104	30	13.11%	43.48%
3	Pre-monsoon	109	20	13.75%	28.99%

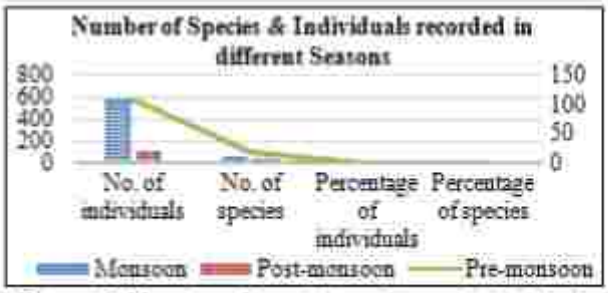

Figure 3: Number of insects' species and individuals recorded in different seasons

Climate is the major drawback for species for the behavioral changes. In monsoon time insects are more active and in pre monsoon their activity will get reduce. During the study we have recorded more number of insects' species in monsoon season and less number of species in pre monsoon season. Because in monsoon season temperature and moisture content is very favorable for insects hence they are more active in monsoon. The order Lepidoptera was recorded in the highest numbers (Table 5) and the numbers are decreases in pre- monsoon season. Because of the climatic factors such as high and low temperatures; humidity and rainfall affect insect survival. Effects occur directly and indirectly, usually by acting on other organisms such as the host plant or predators. The relative abundance of the butterflies varied with the site, month, and family significantly [20].Butterfly diversity varies with season. They are abundant for only a few months and rare or absent during other months of the year [11].

Table 5: Distribution of Insects species at different seasons

Sl.No.	Order	Monsoon	Post-monsoon	Pre-monsoon
1	Blattodea	2	2	2
2	Coleoptera	2	1	0
3	Dipters	1	1	0
4	Hemiptera	1	0	0
5	Hymenoptera	3	1	1
6	Lepidoptera	45	23	12
7	Mantodea	1	0	0
8	Odonata	1	2	5

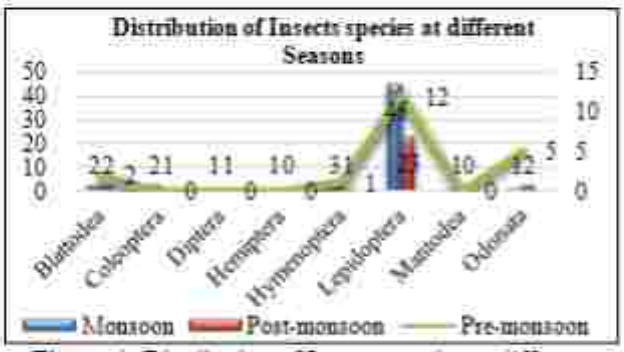

Figure 4: Distribution of Insects species at different seasons.

Abundance of Insects: Abundance of insects surviving to adulthood, and their activity once emerged, are both related to climate. Warm, dry weather generally encourages faster development of the early stages leading to lower mortality and lower predation. However there are some potential problems if condition become too dry, or if food supplies become desiccated, so it is hard to make generalisations. Total of 793 individuals of insects were recorded during the study period. While 396 individuals belonging to 54 species were recorded from Plantation, 17 species were recorded from Cropland and 16 species were recorded from Forest. Moths and butterflies of order Lepidoptera was recorded as the most abundant species and plantation site was supported to the maximum number of butterfly and moth species.

Table 6: Number of species and individuals recorded in different habitats

Sl. No.	Habitat	No. of species	Total number of individuals	Percentage of individuals
1	Plantation	54	396	49.93%
2	Forest	16	321	40.47%
3	Cropland	17	76	9.58%

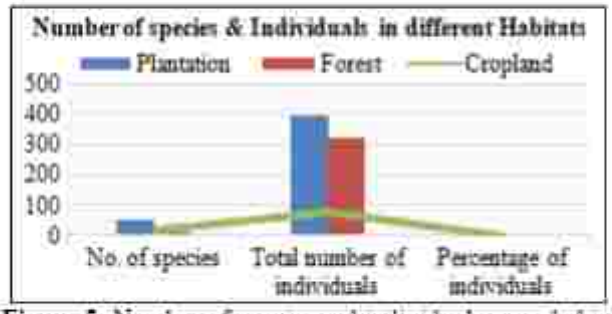

Figure 5: Number of species and individuals recorded in different habitats

In the present study, 793 individuals were recorded belonging to 69species of 8 orders. In three study areas, higher species richness was recorded at plantation site with more number of species in order Lepidoptera indicating availability and access to food plants. In Cropland site contains Order Lepidoptera only.Similar observation made by[19].

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Table 7: Distribution of Insects species of different order at different habitat

Sl.No.	Order	Plantation	Forest	Cropland
1	Blattodea	1	1	1
2	Coleoptera	3	0	0
3	Diptera	1	0	0
4	Hemiptera	1	0	0
5	Hymenoptera	3	1	0
6	Lepidoptera	39	12	17
7	Mantodea	1	0	0
8	Odonata	5	3	0

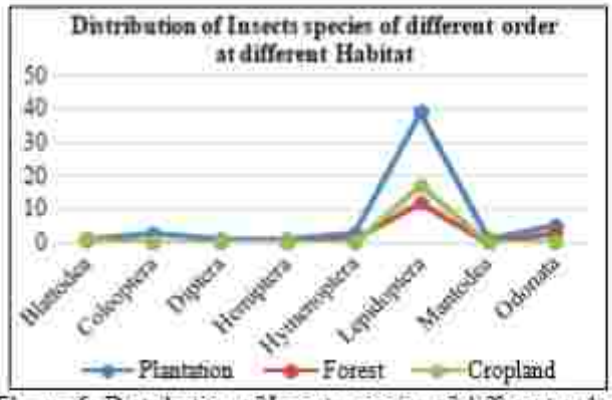

Figure 6: Distribution of Insects species of different order at different habitat

4. Conclusion

The present study reveals that the plantation provides suitable environmental conditions for insects. Hence more number of species was recorded in the plantation. Similar observations were made by [4, 14].

We have recorded more number of butterflies and moths. They are coming under order Lepidoptera. In the present study, highest numbers of observed insects species belonged to order Lepidoptera (81.16%), Similar observation made by [17], followed by Hymenoptera (4.35%), Coleoptera (4.35%), Odonata (2.90%), Blattodea (2.90%), and the least number of species were observed under orders Diptera (1.45%), Hemiptera (1.45%), and Mantodea (1.45%). We have recorded more number of butterfly species, because availability of food source, optimum environmental conditions, and shelter.

Some insects are eco-friendly in nature; Butterflies serve as major pollinators of both wild and cultivated plants[21]and some insects are very effective for croplands for example Rhinoceros beetles and some other beetles. Many blood sucking insects are vectors of human diseases; intensive agriculture encourages the development of insect pests by concentrating food items on which insects can feed.Farmers using some pesticides to control the insects activity which kills the insects and gradually decreases the number of insects. Hence, conservation of insects is necessary.

5. Acknowledgement

The author thanking the President, Governing Council, Bhandarkars' Arts and Science College, Kundapuraand the Principal of Bhandarkars' Arts and Science College, Kundapura for theirencouragement, support and financial assistance.

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Impact Factor – 6.261 | Special Issue - 162 | March 2019 | ISSN – 2348-7143
UGC Approved Journal List No. 40705

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Impact Factor – 6.261 • Special Issue - 162 • Mar. 2019 • ISSN – 2348-7143

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Impact Factor – 6.261 • Special Issue - 162 • Mar. 2019 • ISSN – 2348-7143

INTERNATIONAL RESEARCH FELLOWS ASSOCIATION'S

RESEARCH JOURNEY

UGC Approved Journal
Multidisciplinary International E-Research Journal

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3, Pratap Nagar, Sant Dnyaneshwar Mandir Road, Near Nutan Maratha Mahavidyalaya, Jalgaon.
Website: www.prashantpublications.com Email: prashantpublication.jal@gmail.com
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RESEARCH JOURNEY International Multidisciplinary E-Research Journal
Impact Factor (SJIF) - 6.261 | Special Issue 162 : Women Empowerment
ISSN : 2348-7143
March 2019

Women and Leadership

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'Leadership is not about being in charge, it's about taking care of those who are in your charge' - Anonymous

We live in a world where half the sky is held by women yet women raising to the ceiling is considered a taboo by many; a world where every other person you meet is a woman but while meeting a woman in authority, you would probably come across hundred odd men in power (such an overwhelming ratio of men who are deemed 'leaders' compared to women with the same crown); a world supported and nourished by men and women equally but very clearly, 'dominated' by men. Being born in such a world as a woman (by chance) BUT being a leader (by choice), I would like to present my account on the very taboo of 'women and leadership' through this article.

A simple question to begin with – "How many of us, men and women both included, believe that women should and ought to be in positions of authority/leadership? Well, speaking of men, the destined 'Tough ones, hard minded, strong souled' – starting off with the ideas of authority way back from the time of Adam and Eve - not much that you can complain with their belief that women ought to be in kitchens and their 'disgrace' in accepting orders from women. (Not all of them, just speaking about the majority).

But how many of us women are affirmative in this regard? This is surely a question to ponder upon. Recollecting my very own experiences –

My 'Mother' had a son after having had 5 daughters in a row because according to her, only a male child has the authority to look after the house after them (Amazing!). She expected me to bend my head while in conversation with anyone – obviously raising my head would be a sign of someone who would want to stand tall on their own feet and I was expected not to do so for the rest of my life anyways (Yes, perks of being a girl). To add to it, heart-wrenching encouraging words from my 'Headmistress' (A Woman) during our board examinations – "All the boys will have to get good grades because you have a long way to go. As far as girls are concerned, even a single mark more than the pass marks would be amazing" (Because, the skill of washing dishes and clothes would be learnt at home meanwhile making us all perfect brides). Fighting against all these odds and raising today to have a Doctorate degree in Sanskrit has been a real struggle for me. Well, honestly I expected things to have a positive turn in this decade but even today, I see in certain professions, a disparity in the salary paid to a male and female worker with the same work load; the explanation given being that it is only men who are supposed to support the family (What will a woman do with all that money anyways?) Inequality exists despite negations regarding the same and it is perhaps the biggest obstacle in the way of women being global leaders. (Crossing the four walls of the house itself is a daunting task amidst all this fuss, leave alone leading a mob).

Well, the idea of telling all these stories is not to portray my frustration with the way life has been. All I want to project is the fact that, leave aside men, even women in past never considered the idea of 'women in leadership' as something that is feasible and acceptable. In fact it's not just about me, there have been surveys conducted all across the country which clearly display the ideals. Studies have also shown that women tend not to see themselves in the higher position while men almost always expect to be boosted in professional career. The Huffington Post mentioned last year that only 23 Fortune 500 Companies were led by women (How much more proof to project the disparity?). All the more, this very account of Emmeline Pankhurst, British Political Leader, summarizes everything - "I have often been the only woman in the room and I thought to myself, 'Well, I don't think I'll say anything today because it'll sound stupid,' and then some man says it and everyone thinks it's brilliant and you think, 'Why didn't I talk?'(Recorded in 'Time', September 2017)

To be honest, the point of this article is not to bring about the disparity in the field but to make those few women, who read the article, realize the fact as to how poised for success they are in leadership roles, but invariably tend to ignore their immense potential.

First and foremost, balancing work and personal life is something that only women are adept at. They just seem to know how much time to invest in each and bring out the optimum in both. Reiterating my homely diaries, my husband took a leave off work when he had to take care of the house in my absence and for me, it is almost a daily task. (Not boasting but point being that if women can handle so much, why deprive her of the top position?)

Secondly, it is a known fact that women are indeed empathetic. I, as a colleague, would find it easier to approach a woman leader with my personal problems than a male counterpart because obviously, women would be able to comprehend the emotional aspect behind the problems

very well. (It is a scientifically proven fact that women have a higher emotional quotient). Being empathetic also enables them to know what is the driving factor behind every individual's maximum working ability and also to acknowledge their performances when needed. (My Mom always knew what would cheer me up and pull me to do a work). Moreover, we have this immense patience of listening and prefer it over being heard when it comes to solving problems - 'something that makes a leader great'.

Most importantly, you can't deny the fact that a women is a Mother and a Mother does something that could perhaps be said to be a miracle - "Transforming a mould of fat into a human" If she is able to do this, that perhaps indicates the fact that, people working under a woman would perhaps be nurturing their potentials to the fullest and growing in to become global leaders themselves.

Well, quoting from personal experiences, working with women, I feel that the environment is less authoritarian and more cooperative and family-like, but with solid leadership. Something that is conducive for excellent output. And what makes it possible is the excellent communication skills that women naturally have.

As a matter of fact, only woman are excelled at multitasking - The ability to decisively and quickly respond to simultaneous and different tasks or problems (Yes, we do this in kitchen as well and without this, my children would be late to school every day which happens when my husband handles the kitchen) at a time is a critical component to successful leadership.

Something that Jody Clower once said - "I believe women make phenomenal leaders because they are experts at making the impossible seem possible. And sometimes on a good day they even make it look effortless. Women are pragmatic, resilient and usually able to maneuver tricky situations with grace. Their perspectives are borne out of a mix of trial by fire and sheer fortitude. They look at the world with bravery and are able to piece together the world around them like a complex puzzle." Well, this statement says it all – women in fact are born with all those qualities that makes a person an effective leader. Its just that we never really realized this fact and when we did, we had already had taken enough steps towards the grave.

In short, Quoting Smriti Irani, an Indian Political Leader, while male leaders take you where you want to be, female leaders lead you to where you ought to be.

History has time and again proved to us that there have been those one or two women who have had the guts to defy the odds and set an example to the world. It is indeed a proud fact that women who want to pursue the attributes of leadership today have got a plenty of inspirational personalities to look up to. Be it Rani Lakshmi Bhai from the Indian History or Malala Yousufzai off late, women have shown that they can change the course of History, and that too single handedly. Today, people in high profile positions like Indira Nooyi, Kiran Majumdar, Sheryl Sandberg, Mary Barra or Tsai Ing Wen (All women worth googling once if you don't know them yet) indeed make us awe on the fact that they had the guts to overcome the storm and climb up to the peak. Well, today we have innumerable female leaders to quote which would perhaps even fill up this article. (Indeed, something to be proud of). Today, the environment is perfect, inspiration is in abundance, all that is needed is a boost and soon we will have women dominating in every field that you can name of.

At a micro level, you can very well argue that it in fact depends on the individual and not the gender as to who should be in the peak position. As this verse from Garuda Purana points out – 'People who have the capability of becoming leaders, will end up there no matter what'

Well, I completely agree on this fact. All that I wanted to say is that women since time immemorial, have faced enough struggles on their path to the top and have been deprived of what they deserve all this while. This article is a small effort from my side to sensitize people about this ever neglected issue so that in times to come, the issue of Women and Leadership is no longer something that people would have to write an article on.

Ending on a Positive Note with a quote from Madeleine Albright, Former US Secretary of State - "Women are very slow to rouse, but once they are aroused, once they are determined, nothing on Earth and nothing in heaven will make women give way. NOTHING"

Impact Factor – 6.261 | Special Issue - 162 | March 2019 | ISSN – 2348-7143

INTERNATIONAL RESEARCH FELLOWS ASSOCIATION'S

RESEARCH JOURNEY

UGC Approved Journal

Multidisciplinary International E-research Journal

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- Scientific Journal Impact Factor (SJIF)
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Price : ₹ 500/-

International Journal of Applied Research

ISSN Print: 2394-7500
ISSN Online: 2394-5869
Impact Factor: 5.2
IJAR 2019; 5(12): 208-217
www.allresearchjournal.com
Received: 01-10-2019
Accepted: 03-11-2019

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Changes in kinship and family among Koragas: A case study of selected villages in Kundapur Taluk, Udupi district

Ramachandra

Abstract
In Dakshina Kannada Koragas are considered as untouchables and the practice of social distance, keeping out of personal and social contact is followed in case of Koragas. Hence, Koragas are not allowed to mingle with others in any of the social functions as well as they are also not allowed to enter into places of worships the persons who touches a Koraga are considered to carry the risk of impurity. Since the concept of untouchability has its roots in the ideas of cleanliness and hygiene it is the life style of Koragas who used to eat dead animals and the left over foods has forced other to keep themselves away from them.

Keywords: Korgas, untouchable & social condition

1. Introduction
The Tribe constituent is an important segment of Indian society. India has the second largest tribal population in the world next to Africa. Tribal population constituting 8.8% of the total population of the nation as per 2011 census. It means their population is more than 20 crores. In Karnataka we have 50 Tribal communities especially Soligas, Gondas, Valmikies, Hakkipikkies, Marathi, Malekudiyas, Kadukurubas, Kammaras Meda, Todas and others. The Jenukurubas and Koragas are considered as Primitive tribal groups or vulnerable or aboriginal tribes of the regions.
In an undivided South Kanara we have observed three major tribal communities namely marati (Marati Naiks) Malekudiyas and Koragas. The population of these three tribals is less than 2 lakh.

2. Objectives
The specific objectives of Research paper is as follows:
1. To analyze the social and cultural life of Koragas with respect of their social stratification, clan system, kinship and family patterns.
2. To observe the transition from tribal character to caste system in the above-mentioned spheres of social life.
3. To know whether koragas are Sanskritised, Westernised, Modernised, Hindunised and Christianised.

3. Methodology
The information regarding the Research paper has been collected both by primary sources and secondary sources. They are as follows:
a. The information related to the past history was obtained through the records maintained by administrative bodies.
b. The participant observation and Interview schedule are used in this study.
c. Group discussion was orgainsed to gain information about the various aspects of the way of life of Koragas.

The data was collected from various secondary sources like journals, census report, Encyclopedias, Manuals, Records maintained by the social welfare departments.

4. Scope of study

The scope of the Research paper is restricted only for the 14 selected villages and 100 koraga families of Kundapura Taluk, Udupi District. The total population of 100 selected families is consisting of 377 males and 381 females totally 758 members. The detail of selected villages, families, male and female population is as follows.

Table 1: List of selected villages, No. of families and Gender wise members of the family

Sl. No.	Name of Villages	No of families	Details of Members/selected families		
			Male	Female	Total
1.	Halady	08	30	34	64
2.	Koteshwara	15	68	59	127
3.	Kumbhashi	05	23	27	50
4.	Jadkal	15	50	56	106
5.	Bijady	06	15	19	34
6.	Haklady	04	16	12	28
7.	Gohihole	02	04	05	09
8.	Kalavara	08	27	25	52
9.	Amavasebail	04	28	24	52
10.	Hallihole	05	18	17	35
11.	Nada	06	20	24	44
12.	Gujjadi	12	38	40	78
13.	Keradi	05	18	22	40
14	Vandse	05	22	17	39
	Total	100	377	381	758

5. Review of early literature

The following literature on Koragas tribal community written by various, scholars, Anthropologists, Christian, missionaries, census enumerators, Ethnologists, Sociologists was studied for the presenting the paper.

1. The first chronicle available about Koragas is that of Francis Buchanan (1801) who gives the general description of the Koragas and make the reference to the rule of their chieftain, Hubashika for short period. The historical stories about Koragas was heard like Hinge on Hubashika as a hero, invader, Pariar king, chief of savages, king of mountain, slaves castes, king of koragas, koragas chieftain etc.
2. Edger Thurston (1909) gives a brief information about various customs traditions observed by Koragas about hundreds of years ago. But he does not analysis the problems, changes and development programmes of Koraga tribe.
3. Sturrock (1804) complied various caste and tribes of Dhakshina Kannada. This study shows that Koragas are the tribes, who lives in forest and Hills of undivided South Kanara District. His study reveals the some of their social institutions and practices that existed centuries ago.
4. H. H. Wilson in his 'Mackenzee' collection tries to give definition of Koraga tribal community.
5. Hayavadana Rao in his Mysore Gazetter tries to explain the brief account of cultural traditions of Koragas.
6. B.A. Saletore (1944) and Dr. Padhur Gururaj Bhat (1963) Explains Koragas are earlier inhabitants of Tulunadu. They give brief information about various customes and traditions observed by Koragas about a hundred years ago.
7. Karnataka Government has published a brief account of the life and cultural practices of Koraga tribes in the form of reports in South Kanara District Gazetters (1973) ed. by K. Abhishanker) A hill tribes living in isolation.
8. Dr. Mohammed Peer and Dr. V. Heggade (1982) in their evaluation report on the impact of various developmental programmes implemented during the decade 1980-1990 for the social and economic development of Koraga tribes in undivided South Kanara have briefly highlighted the present conditions of Koragas. Their report on Koragas based on the data obtained from households drawn from South Canara.

Apart from the studies available in the form of monographs, a few attempts have been made by some writers in the regional Language (Kannada) to contribute articles and write-ups in chronicles on life and conditions of Koragas in a most general way. It is as follows.

- Prof Amrith Someshwara : Koragas (1982)
- Sri Ramakrishna T. Shetty : Koraga Grammar (1975)
- Dr. Aravinda Malagati and Dr. Odeyar. D. Heggade : 'Koraga Jananga' Vishslationatmaka Adyayana
- P. Kamalakaha : Dakshina Kannada Jilleya Harijana Mattu Girijanara Samajika Itihasa
- Dr. Purushothama Belimale : Karavali Janapada, Ondu parichayatmaka Kruti
- Dr. Hi. Chi. Boralingayya : Karnataka Janapada Kalegala Kosha
- Dr. H.J. Lakkappa Gowda : Karnataka Budakattugalu
- Dr. A.V. Navada : Koragaru
- Vasudevan C. : Koragas, 'The forgotten of the premitive tribes of Tulunadu
- Dr. K.M. Metri : Budakattu Kulakasabu Forest Blossoms and the concretic Jungle and 'Shukshma Adivasigalu
- Dr. K. Sundara Naik : "Social transformation among the tribals of Dakshina Kananda" A article was published in Budakattu Adhyana.
- Dr. Gangadhar Daivadnya : Koragaru Samakalina Spandana
- Dr. Hi. Chi. Boralingaiah and Dr. A.S. Prabhakar (ed) Karnatakada Budakattu Sachitra Kosha
- Sri. Gunapala Shetty : Mouna Matadidaga
- Dr. Indira Heggade : Tulunadina Koragaru Samajika Arthika Sthitigati
- Dr. Arun Kumar : Seeme
- Dr. Gayathri Navada : 'Virachane'
- Dr. A.V. Navada : Koraga Budakattu Abhiruddhi Kalpane and Tulu pole
- Dr. Ramakrishna Shetty : Koragaru Adunudi
- Dr. Raghavendra Acharya : Samajika Badalaraneyalli Koragaru, Unpublished Ph.D. Thesis Kananda University, Hampi (2010)

The above survey of the studies on Koraga tribes indicate that many attempts have been made in tribal studies on the way of life, changes and strategy of development. The reports published on the Koragas in the form of various articles are neither complete scientific nor Exhaustive. Therefore, these publications do not provide adequate information on Koraga community.

However, these publications shows that the Koraga tribes have attracted the attention of Christian missionaries, Social reformers, Administrators, Anthropologists, medical scientist, sociologists and others.

Hence, in the present study, an attempt is made to focus on the changes that have occurred among the Koragas and the factors like modern education, influence of western culture, Brahmins and upper classes way of life associated with these changes. For the purpose of study I have taken up the 100 Koraga tribal families of 14 villages of Kundapur taluk, Udupi District.

6. Koraga tribes population in Karnataka

As on 15.06.2003 fifty tribes have been constitutionally recognised as scheduled tribes in Karnataka. Koraga and Jenu Kurubas are considered a primitive tribal groups in Karnataka. The government of Karnataka has recommended for inclusion of Hakkipikki, Soliga, Iruliga and Yerava tribes in the primitive tribal groups mainly concentrated in mysore, chamarajnagara, Kodagu, Udupi, Dakshina Kannada and Chikkamagaluru District.

Table 2: Distribution of Koraga Tribal Population by Rural and Urban in Karnataka as per 2011 census report.

Sl. No.	Name of Districts	Rural	Urban	Total
1.	Belagavi	01	07	08
2.	Bhagalkotte	05	04	09
3.	Vijayapura	01	-	01
4.	Bidar	01	-	01
5.	Rayachur	09	01	10
6.	Koppala	03	-	03
7.	Gadag	02	-	02
8.	Dharwad	14	21	35
9.	Uttar Kannada	44	22	66
10.	Haveri	420	76	496
11.	Bellary	07	02	09
12.	Chitradurga	08	04	12
13.	Dhavanagiri	09	28	37
14.	Shimogga	106	91	197
15.	Udupi	6277	2689	8966
16.	Chikkamagaluru	79	01	80
17.	Tumkur	03	06	09
18.	Bengaluru (Urban)	05	114	119
19.	Mandya	04	-	04
20.	Hassan	01	17	18
21.	Dakshina Kannada	2642	1989	4631
22.	Kodagu	30	02	32
23.	Mysore	07	05	12
24.	Chamarajpete	04	-	04
25.	Kalaburgi	02	02	04
26.	Yadagiri	02	05	07
27.	Kolara	03	-	03
28.	Chikkaballapura	02	01	03
29.	Bengaluru (Rural)	-	05	05
30.	Ramanagara	02	09	11
	Total	9693	5101	14794

Sources: Census Report of Karnataka 2011, Census Report of South Canara 2011, Census Report of Udupi 2011

7. Koragas settlement patterns

Koraga settlements are mostly situated in the rural areas. Due to their low status in the rural areas, the Koraga settlements are located in the outskirt of the village, where they form group of their own or even separate hamlet. Since, the caste Hindu do not mix with them, they are forced to have their separate colonies far away from other houses.

The primitive shed used by the Koragas was called Kotta (Kotya - Tulu) or Koppa. The Koragas give reason that they were cursed by the spirit. (Bhuta) Kallurtti thus were not supposed to live in decent houses. They should not live under a roof, Koppa is a primitive structure, and a sort of improvised hut made of bamboos and covered with grass or coconut leaves.

The traditional Koppa is fast disappearing from the scene and now the community men resides in houses made of mud huts with thatched or Mangalore tiles roofs. In the cities and towns the design and construction of the houses of Koragas follows the same regional patterns as found among the communities belonging to lower economic and social strata.

8. Meaning and Origin of Koragas

The Koraga are a tribal community found mainly in the Dakshina Kannada, Udupi District of Karnataka and Kasaragod District of Kerala, State. They are also found in small numbers in all the districts of Karnataka. The Koragas are classified by the Government of India as a Primitive Tribes Groups.

The name 'Koraga' it would seen has many phonetic variations.

Camp Bell refers to them as 'Koras' or Koragars. While Francis Buchanan Calls them 'Corar' or 'Corowar'. It would appear that due to the Tulu accent of the term, the Koraga might have been referred by Buchnan as 'Corar' and 'Corowar'.

Thus the earlier writers have used Koraga, Korgas, Korar, Corar, Koragars to mean the same community. While the others have used 'Koragar' the Kannada Plural for Koraga. Likwise some authors have referred to the tribe as 'Koragars' the plural form in English.

In Kannada the word Koraga is the singular and 'Koragaru' is in the plural.

In Tulu 'Korage' is used in the singular and 'Koragare' in the plural.

In Konkani the word 'Korgo' is used in Singular and 'Korgar' and 'Koragaranche' in plural.

'Kora' the first part of their name refers to the 'sun' and the name may have originated from their conventional worship of the sun. There is a possibility that their name is a corruption of 'Koruvar' which in Tulu means the people of the hills. The etymological meaning of the 'Koraga' is not very clear.

Koragas are called in different ways by different scholars, sociologists anthropologist and others.

- In the first census report of 1871 relating to South Kanara district. It was reported that they are properly 'no hill tribes' living exclusively in the forest of undivided south kanara with the exception of malekudiyas.
- In 1881 census report they were recognised as 'aboriginals'
- In 1891 census Koragas were treated as 'Forest and Hill tribes of South Kanara'
- In the census of 1921, 1931 and 1941 they were classified as 'Depressed classes'.
- In 1951 census they were classified as 'Scheduled Caste'.
- From 1961 to 1981 census report they were re-classified as 'scheduled Tribes'
- In 1986 they were classified as 'Primitive tribe groups'
- According to Ramappa Varmika Koragas were belongs to slave class.
- Sir Herbert Risley called them 'aboriginals'.
- Dr. Elwin V. calls they were 'Original inhabitants of a land'.

- J.H. Hutton calls 'Primitive Tribes'.
- G.S. Ghurye describes them as so called 'Backward Hindus'
- Social reformer Jyothi Rao phule called 'Adipraja'.
- Narasimha Mehta, A Gujarath Saint called they were 'Girijana'
- Other Social reformer called Adivasis, Vanavasis, Antyaja
- Today we use the term 'Scheduled Tribe'.

Origin of koragas

The origin of Koragas there are web of legends and history.

a. One such legend describes them as the issue of Brahmin women by a sudra on account of the difference in the social status of their parents. The children were treated with contempt.
b. Another legend status that Hubashika consented to marry Kanyavathi the daughter of Lokaditya - a Kadamba prince and a girl of Varma family. The legend states that at the marriage ceremony Hubashika and his party were killed by Lokaditya soldiers and his followers driven out to the forest.
c. A third legend connects the origin of the Koragas to chief Hubashika. Who invaded Tulunadu and driven out Mayura Varma the founder of Kadamba dynasty. The army of Hubashika is also claimed to have defeated the Angaravarma son of viravarma of Manjeshwara. Later Hubashika and his followers defeated and driven out by Lokaditya Raya, son of Mayuravarma of Gokarna and Brahmins were brought into zone to replace Koraga.

9. Kinship system

Kinship plays an important role in family life. It is generally understood that the tribal people are kinship oriented. They depend much upon their kinsmen in observing religious rites and rituals, arranging marriages etc. Therefore family bond and kinship obligations are comparatively stronger among tribal community. Relations by kinship fell a strong mutual obligation to assist each other in all possible needs and difficulties. A person may expect help only from his kinsmen in times of Distress. However in modern society under the influence of urbanization, Industrialization, modern education and legislation the kinship bond and obligation are weakening. Such changes are also evident in the kinship organization of the Koragas.

a) Rule of Endogamy and Exogamy

Koragas practice Endogamy as it is the rule among almost all the tribal community. They are divided into several endogamies groups or sub sections.

In 1891 census report recognised 22 sub caste among Koragas.

1.	Ada (ಅಡ)	12.	Nadu (ನಾಡು)
2.	Kadu (ಕಾಡು)	13.	Soppina (ಸೊಪ್ಪಿನ)
3.	Medaru (ಮೇದರು)	14.	Halu (ಹಾಲು)
4.	Satapadi (ಸತಪಡಿ)	15.	Kota (ಕೋಟ)
5.	Goneru (ಗೋನೆರು)	16.	Nagasara (ನಾಗಸರ)
6.	Kapaga (ಕಪಗ)	17.	Tulu (ತುಳು)
7.	Mundala (ಮುಂಡಲರು)	18.	Holeya (ಹೊಲೆಯ)
8.	Sona Devaru (ಸೋನ ದೇವರು)	19.	Madi (ಮಡಿ)
9.	Vanti (ವಂತಿ)	20.	Sappu Koraga (ಸಪ್ಪು ಕೊರಗ)
10.	Gujalavasu (ಗುಜಲವಾಸು)	21.	Urumand (ಉರುಮಂದ)
11.	Kavadi (ಕವಡಿ)	22.	Vastrada (ವಸ್ತ್ರದ)

Mr. A.A.D. Luize Identified 5 sub divisions among Koragas. They are

a. Soppur Koraga
b. Kuntu Koraga
c. Tippi Koraga
d. Vanti Koraga
e. Nadu or Kaptta Koraga

Mr. H.A. Stuart recognised three sub caste Kappada Koraga, Tippi Koraga & Vanti Koraga

There are six endogamous groups or sub caste of Koraga tribes

a. Nadu Koraga - They consider themselves superior than the other Endogamous groups
b. Kappada or Vastra Koraga - They wear black coloured cloths. They were also called Kuntu Koragas.
c. Tippi Koraga - Who wear ornament made of the coconut shell
d. Kadu or Soppu Koragas - They wear gathered the leaves of the nicki bush which grows abundantly in waste land and made small covering for upper body of their waist.
e. Vanti Koraga - Who wear a peculiar kind of large ear-ring to one ear.
f. Ande Koraga - They continuly wore a pot suspended from their necks, in to which they were compelled to spit. It is said that in pre-British days and ande - Koragas has to take out a licence to come into the towns and villages by day. At night their approach was forbidden, as his appearance would cause terrible calamity and something was happen bad.

b) Balis

Besides the rule of Endogamy Koragas also practice Kinship exogamy in various degrees of relationships. Almost all tribes observes the kinship exogamy through its rules may vary from region to region. Koragas practice clan exogamy. They are divided into several clans or septs known as bali which are exogamous. The primary function of the clan is regulate marriage relationships. Koragas clans are enumerated as totemistic, territorid and professions.

K.B. Kappad during his field study has recorded the following bali:

1.	Upparu (ಉಪ್ಪರು)	11.	Bajigaru (ಬಜಿಗರು)
2.	Aleru (ಅಲೇರು)	12.	Elkijaru (ಎಲ್ಕಿಜರು)
3.	Padamma (ಪದ್ಮ)	13.	Bajiaru (ಬಜಿಯರು)
4.	Cherkadi (ಚೆರ್ಕಾಡಿ)	14.	Talin (ತಳಿನ)
5.	Mukka (ಮುಕ್ಕ)	15.	Kunkarmu (ಕುಂಕರ್ಮು)
6.	Kohara (ಕೊಹರ)	16	Odiyaru (ಒಡಿಯರು)
7.	Guttaru (ಗುತ್ತರು)	17.	Banger (ಬಂಗೇರ)
8.	Kuttaru (ಕುತ್ತರು)		
9.	Tadiaru (ತಡಿಯರು)		
10.	Hantaru (ಹಂತರು)		

Prof. A.V. Navada identified seven Balis. It as follows:

- Kundannaya (ಕುಂದಣ್ಣಾಯ)
- Saliyannaya (ಸಾಲಿಯಣ್ಣಾಯ)
- Mujjinthaya (ಮುಜ್ಜಿಂತಾಯ)
- Bangerannaya (ಬಂಗೇರಣ್ಣಾಯ)
- Tadppenaya (ತಡ್ಪೆಣ್ಣಾಯ)
- Turganaya (ತುರ್ಗಣ್ಣಾಯ)
- Sommanaya (ಸೊಮ್ಮಣ್ಣಾಯ)

Mr. Babu Pangala in his article 'Koragara Charitrika Mattu Samskriti' has recognised five balies. They are Tureghenakulu (ತೆರೆಗೆ ನಕ್ಲು) Talanakulu (ತಲನಕ್ಲು) Tadpe nakulu (ತಡ್ಪೆನಕ್ಲು) Kundarannanakulu (ಕುಂದಣ್ಣನಕ್ಲು) and Mookeenakulu (ಮುಕೀನಕ್ಲು) Each bali is associated with dead, living objects, plants and some supernatural power. (Dr. Gangadhara Darvajna : 2012 : 4)

Each clan is associated with the Bhuta or the spirit of the ancestor of the clan which is represented by animate or inanimate objects.

c) Nomenclature

The nomenclature is a part of Kinship system, as it constitutes a relation between generations. The various common names maintained in the lineage or family line shows that there is some significant similarity among the kinsmen. This further strengthen the bond of kinship.

The names of Koragas are interesting and peculiar. Traditional minded Koragas prefer to use the traditional names of their ancestors. There is also a practice of naming the child after the grandparents in the male and female line.

It is interesting to note that certain names among traditional Koragas are commonly used for both boys and girls. They were originally worshippers of the sun and they are still called after the names of the days of the week - It as follows:

They were originally worshippers of the sun and they are still called after the names of the days of the week - It as follows:

Sl. No.	Days	Names
1.	Monday (Somavara)	Thoma, Soma
2.	Tuesday (Mangalavara)	Angara
3.	Wednesday (Budavara)	Budbe, Budha
4.	Thursday (Guruvara)	Guruva
5.	Friday (Sukravara)	Thukra, Tankara
6.	Saturday (Shanivara)	Taniya, Saniya, Chaniya
7.	Sunday (Adithyavara)	Astha

A few names represent the names of both Flora and Fauna

Example:

Males: Koraga, Pakira, Appu, Domba, Bomma, Hoova, Kampara, Kalu, Tukka, Nakura, Pijina, Tabura, Kupula, Chaniya, Chinkra, Chinkra, Naga, Tankara

Females: Nagi, Kakke, Korapolu, Tarmbe, Tambe, Bage, Kusu, Akku, Gubbi, Negi

Transition from tradition to modern secular nomenclature.

10. Family structure

Family is the basic institution of the society. It plays an important role in the upbringing and socializing of the younger generation. It helps internalize the basic values of the society which is required to be the member of society. According to Andre Betiele "The family has been and continues to be one of the strongest institution of Indian society, in all regions, among all communities and in all social classes as are institutions through which individual acquires his capabilities and orientations as a member of society."

Among Koragas, the family is the unit of social organisation, Thus, the individual is primarily accountable to his family. Family plays an important role in the life of a Koraga from birth till death. Though the dominant form of family among the Koragas is Joint and extended. It has been transforming itself into nuclear in the present day society. In olden days there were large number of joint and extruded families in which 30 to 45 people lived together.

(A) Types of family

Among the tribes like any other community family is the main unit of social organisation. Nuclear family consists of husband, wife and married male children. The joint family system slowly started disintegrating. Soon after marriage children form their own separate family and do not depend on elders of the family.

Table 3: Data of Types of Family

Sl. No.	Types of family	No of Family	Percent
1	Nuclear	43	43%
2	Joint	48	48%
3	Extended	09	9%
	Total	100	100

The table no 3 explains the family types to which the Koragas respondents belong to selected in villages of Kundapua. It is universally accepted fact that family is changing with regard to its size and functions. In the present sample 48 families comes under the category of Joint families, 09 families belonged to extended family system. And 43 families belonged to Nuclear family system.

(B) Age wise distribution of Koraga family

Age is an important factor which plays a crucial role in deterring the nature of action by an Individual. The success and failure of any actions depends largely on age factor. In this contact the study of age reflects the attitude and opinion on the various aspects of social life. It is necessary to know the age compositions of the members of 100 families to provide guidance and training regarding the action and interactions of tribal community.

Table 4: Age wise distribution of family

Sl. No.	Age Group (yrs)	Age wise distribution of members of the family		
		No of Male	No of Female	Total
1.	0-06	21	32	53
2.	07-17	120	142	262
3.	18-40	119	102	221
4.	41-60	90	71	161
5.	61 and above	27	34	61
	Total	377	381	758

Table No. 4 explain that majority of the members area between the age group of 07-17 years. The group which have higher number of female members are tend to be very active.

The Data also shows that out of 758 members of family 221 people belong to the age group of 18-40 years. These members can be productive, pro-active to the group.

(C) Housing Patterns and ownership

Table 5: Data of Housing Patterns

Sl. No.	Types of Houses	No of Houses	Percent
1.	Thatched Hat	02	
2.	Tiled	59	
3.	R.C.C (Half)	21	
4.	R.C.C (Full)	18	
	Total	100	

The Table No 5: Shows the types of Houses owned by families (Respondents) which helps us to know their standard of living and Economic conditions. Out of 100 family respondents most of them (59%) lives in tiled houses. Only (2%) family respondents lives in thatched huts. Only 21 families lives in half RCC and half tiled houses. The 18 families who are reported in RCC. In many cases the RCC houses are not completely built. Due to poor earning capacities it is difficult for them to build complete RCC houses.

The house ownership among the 100 families (Respondent). It in well known fact that house ownership pattern helps us to understand the economic status of the family.

In the present study the house ownership patterns explain that out of 100 family respondents 80 families lived in their own house. Where majority of family headmen reported that they live in Government sanctioned lands and builted houses. It is observed during the field work that Indira Awas Yojana, Pradhana Mantri Awas Yojana, Basava Vasathi Yojana, Ambedkar Yojana has helped these families to have their own shelter. The pattern of houses ownership explains us about the socio-Economic status of Koraga community. It is due to the traditional barriers on them as well as their life style which made them as more migrant community.

(D) Marital status of Koragas

Marriage is one of the basic Institution of society. In every society we find marriage system, though the forms of marriage vary of one society to another. It is the main feature of every society right from the primitive tribal societies to the modern industrial societies. In most of the societies marriage has seen as a means of regularizing sex relations. Apart from this child bearing and rearing without any objection from the community in which they are living in, Economic support and sharing of affection between the opposite sexes are also seen as the essential aspects of marriage.

The social institution of marriage has been described differently by different scholars. According to western mark "Marriage is defined by as a relation of one or more men to one or more women who is recognised by law or customs and involves certain rights and duties both in the case of parties entering the union and in the case of children born of it". (C.N. Shanker Rao:)

According to Dr. Ravindranath (2003 page) Among the tribes marriage is regulated by the observance of various rules of their clan or village exogamy, tribal endogamy and certain preferences such as cross cousin marriages, levirate, sororate marriage and some prohibitions. The rites, rituals and rules of marriage differ from one tribe to another. A marked difference can be noticed between tribal marriage and that in the Hindu society.

On the other hand, various writings on tribal marriage describe it as a civil contract and not a religions sacrament. It is only with the contact of hindu culture that tribal marriages taking the form of religions solemnization with the prestige value in the eyes of tribal people.

In general among the tribes marriage involves not only sexual transaction but also imposes economic, social and families responsibilities upon them. Marital status of the members of the Koragas families could prove decisive in shaping the nature and extent of their participation in the activities of the family. It also influences the role that they perform in the effective functioning of the group.

Table 6: Data of Marital Status of Koraga

Sl. No.	Marital Status	Males	Females	Total
1.	Married	169	180	349
2.	Unmarried	26	34	60
3.	Separated (Divorce Desertion)	06	07	13
4.	Widow Widower	12	09	21
	Total	213	230	443

The Table No: 6 shows that in 100 families selected for the present study majority of the respondent 169 males and 180 females totally 349 persons were married and only 26 men and 34 women totally 60 persons were unmarried. This data helps us understand the fact that marriage in Koraga communities especially for the girls is the ultimate objective of life so it is compelled on them.

It is observed during the field work and also opinioned by the respondents that women's marital status decides her level of community participation.

It is also found that in the selected sample there were 06 men were separated from their wives and 07 women were separated from their husband 12 men and 09 women were lived as a widows. In all the 100 families of Koragas tribe selected for the present study marriage is a matter decided in the family by the elders and it is not the personal choice of the member.

(E) Occupational status of Koraga

According to Gurulingaiah "Occupation not only exhibits the economic position of a person but also represent the social status of an Individual. The socio-economic life of a particular group or individuals is predominantly determined by the nature and types of occupation. Occupation of tribal

people is generally classified into traditional occupation and non-traditional or modern occupations. Traditional occupation are those occupation which are associated with the community. Even though occupational changes have taken place among the tribes today they depend on traditional occupation for their livelihood, such as food gathering, hunting, shift cultivation, cattle rearing and handicrafts etc." (2008: Page 89)

During the field work it was observed that majority of the members continued their traditional occupation i.e. Basket making out of 570 members 64 males and 122 women totally 186 (32.63%) persons continued their traditional occupation Basket making. Most of them are working as daily wage earner like agriculture labourers, Mason, coolie, plantations, construction sites, working at factories etc. Only some of the members of family after their retirment are still engaging in the traditional occupation. Basket making, collecting forest products and tribal handicrafts. About 14 men and 82 women totally 96 persons have mentioned their occupational status as beedi rolling. Beedi Industries is one of the earliest Industries in the district involving large number of women belonging to the lower strata of the society. Since beedi rolling can be done sitting at home it is very convenient for women as well as for tribal women to carry out their regular activities along with beedi rolling.

Table 7: Occupational status of the family members of villages.

Sl. No.	Occupation	No. of members of family Engaged			Percentage
		Male	Female	Total	
1.	Basket Making	64	122	186	32.63
2.	Agriculture	03	04	07	01.22
3.	Agricultural Labours	46	16	62	10.87
4.	Mason	24	-	24	04.21
5.	Cooly (Helper to Mason)	48	12	60	10.52
6.	Petty shop	07	-	07	01.22
7.	Beedi rolling	14	82	96	16.84
8.	Driver	08	-	08	01.40
9.	Working at factory	39	03	42	07.36
10.	Working on contract basics at private companies	37	-	37	06.49
11.	Government Employee	05	06	11	01.92
12.	Retired Employee	06	01	07	01.22
13.	Engineer (I.T.I.)	07	01	08	01.40
14.	Teacher (Anganawadi)	02	07	09	01.57
15.	Tailoring	-	06	06	01.05
	Total	310	260	570	-

(F) Educational Qualification of Koragas Family

Education is considered to be the basic institution which connects individual effectively to the social system. It is a well known fact that education in India has remained outside the reach of large section of the population, especially for the marginalised sections of the Indian population specially for tribal's.

It is not only considered as basic institutions but also important factor in bringing about changes in the quality of life of people. As it is observed from many research studies, that education is powerful factor which brings changes in the lives of women. Higher the level of education of women, greater will be the possibilities of her accepting the modern values in the changing socio-cultural sphere.

Education plays a significant role in improving the social status, quality of life, social awareness and economic life situation of tribal people. Primary education has been made free for all in our country and the tribes are getting a special incentives packages to make them avail the benefit of education. Women education was encouraged by providing financial assistance, through scholarship. Inspite of these programmes things did not change because most of the programmes of the government have not reached to the tribal communities.

Table 8: Data of Educational Qualification of Koragas

Sl. No.	Education	No of Respondents		
		Males	Females	Total
1.	Primary	94	158	252
2.	Primary / Secondary	78	102	180
3.	High School	67	45	112
4.	Pre-University	17	26	43
5.	Graduation	28	13	41
6.	I.T.I. Diploma	04	01	05
7.	Post-Graduation	01	02	03
8.	Engineering	-	01	01
9.	Medical	-	01	01
10.	Illiterate	21	46	67
	Total	310	395	705

Table No 8 Shows that Educational Qualification of 100 families (respondents). It is well known fact that in India girls education gets least priority among any social groups it is true in the case of Koraga tribal women that formal education for Koraga tribal women never welcomed by the community. Since their life around the nature and their

activities related to the social living never demanded for formal education.

The table shown above highlights the fact that women in Koraga tribe had access of education up to the primary level. Out of 705 respondents 158 women and 94 men studied up to primary level. This also reflects the fact that school drop out for girls is a very general trend. Generally it is associated with the factors like family and social position enjoyed by the women, general attitude towards education in particular for women education, availabilities of schools and infrastructural facilities, longer Distance, taboos and social restrictions on women so on.

On the other hand, out of 705 respondents 46 women and 21 men totally 67 members of 100 families had never attended school. We can say that there is negative trend towards the higher education of girls in Koraga tribes selected for the present study. It is only 3 women had attained the post graduation level of education.

11. Religious Belief and Practices

Religion is a universal phenomenon. It is one of the earliest forms of human actuary. It represents the relationship of man with super natural powers. It is expressed through a system of beliefs, rituals and worship. According to Emile Durkhi em"A Religion is a unified system of belief and practices to sacred things, that is to say, things set apart and forbidden beliefs and practices which unite into one single moral community called a church, all those who adhere to them". His defaction of religion analyses both structural and functional aspects.

Tribal religion is considered as the most primitive form of religion. It consists of worship of wild animals, trees, natural factors like the sun, the moon, rain, mountains, rivers, faith in witch craft, immortality of soul, ritualism etc. Thus tribal religion enters in almost all the aspects of life. Animism, Totemism, Taboo, magic and ancestor worship are some of the markedly predominant features of the tribal religions life.

The Koragas worship God and Goddesses and other deities which can be broadly grouped in to two categories.

a) The first category comprises of more popular god cased goddesses of India of regional import. These include such God as Rama, Krishna, Ganesh, Shiva, Parvathi, Lakshmi and Hanuman.
b) The second category comprises of the various Bhutas or spirits. Like Koragatanya, Baikadthi, Panjurli, Kallurthi, Kalkuda, Mariamma, Haigulli, marlechikku, Masti, Neveha etc.

The Bhuta worship is more important in their day today life. In fact the religious fabric of the Koraga society is deeply influenced by the Bhuta cult. And this is not peculiar only to this tribe. Infact in South Kanara and Udupi District, Bhuta cult is found among a number of communities particularly of low social status.

The family Bhutas are kept inside the houses over a woodem bracket known as Bhutasthan (Seat of Bhuta) Each family has its distinct set of Bhutas, Inddition to the other bhutas such as Panjurly, Ammanoru and Neecha.

Bhutas are worshipped collectively by the members of the Kutumba at least once a year with offering of flowers, fruits and sacrifice of fouls. All these members of the kutumba if they reside in distant places are supposed to join in the annual worship the family Bhuta aradhane (Kola).

