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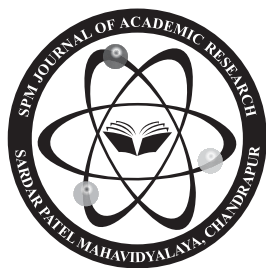
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Cultural Conflict in Julia Alvarez's “How the Garcia Girls Lost Their Accents”

G. N. Khamankar

Dept. of English, Vivekanand Mahavidyalaya, Bhadrawati, Dist. Chandrapur.

Abstract:

Julia Alvarez is one of the most dominant spokespersons of Dominican-American confusion and consciousness. Alvarez and other members of her fraternity are pre-occupied with the sense of cultural survival. Inhabiting two cultures, Alvarez understands that she lives in a multicultural world around her. This research paper attempts to explore and examine the cultural conflict in Julia Alvarez *How the Garcia Girls Lost Their Accents*. The novel explores a Dominican-American family's struggle with assimilation and the resulting clash between Hispanic and American culture.

Keywords:

Cultural Conflict, Hispanic and American culture, Assimilation and alienation.

Born in New York City in 1950 Dominican parents, Julia Alvarez is a multi-lingual and multi-cultural writer who lives through her past. Her books are deluged with the scenes and sensibilities linked to her own history. Although, she has Hispanic origin, she has her links deep into the fervor of the United States. Her uncle studied at U.S. Universities and her grandfather was posted to the United States as a Dominican cultural attaché. Along with her three sisters she grew up in the Dominican Republic in the midst of cousins and other relatives. But owing to the alleged involvement of her father in a plot against Rafael Trujillo, the dictator of the island, she had to move away to the United States at an early age of ten. And, thereafter, she headed a nomadic life moving from place to place in search of identity and quenching the thirst for knowledge and exposure.

Julia Alvarez and other members of her fraternity are pre-occupied with the sense of cultural survival. They still strive hard to learn as to how much of their culture they should be loose or suppress in order to be in the contemporary society. It is not only with Julia Alvarez, but with all the Hispanic American writers, that they have a feeling of alienation. At the same time, they always rest in the excites state under the threat of cultural conflict. Alvarez always lived in two worlds striving hard to make peace with both the worlds. The two worlds sometimes intersected and sometimes remained apart. The confrontation between her two worlds, American progressivity and Dominican heritage, continued to haunt her. Inhabiting two cultures, she understands that she lives in a multicultural world around her. That is why, being sensitive to cultural conflict, she says, **“We want our work to become part of the great body of all that has been thought and felt and written by writers of different cultures, languages, experiences, classes, races.”**

Julia Alvarez's first work of fiction, *How the Garcia Girls Lost Their Accents* appeared on the literary horizon in 1991 by Algonquin Books of Chapel Hill. The novel explores a Dominican-American family's struggle with assimilation and the resulting clash between Hispanic and American cultures. In the novel, there are fifteen short stories in reverse chronological order. The stories deal with the experiences of the Garcia sisters-Carla, Sandra, Yolanda and Sofia and their parents Laura (Mami) and

Carlos (Papi). The stories begin in 1989 with Yolanda's visit to her native county, the Dominican Republic and work backward to 1956, before the family immigrated to New York City. The years in between are filled with the difficult process of acculturation for all members of the family, Donna Rifkind, a famous analyst and reviewer writes in the New York Times Book Review that Alvarez has **“beautifully captured the threshold experiences of the new immigrant, where the past is not yet a memory and the future remains an anxious dream.”**

All the member of the Garcia family experiences, a cultural conflict between the fast-paced American way of life and the more conservative Latin culture of the Dominican Republic. The conflict stems from their desire to retain the customs and traditions of their Latin culture and their need to affect some change in order to adapt to their new surrounding in New York City. When they first move to America, each family member feels strong links to the traditions of their homeland. The girls, especially have a hard time adapting to life in America, at least of first. Before they immigrated, their only sense of America came from Papi's presents, which prompted them to think that it must be a wondrous place where all the children played with expensive toys. After they immigrated, however, they discovered a place where language and skin colour would prevent a smooth assimilation. As recalled in Carla's story **“Trespass,”** the changes they undergo to fit in are not always comfortable:

“[The boys] were disclosing her secret shame, her body was

Changing. The girl she had been back home in Spanish was

Being shed. In her place almost as if the boy's ugly words and

Taunts had the power of spells-was a hairy, breast-budding

Grownup no one would ever love.”

Closely linked to the central conflict revolving around the clash of cultures the family experiences is Papi's and Mami's pursuit of the American dream of success. This pursuit is one of the reason why both understand the need to adapt to their new home. The Garcia family enjoyed the benefits of their upper-class status in Santo Domingo, but when they relocated to the Unites States, they lived in

relative poverty in a poor section of New York City. Their poverty in their early years in America especially embarrasses Papi. His self-confidence and insistence of being treated as head of the family returns, however, when he establishes a successful medical practice in New York. Thus, it is interesting to observe the similarities and differences in class conflict as the Garcia experience them in the United States and in the Dominican Republic. The recollection of their previous socioeconomic standing makes their American transition especially hard. As Sandi recall, her mother says that without their grandfather's help:

“We would have to go on welfare”. Welfare, they knew, was

What people in this county got so they wouldn't turn into

Beggars like those outside La Cathedral back home.”

The Garcia family discovers the opportunity in America to move from one social class to another something that was much more difficult in Santo Domingo. Yet the family is limited by the colour of their skin, which ironically enabled them to achieve a higher status in their homeland. Their skin was lighter than the neighboring Haitians, who were relegated to servant positions. As children, the Garcia girls find themselves picked upon, insulted, and stereotyped because of their accent, their names and their appearance. The woman who lives below them in the city calls them **“spics”** and insists they **“go back to where [they] came from.”** Yolanda's first boyfriend, Rudy, stereotypes her as **“hot-blooded, being Spanish and all,”** and then dumps her when she refuses to sleep with him. At school, Carla and Yolanda feels isolated from their classmates, who tease them about the colour of their skin and their faulty English. After losing Rudy Elmenhurst's affection, Yolanda worries that she will always be different and alone: **“I would never find someone who would understand my peculiar mix of Catholicism and agnosticism, Hispanic and American Styles.”**

As a result of their feeling of difference and alienation, the girls embark on a search for self. As they slowly adapt to their surroundings, they become **“Americanized which angers their father, who wants them to retain their ties to the “old**

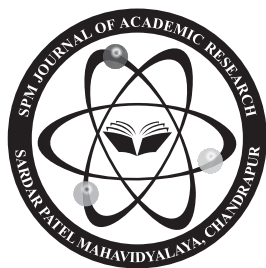
world.” Yet, they do not completely feel at home in America, and this lack of strong sense of self causes cultural conflict. Carla, the eldest believes that by dressing the sisters alike, their mother **“had weakened the four girls' identity differentiation abilities and made them forever unclear about personality boundaries.”**

An example of cultural conflict occurs when Sofia falls in love with a traditionally macho man in Santo Domingo. He believes it is his role to supervise his women, and Sofia allows him to control her every move almost without question. Her sisters, who have at this point become modern American Women, rescue her from what they consider to be unacceptable sexism. Their mother also appreciates the freedom women enjoy in America. She admits that she does not want to move back **“to the old country where..... She was only a wife and mother Better an independent nobody than a high-class houseslave.”** She experiences the conflict of being in between two cultures.

Thus, almost all the members of the Garcia family find themselves in the war-zone of cultural conflict. The novel deals with the experiences of the Garcia Girls, as they leave their native country and resettle in New York City. The narrative's shifting perspective provides only fragments of the girls' experiences as each struggles to assimilate to a new home while being caught up in the resulting clash between Hispanic and American culture. This structure highlights the Garcia girls' inability to discover and maintain a strong identity in either place.

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Bharti Mukherjee's Wife : A Cultural Conflict

Amol J. Kutemate

Dept. of English, Sardar Patel Mahavidyalaya, Chandrapur - 442402

E-mail : amolkutemate@hotmail.com

Abstract:

Bharti mukherjee is one of the major writers of Indian Diaspora. In the context of globalisation her novels are important for immigrant studies. Her novels deal with immigrants' experiences especially of female characters. These characters face social, linguistic, psychological and cultural transformation after immigration. Her characters are caught between two cultures, Indian and American as well as between tradition and pull of modern life. They experience identity crisis out of such complex situations. Out of such crises, they experience fear, insecurity and alienation. The present paper deals with Dimple, the central character in Bharti Mukherjee's novel '*Wife*' and her ultimate psychological impairment due to her failure in adopting new cultural patterns. Dimple is a dreamy and introvert kind of girl in an urban middle class family, lives in Calcutta. After her marriage she migrates with her husband to America, a land of different culture, language, customs and life-style. She is unable to adjust with the cultural changes which she found there. '*Wife*' is not only a novel about immigration but also about cultural and psychological transition which immigration brings out in Dimple. It stimulates negative imagination and forms a conflict in her mind between home and alien culture. Ultimately she murders her husband in a fit of neurotic frenzy. Thus the cultural conflict plays a major role in bringing out the psychic breakdown of an Indian wife in America.

Key Words :

Indian Diaspora, Immigration, Cultural Transition, Cultural Conflict, Psychic Breakdown

Introduction:

“He has lost his own country and has not acquired any other” says Rudyard Kipling. This is the plight of immigrants. People migrate to fulfill their dreams. Once they land on an alien soil they confront new socio-cultural environment. They struggle mutely to survive. They try to adopt new culture, but do not become successful. Their psyche is torn between the old cultural values and the new ones. Finally they develop a split personality which bring out their destruction. Mukherjee deal with this aspect of immigrants through the character of Dimple in her second novel '*Wife*' and effectively portrays the cultural conflict in this novel.

Culture and psyche are related concepts. Every culture has its own revelations in human psyche. The development or destruction of humans depends on the culture in which they exist. It is the culture which imparts an identity to a person. So, when a person shifts from one culture to another he or she faces an identity crisis out of the culture shock which has its deep effects on human psyche.

Indian culture cultivates a feeling among girls that marriage is their way to happiness. Indian parents often give little freedom to their daughters, hence they desire to taste the fruit of freedom through marriage. Dimple Dasgupta, the protagonist of mukherjee's second novel '*Wife*', a girl of middle class Bengali family, is no exception to this attitude. She has colourful dreams about marriage: “Marriage would bring her freedom, cocktail parties on carpeted lawns, fund raising dinners for notable charities. Marriage would bring her love.” (Wife,3) It is quite natural for an Indian girl to have some beautiful dreams about her life partner. Dimple was waiting eagerly for her would be husband, a neurosurgeon, to “have a different kind of life-an apartment in Chowringhee, her hair done by Chinese girls, trips to New Market for nylon sarees.” (03) Her father found an engineer as his son-in-law. Though she was not happy with this, she accepted it passively as the father's decision is supreme in any traditional Indian family. It shows that the cultural impact proves to be a major factor on psychology of Indian girls while taking decisions about marriage.

Dimple is an imaginative girl. Her marriage with Amit Basu, an ambitious mechanical engineer

who is about to migrate to the United States for better career opportunities gives Dimple a chance to revive those imaginings which she had for neurosurgeon. But Amit's delay in getting a job abroad frustrates her. Moreover the atmosphere of her new house disgusts her. The first thing that disgusts her is the change of her name. Amit changes her name from Dimple to Nandini as her mother-in-law wishes him to do so. The second thing is with the apartment where she lives with her husband. “The apartment is h-o-r-i-d....” in her words. (Wife,18) She is not even happy with the curtains in her bedroom. She thinks she does not have enough freedom to choose her bedroom colours as of the married girls do after their marriages. Her husband has a joint family. She lives with her husband, mother-in-law and a brother-in-law. She was not habituated to live in a joint family. She is not aware of adjustments, a daughter-in-law has to make while living in a joint family. Her stay with Amit's family makes her realise the cultural difference between the single family and the joint family. She had thought of marriage as freedom and love before her marriage with Amit Basu. She feels now that her dreams are shattered. She blamed her parents. Now America was the only alternative for her to fulfill her dreams.

After marriage, Dimple has a routine life of an Indian wife. She is not able to do those things which she had aspired before marriage. When she meets with Pixie, her best friend, who is a radio announcer, for the first time after marriage, she becomes jealous with her and her profession: “To Dimple, she seemed a woman from a bright, inaccessible world. She'd been taken on as a part-time announcer for All-India Radio. She worked in sound booths in the day, and attended cocktail parties nearly every night. She was following the top woman interviewer around, out of the Airport VIP lounge, to the openings of films and plays, to charity banquets.” (Wife,37). She thinks: “....how wonderful to be an announcer, even a part-time one, and wear blakish nail polish and lip-stick and talk to million people in the city.... She thought how perfect life would be if she could have a job like Pixie's, and a telephone in her office and hair stayed at Eve's, a boss to frown at her through the glass.” (Wife,37-38) Dimple wants to become like Pixie. “Pixie was a figure in her dream.” (Wife,39) She knows that she can not fulfill her aspirations of freedom in life while living in Calcutta. So, she is eager to go to America to fulfill her

dreams. The basic problem with Dimple is the lack of adjustment in new situations. She had some prior imagination about marriage, husband, love, new home, America etc. and formed her own world of fancy in order to live in it. But the reality was different and when she faced it, she couldn't deal with it. This has become a habit with her and the climax of it, is the murder of her husband by her.