Like the worship of the family Bhuta by various Individual families all the important Bhuta in the community are collectively worshipped at least once a year. In the ceremony which is known as Bhuta Kola, the important functionaries are the patri, the Gurikara and the vottu gurikara.

Apart from the above religious rituals they have also taken to certain Hindu festivals of all India or regional import which are associated with popular Hindu god and goddesses.

12. Finding and suggestions

Government has to provide the facility for the students of Koraga community besides government has to provide like Scholarship, uniform, model School including give some facilities for the student of their parent in order to uplift the condition of theirs and make their lives and the condition better and also provide good hospitality and shelter where is it possible in the School and outside the premises and we need to find out the reason why these are the students are living the school and to find out the solution to make them to come school. To create such atmosphere for them to have good education and need to inculcate virtues of life. So from the society and NGO's have to contribute to make them most civilized and educated in the society by doing this way we can make their lives prosper and happy.

Reasons for the School Dropout and Illiteracy

- Students parents are illiterate because of that reason they do not know the value of education.
- Illiterate women.
- Inadequate Hostel facility.
- Health issues amongst tribal students this is one of the reason to leave the school.
- Class system has been affected on tribal community in the society.

Government has to take some interest the pigment of tribal community. As per the field work or survey the literacy rate of schedule tribe and caste in the selected villages.

The statistics as follows:

- Primary students 252.
- Higher primary 180.
- High School 112.
- University 43 graduation 41 post graduation 3 diploma 67 are illiterate.

It is shown that no changes have been taken place amongst the people regarding their part in getting into education at Higher levels.

There are 67 students who have left the school in the middle of the academic year, in the beginning 544 students got admitted for 1 to 10th class so when we observe these are the reasons for their absence.

- Their freedom has been snatched by disciplinary rules in schools.
- Lack of interest.
- Child marriage and psychological implications made them feel insecure.
- Lack of teaching faculty to teach the children and understand their psychological condition.
- Quality of the food supplied in schools is very poor.

- Because of the Nuclear family system children are supposed to work to feed themselves.
- Because of religious rules, they migrate to various other places to take part in 'Kola', Nema and 'Jaatra' during festive seasons like 'Shravana' and 'Navavatri' and return before raining season.
- Parents refuse to use systematically provided education for their children due to which literacy rate of these communities in Kundapura is very low.
- There are many Koraga welfare organisations in Kundapura straining hard to convince Koraga people to send their children to school related to which they keep conducting meetings, discussions, pertaining to welfare of the children.
- It gives them the knowledge about grammar of Kannada and English language.

'Makkala Mane' at 'Dr Ambedkar Nagar in Kumbhashi, is organising various programme for the educational welfare of the Koraga children in Kundapura.

1. The organisation, tries to impart the importance of education to parents and children of Koraga community.
2. It conducts counseling to the children who are absent for the programe.
3. It organises them programes on Various topics such as need and importance of cleanliness, Handicrafts / arts, including sports and cultural activities.

- Koraga community is not developed to the expected level but slowly they are reaching to the mainstream of the society. It is one of the saddest part of the development.
- Koraga's culture & tradition has been changed by the modern touch, by the influence of Shista Parampare, their customs & tradition like baptism (Cradle Ceremony), Marriage, House Warming Ceremony, Funeral & Role of priest involved in their various aspects of the way of life.
- Koraga language has been declaiming because of the influence of modern education.
- Though Government has prohibited "Ajalu Paddhathi" but still it is practice in remote & interior place and in traditional Koraga families.
- Government has to provide initiative to establish Koraga Tribal Research study centre either in Udupi dist. or South Canara dist.
- Government & NGO's have to organise programmes not for the sake programme, instead of that positive & qualitative programmes have to oraganise for the upliftment of Koraga community.
- For the development of Koraga community to train their skills government has to appoint & train people with in their community to teach & train their people.
- Government has to sanction minimum 3 to 5 acres of land for agriculture and motivate them to do agriculture.

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International Journal of Applied Research

ISSN Print: 2394-7500
ISSN Online: 2394-5869
Impact Factor: 5.2
IJAR 2019; 5(11): 247-254
www.allresearchjournal.com
Received: 24-09-2019
Accepted: 28-10-2019

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ಸಾಮಾಜಿಕ ಬದಲಾವಣೆಯಲ್ಲಿ ಕುಡುಬಿ ಬುಡಕಟ್ಟು ಸಮುದಾಯ – ಒಂದು ಸಮಾಜಶಾಸ್ತ್ರೀಯ ಅಧ್ಯಯನ (ಉಡುಪಿ ಜಿಲ್ಲೆಯ ಕುಂದಾಪುರ ತಾಲೂಕಿನ ಆಯ್ದ ಗ್ರಾಮಗಳಲ್ಲಿನ ಅರವತ್ತು ಕುಡುಬಿ ಕುಟುಂಬಗಳನ್ನು ಅನುಲಕ್ಷಿಸಿ)

ರಾಮಚಂದ್ರ

1. ಪ್ರಸ್ತಾಪ

ದಕ್ಷಿಣಕನ್ನಡ ಮತ್ತು ಉಡುಪಿ ಜಿಲ್ಲೆಯಲ್ಲಿ ಕೊರಗರು, ಮಲೆಕುಡಿಯರು, ಕಾಮ್ಲಾಪುರ, ಮಾಣಿ/ಮಲಾಡಿಗರು ಮತ್ತಿತರ ಸಂವಿಧಾನಬದ್ಧ ಬುಡಕಟ್ಟುಗಳಾಗಿ ಗುರುತಿಸಲ್ಪಟ್ಟಿದ್ದಾರೆ. ಕೊರಗರು ಹೊರ ಶಿಕ್ಷಣ ಪಡೆದು, ಆರ್ಥಿಕ ವ್ಯವಸ್ಥೆ ರಾಜಕೀಯ ಹಾಗೂ ಸಾಮಾಜಿಕ ವ್ಯವಸ್ಥೆಗೆ ತೆರೆದುಕೊಳ್ಳದೆ ತಮ್ಮ ಮೂಲನೆಲೆಗಳಲ್ಲಿಯೇ ಇನ್ನೂ ಬದುಕುತ್ತಿದ್ದಾರೆ. ಅವಿಭಜಿತ ಜಿಲ್ಲೆಯಲ್ಲಿ ಸುಮಾರು 13,597 ಜನಸಂಖ್ಯೆ ಹೊಂದಿದ್ದು, ಅವುಗಳಲ್ಲಿ ಹೆಚ್ಚಿನವರು ತಮ್ಮ ಪಾರಂಪಾರಿಕ ಪ್ರವೃತ್ತಿಯನ್ನೇ ಪ್ರಮುಖ ಜೀವನಾಧಾರವನ್ನಾಗಿ ಮಾಡಿಕೊಂಡಿರುವರು. ಇವರು ಜೀವನದ ಎಲ್ಲಾ ರಂಗಗಳಲ್ಲಿಯೂ ಆಧುನಿಕ ಸೌಲಭ್ಯಗಳಿಂದ ವಂಚಿತರಾಗಿರುವರು. ಅಲ್ಲದೆ ಇವರು ಕೂಡ ಬುಡಕಟ್ಟುಗಳ ಗುಣಲಕ್ಷಣಗಳನ್ನು ಹೊರಿದ್ದು, ಹಾಗೂ ತಮ್ಮದೇ ಮೌಲಿಕ ಭಾಷೆಯಾದ 'ಕೊರಗ'ದಲ್ಲಿಯೇ ಸಂವಹನ ಮಾಡಲು ಪ್ರಯತ್ನಿಸುತ್ತಿರುವುದು ಕಂಡುಬಂದಿದೆ. ಅವಿಭಜಿತ ಜಿಲ್ಲೆಯ ಕಾಡಿನ ಮಧ್ಯೆ ಕಾಯುತ್ತಿರುವುದನ್ನು ಸಂಗ್ರಹಿಸಿಕೊಂಡು ಮತ್ತು ಕುಮೇರಿ ಬೇಸಾಯವನ್ನು ಮಾಡಿಕೊಂಡು ಬದುಕುತ್ತಿರುವ ಮತ್ತೊಂದು ಬುಡಕಟ್ಟು ಸಮುದಾಯ ಮಲೆಕುಡಿಯರು ಮತ್ತು ಮಾಣಿ/ಮಲಾಡಿ ನಾಯ್ಕರು. ಇವರು ಆಧುನಿಕ ಶಿಕ್ಷಣಕ್ಕೆ ತೆರೆದುಕೊಂಡು ಸ್ವಲ್ಪಮಟ್ಟಿಗೆ ಹಿಂದುಳಿದ ಸಮಾಜದ ಸಂಸ್ಕೃತಿಯ ಪ್ರಭಾವಕ್ಕೆ ಒಳಗಾಗಿ ತಮ್ಮ ಜೀವನಾಚರಣೆಯ ಮತ್ತು ವಾರ್ಷಿಕಾಚರಣೆಯ ಆಚರಣೆಗಳಲ್ಲಿ ಜಾತಿಯ ಲಕ್ಷಣಗಳು ಪರಿಣಾಮಗೊಂಡಿರುವುದು ಕಂಡುಬರುತ್ತದೆ. ಅಲ್ಲದೆ ತಮ್ಮ ಮೂಲಸಂಸ್ಕೃತಿಯನ್ನು ಬಿಟ್ಟು ಕೊಡದೇ ಇರುವುದು ಕೂಡ ಕಂಡು ಬಂದಿರುತ್ತದೆ. ಮೂಲತಃ ಬುಡಕಟ್ಟು ಲಕ್ಷಣಗಳನ್ನು ಹೊಂದಿರುವ ಕುಡುಬಿ ಸಮುದಾಯದವರು ಗೋವಾ ಸರಹದ್ದಿನಿಂದ ಕಾರವಾರ ಕರ್ನಾಟಕಕ್ಕೆ ವಲಸೆ ಬಂದು ಉತ್ತರಕನ್ನಡ ಜಿಲ್ಲೆ ಮತ್ತು ಅವಿಭಜಿತ ದಕ್ಷಿಣಕನ್ನಡ ಜಿಲ್ಲೆಯಲ್ಲಿ ನೆಲೆ ನಿಂತಿರುವರು. ಉತ್ತರಕನ್ನಡ ಜಿಲ್ಲೆಯಲ್ಲಿ ಇವರನ್ನು ಕುಣಬಿಯವರೆಂದು ಮತ್ತು ಅವಿಭಜಿತ ದಕ್ಷಿಣಕನ್ನಡ ಜಿಲ್ಲೆಯಲ್ಲಿ ಕುಡುಬಿಯವರೆಂದು ಕರೆಯುವರು. ಭೌಗೋಳಿಕ ಅಡೆತಡೆಯಿಂದಾಗಿ, ಸಂಪರ್ಕದ ಕೊರತೆಯಿಂದಾಗಿ ಇವರಲ್ಲಿಗೆ ಸಾಂಸ್ಕೃತಿಕ, ಸಾಮಾಜಿಕ ವಿಕಸನ ಅಷ್ಟಿ ಬಂದಿರಲಿಲ್ಲ. ಈಗಾಗಿ ಇಂದು ಇವರ ನಡುವೆ ಶಿಕ್ಷಣಪ್ರಜ್ಞೆಯಲ್ಲಿ ಸಮಾನಾಂತರ ಕೆಲವು ಬಂದಿರುವ ಕೆಲವೊಂದು ಸಾಮಾಜಿಕ ಜೀವನಾಚರಣೆಯಲ್ಲಿ ಸಮಾನಾಂತರ ಗೋಚರಿಸುತ್ತಿಲ್ಲ.

2. ಅಧ್ಯಯನದ ಉದ್ದೇಶ:

1. ಈ ಅಧ್ಯಯನವನ್ನು ಉಡುಪಿ ಜಿಲ್ಲೆಯ ಕುಂದಾಪುರ ತಾಲೂಕಿನಲ್ಲಿ ವಾಸ್ತವ್ಯವಿರುವ ಕುಡುಬಿಯವರಿಗೆ ಮಾತ್ರ ಸೀಮಿತಗೊಳಿಸಲಾಗಿರುತ್ತದೆ.
2. ಕುಡುಬಿಯವರ ಕುಟುಂಬ, ವಿವಾಹ, ಬಳವಣಿಗೆ, ವಿವಾಹ ಆರ್ಥಿಕ ಮತ್ತು ಶೈಕ್ಷಣಿಕ ಸ್ಥಿತಿಗತಿಗಳನ್ನು ವಿಶ್ಲೇಷಿಸುವುದು.
3. ಪ್ರಸ್ತುತ ಇವುಗಳಲ್ಲಿ ಆಗಿರುವ ಬದಲಾವಣೆಯನ್ನು ಗುರುತಿಸಿ ವಿಶ್ಲೇಷಿಸಲಾಗಿದೆ.

3. ಅಧ್ಯಯನ ವಿಧಾನಗಳು:

1. ಕುಂದಾಪುರ ತಾಲೂಕಿನಲ್ಲಿ ಅಯ್ದು ಗ್ರಾಮಗಳಲ್ಲಿ ವಾಸ್ತವ್ಯವಿರುವ ಅರವತ್ತು ಕುಡುಬಿ ಕುಟುಂಬಗಳನ್ನು ಆಯ್ಕೆ ಮಾಡಿ ಅಧ್ಯಯನ ಮಾಡಲಾಗಿದೆ.
2. ಈ ಪ್ರದೇಶಗಳನ್ನು ಹಲವಾರು ಬಾರಿ ಭೇಟಿ ಮಾಡಿ, ಅಲ್ಲಿನ ಹಿರಿಯರನ್ನು ಪರಿಚಯಿಸಿ ಕ್ಷೇತ್ರ ಕಾರ್ಯದ ಮೂಲಕ ಪ್ರಶ್ನಾವಳಿ, ಸಂದರ್ಶನದ ಮೂಲಕ ಈ ಸಂಬಂಧಕ್ಕೆ ಬೇಕಾದ ವಿಷಯಗಳನ್ನು ಸಂಗ್ರಹಿಸಲಾಗಿದೆ.
3. ಸಂದರ್ಶನ ಸೂಚಿ (ಅನೇಕಾಜಿಕಮುಖಿ ಪಠ್ಯಪ್ರಶ್ನೆಗಳು)

4. ಅಧ್ಯಯನದ ವ್ಯಾಪ್ತಿ

ಉಡುಪಿ ಜಿಲ್ಲೆಯ ಕುಂದಾಪುರ ತಾಲೂಕಿನ ವ್ಯಾಪ್ತಿಯೊಳಪಟ್ಟ ಆಯ್ದ 10 ಗ್ರಾಮಗಳನ್ನು ಪ್ರಸ್ತುತ ಅಧ್ಯಯನಕ್ಕೆ ಒಳಪಡಿಸಲಾಗಿದೆ. ಈ ತಾಲೂಕಿನ 86 ಗ್ರಾಮಗಳಲ್ಲಿ 46 ಗ್ರಾಮಗಳಲ್ಲಿ ಕುಡುಬಿ ಸಮುದಾಯ ವಾಸ್ತವ್ಯ ನೆಲೆಗಳಿವೆ. ಅವರು ದಟ್ಟವಾಗಿ ನೆಲೆಯಾಗಿರುವ ಗ್ರಾಮಗಳಾದ ಕೋಳಿಂಜೆ, ಹಾಲಾಡಿ, ಅಮಾಸೆಬೈಲು, ಕಳ್ಳಂಜೆ, ವಂಡಾರು,

ಹೊಸಂಗಡಿ, ಅಂಪಾರು, ಮಾಡಮಕ್ಕಿ, ನೇರಿಮನೆ, ಹಲ್ಸಾಡಿ, ಕಿರುಮಂಜೇಶ್ವರ, ಹೆಮ್ಮಾಡಿ, ಗೋಳಿಯಂಗಡಿ, ಕೊಲ್ಲೂರು ಪಕ್ಕ ದೋಣಿಗಡ್ಡೆ, ಹಳ್ಳಹೊಳೆ, ಬಸ್ರೂರು, ನಂಜಾರು.

ಅಧ್ಯಯನಕ್ಕಾಗಿ ಆರಿಸಿ ಮಾಡಿರುವ ಕುಡುಬಿ ಸಮುದಾಯದ ನೆಲೆಗಳು ಗುಡ್ಡಗಳಿಂದ ದೂರವಿದ್ದು, ಕಾಡಿನ ಮಧ್ಯ ಅಥವಾ ಕಾಡಿನಲ್ಲಿ ಬದಿಯಲ್ಲಿ ಕಂಡುಬರುತ್ತದೆ. ಈಗಲೂ ಸಾಂಪ್ರದಾಯಿಕ ಕೃಷಿ ಅಥವಾ ಕುಶಲಕರ ವಸ್ತುತಯಾರಿಕೆಯನ್ನೇ ಅವಲಂಬಿಸಿಕೊಂಡು ಬಂದಿರುತ್ತಾರೆ.

ಕೋಷ್ಟಕ 1: ಅಧ್ಯಯನಕ್ಕೆ ಒಳಪಡಿಸಿರುವ ಗ್ರಾಮಗಳು, ಕುಟುಂಬಗಳು ಮತ್ತು ಕುಟುಂಬವಲ್ಲಿರುವ ಜನಸಂಖ್ಯೆಯ ವಿವರಗಳ ಪಟ್ಟಿ

ಕ್ರ.ಸಂ.	ಗ್ರಾಮಗಳ ಹೆಸರು	ಆಯ್ಕೆಗೊಂಡಿರುವ ಕುಟುಂಬಗಳ ಸಂಖ್ಯೆ	ಕುಟುಂಬದಲ್ಲಿ ವಾಸ್ತವ್ಯವಿರುವ ಸದಸ್ಯರ ಸಂಖ್ಯೆ		
			ಗಂಡಸರು	ಹೆಂಗಸರು	ಒಟ್ಟು
1.	ಹಾಲಾಡಿ	10	48	41	89
2.	ಅಮಾಸೆಬೈಲು	08	40	32	72
3.	ಶಂಕರನಾರಾಯಣ	08	38	26	64
4.	ಹೊಸಂಗಡಿ	06	28	26	54
5.	ಅಂಪಾರು	05	27	19	46
6.	ತಲ್ಲೂರು	06	28	24	52
7.	ಸಿದ್ಧಾಪುರ	04	17	19	36
8.	ಬಡಾಲ್	05	20	19	39
9.	ಮಾಬುಕಳ	04	19	18	37
10.	ನಂಜಾರು	04	22	20	42
ಒಟ್ಟು		60	287	244	531

5. ಕುಡುಬಿ ಬುಡಕಟ್ಟು ಸಮುದಾಯದ ಬಗ್ಗೆ ಇದುವರೆಗೆ ನಡೆದ ಅಧ್ಯಯನಗಳ ಹಿನ್ನೋಟ:

ಕುಡುಬಿ ಸಮುದಾಯದ ಬಗ್ಗೆ ಕಳೆದ 19ನೇ ಶತಮಾನದಿಂದಲೇ ವಿವಿಧ ಮಾದರಿಯ ಸಮೀಕ್ಷೆ – ಅಧ್ಯಯನಗಳು ನಡೆದಿವೆ.

- **ಬ್ರಿಡ್ಜ್ ಫ್ರೆಸ್ಟರ್** ಅರಣ್ಯಾಧಿಕಾರಿಯಾಗಿದ್ದು **ಮದರಾಸ್ ಆರ್ಮಿ ಮ್ಯಾನ್ಯುಯಲ್** ರಚನೆಯ ಸಂದರ್ಭದಲ್ಲಿ ಕ್ಷೇತ್ರಕಾರ್ಯದ ಮಾಹಿತಿ ಮಾಹಿತಿಯನ್ನು ಸಂಗ್ರಹಿಸಿ ನೀಡಿದ್ದಾರೆ. ಇವರು 'ಈಸ್ಟರ್ನ್ ಟೆರಿಟರಿ ಗಾರ್ಡ್ಸ್ ಇನ್‌ಡಿಯಾ' ಎಂಬ ಅಧ್ಯಾಯದಲ್ಲಿ ಕುಡುಬಿಯರ ಬಗ್ಗೆ ಸಂಕ್ಷಿಪ್ತವಾದ ವಿವರಣೆಯನ್ನು ನೀಡಿರುತ್ತಾರೆ. ಇವರು ದಕ್ಷಿಣಕನ್ನಡ ಜಿಲ್ಲೆಯ ಕಾಡಿನ ಮನೆ ಮತ್ತು ಗುಡ್ಡ ಪ್ರದೇಶದ ಅಂತರದಲ್ಲಿ ವಾಸ್ತವ್ಯವಿದ್ದಾರೆ. ಅಲ್ಲದೆ ಕುಡುಬಿಯವರ ಸಾಮಾಜಿಕ ಸಂಕೇತಗಳ ಬಗ್ಗೆ ವಿವರವನ್ನು ಈ ಮಾಹಿತಿಗಳು ಹೆಚ್ಚು ಪ್ರಾಮಾಣಿಕವಾಗಿದ್ದು, ಸರ್ವಸ್ಪರ್ಶ ರಹಿತವಾಗಿ ಇವೆ. ಎಲ್ಲೂ ತಮ್ಮ ಅಭಿಪ್ರಾಯದ ಹೇರಿಕೆಗೆ ಹೋಗಿಲ್ಲ. ಒಂದು ಶತಮಾನದ ಹಿಂದೆ ಈ ಸಮುದಾಯದ ಜೀವನ ವಿವರಗಳನ್ನು ದಾಖಲಿಸಿರುವುದು ಇಂದಿನ ಅಧ್ಯಾಯಕ್ಕೆ ಗಮನಾರ್ಹ ಕೊಡುಗೆ ಎಂದು ಹೇಳಬೇಕಾಗಿದೆ.
- **ಎಡ್ಗರ್ ಥರ್ಸ್ಟನ್** (1909) ತಮ್ಮ 'ಕಾ ಕಾಸ್ಟ್ಸ್ ಆಂಡ್ ಟ್ರೈಬ್ಸ್ ಆಫ್ ಸದರ್ನ್ ಇಂಡಿಯಾ' ದಲ್ಲಿ (ಪಾಲು. 1 ರಿಂದ 7) ದಕ್ಷಿಣ ಭಾರತದ ಹಲವಾರು ಬುಡಕಟ್ಟು ಹಾಗೂ ಜಾತಿಗಳ ಜೀವನ ವಿಧಾನಗಳನ್ನು ಸ್ಥೂಲವಾಗಿ ವಿವರಿಸಿದ್ದಾರೆ. ಇವರ ಬರವಣಿಗೆಯು ಹೆಚ್ಚಾಗಿ ಮಾನವ ಶಾಸ್ತ್ರೀಯ ವಿವರಗಳನ್ನು ಒಳಗೊಂಡಿದೆ. ಕುಡುಬಿ ಬುಡಕಟ್ಟು ಸಮುದಾಯಕ್ಕೆ ಸಂಬಂಧಿಸಿದಂತೆ ಅವರ ಆಚಾರ ವಿಚಾರ, ವಿವಾಹ ಮತ್ತು ಕೌಟುಂಬಿಕ ಪದ್ಧತಿ, ಕಂದಾಚಿ ಮತ್ತು ಪರಂಪರೆಗಳ ಬಗ್ಗೆ ವಿವರವಾದ ಮಾಹಿತಿಯನ್ನು ಒದಗಿಸುತ್ತಾರೆ. ಸುಮಾರು ಪುಟಗಳ ಒಂದು ಅಧ್ಯಯನ ನಡೆಸುವುದರಿಂದ ಕುಡುಬಿ ಸಮಾಜದ ಬಗೆಗಿನ ಬಗ್ಗೆ ಮಹತ್ವಪೂರ್ಣ ಚರಿತ್ರೆ ಕುಮಾರ್ ಇವರ ಮಾಹಿತಿ ಉಪಯೋಗವಾಗಿದ್ದಲ್ಲದೆ. ಆದರೂ ಇವರ ಅಧ್ಯಯನದಲ್ಲಿ ಈ ಸಮುದಾಯವು ಎದುರಿಸುತ್ತಿರುವ ಸಮಸ್ಯೆಗಳ ಬಗ್ಗೆ ಬದಲಾವಣೆಗಳ ಬಗ್ಗೆ ಮಾಹಿತಿಯಿರುವುದಿಲ್ಲ.
- **ಸುಬ್ರಾಯಪ್ಪ ಮತ್ತು ಅಯ್ಯರ್** ಅವರು (1928) ಕುಡುಬಿ ಸಮುದಾಯದ ಪ್ರಭೇದಗಳಲ್ಲಿರುವಾಗ ಆಚೆ ಕುಡುಬಿಯರ ಬಗ್ಗೆ ಸ್ಥೂಲವಾದ ವಿವರಣೆಯನ್ನು ನೀಡಿರುತ್ತಾರೆ. ಅವರು ಆಚೆಕುಡುಬಿಯವರ ಜೀವನ ವಿಧಾನ ಸಮುದಾಯದ ಆಂತರಿಕ ರಚನೆ, ವಿವಾಹ ಪದ್ಧತಿ ಮತ್ತು ನಿಷೇಧ, ಬಳವಳಿಕೆ, ಉಡುಪಿಕೆಕ್ಷೆ, ಹೆಣಹೂಣುವಿಕೆ, ಆಹಾರ ಪದ್ಧತಿ ಇತ್ಯಾದಿ ಅಂಶಗಳ ಬಗ್ಗೆ ಮಾಹಿತಿಯನ್ನು ನೀಡಿರುವರು.
- **ಶ್ರೀ ಅಧಿಕಾರಿ** (1973)ರವರು ಸಂಪಾದಿತ 'ದಕ್ಷಿಣ ಕನ್ನಡ ಜಿಲ್ಲೆಯ ಗಜೆಟಿಯರ್' ನಲ್ಲಿ ಕುಡುಬಿಯವರ ಜೀವನ ವಿಧಾನ ಮತ್ತು ಸಾಂಸ್ಕೃತಿಕ ಆಚರಣೆಗಳ ಕುರಿತು ಮಾಹಿತಿಯನ್ನು ನೀಡಿರುತ್ತಾರೆ.
- **ಎಂ.ಜಿ. ಹಾನಗಲ್** (1975) ಅವರ ಅಧ್ಯಕ್ಷತೆಯಲ್ಲಿ ರಚಿಸಲಾದ 'ಕರ್ನಾಟಕ ರಾಜ್ಯ ಹಿಂದುಳಿದ ವರ್ಗ ಆಯೋಗದ ವರದಿ' ದಲ್ಲಿ ಕುಡುಬಿ ಸಮುದಾಯವನ್ನು ಬೆಟ್ಟ ಪರ್ವತದ ಸಂಪರ್ಕದಲ್ಲಿ ಅಥವಾ ಪ್ರಕೃತಿಯಾಗಿ ಬೆಟ್ಟದಲ್ಲಿ ವಾಸ್ತವ್ಯವಿರುವ ಅಲೆಮಾರಿ ಬುಡಕಟ್ಟು ಎಂಬುದಾಗಿ ಕರೆದಿರುವರು. (ರ ಒಂಬತ್ತನೆಯ ಭಾಗ ಜನಪದ ಬುಡಕಟ್ಟು ಮತ್ತು ಜಾನಪದ ಪು. ೨೦೦೫)
- **ಡಾ. ಸುಬ್ಬಾಡಿ ಪೈ ಮತ್ತು ಡಾ. ಒಪೆಂಡ್ ಸಿ. ಹೆಗಡೆ** ರವರು ರಚಿಸಿರುವ 1980–1990ರಲ್ಲಿ ಕರ್ನಾಟಕ ಸರ್ಕಾರದ ವಿವಿಧ ಅಭಿವೃದ್ಧಿ ಕಾರ್ಯಕ್ರಮಗಳ ಕರ್ನಾಟಕ ರಾಜ್ಯದ ಬುಡಕಟ್ಟು ಸಮುದಾಯಗಳಲ್ಲಿ ಸಾಮಾಜಿಕ – ಆರ್ಥಿಕ ಅಭಿವೃದ್ಧಿ ಪರಿಣಾಮಗಳ ಅಧ್ಯಯನ ವರದಿಯಲ್ಲಿ ಕುಡುಬಿ ಬುಡಕಟ್ಟಿನ ಕುರಿತು ಅಧ್ಯಯನ ನಡೆಸಿರುತ್ತಾರೆ. ಈ ವರದಿಯಲ್ಲಿ ದಕ್ಷಿಣಕನ್ನಡ ಜಿಲ್ಲೆಯಲ್ಲಿ ವಾಸ್ತವ್ಯವಿರುವ 50 ಕುಟುಂಬಗಳ ದತ್ತಾಂಶಗಳ ಸಂಗ್ರಹ ಮಾಡಿರುವುದು ಕಂಡುಬರುತ್ತದೆ.
- **ಕೃಷ್ಣಮ್ಮ** (1991) 'ಕುಡುಬಿಯವರ ವಿಶೇಷ'.
- **ಕುಪ್ಪಾರ ಜೋಷಿ ಎಸ್**. (1983) 'ದಕ್ಷಿಣ ಕನ್ನಡದ ಕುಡುಬಿಯವರು, ಸುಬ್ಬಾರಾಯ ಹೆಗ್ಗಡೆ (1985) 'ಅಟ್ಟೆ ಕುಣಿತ'
- **ಡಾ.ಎ.ವಿ. ನಾವಡ** (1984) ಕುಡುಬಿ ಜನರ ಹೋಳಿ ಕುಣಿತ ಮತ್ತು ಕುಡುಬಿಯರು (1989)
- **ಗಾಯತ್ರಿ ನಾವಡ** 'ಗೋವೆಯ ಮಕ್ಕಳು ಕುಡುಬಿಯರು' ಮತ್ತು 'ಪಾಡಿನ ಕುಲ ಕಡಿಯುವ ಕುಡುಬಿ ವಿವಾಹ'.
- ಪಾಲ್ತಾಡಿ ರಾಮಕೃಷ್ಣ ಆಚಾರ್ (1992) ಜನಪದ ಕುಣಿತಗಳು ಹೋಳಿ ಕುಣಿತ
- ಡಾ.ಹಿ.ಚಿ. ಬೋರಲಿಂಗಯ್ಯ (1991) 'ಗಿರಿಜನರಿಗೆ ಇವತ್ತಿ ಕರಗಾಗಿರುವ ಅಭಿವೃದ್ಧಿ'
- ಅರುಣಾ ಲಕ್ಷ್ಮಣ ಕೋಟ್ (1980) – 'ಕುಡುಬಿ ವ್ಯಕ್ತಿತ್ವದಲ್ಲಿ ಬಲಿಷಾ ಕುಡುಬಿ'
- ನಿಷ್ಕಾಲಂದ ಪಡ್ರೆ (1993) 'ಹೋಳಿ ಬಿದಿರು ಹೋಳಿ'
- ಸಿ. ಶ್ರೀಧರ ನಾಯಕ್ (1992 & 1982) ಬಣಜುಕಟ್ಟು : ಬಣಜಿಗ, ಆಯುರ್ವೇದ ಚಿಕಿತ್ಸಾ ಗಣಿಯು
- ಸುಬೇಕ ಜೋಷಿ (1990) 'ಕೊಂಕಣಿ ಕುಡುಬಿ ಜನಾಂಗ'
- ಗೋಪಾಲ ಗೌಡ ಎ.ವಿ. (1976) 'ದಕ್ಷಿಣ ಕನ್ನಡದ ಕುಡುಬಿ ಜನಾಂಗ'

ಮೇಲಿನ ಎಲ್ಲಾ ವಿದ್ವಾಂಸರ ಅಧ್ಯಯನಗಳು ಸಾಮಾನ್ಯವಾಗಿ ಬುಡಕಟ್ಟು ಸಮುದಾಯಗಳ ಹಲವಾರು ಜೀವನದ ಅಧ್ಯಯನವಾಗಿ ನಡೆಸಿದ್ದರೂ, ಕುಡುಬಿ ಸಮುದಾಯದ ಸಮಗ್ರ ಅಧ್ಯಯನ ನಡೆಸಿಲ್ಲ. ಅಲ್ಲದೆ ಇತ್ತೀಚೆಗೆ ನಡೆದಿರುವ ಸಾಮಾಜಿಕ ಸ್ಥಿತ್ಯಂತರ ಮತ್ತು ಅವುಗಳಿಗೆ ಸಂಬಂಧಿಸಿದ ಕಾರಣಗಳನ್ನು ಅಧ್ಯಯನದಲ್ಲಿ ಒಳಗೊಂಡಿಸಿಲ್ಲ ಎಂಬುದಾಗಿ ವ್ಯಕ್ತವಾಗುತ್ತದೆ.

6. ಕುಡುಬಿ ಬುಡಕಟ್ಟು ಸಮುದಾಯದ ಒಳಪಂಗಡಗಳು:

ಕುಡುಬಿಯರ ನೆಲೆಗಳು ಹೆಚ್ಚಾಗಿ ಗುಡ್ಡಗಳಿಂದ ದೂರವಿದ್ದು, ಕಾಡಿನ ಮಧ್ಯೆ ಅಥವಾ ಕಾಡಿನ ಅಂಚಿನಲ್ಲಿ ಕಂಡುಬರುತ್ತವೆ. ಕುಂದಾಪುರ ತಾಲೂಕಿನ ಮಾಬುಕಳ, ನಂಜಾರು, ಬಸ್ರೂರು, ಹಳ್ಳಿಹೊಳೆ, ಕೊಲ್ಲೂರು, ಥಾಳಿ, ಶೋಣೆಗುಡ್ಡೆ ಮಂದಳ್ಳಿ ಹೇರೂರು, ಹಾರ್ದಳ್ಳಿ ಹಾಲಾಡಿ, ಹೆಂಗವಳ್ಳಿ ಕೇರಿಮನೆ, ಮಾಡಮಕ್ಕಿ, ಬೆಳ್ಳೆ ಕೊಳಂಜೆ, ಅಮಾಸೆಬೈಲು, ಕಳ್ಳಾಂಜೆ, ಪಂಚಾರು, ಅಂಪಾರು, ಹೊಸಂಗಡಿ, ಎಡಮೊಗ್ಗೆ, ಕಮಲಶಿಲೆ ಗ್ರಾಮಗಳಲ್ಲಿ ಕಂಡುಬರುತ್ತವೆ. ಇವರು ಈಗಲೂ ಸಾಂಪ್ರದಾಯಿಕ ಕೃಷಿ ವಸ್ತುತಯಾರಿಕೆಯನ್ನೇ ಅವಲಂಬಿಸಿಕೊಂಡು ಬಂದಿದ್ದಾರೆ. ಅವಿಭಜಿತ ದಕ್ಷಿಣಕನ್ನಡ ಜಿಲ್ಲೆಯಲ್ಲಿ ಕುಡುಬಿ ಸಮುದಾಯವಲ್ಲಿ ಆರು ಒಳಪಂಗಡಗಳಿವೆ.

(ಅ) ಗೋವೆ ಕುಡುಬಿ: ಕುಂದಾಪುರ ತಾಲೂಕಿನ ಹಾಲಾಡಿ ಹೊಳೆಯಿಂದ ದಕ್ಷಿಣಕ್ಕೆ ವಾಸ್ತವ್ಯವಿರುವ ಉಡುಪಿ ತಾಲೂಕಿನ ಒಳಗೊಂಡು ಕುಡುಬಿಯವರನ್ನು ಗೋವೆ ಕುಡುಬಿಯವರೆಂದು ಸಾಮಾನ್ಯವಾಗಿ ಕರೆಯುತ್ತಾರೆ. ಕುಂದಾಪುರ ತಾಲೂಕಿನ ಹಾಲಾಡಿ, ಹಾರ್ದಳ್ಳಿ, ಹೇರೂರು, ಗೋಳಿಯಂಗಡಿ, ಹೊಸಂಗಡಿ, ಪಂಚಾರು, ಅಂಪಾರು, ಹೊಸಂಗಡಿ,

ಕಮಲಶಿಲೆ, ಬೆಳ್ಳೆ ಮುಂತಾದ ಗ್ರಾಮಗಳಲ್ಲಿ ವಾಸ್ತವ್ಯವಿರುವವರನ್ನು ಹೆಬ್ಬಾಗಿಲು ಕುಮಟೆಯವರೆಂದು ಕರೆಯುವರು.

(೪) **ಕೊಕಿರಿಯಾಲು ಕುಮಟೆ:** ಕೊಂಕಣಿ ಭಾಷೆಯಲ್ಲಿ ಸಾಮಾನ್ಯವಾಗಿ ಮಂಗಳೂರಿಗೆ (ಮಂಗಳವಾರ) 'ಕೊಕಿರಿಯಾಲ' ಎಂಬುದಾಗಿ ಕರೆಯುತ್ತಾರೆ. ಮಂಗಳೂರು ತಾಲೂಕಿನ ಬಜಪೆ, ಮಾಣಿಲ್ಕಾರು, ಕೊಂಪದವು, ಎಕ್ಕಾರುಪದವು, ಗಂಜಿಮಠ, ಕುಪ್ಪೆ ಪದವು, ಮಾಂಬೆಟ್ಟಿನಿಡ, ಬಂಟ್ವಾಳದ ಕೆಲವೊಂದು ಗ್ರಾಮಗಳಾದ ಪಾಲ್ಗು, ಕೆಸ್ಕಿಡಿ, ಸಜಿಪಕ್ಕೆ ಪ್ರದೇಶದವರನ್ನು ಕೊಕಿರಿಯಾಲ ಕುಮಟೆಯವರೆಂದೂ ಕರೆಯುತ್ತಾರೆ.

(೫) **ಕಾಪ ಕುಮಟೆ:** ಕುಂದಾಪುರದಿಂದ ಉತ್ತರಕ್ಕೆ ಕಾರ್ಕಳ ತಾಲೂಕಿನ ಗ್ರಾಮಗಳಾದ ಮಾಳ್ಕೂರು, ಹೆಬ್ರಿ, ಸೂಡ್ಲೂರಿಗೆ, ಶಿವಪುರ, ಕಬ್ಬಿನಾಲೆ, ಮಡಾಮಕ್ಕಿ, ಮುದ್ರಾಡಿ, ಈ ಪ್ರದೇಶ ಹಾಗೂ ಉಡುಪಿ ತಾಲೂಕಿನ ಪೆರ್ಡೂರು, ಆರ್ಡಿ, ಪೆರ್ಡೂರು ಹಾಗೂ ಶಿವಮೊಗ್ಗದ ಕೆಲವೊಂದೂರು ಪರಿಸರದ ಕುಮಟೆಯವರನ್ನು ಪ್ರಾಕಾರು ಕುಮಟೆಯವರೆಂದು ಕರೆಯುತ್ತಾರೆ.

(೬) **ಕುಮ್ರಿ ಕುಮಟೆ:** ಕುಂದಾಪುರ ತಾಲೂಕಿನ ಸಿದ್ಧಾಪುರ ಹಳ್ಳಿಹೊಳೆಯವರನ್ನು ಕುಮ್ರಿ ಕುಮಟೆಯವರೆಂದು ಕರೆಯುತ್ತಾರೆ.

(೮) **ಆರೆ ಕುಮಟೆ:** ಕುಂದಾಪುರ ತಾಲೂಕಿನ ಬಿಜ್ಜೂರು, ಬೈಂದೂರು, ಆರೆಕಾಡುಗಳು, ಹಾರ್ದಳ್ಳಿ, ಮಾರ್ಕಾಡಿ, ಮಾಸ್ತಿಕಟ್ಟೆ, ತಲಕಾಡಾಯಿಲು ಮುಂತಾದ ಪ್ರದೇಶಗಳಲ್ಲಿ, ಉತ್ತರ ಕಿವಮೊಗ್ಗ ಜಿಲ್ಲೆಯ ಸಾಗರ ಮತ್ತು ಪರಿಸರದ ಪ್ರದೇಶದಲ್ಲಿ ವಾಸ್ತವ್ಯವಿರುವ ಕುಮಟೆಯವರನ್ನು ಆರೆ ಕುಮಟೆಯವರೆಂದು ಕರೆಯುವುದು ಕಂಡು ಬರುತ್ತಿದೆ.

(೮) **ಜೋಗಿ ಕುಮಟೆ:** ಕುಂದಾಪುರ ತಾಲೂಕಿನ ಸಿದ್ಧಾಪುರ ಹಾಗೂ ಹೊಸಂಗಡಿಯ ಹಲವಿಷಯ ಎಂಬಲ್ಲಿ ವಾಸ್ತವ್ಯವಿರುವ ಕೆಲವೊಂದು ಕುಟುಂಬದ ಕುಮಟೆ ಸಮುದಾಯವನ್ನು ಜೋಗಿ ಕುಮಟೆಯವರೆಂದು ಕರೆಯುತ್ತಾರೆ.

7. ಬದಲಾಗುತ್ತಿರುವ ಕುಮಟೆಯರ ಹೆಸರುಗಳು ಮತ್ತು ಬೆಳವಣಿಗೆ:

ಸಾಮಾನ್ಯವಾಗಿ ಗಂಡಸರು ತಮ್ಮ ಹೆಸರಿನ ಮುಂದೆ 'ಶಾನ್ಭೆ' ಮತ್ತು ಗೌಡ ಎಂಬ ಅಡ್ಡ ಹೆಸರನ್ನು ಜೋಡಿಸಿಕೊಳ್ಳುತ್ತಾರೆ. ಹೆಂಗಸರು 'ಶಾಯಿ' / ಬ್ಬಾ ಎಂಬ ಪದವನ್ನು ಸೇರಿಸಿಕೊಳ್ಳುತ್ತಾರೆ. ಇವರ ಹೆಸರುಗಳು ಕುತೂಹಲಕಾರಿಯಾಗಿರುತ್ತವೆ. ಕಳೆದ ಹಲವಾರು ತಲೆಮಾರಿನ ಗಂಡು ಹೆಣ್ಣಿನ ಹೆಸರುಗಳು ಸ್ವಲ್ಪವಲ್ಲ (ಟಿಪ್ಪಣಿ).

ಕೋಷ್ಟಕ 2: ಬದಲಾಗುತ್ತಿರುವ ಕುಮಟೆಯರ ಹೆಸರುಗಳ ಪಟ್ಟಿ

ಈ ಹಿಂದಿನ ತಲೆಮಾರಿನವರ ಹೆಸರುಗಳು		ಈ ತಲೆಮಾರಿನ ಹೆಸರುಗಳು ಹಿಂದೂ ಧರ್ಮೀಯ ಮತ್ತು ಜಾತ್ಯತೀತರೆಲ್ಲರ ಸಾಮಾನ್ಯ	
ಗಂಡಸರು	ಹೆಂಗಸರು	ಗಂಡಸರು	ಹೆಂಗಸರು
ಗೋವಿಂದ ಶಾನ್ಭೆ	ಪಕ್ಕಿ	ಪರಮೇಶ್ವರ	ಸುಕೇಶ
ಕರಿಯ ಶಾನ್ಭೆ	ಅಜ್ಜಿ	ಮಾಬಲಿಂದ್ರ	ಶಾಂತ
ಚಾಂತ್ರಿ	ಸಾಂಕ್ರಿ	ಗೋಪಾಲ ಶಾನ್ಭೆ	ಗೌರಿ
ದೊಂಬ	ಬುತ್ತಿ	ಕರಿಯ ಶಾನ್ಭೆ	ಗುಪ್ತಾ
ಈಶ ಶಾನ್ಭೆ	ಗುತ್ತಿ	ಕೃಷ್ಣ	ಪಾರ್ವತಿ
ಜೇಂಬ	ಸುಬ್ಬಿ / ಸುಬ್ಬಿ	ರಾಮಚಂದ್ರ	ಗಾಯಿತ್ರಿ
ಸುಕರ / ಸುಕಕ್ಕ	ಸಾಂತ / ಶಾಂತ	ರೋಶನ್ ಶಾನ್ಭೆ	ಸುಮಿತ
ಮಾಗ ಶಾನ್ಭೆ / ಮಾಪ	ರಾಮರಿ ಬ್ಬಾ	ಲಕ್ಷ್ಮಣ	ಜಾನಕಿ
ಮಾಬ ಶಾನ್ಭೆ	ಚಕ್ಕಿ ಬ್ಬಾ	ಪುಷ್ಕರಾಕ್ಷ	ಸುಂದರಿ
ಮಂಡಪ ಶಾನ್ಭೆ	ಕಕ್ಕಬ್ಬಾ	ಅರವಿಂದ	
ಚಳ/ಚೆಲ್ಲ ಶಾನ್ಭೆ	ಕೊಂಗಿಬ್ಬಾ	ಜಯಶೇಂದ್ರ	
ಬಕ್ಕ / ಬಕ್ಕ	ಜಾಗಿಬ್ಬಾ	ಭಾಷೇಂದ್ರ ಶಾನ್ಭೆ	
ಸಾಗ ಶಾನ್ಭೆ	ಗುಂಗಬ್ಬಾ	ಜಗದಾಯ ಶಾನ್ಭೆ	
ದೇಜ ಶಾನ್ಭೆ	ತುಂಬಿಬ್ಬಾ	ಸುಂದರ ಶಾನ್ಭೆ	
ಅಮ್ಮ ಶಾನ್ಭೆ	ಕಂಪಿಬ್ಬಾ	ಹರಿಪ್ರಸಾದ ಶಾನ್ಭೆ	
ಶಾಂತಿ ಶಾನ್ಭೆ	ಕಿಂಗಬ್ಬಾ	ಗುಣಪಾಲ	
ಜಟ್ಟಿ ಶಾನ್ಭೆ	ಬಾಳ್ತಿಬ್ಬಾ / ಭವಾನಿ	ಶೆಟ್ಟರ/ಗುಣಶೆಟ್ಟರ	
ಮಗ್ಗ ಶಾನ್ಭೆ		ಗುಣಾನ / ಗುಣಪತಿ	

ಕುಮಟೆಯವರು ಭೂಮಿಯಲ್ಲಿ ಮಣಿಯುವವರಾದುದರಿಂದ ಮಣಿಸಿಗೆ ಅನುಕೂಲವಾದ ಬಟ್ಟೆ ಬರೆಗಳನ್ನೇ ಅವರು ಕೊಡುತ್ತಾರೆ. ಗಂಡಸರು ಮಣಿಸಿಯ ಸಂದರ್ಭದಲ್ಲಿ ಸೊಂಟಕ್ಕೆ ಒಂದು ಕಂದು ಬಟ್ಟೆ ತರೆಗೆ ಅಡಿಕೆ ಹಾಳೆಯಿಂದ ಮಾಡಿದ ಮುಟ್ಟಾಳೆಯನ್ನು ಮಾತ್ರ ಧರಿಸುತ್ತಾರೆ. ಇನ್ನುಳಿದ ಸಂದರ್ಭದಲ್ಲಿ ಒಳಚಡ್ಡಿ ಅಥವಾ ಬಣ್ಣದ ಲುಂಗಿ ಮತ್ತು ಅಂಗಿಯನ್ನು ಧರಿಸುತ್ತಾರೆ. ಹಿರಿಯ ತಲೆಮಾರಿನ ಜನರನ್ನು ಸಾಮಾನ್ಯವಾಗಿ ಹಿಂದೆ ಜುಟ್ಟು ಬಿಡುತ್ತಾರೆ. ಅವರಲ್ಲಿ ಜುಟ್ಟು ಕತ್ತರಿಸುವುದು ಎಂಬ ನಿಲುವಿದೆ. ಹಿಂದೆ ಜುಟ್ಟು ಕತ್ತರಿಸಿಕೊಂಡರೆ ಜಾತಿಯ ಪಂಚಾಯಿತಿ ಸಜೆ ರೂಪ ವಿಧಿಸುತ್ತಿತ್ತು. ಇಂದು ಯುವ ಜನಾಂಗ ಜುಟ್ಟನ್ನು ಕತ್ತರಿಸಿಕೊಳ್ಳುತ್ತಾರೆ.

ಮಹಿಳೆಯರ ವಿಶಿಷ್ಟವಾದ ಉಡುಪುಗಳಿಂದ ಕುಮಟೆಯವರೆಂದು ಗುರುತಿಸಬಹುದು. ಇವರು ಬಣ್ಣ ಬಣ್ಣದ ಸೀರೆಯನ್ನು ಎದೆಯ ಮುಚ್ಚುವಂತೆ ಸುತ್ತಿ 'ಗೇಂಜ್' ಹಾಕುತ್ತಾರೆ. ರವಕೆ ಧರಿಸುವ ಪದ್ಧತಿ ಇವರಲ್ಲಿ ಇರಲಿಲ್ಲ. ಹೊಸ ಜನಾಂಗ ಈ ಪದ್ಧತಿಯನ್ನು ಮುಟ್ಟು ಮಡುತ್ತಾರೆ. ಕ್ಷೇತ್ರಕಾರ್ಯ ಸಂದರ್ಭದಲ್ಲಿ ಇವತ್ತಿನ ಅನೇಕ ಯುವತಿಯರು ಸೀರೆ ರವಿಕೆ ಉಡುವುದನ್ನು ಧರಿಸುವುದನ್ನೇ ಕಂಡಿದ್ದೇವೆ. ಅವರೆ ಹೇಳ್ದ ಮಕ್ಕಳು ಜುಟ್ಟುಮತಿಯಾದಾಗ ಯಜಮಾನನ ಹೆಂಡತಿ ಸೀರೆ ಉಡಿಸುವ ಸಂಪ್ರದಾಯ ಇಂದು ಬಳಿಮಾಕೊಂಡು ಬಂದಿದೆ.

8. ಬಳಿ ಪದ್ಧತಿ (ಮೆಡಾ, ಬಡಿ (ತುಳುವರು)):

ಪರಿಶುದ್ಧ ಆರ್ಯವನ್ನು ಸೂಚಿಸಲು ಬಳಿ, ಕುಲ, ಮೆಡಾ, ಗೋತ್ರ, ಬಡಿ (ತುಳುವರು) ಮುಂತಾದ ಪದಗಳು ರೂಢಿಯಲ್ಲಿದೆ. ಕನ್ನಡದ 'ಬಳಿ' ಪದವು ತುಳುಭಾಷೆಯಲ್ಲಿ ಬಡಿ ಎಂದು ಕರೆಯಲಾಗುತ್ತದೆ. ಪಾ. ಗುರುರಾಜ ಭಟ್ ಅವರ ಪ್ರಕಾರ 'ಬಡಿ' ಅಥವಾ 'ಬಳಿ' ಈ ಎರಡು ಶಬ್ದಗಳು ಕನ್ನಡ ಶಬ್ದಗಳು ಆಗಿರುತ್ತದೆ ಎಂಬುದಾಗಿ ಅಭಿಪ್ರಾಯ ಪಟ್ಟಿದ್ದಾರೆ. (1973 ಪುಟ : 135) ಕಟ್ಟೆ ಅವರ ಪ್ರಕಾರ 'ಬಡಿ' ಎಂಬ ಪದವು ಬಳಿ, ಬದಿ, ಪಕ್ಕ, ಮಗ್ಗುಲು ಎಂಬ ಅರ್ಥವನ್ನು ನೀಡುವುದು ಮತ್ತು ಯಾವ ಪಂಕ್ತಿಗೆ ಸೇರಿದ್ದು ಎಂಬುದಾಗಿ ಸೂಚಿಸುತ್ತದೆ. (ಕಟ್ಟೆ ನಿಕ್ಕರಿ–ಪುಟ 1062 ಮತ್ತು 1098) ಪಾ. ಅಂದಿರಾ ಹೆಗ್ಗಡೆ ಅವರು 'ಬಳ್ಳ' ಪದದಿಂದ 'ಬಳಿ' ಪದ ಉತ್ಪತ್ತಿಯಾಗಿರಬಹುದು ಎಂಬುದಾಗಿ ಅಭಿಪ್ರಾಯ ಪಡುತ್ತಾರೆ.

ವಿವಾಹ ಸಂಬಂಧ ಏರ್ಪಡುವ ಸಂದರ್ಭದಲ್ಲಿ ಕುಟುಂಬದ ಎಲ್ಲಾ ಆಗುಹೋಗುಗಳನ್ನು ಬಳಗಳೇ ನಿರ್ಣಯಿಸುತ್ತದೆ. ಕುಮಟೆ ಸಮುದಾಯದವರಲ್ಲಿ ಒಂದೇ ಬಳಿಯವರ ನಡುವೆ ವಿವಾಹವು ನಿಷೇಧವಾಗಿದ್ದು, ಅವರೆಲ್ಲಾ ಒಂದೇ ಪಂಕ್ತಿಗೆ ಸೇರಿದವರು ಎಂದು ತಿಳುವಳಿಕೆಯಿರುತ್ತದೆ.

- ಡಾ. ಅಥಣಿ ಕುಮಾರ್ ಅವರು 'ಕುಡುಮಿಯವರು' ಎಂದು ಲೇಖನದಲ್ಲಿ ಗೋವಾ ಕುಡುಮಿ ಬುಡಕಟ್ಟು ಸಮುದಾಯದವರಲ್ಲಿ ಕಿತ್ಸಪ್ರಧಾನ ಕುಟುಂಬ ವ್ಯವಸ್ಥೆಯಿರುವುದರಿಂದ ತಂದೆಯಿಂದ ಮಗಳಿಗೆ/ಮಗನಿಗೆ ಬಳಿಯ ಮುಂದುವರಿಕೆಯಾಗುತ್ತದೆ. ಅವರಲ್ಲಿ ಸುಮಾರು 36 ಬಳಗಳಿವೆ ಎಂಬುದಾಗಿ ಅಭಿಪ್ರಾಯ ಪಟ್ಟಿದ್ದಾರೆ.
- ಡಾ. ವೈ. ರವೀಂದ್ರನಾಥ ಶಾಸ್ತ್ರಿ ಅವರು ಕಾಸರಗೋಡಿನಲ್ಲಿ ವಾಸ್ತವ್ಯವಿರುವ ಕುಡುಮ ಸಮುದಾಯಗಳಲ್ಲಿ 122 ಬಳಗಗಳಿವೆ ಎಂಬುದಾಗಿ ತಿಳಿಸಿದ್ದಾರೆ. 2003
- ಡಾ.ಎ.ವಿ. ನಾವಡ ಅವರು ಕುಡುಮಿಯವರು ಎಂಬ ಲೇಖನದಲ್ಲಿ 16 ಬಳಗಗಳಲ್ಲಿ ಹೆಸರನ್ನು ದಾಖಲಿಸಿದ್ದಾರೆ. ಆದರೆ ಆ ಬಳಗಗಳಲ್ಲಿ ವಿಸ್ತರಣೆ ಸಂಕೇತಿಸುತ್ತವೆ ಎಂಬುದಾಗಿ ವಿವರಿಸಿಲ್ಲ. (2013 : ಪುಟ 318)

ಕುಡುಮ ಬುಡಕಟ್ಟುವಾರ್ಗಲ್ಲಿ ಬಳಗಗಳು ತಂದೆಯಿಂದಲೇ ಮಕ್ಕಳಿಗೆ ಹರಿದು ಬರುತ್ತವೆ. ಆದ್ದರಿಂದ ಕುಡುಮ ಕುಟುಂಬ ಪಿತೃಪ್ರಧಾನವಾಗಿರುತ್ತದೆ. ಮಾತೃವಿನಾಶದ ಮಾತೃವಿಗಳಂತೆ ವಿವಾಹವು ಬಳಿಯ ಹೊರಗಿನಿಂದ ಆಯ್ಕೆ ಮಾಡುವ ಪದ್ಧತಿ ಹೊರಮಾರಿಯ್ಕ (ಇಕ್ಸಾಮಿಗಮಿ) ಚಾಲ್ತಿಯಲ್ಲಿದೆ. ಒಂದೇ ಬಳಿಯ ಗಂಡು ಹೆಣ್ಣುಗಳು ಸಹೋದರ ಸಹೋದರಿಯವರಾಗುತ್ತಾರೆ ಎಂಬ ನಂಬಿಕೆ ಇರುತ್ತದೆ. ಇದರಿಂದಾಗಿ ಮದುವೆ ಅವರೊಳಗೆ ನಡೆಯುವಂತಿಲ್ಲ. ವಿವಾಹ ಮಹೂರ್ತದ (ಧಾರೆ) ಸಂದರ್ಭದಲ್ಲಿ 'ಕಾಯುಬಿ'ಯವರವನು ವಧುವರರ ಬಳಿಯನ್ನು ಗ್ಯಟ್ಟಿಯಾಗಿ ಎಲ್ಲರೂ ಕೇಳುವಂತೆ ಘೋಷಿಸಬೇಕಾಗಿದೆ. ಕುಡುಮಿಗಳು ಕಿತ್ಸಪ್ರಧಾನ, ಕಿತ್ಸಮೂಲೀಯ ಹಾಗೂ ಕಿತ್ಸಂತಿಮ ಕುಟುಂಬ ವ್ಯವಸ್ಥೆಯನ್ನು ಹೊಂದಿದವರಾಗಿದ್ದಾರೆ.

ಕ್ಷೇತ್ರಕಾರ್ಯ ಸಂದರ್ಭದಲ್ಲಿ ನನ್ನ ಮಾಹಿತಿದಾರರು 22 ಬಳಗಳ ಹೆಸರನ್ನು ನೀಡಿದ್ದಾರೆ. ಆ ಬಳಗಳಲ್ಲಿ ಕೆಲವೊಂದು ಬಳಗಳು ಏನನ್ನು ಸಂಕೇತಿಸುತ್ತವೆ ಎಂಬುದಾಗಿದೆ ಮಾಹಿತಿಯನ್ನು ನೀಡಿರುತ್ತಾರೆ. ಹಾಗೂ ಕೆಲವೊಂದು ಬಳಗಗಳು ಏನನ್ನು ಸಂಕೇತಿಸುತ್ತವೆ ಎನ್ನುವ ಬಗ್ಗೆ ಅವರಿಗೆ ಕಲ್ಪನೆ ಇದ್ದಂತಿಲ್ಲ.

1. **ಹುಣ್ಣೆಕಾರ್, ಭೂತ್ಕಾರ್, ಕಣ್ಣಾರ್**: ಈ ಬಳಗಗಳ ಬಗ್ಗೆ ಕುಡುಮಿಯವರಿಗೆ ಅಭಿಪ್ರಾಯಗಳು ಏನನ್ನು ಸಂಕೇತಿಸುತ್ತವೆ ಎಂಬುದಾಗಿ ಕಲ್ಪನೆ ಇಲ್ಲ.
2. **ಗುಗ್ಗುರ್‌ಕಾರ್ ಅಥವಾ ಗುಗ್ಗುರ್‌ಕಾರ್**: ಕುಡುಮ ಭಾಷೆಯಲ್ಲಿ 'ಗುಗ್ಗುಲ' ದೂಪದ ಹುಡಿಯು ಮರ ಕಳಾಭಾಷೆಯಲ್ಲಿ ತಂದೂಳಗೆಗಿದ ಮರ. ಇದೊಂದು ಕಾಡು ಉತ್ಪತ್ತಿಯ ಮರ. ದೂಪದಹುಡಿ ತಯಾರಿಸುತ್ತಾರೆ. ಈ ಮರವನ್ನು ಔಷಧಕ್ಕಾಗಿ ಹಾಗೂ ವ್ಯಾಕ್ಸ್ ಮಾಡಲು ಉಪಯೋಗಿಸುತ್ತಾರೆ.
3. **ಕುಕ್ಕಾರ್**: ಕುಡುಮಿಯರ ಮೌಖಿಕ ಭಾಷೆಯಲ್ಲಿ 'ಕುಕ್ಕಾರ್' ಎಂದರೆ 'ಹಾಲು' ವಿವಾಹ ಸಂದರ್ಭದಲ್ಲಿ ಅಕ್ಕಿಯ ಹಿಟ್ಟಿನಲ್ಲಿ ಪ್ರಾಣಿ ಪಕ್ಷಿಗಳ ಚಿತ್ರವನ್ನು ಅಥವಾ ಮೂರ್ತಿಗಳನ್ನು ತಯ್ಯ ಮಾಡಿಕೊಡುತ್ತಿದ್ದರು ಎಂಬುದಾಗಿ ಮಾಹಿತಿದಾರರು ತಿಳಿಸಿದ್ದಾರೆ.
4. **ಕೋಡ್ಕಾರ್**: ಕುಡುಮ ಭಾಷೆಯಲ್ಲಿ 'ಕೋಡ್' ಎಂದರೆ 'ಹೂಡೋಣ' ಸ್ಟೀವನ್ ಮಾಕ್ (1973 : 57) ಪ್ರಕಾರ ಕೆಲವೊಂದು ಬಳಗಳನ್ನು ಹಾಗೂ ಕುಟುಂಬಗಳು ಹೂಡಿಸಿದ ಹೊಂದಿರುವರು ಎಂಬುದಾಗಿ ಅಭಿಪ್ರಾಯ ಪಟ್ಟಿರುತ್ತಾರೆ. ಕೋಡ್ಕಾರ್ ಬಳಿಯ ನಿರ್ಜೀವ ಅಥವಾ ಭೌತಿಕ ವಸ್ತುಗಳಿಗೆ ಸಂಬಂಧಿಸಿದ ಬಳಗಳ ವ್ಯಾಪ್ತಿಗೊಳಪಟ್ಟಿರುತ್ತದೆ.
5. **ಪಣ್ಕಾರ್ / ಪಣ್ಕಾರ್**: ಕುಡುಮಿಗಳಲ್ಲಿ ಬಳಗಗಳನ್ನು ಗುರುತಿಸುವುದು ಕೆಲವು ಪ್ರಾಣಿ ಪಕ್ಷಿಗಳಿಂದ ಮಾತ್ರವಲ್ಲ ಕೆಲವೊಂದು ಬಳಗಗಳನ್ನು ನಿರ್ಜೀವ ವಸ್ತುಗಳಿಂದ ಗುರುತಿಸುತ್ತಾರೆ. ಕುಡುಮ ಭಾಷೆಯಲ್ಲಿ 'ಪತ್ತ್', 'ಪಣ್ಣಾರ್' ಎಂದರೆ ಕಲ್ಲು. ಅವರಲ್ಲಿ ಕೆಲವೊಂದು ಬಳಗಗಳನ್ನು ಕಲ್ಲಿಗೆ ಸಂಕೇತಿಸುತ್ತಾರೆ.
6. **ಸಾಂಬ್ಕಾರ್**: ಕುಡುಮಿಯವರ ಅನ್ನ ಹೆಸರುಗಳು 'ಸಾಂಬ್ಳೆ' ಎಂಬ ಪದದಿಂದ ಕೂಡಿಕೊಂಡಿರುತ್ತವೆ. ಸಾಂಬ್ಳೆ ಎಂಬ ಪದವು ಮುಖ್ಯಸ್ಥ ಎಂಬುದಾಗಿರುತ್ತದೆ. ಅಧಿಕಾರ ಮತ್ತು ಸಾಮರ್ಥ್ಯ ಒಳಗೊಂಡಿರುವ ಕೆಲವೊಂದು ಕುಡುಮಿ ಕುಲಗಳು ಕಂಡುಬರುತ್ತವೆ.
7. **ಮಾಳ್ಗಾರ್‌ಕಾರ್**: ಕುಡುಮಿ ಕೊಂಕಣಿ ಭಾಷೆಯಲ್ಲಿ 'ಮಾಳ್' ಎಂದರೆ 'ಹುಲಿ'. ಕಟ್ಟಡೇವತೆಯ ವಾಹನ ಎಂಬುದಾಗಿ ನಂಬುತ್ತಾರೆ.
8. **ಮಣ್ಕಾರ್ / ಮಿಣ್ಕಾರ್**: ಕುಡುಮಿ ಭಾಷೆಯಲ್ಲಿ ಮಣ್ಕಾರ್ ಎಂದರೆ 'ಕಾಡು ಹಂದಿ' / ಹಂದಿ ಮುಖ್ಯವಾಗಿ ಬೈರವ ಆರಾಧನೆಯ ಸಂದರ್ಭದಲ್ಲಿ ಹಂದಿಯನ್ನು ಆರ್ಪಿಸುವುದು. ಹಂದಿ ಮಾಂಸವನ್ನು ಭಕ್ಷಿಸುವುದು ಕಾಣಬಹುದು. ಕಾಡುಹಂದಿಯನ್ನು ಬೇಟೆಯಾಡುವುದು ಬುಡಕಟ್ಟು ಸಮುದಾಯದ ಕುಡುಮಿಯವರಲ್ಲಿ ಸಾಮಾನ್ಯವಾಗಿದೆ.
9. **ಮೊಕ್ಕರ್**: ಕುಡುಮ ಭಾಷೆಯಲ್ಲಿ 'ಮೊಕ್' ಎಂದರೆ ನವಿಲು. ನವಿಲನ್ನು ಕೆಲವೊಮ್ಮಾರು ನಿಷೇಧ. ಅವರ ಪೂರ್ವಜರು ಗೋವಾದಲ್ಲಿರುವ ಅರಾಧಿಸುವ ದೇವರುಗಳಿಗೆ ಸಂಬಂಧಿಸಿದ್ದಾಗಿರಬಹುದು. ವಿವಾಹ ಮತ್ತು ಧಾರ್ಮಿಕ ಆಚರಣೆಗಳ ಸಂದರ್ಭದಲ್ಲಿ ಅಕ್ಕಿಯ ಹಿಟ್ಟಿನಲ್ಲಿ ಪ್ರಾಣಿ ಪಕ್ಷಿಗಳ ಮೂರ್ತಿಯನ್ನು ಅವರ ಪೂರ್ವಜರು ಮಾಡುತ್ತಿದ್ದರಾ ಎಂಬುದಾಗಿ ತಿಳಿಸಿರುವರು.
10. **ಕಲ್ಕಾರ್**: ಕುಡುಮ ಭಾಷೆಯಲ್ಲಿ 'ಕಲ್' ಎಂದರೆ ಬಾಳೆಹಣ್ಣು / ಬಾಳೆಗಿಡ ಇವರ ಕೆಲವೊಂದು ಬಳಗಗಳನ್ನು ಬಾಳೆಗಿಡಕ್ಕೆ ಸಂಕೇತಿಸುತ್ತಾರೆ. ಧಾರ್ಮಿಕ ಕಾರ್ಯಗಳಲ್ಲಿ ಹೆಚ್ಚಾಗಿ ಉಪಯೋಗಿಸುತ್ತಾರೆ.
11. **ಹಾಕ್ಕಾರ್ / ಹಾಕ್ಕಾರ್**: ಇವರ ಭಾಷೆಯಲ್ಲಿ 'ಹಾಕೆ' ಅಂದರೆ ಅಕ್ಕಿ. ಕುಡುಮಿಯವರ ಹಲವಾರು ಬಳಗಗಳು ಅಕ್ಕಿಯನ್ನು ಸಂಕೇತಿಸುತ್ತಾರೆ. ಇವರಲ್ಲಿ ಅಕ್ಕಿಯ ಬಗ್ಗೆ ಬಲವಾದ ನಂಬಿಕೆ ಇರುವುದನ್ನು ಕಾಣುತ್ತೇವೆ.
12. **ಜೋಮಿಕ್ಕರ್**: ಕುಡುಮಿಯರ ಮೌಖಿಕ ಭಾಷೆಯಲ್ಲಿ 'ಜೋಮಿಕ್' ಎಂದರೆ 'ಕೆಲಿಹಾಪ್ಪೆ', ಉರಗ, ಸರ್ಪ, ಇವರ ಕೆಲವೊಂದು ಬಳಗಗಳಿಗೆ ನಾಗ / ಸರ್ಪಗಳಿಗೆ ಸಂಕೇತಿಸುತ್ತಾರೆ.
13. **ಕಾಣ್ಕಾರ್**: ಕುಡುಮಿ ಭಾಷೆಯಲ್ಲಿ 'ಕಾಣ್' ಅಂದರೆ ಗೇರುಹಣ್ಣು / ಗೇರುಮರ. ಇವರ ಅಭಿಪ್ರಾಯದಲ್ಲಿ ಗೋವಾದಿಂದ ಕರಾವಳಿ ಪ್ರದೇಶಕ್ಕೆ ವಲಸೆ ಬರುವಾಗ ಗೇರುಬೀಜ ತೆಗೆದುಕೊಂಡು ಬಂದಿರುತ್ತೇವೆ. ಈ ಹಿನ್ನೆಲೆಯಿಂದ ಕುಡುಮಿಯರ ಕೆಲವೊಂದು ಬಳಗಗಳಿಗೆ ಕಾಣ್ಕಾರ್ ಎಂಬುದಾಗಿ ಇಟ್ಟುಕೊಂಡಿರುತ್ತೇವೆ.
14. **ಭರಮಕಾರ್**: ಕುಡುಮ ಭಾಷೆಯಲ್ಲಿ 'ಭರಮ್' ಎಂದರೆ ಭಾಷೆ, ಸ್ವಭಾವ. ಕುಡುಮ ಸಮುದಾಯದಲ್ಲಿ ಸಾಮಾನ್ಯ ಅರ್ಥದ ಪ್ರಯೋಗವಾದ ವ್ಯಕ್ತಿಗಳಿಗೆ ಭರಮಕ್ಕಾರ್ ಎಂಬುದಾಗಿ ಕರೆಯುತ್ತಾರೆ.
15. **ರಾಯ್ಕರ್**: ಕುಡುಮಿಯವರ ಮೌಖಿಕ ಭಾಷೆಯಲ್ಲಿ 'ರಾಯ್ಕರ್' ಎಂದರೆ 'ಮುಖ್ಯಸ್ಥ' ಒಂದು ನಿರ್ದಿಷ್ಟ ಪ್ರದೇಶವಾದ ಗ್ರಾಮದ ಮುಖ್ಯಸ್ಥ. ಇದು ಅಧಿಕಾರ ಯುಕ್ತವಾದ ಪದವಾಗಿರುತ್ತದೆ.
16. **ದೊಂಬಿಕ್ಕಾರ್**: ಕುಡುಮ ಭಾಷೆಯಲ್ಲಿ 'ದೊಂಬಿ' ಅಂದರೆ ಭೂಮಿ, ಬೇಟೆಗಾರ. ಬೇಟೆಗೆ ತೆರಳುವ ಮಾರ್ಗವನ್ನು ಎಂಬುದಾಗಿ ಅಭಿಪ್ರಾಯವಾಗಿದೆ. ಆದ್ದರಿಂದ ದೊಂಬಿಕ್ಕಾರ್ ಬೇಟೆಗೆ ಸಂಬಂಧಿಸಿದ್ದಾಪ್ತ.
17. **ಜಟ್ಟಿಕಾರ್ / ಜಟ್ಟಿಕರ್**: ಈ ಬಳಿಯವರು ಜಟ್ಟಿಗ ದೇವರಿಂದ ಬಂದಿರುತ್ತದೆ. ಕರಾವಳಿಯ ಉತ್ತರಕನ್ನಡದಲ್ಲಿ 'ಜಟ್ಟಿಗ' ಎಂಬ ಭೂತವಿದೆ. ಜಟ್ಟಿಗೇಶ್ವರ ಶಿವನಿಗೆ ಸಂಬಂಧಿಸಿದ ಹೆಸರು. ಈ ಬಳಿಯವರಿಗೆ ಜಟ್ಟಿಗ ಕುಲದೈವವಾಗಿರುತ್ತದೆ.
18. **ದೇವಕ್ಕಾರ್**: ಕುಡುಮಿಯವರಲ್ಲಿ 'ದೇವಕ್' ಬಳಿಯು ಪ್ರಚಲಿತದಲ್ಲಿದೆ. ದೇವಕ್ ಧಾರ್ಮಿಕ ವ್ಯಕ್ತಿ ಎಂಬುದಾಗಿ ಅವರ ನಂಬಿಕೆ. ಸಾಮಾನ್ಯವಾಗಿ ನವರಾತ್ರಿ ಸಂದರ್ಭದಲ್ಲಿ ಆರಾಧನೆ ಮಾಡುತ್ತಾರೆ ಎಂಬುದಾಗಿ ತಿಳಿಸಿರುವರು.
19. **ಶಿವಣ್ಕಾರ್**: ಈ ಬಳಿಯವರು 'ಶಿವ'ನನ್ನು ತಮ್ಮ ಕುಲದೇವರಾಗಿ ಪೂಜಿಸುವುದು ಕಂಡುಬರುತ್ತದೆ.
20. **ಕೊಟ್ಟಕಾರ್**: ಕುಡುಮಿಯವರಲ್ಲಿ ಕೊಟ್ಟಕಾರ್ ಎಂದರೆ 'ಕೊಟ್ಟೆ ಪ್ರದೇಶದಿಂದ ಬಂದಿರುವರು ಎಂಬ ನಂಬಿಕೆ ಇವರದ್ದಾಗಿರುತ್ತದೆ. ಇವರ ಪೂರ್ವಜರಲ್ಲಿ ಕೆಲವರು ಕೇರಳ ರಾಜ್ಯದ ಕೊಟ್ಟೆಪ್ ಪ್ರದೇಶದಿಂದ ಹಲವೆ ಬಂದವರು ಎಂಬುದಾಗಿ ಇವತ್ತಿಗೂ ನಂಬುತ್ತಾರೆ.

ಕ್ಷೇತ್ರ ಕಾರ್ಯ ಸಂದರ್ಭದಲ್ಲಿ ಅಲವಾರು ಕುಡುಮಿ ಕುಟುಂಬಗಳಲ್ಲಿ ಕಂಡು ಬಂದಿರುವ ಬಳಗಗಳನ್ನು ಈ ಕೆಳಗಿನಂತೆ ವರ್ಗೀಕರಿಸಬಹುದು.

- ಪ್ರಾಣಿಪಕ್ಷಿಗಳನ್ನು ಹೊಂದಿಕೊಂಡು ಬಂದಿರುವ ಬಳಗಳು
- ನಿರ್ಜೀವ / ಭೌತ ವಸ್ತುಗಳ ಹೆಸರುಗಳನ್ನು ಹೊಂದಿಕೊಂಡು ಬಂದ ಕುಲಗಳು
- ಗುಣಗಳ ಹೆಸರುಗಳಿಂದ ಬಂದ ಕುಲಗಳು
- ಅಧಿಕಾರ, ಸಾಮರ್ಥ್ಯ, ಸಂಪತ್ತು ಇವುಗಳನ್ನು ಹೊಂದಿಕೊಂಡು ಬಂದ ಕುಲಗಳು
- ಆರ್ಥಿಕವಲು ಉಪಯೋಗವಾಗುವ ಕುಲಗಳಾಮಗಳು
- ಪ್ರಕೃತಿಯಗಳ ಆಧಾರದ ಮೇಲೆ ಹೊಂದಿಕೊಂಡು ಬಂದಿರುವ ಬಳಗಳು 'ಕಾರ್' ಎಂಬ ಪ್ರತ್ಯಯಗಳಿಂದ ಅಂತ್ಯವಾಗುವ ಹೆಸರು ಹಾಗೂ ಕುಲಗಳು

ಕೋಷ್ಟಕ 3: ಸಮೀಕ್ಷೆಗೊಳಪಟ್ಟ ಈ ಗ್ರಾಮಗಳ ಆದಾಯ ಕುರುಬ ಕುಟುಂಬಗಳಲ್ಲಿರುವ ಬಳಗಗಳ ವಿವರಗಳು

ಕ್ರ.ಸಂ.	ಬಳಗಗಳ ಹೆಸರು	ಕುಟುಂಬಗಳ ಸಂಖ್ಯೆ	ಕ್ರ.ಸಂ.	ಬಳಗಗಳ ಹೆಸರು	ಕುಟುಂಬಗಳ ಸಂಖ್ಯೆ
1.	ಹುಚ್ಚಗಾರ್	04	12.	ಕಲ್ಲಗಾರ್	04
2.	ಗುಜ್ಜಾರ್‌ಕಾರ್	02	13.	ಹಕ್ಕಾರ್ / ಹಾಕಿರ್	03
3.	ಭಾಸ್ಕರ್	01	14.	ಡೇವಿಡ್ಕರ್	01
4.	ಕಡ್ಡಾರ್	02	15.	ಕಾಡ್ಕಾರ್	03
5.	ಕುಕ್ಕರ್	05	16.	ಭರಂಕರ್	04
6.	ಕೆರೂಡಾರ್	04	17.	ರಾಯ್ಕರ್	03
7.	ಪಕ್ಕರ್ / ಪಕ್ಕಗಾರ್	01	18.	ದೊಡಕಿಕ್ಕರ್	01
8.	ಕಾಯ್ಕರ್	02	19.	ಜುಟ್ಟಗಾರ್ / ಜುಟ್ಟರ್	05
9.	ಜಾಪಗೆಗಾರ್	02	20.	ದೇವಗಾಗರ್	02
10.	ಮುಕ್ಕರ್ / ದಿಕ್ಕರ್	03	21.	ಕಿಲಗಾಣ	02
11.	ಹೊಂಬರ್	03	22.	ಕೊಟ್ಟಗಾರ್	03
			ಒಟ್ಟು		60

9. ನ್ಯಾಯ ಪದ್ಧತಿ:

ಕುಟುಂಬದಲ್ಲಿ ಅವಶ್ಯಕತೆಯಾದ ಒಳಾಡಳಿತ ವ್ಯವಸ್ಥೆಯಿದೆ. ಪ್ರಾಚೀನ ಕಾಲದಿಂದ ಬಂದ ಗ್ರಾಮದ ಸ್ಥಾನಿಯ ಪದ್ಧತಿಯನ್ನು ರೂಢಿಸಿಕೊಂಡು ಬಂದಿರುತ್ತಾರೆ. ಸ್ವತಂತ್ರ ಭಾರತದ ಸಾಮಾಜಿಕ ಬದಲಾವಣೆಯು ಗಾಢ ಬಳಗಾಗಿ ಪರಿಷ್ಕರಣ ಒಳಾಡಳಿತ ಕಾರ್ಯರೂಪ ಕುಸಿದಿದ್ದು, ಇದೀ ಸಮುದಾಯಕ್ಕೆ ಸಂಬಂಧಿಸಿದ ನ್ಯಾಯಗಳಿದ್ದರೆ ಗುರುಗಳ ಸಮ್ಮುಖದಲ್ಲಿ ಕುಟುಂಬದ ವಿವಿಧ ಕಾರುಬಾರಗಳ ಹಿರಿಯ ಸದಸ್ಯರು ಮಾಡಿಯು (ಹೊಂದಾದ) ಬುದ್ಧಂತ (ಮಂಡಾಳ) ಕುಟುಂಬದ ಹಿರಿಯ ವ್ಯಕ್ತಿಯು (ಬುದ್ಧಂತ) ಸಮ್ಮುಖದಲ್ಲಿ ಕುಟುಂಬದ ಆಂತರಿಕ ಕಲಹಗಳು, ಹಣ್ಣಕ್ಕೆ ಸಂಬಂಧಿಸಿದ ಕಲಹಗಳು, ಆಕ್ರಮ ಸಂಬಂಧಗಳ ಕಲಹಗಳು, ಆರ್ಥಿಕತೆಯಿಂದ ಕೂಡಿದ ಕಲಹಗಳು, ಮುಂತಾದವುಗಳ ಬಗ್ಗೆ ಸಾಮಾನ್ಯ ಪರಾಮರ್ಶನೆಯನ್ನು ಸೇರಿಸಿ ತೀರ್ಮಾನಗಳನ್ನು ಪಂಚರ ಮೂಲಕ ಬಹಿಷ್ಕಾರ ಹಾಕುವ ಪದ್ಧತಿ ಇದೆ. ಇವರಲ್ಲಿ ಆರ್ಥಿಕ ಸಂಬಂಧವನ್ನು ಇರಿಸಿಕೊಂಡಿದ್ದು ಕಾರಣಕ್ಕಾಗಿ ಗಂಡಿನೂ ಬಹಿಷ್ಕಾರವನ್ನು ಹಾಕುತ್ತಾರೆ. ಸಾಮಾಜಿಕ ಬಹಿಷ್ಕಾರ, ಜಾತಿಗಳ ಪ್ರಮುಖ ಕಲಹ, ಕಲ್ಲಿಸಿಕಾರಣಕ್ಕೆ ಸಮಯ ಗುರುಗಳ ಬರಬೇಕು. ಗುರುಗಳನ್ನು ವಂಶಪಾರಂಪರ್ಯವಾಗಿ ಆರಿಸಿ ಮಾಡುತ್ತಾರೆ.

ಸಾಮಾನ್ಯವಾಗಿ ಕುಟುಂಬ ಬುಡಕಟ್ಟುಗಳಲ್ಲಿ ರಾಜಮಾರ್ಗಿಗೆ (ಬುದ್ಧಂತ) ವಿಶೇಷ ಸಾಮಾಜಿಕ ನಿಯಂತ್ರಣವಿದೆ. ತಮ್ಮ ಅಧಿಕಾರದ ವ್ಯಾಪ್ತಿಯೊಳಗಿನ ಮನೆಗಳಲ್ಲಿ ಹುಟ್ಟು ಮರಣ, ಮದುವೆ, ಸಾವು, ಹೊಗಳಿಕೆಟ್ಟು ಬಗೆ ವಿಶೇಷ ಪರಿಸರಲಿ ಇವರ ಸೂಚನೆಯಂತೆ ನಡೆಯಬೇಕು. ಮದುವೆಗಳಲ್ಲಿ ಮೊದಲು ತೋರಣ ಕಟ್ಟುವವನು ರಾಜಮಾರ್ಗ. ಬೇಟೆಗೆ ಹೊರಡುವ ಮೊದಲು ಬಲಿ ದೊಣ್ಣೆಗಳಿಗೆ ಪೂಜೆ ಮಾಡಿ ಬೇಟೆ ಆರಂಭ ಸಂಸ್ಕಾರಿಗೆ ಆದಾಯ ಎತ್ತಿಕೊಡುವುದು ಇವನ ಕೆಲಸ. ಹೊಗಳಿಕ್ಕುವ ಸಂದರ್ಭದಲ್ಲಿ ಕನ್ನ ಮನೆಯಲ್ಲಿ ಜೀವಾಪ ವ್ಯವಸ್ಥೆ ಮಾಡುವುದು ಮತ್ತು ಕೂಡುಗಳಿಯ ಮನೆಗೆ ಆಮಂತ್ರಣ ನೀಡುವುದು ಇವನ ಜವಾಬ್ದಾರಿ. ಕುಟುಂಬದೊಳಗಿನ ಜೀವ ಮಹತ್ವ, ಹೆಣ್ಣಾಕೆಯಾಯ ಮಹತ್ವ, ಕೆಲ್ಲ ಮಹತ್ವ ಮಾಡುವುದು ಮುಖ್ಯವಾದುದು. ಇವರಲ್ಲಿ ಪ್ರತಿಯೊಂದು ಕೆಲಸ ಕಾರ್ಯಗಳು ಕುಟುಂಬದ ಮಿಕ್ಕ ಪ್ರಜೆಗೆ ವ್ಯವಸ್ಥೆಯಂತೆ ನಡೆಯುತ್ತವೆ.

10 (ಅ) ಕುಟುಂಬದ ಕುಟುಂಬ ವ್ಯವಸ್ಥೆ:

ಪ್ರಾಚೀನ ಕಾಲದಿಂದಲೂ ಭಾರತದಲ್ಲಿ ಅವಿಭಕ್ತ ಕುಟುಂಬ ಪದ್ಧತಿಯು ಹೆಚ್ಚಾಗಿ ಆಸ್ತಿಪಾಸ್ತಿಯಲ್ಲಿತ್ತು ಕ್ರಮೇಣ ಅನೇಕ ಕಾರಣಗಳಿಂದಾಗಿ ಇದು ಬದಲಾಗುತ್ತಾ ವಿಭಕ್ತ ಕುಟುಂಬಗಳಕ್ಕೆ ಸಾಗಿತು. ಕುಟುಂಬದಲ್ಲಿ ಒಕ್ಕಪಂತಿಯು, ಒಕ್ಕಪ್ರಧಾನ, ಒಕ್ಕಮುಖಂಡಿಯ ಕುಟುಂಬ ವ್ಯವಸ್ಥೆಯನ್ನು ಹೊಂದಿದವರಾಗಿದ್ದಾರೆ. ಅವಿಭಕ್ತ ಕುಟುಂಬ ಪದ್ಧತಿಯನ್ನು ಹೊಂದಿದ್ದು ಒಂದೊಂದು ಕುಟುಂಬದಲ್ಲಿ ಸದಸ್ಯರ ಸಂಖ್ಯೆ 40–50ಕ್ಕಂತ ಹೆಚ್ಚು ಇರುತ್ತಿದ್ದುದಾಗಿ ಕುಟುಂಬ ಬುಡಕಟ್ಟಿನ ಹಿರಿಯರು ತಿಳಿಸಿರುತ್ತಾರೆ. ಅವಿಭಕ್ತ ಕುಟುಂಬವಾದ್ದುದರಿಂದ ದೊಡ್ಡ ಮನೆಗಳನ್ನು ರಚಿಸುತ್ತಾರೆ. ಮಣ್ಣಿನ ಗೋಡೆಯನ್ನು ಮಾಡಿ ಮಂಚ ಹುಲ್ಲನ್ನು ಮುಚ್ಚುತ್ತಾರೆ. ಸಾಮಾನ್ಯವಾಗಿ ಈ ಕುಟುಂಬಗಳು ಒಂದೇ ಬಳಿಯ ಅಣ್ಣ ತಮ್ಮಂದಿರೆಲ್ಲ, ಹೆಂಗಸರು ಮತ್ತು ಮಕ್ಕಳನ್ನು ಒಳಗೊಂಡಿರುತ್ತಾರೆ. ಅವಿಭಕ್ತ ಕುಟುಂಬ ಪದ್ಧತಿಯನ್ನು ಆಚರಿಸುವ ಇವರು ಒಟ್ಟು ಭರ್ (ಕುಟುಂಬ) ಒಳಿಭರ್ (ದೊಡ್ಡ ಕುಟುಂಬ) ಅಥವಾ ಸಣ್ಣಿ ಕುಟುಂಬ (ಹತ್ತಿರ ಸಂಬಂಧಿಗಳ ಕುಟುಂಬ ಅಥವಾ ಒಂದೇ ಸಂತತಿಗೆ ಸೇರಿದವರು) ಎಂದು ಕರೆಯುತ್ತಾರೆ.

ಕುಟುಂಬ ಸಮುದಾಯವನ್ನು ಮನೆಯ ಹಿರಿಯರೇ ಇಡೀ ಕುಟುಂಬದ ಸಾಮಾಜಿಕ, ಧಾರ್ಮಿಕ, ಆರ್ಥಿಕ ಆಚರಣೆಗಳನ್ನು ನಿರ್ವಹಿಸುವವರಾಗಿರುತ್ತಾರೆ. ಅಲ್ಲದೆ ರಾಜಮಾರ್ಗ ಹುಟ್ಟು ಮರಣ ಮುಂತಾದ ಕುಟುಂಬದಲ್ಲಿ ಜರುಗುವ ಪ್ರಮುಖ ಸಂದರ್ಭಗಳಲ್ಲಿ ಪುರೋಹಿತರಾಗಿ ಕಾರ್ಯನಿರ್ವಹಿಸುತ್ತಾರೆ. ಕುಟುಂಬದ ಹಿರಿಯರಿಗೆ ಮನೆ ಮಂದಿಗೆಲ್ಲ ಬಟ್ಟೆ ಆಭರಣಗಳನ್ನು ತರುವಂತಹ ಅಧಿಕಾರ ಮನೆಯ ಹಿರಿಯರಿಗಿರುತ್ತದೆ. ಮಗನಿಗೆ ಹೆಣ್ಣು ಹುಡುಕುವ ಮತ್ತು ಮಗಳಿಗೆ ಗಂಡು ಹುಡುಕಿ ಮದುವೆ ಮಾಡುವ ಅಧಿಕಾರ ಹೊಂದಿರುತ್ತಾರೆ. ಇವರಲ್ಲಿ ಹೊಲಕ್ಕೆ ಬೀಜಗಳನ್ನು ಬಿತ್ತುವುದು ಆಥವಾ ಸಸಿ ನೆಡುವ ಪದ್ಧತಿ ಅವಿಭಕ್ತ ಕುಟುಂಬದಲ್ಲಿ ಹೆಚ್ಚು ಮಂದಿ ಅಣ್ಣ ತಮ್ಮಂದಿರು ಇದ್ದಲ್ಲಿ ಅವರ ಪೈಕಿ ಹಿರಿಯವನು ಮೊದಲು ಸಸಿ ನೆಡಬೇಕು. ಅದಂತರವೇ ಮನೆಯ ಕಿರಿಯವನು ಬೀಜ ಬಿತ್ತಬಹುದು ಆಥವಾ ಸಸಿ ನಡೆಬಹುದಾಗಿದೆ. ಈ ರೀತಿ ಭಿನ್ನವಾದ ಕುಟುಂಬ ವ್ಯವಸ್ಥೆ ಕುಟುಂಬದಲ್ಲಿ ಕಾಣಬಹುದು.

ಆಸ್ತಿಯು ಹಿರಿಯ ಸಾಮಾನ್ಯವಾಗಿ ಒಕ್ಕ ಪ್ರಧಾನವಾಗಿರುತ್ತದೆ. ತಂದೆಯ ನಂತರ ಮನೆಗೆ ಹಿರಿಯ ಗಂಡು ಮಗನಿಗೆ ಬರುತ್ತದೆ. ತಂದೆಯ ನಂತರ ಮನೆಯ ಎಲ್ಲ ಜವಾಬ್ದಾರಿಗಳನ್ನು ನಡೆಸಿಕೊಂಡು ಹೋಗುತ್ತಾನೆ. ಕುಟುಂಬದಲ್ಲಿ ಸ್ತ್ರೀಯರು ಪುರುಷರಂತೆ ಹೊಲಗದ್ದೆ ಕೆಲಸಗಳಲ್ಲಿ, ಮನೆಯಲ್ಲಿ ಶ್ರಮಜೀವಿಗಳಾಗಿ ದುಡಿಯುತ್ತ ಕುಟುಂಬ ನಿರ್ವಹಣೆಯ ಜವಾಬ್ದಾರಿ ಹೊರುತ್ತಾರೆ. ಇಲ್ಲಿ ಸ್ತ್ರೀಯರಿಗೆ ವಿಶೇಷವಾದ ರಾಜಮಾರ್ಗ ಸ್ಥಾನವಿಲ್ಲ. ಬದಲಿಗೆ ಸಮಾನವಾದ ವ್ಯವಸ್ಥೆಯಿದೆ. ಮಕ್ಕಳ ಪಾಲನೆ, ಪೋಷಣೆಯಲ್ಲಿ ಇವರು ಪ್ರಧಾನರಾದ ಪಾತ್ರ ವಹಿಸುತ್ತಾರೆ.

ಕೋಷ್ಟಕ 4: ಸಮೀಕ್ಷೆಗೊಳಪಟ್ಟ ಈ ಗ್ರಾಮಗಳಲ್ಲಿ ಆದಾಯ ಕುರುಬ ಕುಟುಂಬಗಳಲ್ಲಿನ ಜನಸಂಖ್ಯೆಯನ್ನು ವಯೋ ಗುಂಪಿನ ಸ್ಥರೀಕರಣವನ್ನು ಸಂಗ್ರಹಿಸಿದ್ದು ಅದನ್ನು ಈ ಕೆಳಗಿನ ಕೋಷ್ಟಕದಲ್ಲಿ ನೀಡಲಾಗಿದೆ

ಕ್ರ.ಸಂ.	ವಯೋ ಗುಂಪು	ವಯೋ ಗುಂಪುವಾರು ಜನಸಂಖ್ಯಾ ವಿವರ			
		ಗಂಡು	ಹೆಣ್ಣು	ಒಟ್ಟು	ಶೇಕಡವಾರು
1.	0–06	52	56	108	20.33
2.	07–17	56	41	97	18.26
3.	18–40	88	67	155	2919
4.	41–60	67	50	117	22.03
5.	60ರ ಮೇಲ್ಪಟ್ಟು	24	30	54	1016
ಒಟ್ಟು		287	244	531	100

ಅಧ್ಯಯನಕ್ಕೆ ಆಯ್ಕೆಗೊಂಡಿರುವ ಕುಟುಂಬಗಳ ಆದಾಯ ಕುರುಬಗಳಲ್ಲಿ 0 ರಿಂದ 06 ವರ್ಷ ಮತ್ತು 07 ರಿಂದ 17 ವರ್ಷೋಮಾನದ ಮಕ್ಕಳ ಒಟ್ಟು ಸಂಖ್ಯೆ 205 ಆಗಿರುತ್ತದೆ 18 ರಿಂದ 60 ವರ್ಷ ವರ್ಷೋಮಾನದವರು 272 ಜನಸಂಖ್ಯೆ ಆಗಿರುತ್ತದೆ. 60 ವರ್ಷ ಮೇಲ್ಪಟ್ಟು 54 ಜನರನ್ನು ಹೊಂದಿರುವರು. ಅಧ್ಯಯನಕ್ಕೆ ಒಳಪಟ್ಟಿರುವ 60 ಕುಟುಂಬಗಳಲ್ಲಿ ಅವಿಭಕ್ತ ಕುಟುಂಬಗಳ ಸಂಖ್ಯೆಯ ಪ್ರಾಮುಖ್ಯತೆಯನ್ನು ನಾವು ಗಮನಿಸಬಹುದು. ವಿಭಕ್ತ ಕುಟುಂಬಗಳ ಸಂಖ್ಯೆ 14, ಅವಿಭಕ್ತ ಕುಟುಂಬಗಳು 39 ಮತ್ತು ವಿಸ್ತೃತ (ಅವಿಭಜಿತ ಕುಟುಂಬ) ಕುಟುಂಬಗಳು 07 ಒಟ್ಟು 60 ಕುಟುಂಬಗಳು ಆಗಿರುತ್ತವೆ.

ಕೋಷ್ಟಕ 5: ಸಮೀಕ್ಷೆಗೊಳಪಟ್ಟ 60 ಕುಟುಂಬಗಳಲ್ಲಿರುವ ಕುಟುಂಬಗಳ ಪ್ರಕಾರಗಳ ಸಂಖ್ಯೆ

ಕ್ರ.ಸಂ	ಕುಟುಂಬದ ಪ್ರಕಾರಗಳು	ಕುಟುಂಬಗಳ ಸಂಖ್ಯೆ	ಶೇಕಡವಾರು (%)
1.	ವಿಭಕ್ತ	14	23.33
2.	ಅವಿಭಕ್ತ	39	65.00
3.	ವಿಸ್ತೃತ ಕುಟುಂಬ	07	11.66
ಒಟ್ಟು		60	99.99

10 (೪) ಕುಮುಂಬಿಯರ ವಿವಾಹ ಪದ್ಧತಿ:

ನಿಸರ್ಗದ ನಿಯಮದಂತೆ ಗಂಡು-ಹೆಣ್ಣುಗಳ ಸಮ್ಮಿಲನದಂತೆ ಸಂತತಿ ಪ್ರವೃದ್ಧಾಗುವುದರಿಂದ ಸಮಾಜದ ಆಸ್ತಿತ್ವ ಮತ್ತು ಬೆಳವಣಿಗೆಗೆ ಮದುವೆ ಕಾರಣವಾಗಿದೆ. ಬುಡಕಟ್ಟುಗಳು ವೈವಾಹಿಕ ಜೀವನಕ್ಕೆ ಸಾಕಷ್ಟು ಪ್ರಾಮುಖ್ಯತೆ ನೀಡಿರುವುದರಿಂದ ವಿವಾಹವು ಅವರಲ್ಲಿ ಸಾರ್ವತ್ರಿಕವಾಗಿದೆ. ವಿವಾಹದ ವಯಸ್ಸು, ಸಂಗಾತಿಗಳ ಆಯ್ಕೆಗಳ ಕ್ರಮ, ವಿವಾಹದ ಸಮಾರಂಭದ ಸ್ವರೂಪ, ವಿವಾಹಕ್ಕೆ ಸಂಬಂಧಿಸಿದ ಕೆಲವೊಂದು ನಿಯಮಗಳು, ವಿವಾಹ ವಿಚ್ಛೇದನ ಇವುಗಳ ಬಗ್ಗೆ ಬುಡಕಟ್ಟುಗಳು ತಮ್ಮದೇ ಆದ ನಿಯಮಗಳನ್ನು ಹೊಂದಿರುತ್ತಾರೆ.

ಕುಮುಂಬಿಯರಲ್ಲಿ ಮದುವೆ ಒಂದು ಸಾಮಾಜಿಕ ಒಪ್ಪಂದವೇ ಹೊರತು ಧಾರ್ಮಿಕ ಪ್ರತಿಜ್ಞೆಯಲ್ಲ. ಬುಡಕಟ್ಟುಗಳಲ್ಲಿ ಹಿಂದೂ ವಿಧಿಗಳನ್ನು ಸೇರಿಸಿಕೊಂಡು ತಮ್ಮ ಪಾರಂಪಾರಿಕ ಮದುವೆ ಪದ್ಧತಿಯನ್ನು ಇಂದಿಗೂ ಮುಂದುವರೆಸಿಕೊಂಡು ಬಂದಿರುವುದನ್ನು ಗುರುತಿಸಬಹುದು. ಕುಮುಂಬಿಯರು ಮದುವೆಯನ್ನು ಜಡ್ಡಿಗ್, ಮರ್ಚಿಕ್ ಅಥವಾ ಹೊಸಲು ಎಂದು ಕರೆಯುತ್ತಾರೆ.