India is a country known for its rich culture. To preserve this ,parents have to cultivate Indian values in their children. Since women play a significant role in the family life and in the preservation of traditions, parents ought to make their daughters aware of the various roles that they have to perform in the institution of marriage. While some parents are keen on this, others ignore this aspect. The result is that the girls develop false concept of love, life and freedom. Such is the case with Dimple.

Married life elevates the status of women to motherhood. It is a stage in life which uplifts women to exaltation. Dimple who is never taught the significance of married life and motherhood reacts contrary to this view. She feels motherhood will rob her of the pleasures of leading a cosy life in America. Hence she thinks: "...of the baby as unfinished business. It cluttered up the preparation for going abroad. She did not want to carry any relics from her old life; given another chance she could be a more exciting person...."(42) Hence she violently aborts her baby: "She had skipped rope until legs grew numb and her stomach burned ;then she had poured water from the heavy bucket over her head, shoulders, over the tight little curve of her stomach. She had poured until the last of blood washed of her legs; then she had collapsed."(42) This cruel action shows how the dream of migration brings out the moral degradation of Dimple even before her arrival in America. In this connection Rosanne Klass comments: "For an Indian wife childlessness is a disaster, pregnancy the achievement that seals her status. To overturn such ingrained values would involve a major emotional upheaval; yet Dimple acts on the vaguest and most defined impulses, and thinks more about it."(Klass,88) Thus with a confused state of mind, Dimple arrives on the land of promise with her dreams and aspirations. In spite of possessing adventurous spirit, Dimple gets baffled by exposure to American culture.

Mukherjee presents Indian Americans and Americanised Indians in this novel to explain cross-culturalism. The former is represented by Sens, Mehras, Khannas and Bhattacharyas and the latter by Mullicks. The Indian Americans care for their Indianness. For example, Sens create an Indian aura in their apartment with a framed batic wall hanging with a picture of king Ram and his court. Indian Americans are conscious of their Indianism, whereas Americanised Indians care for their oneness with the alien culture. Ina Mullick represents their attitude by wearing "pants and mascara" and is "more American than Americans".(Wife,68) She smokes, drinks, flirts and goes to night clubs. Though the Sens warns Amit against the evil influence of Ina on Dimple, a woman with illusion about American life, falls an easy victim to Ina's mysterious charm. Indeed Dimple is left in a state of confusion and disillusionment at the end of the novel.

Dimple feels that she can no longer be happy in playing the role of a wife to Amit. She is disillusioned about the marriage. She realizes that her marriage is failure: "She was bitter that marriage has betrayed her, had not provided all the glittery things she had imagined, had not brought her cocktails under canopied skies and 3 A.M.drives to dinzy restaurants where they sold devine kabbabs rolled in *roti* ." (Wife,102) Dejected Dimple leads a lonely life of assisting Meena Sen, watching T.V.or reading news papers. Through the media she is introduced to violence in America. Added to this, she hears about murder, smuggling in the basement of the buildings etc. Hence, she constantly lives in fear of the unknown.

After getting exposed to the alien culture, Amit and Dimple fail to communicate with each other. This has a significant effect upon their relationship. Dimple feels like basking in Amit's love. In turn, Amit needs Dimple to console him when he is jobless. Both fail to communicate their true feelings for each other, both creates a vacuum for themselves and live within it. This failure in communication develops a breach between the couple which widens day by day and ultimately ruins their relationship. The situation worsens after Amit finds a job. Amit devotes more time to his work in order to retain hard earned job. He fails to understand Dimple. He believes that providing material comforts alone will make her happy. The couple moves to Marsha Mukherjee's flat, which is a

well furnished apartment with all sorts of modern appliances. The living condition of the couple improves, yet they feel lonely.

When Dimple's dreamland possess a threat to her very existence, she starts analysing her smooth Calcutta life and the dangerous New York life: "She scared of self-service elevators, of policemen, of gadgets and appliances. She does not want to wear western clothes as she thinks as would be mistakenly taken for a Puerto Rican. She does not want to lose her identity but feels isolated, marginalised." (Choudhury,84)

Dimple is so troubled by this American life that she hurts Amit with a knife when he comes from behind to embrace her. She apologizes to Amit and blames America for making her timid and nervous: "This would not have happened if we had stayed in Calcutta. I was never so nervous back home." (wife,132) Dimple struggles within herself. Asnani's lines clearly show the mental condition of dimple: "Dimple is entrapped in a dilemma of tensions between American culture and society and the traditional constraints surrounding an Indian wife, between a feminist desire to be assertive and independent and the Indian need to submissive and self-effacing." (Asnani,42)

Dimple experiences loneliness at every quarter of her life. To drive away that feeling, she turns to media. T.V. becomes her only companion. Her involvement with the media is so deep that she gets obsessed with words like dark, evil, sinister, gruesome, murder, suicide, mugging etc. She completely trusts the media. Even "...her body seemed curiously alien to her, filled with hate, malice, an insane desire to hurt, yet weightless, almost air borne." (Wife,117) In this regard Choudhary comments on her emptiness: "She is uprooted from her family and her familiar world, and projected into a social vacuum where the media becomes her surrogate community, her global village New York intensifies her frustrations and unhook her further from reality." (Choudhury,84)

Dimple's spirit rebels due to over exposure to the alien culture through the media. To feed her rebelling spirit, she starts socializing with Ina Mullick and Milt Glasser (Ina's American friend), wears Marsha's (Milt Glasser's sister) outfits and goes to the

extent of enjoying the prohibited freedom. She uses Marsha's tinted glasses, because, "...the purple tinted sun glasses are perhaps the most typical index of American culture. For Dimple, they are a disguise, borrowed from the West, just like Marsha's clothes and the apartment in which she is living". (Janet,98) To top it all, she seduces Milt in her own bedroom and hides it from Amit. Dimple's activities are purely an outcome of her attempt to become one with the American culture. Finally she turns into a neurotic. She complains against her life: "Life should have treated her better, should have added and substractsed in different proportions so that she was not left with a chimera....she was furious, desperate; felt sick. It was as if some force was impelling her towards disaster...." (Wife,156)

Amit observes the external changes in Dimple and he relates them to culture shock. He even promises to take her to India. But nothing changes her nature. Influence of the media on Dimple's life takes an ugly turn. She contemplates the murder of her husband: "She would kill Amit and hide his body in the freezer. The extravagance of the scheme delighted her, made her feel very American somehow, almost like a character in a T.V. series." (wife,195) She devises ten different ways to end her life. Dimple becomes Schizophrenic, sees her body and soul apart. She suffers from imaginary illness and develops insomnia. She fails to differentiate between the reel life and the real life. She emotionally brakes down and Amit fails to note that: "He never thought of such things, never thought how hard it was for her to keep quiet and smile though she was falling apart like a old toy...." (Wife,212) In this connection D.Lakshmana rao says in his essay "Bharti Mukherjee's *Wife*: A Paradigm of the Culturally Uprooted": "The latent propensity for violence in her, manifested in her Calcutta days in her killing the rat in her husband's house, and in her skipping rope to kill the foetus in her womb, is brought out and activated under the pressure of new environment....This neurotic obsession with violence is strengthen by its pervasiveness in the new environment."

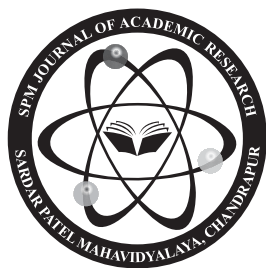
Conclusion:

Dimple would not have undergone such humiliations, had she stayed in India. She would have learnt to reconcile herself to her frustrations. *She*

would not have become murderess as in America where, "talking about murder is like talking about the weather." (*Wife*, 161) Thus Bharti Mukherjee has effectively portrayed the breakdown of an Indian woman's psyche in America and also how the culture shock turns her into a neurotic. In other words, misguided Americanisation brings out the destruction of morality.

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Sudhamurthy : An Infinite Philanthropist

A. Chandramouly

RMG College, Saoli, Dist. Chandrapur

Email : achandramouly@gmail.com

Abstract:

Philanthropy prevails in India since time immemorial. Innumerable philanthropists' stories are come across when one looks into the history of India. Philanthropy is a hobby for someone or a passion for another but it is a profession in the case of Sudhamurthy as she devoted herself from head to toe to the welfare of unprivileged people not only by extending charity but also personally following up the issues till they solved. The attitude of philanthropy is apparently seen in her very appearance, talks, walks, actions, reactions, and in her writing and citing. She is a prolific bilingual writer and as well as a well acclaimed philanthropist. Padmashri Awardees in Philanthropic activities in 2006, Sudhamurthy started Infosys Foundation in 1997 with the sole objective of uplifting the less privileged sections of the society. Her social service span extents in erecting hospitals, orphanages, rehabilitation centers, school buildings, science centres and libraries mainly in rural areas amongst women and children of six states including Karnataka, Tamilnadu, Andra, Orissa, Chandigarh and Maharashtra. Every year she undertakes around 800 villages travelling continuously and donates approximately Rs. 5-6 crore for the betterment of weaker sections of the society. The figures itself exposes the greatness of her charitable work and puts her as the best than the rest.

Key words:

Philanthropy, Prevails, Immemorial, Innumerable, Unprivileged, Uplifting, Orphanages, Rehabilitation, Acclaimed, Prolific, Chunk, Patriotic, Hygiene, Adolescent, Endeavour, *Gamaka*, Dharamshalas, ' Medication, and *Devadasi*.

Introduction:

Dr. Sudha Narayan Murty, acclaimed philanthropist and prolific writer both in Kannada and English, born on August 19, 1950 at Shiggaon in the Haveri District of North Karnataka. She did B.E. in Electrical Engineering from the B.V.B. College of Engineering & Technology, Hubli. She stood first in Karnataka for which she received a gold medal from the Chief Minister of Karnataka. She also completed her M.Tech. in Computer Science in 1974 from the Indian Institute of Science, Bangalore, stood first in her class and received a gold medal from the Indian Institute of Engineers. She was also the first woman engineer to be selected in Telco (now Tata Motors), Pune. Then there she- Sudha Kulkarni- happened to meet with Narayan Murthy and later their friendship ended in marriage in 1978. Even though she started her professional life as an engineer, she later took up teaching as a career, while devoting a significant chunk of her time to social work. She has been the head of the department of Computer Science at the Bangalore University College, and a Visiting Professor at the Post Graduate Center of a reputed college of Bangalore University. Her passion for social causes translated into the creation of the Infosys Foundation in 1997. Ever since its inception, Sudhamurthy has headed the Infosys Foundation with her characteristic commitment and zeal.

Sudha Murty is also a bestselling author, who writes in English and Kannada. Her published works include eight novels, five collections of short stories, four technical books, three travelogues, three children's books and a book on self-experiences. Some of her most popular works include, "How I Taught My Grandmother to Read", "Dollar Bahu", "Mahashweta", "Wise & Otherwise", "Old Man and His God", "Grandma's Bag of Stories," "Magic Drum & Other Favourite Stories" and "The Day I Stopped Drinking Milk".

Sudha Murty's philanthropy and literary achievements have won her recognition at the state, national and international levels. She has been honored with the Padma Shri by the government of India in 2006, the Rajyaprashasti award by the Karnataka government in 2000. She was presented with the Wisdom Star of India Award 2002 and the title 'Seva Ratna' by the Tamil Nadu Governor, P.S.

Ramamohan Rao, for her contribution to computer education, library movement and other spheres of social service. She had also been invited by the United Nations to participate in the U.N. Session on Child Welfare that was held in New York in 2002. She received seven honorary doctorates from the SNDT Women's University, Bombay and the universities of Karnataka, Gulbarga, Chennai, Tirupati, Tumkur, and Kolhapur. The University of California, Berkeley gave her the International and Area Studies Global Leaders Award, while the Book Sellers & Publishers Association of South India, Chennai, recognized her contribution to literature with the R.K. Narayan Award. The Government of Karnataka awarded her the highest literary award the 'Attimabbe Award' –for her literary work for the year 2011-12. She was awarded the Doctorate of Literature from Tumkur University in 2012 for her thesis on "Functional Strategies and Best Practices of Infosys Foundation".

Philanthropic work of Sudhamurthy:

Sudhamurthy, who received Padma Shri award by central government and Seva Ratna award by Tamilnadu government for her social work, started Infosys Foundation in 1997 and since then she fully dedicated herself to charitable work. Now her foundation work is spread in six states: Karnataka, Orissa, Maharashtra, Andhra Pradesh, Tamil Nadu and Chandigarh. Forty percent of her foundation funds are spent in the medical field, 38% towards helping the destitute and the needy, 20% on education and the rest on rehabilitating artisans and craftsmen. Infosys Foundation, under the guidance of Sudhamurthy, take up construction of hospital buildings and health centres with the association of local government bodies. Foundation contractors carry out the entire designing and construction. The service buildings are constructed on government allocated land, and once the structure is ready, they hand it over to the local authorities to run. The foundation even spends Rs. 4-5 crores on a project, which is judged on a case basis. Foundation does not retain any control over the running of the establishment. Trust plays a great part in dealings and, in 85% of the cases, the trust has paid off."

A pet project 'A library for every school' has been most satisfying. She has set up 6500 libraries in schools all over Karnataka. The books are in Kannada

and Sudha has personally supervised the inventory of the libraries ranging from 200 to 2000 books. She has commissioned books by experts on various topics like road safety, patriotic songbooks, hygiene, adolescent issues and problems and Yoga. Many other topics are available in the libraries that help to round off the personality of a child growing up in the rural and often underprivileged sections of society. The success of this endeavour is as high as 98%, with children reading and returning books in good condition. Even the schools have appointed a special teacher to be in charge of the libraries. The whole enterprise has helped to develop a sense of responsibility for borrowing books and reverence for the printed word.