ಅವರಲ್ಲಿ ವಿಕವಿಕ್ಷಿಪ್ತ ಮತ್ತು ವಿಕವಿಕ್ಷಿಪ್ತ ಪದ್ಧತಿ ಜಾರಿಯಲ್ಲಿದ್ದು, ಬಹುಪತಿತ್ವ ಮತ್ತು ಬಹುಪತ್ನಿತ್ವವನ್ನು ನಿಷೇಧಿಸಲಾಗಿದೆ. ಒಂದಿನ ಕಾಲದಲ್ಲಿ ಒಬ್ಬಳಿಗಿಂತ ಹೆಚ್ಚು ಪತ್ನಿಯರನ್ನು ಮದುವೆಯಾಗಲು ಅವರನ್ನು ಸಮುದಾಯದಿಂದಲೇ ಬಹಿಷ್ಕರಿಸುತ್ತಿದ್ದರು. ಆದೇ ರೀತಿ ಅತ್ಯಂತ ನಿಕಟ ಸಂಬಂಧವಿದ್ದ ಕುಟುಂಬಗಳಲ್ಲಿ ಸೋದರ ಸಂಬಂಧದಲ್ಲಿ ಮತ್ತು ವಿಧವೆಯ ಹಂಡತಿಯ ತಂಗಿಯನ್ನು ಮದುವೆಯಾಗುವುದರಲ್ಲಿ ಕುಮುಂಬಿಯರು ಹೆಚ್ಚಿನ ಮಹತ್ವವನ್ನು ನೀಡುತ್ತಾರೆ. ಕುಮುಬಿ ಬುಡಕಟ್ಟುಗಳಲ್ಲಿ ವಿವಾಹದ ವಯಸ್ಸಿನ ವ್ಯತ್ಯಾಸವಿರುವ ಹೆಣ್ಣು ಮಕ್ಕಳು ವಿಶೇಷವಾಗಿರುವ ಮೇಲೆಯೇ ಅವರ ವಿವಾಹದ ವ್ಯವಸ್ಥೆ ಮಾಡುವರು. ಗಂಡು ವಿವಾಹದ ಪದ್ಧತಿ ಇವರಲ್ಲಿ ಇಲ್ಲ.

ಕುಮುಂಬಿಯರಲ್ಲಿ ಬಾಹ್ಯ ಆಚರಣೆಗಳು ಸಂಸ್ಕಾರಯುಕ್ತರಿಗೆ ಒಳಗಾಗಿದ್ದರೂ ಮದುವೆಯ ವಿಚಾರದಲ್ಲಿ ಯಾವುದೇ ಹೆಚ್ಚಿನ ಬದಲಾವಣೆಗಳೂ ಇಲ್ಲಿಲ್ಲ. ಕುಮುಬಿಯರ ಮದುವೆಯಲ್ಲಿ ಈ ಕೆಲವು ನಿಯಮಗಳನ್ನು ಪಾಲಿಸುತ್ತಾರೆ.

ಸಮಾನ ಬಳಗಗಳಲ್ಲಿ ವಿವಾಹ ನಿಷೇಧ. ಗಂಡು ಹುಡುಗಿಯನ್ನು ನಿರ್ಧರಿಸುವಾಗ, ತಂದೆ, ಹೊಸಕ್ಕಾರ ಮತ್ತು ಹಿರಿಯರು ನಿರ್ಧರಿಸಬೇಕು. ಸಮಾನ ದೈವವನ್ನು ಆರಾಧನೆ ಮಾಡುವ ಕುಟುಂಬಗಳಲ್ಲಿ ಮದುವೆಯಾಗುವುದಿಲ್ಲ. ಹುಡುಗ ಮತ್ತು ಹುಡುಗಿ ಮದುವೆಗೆ ಮುಂಚಿತವಾಗಿ ಭೇಟಿಯಾಗಿದ್ದರೆ ಮದುವೆ ಸಂಬಂಧ ಮುರಿದು ಬೀಳುತ್ತದೆ. ಕೊಟ್ಟ ಹೆಣ್ಣು ಕುಲದಿಂದ ಹೊರಗೆ ಎಂಬಂತೆ ಮದುವೆಯಾದ ನಂತರ ಹೆಣ್ಣು ತಾಯಿ ಮನೆಯ ಸಂಬಂಧವನ್ನು ಕಡಿದುಕೊಳ್ಳುತ್ತಾಳೆ. ಮದುವೆಯ ಮುಂಚೆ ಲೈಂಗಿಕ ಸಂಬಂಧ ನಿಷೇಧ. ಅಬ್ಬಲಿಗೆ ಹೂವನ್ನು ಮದುವೆಯ ಮುಂಚೆ ಹೆಣ್ಣು ಮಕ್ಕಳು ಮುಡಿಯುವಂತಿಲ್ಲ. ಹೋಳಿ ಕುಣಿತ ಮತ್ತು ತಮ್ಮ ಸಮುದಾಯಕ್ಕೆ ಸಂಬಂಧಿತ ಇತರ ಕಲೆಗಳನ್ನು ಕಲಿತಿರುವ ಹುಡುಗರನ್ನು ಆರಿಸಿ ಮಾಡುವುದು. ಗೋವಾ ರಂಪಗೆ ಮರದ ಹೂವು ಹೆಣ್ಣು ಮಕ್ಕಳಿಗೆ ಅಥವಾ ಮದುಮಗಳಿಗೆ ನಿಷೇಧ. ಪಣ್ಣಾರ್ / ಪಣ್ಣಾರ್ ಬಳಿಯವರು ಗೋವಾದಿಂದ ಬರುವಾಗ ಕುಮುಬಿಯರ ಹಿಂದೆ ಬಂದ ಬಳಗದವರು ಅವರೊಂದಿಗೆ ನೆಂಟಸ್ತನ ನಡೆಯುವುದಿಲ್ಲ. ಹಾಕ್ಕೆಶಾಲ್ ಬಳಿ ಶೆಣ್ಯಮೆಂಬ ಅಡ್ಡಹೆಸರಿನವರು. ಈ ಬಳಿಯ ಕುಮುಂಬಿಗೆ ಹೆಣ್ಣು ಕೊಡುವುದಕ್ಕೂ ತರುವುದಕ್ಕೂ ಹೆಚ್ಚಿನ ಉತ್ಸಾಹವಿರುವುದು ಕಂಡು ಬರಿಯುವುದು.

ಕೋಷ್ಟಕ ಸಂಖ್ಯೆ 6: ಅನ್ವಯಿಸಿಕೊಳ್ಳಲಾದ ಇಲ್ಲಿ ಗ್ರಾಮಗಳ ಆಯ್ಕೆ ಕುಮುಬಿಯರ ಕುಟುಂಬಗಳ ಸದಸ್ಯರುಗಳ ವೈವಾಹಿಕ ಸ್ಥಾನಮಾನಗಳ ವಿವರ

ಕ್ರಮ.	ವೈವಾಹಿಕ ಸ್ಥಾನಮಾನ	ಪುರುಷರು	ಮಹಿಳೆಯರು	ಒಟ್ಟು
1.	ಮದುವೆಯಾದ	137	118	255
2.	ಅವಿವಾಹಿತ	36	26	62
3.	ವಿಚ್ಛೇದಿತ / ವಿರಿಷ್ಕೃತ	02	ಇಲ್ಲ	02
4.	ವಿಧವೆ / ವಿಧುರ	04	03	07
ಒಟ್ಟು		179	147	326

11. ಕುಮುಂಬಿಯರ ಆರ್ಥಿಕ ಸ್ಥಿತಿ-ಗತಿಗಳು:

ಕುಮೇರಿ ಕೃಷಿಯಿಂದ ಕಾಯಮ್-ಸ್ಥಿತಿಗೆ ಕದಿಗೆ

ಪ್ರಪಂಚದಲ್ಲಿ ಯಾವುದೇ ಒಂದು ಸಮುದಾಯ ಮತ್ತು ವ್ಯಕ್ತಿಗಳ ಸ್ಥಾನಮಾನಗಳು ನಿರ್ಧಾರವಾಗುವುದು ಆ ಸಮುದಾಯ ಅಥವಾ ಆ ವ್ಯಕ್ತಿ ಸಮಾಜದಲ್ಲಿ ಯಾವ ರೀತಿಯಲ್ಲಿ ಆರ್ಥಿಕ ಸಂಪತ್ತನ್ನು ಹೊಂದಿದ್ದಾನೆ ಎಂಬುದರ ಮೇಲೆಯೇ ಅವಲಂಬಿಸಿರುತ್ತದೆ. ಈ ಒನ್ನೆಲೆಯಲ್ಲಿ ನಾವು ಜಾತಿ ಸಮುದಾಯಗಳನ್ನು ನೋಡುವುದಾದರೆ ಪ್ರಾಚೀನ ಕಾಲದಿಂದಲೇ ಒಂದು ರೀತಿಯಲ್ಲಿ ಬುಡಕಟ್ಟುಗಳಂತೆ ಪ್ರಾರಂಭವಾಗಿದೆ ಎಂಬುದು ನಿಜವಾದ ಸಂಗತಿಯಾಗಿರುತ್ತದೆ. ಪಾಷಾಣಯುಗದ ಕಾಲದ ಮಧ್ಯಭಾಗದಲ್ಲಿ ಭಾರತದಲ್ಲಿ ಅನೇಕ ಬುಡಕಟ್ಟುಗಳು ಒಂದಲ್ಲ ಒಂದು ರೀತಿಯಲ್ಲಿ ಆರ್ಥಿಕ ಸೌಲಭ್ಯದಿಂದ ವಂಚಿತರಾಗಿ, ಇತರ ಸಮುದಾಯದವರು ಭೂಮಿಯನ್ನು ಆಕ್ರಮಿಸಿಕೊಂಡು ಅವರ ಭೂಮಿಯಲ್ಲಿರುವ ಬುಡಕಟ್ಟುಗಳನ್ನು ಜೀತದಾಳುಗಳಾಗಿ ದುಡಿಸಿಕೊಳ್ಳುತ್ತಾ ಬಂದಿರುತ್ತಾರೆ ಎಂಬುದಾಗಿ ನಾವು ಇಲ್ಲಿ ನೆನಪಿಸಿಕೊಳ್ಳಬಹುದು.

ಕುಮುಬಿ ಸಮುದಾಯದವರು ಆರ್ಥಿಕ ಸಮಸ್ಯೆಯಾಗಿ ಯಾವಾಗ ಗೋವಾದಿಂದ ಇಲ್ಲಿಗೆ ಬಂದಿದ್ದಾರೋ ಆಗಿನಿಂದಲೇ ಬದುಕಿನಲ್ಲಿ ಆರ್ಥಿಕ ಸ್ಥಿತ್ಯಂತರಕ್ಕೆ ಒಳಗಾಗಿದ್ದಾರೆ. ಪೋರ್ಚುಗೀಸ್ ಮಹಾಂತರದ ಒತ್ತಾಯಕ್ಕೆ ಒಲಿದು ಕುಮುಬಿಗಳು ಕರಾವಳಿ ಭಾಗಕ್ಕೆ ವಲಸೆ ಬಂದು ಹೊಲ್ತಿಕೆಯವರಾದ ಬ್ರಾಹ್ಮಣರ ಮನೆಗಳಲ್ಲಿ ಹಾಗೂ ಭೂಮಾಲಕರ ತೋಟದಲ್ಲಿ ಕೆಲಸದಾಳುಗಳಾಗಿ ಸೇರಿಕೊಂಡು ದಿನದ ಹೊಟ್ಟೆ ಪಾಡನ್ನು ನೀಗಿಸಿಕೊಳ್ಳುತ್ತಿದ್ದರು. ನಂತರ ಅವರ ಜಾತಿ ಹೆಸರಿಗೆ ಶಬ್ದಂತೆ ಮೂಲತಃ ಕುಮೇರಿ ಕೃಷಿಯ ಅನುಭವವಿದ್ದವರಿಂದ ಕಾಡಿನಲ್ಲಿ ಸೇರಿ ದೊಡ್ಡದ ಕುದಿಬಂಡ ನೀರು ಧುಮುಕಿದಂತಹ ಸ್ಥಳದ ಕೆಳಗೆ ಮರ-ಗಿಡಗಳನ್ನು ಕಡಿದು ಕೃಷಿಯನ್ನು ಮಾಡಲು ಪ್ರಾರಂಭಿಸಿರುವುದನ್ನು ನಾವು ಗಮನಿಸಬಹುದು.

ಈ ರೀತಿಯ ವ್ಯವಸಾಯವನ್ನು ಗುಜರಿಗಳು ಹಾಗೂ ಮರಾಠಿಯ ಮಾತಿನ ಸಲಕರಣೆಗಳನ್ನು ಬಳಸಿಕೊಂಡು ಮಾಡುತ್ತಿರುವುದು ಗಮನಿಸಲಾಗಿದೆ. ಇದಕ್ಕೆ ಸ್ಥಳಾಂತರ ಬೇಸಾಯ ಅಥವಾ 'ಕುಮೇರಿ ಕೃಷಿ' ಅಥವಾ ಕುಂಬ್ಲೆ ಬೇಸಾಯ ಪದ್ಧತಿ ಎಂದು ಕರೆಯುತ್ತಿದ್ದಾರೆ.

ಕುಮುಬಿಯರು ಕೃಷಿಯನ್ನು ಜೀವನ ವೃತ್ತಿಯನ್ನಾಗಿ ಮಾಡಿಕೊಂಡು ಕೃಷಿಗೆ ಹೊಂದಾಣಿಕೆಯಾಗುವಂತೆ ಅನೇಕ ಕಾಯ್ದುಗಳನ್ನು ನಿತ್ಯ ಬದುಕಿನಲ್ಲಿ ಮಾಡುತ್ತಾ ಬಂದಿದ್ದಾರೆ. ಕ್ಷೇತ್ರ ಕಾರ್ಯ ಸಂದರ್ಭದಲ್ಲಿ ಹಲವಾರು ಕಾಯ್ದುಗಳನ್ನು ಗಮನಿಸಲಾಯಿತು. ಕುಮುಬಿಯರು ತಮ್ಮ ಮನೆಯ ಸುತ್ತಮುತ್ತ ಹಾಗೂ ನೀರು ಹರಿದಾಡುವ ಸ್ಥಳದಲ್ಲಿ ಕೈ ತೋಟವನ್ನು ಮಾಡಿಕೊಂಡಿದ್ದಾರೆ. ಈ ತೋಟದಲ್ಲಿ ಬೀಳ್ಳೆಲೆ, ಮೆಣಸು, ಅಡಿಕೆ, ಅನಾನಸು, ಬಾಳೆಯ, ಹಲಸಿಕಾಯಿ, ಕಾಯಿಳಕಾಯಿ, ಪೊಂಡೆಕಾಯಿ, ಬೆಂಡೆ, ಬಸಲೆ, ಅಡಿವೆ ಸೊಪ್ಪು, ನುಗ್ಗೆಕಾಯಿ, ಅನೇಕ ಬೆಳೆಗಳನ್ನು ಬೆಳೆಸಿರುತ್ತಾರೆ. ಅವರುಗಳಲ್ಲಿ ಕೆಲವರು ಭೂಮಿಯಿಲ್ಲದೆ ಈಗಲೂ ಬೇರೆಯವರ ಗದ್ದೆಯಲ್ಲಿ ಕೃಷಿ ಕೂಲಿ ಕಾರ್ಮಿಕರಾಗಿ ದುಡಿಯಲು ದಿನನಿತ್ಯ ಹೋಗುತ್ತಾರೆ. ಅಲ್ಲದೆ ಕೆಲವರು ಪಶುಸಂಗೋಪನೆ ವೃತ್ತಿಯಲ್ಲಿ ಸಣ್ಣ ಕೊಟ್ಟಿಗೆಯನ್ನಾದರೆ ಕ್ಷೇತ್ರಕಾರ್ಯದಲ್ಲಿ ಗಮನಿಸಲಾಯಿತು. ಕೃಷಿ ಮಾಡುವ ಎಲ್ಲಾ ಮನೆಗಳಲ್ಲಿ ಹಸು, ಕೋಣಗಳಿರುವುದನ್ನು ಕಾಣಬಹುದು. ಇದರಿಂದ ಕೃಷಿಯಲ್ಲಿ ಪಶುಸಂಗೋಪನೆಯನ್ನು ಹಾಗೂ ಪಶು ಸಂಗೋಪನೆಯಲ್ಲಿ ಕೃಷಿಯನ್ನು ಪೂರಕವಾಗಿ ಮಾಡಿಕೊಂಡು ಜೀವನ ಸಾಗಿಸುತ್ತಾ ಬಂದಿರುವುದನ್ನು ಇಲ್ಲಿ ಗಮನಿಸಲು ಸಾಧ್ಯವಿರುತ್ತದೆ.

ಕುಮುಬಿಯರು ಕಾಡಿನಲ್ಲಿ ಸಿಗುವ ವಿವಿಧ ಜೊಂಪುಗಳನ್ನು ಕಡಿದು, ಆ ಜೊಂಪುಗಳನ್ನು ಸುಳ ಅವುಗಳಿಂದ ಬೆಕ್ಕ ಬುಟ್ಟು ಜೇಸಣಿಕೆ, ಚಾಪೆ ಮುಂತಾದ ಗೃಹ ಬಳಕೆಯ ವಸ್ತುಗಳನ್ನು ತಯಾರಿಸುತ್ತಾರೆ. ಅವುಗಳನ್ನು ಹೆಚ್ಚಾಗಿ ಮಾರಾಟ ಮಾಡದೇ ಸ್ವಂತ ಉಪಯೋಗಕ್ಕೆ ಬಳಸುವುದನ್ನು ಗಮನಿಸಬಹುದು. ಬುಡಕಟ್ಟು ಸಮುದಾಯವು ಒಂದಿಲ್ಲಾ ಒಂದು ರೀತಿಯಲ್ಲಿ ಪ್ರಾಣಿಗಳ ಮೂಲ ವೃತ್ತಿಯಿಂದ ಸ್ವತಂತ್ರರಾಗಲು ಪ್ರಯತ್ನಿಸುವುದನ್ನು ಕಾಣಬಹುದು. ಈ ಒನ್ನೆಲೆಯಲ್ಲಿ ಕುಮುಬಿ ಬುಡಕಟ್ಟು ತಮ್ಮ ಮೂಲ ವೃತ್ತಿಯಾದ ಕುಮೇರಿ ಕೃಷಿಯನ್ನು ಕೆಲವೊಂದು ಕಡೆಗಳಲ್ಲಿ ಮುಂದುವರಿಸುತ್ತಾ ಆಧುನಿಕ ನಗರೀಕರಣದ ಪ್ರಭಾವದಿಂದ ತಾವು ಕೃಷಿ ಜೀವನದಲ್ಲಿ ಬದಲಾವಣೆಯನ್ನು ಬಯಸುತ್ತಿದ್ದಾರೆ ಮತ್ತು ಅದರ ಬಗ್ಗೆ ಕಾಳಜಿ ವಹಿಸುತ್ತಿರುವುದು ಕಂಡುಬರುತ್ತದೆ. ಕ್ಷೇತ್ರಕಾರ್ಯಕ್ಕೆ ಸಂಬಂಧಿಸಿದಂತೆ ಕುಂದಾಪುರ ತಾಲೂಕಿನ ಹತ್ತು ಗ್ರಾಮಗಳ 60 ಕುಮುಬಿ ಕುಟುಂಬಗಳಲ್ಲಿ ಆರ್ಥಿಕವಾಗಿ ನಿಧಾನಗತಿಯಲ್ಲಿ ಬದಲಾವಣೆಗೊಳ್ಳುತ್ತಿರುವುದು ಗಮನಿಸಬಹುದು.

ಕೋಷ್ಟಕ ಸಂಖ್ಯೆ 7: ಅಧ್ಯಯನಕ್ಕೆ ಆಯ್ಕೆಗೊಂಡ ಗ್ರಾಮಗಳಲ್ಲಿನ ಅಲಾಲು ಸುಡುವ ಸಮುದಾಯಗಳಲ್ಲಿನ ಅರ್ಹ ಸ್ತ್ರೀಕಾರಗಳ ಸಂಖ್ಯೆ.

ಕ್ರಮ.	ಸ್ತ್ರೀಕಾರ ವಿವರ	ಸ್ತ್ರೀಕಾರ ಸಂಖ್ಯೆಗಳು			ಶೇಕಡಾವಾರು
		ಗಂಡಾರು	ಹೆಣ್ಣಾರು	ಒಟ್ಟು	
1.	ಕುಮೇರಿ ಕೃಷಿ (ಕೃಷಿ / ಬೇಸಾಯ)	61	66	127	42.76%
2.	ಕೃಷಿ ಕಾರ್ಮಿಕ	83	35	118	39.73%
3.	ಗಾರೆಕೆಲಸ (ಮೇಸ್ತ್ರಿ)	07	–	07	02.35%
4.	ಗಾರೆಕೆಲಸಕ್ಕೆ ಸಹಾಯಕ (ಕೂಲಿ)	04	02	06	02.02%
5.	ಸ್ವಂತ ವ್ಯಾಪಾರ	03	–	03	01.01%
6.	ಬೀಡಿಕಾರ್ಮಿಕ	–	06	06	02.02%
7.	ಡ್ರೈವರ್	05	–	05	01.68%
8.	ಗೌರವಧನ/ಹಂಚಿನ ಕಾರ್ಮಿಕ (ಪ್ರಮಿಕ)	04	03	07	02.35%
9.	ಸರ್ಕಾರಿ ನೌಕರ	02	01	03	01.01%
10.	ಶಿಕ್ಷಕ (ಅಂಗನವಾಡಿ/ಪ್ರಾಸ್ಕೌಢ)	01	01	02	00.67%
11.	ನಿವೃತ್ತ ನೌಕರ	01	–	01	00.33%
12.	ಟೈಲರಿಂಗ್	–	03	03	01.01%
13.	ಖಾಸಗಿ ಸಂಸ್ಥೆ ನೌಕರ (ಗುತ್ತಿಗೆ ಆಧಾರದ್ದು)	03	02	05	01.68%
14.	ಇಂಜಿನಿಯರಿಂಗ್ (ಬಿಟೆಕ್)	01	03	04	01.34%
	ಒಟ್ಟು	175	122	297	100%

12. ಸುಡುವಂತಹ ಶೈಕ್ಷಣಿಕ ಸ್ಥಿತಿಗತಿಗಳು:

ಒಂದು ಸಮುದಾಯದ ಸಾಮಾಜಿಕ – ಆರ್ಥಿಕ ಪ್ರಗತಿಗೆ ಶಿಕ್ಷಣವು ಬಹಳ ಮುಖ್ಯವಾಗಿದ್ದು, ಸುಡುವಿಯವರು ಶಿಕ್ಷಣಕ್ಕೆ ಹೆಚ್ಚಿನ ಮಹತ್ವ ನೀಡುವುದು ಎಂದು ಅಭಿಪ್ರಾಯವಿದ್ದರೂ, ತಮ್ಮ ಮಕ್ಕಳನ್ನು ಉತ್ತಮವಾದ ಶಾಲಾ ಕಾಲೇಜುಗಳಲ್ಲಿ ಓದಿಸಲು ಇಚ್ಛೆ ಪಡುತ್ತಾರೆ. ಹೆಣ್ಣು ಮಕ್ಕಳ ವಿವಾಹಕ್ಕೆ ಪ್ರಮುಖ ಪ್ರಾಶಸ್ತ್ಯವನ್ನು ನೀಡಿದರೂ, ಪರಿಶರದ ಪ್ರಾಶಸ್ತ್ಯವನ್ನು ಶಿಕ್ಷಣ ನೀಡುತ್ತಿರುವುದು ಇವರ ಸಾಮಾಜಿಕ ಜೀವನದಲ್ಲಿನ ಬದಲಾವಣೆಯನ್ನು ತೋರಿಸಿ ಕೊಡುತ್ತದೆ. ಆದರೂ ಕೂಡ ವಿದ್ಯಾರ್ಥಿಗಳು ಶಿಕ್ಷಣವನ್ನು ಅರ್ಧದಲ್ಲಿಯೇ ನಿಲ್ಲಿಸುತ್ತಾರೆ.

ಕೋಷ್ಟಕ 8: ಸಮೀಕ್ಷೆಗೊಳಪಟ್ಟ ಹತ್ತು ಗ್ರಾಮಗಳಲ್ಲಿ ವಾಸ್ತವ್ಯವಿರುವ 60 ಸುಡುವ ಬುಡಕಟ್ಟುಗಳ ಶೈಕ್ಷಣಿಕ ಸ್ಥಿತಿಗತಿಗಳ ವಿವರ

ಕ್ರಮ.	ಶೈಕ್ಷಣಿಕ ಹಂತ	ವಿದ್ಯಾರ್ಥಿ ಸಂಖ್ಯೆ			ಶೇಕಡಾವಾರು
		ಗಂಡು	ಹೆಣ್ಣು	ಒಟ್ಟು	
1.	ಪ್ರಾಥಮಿಕ (01–04)	96	38	134	31.67%
2.	ಪೂರ್ವಮಿಕ (5–7)	67	33	100	23.64%
3.	ಪ್ರೌಢಶಿಕ್ಷಣ (8–10)	21	46	67	15.83%
4.	ಪದವಿಪೂರ್ವ (2/2002A)	26	33	59	13.94%
5.	ಪದವಿ (ಬಿಎ)	06	12	18	04.25%
6.	ಬಿಇಡ / ಡಿಪ್ಲೋಮಾ	02	04	06	01.41%
7.	ಸ್ನಾತಕೋತ್ತರ	–	–	–	–
8.	ಇಂಜಿನಿಯರಿಂಗ್	–	–	–	–
9.	ವೈದ್ಯಕೀಯ	–	–	–	–
10.	ಐಟಿಐ / ಪಾಲಿಮಿಕ	–	–	–	–
11.	ಅನಕ್ಷರಸ್ಥರು (ಇತರರು)	17	22	39	09.21%
	ಒಟ್ಟು	235	188	423	100%

ಸುಡುವಿಯವರು ವಾಸಿಸುತ್ತಿರುವುದು ಸಾಮಾನ್ಯವಾಗಿ ದಟ್ಟ ಅರಣ್ಯಗಳಲ್ಲಿ ಆಗಿರುವುದರಿಂದ ಶಾಲೆಗಳು ತುಂಬಾ ದೂರದ ಅಂತರದಲ್ಲಿರುತ್ತವೆ. ಮಳೆಗಾಲದಲ್ಲಿ ಕೆಸರುಮಯವೂ ಇದ್ದು, ಶಾಲೆಗಳು ನಡೆಯುವುದಿಲ್ಲ. ಮಕ್ಕಳ ಮಾತೃಭಾಷೆ ಕೊಂಕಣಿ. ಶಿಕ್ಷಕರಿಗೆ ಆ ಭಾಷೆ ಗೊತ್ತಿಲ್ಲದಿರುವುದರಿಂದ ಮಕ್ಕಳಿಗೆ ಮಾತಾಡಿಕೆ ಮಾಡಿಸುವುದು ಅವಶ್ಯವಾಗುತ್ತದೆ. ಕನ್ನಡ ಕಲಿಯಲು ಎಲ್ಲರಿಗೂ ಆಸಕ್ತಿ ಇದೆ. ಆದರೆ ಅದನ್ನು ಬಾಲ್ಯದಲ್ಲಿ ಅವರ ಮಾತೃಭಾಷೆಯಲ್ಲಿಯೇ ಮಾತಾಡಿಕೆ ಮಾಡಿಕೊಡುವ ಮೂಲಕ ಕಲಿಯುವಂತೆ ಅವರ ಅಭಿಪ್ರಾಯವು ಇರುವಲ್ಲಿ ಸಂತ್ಯಾಶಾಪ್ತ ಕೂಡ ಇದೆ.

ಪರಿವರ್ತನೆಯ ಶಾಲೆಗಳು, ಬಹುಮುಖ ಶಿಕ್ಷಕರ ನೈಪುಣ್ಯತೆಯಿಂದ ಕೆಲವು ಕನ್ನಡ ಶಾಲೆಗಳು ಮುಚ್ಚಿ ಹೋಗುವ ಸ್ಥಿತಿಯಲ್ಲಿರುವುದು ಗಮನಿಸಲಾಯಿತು. ಇದೆಲ್ಲದರ ಪರಿಣಾಮವಾಗಿ ಅರ್ಧದಲ್ಲಿಯೇ ಶಾಲೆ ಬಿಡುವ ಮಕ್ಕಳ ಸಂಖ್ಯೆ ಹೆಚ್ಚು. ಇದರ ಪರಿಣಾಮ ಉನ್ನತ ಶಿಕ್ಷಣ ಎಂಬುದು ಸುಡುವಿಯವರಿಗೆ ಮರೀಚಿಕೆ. ಪದವಿ ಪೂರ್ವದವರು ಕೇವಲ ಬೆರಳೆಣಿಕೆಯಷ್ಟು ಇರೋ ಸಮುದಾಯದಲ್ಲಿ ಪದವಿ ಪೂರ್ವದವರು ಒಟ್ಟು ಹದಿನೆಂಟು (18) ಜನರು. ಇಂಜಿನಿಯರಿಂಗ್, ಸ್ನಾತಕೋತ್ತರ ಪದವಿ, ವೈದ್ಯಕೀಯ, ಐಟಿಐ, ಪಾಲಿಮಿಕ ಯಾರೂ ಇಲ್ಲ.

ಪ್ರಾಥಮಿಕ ಶಿಕ್ಷಣ ಪೂರೈಸಿದವರ ಸಂಖ್ಯೆಯೇ ಸುಡುವಿಯವರಲ್ಲಿ ಜಾಸ್ತಿ ಸಂಖ್ಯೆಯಲ್ಲಿರುವುದು ಕಾಣುತ್ತೇವೆ. ಪ್ರಾಥಮಿಕ ಶಿಕ್ಷಣ ಪೂರೈಸಿದವರ ಸಂಖ್ಯೆ ಒಟ್ಟು 100 ಆಸ್ತಿ. ಪೂರ್ವಶಿಕ್ಷಣ ಪೂರೈಸಿದವರ ಸಂಖ್ಯೆ 67 ಮಾತ್ರ. ಪದವಿಪೂರ್ವ ಶಿಕ್ಷಣ ಪೂರೈಸಿದವರ ಸಂಖ್ಯೆ59. ಇಷ್ಟೋವರಿ ಆಧುನಿಕ ಜಗತ್ತಿನ ಶಿಕ್ಷಣ ಪೂರೈಸಿದವರ ಸಂಖ್ಯೆ ಒಟ್ಟು 06 ಮಂದಿ. ಅವರಲ್ಲಿ ಹೆಣ್ಣು ಮಕ್ಕಳ ಸಂಖ್ಯೆ ಜಾಸ್ತಿಯಾಗಿರುವುದನ್ನು ಗಮನಿಸಬಹುದು. ಅನಕ್ಷರಸ್ಥರ ಸಂಖ್ಯೆ 39 ಇದ್ದರು. ಅವ್ಯು ಹತ್ತು ಗ್ರಾಮಗಳ 60 ಸುಡುವಿಗಳ ಶೈಕ್ಷಣಿಕ ಪ್ರಗತಿಯನ್ನು ಗಮನಿಸಿದರೆ. ಶೈಕ್ಷಣಿಕ ಮಟ್ಟದಲ್ಲಿ ಸಾಕಷ್ಟು ಬದಲಾವಣೆ ಆಗದೇ ಇರುವುದು ಕಂಡುಬರುತ್ತದೆ.

ವಿದ್ಯಾರ್ಥಿಗಳು ಶಾಲೆಗೆ ಬಾರದಿರುವುದಕ್ಕೆ ಈ ಕಾರಣಗಳನ್ನು ಮುಂದಿಟ್ಟುಕೊಳ್ಳಲಾಗಿದೆ. ಶಾಲೆಯನ್ನು ಮುಚ್ಚಲ್ಪಟ್ಟಿರುವುದು ಮತ್ತು ಶಾಲೆಗಳು ದೂರದಲ್ಲಿರುವುದು ಕಾರಣಗಳೆಂದು ವಿದ್ಯಾರ್ಥಿಗಳ ದೃಷ್ಟಿಯಲ್ಲಿ ಗಮನಿಸಲಾಗಿದೆ.

- ಅರಣ್ಯ ಪ್ರದೇಶದಲ್ಲಿ ಹಾಗೂ ಅರಣ್ಯದ ಅಂಚಿನಲ್ಲಿ ವಾಸವಾಗಿರುವುದು. ಇದ್ದಿನ ವಿದ್ಯಾರ್ಥಿಗಳು ಶಾಲೆಗೆ ಹಾಜರಾದ ಕೂಡಲೇ ಕುಟುಂಬದ ಕೆಲಸ ಸಹಿಸಲಾಗದೇ ಇರುವುದರಿಂದ ಶಾಲೆಯನ್ನು ಅರ್ಧದಲ್ಲಿಯೇ ಬಿಡುತ್ತಾರೆ.
- ಸಾಮಾಜಿಕವಾಗಿ ಸುಡುವಿಯವರು ಇತರ ಸಮುದಾಯದ ಜನರ ಸಂಪರ್ಕದಲ್ಲಿರುವುದು ಶಿಕ್ಷಣದ ಮಹತ್ವದ ಬಗ್ಗೆ ಅರಿವು ಇಲ್ಲದಿರುವುದು.
- ತಾವು ವಾಸಿಸುವ ಪರಿಸರದಲ್ಲಿ ವ್ಯಾಪಾರಕ್ಕೆ ಪೂರಕವಾದ ವಾತಾವರಣ ಇಲ್ಲದ ಕಾರಣ ಶಾಲೆಗೆ ಪ್ರೇರಣಾದಾಯಕ ಕಲಿಕಾ ವಾತಾವರಣದ ಕೊರತೆ.
- ಸುಡುವಿಯವರ ಮಾತೃಭಾಷೆ ಕೊಂಕಣಿ. ಶಾಲೆಯ ಹೊರ ವಾತಾವರಣ ಕಿಡಿಸದೇಯಿರುವುದು. ಬುಡಕಟ್ಟು ವಿದ್ಯಾರ್ಥಿಗಳ ಮಾನಸಿಕ ಸ್ಥಿತಿಯನ್ನು ಅರಿತು ಬೋಧಿಸುವ ಶಿಕ್ಷಕರ ಕೊರತೆ ಕಂಡುಬಂದಿರುತ್ತದೆ.
- ಸುಡುವು ನಿರ್ವಹಣೆ ಹಾಗೂ ಸುಡುವಿನ ಜೀವನಾಧಾರಿಯನ್ನು ಹೊರಬೇಕಾಗಿರುವುದರಿಂದ ಕೂಲಿ ಕಾರ್ಮಿಕರಾಗಿ ದುಡಿಯಬೇಕಾದ ಅನಿವಾರ್ಯತೆ ಮಕ್ಕಳಿಗೆ ಇರುವುದು.

ಸುಡುವಿ ಬುಡಕಟ್ಟು ಅಭಿವೃದ್ಧಿಗೆ ಶಿಕ್ಷಣವೊಂದೇ ಪರಿಹಾರ. ಈ ದಿಕ್ಕಿನಲ್ಲಿ ಸರ್ಕಾರ, ಸರ್ಕಾರೇತರ ಸೇವಾ ಸಂಘಗಳು ಸೇವಾ ಕಾರ್ಯಕ್ರಮಗಳಾಗಿ ಕಾರ್ಯಕ್ರಮಗಳು ಏರು ಮಾಡಿಕೊಳ್ಳಬಹುದಾದ ಭಾಷಿಕ ಮತ್ತು ಗಣಿತಿಕ ಬದಲಾವಣೆಗಳನ್ನು ವೈಜ್ಞಾನಿಕವಾಗಿ ಅಧ್ಯಯನ ಮಾಡಿ ಮುಂದಿನ ರೂಪುರೇಷೆ ರೂಪಿಸಬೇಕು. ಹಾಗೇ ಮಾಡಿದ್ದಾಗ ಅಭಿವೃದ್ಧಿಗೊಂದು ಮಹತ್ತರವಾದ ಮೆಗ ಎಲ್ಲಿಸಬಹುದು.

13. ಇರಿತ ಮತ್ತು ಸಲಹೆಗಳು:

- ಸುಡುವಿಯವರ ಬುಡಕಟ್ಟು ಸಂಸ್ಕೃತಿಯು ನೇರವಾಗಿ ಪ್ರಕೃತಿಗೆ ಸಂಬಂಧಿಸಿರುವುದು. ಪ್ರಕೃತಿ ಮತ್ತು ಬುಡಕಟ್ಟು ಸಮುದಾಯಕ್ಕೆ ಆಗಿರುವ ಸಂಬಂಧವನ್ನು ಉಳಿಸಿಕೊಳ್ಳುವುದಕ್ಕಾಗಿ ಕಂಡುಬರುತ್ತದೆ.
- ಸುಡುವಿಯವರ ಸುಡುಂಬವು ಹೆಚ್ಚಿರುವುದಾಗಿ ಅಂಥಹ ಸುಡುಂಬಗಳಾಗಿರುವುದು.

- ಸುಪರಿಂಟಿಂಡರ ಜೀವಂತವರ್ತನಗಳಾದ ನಾಮಕರಣ, ವಿವಾಹ ಮತ್ತಿತರ ಆಚರಣೆಗಳು ಹಂದು ಸಂಸ್ಕೃತಿಯ ಪ್ರಭಾವಕ್ಕೆ ಒಳಗಾಗಿ 'ಹಿಂದುಸ್ಥೈಜೇಷನ್' ಆಗಿ ಪರಿವರ್ತನೆಗೊಳ್ಳುತ್ತಿವೆ.
- ಅಧ್ಯಯನಕ್ಕೆ ಒಳಪಡಿಸಿರುವ 60 ಸುಪರಿಂಟಿಂಡರ ಕ್ಷೇತ್ರಕಾರ್ಯವಾಗಿ ಅವರೆಲ್ಲರೂ ಸಿಧಾಂಗಿಯಲ್ಲಿ ಪ್ರಾತಿನಿಧಿಕವಾಗಿರುವುದು ಕಂಡುಬರುತ್ತದೆ.
- ಸುಪರಿಂಟಿಂಡರ ಕಾರ್ಯಚಟುವಟಿಕೆಗಳು ಅರ್ಥಿಕವಾಗಿ ತೀರಾ ಹಿಂದುಳಿದವರಾಗಿದ್ದು, ನಿರುದ್ಯೋಗ ಸಮಸ್ಯೆ ಕಾಡುತ್ತಿದೆ. ಈ ಬಗ್ಗೆ ಸೂಕ್ತ ಕ್ರಮಕೈಗೊಳ್ಳಬೇಕಾಗಿದೆ.

14. ಆಕರಗ್ರಂಥಗಳು:

(ಅ) ಪ್ರಮುಖ ಪತ್ರಿಕೆಗಳು:

- ಪ್ರಜಾವಾಣಿ – ಹುಬ್ಬಳ್ಳಿ ಮೊದಲ ಪುಟ, ಅಂಕಣ ಹಾಲಾಡಿ, ಕುಂದಾಪುರ, ದಿನಾಂಕ 62
- ವಿಜಯ ಗೌಡ – ಕಮಲಶಿಲೆ, ತೀರ ಇತ್ತೀಚೆ ಪುರೋಹಿತಶಾಹಿಯಿಂದ ದೇವಸ್ಥಾನದ ಬಳಿ, ಕುಂದಾಪುರ
- ಕರಾವಳಿ ವಾಣಿ – ಬೆಳ್ಳಾರಿ ವಿಜಯಾದ, ಕಾರ್ಕಳ
- ರಮೇಶ್ ವಾಣಿ – ಶಕ್ತಿಗಾ ಬಾಚಿ, ಬೈಡಿಲ್ ಪಡುವ ಕಲಿಕೆಗಳು, ಮಂಗಳೂರಿನ

(ಆ) ಗ್ರಂಥ ಋಣ:

1. ಪುಟ್ಟಣ್ಣಶೆಟ್ಟಿಯವರು ಎ.: 'ಬಪ್ಪನಾಡಿನ ಪ್ರಾಚೀನ ಬಪ್ಪನಾಡಿನ', ಪುಟ್ಟಣ್ಣ ಮಾಸಪತ್ರಿಕೆ (ಸಂಪು 1) 1894.
2. ಇಂದುಶೆಟ್ಟಿ ಪ್ರಭಾಕರಾಯರು : ಅಪ್ಪನಾ ಮೊದಲ ಸಂಪುಟ ಇ ಪುಟ್ಟಣ್ಣ ಪುಸ್ತಿಯಾಗಿ ಸಂಪು. ಪಲ್ಲಿಯ ಧಾಮೆ ಕಣ್ಣಾಯಪ್ಪಶೆಟ್ಟಿಯರು ಪುಟ್ಟಣ್ಣ 1909
3. ಆರ್.ಎ.ಸ್. ಪುಟ್ಟಣ್ಣಶೆಟ್ಟಿ (ಸಾಹ): ಪುಟ್ಟಣ್ಣಯ್ಯನ ವಿಜಯಾ – ಪುಟ್ಟಣ್ಣ ಸಂಪುಟ್ಟಣ್ಣಶೆಟ್ಟಿಯವರು ಪ್ರಾಚೀನ ಸಂಪು ಸಂಪುಟ್ಟಣ್ಣ ಇದ ಪುಟ್ಟಣ್ಣಯ್ಯನ ಪುಟ್ಟಣ್ಣಶೆಟ್ಟಿಯ, ಈಂಪಿಟ್ಟಿನ ಬಾಳು ಪುಟ್ಟಣ ಸಂಪು ಧಾಮೆಟ್ಟಿಯವರು ಕೆಣಿಟ್ಟಿಯರು.
4. ಆರ್. ಬಿಂಪುಟ್ಟಿಯಪ್ಪ ಕಣ್ಣಾಶೆ: 'ಪಾಂಡ್ಯಿಯ ಪ್ರಭೆಯಿಟ್ಟಿಯಪ್ಪಿಯ ಪುಟ್ಟಣ ಪಾಣಿಕ್ಷಿಟ್ಟಿಯಪ್ಪಿಯ ಧೈಯಪ್ಪಿಯಾಯರು ಕಿಣ ಎಂಪಿಟ್ಟಿಯರು', ರಟ್ಟ ರಟ್ಟಿಯಾಯ ಪುಟ್ಟಣ, ರ ಪಿಪಿಯಿಟ್ಟಿಯ ಪಿಪಿಪಿಟ್ಟಿನ ಪಿಪಿಪಿಟ್ಟಿನ ಪಿಪಿಯಾಯಾಯಿಪ ಪಾಣ ಸುಪ ಪಾಯಿಪ ಪಿಪಿಪಿಯಿಟ್ಟಿಯಿಪ ಪುಟ್ಟಣ್ಣಾಯಿಪ ಎಪಿಪಿಯಿಪಿಪ ಪ್ರಾಣಿಪ್ಪಿಯ 1994
5. ಪಣ್ಣಾ ಎ.ಎ.ಟ ಪಿಪಿಯಿಪ್ಪ ಕಿಪ ಒಪ್ಪಿಪಿಪಿಪ, ಗಿಪ್ಪಿಪಿ ಪಿಪಿಪ ಪಿಪಿ. ಪಪಿಪಿಪಿಪಾಪಿಪಿಪ 1963
6. ಪಿಪಿ. ಪಿಪಿಪಾಪಿಪಿಪಿಪಿಪಿಪಿ, ಪಿಪಿಪ : ಪಿಪಿಪ್ಪಿಪಿಪ ಪಿಪಿಪಿಪಿಪಾಪಿಪಿ ಪಿಪಿಪ ಪ್ಪಿಪಿಪಿಪ, ರ .ಪಣಿಪಿಪಿ ಕಿಪ ಪಣಿಪಿಪಿಪ್ಪಿ ಕಿಪ ಪಿಪಿಪಾಪಿಪಿ ಪಿಪಿಪಿಪಿಪಿ, ಒ.ಪಿಪಿಪಿಪಿಪಿಪ ಕಿಪಿಪ್ಪಿಪಿಪಿಪಿಪಾಪಿಪಿ ಒ.ಪಿಪಿಪಿಪಿಪಾಪಿಪಿಪಿ, 2003
7. ಪ.ಕಮಲಾಕ್ಷ ದ.ಕ. ಪಿಲ್ಲೆಯ 'ಹಡಿಪಿನ ಮತ್ತು ಗಿಡಿಪಿನರ ಸಮಾಜೀಕ ಇತಿಹಾಸ', ಕನ್ನಡ ಪುಸ್ತಕ ಪ್ರಾಧಿಕಾರ 1994
8. ಡಾ.ಓ.ಪಿ. ಮೊಗವೀರಂಗಯ್ಯ: ಕರ್ನಾಟಕ ಬಡಪಿಪ ಕರೆಗಳ ಕೋಶ, ಕನ್ನಡ ವಿಶ್ವವಿದ್ಯಾಲಯ ಹಂಪಿ 1996
9. ಡಾ.ಹೆಚ್.ಜಿ. ಲಕ್ಷ್ಮಣ ಗೌಡ : 'ಕರ್ನಾಟಕದ ಬುಡಕಟ್ಟುಗಳು', ಕರ್ನಾಟಕ ಜಾನಪದ ಮತ್ತು ಯಕ್ಷಗಾನ ಅಕಾಡೆಮಿ 2000
10. ಡಾ.ಕೆ.ಎಂ. ಮೇತ್ರಿ : 'ಬುಡಕಟ್ಟು ಸಮಾಜಶಾಸ್ತ್ರ' ಪ್ರಸಾರಾಂಗ ಕನ್ನಡ ವಿಶ್ವವಿದ್ಯಾಲಯ ಹಂಪಿ 2002
11. ಡಾ.ಓ.ಪಿ. ಮೊಗವೀರಂಗಯ್ಯ ಮತ್ತು ಡಾ.ಎ.ಎಸ್. ಪ್ರಭಾಕರ (ಸಂ): 'ಕರ್ನಾಟಕ ಬುಡಕಟ್ಟು ಸಮಿಕ್ಷೆ ಕೋಶ', ಪ್ರಸಾರಾಂಗ ಕ.ವಿ. ಹಂಪಿ 2013
12. ಡಾ. ಇಂದಿರಾ ಹೆಗ್ಗಡೆ : 'ಜಾಳಾಡಿಕ್ಕ ಕೊಂಗಯ್ಯ', ಸಾಮಾಜಿಕ, ಅರ್ಥಿಕ ಸ್ಥಿತಿಗತಿ, ಕನ್ನಡ ವಿಶ್ವವಿದ್ಯಾಲಯ ಹಂಪಿ, ಬುಡಕಟ್ಟು ಅಧ್ಯಯನ ಸಂಪುಟ 2007
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14. ಡಾ. ನಾಮದ ಎ.ವಿ.: 'ತುಳು ಜೊಲಿ' ಕೊಡಪ್ಪಾಡಿ ಪ್ರಕಾಶನ, ಮಂಗಳೂರು 2013
15. ಡಾ. ವಾಮನ ನಂದಾವರ (ಸಂ) ಕರಾವಳಿ ಅಧ್ಯಯನಗಳು ಭಾಗ– (2) ಕನ್ನಡ ಮತ್ತು ಸಂಸ್ಕೃತಿ ಇದಾಸ

International Journal of Engineering Science Invention (IJESI)
ISSN (Online): 2319 – 6734, ISSN (Print): 2319 – 6726
www.ijesi.org ||Volume 7 Issue 1|| January 2018 || PP. 40-46

Antimicrobial Activity of Endophytic Fungi Isolated from Ethnomedicinal Plant *Phyllanthus reticulatus* Poir.

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ABSTRACT: *The objective of the present study was to isolate Endophytic Fungi from ethnomedicinally important plant Phyllanthus reticulatus Poir. [Kirganelia reticulata (Poir.) Baill.] and to evaluate antimicrobial activities against human pathogens. A total of seven endophytic fungi were isolated and identified from the leaves and stem of Phyllanthus reticulatus Poir. Viz., Geotrichum candidum, Cylindrocladium sp. Fusarium sp. Cladosporium cladosporioides sp., Mucor pusillus, Rhizopus sp. and Alternaria alternata. The cell free ferment broth was subjected to antimicrobial assay against human pathogenic microbes such as Escherichia coli, Pseudomonas aeruginosa, Staphylococcus aureus and Candida albicans. The results of the present study showed that Cladosporium cladosporioides has antibacterial activity against Pseudomonas aeruginosa and Fusarium sp. is found to be effective against Escherichia coli. While other endophytic fungi tested against human pathogens did not show any effectiveness. This study has proven that Phyllanthus reticulatus Poir. is a very good source of endophytic fungi with potential to produce bioactive compounds having antibacterial and antifungal effect.*

KEYWORDS: *Antimicrobial, Endophytic fungi, Phyllanthus reticulatus Poir.*

I. INTRODUCTION

Endophytes are microorganisms that are present in living tissues of various plant parts establishing natural relationship without apparently causing any symptom of diseases [1, 2]. These endophytes protect their hosts from infectious agents and adverse conditions by securing bioactive secondary metabolites [3, 4]. Endophytes are recognized as rich sources of bioactive metabolites of multifold importance in medicine, agriculture [5]. Many endophytic fungi have been reported to produce novel antibacterial, antifungal, antiviral, anti-inflammatory, antitumor, and other compounds belonging to the alkaloids, steroid, flavonoid, and terpenoids derivatives types [6]. Fungal endophytes protect their hosts from contagious agents and withstand at adverse conditions by discharging active metabolites [7]. Endophytic fungi are a good source of antibiotics. Natural products from entophytic microbes have been observed to inhibit or kill wide variety of harmful disease causing agents. Endophytic fungi are also capable to produce antimicrobial metabolites. The production of Hypericin, Anaphthodianthrone derivative and Emodin are believed to be the main precursor of hypericin [8]. A compound polyketidecitrinin produced by endophytic fungus *Penicillium janthinellum* from fruits of *Melia azeadirachta*, presented 100 % antibacterial activity against *Leishmania* sp. [9]. These creatures were drawing a great attention after the discovery of fungi *Taxus brevifolia*, producing the anti-cancer drug taxol [10]. Endophytic fungi are also reported from *Avicennia officinalis* [11].

Medicinal plants play a crucial role in providing primary health care to human populations, since the dawn of civilization. The knowledge of medicinal plants has been accumulated from different medicinal systems such as Ayurveda, Unani, and Siddha. During the last few decades, there has been an increasing interest in the study of these medicinal plants has been witnessed in different parts of the world mainly due to many problems associated with synthetic drugs and with the emergence of multi-drug resistant pathogens [12]. Medicinal plants contain a wide variety of radical scavenging molecules such as phenolic compounds, quinones, coumarins, lignins, tannins, alkaloids, amines, vitamins, terpenoids communities produce similar therapeutic products and other endogenous metabolites [13-15]. It was assumed that medicinal plants and their fungal endophytic organisms that exist in the tissues of living plants are potential resources of novel natural products for exploitation in pharmaceutical and agricultural industries [16]. *Phyllanthus reticulatus* Poir. belongs to the family – Euphorbiaceae commonly known as karnelli, synonym: *Kirganelia reticulata* (Poir.) Baill. It is an erect or straggling shrub; branch slender, drooping. Leaves upto 3 x 1.5cm, elliptic-orbicular, rounded at both ends, glabrescent; petioles 3 mm long; stipules minute. Flowers in axillary fascicles; petioles filiform. Calyx lobes 5, 3 inner often larger. Stamens 5, in two series; the outer short and free; the inner three slightly larger and

connate. Ovary 5- many celled, ovules 2 per cell, superposed. Fruit baccate, 6 mm in diameter, globose, purple - black when ripe. Flowering September- April [17].

Phyllanthus reticulatus is an ethnomedicinal plant and leaf extraction showed antidiabetic, antiplasmodial, hypocholesterolemic, antimicrobial, hepatoprotective activity, analgesic and anti-inflammatory activity [18]. Hence, the present study dealt with the isolation of endophytic fungi from both leaf and stem segments of *Phyllanthus reticulatus* and their antimicrobial activity against selected human pathogens were studied.

II. MATERIALS AND METHODS

2.1 Plant collection and identification

Healthy mature leaves and stems of medicinal plant *Phyllanthus reticulatus* were collected from different places of Udupi District of Karnataka State in plastic bags. The collected plant material was authenticated by the Taxonomist Dr. K. Gopalakrishna Bhat, Department of Botany, Poornaprajna College, Udupi, Karnataka, India. Fresh plant materials were used for isolation of endophytic fungi and evaluation of their antimicrobial activities.

2.2 Isolation of endophytic fungi

The plant materials were rinsed gently in running tap water to remove dust and debris. After proper washing, the leaf and stem is cut into small pieces of 0.5-1cm in length. Highly sterile conditions were maintained during the isolation of endophytes. All the work was performed in the laminar air hood. Sterile glass wares and mechanical things, such as scissors, forceps, scalpel, and blades were used. The isolation of endophytic fungi was done according to the standard method [19]. The surface sterilization was done by sodium hypochlorite (NaOCl) and 95% ethanol. Finally the leaves were washed in sterile distilled water for 2 minutes. The plant material was blotted on sterile blotting paper. In each Petri dish 5-6 segments were placed on PDA medium. Each Petri dish containing PDA is supplemented with antibiotics Penicillin G 100 units per ml and streptomycin 100 microgram per ml. The Petri dishes were sealed with parafilm and incubated at 27 $\pm 2^{0}$ C for 4-6 weeks at dark. Most of the fungal growth was expected within two weeks of inoculation. The incubation period for each fungus was recorded and the growth of endophytic fungi was observed daily.

Leaf segments of *P. reticulatus* inoculated on PDA medium

2.3 Identification of endophytic fungi

The isolated fungi were identified based on the morphology of surface texture, pigmentation and spores at the hyphal tips which were used to identify the endophytic fungi at species level using standard manual [20, 21]. The microscopic examination was also done to study their reproductive spores [22]. The identified fungal isolates from the plant tissue segments were sub cultured in a Petri dish containing sterile PDA media. To preserve as a pure culture, the endophytic fungi was inoculated in PDA slant and incubated at 4°C.

Endophytic fungal growth on PDA medium

2.4 Calculation of colonizing frequency

Colonizing frequency was calculated as per standard procedure [23].

$$\text{Colonization frequency} = \frac{\text{Number of segments colonized by fungi}}{\text{Total number of segments observed}} \times 100$$

2.5 Relative Percentage Occurrence (RPO) of Different Fungi was calculated with slight modification [24]

$$\text{RPO} = \frac{\text{Density of colonization of one group}}{\text{Total Density of colonization}} \times 100$$

2.6 Screening for antimicrobial activity

150 ml of Potato Dextrose Broth was prepared in 250 ml flasks and autoclaved at 15 lbs psi for 20 min. The medium was inoculated with various fungi culture and incubated at 28±1°C in the incubator for 1-2 weeks. After 9 days the culture medium is centrifuged at 10000 rpm for 30 minutes. After centrifugation, the supernatant was collected and subjected to antimicrobial screening by Agar diffusion technique [25].

2.7 Antibacterial Activity of Test organisms

Three human pathogenic bacteria such as *Escherichia coli*, *Staphylococcus aureus*, *Pseudomonas aeruginosa* and one fungal pathogen like *Candida albicans* were used for antimicrobial assay. All the test microbial strains were obtained from the Culture Collection Centre, IMTECH, Chandigarh (India).

2.9 Antimicrobial screening by Agar Well Diffusion Technique

Antimicrobial activity of culture supernatants of endophytic fungi were tested by Agar well Diffusion Method using Mueller Hinton Agar Medium. All the overnight culture of test microbes were inoculated into Mueller Hinton Agar plates using sterile cotton swabs. About 5 mm size wells were made using sterile cork borer and 200 µl of culture supernatants added into separate wells. All the plates were observed for zone of inhibition after incubation at 37°C for 24 hours for bacterial pathogens and at 30°C for 48 hours for fungal pathogens. Sterile Sabouraud Dextrose Broth is used as negative control. The antimicrobial activities were analysed by presence or absence of inhibition zones [26].

III. RESULTS

In the present study, 12 leaflets and 12 stem segments of ethnomedicinal plant *P. reticulatus* was processed for isolation of endophytic fungi. A total of 7 endophytic fungi *Geotrichum candidum*, *Cylindrocladium* sp., *Fusarium* sp., *Mucor pusillus*, *Cladpsporium cladosporioides*, *Alternaria alternata*, *Rhizopus* sp. were isolated which is shown in Table 1. Colonization frequency percentage (% CF) and Relative Percentage Occurrence (RPO) are also given in Table 2 and 3 and Figure 1 respectively. The seven endophytic fungi were subjected for antimicrobial activity against pathogenic bacteria viz., *Staphylococcus aureus*, *Pseudomonas aeruginosa*, *Escherichia coli* and fungal pathogens like *Candida albicans*. *Cladpsporium cladosporioides* had shown antimicrobial activity against *Pseudomonas aeruginosa* and showed inhibition zone of 12 mm. *Fusarium* sp. is found to be effective against *Escherichia coli* and showed inhibition zone of 10 mm. Whereas other endophytic fungal forms tested for antimicrobial sensitivity did not show any effectiveness against the pathogenic forms (Table 4).

Table1: Endophytic fungi isolated from different parts of *P. reticulatus* Poir.

Sl. No.	Plant Parts	Endophytic fungi	Class
1	Leaf	*Geotrichum candidum*	Deuteromycetes
2	Leaf	*Cylindrocladium* sp.	Deuteromycetes
3	Leaf	*Fusarium* sp.	Hyphomycetes
4	Leaf	*Mucor pusillus*	Zygomycetes
5	Stem	*Cladpsporium cladosporioides*	Hyphomycetes
6	Stem	*Alternaria alternata*	Ascomycetes
7	Leaf	*Rhizopus* sp.	Zygomycetes

Table 2: Percentage Colonizing frequency (% CF) of Endophytic fungi isolated from *P. reticulatus*

Sl. No.	Endophytic fungi	Isolate from	Total no. of segments observed	No of segments colonized	% Colonization Frequency (%CF)
1	*Geotrichum candidum*	Leaf	12	2	16.6
2	*Cylindrocladium* sp.	Leaf	12	2	16.6
3	*Fusarium* sp.	Leaf	12	3	25
4	*Mucor pusillus*	Leaf	12	1	8.3
5	*Cladosporium cladosporioides*	Leaf	12	2	16.66
6	*Alternaria alternata*	Stem	12	5	41.6
7	*Rhizopus* sp.	Stem	12	4	33.33

Figure 1: Percentage Colonizing Frequency (%CF) of Endophytic fungi isolated from P. *reticulatus* Poir.

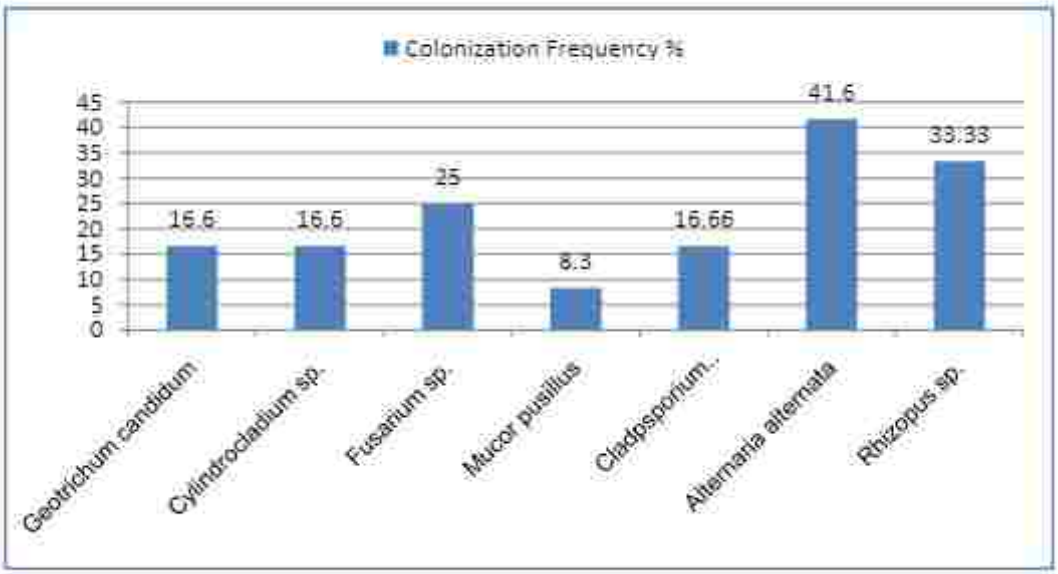

Table3: RPO of endophytic fungi isolated from *Phyllanthus reticulatus* Poir.

Sl. No.	Name of the Endophytic fungi	Isolate from	RPO (%)
1	*Geotrichum candidum*	Leaf	10.52
2	*Cylindrocladium* sp.	Leaf	10.52
3	*Fusarium* sp.	Leaf	15.78
4	*Mucor pusillus*	Leaf	5.26
5	*Cladosporium cladosporioides*	Leaf	10.52
6	*Alternaria alternata*	Stem	26.31
7	*Rhizopus* sp.	Stem	21.05

Table 4: Evaluation of anti microbial activities

Endophytes isolated from *Phyllanthus reticulatus*	Zone of inhibition			
	E. coli	*Staphylococcus aureus*	*Pseudomonas aeruginosa*	*Candida Albicans*
Geotrichum candidum	-	-	-	-
Cylindrocladium sp.	-	-	-	-
Fusarium sp.	+	-	-	
Mucor pusillus	-	-	-	-
Cladpsporium cladosporioides	-	-	+	-
Alternaria alternata	-	-	-	-
Rhizopus sp.	-	-	-	-

("+": Presence of inhibition zone & "-": Absence of inhibition zone)

Zone of inhibition (a) (b)
a. *Cladosporium cladosporioides* b. *Fusarium* sp.

IV. DISCUSSION

A total of seven endophytic fungi were isolated from the medicinal plant *Phyllanthus reticulatus* Poir. belongs to different classes. *Geotrichum candidum*, *Cylindrocladium* sp. belong to the class Deuteromycetes,, *Fusarium sp and Cladpsporium cladosporioides*, belong to the class Hyphomycetes, *Alternaria alternata* belongs to the class Ascomycetes, *Rhizopus* sp.and *Mucor pusillus* belong to the class Zygomycetes. Colonizing Frequency percentage (CF %) of *Alternaria alternata* (41.6 %) was found to be highest, whereas *Mucor pusillus* showed lowest CF % (8.3 %). *Alternaria alternata* has exhibited highest RPO (26.21%) and *Mucor pusillus* showed the lowest RPO (5.26 %). The isolated endophytic forms were subjected for antimicrobial sensitivity test against pathogenic microbes such as *Pseudomonas aeruginosa*, *Escherichia coli*. and *Candida albicans*. *Cladpsporium cladosporioides* was the most effective endophytic fungus against *Pseudomonas aeruginosa* and zone of inhibition was 12 mm. *Fusarium* sp. was found to be effective against *Escherichia coli* and zone of inhibition was 10 mm. Whereas other endophytic fungal forms tested for anti microbial sensitivity test did not show any effectiveness to the tested pathogenic forms . Generally endophytic fungi are widely distributed in all plant domains. It produces valuable plant secondary metabolites and exploited for medical, agricultural and industrial uses [27]. Plants having an ethnobotanical history or used by local indigenous people for any therapeutic purpose will provide the best opportunities to isolate novel endophytic fungi and to make use of them to produce novel bioactive products [28].

V. CONCLUSION

The secondary metabolites present in endophytic fungi *Cladosporium cladosporioides* and *Fusarium* sp. may act as potential antimicrobial agents. *Phyllanthus reticulatus* Poir. harbors several endophytic fungi which produce biologically active antimicrobial substances with selective antimicrobial properties. A total of 7 endophytic fungi were isolated from the medicinal plant *Helicteres isora* L. [29].The natural bioactive compounds obtained especially from the endophytic fungi have been largely unexplored. Efforts must be made to ensure safe, effective and affordable treatments for wide range of diseases by traditional methods which use locally available medicinal plants. The scientific and authentic researches on these aspects are to be done in order to exploit traditional knowledge of ethnomedicinal plants.

ACKNOWLEDGEMENT

Authors are thankful to the Department of Biosciences, Mangalore University, Mangalagangothri for providing laboratory facilities to carry out this work.

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International Journal of Engineering Science Invention (IJESI) is UGC approved Journal with Sl. No. 3822, Journal no. 43302.

Gayathri Pai. "Isolation of Endophytic Fungi From Medicinal Plant Phyllanthus Reticulatus Poir. And Evaluation of Their Antimicrobial Activities." International Journal of Engineering Science Invention(IJESI), vol. 07, no. 01, 2018, pp. 40--46.

TALENT MANAGEMENT PRACTICES IN ORGANIZATIONS

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"Talent management" is about the activities to attract, develop and retain employees; some organizations and experts use this term only in the context of talented and high-potential employees. Human Resource Management" is required to maximize the capabilities and performance of people in organizations. Human resource management function and profession has seen a drastic change over the years from being just a Personnel Department in large organizations merely taking care of paper work, hiring and paying people to being a standalone HR department in organizations of all sizes. With the increasing importance and recognition in recent times, HR department plays a major role in staffing, training and helping to manage people so that people and the organization are performing at maximum capability in a highly fulfilling manner. However the well known and sustained argument as to whether HR-related functions should be organized into large organizations is still considered valid. In this direction, it is seen that Human Resources (HR) can include a broad spectrum of specialties such as recruiting, payroll, policy, safety, training and development, and performance management within organizations. HR professional may handle all of those specialties in small organizations which house small HR departments and also less number of employees. In larger organizations, each specialty can be handled by a department of its own. For an organization to manage its talent effectively, HR should develop programs that will attract, select, develop, and retain the talent needed to meet the organizational mission.

Whether an organization hosts HR department of one or a combination of multiple departments that include hundreds of employees, the primary responsibility of that department is talent management. Talent management needs to be given its due in every organization in order to optimize employee's performance.

Keywords: Talent management, HR department, Professional and Employees

Applied Physics A (2018) 124:767
https://doi.org/10.1007/s00339-018-2196-y

Applied Physics A
Materials Science & Processing

Evolution of defects and their effect on photoluminescence and conducting properties of green-synthesized ZnS nanoparticles

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Received: 2 January 2018 / Accepted: 17 October 2018
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Abstract

We have grown ZnS (zinc sulfide) nanoparticles (NPs) by hydrothermal and microwave (MW) heating method and a comparative study on the physical properties was carried out. Zinc acetate dihydrate (ZAD) and thioacetamide (TA) were used as Zn and S precursors, respectively. X-ray diffraction (XRD) and selected area electron diffraction (SAED) pattern revealed the cubic structure for ZnS and nanocrystalline nature of the samples. The careful observation of the XRD patterns of the samples grown by hydrothermal and microwave heating method indicate that microwave-synthesized ZnS (ZnS–MW) samples were strained compared to those grown by conventional hydrothermal methods. Uniform sized smaller nanoparticles were formed during microwave irradiation in a much shorter time. UV–Vis absorption spectra indicated quantum confinement effect. The emission peaks in photoluminescence spectra indicate the presence of various point defects in the samples. In the microwave synthesized sample, nucleation and growth process of the ZnS crystallites are very quick, leading to the formation of defects. The dielectric studies of both types of the samples show a typical behavior of polycrystalline semiconducting material. Under the applied A.C. fields, the conduction phenomena provide sufficient evidence for the electronic hopping between localized sites. Lower values of activation energy obtained for both dipolar relaxation and DC conductivity in the case of microwave synthesized sample indicate the applicability of such materials in various switching applications.

1 Introduction

In recent years, II–VI semiconductor nanomaterials such as ZnS, CdS, CdTe, ZnSe etc. have been the subject of intensive research interest owing to their size-dependent property of quantum confinement effect [1, 2]. Among them, ZnS is an important II–VI semiconducting material widely used as a phosphor which exhibits high luminous intensity and narrow emission band. Apart from the size-dependent luminescence, emission in ZnS can also be tuned by incorporation of suitable impurities. Visible emission has been achieved in ZnS by inducing mid gap energy levels in the nano crystals of ZnS due to doping with metallic ions such as Ag, Ni, Mn etc. [2]. ZnS has been proved to be an efficient visible light driven photocatalyst for H_2 evolution. Some photocatalytic ZnS materials have also been investigated for the antimicrobial activities [3]. In addition, the nano-sized ZnS finds application in flat panel displays, solar cells, infrared windows, photoconductors, sensors etc [4–6]. Due to less toxicity, ZnS is also finding applications in biological labeling and diagnostics [7]. A lower value of activation energy for dielectric relaxation and electrical conduction is under investigation for the possible application of these defected materials in flash memory devices.

Majority of reports available in literature on the synthesis of ZnS nanomaterials include hydrothermal process [8], sol–gel method [9], chemical co-precipitation method [10], sonochemical method [11], microwave irradiation [12] and solvothermal method [13] etc. The size of the ZnS nanocrystallite was found to depend on the preparation conditions such as the ratio of metal salt to sulfur source, operating

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Published online: 24 October 2018

temperature and pressure during reaction, the amount of capping agents used, and method of heating the precursors.

In a conventional heating, an external thermal source heats the reaction medium by a conductive heating. This is an inefficient method of transferring energy into a system, as it depends on the thermal conductivity of different materials that must be penetrated [14]. This results in excess temperature of the reaction vessel which is much higher than that required for the reaction. In contrast, microwave irradiation produces efficient in-core volumetric heating by direct coupling of microwave energy with the molecules (solvents, reagents, catalysts) that are present in the reaction mixture. N Dahal et al. [15] have reported an extensive comparative study of conventional heating against microwave heating in noble metal nanoparticle (NP) synthesis and observed preferential effects of MW heating on nucleation and growth of near monodisperse Rh, Pd and Pt NPs. Zhu et al. have studied effect of microwave power on the size of ZnS nanoparticles (NPs). In their investigation, marginal size reduction of particles from 3 to 2.9 nm with decrease in microwave power from 650 to 280 W was reported [16, 17]. Ma et al. have reported the growth of ZnS NPs through conventional heating at 140 °C for 8 h, and have reported particles of 6.4 nm size [18]. Even though separate studies are available on the growth of ZnS NPs by conventional hydrothermal and microwave synthesis, comparative study of the ZnS NPs grown by these two techniques is not reported as per our best of knowledge. Hence such a comparative study has been carried out in the present work. The ability of a specific substance to convert electromagnetic energy of microwave into heat at a given frequency is determined by the dielectric loss factor tanδ. Water having $\tan\delta = 0.123$, classified as medium polar solvent, is best suited in our case for the synthesis of ZnS NPs to follow principles of green chemistry. The most common microwave frequency used for research is 2.45 GHz ($\lambda \sim 12.25$ cm), the same as for the domestic microwave ovens. Since conventional heating and microwave heating processes are fundamentally different in their heating mechanisms, it will result in a vastly different product with different properties.

The objective of the present work is to synthesize ZnS nanoparticles (NPs) in aqueous dispersion by conventional and MW heating, and, to explore the method specific desired properties of ZnS NPs for device applications. The aqueous synthesis of ZnS is based on the heat sensitivity of thioacetamide (TA), which releases sulfur (S) species on heating. Consequently, the reaction was well activated under microwave irradiation resulting in the formation of ZnS nanocrystals in a much shorter time.

2 Experimental details

2.1 Synthesis by hydrothermal method

Zinc acetate dihydrate [$Zn(CH_3COO)_2{\cdot}2H_2O$] of molecular weight 219.5 and thioacetamide (CH_3CSNH_2) of molecular weight 75.13 were used as zinc and sulphur precursors, respectively. The chemicals used were of AR grade and used without further purification. Initially, individual solutions of 0.15 M zinc acetate dihydrate and 0.27 M TA were prepared separately. They were mixed in a round bottomed flask (RBF) under stirring for 15 min at room temperature. This mixture was subsequently heated for 2 h at a constant temperature of 80 °C, with water cooled condenser fixed to the flask. The solution was then allowed to cool naturally to room temperature. ZnS NPs were separated by centrifugation, washed several times with double distilled water and finally washed with acetone. The precipitate was dried in a hot air oven and the resulted sample was named as ZnS–HT.

2.2 Synthesis by microwave heating method

For the microwave-assisted synthesis of sample, RBF containing a mixture of precursors was placed in a custom designed domestic microwave oven. It is worth mentioning that we have utilized the same starting materials and their concentration mentioned in the previous method for the microwave synthesis of ZnS. A water-cooled condenser was connected outside the microwave oven cavity by a glass joint to RBF. With reflux systems, there is little risk of explosions as the flammable vapors will not be released into the microwave cavity and the heating system will be at atmosphere pressure. Heating of precursors was done by microwave radiations for 6 min. Colloidal precipitate obtained was cooled to ambient temperature, washed, separated by centrifugation, dried and the resulted sample was named as ZnS–MW.

Synthesized samples were subjected to X-ray diffraction using Rigaku Miniflex 600 X-Ray Diffractometer operating at 40 kV and 15 mA with monochromatic copper—K_α radiation. Transmission electron microscope (TEM) studies were carried out using JOEL JEM 2100 High-Resolution Transmission Electron Microscope operating at 200 kV. Optical absorption spectrum was recorded using SHIMADZU-1800 UV–Vis spectrophotometer at room temperature. A Photoluminescence (PL) spectrum was obtained with the help of Hitachi F-7000 Fluorescence Spectrophotometer. Dielectric measurements were carried out using a Novocontrol Alpha Impedance Analyzer (Novocontrol Technologies, Germany) equipped with a quatro liquid nitrogen gas cryosystem, over a frequency range of 100 Hz–5 MHz at several temperatures between 223 K and 323 K.

3 Results and discussion

3.1 X-ray diffraction

XRD pattern of samples synthesized by both the methods (conventional and MW heating) is shown in Fig. 1. The prominent broad peaks indicate nanocrystalline nature of the samples. The XRD peaks were corresponding to (111), (220) and (311) planes of simple cubic structure of ZnS as identified with JCPDS file nos.03-065-9585 and 01-071-5971 for the samples ZnS–HT and ZnS–MW respectively. Additional diffraction peaks due to impurities or other crystalline phases were not detected from the XRD pattern indicating the high purity of the grown nanoparticles.

Average crystallite size (D) was calculated for the prominent (111) diffraction peak using Debye Scherrer equation:

$$D = \frac{0.9\,\lambda}{\beta\,\cos\theta} \tag{1}$$

where λ is wavelength of incident X-rays; θ is angle of diffraction, β is full width at half maximum (FWHM) of Bragg peak. Interplanar separation (d_{hkl}) between planes corresponding to Miller indices (hkl) were calculated using Bragg's law.

Strain (ε) produced in the nanocrystallites was calculated using

$$\varepsilon = \frac{\beta}{4\tan\theta} \tag{2}$$

Narrow X-ray diffraction peaks with increased intensity were observed for ZnS–HT samples compared to that of ZnS–MW samples, indicative of increased crystallinity [19] and particle size for ZnS–HT samples. Lee et al. [20] found a small increase in peak intensity with a slight decrease in line width with increase in synthesis temperature of ZnS:Cu nanocrystals, and it was attributed to the possibility of grain growth with temperature. The increased crystallinity and particle size for ZnS–HT samples in the present study may be due to prolonged synthesis procedure for ZnS–HT samples leading to crystal growth followed by agglomeration.

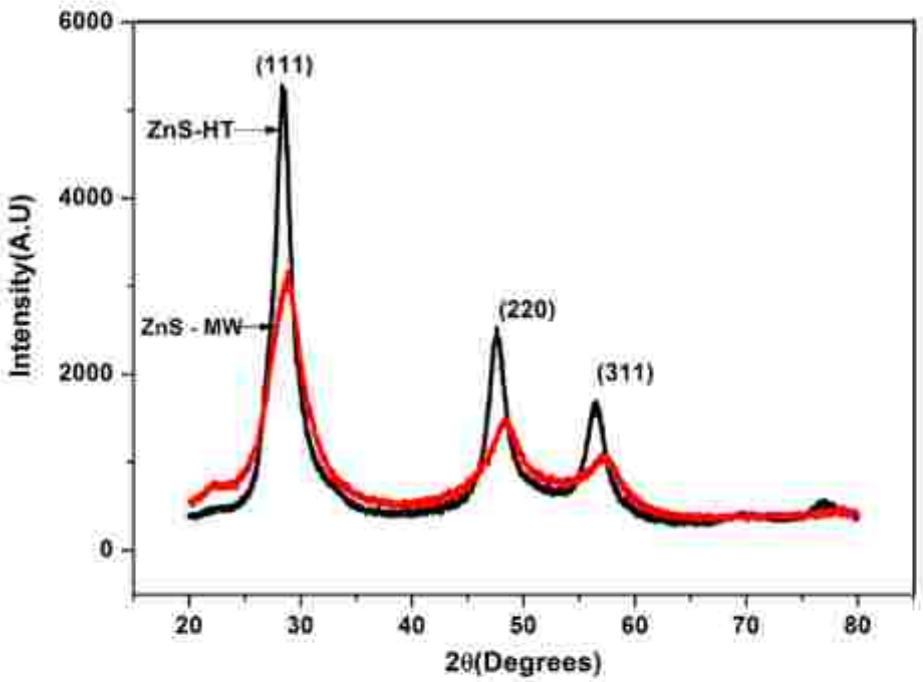

Fig. 1 X-ray diffraction pattern for ZnS–HT and ZnS–MW samples

Table 1 Percentage of elements present in ZnS–HT and ZnS–MW and their particle size

Sample	Atomic % of Zn	Atomic % of S	Strain, $\times 10^{-3}$	Crystallite size from XRD (nm)	NP size from TEM (nm)	NP size from UV–Vis absorption (nm)
ZnS–HT	51.8	48.2	36.13	3.89	6.3	6.1
ZnS–MW	55.5	45.5	65.22	2.13	2.55	2.9

Lattice strain produced in the ZnS nanocrystallites synthesized by both the methods are given in Table 1. It is observed from the table that a higher lattice strain is developed for ZnS nanocrystallites synthesized by MW heating as compared to conventional heating. The inter-planar spacing d_{111} obtained for ZnS–HT is 3.123 Å, and it gets reduced to 3.111 Å for ZnS–MW.

3.2 Electron microscopy

Transmission electron microscopy (TEM) is less likely to be affected by experimental errors and more direct than X-ray line broadening [21]. Figure 2a show the TEM, high-resolution TEM (HRTEM) image and selected area electron diffraction (SAED) pattern for ZnS–HT sample while Fig. 2b correspond to that of ZnS–MW sample. A close observation of the HRTEM figures reveal that smaller crystallites are resulted for the samples synthesized by MW heating as compared to the conventional heating. Size distribution of NPs are plotted for the TEM images of both samples and shown as insets in 2a(1) for ZnS–HT and 2b(1) for ZnS–MW. TEM images indicate the non formation of monosized NPs in the case of ZnS–HT sample. From the SAED pattern of both type of samples, it is inferred that the diffracting planes are

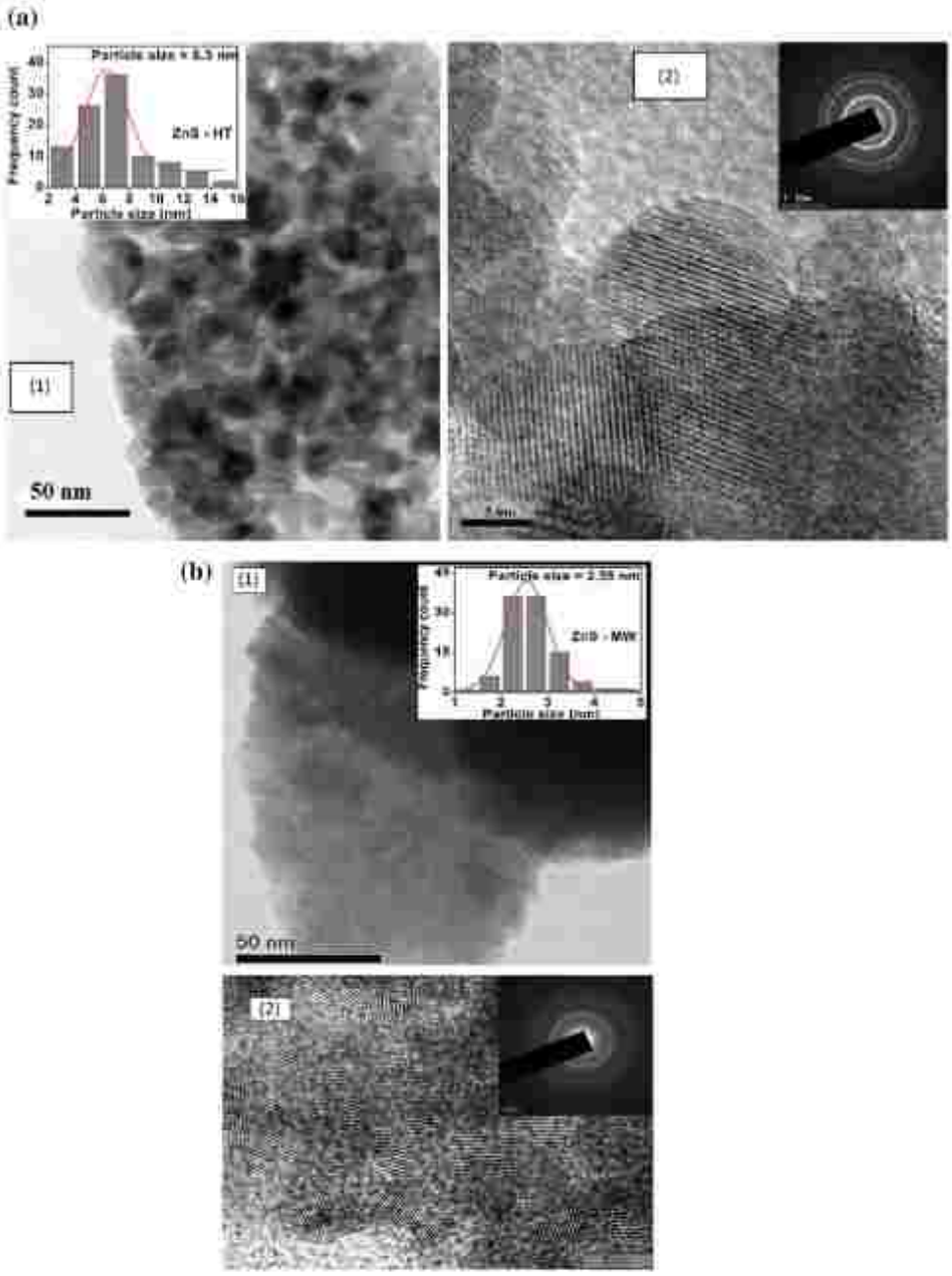

Fig. 2 **a** (1) TEM and inset is histogram of distribution of particles and (2) HRTEM image for ZnS–HT sample and inset is SAED pattern. **b** (1) TEM and (2) HRTEM image for ZnS–MW and inset is SAED pattern

corresponding to (111), (220) and (311) planes of sphalerite ZnS. The presence of sharp spots in the SAED pattern of ZnS–HT is a measure of high crystallinity of the samples as observed from the XRD results. On the contrary, only diffraction rings were observed in the case of ZnS–MW indicating fine grain structure of the sample. Both the samples show agglomeration effect. But MW synthesized sample shows agglomeration tendency to a greater extent which may be due to the smallness of NPs, indicating the necessity of using a capping agent to get stabilized NPs.

EDS analysis of ZnS–HT and ZnS–MW showed the presence of Zn and S atoms in the prepared samples. As observed from the XRD spectra, EDS spectra did not show any traces of other elements which confirm the purity of the samples. The percentage of elements Zn and S obtained from EDS as well as crystallite sizes obtained by XRD, TEM and UV–Vis absorption studies are shown in Table 1.

3.3 Optical properties

3.3.1 UV-absorption studies

The dependence of absorbance of samples on wavelength is shown in Fig. 3. The absorption peaks occur at 329 nm and 322 nm for ZnS–HT and ZnS–MW respectively. The marginal shift in the absorption peak towards lower wavelength observed for the ZnS–MW samples is attributed to particle size effect. For the samples prepared by both the methods, there is a blue shift of absorption peaks compared to that of bulk (337 nm) which indicates strong quantum confinement effect. Band gap of ZnS NPs is calculated from the Tauc relation [22]:

$$\alpha h\nu = A(E_{h\nu} - E_g)^n \tag{3}$$

where α is absorption coefficient, obtained by Beer Lamberts' principle and A is a constant;

$$\alpha = \frac{2.303 \text{ Absorbance}}{t} \tag{4}$$

t is the path length of radiation in sample solution.

Since ZnS is a direct band gap semiconductor, the exponent value of $n = 1/2$ is considered for allowed direct transitions. From Eq. (3), the band gap E_g for nanoparticles was estimated by extrapolating the straight line portion of $(\alpha h\nu)^2$ versus $(h\nu)$ plot to the x-axis (Fig. 3). The obtained energy band gap of ZnS NPs was found to be 3.88 eV for ZnS–HT and 4.8 eV for ZnS–MW synthesized samples. This indicates a predominant blue shift in the energy band gap for the ZnS–MW samples. To explain such a blue shift, we have made use of the effective mass approximation model [23] according to which, the energy band gap of NP can be written as:

$$E_{np} = (E_g)_{bulk} + \frac{h^2\pi^2}{2R^2}\left(\frac{1}{m_e^*} + \frac{1}{m_h^*}\right) - \frac{1.8e^2}{4\pi\varepsilon_0\varepsilon_r R} \tag{5}$$

where R is the radius of nanoparticle. m_e^* is the effective mass of electron in ZnS = 0.34 m_0, m_h^* is the effective mass of hole = 0.23 m_0; m_0 being rest mass of electron, ε_r

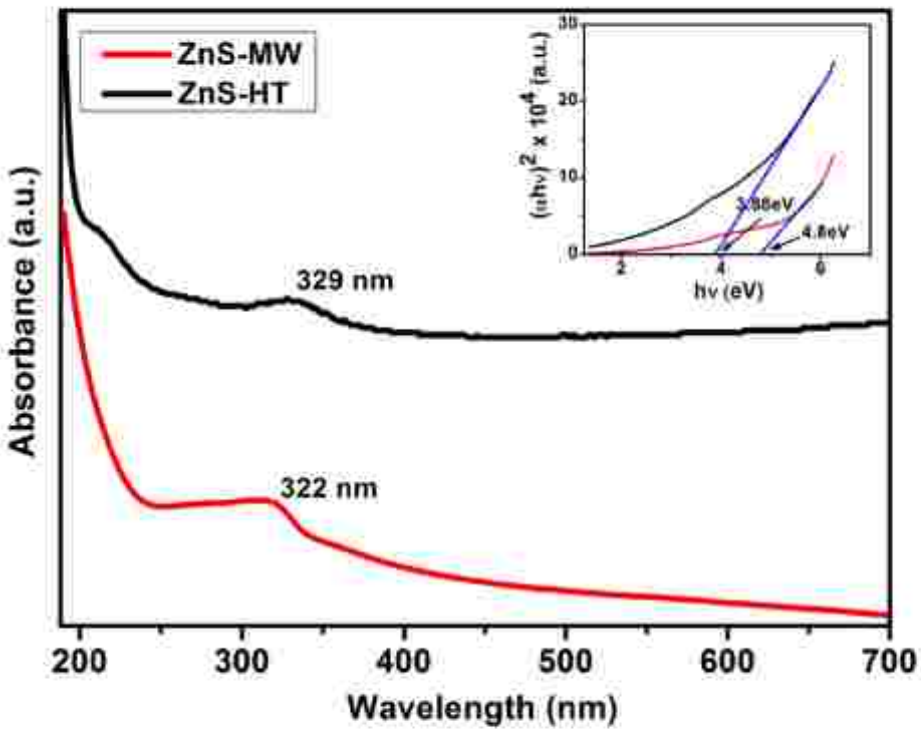

Fig. 3 UV–Vis absorption spectra for ZnS–HT and ZnS–MW samples and inset is $(\alpha h\nu)^2$ vs hν graph

is the dielectric constant of ZnS = 8.76; ε_0 is the permittivity of free space. Size of NPs, determined by the above relation is tabulated in Table 1.The slightly higher particle size obtained in UV–Vis studies compared to that of the structural studies for ZnS–MW sample could be due to the presence of energy states in the band gap which leads to an apparent change of band gap energy. Similar observation in the case CdS nanostructures was attributed to the effect of strains present in the sample [24]. Such strains were also present in our ZnS nanoparticles grown by both methods as it is evident from the XRD results presented in Table 1.

3.3.2 Photoluminescence (PL)

Photons of energy corresponding to the bandgap are used to excite the electrons from the valance band to conduction band (CB). The PL spectra for ZnS are observed in the visible region which may be due to point defects present in the crystal. Due to the high surface to volume ratio of nanoparticles at smaller dimensions, the defect density increases. The usual Schottky defects commonly present in ZnS are interstitial Zn (I_{Zn}), interstitial S (I_S), Zn vacancy (V_{Zn}) and S vacancy (V_S) [25].

Photoluminescence spectra of ZnS–HT and ZnS–MW samples are shown in Fig. 4a, b respectively. Broad and asymmetric spectra are observed for both type of samples, indicating the presence of more than one contributors to the PL intensity. Gaussian curve fitting was applied to deconvolute the PL curves. The best Gaussian fit gave five different peaks for both ZnS–HT and ZnS–MW. PL intensity for the ZnS–HT sample is higher due to better crystallinity possessed by it compared to ZnS–MW sample. The emission wavelengths near 360 nm in the samples have arisen due to transitions from interstitial Zn. The presence of excess Zn in the material gives rise to emission near 390 nm and it is attributed to changing Zn:S ratio [23]. In our studies, EDS spectra showed slight excess amount of Zn than the stoichiometric ratio of Zn:S = 1. The emissions at 350 nm and 442 nm in ZnS–MW are attributed to S interstitials and transition from surface sulfur vacancy to surface Zn vacancy respectively. The green PL peak at 511 nm is assigned to elemental sulfur species on the surface of ZnS [26].

Emission at 442 nm was not observed in ZnS–HT. This may be due to the filling up of surface sulfur vacancies by S^{2-} ions because of higher amount of sulfur present in ZnS–HT samples [27]. Conventional heating method has a larger capacity to eliminate the shallow defects while the microwave heating is unable to eliminate them [28]. Emission corresponding to 469 nm is related to recombination of electrons at S vacancy donor level with holes trapped at Zn vacancy acceptor level [29]. According to Sookhakian et al. [29] surface vacancy related states are shallow defect states; the energy difference between surface S^{2-} vacancies and surface Zn^{2+} vacancies is slightly larger than that between internal S^{2-} vacancies (Vs) and internal Zn^{2+} vacancies (V_{Zn}).

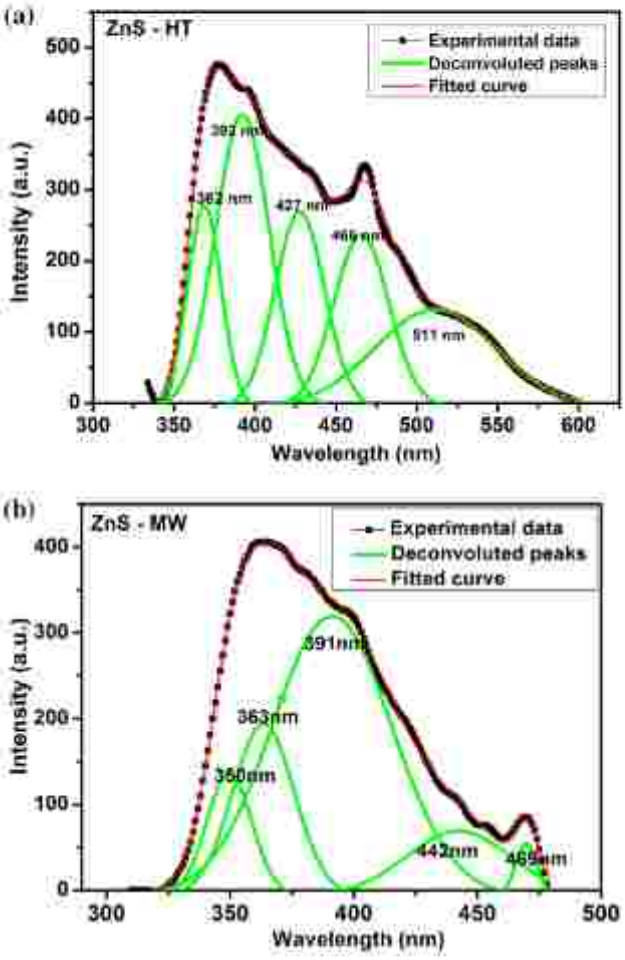

Fig. 4 **a** Photoluminescence spectra for ZnS–HT sample. **b** Photoluminescence spectra for ZnS–MW samples

Some of the PL peaks appear at nearly same wavelength positions in both the samples, but have different intensities. These are—peaks near 362 nm, 391 nm and 466 nm. Marginal shift in the emission peaks could be associated with the change in the particle size obtained by two methods. It appears that certain peaks are signature peaks and are intrinsic to the material depending on the precursor chosen and their ratio selected for synthesis procedure [30, 31]. The PL emission near 469 nm is very feeble for the ZnS–MW samples. The energy states within the band gap in the nanocrystals are produced due to surface states and/or Zn^{2+} or S^{2-} ions. The surface-related states result in emission due to recombination at 442 nm and the intrinsic Zn and S vacancies prevailed emissions at 469 nm. The peak around 442 nm is a broad and intense peak compared to emission at 469 nm indicating the presence of surface defect states dominated the PL emission spectra. The strongest emission

peak is due to excess zinc which is believed to be present at the surface of nanostructure. The transition taking place around 391 nm corresponds to transition from Zn interstitial to S interstitial states. So such transition occur at a lesser energy (3.17 eV) compared to the transitions around 362 nm (3.45 eV).

The reasons for the decrease in PL intensity in the case of ZnS–MW may be ascribed as follows: the nucleation and growth process of the ZnS crystallites are very quick, leading to the formation of defects. These defects on the surface of ZnS can trap the photo-induced electrons and holes. This will add to an increase in the charge separation on the ZnS nanospheres and decrease the recombination rate of the photo-induced electron and hole, resulting in a decrease in the PL intensity [32]. The presence of defects will strongly influence the dielectric and transport properties of the samples [33].

3.4 Dielectric studies

The technique of ac analysis has been widely used to investigate the dielectric behavior of amorphous and polycrystalline materials. The conductivity of semiconductor materials is known to be frequency dependent since it involves conduction between localized states [34]. Depending on the frequency of operation, a given dielectric material can possess one or more of these basic types of electric polarization: electronic, atomic (or ionic), dipolar (or rotational) and interface (or space charge) polarization. To understand the conduction mechanism involving defects state in the grown nanoparticles, frequency dependent dielectric studies were carried out.

3.4.1 Dielectric constant and dielectric loss

Figures 5 and 6 shows the variation of dielectric constant with frequency for the two samples ZnS–HT and ZnS–MW, respectively, at temperatures ranging from 223 to 323 K. The low-frequency dielectric constant (ε') of both samples was observed to be higher than that of the bulk dielectric constant 9. This may be due to the increase in the interfacial polarization caused by larger grain boundary between the smaller grains and can be explained on the basis of Maxwell–Wagner model [35]. The model assumes a dielectric medium to be made up of conducting grains and relatively less conducting grain boundaries. The grain boundaries are more effective at low frequencies while the grains are highly active at high frequencies. A gradually decreasing trend of permittivity is observed with increasing frequency at all temperatures for both type of samples. At high frequencies, the dipoles can no longer follow the field and ε' decreases.