Deserving students are helped to continue their education through need-based scholarships. Infrastructure facilities have been added to many schools, including repairs to existing structures and providing additional classrooms. A unique Science Center has been set up in the Kolar District that is a boon to the whole district. Traditional art and cultural forms have been targeted to revive, restore and promote their lost glory. These forms are also a source of income to the participants. *Gamaka*, an ancient form of music, has benefited from this assistance. Puppet shows and audiocassettes of this art have been distributed free to keep it alive.

The Foundation work in health care includes rehabilitation work and the construction of wards and 'dharamshalas'. The range of work spans leprosy rehabilitation camps in Gulbarga to air-conditioning of the Burns unit in Bangalore; a brain-fever specialty hospital in Bellary to a super-specialty hospital for the poor in Pune; an outpatient department in Aurangabad to an annex in Kanchi cancer hospital; wards in Swami Shivanada Memorial Charitable hospital in Pattamadai, Tamil Nadu, to a cholera hospital in Orissa. The help extends beyond brick and mortar to humanitarian pension schemes for senior citizens, destitute widows and chronically ill patients to help them pay for their medication and daily expenses. The rehabilitation works for the underprivileged extend from orphanages in Tamil Nadu, Orissa, Karnataka and Pune to community spaces for destitute women in Mysore and mentally challenged women in Chennai. *Devadasi* women in Karnataka have received assistance to improve their living conditions.

Rescue and rehabilitation of street children and leprosy-afflicted children is underway. The tremendous diversity of the projects undertaken by the Foundation is not spearheaded by a huge enterprise with swanky office space, interior decoration etc. It is just an office on the third floor of the Infosys building in Bangalore with three trustees, two secretaries and one assistant who acts as a gopher. The employees of Infosys in various cities identify projects and Sudha prepares a report, which is then analysed and implemented. "The help of the Infosys family is tremendous. It creates a greater responsibility and awareness of social issues in these bright and efficient minds and channelises their attention to matters beyond IT and career growth. I think that is important in our country today to work towards overcoming the problems that face us as a nation. These are the projects undertaken under the auspices of the Foundation. Sudha, in her own personal capacity, has helped varied projects covering many bases. The list includes contributions to renovation of temples and schools, prizes and awards to individual achievers in schools and colleges, Heritage renovation projects, construction of public toilets in Bangalore, publication of scholarly books, construction of auditoriums, veterinary hospitals, public libraries and educational establishments in her hometown Hubli and several rural areas.

Conclusion:

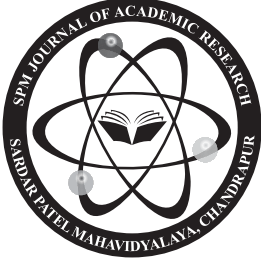
The dictionary defines a philanthropic person "as one who shows generosity towards other people and a sincere wish to help them. Sudhamurthy does not stop the process with a mere allocation of funds for any project. She is there from inception and formulation to completion. She also keeps her fingers firmly on the pulse of the project, monitoring every aspect and stage of development and ensuring that it reaches the intended target. Sudhmurthy travels many miles into the heartland of the country, by any available means of transport to talk to people, to see what they need and to go about delivering it to them. The philanthropy is aimed at people at the grass-root level. For her, every rupee donated should deliver its value to the target beneficiary. It is also a continual process with a multiplier effect triggering a whole value chain touching the last person on the fringes of survival.

The influences of Sudha's father, a doctor and

professor, and her mother have been profound on her. The freedom that they gave her to pursue a technical career and to choose her partner was an affirmation of the confidence and faith that they held in her choices. This has motivated her to work towards a better community based on real time concepts of education, health and creative endeavors.

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स्त्रिवादी साहित्याचे बदलते स्वरूप

पद्मरेखा धनकर - वानखेडे

मराठी विभाग, सरदार पटेल महाविद्यालय, चंद्रपुर

विषयाचा गोषवारा

“स्त्रिवादी साहित्याचे बदलते स्वरूप” विषयाचा आवाका फार मोठा आहे मराठी साहित्यात स्त्रियांनी विपूल लिखाण केलं आहे. परंतु स्त्रियांनी केलेलं सारंच लिखाण म्हणजे स्त्रिवादी साहित्य निश्चितच नाही. १९६० च्या सुमारास इंग्लंड, फ्रान्स, अमेरिका या देशात स्त्रिवादी जाणिवांचा उदय झाला. भारतात स्त्रिवादी चळवळीचा उदय १९७५ च्या महिला वर्षानंतर झाला. आणि स्त्रिविषयक जाणिवांचे पडसाद उमटू लागले. भारतीय समाजमनाने स्वीकारलेल्या स्त्रिच्या दुय्यम स्थानाला फाटा देणारे, स्त्रि - पुरुष संबंधाच्या शोध घेणारे हा पुरुषांच्या विरुद्ध लढा नाही. माणूस म्हणून जगण्याचा अधिकार, स्त्रिचे स्वत्व, अस्तित्व, अस्मिता याचा शोध घेऊन तिच्या आत्मशोधनाचा अविष्कार प्रगट करणारे लिखाण म्हणजे स्त्रिवादी साहित्य आहे. मराठी साहित्याचा अभ्यास करतांना असे दिसून येते की स्त्रि जाणिवांची स्पंदने मराठी साहित्यात मध्ययुगीन काळातच उमटलेली दिसून येतात. इस २०० ते ७०० या कालखंडात संत मुक्ताबाई, जनाबाई, बहिणाबाई, विठाबाई, सोयराबाई, निर्मळा, वेणाबाई अशा अनेक संतकवयित्रींनी स्त्रि जाणिवेसह काव्य लिहिले आहे.

बिजशब्द :

स्त्रिवादी साहित्य, बाल - जठर विवाह, पाल, वेसवा.

प्रस्तावना:-

मध्ययुगीन भारतातील संतांची भक्तिमार्गी चळवळ मुक्ती संकल्पनेला एका वेगळ्या दिशेने नेणारी चळवळ आहे. भौतिक साधनांचा मोह, कामक्रोधादी भावना, विषय विकार, इंद्रियसुख यात अडकून पडलेल्या सर्वसामान्य माणसाला भौतिक सुखाच्या पलिकडचे आत्मसुख प्राप्त करून द्यावे व भौतिक व इंद्रियसुखातून त्याला मुक्ती द्यावी हा संत चळवळीचा मुख्य उद्देश होता. यात पुरुष संतांबरोबर संत स्त्रीया असल्यामुळे ही चळवळ स्त्री - पुरुष एकात्मतेचे व समतेचे प्रतिक आहे.

भक्तीमार्गातून - स्त्रीमुक्ती

मला असं वाटतं आजची स्त्रीमुक्तीची संकल्पना तेंव्हा नव्हती. म्हणूनच आपल्या वेदनेतून स्त्री म्हणून होत असलेल्या अत्याचारातून मुक्ती व्हावी म्हणून संत स्त्रीयांनी भक्तीमार्ग स्वीकारून आपली मुक्ती करवून घेतली. आपले दुःख आपल्या वेदना या स्त्रीयांनी अत्यंत समर्पक मांडल्या आहेत. या मुक्तीच्या मार्गातही स्त्री देहामुळे निर्माण होणारे अडथळे फार मोठे होते. मध्ययुगात स्त्रीला कोणताच अधिकार नव्हता. तिचे सर्वस्व म्हणजे तिचा पती आणि प्रपंच, विवाह बहुदा बालपणीच होत. त्याकाळी बाल - जठर विवाह होत. तीन वर्षांची अजाण बालिका असलेल्या बहिणाबाईचा विवाह तीस वर्षाच्या प्रौढ पुरुषाशी झाला होता. अशा पद्धतीने होणाऱ्या विवाहात त्या मुलीच्या शारीरिक व मानसिक हालाला पारावार राहत नसे. एका अर्थाने अत्यंत अमानुष व विवाह पद्धती विषयी घृणा निर्माण करणारा हा विवाह होय. स्त्री - पुरुष नात्यातली हळूवारता, उत्कटता संपून जाण्यास अशा विवाहात वेळ लागत नसे. विठाबाई या संतकवयित्रीने पतीच्या लैंगिक आक्रमणाचे वर्णन स्पष्ट शब्दात केले आहे. ती म्हणते

“भ्रतार हो मजसी ओढितो एकांती

भोगावे मजसी म्हणूनिया”

ओढोनिया बहूत मारितो मजसी

मध्यरात्री जाणा समयासी”

हा अभंग वाचतांना अंगावर काटा उभा झाल्याशिवाय राहत नाही. तीस - चाळीस वर्षांचा प्रौढ पुरुष व अजाण बालिका वधू यांचा लैंगिक व्यवहार कसा असेल. त्या अजाण बालिकेला कुठल्या

भिषण प्रसंगाला तोंड द्यावे लागत असेल. याची कल्पनाही करवत नाही. वैवाहिक जीवनाच्या दहशतीपेक्षा प्रपंचातूनच मुक्त होण्याचा मार्ग त्या शोधू लागत. लौकिक पतीचा व प्रपंचाचा त्याग करून त्यांनी परमेश्वराशी नाते जोडले. परमेश्वराला आपले सर्वस्व पती, प्रियकर मानले वेळ पडल्यास स्वैरिणी झाल्याचे ही त्यांनी उघड कबुली दिली. त्या लोकनिंदेला समोर गेल्या. बाजारबसवी आहे असे समाजाने म्हटले तरी चालेल पण परत फिरायचे नाही. पंढरीच्या वाटेवर बाजार मांडूनच आपण बसलो आहोत हे संत जनाबाई अत्यंत प्रखरपणे सांगते.

डोईचा पदर आला खांद्यावरी

भरल्या बाजारी जाईन मी ॥

हाती घेईन टाळ खांद्यावरी वीणा

आता मज मना कोण करी? ॥

पंढरीच्या वाटे मांडीयले पाल

मनगटावर तेल घाला तुम्ही ॥

जनी म्हणे देवा, मी झाले वेसवा

रिगाले केशवा, घर तुझे ॥

हा ही स्वत्व शोधण्याचा प्रवासच अशा अनेक संत कवयित्रींनी मांडलेल्या स्त्रीजाणिवा सांगता येतील फक्त स्त्री संतांनी आपली मुक्ती अध्यात्माच्या व भक्तीमार्गाच्या आधारे केलेली दिसते.

यानंतर १८०० ते १९०० या कालखंडाचा विचार केला तर पंडीता रमाबाई, ताराबाई शिंदे, आनंदीबाई जोशी, सावित्रीबाई फुले अशा दमदार स्त्रीयांचा उल्लेख करावा लागेल. १८८२ साली ताराबाई शिंदे यांनी ‘स्त्री - पुरुष तुलना’ हा निबंध लिहून स्त्री व पुरुष यात साहसी कोण याचे विवेचन मांडले आहे. स्त्रीयांच्या परावलंबित्वाचे नेमके दर्शन केवळ ३७ पानांच्या या लेखात घडवून पुरुष प्रधान संस्कृतिला अनेक प्रश्न विचारले आहे. त्या म्हणतात.

“आजपर्यंत बटकीप्रमाणे ताबेदारीत राहून सदासर्वदा नवऱ्याची मर्जी अति नाजूक, ताजव्याचे काठ्यासारखी तोलून, घरातील सर्व मनुष्याचे जे नाही ते सर्व बोलणे व कष्ट सोसून, सदोदित भाड्याचे बैलासारखे राबून,

हरिणसस्यासारखी रात्रंदिवस जनांची, घरच्यांची भीती
बाळगून वागत असतांनाही स्त्रीयांना एक शब्द बोलण्याची
अगर चिमटीभर दाण्याची सत्ता नासावी का रे ?”

या त्यांनी विचारलेल्या प्रश्नातून त्या स्त्रीयांची दुर्दशा तर
मांडतातच पण तिला अभिव्यक्ती स्वातंत्र्य व स्वावलंबनाचा
अधिकार असावा असंही त्या म्हणतात. याच निबंधात वेश्येला
वाईट मार्गाला लावणारे पुरुषच आहेत हे ही खंबीरपणे मांडतांना
म्हणतात.

“आता रांडा कोण ? यांची काही सृष्टी विरहीत उत्पत्ती झाली
का ? का या कोणी दुसऱ्या देवाने केल्या. रांडा या तुम्हीच
फसवून घराबाहेर काढलेल्या स्त्रीयांपैकी स्त्रीया असतात.”

ताराबाईंचा हा निबंध म्हणजे त्याकाळातले मोठे धाडस म्हणावे
लागेल.

सावित्रीबाईंनी स्त्रीयांच्या शिक्षणासाठी केलेलं कार्य आम्ही
जाणतोच. सावित्रीबाईंच्या प्रयत्नामुळेच शैक्षणिक आणि
वैचारिक क्रांती स्त्रीयांपर्यंत पोहचली. एक कवयित्री म्हणून
त्यांच्या काव्याचा अभ्यास करतांना एका कवितेनं माझं लक्ष वेधून
घेतलं.