The insets in Figs. 5 and 6 show the variation of dielectric loss (ε'') with frequency. The dielectric loss (ε'') decreases in the low-frequency region due to high resistivity of grain boundaries and energy expended for motion of charge carriers is high. With further increase in frequency, ε'' shows a maximum. This particular behavior suggests a dielectric relaxation process. The frequency corresponding to maximum ε'' is found to shift to higher frequencies with increasing temperature. This behavior is typical of polycrystalline

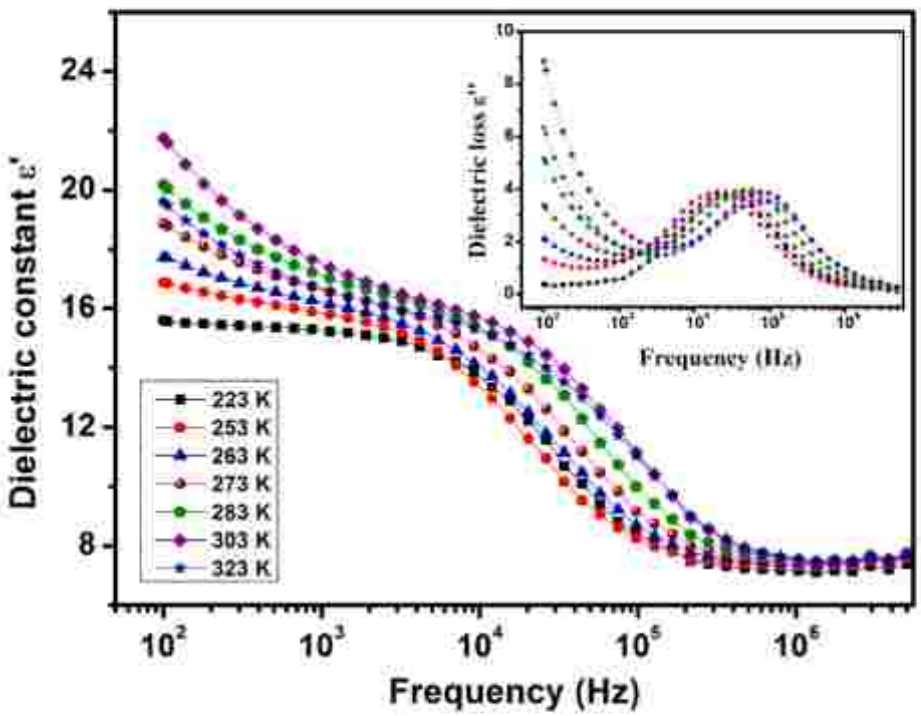

Fig. 5 Variation of dielectric constant with frequency at different temperatures for ZnS–HT and inset is variation of dielectric loss with frequency

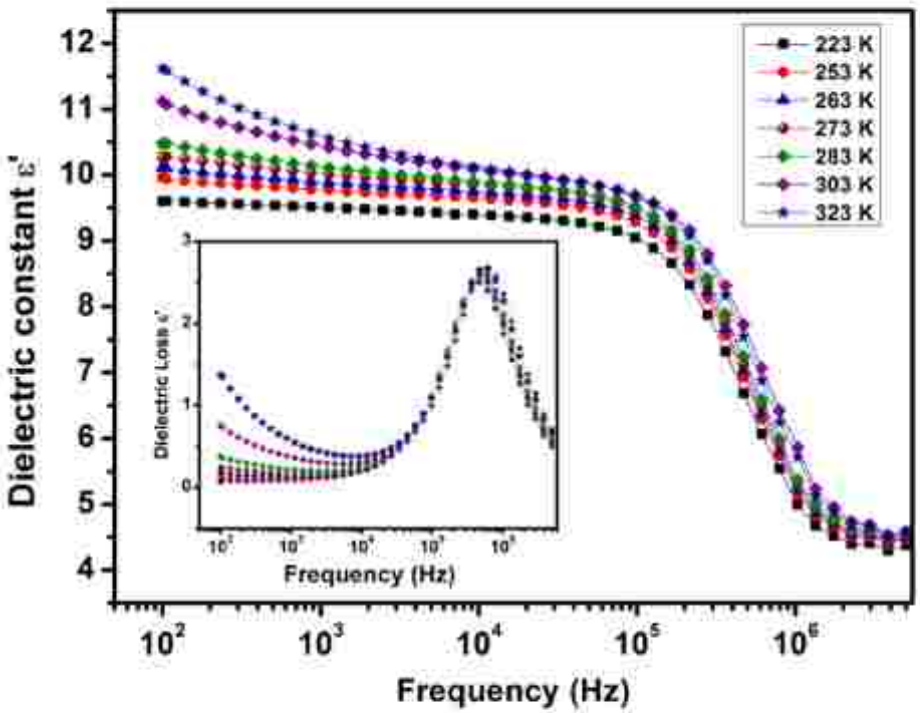

Fig. 6 Variation of dielectric constant with frequency at different temperatures for sample ZnS–MW and inset is variation of dielectric loss with frequency

semiconducting material [36]. Thus the variation of peak frequency (f_{max}) with temperature follows Arrhenius relation, supporting thermally activated process. We have plotted the Arrhenius plot of logf_{max} versus 1000/T for both samples. The activation energy E_a of relaxation process is calculated by plotting logf versus 1000/T, and using Arrhenius expression:

$$\text{Peak frequency } f = f_0 \exp\left(\frac{-E_a}{kT}\right). \quad (6)$$

f_0 is a constant, k Boltzmann constant.

In ZnS–MW sample, the relaxation peaks for various temperatures lie close to one another exhibiting very small activation energy. However, for ZnS–HT sample, the activation energy for this relaxation process is 0.184 eV.

3.4.2 AC conductivity

Measurement of the ac conductivity of semiconductors is a powerful tool for obtaining information about the defect states present in the system and the measurement helps to distinguish between localized and band to band (dc) conduction. Frequency dependence of conductivity for ZnS–HT and ZnS–MW samples at room temperature is shown in Figs. 7a and 8a, respectively. It can be seen that σ_{ac} does not change much but increases slightly with temperature in low frequency region. This may be attributed to the interfacial polarization caused due to grain boundaries which are highly resistive. Within the measured high-frequency limits, microwave synthesized ZnS NPs show a higher conductivity by one order of magnitude compared to that of ZnS–HT. The low conductivity in ZnS–HT NPs may be due to the agglomeration of ZnS nanoparticles which offers high resistance due to enhanced inter-granular distance between the grains [37]. The conductivity increases with increase in temperature implies that ac conductivity is a thermally activated process.

Inset in Fig. 7a shows the conductivity as a function of frequency in double log representation. At higher frequencies, near the top of each of these curves there is contribution from grains which follow the universal dielectric response [38]. The dispersion region of $\sigma_{ac}(\omega)$ is fitted with Jonscher's power law by means of nonlinear least square fitting. Figure 7c represents the conductivity spectrum for ZnS–HT to which Jonscher's model is fitted at high-frequency region. In Fig. 8b plot of log σ_{ac} vs 1000/T is shown.

The temperature dependences of ac conductivity of ZnS–MW samples are shown in Fig. 8a. Jonscher's power law is fitted to conductivity spectrum for ZnS–MW sample at high-frequency region, as done in the case of ZnS–HT sample. Figure 8b shows a plot of log σ_{ac} vs 1000/T.

The dc conductivity, σ_{dc} values obtained are plotted against 1000/T, slope of which is used to calculate activation energy E_a using the Arrhenius type of equation:

$$\sigma_{dc} = \sigma_0 \exp\left(-\frac{E_a}{KT}\right) \quad (7)$$

where σ_0 is pre exponential factor. From the slopes of lines in Fig. 8b activation energy is calculated. $E_a = 0.155$ eV for

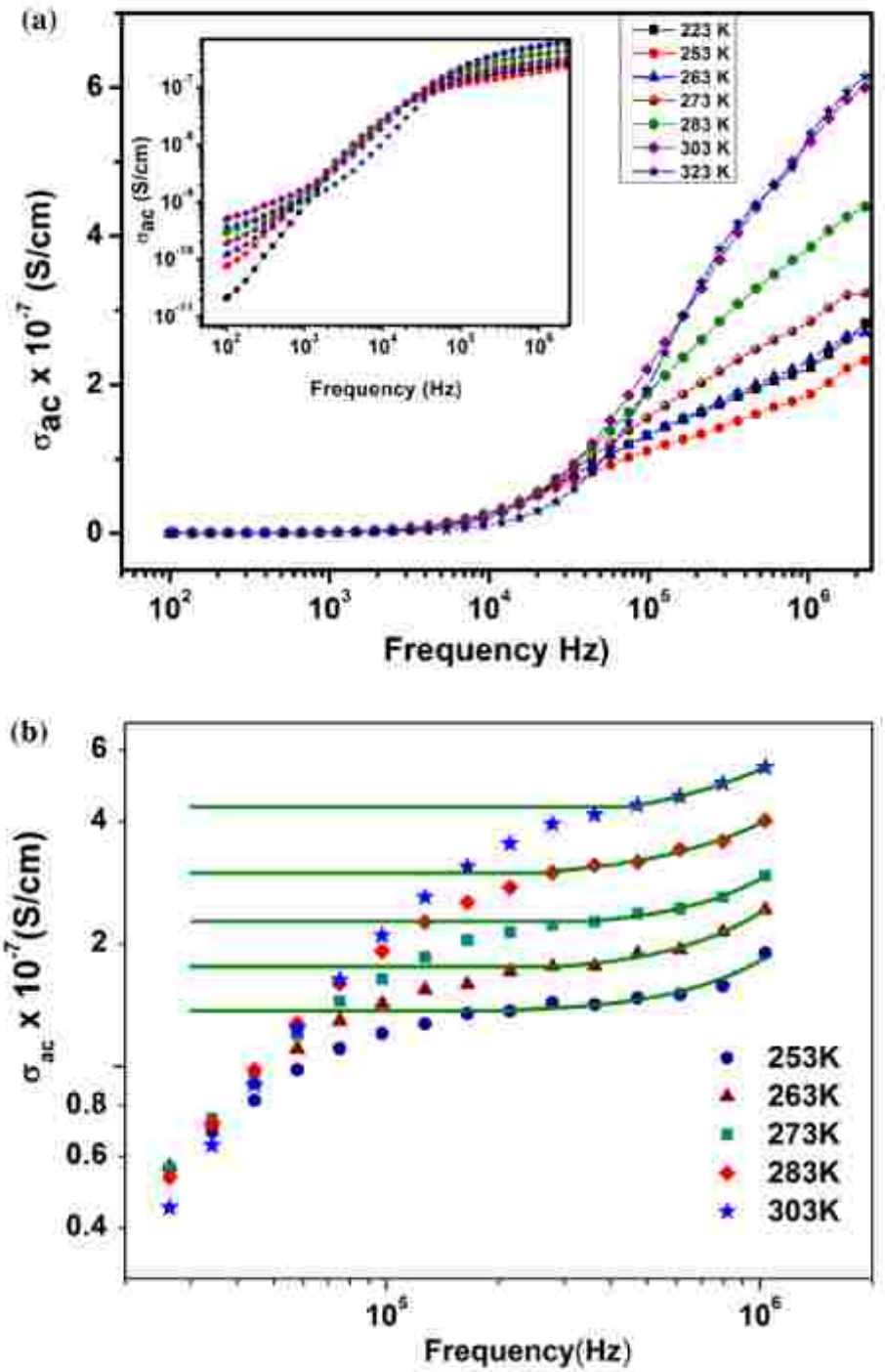

Fig. 7 **a** Variation of σ_{ac} with frequency for ZnS–HT and inset is log–log plot of σ_{ac} and frequency. **b** log–log plot of σ_{ac} and frequency of ZnS–HT at select temperatures for the high-frequency region

ZnS–HT and $E_a = 0.014$ eV for ZnS–MW sample. These values are nearly equal to E_a obtained in the case of dipolar relaxation as explained in the previous section. Moreover, these values are much smaller than the band gap value (3.68 eV). A possible reason for small values of E_a is due to the presence of various defects present in the band gap as evidenced by photoluminescence spectra. Since ZnS–MW contains more number of defects compared to ZnS–HT, activation energy is very small. Hence dc conductivity might have arisen by the excitation of electrons from localized states to the conduction band. It has been reported that the low value of activation energy have arisen due to dipolar relaxations between polaronic type defects present within the band gap [36, 39]. Further, the ZnS–HT sample exhibited a near stoichiometry compared to the ZnS–MW, a low density of charged defects may be present in the former case.

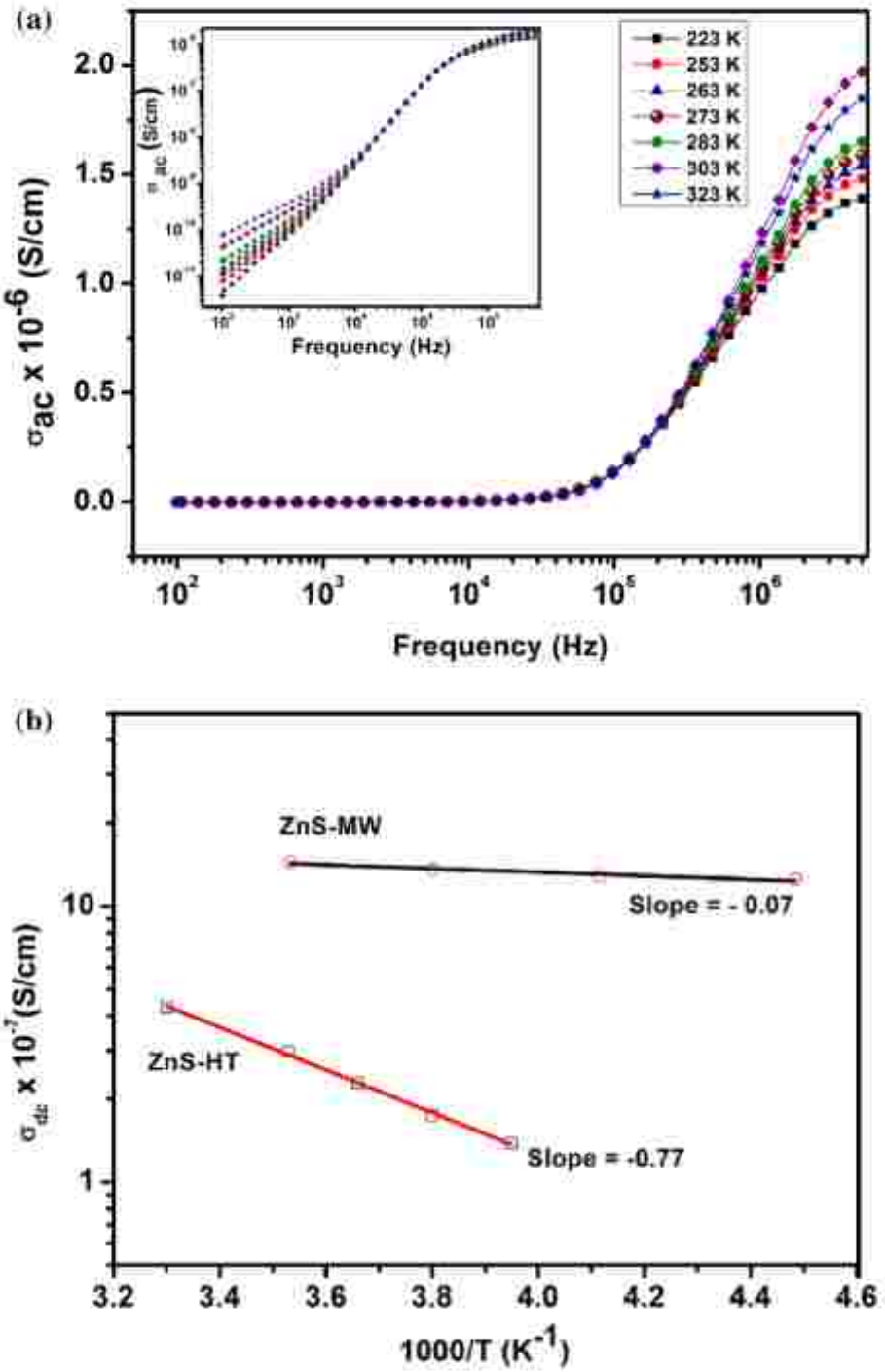

Fig. 8 **a** Variation of σ_{ac} with frequency for ZnS–MW and inset is log–log plot of σ_{ac} and frequency. **b** Plot of log σ_{dc} vs 1000/*T* for ZnS–HT and ZnS–MW samples

4 Conclusion

In summary, structural, optical and electrical properties of the synthesized ZnS NPs by microwave heating and conventional heating methods were compared. Formation of nanocrystalline phase with a preferred (111) orientation for the samples grown by both methods was confirmed by X-ray diffraction studies. Crystallite size was found to depend on the method of preparation of the NPs and microwave heating method seems to be beneficial for obtaining fine grain structures. UV–Vis absorption spectra exhibited a blue shift in absorption peak for the ZnS–MW and the quantum confinement effect resulted in an increased band gap energy compared to that of ZnS–HT. Size of NPs determined by XRD, UV—absorption spectra and TEM complement each other. The higher PL intensity observed in ZnS–HT could be attributed to the better crystallinity. On the other hand, the strained ZnS–MW samples exhibited PL peaks due

to surface related defects. The electrical studies have also confirmed the presence of larger number of defects. Lower activation energy for dipolar relaxation and dc conductivity was observed for ZnS–MW samples. Microwave synthesized samples when stabilized may find application in degradation of pollutant molecules, without producing secondary by-products and also due to low activation energy such materials are suitable for various switching applications.

Acknowledgements The authors thank UGC-DAE Consortium for Scientific Research, Mumbai Centre for dielectric measurements, DST-SAIF centre at Karnatak University-Dharwad for photoluminescence measurements, Manipal Academy of Higher Education- Manipal for other characterisations and Bhandarkars' Arts and Science college, Kundapura for sample preparation facilities. One of the authors, Lalitha Devi B thanks the University Grants Commission, Government of India, for teacher fellowship.

Compliance with ethical standards

Conflict of interest The authors declare that they have no conflict of interest.

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Chemical Physics Letters 700 (2018) 74–79

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Research paper

Investigations on structural and optical properties of starch capped ZnS nanoparticles synthesized by microwave irradiation method

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ARTICLE INFO

Article history:
Received 9 January 2018
In final form 4 April 2018
Available online 5 April 2018

Keywords:
ZnS nanoparticles
Microwave irradiation
Starch
Raman scattering
Photoluminescence

ABSTRACT

Following a green synthesis method, zinc sulfide (ZnS) nanoparticles were prepared by chemical co-precipitation technique using starch as capping agent. Microwave irradiation was used as heating source. X-ray diffraction studies indicated that nanopowders obtained were polycrystalline possessing ZnS simple cubic structure. Transmission electron microscopic studies indicated that starch limits the agglomeration by steric stabilization. Interaction between ZnS and starch was confirmed by Fourier transform infrared spectroscopy as well as Raman scattering studies. Quantum size effects were observed in optical absorption studies while quenching of defect states on nanoparticles was improved with increase in starch addition as indicated by photoluminescence spectra.

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1. Introduction

Among the types of metal chalcogenides, zinc sulfide (ZnS) is the most commonly used one in a broad spectrum of applications like catalysis, electronic and optoelectronic nanodevices [1–6] since a long time. ZnS is a direct band gap semiconductor which can be used for the fabrication of certain devices like supercapacitors [7] and solar cells [8] in addition to light emitting devices [9]. Several methods of synthesis have been established for the nanoparticles (NPs) of ZnS [10–13]. The large value of surface to volume ratio in NPs of ZnS leads to agglomeration due to increased surface activities and properties in nanoregime is lost. In order to minimize agglomeration, a wide range of synthetic approaches using capping agents or stabilizers have been proposed [14]. One among them is wet chemical synthesis, a 'bottom-up' process. It allows better control over the size and shape of NPs by varying the reaction conditions. During wet chemical synthesis of ZnS nanoparticles, capping agents like polyethylene oxide (PEO) [15], polyvinylpyrroledone (PVP) [16], Polyvinyl carbazole (PVK) [17], mercaptoethanol [18], thiophenol [19], etc. are commonly used to arrest agglomeration. However, now a day, there is a great demand for the replacement of petroleum derived polymers by the biodegradable polymers to minimize hazardous wastes produced.

Polysaccharides are in the focus of research in recent years as novel materials for the development of biodegradable compounds. Starch is considered to be one of the best stabilizers among the abundant, biocompatible, renewable biopolymer materials and it is used in the preparation of NPs of many materials [20]. Such NPs are also found to impart functionality to the material. Remarkable color tunability has been reported for small addition of carbon NPs with starch powder [21]. Vigneshwaran et al. observed antibacterial and UV protection properties in cotton fabrics when impregnated with starch capped ZnO [22]. Starch has been proved to be a better polymer to cap nano-sized particles of ZnO, CdS, CdSe and ZnS nanoparticles [23–27] due to the polar groups present in its structures.

Present work focuses on the study of capping action of starch onto ZnS for different concentrations of starch by a synthesis route using microwave irradiation (MWI). Thioacetamide (TA) was used as source of S ions. On MWI, TA releases, S^{2-} ions needed for the formation of ZnS. The preparation method reported in this work may provide an adoptable route for the large-scale production of highly stable ZnS nanopowders.

2. Experimental

2.1. Materials used

Zinc acetate dihydrate as well as soluble potato starch were procured from Alfa Aesar and thioacetamide was purchased from

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https://doi.org/10.1016/j.cplett.2018.04.010
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Sisco Research Laboratories, Mumbai, India. The chemicals used were of AR grade and used without further purification.

2.2. Method

Starch solution at different concentrations like 250 mg/l, 500 mg/l, 750 mg/l and 1 g/litre, were prepared in double distilled (DD) water and heated to 80 °C. Starch is normally not soluble in water, but when the aqueous solution was heated to temperatures of 60–80 °C, it dissolved. Ambient cooled starch solution was added to 0.15 M aqueous solution of Zinc acetate (ZA) and allowed to form ZA-starch complex by magnetic stirring. To the mixture of ZA and starch, TA was added slowly and stirred for 15 min. The solution was then microwave irradiated (MWI) in a domestic microwave oven for 6 min. After about 3 min of heating by MW, ZnS formation started, making the solution turn from colorless to white. In our experiments, about 6 min was needed for the completion of ZnS formation. When solution was cooled, ZnS nanoparticles were separated by centrifugation, washed several times with DD water and finally washed with acetone and dried. Sample codes for the different samples synthesized for different concentrations of starch are given in Table 1.

2.3. Characterization

X-ray diffraction (XRD) patterns for the samples were recorded using Rigaku Miniflex powder diffractometer. Transmission electron microscopic (TEM) studies were carried out using JOEL JEM 2100 high resolution transmission electron microscope (HRTEM) operating at 200 kV for image recording. FTIR spectra for starch and ZnS–starch compounds were recorded on a SHIMADZU-8400S FTIR spectrophotometer for the dispersion of ZnS powders in KBr pellets and Raman spectra were recorded with BRUKER RFS 27: Stand-alone FT-Raman Spectrometer. Optical absorption studies were carried out using SHIMADZU-1800 UV–Vis spectrophotometer. The PL spectra of ZnS samples were obtained using Hitachi F-7000 Fluorescence Spectrophotometer.

3. Results and discussion

3.1. X-Ray diffraction

Fig. 1 shows the XRD pattern recorded for the samples. Broad prominent peaks occurring at 2θ values near 29°, 48° and 57° are indexed to (1 1 1), (2 2 0) and (3 1 1) planes of cubic phase of nanoZnS, respectively (JCPDS file no. 01-079-0043). No peaks other than ZnS were recognized in XRD patterns, indicating high purity of ZnS samples. The average grain size of the sample powder was determined from the full width at half-maximum (FWHM) of the most intense peak using Scherrer equation:

$$D = \frac{0.9\lambda}{\beta \cos\theta} \quad (1)$$

where λ is wavelength of incident X-rays (1.5402 Å), θ is angle of diffraction, β is FWHM of Bragg peak. The samples show slight increase in size with the addition of starch implying the role of starch on the nanocrystal growth. Interplanar separation as well as unit cell parameters for all the samples were calculated and tabulated in Table 1.

A progressive shift of peaks towards right was observed in the XRD pattern. This indicates the lattice contraction due to increase in concentration of starch. Such shifts were reported to be due to change in phase or compressive stress developed in the material or due to reduction in the number of defects [28]. Since in the present case, cubic crystalline phase continued to exist with the addition of starch, we attribute such peak shifts or the resulting decrease in unit cell volume to latter two cases. To confirm this, photoluminescence studies were conducted.

3.2. Electron micrographs

We could observe good stability for the colloidal dispersion of sample S3 compared to other samples. Further, morphological studies showed well separated NPs for S3 compared to rest of samples.

However, TEM images for S1 and S4 are also presented for clarity. Fig. 2(a) shows TEM image for S1. The size distribution of particles is shown in the inset and from the histogram, mean particle size obtained was 2.23 nm. Agglomeration is evident from Fig. 2(a) due to insufficient amount of starch to stabilize NPs. Fig. 2(b) shows the ZnS NPs for S4 in the environment of starch. Aggregation to some extent can be seen from the Fig. 2(b). In the inset of Fig. 2 (b), the size distribution is shown with a mean particle size of nearly 2.76 nm. With the increase in starch content as in S4, more ZnS nuclei would form and the subsequent growth resulting in the increase of average size of the nanoparticles.

Fig. 3(a) and (b) show the TEM and HRTEM images obtained for sample S3. Fig. 3(a) indicates that the small NPs formed are very well dispersed showing minimum chances of agglomeration. The black spots in Fig. 3(a) indicate the ZnS NPs and the light[1] colored edges represent starch since polysachcharides produce less contrast. This implies a very thin layer of starch being uniformly coated on the surface of the NPs. Both Fig. 3(a) and (b) indicate the formation of near uniform sized particles, which is attributed to capping action of starch onto ZnS. The particles are isotropic in size and shape as indicated by HRTEM image. The distribution of size of particles obtained from Fig. 3(a) is shown by the histogram in Fig. 3(c). It shows that ZnS NPs possess size between 2 and 5 nm and, mean size was obtained as 2.50 nm for sample S_3. From these results, it can be concluded that the formation of ZnS nanoparticles take place through the reduction of Zn^{2+} ions inside nanoscopic starch structure. The clear lattice fringes observed in HRTEM image 3(b) indicate the crystallinity of NPs. The measured lattice constant in the bottom right inset in Fig. 3(b) is 0.313 nm which corresponds to (1 1 1) plane of cubic ZnS. Sizes obtained by TEM for S1, S3 and S4 are given in Table 1.

The crystalline nature of the ZnS NPs was also observed by selected area electron diffraction (SAED) pattern shown in Fig. 3 (b) as top left inset for S3. The concentric diffraction rings in the SAED patterns corresponds to (1 1 1), (2 2 0) and (3 1 1) planes of cubic ZnS. The inter-planar spacing d in angstrom obtained through TEM and XRD are (3.323 3.076); (1.745 1.876) and (1.338 1.603) respectively which are comparable with standard reference (ASTM) data (3.126 1.9143 1.6325). SAED pattern shows a set of concentric rings instead of spots as a diffraction from polycrystalline particles [29].

To confirm the constituents present in the sample we have carried out elemental analysis and typical EDS pattern for S3 is shown in Fig. 3d. The pattern obtained shows the presence of Zn, S, C and O. Strong peaks were obtained for Zn and S indicating the main components of the product. The weak signals of C and O obtained are attributed to have come from starch. The absence of any extra peaks other than the expected ones indicated the purity of the sample.

3.2.1. Mechanism of starch encapsulation onto ZnS NPs

Starch consists of 2 types of molecules: linear amylose and branched amylopectin. These in turn possess α – ω glucose units

[1] For interpretation of color in Fig. 3, the reader is referred to the web version of this article.

Table 1
Parameters obtained from X-ray diffraction and TEM for different concentrations of starch.

Sample	Starch added (mg/l)	2θ (°)	Size D (nm)	Interplanar separation d (Å)	Cell constant a (Å)	Unit cell volume $(Å)^3$	Size by TEM (nm)
S1	250	28.79	2.4	3.097	5.365	154.4	2.23
S2	500	28.86	2.45	3.089	5.352	153.3	–
S3	750	28.99	2.5	3.076	5.328	151.3	2.5
S4	1000	29.08	2.6	3.067	5.312	149.9	2.76

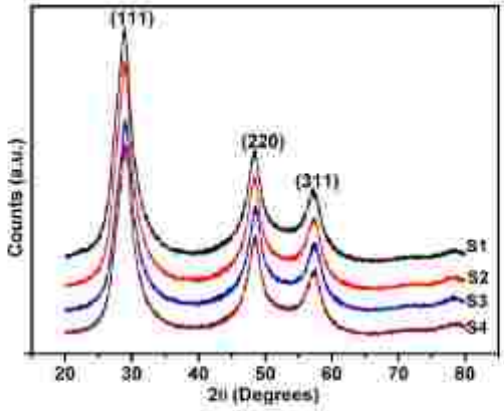

Fig. 1. XRD pattern for ZnS–starch composites for S1, S2, S3 and S4.

in the $^4C_1$ conformation leading to long chains of helical structure [30]. When the aqueous solution of starch was heated to 80 °C, the starch granules swell and burst leaching out smaller amylose molecules. The hydroxyl groups on the smaller amylose molecules act as passivation contacts for the Zn^{2+} ions and form complexes in the solution. On microwave irradiation, thioacetamide releases S^{2-} ions and ZnS nuclei are formed. It is known that higher content of starch induces aggregation of NPs [31]. However, enormous growth or agglomeration is prevented due to steric hindrance provided by polymer chains of starch as in S3. With increase in starch amounts, more hydroxyl groups are available from starch, more ZnS nuclei would form and grow resulting in increase of particle size as in S4. This is due to various surface energies, ZnS nanocrystals grow and the van der Waals interactions between surface molecules of nanocrystals drive them to form larger ZnS nano aggregates [32].

3.3. Fourier transform infrared spectroscopy

FTIR is a technique, which provides useful information about the structure and bonding of a molecule. The FTIR spectra of neat starch and starch capped ZnS NPs (for sample S3) are shown in Fig. 4.

Broad absorption band centered around 3400 cm^{-1} is attributed to O–H stretching mode. OH peak of starch at 3421 cm^{-1} has shifted to 3405 cm^{-1} in ZnS-starch composites indicating a coordination link between Zn^{2+} ions and —OH ligands [33]. Moreover, the band at 3421 cm^{-1} for neat starch is broader compared to the band at 3405 cm^{-1} for ZnS–starch composite. This may be due to ceasing of certain hydrogen bonds as a consequence of involvement of hydroxyl groups in linkage with Zn^{2+} ions [34]. The band formed at 1644 cm^{-1} in neat starch is assigned to scissoring vibrations of —OH coming from water of hydration. There are certain groups present on ZnS–starch compounds that show no change in IR peak positions with respect to neat starch. For example: C—O bond stretching of C—O—H group at 1157 cm^{-1}, C—O bond stretching of the C—O—C group in the anhydroglucose ring at 1025 cm^{-1} and $—CH_2$ bending band at 1417 cm^{-1} [35]. This indicates that these groups were not involved in binding with ZnS NPs. Band at 1558 cm^{-1} appears due to interaction between ZnS and starch [36,37]. The vibrations occurring at 669 cm^{-1} and 1110 cm^{-1} in ZnS-starch compound is attributed to characteristic Zn-S vibrations [38].

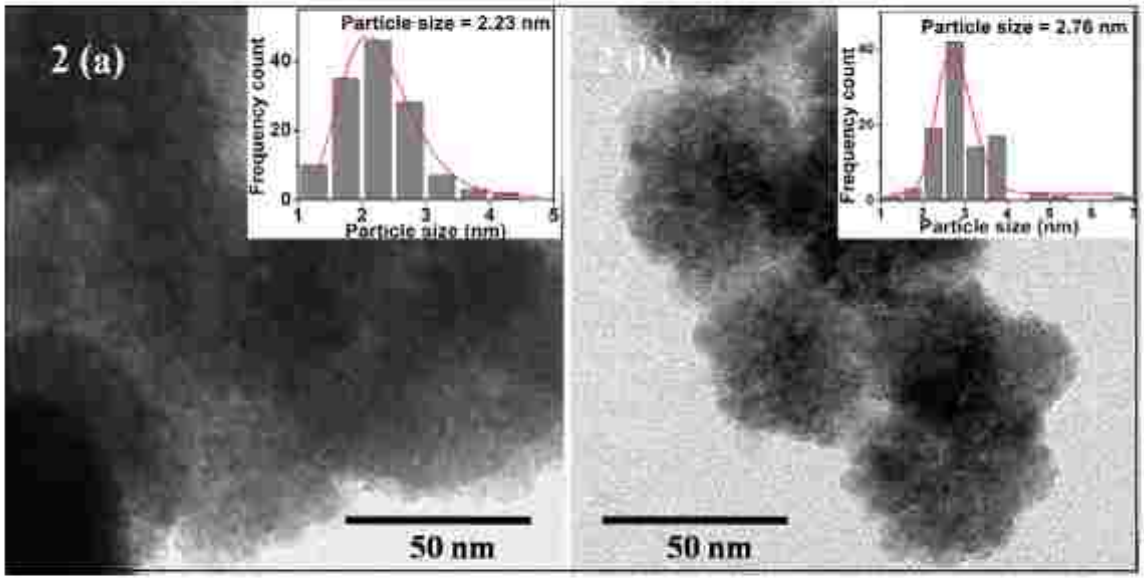

Fig. 2. (a) TEM image for S1 and inset is histogram of particles and, (b) TEM image for S3 and inset is histogram of particles.

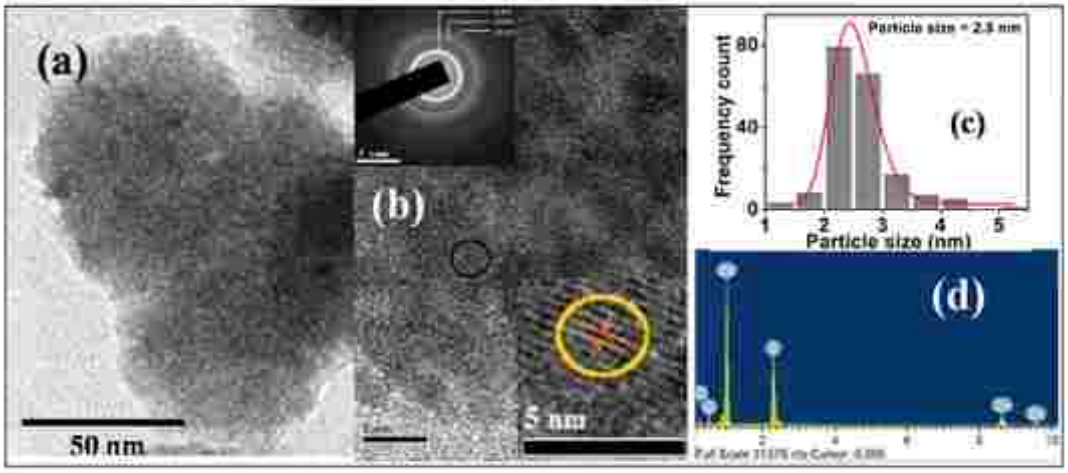

Fig. 3. (a) TEM image for S3, (b) lattice image for S3, top right inset is electron diffraction pattern and bottom right inset is enlarged image of encircled portion. (c) Histogram of particles and d) EDS pattern for S3.

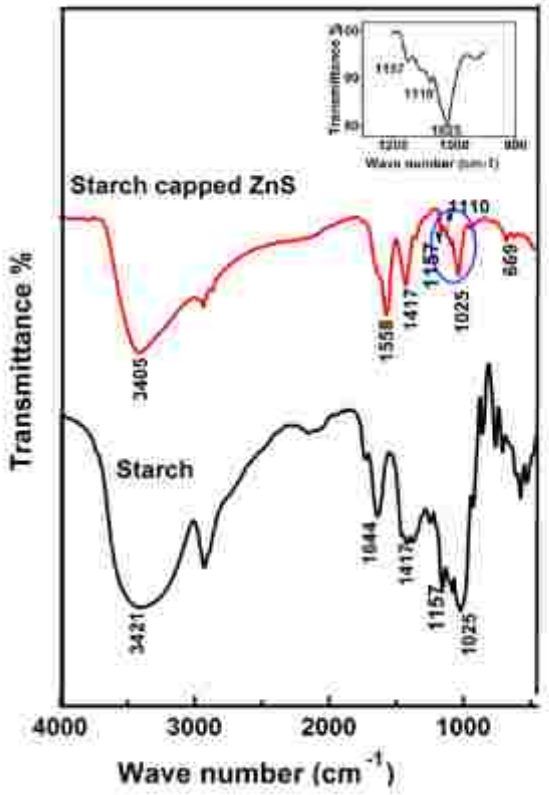

Fig. 4. FTIR spectra of Starch and ZnS–starch composites. Inset shows the enlarged figure of encircled portion of the FTIR spectra for ZnS-starch composite S3.

In spite of repeated washing of the final product, the FTIR spectra could record the peaks corresponding to starch along with ZnS, indicating a strong binding of starch with the ZnS nanoparticles. In aqueous solution, starch takes a right-handed helical conformation with extensive numbers of hydroxyl groups. This can facilitate the complexation of metal ions to starch resulting in a stronger binding of Ni^{2} to starch.

3.4. Raman scattering

Raman spectroscopy is a powerful analytical technique that provides detailed and specific information of a substance at molecular level. We have carried out Raman scattering experiments for S3 and the spectra is shown in Fig. 5. For the bulk ZnS, the peaks at 274 cm^{-1} and 351 cm^{-1} are the basic Raman peaks assigned to TO (transverse optical) and LO (longitudinal optical)

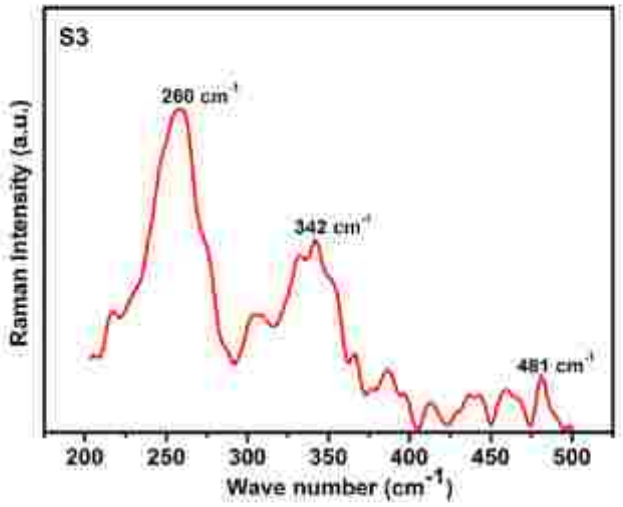

Fig. 5. Raman spectra for S3.

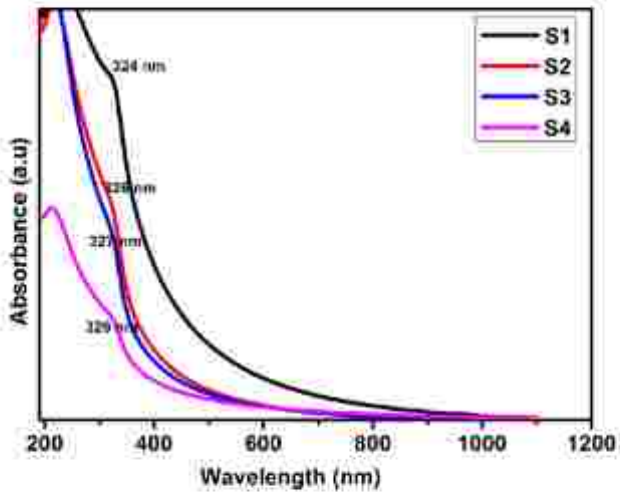

Fig. 6. Optical absorption spectra.

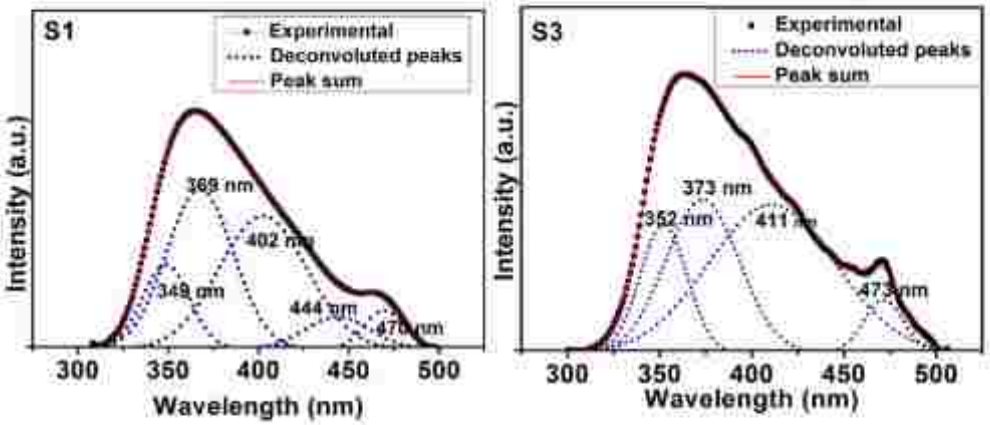

Fig. 7. Emission spectra for S1 and S3.

phonon modes of ZnS [39]. In the present study (Fig. 5), these peaks are found to be shifted to lower energies of 260 cm^{-1} and 341 cm^{-1} for S3 indicating a phonon confinement effect due to their nanosizes [40]. Several peaks appear for S3 due to starch capping. The marked presence of starch is recognized by the Raman band between 475 and 485 cm^{-1} [41]. Hence the peak at 481 cm^{-1} for the sample S3 is attributed to starch. Height of this peak is small due to less amount of starch present in the material.

3.5. Optical absorption studies

Optical absorption is shown in Fig. 6 as a function of wavelength for the ZnS–starch composites. The figure indicates that absorption is due to band gap transition. The optical absorption peak due to NPs is blue shifted with starch addition compared to bulk ZnS (337 nm) in all cases. This blue shift in the absorption peak indicates the formation of starch encapsulated ZnS in nanometer regime [42]. The wavelength at absorption maximum increases from 324 nm to 329 nm with addition of starch at concentration of 250 mg/l to 1 gm/l indicating that the red shift is due to increase in particle size. Calandra et al. explained such shifts for ZnS NPs as due to confinement of excitons and trapped charge carriers at the surface states [43]. The properties like optical absorption and emission are also strongly modified in semiconductor NPs due to size quantization.

3.6. Photoluminescence (PL)

PL analysis is an important tool in characterization of surfaces since PL often originates near the surface of the material. Aqueous dispersion of samples was excited at 280 nm for photoluminescence measurements. Fig. 7 shows the PL emission spectra for ZnS-starch composites S1 and S3.

S1 yielded five emission peaks indicating the presence of more defect states. Emission peaks around 350 nm and 470 nm are common for both S1 and S3 samples. Emission near 350 nm is due to S-interstitials and, near 470 nm to transition between internal vacancies of S and Zn since vacancy states lie deeper than states arising from interstitial atoms [44]. The weak emission at 444 nm for S1 is attributed to surface defects [45] due to incomplete passivation. With increasing starch amounts, this peak at 444 nm is not observed in S3 due to increased passivation contacts of starch with NP surface. The 3rd peak in both S1 and S3 is due to the traps of sulfur vacancies. We observe in S3 that the starch molecule added assists in removing surface defects. Hence, we speculate that the contraction observed in unit cell volume in XRD studies is due to reduction in the number of defects due to starch capping.

4. Conclusions

The experiments performed on the effective capping of ZnS NPs by starch led to following conclusions:

- Powder XRD and TEM studies revealed that the synthesized sample of ZnS had a zinc blende phase with average nanocrystallite size less than 3 nm. The size of nanocrystallite was found to increase with increasing starch addition implying starch encapsulation onto ZnS.
- Blue shift of the exciton peaks due to optical absorption indicated quantum size effect. The surface shallow defect related emissions were quenched with the addition of starch.
- FTIR studies suggested that the interaction of ZnS NPs with starch occurs by passivation through —OH ligands. Raman spectra also identifies the formation of ZnS in the well stabilized ZnS-starch compound.

Acknowledgements

The authors thank Bhandarkars' Arts and Science College, Kundapura for sample preparation facilities and Manipal Academy of Higher Education–Manipal for characterizations. One of the authors, Lalithadevi B thanks the University Grants Commission, Government of India, for teacher fellowship.

Conflict of interest

The authors declare that they have no conflict of interest.

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International Journal of Applied Research

ISSN Print: 2394-7500
ISSN Online: 2394-5869
Impact Factor: 5.2
IJAR 2018; 4(4): 437-442
www.allresearchjournal.com
Received: 08-02-2018
Accepted: 10-03-2018

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Indian parliament and its working, changing face and need for reforms

Dr. Shubhakarachary

Abstract
Parliament today is not a law – making body only. It has become move and move a Multifunctional Institute performing a variety of roles. May of these interrelated and often meshing in to one another. This, however is often not appreciated and disproportionate emphasis is laid only on one or two aspects of working of Parliament. Any attempt at a comprehensive identification of roles and analysis of functions of the present day Parliament in the language of Modern Parliamentary Political Science may be quite misleading. With the view to clarifying the Concept, some of the coordinal roles and functions of the Parliament.

The Parliament of India is the Supreme bi-latateral Legislative body of Republic and its is composed of President of India and two houses, the Rajyasabha (Council of States) and the Loksabha (House of the People). As we know that the President in his role as head of the Legislative has full power to summon and prorogue either house of Parliament or to dissolve Loksabha. The President can exercise powers only upon the advice of Prime Minister and his Union Council of Ministers.

The Members of Parliament, Loksabha are directly elected by Indian Public by voting in single – member Constituency. Rajyasabha are elected by the members of all State Legislative Assembly by the proportional representation. The Parliament has a sanctioned strength of 543, 2 members nominated by the President of India from Anglo Indian race to Loksabha. Rajyasabha has 238 seats and 12 members nominated by President from the expertise of different fields of Science, Culture, Art, History, Architecture, etc. The Parliament meets at Sansad Bhavan in New Delhi.

Keywords: Constitution, parliament of India, Loksabha, Rajyasabha, president, vice – president, speaker, election, amendments, adjournment

Introduction

It would be appropriate to review the working of our Parliament during the last 70 years and move. We need to attempt a balance – sheet of achievements and failures of Parliament as the supreme representative institution of largest democratic Country in the World.

The first Parliament of India came into being on 26 January, 1950 with the commencement of the Constitution and birth of Republic. This was the Provisional Parliament. The first Constitutional Amendment was passed during its time; in retrospect, one of the other significant events during the life of provisional Parliament was the Mudgal case.

The first General Election under the Constitution were held in 1951 – 52, and bi – cameral Parliament with its two Houses, Loksabha and Rajyasabha was duly constituted.

The Seventeen Loksabha

The First Loksabha (1952 – 1957)

Was constituted on 17th April, 1952. Its first sitting was held on 13th May, 1952. Through elected by universal adult franchise and as such a truly representative body. The first Loksabha in a sense was highly elitist. It had a marked dominance, especially on its proceedings of the people who had their education in prestigious institutions of learning either in India or abroad. Most of them came from the urban background. Single largest professional group was that of Lawyers. Although the house had a preponderance of graduates (37 percent of total membership) under matriculates constituted the next largest group having 23.2 percent of total.

The average age of members was 45 years and 8 months. The maximum numbers of members were in the age group 50 – 55 years. 22 members forming only 4.4 percent were women. It was a treat to hear some of the fighting speeches that came from women members.

Renu Chakravarthay a communist members from West Bengal distinguished herself as a great debater in the house having strong yet feminine and musical voice. She individually took the maximum time of the house. Other important lady members were Suchetha Kripalani, Rajkumari Amrith Kaur, Tarakeshwari Sinha and Vijayalakshmi Pandit.

Although with 364 of the 499 members being from the Congress alone, it was clearly a situation of one party dominance but it could not be said that opposition was inefficient or was rendered ineffective by the large majority of the Congress. The actual practice it always asserted itself and made it presence felt on every important occasion on many matters. The Congress could not afford to ignore the opinion of opposition members.

The first Loksabha consisted of some of the most distinguished men and outstanding Parliamentarians, all adopted Parliamentary procedure, talented, accomplished and skilled in the art of Parliamentary debate. Ex. – Nehru, Purushottam Das Tandon, Harekrushna Mehtab, S. K. Patil, N. V. Gadgil, Swaransing, R. Yen. Kataraman, N. G. Ranga, Set Govind Das, Thakurdas Bgargava.

The list of members from opposition side was also no less impressive. It consisted of freedom fighters and powerful debaters of high order. Such as Acharya Kripalani, Ashok Mehtha, Dr. S.P. Mukarjee, A. K. Gopalan, H. N. Mukarjee, N.C. Chatterjee, R. Chakravarthy, Meghanand Saha, H. V. Kamath, Sardar Hukum Singh and others.

The first Loksabha taking first step towards rebuilding and rehabilitating the Country's economy on new basis. Legislation was adopted as the chief instrument of socio – economic engineering. It occupied about 43 percent of total time of sitting. Large number of legislative measure ushering in great reforms in the social, economic and political fields. 7 private members' bills were passed. Loksabha passed Six Constitutional Amendment Acts.

The Second Loksabha (1957 – 62)

Deserved the credit of having given effect to a large number of Legislative members ushering in significant reforms in social, economic and political fields. Among the bills passed, four amended the Constitution. Two private members' bill passed. For the first time, there was a joint sitting of both the houses to resolve the dead lock in Dowry Prohibition Bill.