फुलपाखरू व फुलाची कळी

फार देखणे	फुलपाखरू	
होते सुंदर	छान मजेचे	
सतेज डोळ	पवळे रंगी	
बोलके होते	हसरे त्याचे	
पंख रेशमी	त्यावर गोल	
लहान मोठे	पित रंगाचे	
पाय मोडके	परी भरारी	
बागडणेही	सुंदर त्याचे	॥१॥

त्यास पाहुनि	भूलून गेली	
आतुर होई	कळी फुलांची	
होती कोवळी	भारी सुंदर	
मनाने झाली	प्रमिला त्याची	
आपुलकीने	खुणवी त्याला	
मार्ग प्रतीक्षा	करते त्याची	
ये तू धावत	फुलपाखरा	
मनात चिंती	कळी फुलाची	॥२॥

झेप घेऊनी	फुलपाखरू
तिच्या जवळी	बसे मजेने
भारावलेली	मधूकलिका
ओढून घेई	उत्कटतेने
रूप तियेचे	करी विछिन्न
नकोसे केले	तिजला त्याने
शोषून घेई	मध तियेचा
चिपाड केले	तिला तयाने ॥३॥

चव घेऊनी	करी दूर ती
तीजकडे ते	जरा न पाही
तिला टाकूनी	दुसरीकडे
जावयास त्या	लाजही नाही
कोण कोठली	कळी फुलांची
जुनी विसर	नवीन पाही
रीत जगाची	उत्सृंखल ही
पाहुनिया मी	सिमित होई ॥४॥

स्त्रीयांची होणारी फसवणुक व शारिरिक, मानसिक अत्याचार
सावित्रीबाईंनी प्रखरपणे मांडला आहे.

१९०० व्या शतकापासून आजपर्यंत स्त्रीसाहित्याचा
विचार केला तर स्त्री जाणवा अधिक सकस झाल्याचे दिसते.
कविता, कथा, कादंबरी, आत्मचरित्र अशा विविध साहित्य
प्रकारातून त्या व्यक्त झाल्या आहेत.

काव्य :

लक्ष्मीबाई टिळकांनी ‘भरली घागर’ हा कविता संग्रह
लिहून आधुनिक मराठी स्त्री काव्याला अर्थानं सुरुवात केली
संजीवनी मराठे, पद्मा गोळे, इंदिरा संत, शांता शेळके या
कवयित्रींनी स्त्रीमनाचे विविध पैलू बारकाईने चित्रित केले. स्त्री
म्हणून स्त्रीला ओळख देण्याचा प्रयत्न केला. पद्मा गोळे आपल्या
कवितेत म्हणतात.

नाही मी हो नुसती नार	पेजेसाठी जी लाचार
शेजेसाठी आसुसणार	नाही मी नुसती मादी
मी माणूस	माणूस आधी

स्त्रीकडे एक स्वतंत्र व्यक्ती ‘माणूस’ म्हणून पाहण्याची गरज त्यांनी
जाणवून दिली. शिरीष पै, अनुराधा पोतदार, प्रभा गणोरकर,

निरजा अरूणा ढेरे यांच्या कवितेत केवळ स्त्रीचे 'घर' हे केंद्रबिंदु न राहता तिचे मन मुक्त होऊ पाहते. गणोरकर विवर्तमध्ये म्हणतात.

मला जराही हात देत नाही घर

माणसातले माणूसपण आटणे मला समजू शकते

पण मला स्वीकारता येत नाही

माझ्या घरानेही माझ्याशी चालवलेला हा असहकार

आसावरी काकडे, कविता महाजन, प्रज्ञा लोखंडे अशा अनेक कवयित्रींनी बदलत्या वास्तवाचे भान ठेवून लिखाण केले. 'वाळूचा प्रियकर' या मल्लीका अमरशेख यांच्या संग्रहातून पुरुषकेंद्री समाजव्यवस्थेला धडक देण्याचा आत्मविश्वास दिसतो.

निष्कर्ष

स्त्री कथा विचार केला तर कमलाबाई टिळक, विभावरी शिरूरकर, कुसुमावती देशपांडे यांचे नाव प्रथम घ्यावे लागेल. विभावरी शिरूरकरांनी 'कळ्यांचे निश्वास' या कथासंग्रहात त्यावेळेसच्या एका वेगळ्याच स्त्री वेदनेला वाचा फोडली. त्याकाळात विशिष्ट ध्येयासाठी अविवाहीत राहणाऱ्या स्त्रीया दिसू लागल्या होत्या. स्त्रीया मिळवल्या झाल्या आणि एक वेगळाच प्रश्न निर्माण झाला मुलगी कमवते म्हणून तिच्या लग्नाबद्दल उदासिन असलेले पालक दिसू लागले. अशा प्रौढ कुमारिकेच्या मनात निर्माण होणारे प्रश्न, मानसिक ताण 'कळ्यांचे निश्वास' मधून व्यक्त झाले. त्यांच्या 'हिंदोळ्यांवर, विरलेलं स्वप्न, बळी या कादंबऱ्याही महत्वाच्या ठरल्या. कमल देसाईच्या 'काळा सूर्य' आणि हॅट घालणारी स्त्री या लघुकादंबऱ्या उल्लेखनिय आहेत. 'बायका म्हणजे फक्त गर्भाशय नव्हे त्या माणसं असल्याने आपल्या देहासकट अनेक अनुभवातून जातात. हे कमल देसाईंनी आपल्या साहित्य कृतीतून सांगितले. त्यांची नायिका सामान्य स्त्री असली तरी असमान्याचा ध्यास घेते.

गौरी देशपांडेच्या लिखाणात एकीकडे कौटुंबिकपणा असला तरी प्रस्थापित कुटुंबाला पर्याय वा छेद देण्याचा प्रयत्न दिसतो. निरीश्वरवाद असतो पण त्या स्वच्छ नैतिक भूमिका असते. प्रेम असतं पण ते केवळ लैंगिक नसतं सानिया, प्रिया तेंडुलकर, छाया दातार, मेघना पेठे अशा अनेक लेखिका सांगता येतील. मल्लिका अमरशेख याचं 'मला उद्धवस्त व्हायचंय' हे आत्मचरित्र

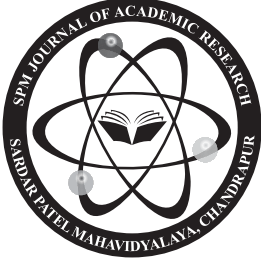
स्त्रीच्या अभिव्यक्तीची वेगळी उंची गाठणारं आहे.

दलित कवयित्रींच्या कविता दुधारी आहेत. दलित म्हणजे पिडीत. दलित म्हणून जीवनात आलेल्या व्यथा वेदना. आणि दुसरीकडे एक स्त्री म्हणून आलेले भोग. त्या व्यक्त करतात. स्त्री जाणवा घेऊन पुरुषांनी लिहिलेलं वाङ्मयही आपण लक्षात घेतलं पाहिजे बाबा पद्मनजी यांची यमुना पर्यटन, ह. ना. आपटे यांची 'पण लक्षात कोण घेतो' या कादंबऱ्या देवलांचं नाटक 'शारदा' शंकर पाटलांची वेना. या वाङ्मयकृतीत पुरुष असूनही स्त्री जाणवा सकस आहेत.

आपल्या समोर फक्त मराठी साहित्याच्या विचार केला आहे. इतर भाषेत स्त्रीवादी साहित्य प्रचंड निर्माण झालं आहे. अमृता प्रितमचा 'चवथा कमरा' प्रतिभा राय या ओडीसी लेखीकेने लिहीलेलं 'पुण्यतोया' उमा दादेगावकरांनी अनुवाद केला आहे.

संदर्भ ग्रंथ

- १) स्त्री विकासाचे नवे क्षितिज - संपादक डॉ. कर्वे स्वाती प्रतिमा प्रकाशन पुणे ३० प्रथमावृत्ती ८ मार्च २००८
- २) स्त्री विकासाच्या पाऊलखुणा - संपादक डॉ. कर्वे स्वाती प्रतिमा प्रकाशन पुणे ३० प्रथमावृत्ती ऑगस्ट २००३
- ३) द सॅकड सेक्स - सिमोन द बोव्हुआर - अनुवाद गोखले करूणा, पद्मगंधा प्रकाशन प्रथमावृत्ती १ मे २०१०



गोंडकालीन जल-व्यवस्थापन

विद्याधर बन्सोड

सहयोगी प्राध्यापक, मराठी विभाग, सरदार पटेल महाविद्यालय, चंद्रपूर

गोषवारा :

चंद्रपूर हे ऐतिहासिक नगर आहे. 'द्वापार युगाचे अंती कुंतलपूरच्या चंद्रहास्य राजाने 'लोकपूर' वर स्वारी करून 'लोकपूर' पादाक्रांत केले. अगदी प्राचीन काळात घनदाट जंगलांनी वेढलेला हा प्रदेश दण्डकारण्य म्हणून ओळखला जात होता. मौर्य, सुंग, सातवाहन, वाकाटक, कोसल, हैहय, चालुक्य, राष्ट्रकुट, यादव, नागवंशियांची या भागावर साम्राज्ये होती. बौद्धांचीही अधिसत्ता या प्रदेशावर बराच काळ होती. चांद्रवंशीय माना राजांचे प्रभुत्व गारद करून गोंडानी या भागावर स्थिर शासन प्रस्थापित केले. भीम बल्लाळशहा हा गोंड राज्याचा संस्थापक. तो आदिलाबाद येथील आत्राम घराण्यातील होता. त्याने शिरपूर गादीची स्थापना केली. गोंडवंशातील दहावा राजा खांडक्या बल्लाळशहा याने इ.स. १४७२ मध्ये चंद्रपूर शहराभोवती परकोट बांधायला सुरूवात केली. बल्लाळशहाचा कर्तबगार मुलगा हीरशहाने शेतीच्या जल व्यवस्थापनाचा पाया घातला. बालेकिल्ल्याच्या कोपऱ्यावर त्याने 'कोनेरी तलाव' बांधला. हीरशहाच्या प्रयत्नांमुळे सतरा जमिनदात्या स्थापन झाल्या. तलाव निर्मितीची 'तुकूम पध्दती' त्याने अस्तित्वात आणली. तलाव बांधणीची 'मूळखांड पध्दती' कार्यान्वित केली. खांडक्या बल्लाळशहाने पिण्याच्या पाण्याच्या विस्तारासाठी १५८ एकर जागेत पाया रचला. रामशहाने ते पूर्ण केले म्हणून 'रामाळा तलाव' नाव पडले. पिण्याच्या पाण्यासाठी मोक्याच्या ठिकाणी 'हतनी' बांधल्या. राणी हिराईने घोडयांना पाणी पिण्यासाठी 'घोडतळे' बांधले. तो आजचा घुटकाला. अनेक तलाव व कधीही न आटणाऱ्या पायऱ्याच्या विहिरी गोंडराजांनी तयार केल्या.

बीज शब्द :

लोकपूर, इंदुपूर, चंद्रपूर, गोंडराजा भीम बल्लाळशहा, हीरशहा, रामशहा, राणी हिराई, तुकूम, मूळखांड, रामाळा, कोनेरी, हतनी

चंद्रपूर हे ऐतिहासिक नगर आहे. आपण चंद्रपूर शहरात प्रवेश करणार तेव्हा चंद्रपूरच्या किल्लास्वरूप परकोटाचे दर्शन आपणास घडेल. आपल्या मनात प्रश्न निर्माण होईल की शहराभोवतीचा हा परकोट कोणी बांधला? इथे कोणत्या राजांनी राज्य केले? या लेखाच्या शीर्षकाकडे नजर घातली तर शीर्षकच सांगेल की इथे गोंड राजांनी राज्य केले. त्या राज्यात शेतीसाठी व जनतेच्या गरजांसाठी त्यांनी पाण्याचे व्यवस्थापन कसे केले असेल? त्या प्रश्नांची उत्तरे आपणास या लेखात मिळतील. तत्पूर्वी इथल्या राजांचा इतिहास संक्षिप्तपणे आपण पाहू या.

‘द्रापार युगाचे अंती कुंतलपुरच्या चंद्रहास्य राजाने ‘लोकपूर’ वर स्वारी करून ‘लोकपूर’ पादाक्रांत केले. झरपट-ईरईच्या सुंदर व रमणीय प्रदेशाने त्याचे चित्त आकर्षित होऊन पुढे हीच त्याने आपली राजधानी केली.’^१ अगदी प्राचीन काळातील घनदाट जंगलानी वेढलेला हा प्रदेश दण्डकारण्य म्हणून ओळखला जात होता. पूर्वी चंद्रपूर-गडचिरोली जिल्हा एकत्रच होता. ह्या परिसरात मोठया प्रमाणात डोंगराळ भाग असून जंगलाने व्याप्त आहे. ‘चंद्रपूर जिल्हा आज आहे तसा आकार आणि स्वरूपाने पूर्वी नव्हता. इंग्रजांच्या कब्जात आल्यानंतर त्याला आजचे स्वरूप प्राप्त झाले असेही म्हणता येणार नाही. पुरातन काळापासून परिस्थितीनुसार त्यात बदल होत आला आहे. मौर्य, सुंग, सातवाहन, वाकाटक, कोसल, हैहय, चालुक्य, राष्ट्रकूट, यादव, नागवंशियांची राज्ये आणि साम्राज्ये या विभागावर होती. भद्रावती ही वाकाटकांची राजधानी होती. तिच्या विकासाचा प्रारंभ सातवाहनांच्या काळात झाला. बौद्धांचीही अधिसत्ता या प्रदेशावर बराच काळ राहिली, रमलीही. चांद्रवंशीय माना राजांचे प्रभुत्व गारद करून गोंडांनी या भागावर स्थिर शासन प्रस्थापित केले. चंद्रपूरचे हे राज्य नर्मदेपासून दक्षिणेला गोदावरीपर्यंत आणि गढामंडलापासून पूर्वेला छत्तीसगढ पर्यंत पसरले होते’^२

गोंडजमात व गोंडवन :

‘आपण ज्यांना आदिवासी म्हणतो ते मूळचे येथीलच रहिवासी होत. आदिवासी ही काही अखंड जमात नव्हे. त्यांच्यात सुमारे दोनशे जाती आहेत. सर्वच आदिवासी वन्यधर्मीय असले तरी त्यांच्यात भाषा, पोषाख, चालीरीती, देवधर्म यात बराच फरक आहे. या आदिवासीपैकी गोंड जमात प्रमुख आहे. नर्मदेपासून दक्षिणेस गोदावरीपर्यंत व पूर्वेस छत्तीसगडापासून पश्चिमेस

खानदेशपर्यंतच्या प्रदेशात ते प्रामुख्याने राहतात. सध्या व्यवहारात व कागदोपत्री जरी ह्या जमातीचा ‘गोंड’ असा उल्लेख होत असला तरी ते स्वतःस कोया किंवा कोयतूर (कोयावंशीय) म्हणवून घेतात. त्यांना गोंड हे नाव तेलगू लोकांनी दिले. तेलगू भाषेत कोंडा याचा अर्थ पर्वत पहाड असा होतो. पर्वत-पहाडाच्या आश्रयाने राहणाऱ्या व विशिष्ट वन्यधर्माचे आचरण करणाऱ्या लोकांस तेलगू लोक कोंड म्हणू लागले, त्याचाच अपभ्रंश गोंड असा झाला. गोंड लोकांत राजगोंड, महाराज गोंड, माडिया गोंड, थुकेल गोंड व डोखर गोंड अशा बारा जाती आहेत. त्यापैकी गोंड, राजगोंड, माडिया गोंड व कोरकु गोंड ह्या जातीच दक्षिण गोंडवनात आढळतात. त्यांचा वन्य धर्म आहे व वन्य संस्कृती आहे. गोंड हे पर्वत -पहाड यांनी वेढलेल्या प्रदेशात राहात असत. त्यामुळे ते राहात असलेल्या अरण्यमय प्रदेशास ‘गोंडवन’ असे नाव पडले. गोंडवन म्हणजे गोंड राहात असलेला अरण्यमय प्रदेश होय’^३

चंद्रपूरच्या गोंड राज्याची स्थापना :-

‘भीम बल्लाळशहा हा गोंड राज्याचा संस्थापक व राजवंशाचा मूळपुरुष समजला जातो. हा मोवाड (जि.आदिलाबाद, आंध्रप्रदेश) येथील आत्राम घराण्यातील होता. हा शूर पराक्रमी व महत्वाकांक्षी होता. त्याने शिरपूर (जि.आदिलाबाद, आंध्रप्रदेश) येथे गादीची स्थापना केली’.^४

‘गोंड राजांची वंशावळ अशी - भीमबल्लाळशहा (१२४७-१२७२), खरजा बल्लाळसिंह, हीर सिंह, आदिया बल्लाळसिंह हतलवार सिंह हकेसर सिंह हदिनकरसिंह, रामसिंह, सुरजा बल्लाळसिंह, खांडक्या बल्लाळसिंह (१४७२ ते १४९७) हहीरशहा (१४९७-१५२२), भूमा व लोकबा, कोंडया उर्फ कर्णशहा, बाबाजी बल्लाळशहा, धुंडया रामशहा, कृष्णशहा, बीरशहा (१६९६-१७०४), रामशहा (१७१९-१७३५), निळकंठशहा (१७३५-१७५१)’^५

चंद्रपूरचा परकोट :

‘चंद्रपूर शहराभोवती जो परकोट आहे त्याचा पाया गोंडवंशातील दहावा, पण बल्लाळपूर येथून राज्य करणारा शेवटचा राजा खांडक्या बल्लाळशहा याने इ.स.१४७२ च्या सुमारास चंद्रपूरचा पाया घातला. राजाच्या पदरी तेल ठाकूर नावाचा एक वास्तुशास्त्रज्ञ होता. त्याने नकाशा तयार केला व साडेसात मैल

परिघाची आखणी केली व पायाभरणी केली. खांडक्याच्या मृत्यूनंतर त्याचा मुलगा हीरशहा याने (परकोट उभारणीचे) काम सुरू केले. प्रथम परकोटाच्या चार वेशी उभारल्या. 'हत्तीवर आरूढ असलेला सिंह' हे शौर्याचे प्रतिक राजचिन्ह ठरवून प्रत्येक वेशीच्या बाजूस खोदविले. या शिल्पात सिंहाचे आकारमान हत्तीच्या दुप्पट तरी दिसते'^६

जल -व्यवस्थापन :

गाव किंवा नगर वसवावयाचे असेल तर पाण्याची सोय पाहूनच वसविले जाते. पिण्याचे पाणी, शेतीसाठी पाणी, गुरांसाठी पाणी व बागा तसेच जलक्रीडेसाठी पाणी आवश्यक असते. पाणी म्हणजे जीवन, पाण्याच्या व्यवस्थापनाशिवाय राज्य चालविणे शक्य नाही.

जल -व्यवस्थापनातील हिरा-हीरशहा :-

शेतीचे जल-व्यवस्थापन :

'खांडक्या बल्लाळशहाच्या मृत्यूनंतर त्याचा कर्तबगार मुलगा हीरशहा चंद्रपूरच्या गादीवर बसला. सोळाव्या शतकामध्ये चंद्रपुराहून राज्य करणारा हाच पहिला राजा होय. गादीवर येताच प्रथम त्याने आपल्या वडिलांचे अपुरे राहिलेले काम पूर्ण करण्याचा निश्चय केला आणि तट उभारण्याच्या कामास प्रारंभ केला.

कोनेरी तलाव :

'बालेकिल्ल्याच्या पूर्व बाजूस त्याने राजकुटूंबातील मंडळीची गरज भागावी यासाठी एक छोटा तलाव तयार केला व त्यास घाट व उत्तम फरसबंदी केली. तो ५२५ फुट लांब व २२४ फुट रुंद आहे. त्यात दररोज ताजे व स्वच्छ पाणी भरले जाईल अशी व्यवस्था हीरशहाने केली. बालेकिल्ल्याच्या कोपऱ्यावर हा तलाव बांधला, त्यामुळे त्यास 'कोनेरी तलाव' असे नाव पडले. पाळीवर दगडाच्या एका प्रचंड नंदीची स्थापना केली. अशा रितीने महाल, बालेकिल्ला, हौद व देऊळ बांधून झाल्यावर त्याने मोठया इतमानाने वाडयात प्रवेश केला'^७

जमिनदारी व पाण्याचे व्यवस्थापन :

'हीरशहा हा सुधारणाप्रिय होता. त्याने आपल्या राज्यात क्रांती घडवून आणली व राज्याचे स्वरूप पालटून टाकले. या वेळेपावेतो वैरागडचा सुभा सोडला तर राज्याचा बहुतेक भाग घनदाट व अफाट जंगलाने व्याप्त होता. हीरशहाने आपल्या

राज्यात एक फर्मान असे काढले की जो कोणी जंगल साफ करून वस्ती वसवील त्यास सरदार बनविण्यात येईल व तितक्या भागाची जमिनदारीची सनद देण्यात येईल. दुसरे फर्मान असे काढले की, जो कोणी तलाव बांधेल; त्या तलावाच्या पाण्याने जेवढी जमीन ओलीत करता येईल तितकी जमीन 'खुदकास्त' म्हणून बक्षीस दिली जाईल. सरदारकीचे आमीष व जमिनीचा लोभ या दोन्ही गोष्टीमुळे हा हा म्हणता जंगले साफ होऊन ठिकठिकाणी लोकवस्ती निर्माण झाली. हीरशहाच्या या प्रयत्नामुळे त्यांच्या राज्यात एकूण सतरा जमिनदाऱ्या स्थापन झाल्या. उदा. अहेरी, खुटगांव, गिलगांव, चांडाळा, दुधमाळा, धानोरा, पायमोरांडा देवे, पोटेगांव, मुरूमगांव, सिरसुंडी, रांगी, झाडापापडा, सोनसरी, पानाबारस, औंदी, कोरचा, अंबागड चौकी इ.^८

जमिनदाऱ्या व नवीन तलावांची निर्मिती :-

'जमिनदाऱ्यांची निर्मिती हे गोंड शासनाचे वैशिष्ट्य होय. जमिनदार गोंड शासनाचे सरदार होते. लढाईच्या काळात शासनाला सैन्य पुरवठ्यासह सर्व तऱ्हेची मदत करावयाची आणि शांततेच्या काळात शासनाने त्यांचे मातहत दिलेल्या जमिनीवरील जंगल तोडून त्या लागवडीखाली आणावयाची कामगिरी त्यांचेकडे असे. आपल्या कार्यक्षेत्रात असणाऱ्या विभागातील शांतता आणि सुव्यवस्था ठेवण्याची त्यांची जबाबदारी होती. जमिनदारांच्या कार्यक्षेत्रात दिलेल्या भागांवर त्यांना मालकी हक्क दिले नव्हते'^९ याच काळात जमिनदारानी मालगुजारांनी राजसेने मोठया प्रमाणात तलावांची निर्मिती केली.

तुकूमपध्दती :-

'गोंड शासनात तुकूम पध्दती अंमलात आणून तळे बांधेल त्याला तलावाच्या पाण्याने भिजेल एवढी जमीन बहाल करण्याचे धोरण अंगिकारल्यामुळे चंद्रपूर जिल्हा तळ्यांचा प्रदेश म्हणून ओळखल्या जातो. या पध्दतीला तुकूम पध्दती म्हणतात व ही जमीन धारण करणाऱ्यास तुकूमदार म्हणत असत.

या जिल्ह्यात १२०३८ तळी असून त्यांनी १,७४,४०० एकर जमीन व्यापली आहे. (यात अविभाजित चंद्रपूर जिल्हा अपेक्षित आहे. अर्थात आजचा चंद्रपूर व गडचिरोली जिल्हा मिळून) मोठया कास्तकांरांनी (शेतकऱ्यांनी) आपापली पाण्याची सोय बोडया किंवा तळी बांधून करून घेतली आहे. यासाठी

जिल्ह्यातील पूर्वजांचे तसेच या भागांवर राज्य केलेल्या गोंड शासनाचे आभार मानले तेवढे थोडेच होईल'^{१०} चंद्रपूर, गडचिरोली, भंडारा, गोंदिया हे जिल्हे त्यांच्या कर्तृत्वामुळेच तलावाचे जिल्हे म्हणून ओळखले जातात.

मुळखांड पध्दती :-

‘मुळखांड’ ही तलाव बांधणीतील त्याची (हिरशहाची) कल्पकता आजही वैशिष्ट्यपूर्ण आहे. तलाव हे सामान्यतः उंच भागावर असतात. त्यात जमा होणारे पाणी त्यापेक्षा उंच भागाकडून येऊन जमा होत असते. तलावाच्या पाळीच्या खाली शेतजमीन असते. तलावाची पाळ पूर्ण झाल्यावर, शेतीला पाणी पुरवठा होण्यासाठी पाळीला खांड पाडावी लागते. ज्यातून पाणी खालच्या शेतीकडे वळवता येते. तळ्याखालील जमीन वाहितीखाली (लागवडीकरिता) आणण्याबरोबरच तिच्या पाणी पुरवठ्याची विकास व्यवस्थाही जमीन करणारांकडूनच करवून घेणाऱ्या गोंड शासकाची कल्पकता आजच्या नियोजनातही मार्गदर्शक आहे'^{११} यात राजाची अर्थनियोजनातील व विकास योजनेतील दूरदृष्टी दिसून येते.

नगरवासियांसाठी जल-व्यवस्थापन :-

रामाळा तलाव :-

पंधराव्या शतकात राजा खांडक्या बल्लाळशहाने चंद्रपूरच्या तटाचा पाया घातला व राजधानी वसविली. त्याचवेळी त्याने शहराच्या ईशान्येस सुमारे १५८ एकर जागेत पिण्याच्या पाण्याच्या सोयीसाठी व निस्तारासाठी तलाव बांधला.

पुढे त्याच तलावातून जाणारा लोंढा (पाण्याचा लोट) अडवून एक लहान तलाव तयार करण्यात आला त्याचे नांव ‘लेंडी तलाव’ अर्थात लोंढा अडवून तयार केलेला तलाव असे पडले. रामशहाने रामाळा तलावाची डागडुजी (दुरूस्ती) केली. दगडी फरसबंदी करून घाट बांधले. तळ्याच्या उत्तरेस मूलकडे जाणाऱ्या रस्त्यावर मातीची पाळ घातली व त्यास आपल्या नावावरून ‘रामाळा तलाव’ असे नाव दिले'^{१२} हा तलाव त्याने बगड खिडकी व जटपुरा दरवाजा यामध्ये किल्ल्यास लागून बांधला.