On the last day of Second Loksabha, Nehru remarked "Considering everything. We have done rather well and considering the State of the World today when every other day we read about coup d'états in various Countries, it was surprising how we have carried on in our Normal way". It was the tenure of Second Loksabha represented Golden Period in the history of Indian Parliamentary democracy.

The Third Loksabha (1962 – 67)

The Third Loksabha had 34 women members. Smt. Indira Gandhi became the first women Prime Minister of India. An interesting development was the law making function no move remained the major occupation of the house.

The Forth Loksabha (1967 – 70)

The Forth General Election marked a watershed in Indian politics. Although Congress Party retained absolute majority in the House, the losses that it had suffered were heaviest so for. The most important developments on political and Parliamentary scene in India. This period were the phenomenon of defection and party splits of the Congress Party losing its undisputed dominant position and of Non Congressism emerging as a rallying point and programme for the opposition parties.

The support of Smt. Indira Gandhi to V.V. Giri and his election as President battle between Smt. Gandhi and the Congress Syndicate, the controversy of conscience, discipline, split of Congress in the Gandhi Centenary Year (1969). The ouster of Moorgi Desai from Finance Ministership and Nationalization of major Banks all had their impact on functioning Loksabha. The defections started in the period. The House was dissolved prematurely on 27th December, 1970 and thus life of only 3 years 9 months 10 days.

The Fifth Loksabha (1971 – 77)

It was significant eventful, some of the National and International events gave rise to serious debates, discussion and deliberations on the floor of the House. Simla Agreement in the wake of India's Triumphant Victory in Bangladesh war generated a very lively discussion on the floor of the House. As many of 19 Constitution Amendment Bills were passed. 35th and 36th Amendments that Sikkim was integrated with the Union.

Introduction of the pension scheme for former members of Parliament, Nagarwala issues, MISA and long debate on the important licence case and alleged role of Railway Minister Shri L. N. Mishra and Shri Tulmohan Ram. The later was said to have accepted a bribe.

While Proclamation of Emergency issued earlier in December 1971 following the Pakistan aggression was already operation the fresh Proclamation was issued by the President on 25th June, 1975 on the grounds of threatened International disturbances. Opposition leaders linked declaration of a fresh Emergency with Allahabad High Court's decision declaring the election of Smt. Indira Gandhi to the Loksabha void and disqualifying her "for being chosen as for being a member" of either Houses of Parliament or of any State Legislative for period of six years. After a 14 hour debate, Loksabha adopted the resolution approving the Proclamation of Emergency. The dissatisfaction with Emergency measures and the movement led by Jayprakash Narayan had made the opposition of the Congress Government very uncomfortable.

The fifth Loksabha left behind some bitter memories of Emergency Legislation, Administrative Excesses and Political Isolation of Smt. Indira Gandhi.

Sixth Loksabha (1977 – 79)

1977 Election brought to power a Non – Congress Government. But it was a courageous decision on part of Smt. Indira Gandhi to accept the verdict gracefully, bow out of power and up hold highest norms of Parliamentary democracy. While the ruling party lost, freedom and democracy had won. The system had proved its legitimacy vibrance, resilience and vitality. It was established that even the most powerful could be defeated at the polls and transfer the power could be effected through Constitutional peaceful means.

The significant work done by 6th Loksabha included Amendment to Constitution (43rd) to revert to a five year term for Loksabha and State Assemblies instead of 6 years. The 42nd Amendment passed during the Emergency was

inserted to Constitution. Almost entire period was dominated by Janatha Government trying to trace out and punish all those guilty of standing with Smt. Indira Gandhi and responsible for the 'atrocities and excesses' of the Emergency period. The Shah Commission inquiry, the Maruthi affairs, the privilege issue against Smt. Indira Gandhi and in one of them her warrant and arrest, jail and expulsion from the membership of the House all were part of the same exercise. Before Janatha Government could settle down to positive business serious fissures between the leaders and diverse group constituting the Janatha Party started coming the surface. Y.B. Chavan moved a vote of no – confidence in the Council of Minister headed by Morarji Desai. It brought another Non – Congress Council of Minister this time headed by Chaudhary Charan Singh who never faced the House and resigned. The 6th Loksabha was dissolved after remaining in existence for nearly two years and half only. The Janatha experiment had failed.

The Seventh Loksabha (1980 – 84)

Smt. Indira Gandhi back in the saddle. The Congress (I) had avenged its defeat of 1977. Almost all other parties were in bad shape. The single largest group (39.3%) in the Seventh Loksabha also continued to be that of "Agriculturists". In fact right from the first Loksabha onwards, the strength of agriculturists had been increasing in every successive House. The Mandal Commission Report which recommended 27 percent reservation for backward classes was discussed in the floor.

On 31st October, 1984 the whole Nation was shocked to learn of the dastardly assassination of Prime Minister Smt. Indira Gandhi by her own security guards. Shri Rajive Gandhi succeeded her as Prime Minister held under the shadow of the assassination of Smt. Indira Gandhi. The 1984 Elections gave a three – forth majority to the Congress. Which the party did not command even during Nehru's time.

The Eighth Loksabha (1985 – 89)

The Eighth Loksabha had a new look in the International year of Youth. India had her youngest Prime Minister. Also the House had some top stars from film world namely Amitabh Bachhan, Smt. Vijayanthi Bali and Sunil Dutt. The Eighth Loksabha had a distinction of having the largest proportion of educated members; more than 71 percent were graduates. As many as 13 Constitutional Amendment Bill were passed. 10 of these were finally enacted. During this time – reducing the voting age from 21 years to 18 years.

The Indian Post Office Bill, finally sent to the President, he returned to the Parliament to re consideration. The Muslim Women (Protection of rights of Divorce) Bill, 1986 generated lively discussion in the wake of the Shah Bano Case. And Bill was passed at a marathon sitting on 5th – 6th May, 1986.

8th Loksabha witnessed the suspension of 63 members of the opposition on a single day 15th March, 1989 for the remaining days of the week. The same was the case with discussion on matter relating to the purchase of the 155 mm. Howitzer guns from the Bofors Company of Sweden. A record of sorts was created when the House was adjourned 8 times on single day – 20th July, 1989. These developments ultimately culminated in enemas resignation by opposition members from Loksabha. 124 members resigned their seats in the House.

The Ninth Loksabha (1989 – 91)

The Congress was still the largest single party. The number of parties represented was an all time record. There were as many as 24 parties. Also it was the first time that no party had secured a clear majority. A Minority Government of Janatha Dal was formed by Shri. Vishwanatha Pratap Singh with the support of B.J.P. and Left Parties from outside. 9th Loksabha had a unique distinction of having the single largest party the Indian National Congress (I) with 197 members – as the officially recognized opposition and former Prime Minister Shri Rajiv Gandhi as a Leader of Opposition with the rank of the Cabinet Minister to sit as the Leader of opposition in the Loksabha.

The situation of Jammu and Kashmir, Punjab, Assam dominated the proceedings. V.P. Singh announced in the two Housed his Government's "momentous decision of Social Justice" on the report of Mandal Commission. His announcement it was alleged was politically motivated, intense and massive agitation launched by the students, teachers, lawyers and others accompanied by self – immolation of young boys and girls on open streets virtually rocked the Loksabha.

V.P. Singh Government could not complete even a year in office, following the withdrawal of support by B.J.P. and its allies in retaliation against the Arrest of L.K. Advani and stoppage of his Ratha Yathra to Ayodhya for construction of Ram Temple. It was obvious that V.P. Singh had lost majority support in Loksabha. However re refused to resign and instead offered to prove his majority on the floor of the House. The motion of Confidence was defeated by 356 to 151 votes with 6 members abstaining. This established another record. The President invited Chandra Shekar to form a new Government. But his minority Government also was short lived. President dissolving the 9th Loksabha.

The biggest causality during 9th Loksabha period was institutional, the rules, conventions and time honoured tradition in many aspects were given a go by. There were more than the usual instances of Pandemonium, noisy and uproarious scenes, walk – outs, crowding in the well of the House, rising slogans, frequent adjournments. Madhu Limaye said "entire tenure of 9th Loksabha was disappointing and the last day was a day of National shame". Besides this 18 Bills were passed again without discussion. The 9th Loksabha tenure was brief experiment of minority Government run with outside support having flopped.

The Tenth Loksabha (1991 – 96)

10th Loksabha was constituted under the shadow of the grim tragedy of the most gruesome and ghastly assassination of the former Prime Minister Shri. Rajiv Gandhi who was not only a candidate of Loksabha membership but also the most likely person to take over as Prime Minister after the Elections. 10 General Election was the most brutal and violent Election in Indian History. Congress (I) emerged as by far the largest party in the House. But a little short of absolute majority to form a stable Government on its own. The sympathy generated as a result of assassination of Rajiv Gandhi did add a few seats to Congress (I) tally, but it was not enough. The party was almost completely rousted from two other most populous State U.P. and Bihar. The unanimous Election P.V. Narasimha Rao first as the President of Congress Party and then elected as leader of Congress Parliamentary Party and his appointment as the

first Prime Minister of India from southern States strengthened the integration sentiment.
P.V. Narasimha Rao acquired simple majority largely through managing splits in opposition parties. 10th Loksabha's noteworthy development was that of setting up fully fledged system of 17 Departmental Standing Parliamentary Committees.

The Eleventh Loksabha (1996 – 1997)
In 11th Loksabha as many 28 political parties were represented in the House. It saw 3 Governments and Prime Minister Come and go. Atal Bihari Vajpayee for 13 days followed by H.D. Devegowda and Indra Kumar Gujral. It was a strange phenomenon that the two parties in the House. The B.J.P. and the Congress were outside the Government whole some 13 – 14 Tiny Parties of diverse and opposite. Persuasion Cobbled majorities in the lust for sharing the spoil of power. Both H.D. Devegowda and Indra Kumar Gujral was member of Rajyasabha. During the short life of the 11th Loksabha there were as many as four confidence motions from the Prime Minister themselves.
Indiscipline, disorder and pandemonium resulting in House not being allowed to function and getting repeatedly adjourned become routinised but the show lasted only 18 months. Be it as it may the 11th Loksabha will be remembered for electing to the office of the Speaker for the first time a member of the opposition P.A. Sangma, who was also the first tribal, the first Christian and youngest ever Speaker. At his initiative a special 6 days session of the two Houses was held to commensurate the Golden Jubilee of India's Independence. For the first time in the history of Parliament the Speaker delivered a speech in the House. He gave a clarion call from the chair for a second freedom struggle.

The Twelfth Loksabha (1998 – 1999)
12th Loksabha also no party could secure a clear majority. A BJP led coalition Government headed by Atal Bihari Vajpayee was formed, but it could last only 13 months. Since no alternative Government could be formed fresh Election had to be called. So this is become the shortest lived Loksabha. The major development is was presentation of Budget at 11 a.m. instead of 5 p.m. For the first time a member of the Scheduled Castes, Ganti Mohana Chandra Balayogi of Telagu Desham Party elected as Speaker.

The Thirteenth Loksabha (1999 – 2004)
Atal Bihari Vajpayee formed NDA Coalition Government of some 23 parties together, which despite many stresses and strains and succession of crisis is continuing and proving considerably stable with no alternative sight. The prevention of Terrorism Bill was passed in March 2003 in the joint sitting of the Parliament. The Golden Quadrilateral is a National Highway Network connecting most of the major industrial, agriculture and cultural centre of India. It connects major Metro Cities of India, Delhi, Kolkata, Mumbai and Chennai. It is the largest Highway Project in India, it was planned by 1999, launched in 2001 and completed in 2012.
Vajpayee tries to make good relations with Pakistan; he travelled by bus to Lahore in 1999.
The Kargil War – India won the Kargil war which outbreak in May to July 1999 in Kargil District of Kashmir and elsewhere Line of Control.

The Fourteenth Loksabha (2004 – 2009)
14th Loksabha convened after the Indian General Election held in 4 phases during the 20th April to May 2004. Which lead to the formation of the first Dr. Man Mohan Singh Government. Indian National Congress lead United Progressive Alliances won 62 more seats than the previous Loksabha.
During this period India and USA Nuclear Co-operation was approved in USA relating to the Nuclear Supplier Group. And India approved the Non – Proliferation Enhancement Act on October 8, 2008. This agreement between the Indian Foreign Minister Pranabh Mukarjee and USA Counter Part Condoleezza Rice on October 10, 2008. But left parties were against the 123 agreements. They moved no – confidence motion against the Government but they failed to get majority.
14th Loksabha witnessed the 2G Spectrum Scam that the political and private officials under the UPA Coalition Government in India were accused of committing. It was claimed that the magnitude of the scam was 2,867,800,000,000 Rupees. The Union Government of that time was accused of undertaking mobile telephone companies for frequency allocation licenses, which they used to create 2G Spectrum subscription for the Cell Phones. The Comptroller and Auditor General of India exposed the Scam. The Minister of the United Progressive Alliance Government A. Raja and Kanimozhi were prime accused.
In 2005 Operation Duryodhana was the code name of a string operation, which captured on camera. The eleven members of the Parliament of India accepting money to table questions on the floor of the Parliament, it defame of the Indian Parliament.

The Fifteenth Loksabha (2009 -2014)
The members of the 15th Loksabha were elected during 2009 General Elections in India. The Indian National Congress led the United Progressive Alliances, won 44 more seats than the previous Loksabha.
It is the second innings of the Dr. Man Mohan Singh Government. It introduced a total 222 Bills in the 15th Loksabha. But out of this 165 Bills were passed by the House.
Smt. Meira Kumar, Parliament member and Congress Party member elected as the Speaker of the Loksabha. Smt. Sushma Swarj was the Opposition Party leader at the time and Smt. Sonia Gandhi was the leader of the United Progressive Alliance Government.
The outgoing term of the House was the most disrupted and wasted in Independent India with the 'Pepper Spray' incidents in the Last Session making a new law in Parliamentary Conduct. There was also uproar galore on the demand for resignation of the Prime Minister Dr. Man Mohan Singh in the Coal Block Allocation Scam.

The Telangana Bill creating the 29th State of India was passed in the last week on the Last Session of Loksabha.
The 15th Loksabha has also seen immediate disqualification of the RJD Chief Sri Lalu Prasad Yadav after their conviction in the Fodder Scam, even though scams and scandals, including the Common Wealth Game Scandal and Adarsha Housing Scam led to the disruption.

General Review

A General view of development in Parliamentary Institutions since the first Loksabha reveals some very interesting and some disturbing facts. The number of days on which the House of Parliament sit each year and the time that in devoted to transacting business has come down considerably in recent years. In the face of disturbances and shouting the Houses have to be adjourned frequently. Even in Parliamentary circles now it is widely recognized that the ugly scenes of indecorous behavior, indiscipline, pandomenta etc. It lead to waste of precious Parliamentary time loss of respect for the supreme representative institution of the people.

Parliament was conceived as the legislature or the Law making body, but of late Law making has ceased to be even the most important of its functions, either qualitatively or quantitatively ..... About 48 percent, it has come down to occupy less than 14 percent of its time.

The character of Parliament has also changed as a result of changes in membership composition. In the early years our Parliament could legitimately boast of having some very outstanding and accomplished Parliamentarians, who could do honour today Parliament of the World. Ex: Acharya Krupalani, Dr. Ram Manohar Lohia, Vajpayee, Jayaprakash Narayana, Nehru, H. V. Kamath, Dr. B.R. Ambedkar, etc.

For the first 30 years of Independence Congress remained the dominant party with an undisputed majority, interestingly however the opposition while small in number was more effective and had greater impact in earlier years. Perhaps it was so because of the high quality and character of membership on both sides and largely because a stable Government and secure leadership could show greater magnanimity and accommodate opposition viewpoints without losing face.

In earlier Loksabha there was much greater emphasis on discussion of National and International issues. Regional issues and Local problems were left to be taken up in the State Legislature. People would flock to hear Nehru initiative debates on International situation, on Foreign Affairs which followed high level discussions from National angle. It seems that gradually but increasingly more regional and even local problems are coming to acquire greater relevance and importance for our members.

The representative democracy Parliamentary Institutions have endured in India for five decades is a great tribute to their strength and resilience. In recent years quite some thinking and debate about decline of Parliament, devaluation of Parliamentary authority deterioration in the quality of members, poor levels of participation. Today one notices a certain cynicism towards Parliamentary Institutions and as erosion in respect for Parliamentary process. The legislators as evidenced by poor quality of debates, and attendance in the Legislatures, unruly behavior of members.

Parliament and Parliamentarians has become a fashion with self – proclaimed intellectuals. This has to be deprecated because other institutions have perhaps declined more. Today we are in situation where sanctity of means has lost all value, meaning and relevance. If dacoits, smugglers, gangsters and foreign agents can help put us or sustain us in power, we are prepared to compromise with them. We do not hesitate to buy stability of our chairs by bringing fellow legislators. The people feel that the new breed of politicians in all parties are selfish, power hungry, greedy, dishonest hypocrites and power merchants for whom the Nation comes lost and the welfare of the people is at the bottom of the priorities.

Need for Reforms

It seems to have been made to examine and analyze what really plagues Parliament or find out reason for erosion of traditional authority, high esteem and glory of the Institutions of Parliament. We must deliberate on the highest priority basis why things have come to such a pass. Something can still be done to restore the legislatures to their old glory and bring about a renaissance of democratic faith and Parliamentary culture.

The information explosion, the technological revolution, the growing magnitude and complexities of modern administrations cost upon Parliament other vastly extended responsibilities, inadequacy of time, information and expertise with Parliament results in poor quality Legislation and unsatisfactory Parliamentary surveillance over administration, inadequacy of causation and training in the sophisticated members of Parliamentary policy and working procedure of modern Parliamentary Institutions have adversely affected the performance both the Legislators and Bureaucratese. Little efforts has been made thus for to develop the essential pre – requisites for the success of the Parliamentary party – discipline, character high sense of public morality, ideology oriented two party system and willingness to hear minority views.

It would be necessary to reform the electoral system and the political party system, what is needed is a holistic approach to electoral reforms and comprehensive legislation for the purpose.

We have to be clear about the precise need, direction and reforms that would be desirable at present. It is obvious that more tinkering first – aid repairs and trifling cosmetic adjustment. We have to be prepared for fundamental institutional – structural, functional, procedural and organizational changes.

Parliamentary reforms would have to include

a) Building a better image of Parliament.
b) Improving the quality and conduct members.
c) Reducing expenditure on Parliament.
d) Making membership financially less attractive and more motivated by support of sacrifice and service.
e) Improving information supply to Parliament.
f) Legislative planning and improving the quality of Law.
g) Settling up standing committees on the Constitution and Economy.
h) Codifying Parliamentary privileges.
i) Improving working Parliamentary parties, floor management Parliamentary time table.
j) Rationalizing and modernizing rules of procedure to meet today's needs.

Finally Parliamentary reforms would have to be a part of an integrated approach to be reform all sectors, in Education, Judiciary, Administration, Economy, Social, Cultural, Political spheres.

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International Journal of Humanities and Social Science Invention (IJHSSI)
ISSN (Online): 2319 – 7722, ISSN (Print): 2319 – 7714
www.ijhssi.org ||Volume 7 Issue 05 Ver. I ||May. 2018 || PP.57-60

Sri Aurobindo: A Mystic of Par Excellence

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Sri Aurobindo is an outstanding figure in Indo – Anglican literature. He has an international reputation as a mystical philosopher. He was born on 15 August, 1872. Besides being a philosopher, he was also a yogi, guru and a poet. He is a spiritual reformer. He spoke on human progress and spiritual evolution through his work of art. He developed a method of spiritual practice which is called Integral Yoga. He believed in a spiritual realization that not only liberated man but also transformed his nature, enabling a divine life on earth. His main literary works are 'The Life Divine'. It deals with theoretical aspects of Integral Yoga. His notable work is 'Synthesis of Yoga'. It is a practical guidance to Integral Yoga. 'Savitri' is an epic poem.
Between 1910 and 1914 Aurobindo published research on the Vedas, the Upanishads, linguistics and other subjects. He also wrote some finely crafted essays on spiritual and cultural subjects. This got published in 'Essays Divine and Human' and poems that are transcripts of spiritual experience on aspiration. 'Meditation of Mandavya' records the moods of Bhakti.The transformation of life Aurobindo speaks of must include a remolding of human society. In 'The Human Cycle', Aurobindo traces the evolution of human cultures from the 'symbolic' stage to the age of rationalism and individualism.
Sri Aurobindo, a great sage of modern India, flooded the entire world with the shower of spiritual consciousness. He revolutionized the human thought and had tremendous impact on the people all over the world. As a poet, he is endowed with a poetic consciousness that is unobtrusively committed to achieving social betterment and spiritual consciousness. He shows a piercing and instantaneous insight into the heart of his subject. He mastered several poetic modes but then, he evolved a writing style of his own that would be in line with his spiritual thought.
Sri Aurobindo is a great mystic poet and philosopher. According to Sri Aurobindo poetry is the mantra. It is the words heard from the innermost soul of the seer poet. The seer poet gets visions, only when the mind is evolved and it merges with Saccchidananda. His realization of the infinite makes him a mystic.

Date of Submission: 23-04-2018 Date of acceptance: 08-05-2018

Aurobindo possesses an insight into the things around him. He reveals the beauty and reality which cannot be seen from the ordinary men. To Aurobindo, the poet has been the 'child of divine'. Poetry overflows with full of living energy, and its creation will be ever fresh and new. We can find this specialty and freshness in his poems. His poems are powered with divine, spiritual and mystical elements. The poem, 'Trance of Waiting' is filled with a mystical glow. Here the poet goes to a state of trans. When this mood of trans is overpowering him, he is attaining a luminous sleep:

Lone on my summits of calm I have brooded with voices around me,
Murmurs of silence that steep mind in a luminous sleep,
Whispers from things beyond thought in the Secrecy flame –white forever,
Unscanned heights that reply seek from the inconscient deep
Distant below me the ocean of life with its passionate surges
Pale like a pool that is stirred by the wings of a shadowy bird.
Thought has flown back from its wheelings and stoppings, the nerve – beat of living
Stills; my spirit at peace bathes in a mighty release.

In this moment, the thought is disappearing totally, and supernal wisdom is occupying the mind. In some of the writings of Sri Aurobindo, this approach does exist with various symbols.

Wisdom supernal looks down on me, Knowledge mind cannot measure,
Light that no vision can render garments the silence with splendor.
Filled with a rapturous Presence the crowded spaces of being
Tremble with the Fire that knows, thrill with the might of repose
Earth is now girdled with trance and Heaven is put round her for vesture.
Wings that are brilliant with fate sleep at Eternity's gate.

The blissful experiences and the ecstasies of the soul are reflected through various images. The mystical images and symbols like these, add the beauty and everlasting effect to the poem. The true origin of mysticism is the soul and the true enjoyer of it is none other than the soul. Aurobindo opines that mystical element begins in eternity as well as end in eternity. The mystical elements, in Aurobindo's writings elevate us to the level of the super mind ultimately. Sri Aurobindo was a philosopher par excellence, a poet par excellence, and a rare and superb visionary. Sri Aurobindo, a believer in Art for Art's sake and Art for Life's sake at the same time, believed that poetry is the highest form of art and he wished to keep it at the centre of human knowledge and action, as the captain of a rhythmic voyage of self discovery, a mystic fire carrying us forward on the long high road to timelessness.

Mysticism is a tough concept to explain. Aurobindo had quest for realizing the divine truth. He had experienced it. Mystics are those who get visions at the acme of spiritual revelation. He says that man should transcend the conscious level and realize the super conscious level through the medium of yoga. This can be attained by internal surrender or total dedication to the super mind of God.

"The Blue Bird' is a descriptive poem replete with images both literal and abstract. Sometimes both may appear in the same line as in the case."My pinions soar beyond Time and Space into unfading Light."It is easy to visualize a bird spread its wings and fly but it is difficult to visualize anything beyond time and space.Sri Aurobindo's Blue Bird is a mystic who has witnessed all. His freedom is born of true knowledge, "Nothing is hid from my burning heart" and consequently he has a mind that is "shoeless and still". The integrality of the spiritual experience and aspiration of the poet can be seen here.In"The Blue Bird ", Aurobindo says,

I rise like a fire from the mortal earth
Into a griefless sky
And drop in the suffering soil of his birth
Fire seeds of ecstasy.

What the poet means is the ascent of consciousness towards the Divine and a returning descent of the higher consciousness into the lower physical consciousness. The intergral participation of all the different parts of the nature in the realization has to be noted. There is reference to the mind, heart, will and the senses. The following lines reveal this:

I bring the bliss of the Eternal's face
And the boon of the Spirit's sight
I measure the worlds with my ruby eyes;
I have preached on Wisdom's tree
Thronged with the blossoms of Paradise
By the streams of Eternity.
Nothing is hid from my burning heart,
My mind is shooless and still,
My song is rapture's mystic art,
My fight immortal will.

The poem ' Rose of God' unfolds mysticism about the secrets of the Divine Rose. The poet reflects on the five essences that fuse as the integral perfection of God – Bliss, Light, Power, Life and Love. Every word in 'Rose of God' is profound and leads to the revelation of spiritual reality. According to Sri Aurobindo, the rising of the sun in the sky at dawn produces the seven coloured spectrum. This spectrum stands for the seven levels of ecstasy defined in Yoga tenants like 'Yoga Vasishta'. We get the picture of it in the following lines:

Rose of God, vermilion stain on the sapphires of heaven,
Rose of Bliss, fire –sweet, seven – tinged with the ecstasies seven!
Lead up in our heart of humanhood, O miracle, O flame,
Passion – flower of the Nameless, bud of the mystical Name.

The eagerness of God to come to man is powerfully underlined by the symbol of the sun rising in the sky. The Rose of God is addressed as Wisdom. The miracle is said to happen in the heart of man. The poem also discusses the transformation in the mind of man. Light represents unclouded knowledge. The poet calls the Sun a golden flower of mystery. It also comes down to man in time as an incarnation. This incarnation is what the poet calls the guest of the marvelous hour. The descent of the Super mind depends on the Grace of God. This can be read in these lines:

Rose of God, great wisdom – bloom on the summits of being,
Rose of light, immaculate core of the ultimate seeing!
Live in the mind of our earthhood, O golden Mystery, flower,
Sun on the head of the Timeless, guest of the marvellous Hour.

For the poet, the Sun is the image of Immortality. An image is finite, but what it represents is Infinite. In the short period of a man's life, if the life is divinized, it can have eternal significance.

Rose of God, damask force of Infinity, red icon of might,
Rose of Power with thy diamond halo piercing the night!
Ablaze in the will of the mortal, design the wonder of thy plan;
Image of Immortality, outbreak of the Godhead in man.

Life is multifaceted and comparable to a flower with multi –layer petals. The colours run the whole gamut just as a lyre speaks all the octaves of music. The poet is referring to the Sahasrara, or the thousand petals lotus where Siva and Parvathi, the parents of the universe, are seated. According to Tantric lore, the kundaline that has risen up to the Sahasrara returns downwards by the grace of God. As a result the physical body is transformed into the finest form of divinity which the poet refers to as sweet rhyme. When the super mind descends, earth and heaven merge and mortal becomes immortal. Life becomes eternal. Aurobindo calls it " The Rose of Life".

Rose of God, smitten purple with the incarnate divine Desire,
Rose of life, crowded with petals, colour's lyre!
Transform the body of the mortal like a sweet and magical rhyme,
Bridge our earthhood and heavenhood, make deathless the children of Time.

Rose of God, like a blush of rapture on Eternity's face,
Rose of Love, ruby depth of all being, fire – passion of Grace!
Arise from the heart of the yearning that sobs in Nature's abyss.
Make earth the home of the Wonderful and life beatitude's kiss.

Much of Aurobindo's poetry was spiritual in inspiration. Aurobindo found poetry more suitable for the expression of inner experience.

"A God's Labor" is a beautiful poem. It is Indian in its theme. It brings out to an extent the secret path that yogis tread. In the poem "I" refers to the poet narrator and "you" refers to God. The poet describes the world as a mirage highlighting the materialistic aspects of life which can be an impediment for the spiritual life. Hence, the elements of purgation in the mystic journey can be noticed here:

I saw that a false hood was planted deep
At the very root of things.

The inner voice keeps the poet seer moving onwards and onwards. It is revealed thus:

Dig deeper, deeper yet
"A voiced cried, Go where none have gone !
Till thou reach the grim foundation stone
And knock at the keyless gate.

The poet magnificently describes his mystical and mysterious journey. He also reveals that it is only through hard efforts on the earth one can aspire for the liberation. The following lines reveal this:

Heaven's fire is lit in the breast of the earth
And the undying suns here burn.

The poet then goes on to tell that every man has a true divinity in himself. It has to be discovered through the stages of purgation, illumination, dark night of the soul and ultimately the union with God. Aurobindo feels that humanity can lead towards the divinized humanity.

There shall move on the earth embodied and fair

There are powerful imageries in the poem. The poem reveals the animalistic tendencies in the human life. Even the bad and the ugly part of existence attain a beautiful description in the hands of a great literary master.

The Truth of truths men fear and deny,
The Light of lights they refuse;
To ignorant gods they lift their cry
Or a demon altar choose.

This is a metaphysical discovery. The poem reveals that it is not God, but mankind who has to strive to reach salvation. Each of us has a true, divine self. This thought of Aurobindo can be reflected in the following lines:

I shall leave my dreams in their argent air,
For a raiment of gold and blue
There shall move on the earth embodied and fair
The living truth of you.

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Meenakshy N.S.. " Sri Aurobindo: A Mystic of Par Excellence." International Journal of Humanities and Social Science Invention (IJHSSI) 7.05 (2018): 57-60.

ISSN: 2394-9333, www.ijtrd.com

Mahasweta Devi: A Socio – Political Commentator of the Marginalized Community

Asst Prof. Meenakshy N.S

Abstract

The subject of Mahasweta Devi's creative writings has centered on the struggle of socially marginalized. She tried to depict the struggles of the people against exploitation and tyranny. Her women protagonists hail from marginal sections of society. Their tales expose the power dynamics of sex, economics and culture which collectively tyrannize them all. Her work is inspiring because she reminds us that gender is only one of the many axes on which discrimination rests. She is straightforward with her approach to talking about the lives of experiences of the marginalized. She talks about complex realities. Her fiction allows the reader to look at cultural practices, social institutions, identity formations, sexual roles and how they operate in spaces with different power dynamics. The arrangement of all these in her narratives come together to display the exploitations based on the difference in caste, class and gender. Since time immemorial, men and women in India had their roles differentiated. Women were always on the box of disadvantages. They used to spend their whole lives in the kitchen, taking care of the whole family and often tortured by men. This is highlighted in her novels.

Mahasweta Devi was an Indian Bengali fiction writer and socio-political activist. Her notable literary works include Hajar Churashir Maa, Rudali, and Aranyer Adhikar. She worked for the rights and empowerment of the tribal people (Lodha and Shabar) of West Bengal, Bihar, Madhya Pradesh and Chhattisgarh states of India. Devi wrote over 100 novels and over 20 collections of short stories. She studied the Lodhas and Shabars, the tribal communities of West Bengal, and the women and the dalits. In her elaborate Bengali fiction, she often depicted the brutal oppression of the tribal people and untouchables by the powerful authoritarian upper-caste landlords, money-lenders, and venal government officials.

In the Breast- Giver, to earn a living, Jashoda can only use what she has as a woman: her breasts and milk. The Mistress praises Jashoda about the amount of milk she produces and Jashoda comments that there was "a flood of milk although she was between pregnancies and she didn't have any special food or pampering". When the Mistress gives Jashoda the job, Jashoda goes home that night and says to her husband, "Look, I'm going to pull our weight with these". She obviously takes great pride in her body and what she is able to do with it. However, the fact that her job is a sexist one cannot be overlooked. It is obvious that only a woman can do a job such as the one Jashoda does. Women are again objectified and subjected to the view of only being good for certain things that men cannot do. In this way, you could say that the work is 'gendered' and the text is supporting traditional gender roles. Jashoda is, in a way, the stereotypical woman, raising children (though some are not her own) and keeping a home for her husband. She is seen as submissive and nurturing in a way that the traditional gender roles support.

The only reason Jashoda goes to work outside the home in the first place is because her husband is injured and cannot work and provide for their family any longer. Before her husband's accident, Jashoda was in the home, raising children, and was stuck in a traditionally female role of housewife. She had no other use to him besides bearing and raising children and keeping a home for him and their family. The traditional roles are switched, however, when Jashoda goes to work as a wet nurse.

Though Jashoda is the provider for the family, she is not free from her responsibilities as a wife and mother to her own children. She has to do both jobs simultaneously, which speaks to the complexities of many women's lives. Just because a woman works outside the home to earn a living doesn't mean that she cares any less about the goings on in her household and family.

Jashoda becomes more and more revered for her body's otherworldly tolerance, as the story that plays out on Jashoda's body. Jashoda suffers a painful and sickened death. Her plentiful breasts now become a gaping wound. She did not get the food and survival sources from Haldar's house as they parted here and there. Nor her husband followed her. She remained alone and searched to pass out the life. She got cancer in her breast. Kangalicharan, her husband and also her son came to support her. But it was already late and they could not do anything. She is destined to die with breast cancer. It is the extreme phase of female resistance without defying male dominance. She showed it to her husband who came after listening to her disease.

Mahasweta Devi embarks on a project of presenting the shocking realities that happen behind the socio-economic and political iron curtains, through her most powerful work Draupadi. The three stories in Breast Stories namely Draupadi, Breast-Giver (Stanadayini) and Behind the Bodice (Choli ke Pichhe) deal with exploitation. The stories have a common theme, the Breast. The translator points out in her introduction that the breast is far more than a symbol in these stories. It becomes a means of harsh comment on an unfair social system. If it is transformed into a commodity in Draupadi, it is an object that stands for the supposed 'normality' of sexuality as male violence in Behind the Bodice.

Draupadi, which was published in Mahasweta Devi's work Agnigarbha and translated by Gayatri Chakravorty Spivak in her collection titled 'Breast Stories' is an extra-ordinary and rare document of violence on and resistance by a poor, illiterate tribal woman who in her ultimate denial to clothe herself, not only exposes the ugly and horrifying face of political repressive forces including government, bureaucrats, feudal masters and the state sponsored delinquents, but also challenges the might of callous post-colonial state embodied in the figure of Senanayak. The play documents the economic, political, social and sexual oppression of the duality women in tribal areas who suffer from triple marginalization in terms of caste, class and gender. It is about the 1967 peasant rebellion in the Naxalbari area of West Bengal by the landless peasants and the itinerant farm workers against the unofficial state-feudal nexus.

In the stream of marginalization, women are in the worse situation. They are marginalized on the basis of unspoken and unwritten laws of the man-constructed society. Women's positions in society, particularly those of marginalized ones are preoccupied with the sense of docility and negligence. Marginalized women – the tribal women or the poor women – do not have any 'decent' or 'proper' position and identity in society.

In Mahasweta Devi's short story Draupadi where a Santhal tribal woman, Draupadi is subjected to third degree sexual violence. It depicts how a marginalized tribal woman derives strength from her body and her inner feminine core to fight against her marginality. In an attempt to subjugate her mind, body and soul, Dopdi (tribal name) is raped repeatedly by a number of men as she loses consciousness time and time again during her ordeal. She displays an unusual form of resistance by subverting the gaze in such a way that it is her oppressors who are made to feel the shame. Mahasweta is a writer with a commitment for social cause. Her stories and novels comment on India as a socio-political trajectory of the country. Mahasweta Devi has been actively working for years for tribals and marginalized communities. Her activism effortlessly translates into her writings.

The situation of the oppressed and the violence meted out to women throughout India remains the same: "The continuation of sexual assault of feudal patriarchal society in the form of state violence is the experience of contemporary feudal society". Mahasweta Devi is one of those rare writers who always aspires to find and explore something challenging and new and never accepts the existing ideals. Her short fiction Draupadi is primarily, the story of Santhal tribal women raped by men in power which is her sexual torture in police custody. Rape is considered as a bolt on the forehead of an innocent woman.

The story has its backdrop, the Naxalbari movement of Bengal, which started as a rural revolt of landless workers and tribal people against landlords and money lenders. The misery of a tribal woman

,tocratic woman is far more dreadful. Rape is the worst recognition of sexual violence ving all the vital information about the famous criminal Draupadi right at the beginning sweta Devi states: that they went underground for a long time and they are on the list of wanted. d the technique of guerilla warfare to compete with their enemy. Guerilla warfare is supposed to be the most despicable and repulsive style of fighting with primitive weapons. Dopdi and Dulna belong to the category of such fighters, for they too killed with hatchets and scythes, bows and arrows.

Mahasweta Devi's tribal Dopdi is fighting for her survival, for food and for water. The writer etches out the plight of the tribals in words. She depicts how utter helplessness can finally lead to resistance or even rebellion. Unlike other passive rape victims, Devi does not let her heroine 'Droupadi' suffer in silence. With unconquerable spirit, the naked and bleeding Draupadi faces all her rapists defiantly, out resisting the sexual flouting of her body. Mahasweta Devi gives voice to the voiceless unfortunate of the earth. Her literary output is an attempt to shake the conscience of the citizens and to make them notice, identify and analyze what goes unnoticed, unheard by the naked eye. There is no doubt that this story is a hard hitting comment on the grim situation of the tribal and marginalized in the face of democracy. The condition of women in the present patriarchal society remains the same irrespective of time and place. The tribal woman is marginalized in more than one way as she lives in a constant fear of victimization. In this social environment one comes across a character like Dopdi in literature who decides to take her revenge in her own way. She, raising her voice after being brutally gang raped, shows the extent to which a woman can be pushed. Conquering her pain and humiliation, she emerges as the most powerful 'subject.'

Her tale presents the bitter realities of the revolutionary movements of the tribals in an unabated manner and highlights the irony that in 21st century tribal women still have to fight the unjust world order for bare survival.

Through the compelling interplay of politics and history, Devi exposes the irony of the patriarchal hegemonistic societies that eulogize the idea of protecting a woman's honor at all cost but given a chance, violates her without having any qualm. Dopdi, the central character, is the representative of millions of tribal women who are oppressed, marginalized and victimized by the agents of politics.

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SEARCH FOR CULTURAL IDENTITY IN DIVAKARUNI'S 'QUEEN OF DREAMS' AND 'THE VINE OF DESIRE'

MRS. MEENAKSHY N.S.

Chitra Banerjee Diwakaruniis a Post-colonial diasporic writer of Indian origin has gained a wide national and international fame as a poet, short story writer, novelist and essayist. Diwakaruni has been praised for her literary creativity and pegonal sensitivity in dealing with cross – cultural complexities of self – identity, family relationships and community values. Most notable has been her concern with these issues in connection with the experiences of Indian and Indian American women. Her story telling power is grounded in social awareness. She deals with East/West cultural conflict that all South Asian Americans/ immigrants uniformly encounter. Her novels 'Queen of Dreams' and 'The Vine of Desire' reveal her skill in dealing with cross – cultural identity. They deal with the challenges that she has faced as an Indian American author.

Divakaruni's 'Queen of Dreams' and 'The Vine of Desire' draws readers into the lives of people across cultures, particularly the lives of Indian and Indian American women. Author's own immigrant experiences has been poured in these two novels. It deals with assimilation that takes place in different situations. Her characters reflect the paradox of being caught between two conflicting cultures, the Indian and the American.

The concept of cultural identity has mainly been studied in multicultural societies. In the globalized world with increasing intercultural encounters, cultural identity is constantly enacted, negotiated, maintained and challenged through communicative practices. The concept of cultural identity is most often used in multicultural societies as a way to recognize and celebrate identities of racially and ethnically marginalized groups. Cultural identity helps us understand the relationships around us to determine who we are as individuals in our community. Our cultural identity is also shaped by the people within our culture. We create a mold of cultural identity through the ideas of our parents by adopting a majority of their beliefs at a young age. As we grow older the different people we come in contact with help us to shape our cultural identity.

The protagonists in 'Queen of Dreams' have constant identity crisis and suffer from exile, alienation and embarrassment largely born of cultural prejudices throughout the novel.Divakaruni's writings portrays the realities of women in different dimensions.Divakaruni, is not just a voice among the Diasporic writers of the time, but an author infusing the essence of multiculturalism in her writing. She tells about her Indian heritage and her immigrant encounters of isolation and approval. She handles the tribulations and misconception related to cultural barriers. Her focus is on the diasporic Indian women caught between two opposing worlds. The women who either live abroad or happen to be visiting India are fought between the problems of multiculturalism. They think more rationally but they mentally retain some of the Indian traditional beliefs. They are torn between old and new values. When a person leaves his own culture and enters another, his own values come into conflict with the new ones. The novel ' Queen of Dreams' portrays the American reality which is the source of the American Dream, fears and anxiety that the Americans are vulnerable too, and the immigrant Indian's response to the emptiness and loneliness that haunts the inhabitants of this land.

'Queen of Dreams' is a novel of three generations – immigrant mother Mrs. Gupta, Rakhi, and her American daughter Jonaki. Mrs. Gupta, a first – generation Indian immigrant in America interprets other people's dreams and warns about immigrant danger and problems. Mrs. Gupta, the queen of dreams, retains much of her Indian routes. In America the young dream teller's dreams leave her completely. Unable to dream, Mrs. Gupta loses her identity and sinks into depression. In California, Mrs. Gupta feels increasingly alienated from her talent. Dreams do not come to her.

Rakhi is a young artist and a divorced mother. She lives in Berkeley. She is struggling to keep her footing with her family and with a world in alarming transition. Mrs. Gupta has the ability to share and interpret the dreams of others. She guides them through their fates. This gift of vision fascinates Rakhi but also isolates her from her mother's past in India and the dream world she occupies, and longs for something to bring them closer. Rakhi makes an attempt to know her identity. She discovers that her life is shaken by new horrors that she and her friends must deal with new complexities about their acculturation.

For a second generation Indian American like Rakhi, the sensation of being in- between is troublesome. Conflicts arises from the cultural clash between American individualism and Indian communitarianism. The value system and culture of the second generation is unclear. The dreams support Mrs. Gupta to have a sense of belonging, but Rakhi has nothing . She feels that it is her birth right to know about India. Her conception about India is coloured with the brush of her imagination. Research for origin in India also appears when she chooses Sonny as her life partner. The only means by which Rakhi can associate her feelings with India is her paintings.

Diwakaruni, in the novel, 'The Vine of Desire' writes about Anju and Sudha. Anju and Sudha were friends when they lived in Calcutta. These two rekindle their friendship in America. The novel begins with a sad description. It is of the unfortunate death of Anju's unborn son Prem and the depression and loneliness faced by Anju and her husband Sunil. Anju decides to call her cousin Sudha to California in order to give her mental support. Sudha was then in trouble after her divorce. She is tormented by uncertain future of her new born child. Sudha accepts her offer because she herself wants to get rid of all the troubles that would upset her. After coming to California she realizes the mistake she had

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ISBN :9789381-9796-81

committed. Sunil is attracted towards her and though she knew this, even before Anju got married to him, she never gave it any serious thought. But now she realizes his longing and passion for her. Sudha tries her best to avoid. But passion runs high and the characters get entangled in a vine of desire, unable to separate the wishful from the reality.

Sudha, having run away from the house begins her new life as a maid to Mr. Sen. He is an old man who is counting his last days. Sudha is able to infuse a new life in the old man. Anju too comes on terms with her life after going through bouts of depression. She makes peace with herself. As the story progresses, one can find change in Anju. She understands the reality and tries to see things in clearer lights. We get to know the tussles of Lalit's mind by simply listing 'what he said' and 'what he didn't say' to Sudha. The novel highlights in the alternating voices of the story teller Sudha and the outspoken Anju.

Chitra Banerjee Divakaruni deals with multifaceted problem of identity through her characters in 'Queen of Dreams' and 'The Vine of Desire'. They have constant identity crisis and suffer from exile, alienation and embarrassment largely born of cultural prejudices. When young people are severed from the ideals and positively sanctioned statuses, feelings of alienation or social isolation may develop. These feelings can result in undesired treatment and status. This process results in personal marginalization, and it may lead to social marginalization. This includes a person's relative economic, employment, educational and cultural loss compared to those around him. Here, an individual may experience extreme discomfort.Chitra Banerjee Divakaruni has played a significant role in making South Asian American women writers more visible to the general reading public. Women of the South Asia Diaspora got recognition because of her writings. She has met her own challenges which makes her say, "Writing must come out of what we know, what we feel... must be rooted in a people and a place... but ultimately it must transcend all that to reach across time and space and memory to touch those who have never – and who will never – live as we have lived."

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International Journal of Engineering Science Invention (IJESI)
ISSN (Online): 2319 – 6734, ISSN (Print): 2319 – 6726
www.ijesi.org ||Volume 7 Issue 4 Ver. I || April 2018 || PP 23-25

Violence in Tendulkar's 'The Vultures' And 'Silence! The Court Is In Session'

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Date of Submission: 24-03-2018 Date of acceptance: 09-04-2018

Introduction

Vijay Dhondopant Tendulkar Was Born On 6 January, 1928 In Girgaon, Mumbai, Maharashtra. He Began His Career As A Dramatist In The Mid 1950s. At The Age Of Eleven, He Wrote, Directed And Acted In His First Play. At Age Fourteen, He Participated In The 1942 Indian Freedom Movement. Tendulkar's Early Struggle For Survival And Living For Sometime In Tenements In Mumbai Provided Him First-Hand Experience About The Life Of Urban Lower Middle Class. He Thus Brought New Authenticity To Their Depiction In Marathi Theatre. 'The Vultures' Was Set In A Morally Collapsed Family Structure And Explored The Theme Of Violence. This Prolific Writer Has Twenty – Eight Full Length Plays To His Credit. Winner Of Several National And International Awards And Fellowships, He Is Both A Venerated And A Controversial Figure In The Country's Theatre Scene.

'The Vultures' Was Published In 1971. Conservative Section Of Maharashtrian Society Was Stunned By The Open Display Of Illicit Sexual Relations And Scenes Of Violence That Constituted The Plot. The Play Is A Ruthless Dissection Of Human Nature Revealing Its Inherent Tendencies To Violence, Avarice, Selfishness, Sensuality And Sheer Wickedness.The Decadence And Degeneration Of Human Individuals Belonging To A Middle Class Family Is Exposed Through The Interactions Among The Members Of The Family. The Play Has Two Acts. There Is A Gruesome Portrayal Of Man's Greed And On The Other; There Is A Portrayal Of Tender Love.

Tendulkar In The Play 'The Vultures' Displays A Rare Genius For Mixing The Absurd – As Evident In The Cruel And Curious Relationship Obtaining In The Relationship Among Pappa The Father, His Two Sons Ramakant And Umakant, And Manik, His Daughter, And The Tender But Possessive Relationship Between Rama, Ramakant's Wife And Rajaninath, Pappa's Illegitimate Son. Tendulkar Admits To The Fact That The Play Is Characterized By Violence. It Is From Rajaninath's Songs That We Come To Know Of The Past And Present Of The Pitalefamily. In The Opening Scene, He Sings That Twenty – Two Years Ago Ramakant And Rama Left The House Locking It. He Remembers The Day Ramakant Married Rama. Then She Was Innocent. Ramakant Being An Addict To Liquor, Failed In His Duty As A Husband To Make A Mother Of His Wife. Rama Had To Fulfill Her Only Desire Through Her Brother- In – Law, Rajaninath.

It Is Liquor That Makes The Characters Be Violent And Harsh Towards One Another. Pappa Is Hardened By His Own Past Crimes. When Ramakant And Umakant Talk To Their Own Sister About Her Affair With The Raja Of Hondur. They Use Bad Language Which Reveals Their Incestuous Nature. The Arrival Of Sakharam Rouses The Suspicion That Their Father Still Has Some Money. They Drive Away Sakharam. Then, Ramakant, Umakant And Manik Make Their Pappa Drink To Know The Truth About The Money. This Scene Is Filled With Violence. The Sons Pretend To Fight Each Other With The Father Getting Trapped Between Them. Pappa Gets Injured. To Escape From Further Assault, Pappa Admits To Them That He Has Deposited Some Money. His Refusal To Past With The Money Enrages His Children. The Children Try To Kill Him. Papa Runs Away. Ramakant And Umakant Want To Get Rid Of Their Sister. At A Game Of Cards, Umakant Is About To Choke Manik Todeath. Immediately Ramakant Says.

"Don't Bloody Let Her Go."

The Words Of Ramakant Reveals The Inherent Violence In Him. Ramakant And Umakant Discuss Manik's Love Affair With The Raja Of Hondur. They Plot To Break Manik's Leg Inorder To Prevent Her From Meeting Her Lover Further. The Two Brothers Ruthlessly Execute This Plan. Meanwhile, They Learn That Raja Of Hondur Has Impregnated Manik. The Two Brothers Attempt To Blackmail Him But He Dies Of Heart Attack. The Two Brothers Kick Out The Foetus Growing In Manik's Womb. Knowing Of Rama's Pregnancy, Manik Attempts By Superstitious Spell To Get The Foetus Aborted. The Psychological Trauma The Characters Undergo In Pursuit Of Wealth Is Revealed In The Play.