रामाळा तलावातून नगरास पाणीपुरवठा :-

‘रामाळा तलावातून पूर्ण शहरात पाणी पुरवठ्याची सोय

त्याने (रामशहाने) केली. गावात पाणी नेण्याकरिता मातीच्या भाजलेल्या मोठ्या आकाराच्या पाईप लाईनची योजना केली. पाण्याच्या साठ्यासाठी गावात मौक्याच्या ठिकाणी त्याने ‘हतनी’ बांधल्या. ह्या ‘हतनी’ अजूनही दिसून येतात. तसेच गावात मौक्याच्या जागी भव्य विहीरी बांधल्या'^{१३}

हतनी जमिनीपासून दहा फुट उंच आहेत. दगडांचे मजबूत बांधकाम आहे. विहीरीएवढा गोल आकार पायाजवळ दिसून येतो. कचरा किंवा कोणतीही घाण जाऊ नये याची अप्रतिम व्यवस्था त्यात आहे. अजूनही अनेक ‘हतनी’ चंद्रपूर शहरात चांगल्या स्थितीत आहेत. तेरा ‘हतनी’ त्यांच्या अवशेषासह आजही दिसून येतात. दहा ‘हतनी’ रामाळा तलावापासून राजवाड्यापर्यंत सरळ रेषेत आहेत. चांगल्या स्थितीत असणाऱ्या ‘हतनी’ खालील ठिकाणी आढळून येतात.

पहिली :- रामाळा तलावाच्या पाळीच्या दक्षिणेस सारडा यांचे घराजवळ

दुसरी :- भानापेट वार्डात श्री महादेव पिंपरीकर यांच्या घराच्या पूर्व दिशेस

तिसरी :- रघुवीर बालक मंदिराच्या पश्चिमेस

चवथी :- अचंलेश्वर वार्डात श्री दंतुलवार निवासाच्या उत्तरेस मोकळ्या जागेत रोडच्या पूर्वेस

पाचवी :- कस्तुरबा प्राथमिक शाळेच्या आणि जेलच्या (राजवाड्याच्या) वाल कंपाऊंडला लागून होती, ती सध्या नामशेष झाली आहे.

सहावी :- सोमेश्वर मंदिराच्या जवळ

आठवी :- श्री ईश्वर सुरबाजी घडसे यांचे घराला लागून

नववी :- दादमहाल वार्डात आहे.

दहावी :- कस्तुरबा चौकाच्या दक्षिणेस आणि राजवाड्याच्या पश्चिम उत्तर दिशेस दादमहाल रोडवर आहे.

अकरावी :- ही हतनी गोल बाजारातील श्री पोटदुखे तेलघाणीच्या दक्षिणेस थोड्याच अंतरावर आहे.

बारावी :- हतनी गोल बाजारातून कांजीकडे, कहाळे फटाका सेंटरच्या जवळ आहे.

तेरावी :- ही हतनी ही चंद्रपूर शहराच्या मध्यभागी बसून संत

गुलाबदास मठासमोर श्री.बोहरा समाजाच्या एका व्यक्तीच्या घराच्या आवारात आहे. याच हतनीला तांब्याचे पाईप असून ते आज मौल्यवान किमतीचे आहेत. यावरून असे सिद्ध करण्यास वाव आहे की, प्रत्येक हतनीस तांब्याची पाईप असावी' १४ ही सर्व शुध्द पाण्याची अप्रतिम व्यवस्था रामशहाने केली. परंतु लोकांच्या अज्ञानामुळे व पुरातत्व विभागाच्या दूर्लक्षामुळे या हतनी नष्ट होत आहेत.

पायऱ्यांच्या व अन्य विहिरी :-

गोंड राजांनी आपल्या गरीब जनतेसाठी कधीही न आटणाऱ्या भव्य अशा विहिरींचे निर्माण केले. विहिरीत उतरल्यावर खूप दुरवर भुयारी रस्ता असावा असे वाटते. आज पाण्याच्या दुर्भिक्षाच्या काळात या विहिरी शहराला पाणी पुरवठा करू शकतात. जवळपास १५ विहिरी आपणास आजही आढळून येतात. काही चांगल्या अवस्थेत असणाऱ्या विहिरी अशा आहेत.

१. डॉ.सालफळे यांच्या दवाखान्याच्या मागे, हनुमान मंदिराजवळ
२. अंचलेश्वर मंदिराजवळ दोन विहिरी.
३. महाकाली मंदिराच्या परिसरात व भिवापूर रोड महाकाली यात्रेच्या पटांगणात
४. बाबुपेठ रेल्वे फाटकाच्या बाजुला पश्चिमोत्तर
५. चंद्रपूरहून जुनोन्याकडे जाताना, रस्त्याच्या दक्षिणेस
६. सराफा बाजार, कहाळे फाटका सेंटरच्या जवळ,
७. टिळक मैदानात, चांदा प्लास्टिकजवळ,
८. श्रीकृष्ण टॉकीज जवळ
९. अष्टभुजा वार्ड, बायपास रोडला,
१०. मानाटेकडी बुध्द गुहेसमोर पश्चिमेस,
११. रामबागेतील विहीर.
१२. हिंगलाज भवानी मंदिराजवळ
१३. भद्रावती शहरात नाग मंदिराच्या आवारात, एकविरा देवी मंदिर, जटपूरा गेट, छोटा बाजार, कुंभार मोहल्ला, सिटी पोलीस स्टेशन समोर, सोमेश्वर मंदिर तसेच डॉ. आंबेडकर पुतळ्याच्या पाठीमागची विहीर. या विहिरी बुजवल्या गेल्या ही पाण्याची संसाधने पुरुरूपजीवीत करण्याची नितांत गरज आहे.

घुटकाला तलाव :-

'गोंडकालीन एक अविस्मरणीय राणी म्हणजे राणी हिराई. तिने अठराव्या शतकात इ.स.१७०४ ते १७१९ पर्यंत म्हणजे रामशहा सज्जन होईपर्यंत राज्यकारभार चालविला. तिथे शहराच्या वायव्य दिशेला घोडयांना पाणी पिण्यासाठी एक तलाव बांधला. या तलावाच्या जवळच घोडयांचा रिसाला (घोडयांची अश्वशाळा) होता. घोडयांचे हे पाणी पिण्याचे तलाव होते.

त्यावरून त्या तळ्याचे घोडतळे असे नाव पडले. पुढे घोडकतळे व अपभ्रंशाने घुटकाळा झाले'^{१५} आज आवश्यकता संपल्यामुळे संपूर्ण तलावात वस्ती झालेली दिसून येते. परंतु गोंड राजांच्या काळात जनतेला शुध्द पाणी मिळत होते. त्या गोंड राजांबद्दल सर्वांना आदर आहे.

सारांश :-

गोंड राजांमधील चंद्रपूर नगरीची बांधणी करणारा, बल्लारशहावरून राज्य करणारा राजा खांडक्या बल्लाळशहाने रामाळा तलावाची निर्मिती केली. राजा हीरशहाने जमिनदारी व तलाव निर्मितीचे महान कार्य केले. कोनेरी तलावाची निर्मिती केली. तुकूम पध्दतीचा पाया घातला. रामशहाने नगराला पाणी पुरवठ्याची दीर्घकाळ चालणारी सोय केली.

रामाळा तलावाचे पक्के घाट बांधले. राणी हिराईने घुटकाळा तलावाची निर्मिती केली. हे अप्रतिम व दीर्घकाळ टिकणारे जल-नियोजन होते. या सर्वांचा निष्कर्ष काढून असे म्हणता येईल की,

‘खांडक्याने रचिला पाया

हिरे वाढविला वेलू

हिराईने जपलेला

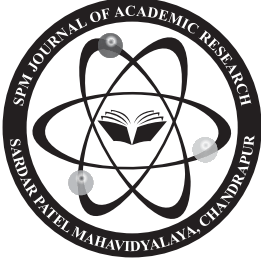
राम झालासे कळस’

फक्त दुःख याचे वाटते की पुरातत्व विभागाने अक्षम्य असे दुर्लक्ष केलेले आहे. ही प्राचीन पायाभूत धरोहर जनतेच्या अज्ञानाने नष्ट होत आहे. या संदर्भात जनतेमध्ये जागृती करण्याची नितांत गरज आहे.

संदर्भ :-

१. काटकर तु. ना. चंद्रपूर नगरपालिका शताब्दी ग्रंथ - १९६७ पृष्ठ ७
२. हूड राजेश्वर हरी- निसर्गाभिषिक्त चंद्रपूर प्र.आ.१९.७.७ पृष्ठ ५
३. राजुरकर अ.ज.- चंद्रपूरचा इतिहास (प्रकाशक हरिवंश प्रकाशन, चंद्रपूर पृष्ठ ९४,९५)
४. उनि - पृष्ठ क्र. १०९
५. उनि- पृष्ठ क्र. ११५

६. राजूरकर अ.ज. चंद्रपूरचा इतिहास, संशोधित द्वितीय आवृत्ती १९८२, महाकाली प्रकाशन नागपूर पृष्ठ १५, १६
७. राजूरकर अ.ज. चंद्रपूर इतिहास हरिवंश प्रकाशन, चंद्रपूर पृष्ठ १३५
८. उनि. - पृष्ठ क्र. १३६
९. हूड राजेश्वर हरी-निसर्गाभिषिक्त चंद्रपूर प्र.आ. १९.७.७ पृष्ठ क्र. २८
१०. हूड राजेश्वर सोनबाजी- 'तहानलेला चंद्रपूर जिल्हा (एक गंभीर समस्या) प्र.आ. १९६८ पृष्ठ क्र. ६६
११. हूड राजेश्वर हरी-निसर्गाभिषिक्त चंद्रपूर-प्र.आ. १९.७.७ पृष्ठ क्र. २८
१२. राजूरकर अ.ज. - 'चंद्रपूरचा इतिहास - संशोधित द्वितीय आवृत्ती १९८२ पृष्ठ २२२
१३. राजूरकर अ.ज. - चंद्रपूरचा इतिहास-संशोधित द्वितीय आवृत्ती महाकाली प्रकाशन, नागपूर पृष्ठ २२२, २२३
१४. जुलमे टी.टी- 'किनारा' साप्ताहिक दि. २८ जुलै २०११ पृष्ठ क्र. ४
१५. राजूरकर अ.ज. - 'चंद्रपूरचा इतिहास' - हरिवंश प्रकाशन, चंद्रपूर पृष्ठ क्र. १९६



आदिवासी साहित्य आणि लोकसंस्कृती : एक दृष्टिक्षेप

मृदुला रायपूरे - जांगडेकर

सहाय्यक प्राध्यापक, मराठी विभाग, डॉ. आंबेडकर महाविद्यालय, चंद्रपूर

E-mail : mrudulajanglekar@gmail.com

गोषवारा :

साठोत्तरी मराठी साहित्याचे एक अपत्य म्हणून आदिवासी साहित्याकडे पाहता येईल. हजारो वर्षे जंगल, दऱ्याखोऱ्या, कडे कपारीत, पशुवत किंबहुना त्याहून निम्न जीवन जगणाऱ्या आदिवासींमध्ये शिक्षणाचे वारे वाहायला लागले. आत्मजाणीव होऊन, शब्दांची साथ करून त्यांनी आपले भावविश्व साहित्याच्या माध्यमातून मांडायला सुरुवात केली. आदिवासी साहित्य हे एका अर्थी लोकसाहित्यच आहे. लोकसंस्कृती ही लोकसाहित्याचा पाया आहे. लोकसंस्कृतीच्या आधारावरच आदिवासी साहित्याची इमारत मजल दरमजल चढत आहे.

बीजसंज्ञा :

आदिवासी, लोकसंस्कृती, आदिवासींचे साहित्य.

प्रस्तावना :

आदिवासी हा एक सर्वसामान्य माणूस. मग त्याला 'आदिवासी' का म्हणायचे ? असा प्रश्न जेव्हा उपस्थित होतो तेव्हा त्यांच्या जीवन जगण्याच्या पध्दती, आनुवांषिकता, त्यांची शरीररचना, त्यांचा मूळ निवास इत्यादी बाबतीत काही खास वैशिष्ट्ये इतर मानवसमुहांहून वेगळी जाणवतात. म्हणून आदिवासी हा नेमका कोण, हे आपण समजावून घेतले पाहिजे.

'आदिवासी' या शब्दाची व्याख्या :-

- १) "आदिवासीपासून आदिवासी भारतीय भूमीचे मूळ भूमिपूत्र आहेत. आदि आणि वास यावरून त्यांना आदिवासी नाव पडले." ^१
- २) "आदिवासी समाज हा एका विशिष्ट भूप्रदेशावर वास्तव्य करणारा, एक समान बोलीभाषा बोलणारा समान सांस्कृतिक जीवन जगणारा पण अक्षर ओळख नसलेल्या स्थानीय गटांचे एकत्रीकरण आहे." ^२
- ३) "आदिवासी हा या भूमीचा 'मूळधनी' व भारतीय गणराज्याचा प्रथम नागरिक आहे." ^३
- ४) "आदिवासी म्हणजे : झाडं, गवत, जंगल, नागडे स्त्री-पुरुष" ^४

ही वाङ्मयीन व्याख्या अधिक बोलकी वाटते. या सर्व व्याख्यांवरून आपल्याला हे दिसून येते की विशिष्ट भूप्रदेशात समुह करून राहणारे, एकसारखी जीवनशैली असणारे, या देशाचे मूळ निवासी म्हणजे 'आदिवासी' होत. अनेक वर्षे प्रगत समाजाशी कुठलाही संबंध न आल्याने आणि जंगल, दान्याखोऱ्यात वास्तव्य करत असताना आपली एक विशिष्ट संस्कृती निर्माण केल्यामुळे आदिम जीवनाची बीजे त्यांच्या संस्कृतीत आजही सापडतात. ह्याच बीजांचा एक अंकुर म्हणजे आदिवासी साहित्य होय.

असा हा बराच काळ उपेक्षित राहिलेला आणि सवंग (आणि बेगडी) प्रसिध्दीच्या नादात बीभत्स चित्रणाला बळी पडलेला आदिवासी समाज नव्याने आपल्या जीवनजाणिवा साहित्यातून मांडू लागला. त्यांच्या जगण्यातली कलात्मकता त्यांनी साहित्यातही ओतली. परिणामी एका वेगळ्याच साहित्यिक अनुभूतीला वाचक सामोरा गेला. आज आदिवासी साहित्याचा

वेगळा विचारमंच तयार झाला आहे. त्या माध्यमातून अनेक आदिवासी साहित्य संमेलनेही झाली आहेत. म्हणजे कलेच्या - साहित्याच्या क्षेत्रात आदिवासी साहित्य प्रस्थापित होत आहे. "साहित्याची चळवळ ही माणसाला स्वत्वाची जाणीव करून देते" ^५ ही बाब आदिवासीबाबत खरी ठरत आहे.

आदिवासींची लोकसंस्कृती आणि साहित्य :-

मानवाला मानवत्व प्रदान करते ती संस्कृती. जगात असा एकही मानवसमूह सापडणार नाही ज्याला संस्कृती नाही. अगदी वैयक्तिक संस्कृतीपासून जगाच्या संस्कृतीपर्यंत आपल्याला या संस्कृतीच्या व्यापकतेचा शोध घेता येईल. आदिवासींची आपली एक संस्कृती आहे जी इतरांच्या संस्कृतीहून पूर्णतः वेगळी आणि वैशिष्ट्यपूर्ण आहे. तिला लोकसंस्कृती म्हणजे अधिक संयुक्तिक ठरेल.

रेडक्लिफ ब्राऊन या युरोपिय अभ्यासकाच्या मते, "आदिमसमूह म्हणजे लोक." ^६ "नागरी संस्कृती, आर्थिक विकास आणि शिक्षण यापासून दूर असलेला आणि स्वतंत्र सांस्कृतिक वैशिष्ट्ये असलेला समूह म्हणजे लोक" ^७ असे जॉर्ज हरझॉक म्हणतो. या दोनही मतांवरून 'लोक' या शब्दाची संकल्पना थेट आदिवासींना जाऊन मिळते. ही बाब अधिक स्पष्ट होण्यासाठी ना. गो. कालेलकरांची व्याख्या आपण पाहू "लोक म्हणजे एका वेगळ्या संस्कृतीचे दर्शन घडविणारा वर्ग, ही संस्कृती स्वाभाविकपणे जगते आणि निसर्गाला अधिक जवळची असते. बाह्य संस्कारापासून अलिप्त राहिल्यामुळे तिच्यात पुरातनत्वाचे निर्भेळ अवशेष अधिक प्रमाणात मिळू शकतात. ही आद्यसंस्कृती नसली तरी तिची जुन्यातजुनी उपलब्ध होणारी अवस्था आहे." ^८ 'लोक' या शब्दाचे सर्व निकष आदिवासींना लागू होतात आणि म्हणूनच लोकसंस्कृतीची व्याख्या करताना रॉबर्ट रेडक्लिफ म्हणतात की, "लहान आकार, एकसंधतेची भावना, स्वयंपूर्णता, आचार - विचारांमध्ये समानता, एकमेकांबद्दल आपुलकी - जिवाळा, वर्तनातील सरळपणा, पारंपरिक आचरणपध्दती, रुढी, समजूती, विश्वास यांची प्रधानता, इच्छा आकांक्षेचा रोखठोक आविष्कार, मंद गतीने परिवर्तनाचा स्विकार आणि एकसुत्र जीवन प्रणाली अशा गोष्टींनी बनलेली संस्कृती म्हणजेच लोकसंस्कृती होय." ^९ ही लोकसंस्कृती आदिवासींमध्ये खोलवर रुजलेली आहे. त्यामुळे तिचे पडसाद त्यांच्या साहित्यावरही दिसून येतात. खरे तर

लोकसंस्कृती हाच आदिवासी साहित्याचा पाया आहे.

आदिवासी लोकसंस्कृतीची काही खास वैशिष्ट्येही आपल्याला जाणवतात. ती म्हणजे यातुविद्या, आदिमता, प्राणीसंस्कृती, अस्सल देशीयता, समताधिष्ठिता, निसर्ग इत्यादी ह्या वैशिष्ट्यांचे अवशेष त्यांच्या साहित्यातून दृगोचर होते आणि म्हणून आदिवासी साहित्य आणि लोकसंस्कृती ह्यांच्या परस्पर बांधणीमुळे आदिवासी साहित्याचा घाट, त्याची मांडणी त्यातील आशय हे सारेच कसे वैशिष्टपूर्ण झाले आहे !

“ माझे शब्द जणू

तीरकामठा

हा वाहणार घामाचे थेंब

दिवसभर केलेल्या कष्टाचा

आरामदायी विश्वास

हे कमरेचे घुंगरु

हे गाण्याचे सूर

ही माझी संस्कृती

हीच माझी आकृती आहे. ”^{१०}

ही खास संस्कृती आदिवासींची ओळख आहे. कष्टमयी, दरिद्री जीवन तरीही निरागसता आणि अधिक हव्यासाची पर्वा नाही. त्यांचे संपूर्ण जीवन निसर्ग आणि प्राण्यांच्यामध्ये गेलेले त्यामुळे त्यांच्या बहुतेक सर्व विधींमध्ये नैसर्गिक नियमच आढळून येतात. म्हणून डॉ. राजेश धनसकर म्हणतात, ” आदर्श प्राणीसंस्कृती आदिवासींमध्ये आहे. ”^{११}

निसर्गाच्या प्रत्येक हालचालींवर आदिवासींचे लक्ष असते. “ती वाणमारी चांदनी पहा उगली आहे पूर्व दिशेला. ती चार पायांची खाट वरल्या डोंगराआड गेली आहे. थोड्या वेळाने उजाडेल.”^{१२} आपल्या आयुष्याची या तारकांशी, निसर्गाशी सांगड घालून जीवनयापन हा आदिवासी हजारों वर्षांपासून करत आहे. “मी जायला राजी आहे. मला पहिलं मागणं मोडायचं नाही. सासुला मी आवडली की नाही ते तीन सांगावं ”^{१३} असे बेधडक बोलून आदिवासी स्त्री आपल्या मर्जीने जोडीदार निवडते.

“ विषमता डाकीने भूईमे गाडु,

समता आहू पोही समता आहू. ”^{१४}

(विषमतेची डाकीण जमिनीत गाडू, समता आणू पोरी समता आणू) असे लग्न सोहळ्यात स्त्रीपुरुष समानतेचे गीत गायिले जाणे हे परमोच्च संस्कृतीचे द्योतक आहे.

आदिवासी साहित्यिकांच्या लिखाणात नैसर्गिक प्रतिमांचाच अधिक भर दिसतो. ‘कधी गाठतील?’ या कवितेत कवी म्हणतात,

“पाखरं सैरावैरा दिशाहीन प्रवासाला

फक्त विजांना मुठीत घेऊन

पुन्हा बी मातीत पेरतील

पावसाचा धावा करतील ”^{१५}

आपल्या प्रत्येक वक्तव्याला हा निसर्ग साक्षीदार आहे, जणू असेच यांना भासवायचे आहे. यातुविद्येचा प्रभाव आदिवासींवर आहे. याचे चित्रण त्यांच्या साहित्यातूनही जाणवते. ‘देव आंग धुवाले नेजच हाओ’ या कवितेत,

“ जसा ढोलावर टाहरा पडतो

दिडजॉंग दिडजॉंग ताल धरतो

माहा आंग सरसरून येते

आन डोकबी झडती देते

तागाच्या सोटयानं.....

माहा आंग मीच बदडून काढतो

रक्ताचे हिरवे निळे व्रण आंगभर माखून घेतो

मोराच्या पंखाचा कुच्च्या फिरवतो

हु.....हु..... म्हणत घुमाले लागतो

येडया वाकडया किल्लान्या देतो

तवा लोक म्हणतात

माहया आंगात मांठा देव आला

लोक अंगारे धुपारे करतात

नवस गाऱ्हाणे मांडतात

कोणी कोंबडयाचा नवस बोलतो

कोणी बोकडयाचा नवस बोलतो. ”^{१६}

हया आदिमतेत अंधश्रद्धा जरी असली तरी त्यामध्ये

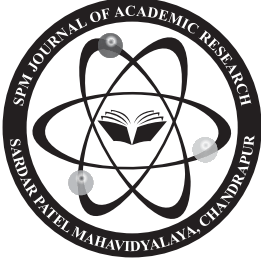
सृजनशीलतेचा भावही दडलेला आहे. पर्यावरण जतनाची भूमिका आदिवासींच्या साहित्यात दिसून येते. जंगल आपली आई आहे. तिचं जतन केलं पाहिजे हा भाव त्यांच्यात आहे. जंगल हेच आपलं जीवन आहे असे समीकरणच त्यांनी करून टाकले. “ त्यांना आपल्या घनदाट जंगलाच्या पलिकडलं काहीच माहीत नव्हतं जंगलात मनसोक्त वावरायचं शिकार करायची. दारू ढोसायची. ढोल ताशे अन् डफडयाच्या तालांवर नाचून आनंद घ्यायचा. तिच त्यांची संस्कृती.”^{१७} हा बेफिकिरपणा जरी त्यांच्या जगण्यात असला तरी एका श्रेष्ठ दर्जाच्या लोकसंस्कृतीशी त्यांची नाळ जुळलेली आहे, याचा प्रत्यय त्यांच्या साहित्यातून जाणवतो.

आदिवासी साहित्यिकांच्या प्रत्येक पानापानातून मानवतेसाठीचा आक्रोश ऐकू येतो. निसर्गवादी, मानवतावादी मूल्ये प्रस्थापित करण्यासाठी, निकराचा लढा देण्यासाठी आदिवासी साहित्य निर्माण होत आहे. म्हणून त्यांच्या प्रत्येक शब्दात आदिवासी लोकसंस्कृतीचे त्यांनी गोडवे गायिले आहेत.

संदर्भ सुची :

- १) वारघडे सुरेशचंद्र, ईशान्य भारतीय आदिवासी, प्रियांका प्रकाशन, पुणे, प्र. आ. पृ.५.
- २) आगलावे डॉ. प्रदीप, आदिवासी समाजाचे समाजशास्त्र, श्री. साईनाथ प्रकाशन, नागपूर, प्र. आ. २००४, पृ २-३, मूळ ग्रंथ - Cultural sociology, Gillin & Gillin, The Mac. millan Co. Ltd. New york, 1950, P – 282.
- ३) तुमराम डॉ. विनायक, आदिवासींच्या धार्मिक अस्मितेचा उदय, संपा. डॉ. संजय लोहकरे, यशोदीप क्रिएशन्स, पुणे, प्र. आ. २०११, पृ. २४.
- ४) राजगडकर प्रभू, निवडुंगाला आलेली फुलं, प्रनील प्रकाशन, चंद्रपूर, प्र. आ. २०१२, पृ. २७
- ५) आदिवासी साहित्य संमेलन अध्यक्षीय भाषणे, संपा. डॉ. गोविंद गारे, सुगावा प्रकाशन, पुणे, प्र. आ. २००५, पृ. ६३.
- ६) लोकजीवन आणि लोकसंस्कृती, संपा. द. ता. भोसले, महाराष्ट्र राज्य साहित्य आणि संस्कृती मंडळ, प्र. आ. २००५, पृ. १२

- ७) तत्रैव, पृ. १२
- ८) तत्रैव, पृ. १३
- ९) तत्रैव, पृ. १५
- १०) आत्राम कविता, काजवा, कविता प्रकाशन, धुळे, पृ. १५
- ११) परिसंवाद - आदिवासी समाजाच्या सर्वांगीण विकासाकरिता एक वैचारिक परिवर्तनवादी चळवळीची गरज, दि. ६ ऑक्टो २०१३, चंद्रपूर.
- १२) गावित नजुबाई, भिवा फरारी, मावळाई प्रकाशन, पुणे, प्र. आ. २००८, पृ. १४
- १३) तत्रैव, पृ. ३९
- १४) तत्रैव पृ. ५७
- १५) मडावी दशरथ, टाहरा, लोकायत प्रकाशन, यवतमाळ, प्र. आ. २०११, पृ. ८
- १६) तत्रैव, पृ. १९
- १७) मडावी बाबाराव, टाहो, मिलिंद प्रकाशन, वर्धा, प्र. आ. २०१०, पृ. १३.



अंतराष्ट्रीय हिन्दी कथा साहित्य

एस. पी. बन्सोड^१, देवेंद्र भगत^२

^१हिन्दी विभाग, सरदार पटेल महाविद्यालय, चंद्रपुर

^२किसनराव खोब्रागडे शिक्षण महाविद्यालय, आरमोरी, जि. गडचिरोली.