Rama Is Given An Opportunity To Express Her Agony And Frustration. Rama Gives A Long Moving Speech With Regard To Her Survival In The House Of Vultures. She Is Disgusted With Her Husband's

Drunken Love-Making And She Declares To Rajaninath Her Intention Of Immolating Herself. Rajaninath Understands Rama's Yearning To Become A Mother. He Holds Her In An Embrace. Rama Pretends To Protest. Rama Becomes Pregnant. We Find Ramakanth Taking Care Of Her. He Thinks That The Seed That Grows In Her Womb Is His. But When He Comes To Know The Truth, He Takes Revenge By Killing Him.

Towards The End Of The Play, 'The Vultures', Ramakant Becomes A Pauper. He Starts Drinking Profusely. In The Mean Time, Hari Pitale, The Pappa And Manik Have Been Hanging Around The House. They Want To Take Revenge On Him. Pappa Persuades Rajaninath To Join Hands With Him To Take Revenge Upon His Legitimate Sons. Rajaninath Send Him Away. He Collides With Umakant Who Has Been Eavesdropping. Manic Comes To The Garage Announcing That She Has Succeeded In Aborting Rama. Ramakant In Drunken State Raves That He Will Abort Rama Since The Child Is Not His. Thus We Can Say That The Vultures Is The Most Violent Of Tendulkar's Plays. The Ferocity, Ruthlessness, Avarice And Cunningness Of The Vulture Is Inherent In All The Members Of Pappa's Family.

The Play 'Silence! The Court Is In Session' Was Written In 1963 For Rangayan, A Mumbai-Based Theater Group. It Was Inspired After The Playwright Overheard The Conversation Among The Members Of Amateur Theater Group Travelling On Mumbai Local Train To Perform A Mock Trial At Vile Parle. A Group Of Professors Has To Play At The Village. Leena Benare Was The First To Reach There. She Is An Independent, Jolly, Working, Single Woman Who Loves To Live A Liberal Life. All The People Has The Plan To Practice Before The Play But Then They Found That One Of A Member Is Absent. So, They Decide To Add A Local Resident Samant In The Play Who Is Not Familiar With Acting. They Decide To Set A Mock Trail To Make Samant Understood How To Act In A Drama. They Select Benare As Accused Of Infanticide And Having Illegitimate Affairs With Numerous Men Specially With The Absent Member Of Group Prof. Damle. The Play Which Starts With The Intention Of Fun Grew Serious When The Members Start Blaming Miss Benare For Her Way Of Living. There Is Drama In The Drama. The Playwright Has Powerfully Depicted The Male Chauvinism In The Society. At One Place Benare Is An Independent Woman On The Other Side There Is A Mrs. Kashikar Who Throughout The Drama Get Taunted By His Husband Mr. Kashikar. The Drama Depicts How The Society Treats A Woman Who Chooses To By Her Own.

In The Play 'Silence! The Court Is In Session', We Find Sexual And Psychological Violence Against A Woman. The Focal Point Of The Play Is The Violent Response Of The Male Dominated Society To Pre-Marital Relationship And Motherhood. The Mock-Trial Holds A Mirror To The Social Response To Such Things. What Is Wrong, Immoral For A Woman Is Not So For A Man. Benare, In The Beginning Of The Play Is Found Bubbling With Over Confidence. She Is A Little Naughty And Talkative. She Represents The Working Class Women Who Wants To Lead A Liberated Life She Is A Victim Of Incest. She Is Robbed Of Her Virginity When She Is Hardly Fourteen Years Old. Benare Is An Object, A Commodity To Be Used And Thrown Away. Benare Is Disillusioned In Her Quest For A Stable Relationship. Having Realized The Sexual Urge Of The Body, She Calls It A Traitor. She Comes To A State Where She Despises It But She Wants To Retain It Only For A Child To Be Born.

In Act Three We See The Manifestation Of Physical Violence When Rokde Is Asked To Conduct The Accused To The Witness Box, And Mrs. Kashikar Virtually Drags Benare To The Witness Box. Benare, An Outspoken Women, Turns Immobile And Defiantly Silent. This Reversal Of Situation Shows What Odds A Progressive Women Has To Face. Mrs. Kashikar Represents The Orthodox, Tradition-Bound Married Woman. She Is The Submissive Wife Of Kashikar Who Treats Her As A Doormat, For He Is Always Snapping At Her And Snubbing Her. So, Mrs. Kashikar Cannot Stand The Idea Of Modern Young Women Earning Their Own Upkeep. Mrs. Kashikar Is Plainly Jealous Of Ms. Benare And The Freedom She Enjoys.

In This Play, Benare Loves Her Child As Dearly As Any Legitimate Mother Does. She Is Determined To Give Birth To The Baby. While The Society, Represented Here By The Court, Orders Her To Murder The Baby Before Birth. Ironically, The Court Itself Is Attempting To Do The Crime For Which She Is Prosecuted. Violence In 'Silence! The Court Is In Session'operates At Two Level – Verbal And Physical. Verbal Violence In Terms Of Humiliating Charges Against Benare And The Attempt To Project Her As The Unforgivable Villain Of The Society Has A Psychological Ramification For Both The Victim And The Victimizers. For The Violence Perpetuated By Kashikar And His Associates On Benare Can Be Traced To Collective Unconscious Of Men Born And Brought Up In A Patriarchal Society. Consequently, They Take A Dig Against Her By Out-Raging Her Modesty. Kashikar, The Judge, Goes To The Extent Of Prescribing The Old System Of Child Marriage. When He Says:

"What I Say Is, Our Society Should Revive The Old Custom Of Child Marriage. Marry Off The Girls Before Puberty. All This Promiscuity Will Come To A Full Stop."

The Trial Goes To The Extent That Even Kashikar Feels That "...This Is Getting On Too Personal A Level." Samant Starts Off With Noble Intentions In His Role As The Fourth Witness. He Tells Sukhatme "Of Course What Is True For The Trial Is Quite False Really." The Disclosure That She Is Pregnant Without Being Married Ads To Her Discomfiture And She Cries Out "That's Enough." Prof Damle Is Responsible For All The

Discomfort She Is Experiencing. Kashikar's Report That She Would Be Dismissed By Tomorrow From The Job Shatters Her. She Is Half Dead And They Continue With Their Attack. Sukhatme's Words Leave Her Morally And Spiritually Wounded. In The Same Scene We Notice The Door Locked From Behind And Benare's Banging The Door To Go Away From The Court And The Process By Which She Is Forced To Remain Inside Amount To Physical Violence.

Mrs. Meenakshy N.S."Violence in Tendulkar's 'The Vultures' And 'Silence! The Court Is In Session'" International Journal of Engineering Science Invention (IJESI), vol. 07, no. 04, 2018, pp 23-25

IOSR Journal Of Pharmacywww.iosrphr.org
(e)-ISSN: 2250-3013, (p)-ISSN: 2319-4219
Volume 7, Issue 12 Version. 1 (December 2017), PP. 01-05

Screening of Phytochemicals and Isolation of Endophytic Fungi from Medicinal plant *Helicteres isora* L.

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Abstract: *The objective of this study was to screen the phytochemicals and isolate the endophytic fungi harbored in the leaf and stem of medicinal plant Helicteres isora L.. Medicinal plants play a key role in traditional medicine and medicinal property is found to be because of phytochemical constituents present in the plants. Phytochemicals such as alkaloids, carbohydrates, tannins, steroids, flavonoids, saponins, terpenoids, coumarins, carboxylic acid, resins, quinone and phenolic compounds were analyzed by using ethanol as solvent. There is a correlation between phytochemicals and secondary metabolites produced by the endophytic fungi. The medicinal plants and their fungal endophytic communities produce similar therapeutic products. The results of the present study showed the presence of secondary metabolites and endophytic fungi such as Penicillium citrinum, Aspergillus niger, Curvularia vermiformis, Rhizopus sp., Cladosporium sp., Alternaria alternata and Fusarium sp., were isolated and identified by morphological characters.*

Keywords: *Endophytic fungi, Helicteres isora L., Phytochemicals, Secondary metabolites.*

Date of Submission: 15-11-2017 Date of acceptance: 02-12-2017

I. INTRODUCTION

Helicteres isora L. is a medicinal plant used in traditional medicine. The root and bark are expectorant, demulcent, astringent to the bowels, antigalactagogue, lessen gripping; a cure for scabies when applied topically (Uniani). The juice of the root is said to have a beneficial effect in empyema and stomach infections. In the Konkan it is used in diabetes, and is a favourite cure for snake-bite. The bark is used in diarrhoea and dysentery. The fruits are made into liniment for sores of the ear, and they are administered internally for colic.[1]

Medicinal plants are known to harbour endophytic fungi that are believed to be associated with the production of secondary metabolites and phytochemicals [2].Endophytic organisms that exist in the tissues of living plants are potential resources of novel natural products for exploitation in pharmaceutical industries[3].Endophytes are microorganisms that are present in living tissues of various plant parts establishing natural relationship without apparently causing any symptom of diseases [4,5].These endophytes protect their hosts from infectious agents and adverse conditions by securing bioactive secondary metabolites[6,7].Of the 300,000 plant species that exist on earth, each individual plant is to host one or more endophytes [8,9].

II.MATERIALS AND METHODS

2.1 Plant collection and identification

Healthy and mature leaves and stems of medicinal plant *Helicteres isora* L. were collected from different places of Udupi District of Karnataka State in plastic bags. The collected plant material was authenticated by the Taxonomist Dr. K. Gopalakrishna Bhat, Department of Botany, Poornaprajna College, Udupi, Karnataka, India. Fresh plant materials were used for preliminary phytochemical analysis and isolation of endophytic fungi.

Helicteres isora L.

Helicteres isora L. (Fruits)

2.2 Preliminary phytochemical analysis

Phytochemical analysis was done with air dried and powdered ethanolic extract of plant material, as per standard procedure [10]

2.3 Isolation of endophytic fungi

The plant materials were rinsed gently in running water to remove dust and debris. After proper washing, the leaf samples were cut into small pieces, and leaves were selected for further processing under aseptic condition. Highly sterile conditions were maintained for the isolation of endophytes. All the work was performed in the laminar air hood. Sterile glass ware and mechanical things, such as scissors, forceps, scalpel, blades were used in all experiment. Leaves were cut into 3-4mm in diameter 0.5-1cm in length with and without midrib. The isolation of endophytic fungi was done according to the standard method [11]. The surface sterilization was done by sodium hypochlorite(NaOCl) and 95% ethanol. Finally the leaves washed in sterile distilled water for 2 minutes. The plant material was blotted on sterile blotting paper. In each Petri dish 5-6 segments were placed on PDA medium.

Each Petri dish containing PDA is supplemented with antibiotics Penicillin G 100units per ml and streptomycin 100Microgram per ml. The dishes were sealed with parafilm and incubated at 27 $\pm 2^{0}$ C for 4-6 weeks at dark. Most of the fungal growth was expected within two weeks of inoculation. The incubation period for each fungus was recorded. Observation was carried out daily until the growth of endophytic fungi was observed.

2.4 Identification of endophytic fungi

The isolated fungi were Identified based on the morphology of surface texture, pigmentation and spores at the hyphal tips which were used to identify the endophytic fungi at species level using standard manual[12,13]. The microscopic examination was also done to study their reproductive spores[14].The identified fungal isolates from the respective plant tissue segments were isolated and then subcultured in a Petri dish which contains sterile PDA media. To preserve as a pure culture, the endophytic fungi was inoculated in PDA slant and incubated at 4^{0}C.

Endophytic fungal growth on PDA medium.

2.6 Calculation of colonizing frequency

Colonizing frequency was calculated as per standard procedure[15].

$$\text{Colonization frequency} = \frac{\text{Number of segments colonized by fungi}}{\text{Total number of segments observed}} \times 100$$

2.7 Relative Percentage Occurrence (RPO) of Different Fungi is calculated by using the following slightly modified formula [16]

$$\text{RPO} = \frac{\text{Density of colonization of one group}}{\text{Total Density of colonization}} \times 100$$

III. RESULTS

Traditional medicinal plant *Helicteres isora* possess phytochemicals such as alkaloids, carbohydrates, tannins and phenolic compounds which, is shown in table 1. In the present study, 12 leaf and 12 stem segments of *Helicteres isora* were processed for isolation of endophytic fungi. A total of 7 fungi were isolated out of which four fungal forms belong to the class Ascomycetes, two belong to Hypomyctes and one Zygomycetes, which is shown in Table 2. Colonization frequency percentage and Relative Percentage Occurrence(RPO) are also given in Table 3, 4 and Figures 1 and 2 respectively.

Table 1: Results of preliminary phytochemical tests

Test for	Present/Absent
Alkaloid	+
Steroid	-
Carbohydrate	+
Tannin	+
Flavanoids	-
Saponins	-
Terpenoid	-
Coumarins	-
Phenol	+
Carboxylic acid	-
Resins	-
Quinone	-

Carbohydrate(+), Phenol(+), Steroid(-)

(+): Present (-): Absent

Table 2: Endophytic fungi isolated from different parts of *Helicteres isora* L.

S.No.	Plant Parts	Name of the Endophytic fungi	Class
1	Leaf	*Alternaria alternata*	Ascomycetes
2	Leaf	*Penicillium citrinum*	Ascomycetes
3	Leaf	*Aspergillus niger*	Ascomycetes
4	Leaf	*Cladosporium* sp.	Ascomycetes
5	Leaf	*Rhizopus* sp.	Zygomycetes
6	Stem	*Curvularia vermiformis*	Hyphomycetes
7	Stem	*Fusarium* sp.	Hyphomycetes

Table. 3: Name and colonizing frequency of Endophytic fungi isolated from *Helicteres isora* L.

S.No.	Name of the Endophytic fungi	Isolate from	Total number of segments observed	Number of segments colonized	% Frequency of colonization
1	*Alternaria alternata*	Leaf	12	3	25%
2	*Penicillium citrinum*	Leaf	12	2	16.6%
3	*Aspergillus niger*	Leaf	12	4	33.3%
4	*Cladosporium* sp.	Leaf	12	1	8.3%
5	*Rhizopus* sp.	Leaf	12	2	16.66%
6	*Curvularia vermiformis*	Stem	12	2	16.66%
7	*Fusarium* sp.	Stem	12	3	25%

Fig.1:Colonization Frequency (%)of Endophytic fungi isolated from *Helicteres isora* L.

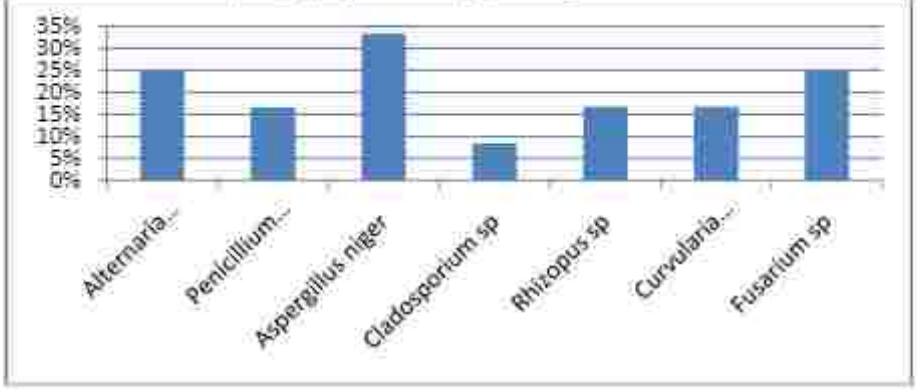

Table 4: RPO of Endophytic fungi isolated from *Helicteres isora* L.

S.No	Name of the Endophytic fungi	Isolate from	RPO
1	*Alternaria alternata*	Leaf	17.64%
2	*Penicillium citrinum*	Leaf	11.76%
3	*Aspergillus niger*	Leaf	23.52%
4	*Cladosporium* sp.	Leaf	05.88%
5	*Rhizopus* sp.	Leaf	11.76%
6	*Curvularia vermiformis*	Stem	11.76%
7	*Fusarium* sp.	Stem	17.64%

Fig.2: RPO of endophytic fungi isolated from *Helicteres isora* L.

IV. DISCUSSION

Medicinal plants contain a wide variety of phytochemicals such as phenolic compounds, flavanoids, lignin, quinones, coumarins, which are having therapeutic values. In addition to plants, endophytes residing in medicinal plants are considered as rich sources of bioactive metabolites of multifold importance in medicine, agriculture and industries[17]. Preliminary screening of leaves of medicinal plant *Moringa oleifera* with different solvent methods showed the presence of alkaloids [18].Many Endophytic fungi have been reported to produce novel anti bacterial, anti fungal, anti viral, anti inflammiatory and anti tumor compounds. In various studies, the population and biodiversity of the fungal endophytes have been found to be varying as the environmental conditions under which the host is growing. The host plant composition, as well as seasonal variation affects the endophytic population[19].

The phytochemicals such as phenolic compounds, flavonoids and tannins etc generally occur in most of the medicinal plants.The medicinal plants and their fungal endophytic communities produce similar therapeutic products. Medicinal plants are known to harbour endophytic fungi that are believed to be associated with the production of pharmaceutical products[20].The phenolic compounds and flavonoids isolated from endophytes of *Calotropis procera* are found to be similar and responsible for antioxidant properties[21].

V. CONCLUSION

Traditional medicinal plant *Helicteres isora* L. contains phytochemicals such as carbohydrates, tannins, phenolic compounds and alkoloids. A total of 7 endophytic fungi were isolated from this plant may also have similar chemical compounds. As there is correlation between the metabolites produced by the host plant and its endophytes, further investigation of these endophytic fungi for bioactive compounds may lead to the discovery of new drugs. The use of herbal crude drugs, in tracts and their remedies have significantly increased throughout the world. Efforts must be made to ensure safe, effective and affordable treatments for wide range of diseases by traditional methods which use locally available medicinal plants. The scientific and authentic researches on these aspects are to be done in order to exploit traditional knowledge of medicinal plants.

ACKNOWLEDGEMENT

Authors are thankful to the Department of Biosciences, Mangalore University Mangalagangothri for providing laboratory facilities to carry out this work.

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IOSR Journal of Pharmacy (IOSR-PHR) is UGC approved Journal with Sl. No. 5012

Gayathri Pai Screening of Phytochemicals and Isolation of Endophytic Fungi from Medicinal plant Helicteres isora L." IOSR Journal of Pharmacy (IOSRPHR), vol. 7, no. 12, 2017, pp. 01-05

IJCRT.ORG ISSN : 2320-2882

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

INDIA AND CHINA RELATIONS ISSUES AND CONCERNS

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Abstract:

India and China, The two largest Developing countries in the world share a number of Interest, But since the formal establishment of diplomatic relations with people's Republic of China in 1950, Indo-China relations have been rather voilate, lacking in confidence with unresolved issues hindering the relationship.

The last six decades of India – China relationship have seen more mutual mistrust and suspicion than friendliness and cordial atmosphere. Attempts have been made to bridge the differences. Both the Nations today have growing economics and their bi-lateral relationship to a great extent has assumed global and strategic relevance. If bilateral relationship has to improve then many domestic problems have to be solved in a coherent manner. There are many issues between China and India which still impact their relations like the border and the Tibet issues which are prominent issues. There are many positive and negative connotations of their bilateral relationship.

Key words:

Bi-lateral, civilizations, nuclear device, Line of Actual control, String of posits, Silk route, corridor.

Introduction:

India and China are the only countries in the world, which have legacy of ancient culture and civilization. Both the nations are under developed and are most popular countries in the world. But both nations have many contentions issues even though they have co-operalid on a number of areas. The element of trust and confidence is lacking between these two countries. India was one of the few countries which recognized the "People's Republic of China". The history of initial years of India – China relations especially during 1949-1958 depicts an era of friendliness. Both India and China were able to reach consensus and signed the Panchasheela Agreement which basically included the trade and relations between India – China bilateral relationship. Hostilities grew during 1959-1967. Hindi – Chinni bhai bhai period changed into Hindi – Chinni bye bye period. The growing mistrust and suspicion led to war in October 1962. It was an essay victory for China over India. This conflict reflected is policy towards India during India – Pakisthan Wars 1965 and 1971.

The period during 1976-1988 has been an era of dispelling doubts and mis-understanding. In 1988 after Rajiv Ghandhi's visit to China, the India and China relations took a new – turn. The period during 1988-1998 saw new atmosphere and trust in India – China bilateral relations. However after India detonated a nuclear device in 1998, the relationship detoriated. China opposed India's nuclear test and made strong criticism saying that it was against the international trend. The nuclear issue was an irritant in India – China relations. However, the situation changed after both the nations realized about each others contribution in the global economy and tried to improve the bilateral ties, the relationship improved during the first decade of twenty first century which has been an era of co-operation in economic spheres even through the misunderstanding continued on political fronts.

Issues and concerns between two countries:

1. **Border Disputes:** The border disputes between the two countries have existed since many years which are unsolved. The two main unsolved issues remain Aksai-Chin and Arunachala Pradesh. In 1962 the two nations fought a brief war in Aksai – Chin is administered by China, it remains an Integral part of India as it is the part of Jammu and Kashmir (Ladakh). But for China it is a the part of Xinjiang province and is of strategic importance since it connects China with Tibet. The other border dispute between the two countries involves the North – East Indian state of Arunachala Pradesh which the Indian side claims Arunachal Pradesh to be the Integral part of the territory of India. China refers to it as South Tibet, mainly because of us Tibetan Budhist affiliations; Chines maps include a major part of Arunachal Pradesh (around 90,000 Sq. Km) as part of their country which is causing strained relationship between India and China.

The border dispute is historical one Jt is rooled in the disputed status of the Mac Mohan Line which defines the border between India and Tibet. India recognizes this agreement as the basis for its territorial claim whereas China has objected this as it was not party to the convention. India is today claiming 43.180 Sq.kms of Jammu and Kashmir occupied by China including 5180 Sq.kms ceded to Pakisthan under the 1963 China – Pakhisthan Agreement. China on the other hand is claiming 90.000 Sq. Kms of territory held by India in Arunachala Pradesh. Arunachal Pradesh is crucial to India for maintaining the stability in India's North – Eastern insurgent affected areas.

India's grant of state hood to Arunachal Pradesh in the late eighties caused the hostility on the bilateral relations to such an extent that another border was seemed likely. China claimed the major territorial concession in Twang because claim it to be central to Tibetan Budhism since the 6th Dalai Lana was born there. India in the same way demands the return of the sacred mount Khailash manasasarovara in Tibet, as it is the sacred place for Hindus. Border agreements of 1993 and 1996 improved the bi-lateral relationship between two countries. Mutual troop cut, regular meetings of the local military commanders, appointment of special representatives to address the border issues were two steps undertaken to resolve the issues.

In recent years, China has shown aggressive policy towards the border issue with India. In may 2007 the Chinese government denied a visa to an Indian official to visit China on the grounds that he was from Arunachala Pradesh which it considered as its own territory. Apart from this there are reports of the encroachments across the Line of Actual Control (LAC). In March 2009, China attempted to block 2.9 billion dollars loan to India from the Asian Development Bank (ADB) on the grounds that it was destined for the development of Arunachala Pradesh. Arunachala Pradesh is regarded as an integral part of India as it has merged with Indian Union in 1987 constitutionally. Thus border issue between China and India 5 one of the issue and concerns which requires to be resolved amicably between the two nations.

2. **Border Incursions:** Border Incursions have been a major stumbling block to improving relations between Indian and China. Both countries have been strengthening their military presence along the Line of Actual Control (LAC). India and China have not considered these incursions seriously saying that they occur due to a difference in perception or Interpretation about the boundary i.e. the Line of actual control (LAC).

3. **Stapled Visas :** stapled visa were issued to the residents of Jammu and Kashmir and Arunachala Pradesh in 2009 by China which caused strong protest from India. This practice by China amounted to questioning India's sovereignty and territorial integrity. Therefore in 2011, China stopped issuing such visas for people from Jammu and Kashmir.

4. **Water disputes:** In case of China and India, water issues are becoming major areas of concern between the two states. China's plan of constructing big dams and diverting the water of rivers to its own advantage has led to discontent in India. As there are four rivers which How from China to India. The two countries must have a better understanding relating to water sharing and other benefits out of these rivers. However, China's strategic advantage over these rivers makes it possible for her to counter – balance India on many other issues. China's plan to build several dams on the upper reaches of the Brahmaputra have not been appreciated by New Delhi. The Brahmaputhra which orginates in Tibet is one of the major water resources in India's north – east, especially as a source of irrigation and Industry.

   China has a unique exclusivist policy on natural resources which originate from its soil. India on the other hand is planning to build 25 hydropower plant in Arunachala Pradesh before China. Completes its project. India is also concerned about a decrease in the flow of the river water and destruction of the Himalayan eco-system. China has not played the role of a responsible upper riparian state which has hurt interest of not only India but also Bangladesh. In the absence of international law on shared waters, the problem tends to get more complicated. India and China have entered into agreements on sharing of hydrological data for Hood control but the Chines have not been consistent in sharing of the information. The Chines have also built a number of water projects in Tibet including dam on Brahmaputra.

   The strategic advantage of China on water resources combined with the differing positions on Line of Actual Control (LAC) and China's claim on the territories that are part of India further complicate the water issues between the two.

5. **Tibet :** The unsolved issue of Tibet is one of the central issues and concerns of India in its relation with China. In 1950, the Chines troops invaded Tibet to re-claim and re-assert its sovereignty over the region. Following this, the seventeen points agreement was signed which further re-asserted its control. In the uprising of 1950, the 14th Dalai Lama Fled to India. With many of his followers joining him in exile wherein he established the central Tibetan Administrates (Commonly known as the Tibetan government – in – exile). During this uprising India was accused of aiding the rebels and maintaining Tibet as a buffer zone to restore Tibet with an Independent status. In 2003 India recognized the Tibet Autonomus Region as an 'Integral' part of the people's Republic of China. India's official position the

Dalai Lama is that it consider him as a spiritual leader and an honoured guest. But China opposed any country which provides a platform for his (Dalai Lama's) anti – China activities in any form China views that India is treating Daki Lama in India as government in exile where as China is just 200 miles away from Tibet and considers Tibet as part of China. India's willingness to provide shelter to Dalai Lama is a continued source of irritation to India – China relationship. China accused Dalai Lama of being behind the self immolation protest by a Tibetan exile in India and said that he is openly encouraging Tibetans with in Chines border to carry out self immolation. So the presence of Dalai – Lama and his anti – China activities in India have negative Implications for India – China relations.

6. **Imbalanced Trade:** India and China formally resumed Trade relations in 1978. After six year, the two countries signed the most favoured nation (MFN) agreement. In 2000 India's trade with China was as low as 2.92 billion Dollars but by 2010 it has increased to 73.9 billion Dollars. Despite China being the largest trade partner, concerns about trade imbalance remain. During 2013-14, the trade deficit between the two countries was as 36.22 billion Dollars. Strong Chines regulatory systems have put off exports from India especially from sectors like information Technology (IT), meat and pharmaceuticals, where India is belived to be superior. India is an exporter of raw materials to China, and imports finished goods from China. Traders prefer to buy finished goods from China as they are better in quality and cheaper than Indian goods. This has affected the market of some goods in India therefore there is trade imbalance in India.

7. **Geographical Influence of China:** One of India's growing concerns in the last decade is China's ever expanding sphere of Geo-political influence in the Indian Ocean. It is known as the "string of pearls" and involves the development of commercial ports in various countries as part of its new 'Silk route' the route is an important trade corridor extending from its naval base in Hainan Islands (South China Sea) to Begamayo in Tanzania, Africa. Many ports are en circling mainland India, China is the only other country apart from India to have a fully functional embassy in male.

8. **Lack of trust in China:** One of the important issues facing both the countries is the lack of trust in China and its intentions. More Indian have an unfavorable view of China than a favorable view in a recent lowly institute poll 60% indicate that China would be a major threat over the next decade 73% of those surveyed Identified 'war with China' as a big threat over the ten years. Almost three quarters claimed that China wants to dominate Asia. 58% felt that China's growth has not been good for India overcoming this mistrust is a major challenge

for India. This is due to the lack of the transparency in Chines decision making which has led to the uncertainty about Chines behavior and motivation.

9. **2017 Doklam standoff:** On June 2017 Chines troops with contruction vehicle and road building equipment extended and existing road south ward In Doklam, a territory which is claimed by both China as well as India's ally Bhutan. On June 18, 2017 around 270 Indian troops with weapons and two bulldozers entered Doklam to stop the Chines troops from constructing the road China accused India of illegal intrusion into its territory across mutually agreed China – India boundary and violation of the territorial sovereignty and UN charter. India accused China of changing statusquo in violation of a 2012 understanding between the 1000 governments regarding the boundary points and causing security concerns. This is widely understood as its strategic siliguri corridor on August 28, 2012. China and India have reached a consensus to put and end to the border standoff. Both China and India agreed to withdraw troops from Doklam.

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Impact Factor 3.025

ISSN 2349-638x

Refereed And Indexed Journal

AAYUSHI INTERNATIONAL INTERDISCIPLINARY RESEARCH JOURNAL (AIIRJ)

UGC Approved Monthly Journal

VOL-IV ISSUE-XI Nov. 2017

Address
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CHIEF EDITOR – PRAMOD PRAKASHRAO TANDALE

Aayushi International Interdisciplinary Research Journal (AIIRJ)
UGC Approved Sr.No.64259
Vol – IV Issue-XI NOVEMBER 2017 ISSN 2349-638x Impact Factor 3.025

Women Empowerment in Local Self Govt. in Karnataka With Special Reference to Udupi Dist.

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Abstract:

This study seeks to make an investigation in to how much women in Karnataka could make use of the opportunities. Which the Act provided and how much it helped women's to empower themselves. Women empowerment in conditioned by the socio – economic and religion – cultural ambience, it could be achieved with or without governmental assistance and support. Nevertheless in Indian context women empowerment remained a distant dream for a good five decades till the 73rd and 74th Constitutional Amendments Act began to be implemented. The passage of the above acts are landmarks in the March 07 women towards the ultimate goal of self-fulfillment. Women's participation in politics is closely related to their level of empowerment in literacy as well as health care. Karnataka women are far ahead however, their presence in political arena, even at the grassroots level was not all conspicuous until empowerment. Was as i.e. – were, thrust upon them by the 73rd Amendment Act. This Act made the involvement and participation of women in Politics Mandatory. Thirty-three percent of the total seats and posts in the three tier Panchayath Raj Institutions are now been filled by women. This is the background which prompted the identification of this topic for study and to pay maximum effort in to different dimensions of rural democracy and women's Political participation and involvement in them.

Keywords: *Women participation, empowerment of women, Panchayath Raj Act, Grama Panchayath, Taluk Panchayath, Zilla Panchayath, Karnataka, Udupi District.*

Introduction:

Since Independence, various initiatives have been taken for improving the Socio – economic conditions and empowering women in India. In this context the Constitution guarantees socio – economic and political equality and the provision of equal rights for availing different opportunities to all social groups of the population. Especially women, increasing emphasis has also been placed on initiating variety of development schemes and welfare programs for maximizing the participation of women in different activities. Various legal reforms and resolutions in Social status and empowerment of women in Indian Social System. However little progress has been visualized in the participation of women in different activities.

In view of these assumptions the introduction of reservation policy is in favour of women in the Panchayath Raj Institutions. This study relates to political participation of women in Panchayath Raj System in Karnataka. In this study an attempt is made to analyze the political participation of women in Panchayth Raj system. In Grama Panchayath – A case study of Thirty two Grama Panchayath in Udupi District.

India is known as the land of villages and even now majority of population live in the villages. In India women have been deprived of various kinds of opportunities and advantages by our traditional society for the past several centuries. Discrimination of women is commonly observed in providing opportunities of socio – economic development. Participation in different activities and development programs and availing the opportunities of various facilities, which are directly or indirectly linked with bringing improvement in the life style and the quality of life because of prevailing several social and cultural backwardness.

In the view of these assumptions the introduction of reservation policy in favour of women in the Panchayath Raj Institutions has therefore been an important Government intervention for maximizing the participation of women in different activities of Grama Panchayath levels and thereby to improve their socio – economic status.

Gender inequality which the society has inherited as an age old malpractice is not likely to vanish only by enacting a law or issuing a whip, sexual inequality has much deeper roots.

Therefore it is imperative to study all aspects of social problems being faced by women while discharging their responsibilities as a participant or a chairperson in newly constituted Grama Panchayath with new scenario of providing recent administrative and financial back up and co-ordination. The present study has attempted to examine various issues related to the implementation pattern of reservation policy and its awareness among women. The nature of participation of women members in different meetings, activities and various development programmes of Grama Panchayaths, social reform and welfare activities.

Objectives Of The Study

1. To understand the report the socio – economic, educational background of elected women representatives to Grama Panchayaths of the area under study.
2. To study and asses the level of awareness of the elected women members about their roles and responsibilities and various developmental programmes.
3. To study the involvement of elected women members in decision making.
4. To study the problems and difficulties faced by the elected women representatives in Grama Panchayaths.
5. To suggest suitable measures for the empowerment of women in Grama Panchayaths.

Profile Of Karnataka State

General:

The State of Karnataka is the 8th largest State in the Indian Republic in terms of geographical area of 1, 91,791 Square Kilometers. It is also 9th largest in terms of population. The State is situated in the Southwest India and accounts for 6.3 percent of geographical area and 5.1 percent of population in the Country. The State is bounded by Maharashtra, and Goa States in the North and North East; by the Arabian Sea in the West; Kerala and Tamilnadu in the South and Seemandra and Telangana in East. The State is confirmed roughly within 11.5 and 18.5 North latitudes and 74° and 78° East longitudes; situated on a table land, where the Western and Eastern Ghats ranges covered in the Nilgiri Hills complex. It composes of 30 Districts. The State capital city is Bangaloru.

Physical Features:

The State can be divided into four regions namely (a) Costal strip on the West (b) Western Ghats ranges (c) Mid – plateau (d) North Eastern plains. The Costal are rise above the sea level from 600 ft. Northern Eastern plains of Bidar, Kalburgi and Raichur lie about 600 – 1500 ft. The Mid plateau rises from 1500 – 3000 ft. The Western Ghats Ranges are seen from 3000 to 6000 ft. The Northern and Eastern districts like Vijayapura, Bellary and Chitradurga receive law rainfall whereas Dakshina Kannada, Uttara Kannada, Coorg and Chikmagalore in the Western Ghats and Semi – Malnad region receive heavy rainfall (more than 2000 mm). The distribution of rainfall closely follows with the evergreen belt of Western Ghats and Malnad regions. Through the State situated in the tropics, the climate is equable in the Southern districts and warm in the Northern district.

Current Population of Karnataka State

Name of Districts	Population in 2011			Growth Rate – 2001 -2011)	Density (Per Sq. Km.)	Sex Ratio (Females per 100 Males
	Persons	Males	Females	2001-211	2011	2011
Karnataka	6,11,30,704	3,10,57,742	3,00,72,962	15.67	319	968
Belgaum	47,78,439	24,27,104	25,51,335	13.38	356	969
Bagalkot	18,90,826	9,52,902	9,37,924	14.46	288	984
Bijapura	21,75,102	11,12,953	10,62,149	20.38	207	954
Bidar	17,00,018	8,70,850	8,29,168	13.16	312	952
Raichur	19,24,773	9,66,493	9,58,280	15.27	228	992
Koppal	13,91,292	7,01,479	6,89,813	16.32	250	983
Gadag	10,65,235	5,38,477	5,26,758	9.61	229	978
Dharwad	18,46,993	9,39,127	9,07,866	15.13	434	967
Uttara Kannada	14,36,847	7,27,424	7,09,423	6.15	140	975
Haveri	15,08,506	8,19,295	7,79,211	11.08	331	951
Bellary	25,32,383	12,80,402	12,51,981	24.92	300	978
Chitradurga	16,60,378	8,43,411	8,16,967	9.39	197	969
Davanagere	19,46,905	9,89,602	9,57,303	8.71	329	967
Shimoga	17,55,512	8,79,817	8,75,693	6.88	207	995
Udupi	11,77,908	5,62,896	6,15,012	5.90	304	1,093
Chikmagalur	11,37,753	5,67,483	5,70,270	0.28	158	1,005
Tumkur	26,81,449	13,54,770	13,26,679	3.74	253	979
Bangalore	95,88,910	50,25,498	45,63,412	46.68	4,378	908
Mandya	18,08,680	9,09,441	8,99,239	2.55	365	989
Hassan	17,76,221	8,85,807	8,90,414	3.17	261	1,005
Dakshina Kannada	20,83,625	10,32,577	10,51,048	9.80	457	1,018
Kodagu	5,54,762	2,74,725	2,80,037	1.13	135	1,019
Mysore	29,94,744	15,11,206	14,83,538	13.39	437	982
Chamarajanagar	10,20,962	5,13,359	5,07,603	5.75	200	989
Gulbarga	25,64,892	13,07,061	12,57,831	17.94	233	962
Yadgir	11,72,985	5,91,104	5,81,881	22.67	224	984
Kolar	15,40,231	7,79,401	7,60,830	11.04	384	976
Chikkaballapura	12,54,377	6,37,504	6,16,873	9.17	298	968
Bangalore Rural	9,87,257	5,07,514	4,79,743	16.02	441	945
Ramanagara	10,82,739	5,48,060	5,34,679	5.06	303	976

Development of Panchayath Raj Institution in Karnataka State:

The Mysore Government in 1918 enacted the Mysore Local Board and Village Panchayath Act which provided political and administrative powers to the elected representatives in the State. Maharaja of Mysore strengthened these bodies and ensured the largest possible measure of responsibility and autonomy.

In 1952, the Government of Mysore has passed the Mysore Village Panchayath and District Board Act. The Government appointed one more committee called the Local Boards Enquiry Committee under the chairmanship of D. Chandrashekhariah. The committee recommended a three tire structure of Local Self Government with District Boards at the apex, Taluk Board at the middle and Village Panchayath at the base.

In 1959, Mysore State had passed the Panchayath and Local Board Act. It was adopted in 1960 and Grama Panchayath and Taluk Panchayath came in to existence in the State. 1983 Chief Minister Sri Ramakrishna Hegde and Panchayath Raj and Rural Development Minister Abdul Nazir Sab adopted the New Panchayath Raj System. The Government of Karnataka under the ledership of Sri Ramakrishna Hegde had enacted the Karnataka Zilla Panchayath, Taluk Panchayath, Mandala Panchayath. The Nyaya Panchayath Act 1983 which was brought into operation from 7th April, 1987. The Zilla Parishad Act of 1983 transferred a wide range of the State's functions to Zilla Parishadhs, encompassed vital development areas in the State.

According to the new law in Karnataka State in 1991 Former Prime Minister P. V. Narasimha Rao had introduced another draft bill pertaining to rural areas. The large National Convention was organized by Ram Nivas Mirda, Former Minister to gather intellectual and practical input for the development of Panchayath Raj System in India. The Balwanth Rao Mehta Committee had made recommendations for different States to establish Panchayath Raj System to ensure democratic de – centralization. Accordingly in 1993, the 73rd and 74th Constitutional Amendment came in to force in order to create Local Government across the Country. The 73rd exclusively dealt with the Grama Panchayath System in rural areas. While the 74th Constitutional Amendment deals exclusively with Urban Local Government in India. In Karnataka the Government implemented the three – tier Panchayath Raj Sysyem namely Grama Panchayath, Taluk Panchayath and Zilla Panchayath in 1993. The objectives of Karnataka Panchayath Raj Act includes:-

- Establish a three – tier structure for Panchayath System at Village, Sub – District and District levels.
- Elect Members to the three – tiers through the direct elections at all levels.
- Elect Chairperson and Vice – Chairperson through indirect election.
- Reserve seats for scheduled caste, scheduled tribes and women at all three levels.
- Conduct elections to all the three levels under the State Election Commission.
- Empower State Finance Commission to determine the sharing of funds between State Government and the Panchayath Raj Bodies.
- Maintain accounts and conduct audits all three tier of the Panchayath System.

Grama Panchayath:

The Grama Panchayath to the basic of lowest level of Panchayath Raj in Karnataka. It has jurisdiction over the group of Villages Grama Panchayath represents and assembly of the Village elders who are directly elected by the Citizens of the Village. The following functions:-

- Provide Sanitary Latrines to at least one – tenth of the households every year.
- Construct and maintain sufficient community Latrines for use by men and women.
- Maintain water supply work on its own or through annual contract.
- Revise and collect taxes, rates and fees at fixed periods.
- Ensure enrollment of children in primary school.
- Ensure Immunization of children.
- Registration of births and deaths.
- Sanction for proper drainage.
- Construct, repair and maintain public streets.
- Remove the encroachments of public streets and public places.
- Provide street lights.
- Make payments for electricity charges on regular basis.
- Fill up sanitary depression and re claim unhealthy localities.

- Maintain all community properties.
- Maintain records related Population Census, Cattle Census, Crop Census, Causes of unemployed people and people below poverty line.
- Assign places away from the Village dwelling areas for dumping manure and refuse.

Taluk Panchayath:

The Taluk Panchayath is the intermediate level of Panchayath Raj in Karnataka is Constituted in each Taluk. The representatives of Taluk Panchayath Samiti are directly elected by the residents of the Non – Urban areas of the Taluk. The President and Vice – President elected from among the members. The tenure of Taluk Panchayath members is five years. The Taluk Panchayath has provision for reservation of seats for SC/ST on the basis of their population. Two seats reserved for women. The functions of Taluk Panchayath include:-

- Construct and Expand water supply work to get at least Forty Liters per – capita per day.
- File reports of Grama Panchayath activities within the Taluk regarding.
- Constructions of Community Latrines.
- Collection and revision of rates, taxes and fees.
- Payment of electricity bills.
- Enrollment of children in schools.
- Progress of Immunization.
- Maintain primary school building and provide sanction for sufficient class rooms and water supply in schools.
- Obtain land to create manure pits away from village dwelling areas.

Zilla Pamchayath:

The Zilla Panchayath is the apex level of Panchayath Raj in Karnataka. The Zilla Panchayath is constituted for each District of the State. It has Jurisdiction over the entire District. Except those portions that are included in smaller areas or are under the authority of Municipal Corporations, Town Panchayath or Industrial Township. The members of the Zilla Panchayath are elected from the District. The representatives of the Zilla Panchayath are elected for the five years term. Zilla Panchayath has seats reserved for SC/ST, OBC and Women. The functions of the Zilla Panchayath include:-

- Establish health centers, maternity centers, as per Government rules.
- Construct underground structures for water re – charge to make water available in the drinking water wells.
- Prevent drilling of irrigation bore – wells near drinking water wells to ensure adequate drinking water.
- Create a plan for Social Foresting development in each Taluk.

PROFILE OF UDUPI DISTRICT

Historic Background

The study is based on the Thirty – two Grama Panchayath of Udupi District. Udupi is one of the Costal district of the Karnataka State. The various inscription available in the district confirm that the district was being was being ruled by Alupas during the 7th Century A.D. During the 10th and 11th Centuries, Barkur of Udupi district was the central place of politics during the reign of the Shantaras, subsequently Barkur became the capital of Alupa King Aluvendra. After Alupas the district was under the Hoysalas for short period. It came under Vijayanagar Empire later.

From 1554 the Nayakas of Keladi, ruled this place for nearly two Centuries and it came under the spell of Mysore Sultan after the war of Bidanoor during 1763 A.D. After death of Tippu Sulthan in 1769 A.D. with the fall of Srirangapattana the place come under the rule of British and was a part of Madras Province until the re-organization of States in 1956.

The Udupi District has the districts of Uttar Kannada to his north, Shimoga and Chikmagalore to its east, Dhakshina Kannada District to its south and Arabian Sea to its west.

Udupi is a newly carved district out of erst while Dakshina Kannada District. The district is geographically divided into 3 areas namely Costal Belt, Interior Area and Western Ghats. The Costal area is having very good transport and communication system with well developed Infrastructure facilities. Hence the population in the area is quite thick. The important crops grown in the area include Paddy, Pulses, Sugarcane, Groundnut, Coconut, Cashew nut etc.

Socio – Economic and Political profile of respondents:

Socio – economic and political status of women depend much upon their basic background, characteristic pertaining to their own personality and the society in which they live. The socio – economic profile is vital to any study as it helps in building a comprehensive and complete picture of the respondents. Several socio – economic factor have been taken in to account in the study that give a good idea about the background and the profile of the women Garama Panchayat members under study. For drawing up a coherent picture of the participation of women in political activities, a sample of 127 women members of Grama Panchayat was randomly from the members list of 16 Grama Panchayat. Another sample of 20 male members and 15 officials was also randomly drawn from the same members list to study the attitude of men towards women. The individual profile is derived by looking at factors such as age, caste, religion, marital status, type of family, educational level and occupation and annual income of the respondents. The education and occupation level of the respondent's husband is also taken in to account to gauge the economic status of the family.

Women Empowerment through Panchayats:

The empowerment of women is becoming an increasingly popular term in development discourses. Women's empowerment is a process, and the outcome of the process by which women gain greater control over material and intellectual resources, and challenge the ideology of patriarchy and gender – based discrimination against women in all the institutions and structure of society.

Women's empowerment is not against men, but against the system of patriarchy and all its manifestations. The empowerment spiral transforms every person involved – the individual, the collective and the environment.

The method of measuring and evaluating women's empowerment and progress is by looking at:-

- Whether women status has improved as a result of being in Panchayats?
- Whether awareness levels of women in Panchayats has increased?
- Whether the ability of effective participation in Panchayats has increased?
- Measures whether the women have been raising problems in Panchayat meetings.

A women empowerment begins with consciousness – perception about herself and her rights, her capabilities and potential awareness of how gender and socio – cultural and political forces affect her.

Empowerment is a process by which marginalized groups recognize their powerlessness and address deprivation and discriminations in their individual capacities well as through collective bargains.

Women's empowerment refers to the process by which women acquire due recognition at par with men, to participate in the development process of her society through the political institutions as a partner with human dignity.

Women empowerment challenges traditional ideas of male authority and supremacy. Empowerment has been variously understood as a process, a movement, a collective action and challenging existing power relations and gaining greater control over the source of power, it requires political action and collective assault on cultural as well as National and community power structures that oppress women.

Implications:

(1) The 73rd Constitutional Amendments and the reservation policy for women undoubtedly make them to enter bin to public sphere. But reservation for women by itself will not empower the women members. They require regular orientation, training, educational awareness building programme which should provide the government.
(2) Reservation policy for women has set a positive trend. Therefore reservation for women and reservation on the basis of caste should be continued.
(3) Biased opinion of male members towards women should be given up.
(4) Hard working, result oriented and qualified women should be encouraged to join politics.
(5) In most of the case maintaining a balance between their family life and political life is challenging. This appears to be the major impediment for women in not making much headway in politics.

Suggestions:

(1) A long – term solution to women's participation in political activities rests in greater awareness about their role, responsibilities and entitlements.
(2) Participatory approach need to be adopted.
(3) Expansion of information, education and development of communication skill of women.
(4) Empowerment as a process requires multi – dimensional efforts and holistic interventions. This requires concerned and sustained efforts by all concerned – policy makers, Governments, NGO's, training institutions.
(5) Political empowerment of women need more support from officials and the public.

Conclusion:

An integrated approach is necessary to make the Panchayaths truly democratic and strengthen good Governance. Training and research Institutions concerned state and central departments have role in strengthening the Panchayath Institutions.

Awareness and training programme to a large extent have focused on general aspects relating to the functioning of Panchayaths. In a majority case the awareness level of women on the aspects are quite encouraging. Women cannot function and play their roles effectively unless they are able to assert themselves.

Empowerment is a process and multi – dimensional, it cannot be confined to a limited sphere; planned interactions have to be made in areas including the economic, social and political spheres for true empowerment to take place. Therefore women have to be provided access and opportunities to the basic rights such as literacy, legal and ownership rights etc. Political empowerment can be better sustained if women have at least a degree of economic independence.

The 73rd Constitutional Amendment and the reservation policy for women undoubtedly have a set of positive trend. Women in large number have been able to create and occupy space in the public sphere. It has given them greater visibility as well as mobility. Women have also been able to enter other sector and actively participate in local organizations. This has changed the perception and outlook of women and given them greater self-confidence. Women have gained better status both in family and outside. Family members and men in many instances perceive women in a more positive way.

There is a lot of scope and potential for women to emerge as leaders and decision makers and play a key role in the development and good Governance of Local Institutions. It requires dedicated and committed efforts by all concerned.

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