गोषवारा :

निष्कर्ष रूप में यह कह सकते हैं कि दलित साहित्य सजीव साहित्य है। इसे और आगे जाना है। इस साहित्यिक धारा ने हिन्दी साहित्य को समृद्ध किया है। दलित उपन्यास साहित्य ने हिन्दी साहित्य को नये अनुभव नई अनुभूति नये शब्द, नये नायक, नई दृष्टि और वेदना - विद्रोह का रसपान कराया है। इन अनुवादित उपन्यासों ने एक नयी रचना प्रक्रिया के दरवाजे सभी के समक्ष खोल कर रख दिए। जिसमे यथार्थ झांकने लगा।

इन अनुवादित उपन्यासों ने दुसरी भाषा की संस्कृति रीति- रूढ़ियों परम्पराओं इन सभी को जन-मानस के सम्मुख रखा।

वैसे भारत जैसे परम्परावादी देश अपने प्राचीन मूल्यों को एकदम नहीं त्याग सकते हैं। धार्मिक और सांस्कृतिक मान्यताओं की प्राचीन परम्परा भी चलती ही रही है। यह उपन्यास इस विचारधारा को लेकर चलते हैं कि मानव में कोई भेद नहीं है और ऐसी विचारधारा का सामुहिक प्रभाव यह हुआ कि जीवन के प्रति दृष्टिकोण परिवर्तित होने लगा। क्योंकि इन उपन्यासकारों ने लोगों को सोचने के लिए मजबूर किया। जिससे सभी मूल्यों का परिक्षण तर्क के आधारपर होने लगा वे मूल्य इन उपन्यासों से टुटने लगे, जो सड़ी-गली परंपराओं से चिपके बैठे थे। एक लोकतांत्रिक स्वर पनपने लगा। इस प्रकार भारतीय सांस्कृतिक जीवन का एक नया धरातल निर्मित हुआ।

साहित्य समाज का दर्पण होता है। सामाजिक, सांस्कृतिक परिवेश, मानवीय जीवन से सम्बन्धित आर्थिक, राजनीतिक,

ऐतिहासिक, भौगोलिक तत्व आदि पहलू साहित्य की हर विद्या में स्पष्ट रूप में प्रतिबिंबित होते हैं। ऐसे सभी पहलुओं के सह भाषाओं के आदान-प्रदान का रूप ही साहित्य को विश्वधरातल पर प्रस्थापित करने का महत्वपूर्ण कार्य करता है। यही कारण है कि वैश्वीकरण के इस युग में एक भाषा का साहित्य उसी भाषा तक सिमित न होकर विश्वव्यापी हो गयी है। क्योंकि साहित्य समाज और संस्कृति का अत्यंत संवेदनशील अंग होता है और समाज की सबसे महत्वपूर्ण इकाई व्यक्ति होता है। व्यक्ति के व्यक्तित्व के विकास में साहित्य अहम् भूमिका अदा करता है और व्यक्तियों के व्यक्तित्व के अनुरूप ही समाज में विभिन्न प्रकार की मान्यताएं, परंपराएं, संस्कार और व्यवहार का जन्म होता है जो समाज की उन्नति या अवनति के लिए जिम्मेदार होता है। दूसरे शब्दों में यह भी कहा जा सकता है कि किसी राष्ट्र का उत्थान पतन उसके समाज पर निर्भर करता है। जिसमें साहित्य महत्वपूर्ण भूमिका अदा करता है। अनेक प्रकार के अंधविश्वासों, रूढ़ियों और दूषित नीतियों परंपराओं के नाम पर समाज के हर स्तर में घुसपैठ करती हुई दिखाई देती है। जिसका कुरूप रूप हमारे सामने आया इसकी वजह से संपूर्ण समाज, जाति, धर्म, वर्ण, क्षेत्र और भाषा आदि स्तरों पर इसका परिणाम हुआ। इसके परिणाम स्वरूप एक बड़ा और महत्वपूर्ण हिस्सा स्वतंत्रता समानता व बंधुता जैसे मानवीय गुणों से वंचित होकर दमन, शोषण और घिनौने उत्पीड़न का शिकार हो गया जिसके कारण उनका शारिरिक, मानसिक व सांस्कृतिक विकास रूक गया। समाज की उपेक्षाओं के कारण कुछ लोगों को पशु से भी बदतर जीवन जीने के लिए विवश होना पड़ता है। समाज को शक्तिहीन, प्रगतिहीन, दिशाहीन व विकलांग बनने से रोकने के लिए सच्चे मानवतावादी साहित्य का उदय होना स्वाभाविक भी था। क्योंकि साहित्य में ही वह शक्ति है तो क्रांति करवा सकती है।

इसी विषय को लेकर अंग्रेजी भाषा में साहित्य रचा गया है। जिसमें प्रमुख है उपन्यासकार मुल्क राज आनंद द्वारा रचित 'अछूत' एवं अरूंधती रॉय द्वारा रचित 'मामुली चिजो का देवता' $\frac{1}{4}$ God of small things $\frac{1}{2}$ ।

साहित्य विद्या में उपन्यास का स्थान महत्वपूर्ण है

कारण यह है कि यह मानव जीवन की अभिव्यक्ति का साधन माना जाता है। मुंशी प्रेमचंद के शब्दों में "उपन्यास को मानव चरित्र का चित्र मात्र मानता हूँ। मानव चरित्र पर प्रकाश डालना और उसके रहस्यों को खोलना ही उपन्यास का मूल तत्व है। वे आगे कहते हैं उपन्यास मनुष्य जीवन का चित्र है, प्रतिबिंब है"।¹ उपन्यास में कथावस्तु, भाषा शैली आदि तत्व गौण है मनुष्य का जीवन महत्वपूर्ण है। मनुष्य का जीवन आज तक विचारों के सामने बड़ी पहेली है। इस पहेली को सुलझाने का कार्य उपन्यासकार कर रहे हैं।

भारतीय समाज में वर्ण व्यवस्था के आधार पर होने वाला भेदभाव न जाने कितने समय से इस देश में एक अभिशाप कि भांति कलंक बना हुआ है। भारतीय भाषा के साहित्य पर भी इस व्यवस्था का असर दिखाई देता है। साथ ही अंग्रेजी भाषा में भी भारतीय साहित्यकारों ने इस समस्या को बखुबी उठाया है। इसी श्रेणी में मुल्क राजा आनंद द्वारा लिखित 'अछूत' एक अहम उपन्यास है। आनंद ने अपने उपन्यास अछूत में समाज के उस घोर यथार्थ का चित्रण किया है। जिसमें तत्कालीन समाज पतनोन्मुख हो रहा था। अछूत उपन्यास का नायक बाखा द्वारा मुल्क राजा आनंद ने समाज के उस घृणित परिवेश को हमारे सामने रखा जिसमें मानवता अपने खण्डित रूप में करुण आर्तनाद कर रही थी। बाखा के माध्यम से लेखक ने सामाजिक उत्पीड़न की पृष्ठ भूमि में उपेक्षित और तिरस्कृत जीवन को प्रखर रूप से उभारा है। बाखा को बिना किसी कारण अपमान और प्रताड़ना सहनी पड़ी क्योंकि वह अछूत था। उसकी परेशानी का कारण उसका अछूत होना ही था।

बाखा के जरिये मुल्क राज आनंद ने संकेत दिये हैं कि आनेवाले पीढ़ी अपने जीवन में कुछ बातों को अपनाकर अपने जीवन को परिवर्तित कर सकती है इस और उपन्यासकार दिशा निर्देश करते हैं। परंतु उनका नायक बाखा परिस्थिति के सामने घुटने टेक देता है।

दलितों को ही केंद्र बनाकर लिखा गया अरूंधती रॉय का God of small things (मामुली चिजों का देवता) में वेलुथा नामक नायक का नया युग उदय होता है।

अरूंधती रॉय के वेलुथा और मुल्क राज आनंद के

बाखा में काफी समानताए है। बाखा कि तरह वेलुथा को भी समाज में अपने अस्तित्व की लड़ाई लडनी थी, उसे भी वही शोषण और उत्पीडन वाला व्यवहार सहना पड़ा। लेकिन बाखा और वेलुथा के चरित्र में मुलभूत अंतर यह था कि वेलुथा बाखा और हिंसा कि ज्वाला नहीं थी। अरुंधती रॉय के इस चरित्र ने कभी भी सामाजिक प्रथाओं को तोड़ने का प्रयास नहीं किया जो सदियों से उनपर अत्याचार करती आयी है। वह एक साधारणसा मासुमसा इंसान था जो जीवन की छोटी-छोटी चिजों को पाने में आनंद अनुभव करता था। शायद उसे गांधीजी के कथनानुसार अपने व्यवहार में अन्यायी लोगों का हृदय परिवर्तन करना था।

वेलुथा के विषय में अरुंधती रॉय कहती है कि उसे मशीनों के विषय मे उतना ही ज्ञान है। जितना एक सवर्ण को हो सकता है। माम्माची हमेशा कहते है कि वह यदि दलित नहीं होता तो आज इंजिनियर, डॉक्टर, वकील, अध्यापक बन सकता है। अगर उसे उचित शिक्षा एवं सुविधाएँ दी जाये। रॉय के उपन्यास के नायक को समाज ने सही सम्मान और अधिकार नहीं दिया किन्तु उसके पास प्रतिभा का कोई अभाव नहीं था। माम्माची ने उसे अपने कारखाने में मशीनों कि देखरेख का काम सौपा तो वहाँ काम करनेवाले उँची जाति के लोगो ने उसकी विरोध किया। इसलिए कि वह अछुत था। उच्च जाति के लोगो के विरोध को देखते हुए माम्माची वेलुथा को अन्य कारीगरों की अपेक्षा वेतन कम देते थे। इस प्रकार जिस मशिनी युग की उम्मीद में बाखा अपने गम भुलता था उस मशिनी युग में रहकर भी वेलुथा को असमानता का अहसास कदम-कदम पर हो रहा था।

इकिस्वी शताब्दी के ये अंग्रेजी उपन्यास आज के युग का वैज्ञानिक, बौद्धिक, भौतिक एवं मानवतावादी धरातल पर चित्रण करते है। मनोवैज्ञानिक दृष्टिकोण विकसित होने के कारण आज मनुष्य की और देखने के दृष्टिकोन में परिवर्तन हो रहा है। नायक की कल्पना में भी अत्यधिक परिवर्तन दिखाई देता है। इन दोनों उपन्यासों के अंतर्गत समाविष्ट उपन्यासो में जिन नायकों का चित्रण किया गया है वे समाज व्दारा तिरस्कृत जनसमुह का प्रतिनिधित्व करते है और यह परिवर्तन का नारा सर्वत्र दिखाई देता है। साधारण मनुष्य की

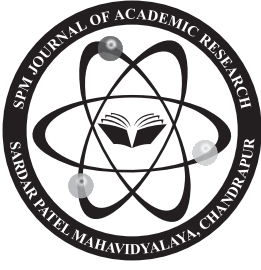
जीवन शैली की असाधारणता आज के साहित्य की प्रधान विशेषता बन गई है। अगर जीवन में भी परिवर्तन हो रहा है तो इसमे कोई आश्चर्य की बात नहीं है कि साहित्य में भी परिवर्तन होगा ही। वर्तमान युग में जीवन को अपनी समस्त विराटता में अभिव्यक्ति देने वाला अगर कोई रूप है तो वह आज का उपन्यास साहित्य ही है।

‘अछुत’ तथा ‘मामूली चिजों का देवता’ ये दोनों उपन्यास भारतीय समाज जीवन को संपूर्ण रूप से चित्रण करते है। चाहे वे सामाजिक, सांस्कृतिक, धार्मिक, राजनैतिक पक्ष ही क्यों न हो संपूर्ण रूप से परिवर्तीत होते दिखाई देते है। इन साहित्यकारों का मानना है कि परिवर्तन जीवन का शाश्वत सिध्दांत है। जीवन बदलता रहता है यह बदलाव हम ग्रहण करते है। असन्तोष की भावना उनमें बलवती है यही कारण है कि भारतीय समाज का निम्न वर्ग शोषक तथा जमीनदारो के साथ ही धार्मिकता के कट्टर समर्थकों की अवज्ञा करता है और तब एक संघर्ष होता है यही बात इन उपन्यासों की कथावस्तु में बताई गई है।

बाखा और वेलुथा इन चरित्रों व्दारा दोनों ही उपन्यासकार दलित समाज के प्रति बनी हुई अवधारणाएँ कितनी संकुचित एवं कठोर है। इसका चित्रण करते है। इसका अंत तभी हो सकता है। जब मानव मानव की भाँति एक दुसरे से व्यवहार करे। अर्थात मानवीय धर्म का पालन करे तभी।

संदर्भ :

1. हिन्दी के महाकाव्यात्मक उपन्यास - डॉ शंकर मुदगल पृष्ठ संख्या - २९ चंद्रलोक प्रकाशन / संस्करण प्रथम १९९२
2. अछूत :- मुल्क राज आनंद
3. मामूली चिजों का देवता ¼God of small things½ अरुंधती रॉय.



दुष्यंत कुमार की ग़ज़लों में निहित प्रमुख प्रवृत्तियाँ

कल्पना सतीश कावळे

हिन्दी विभाग, एफ.ई.एस. गर्ल्स कॉलेज, चंद्रपुर

अन्यायपूर्ण व्यवस्था के खिलाफ़ बागी तेवर अपनानेवाला हिन्दी का यह शायर आज भी प्रासंगिक लगता हैं अपने भीतर की बेचैनी एवं आक्रोश को ग़ज़लों के माध्यम से जनसामान्यतक पहुँचाने वाला यह शायर अमर तो है ही पर खास बात यह है कि वह 'हिन्दी का एक बागी शायर' के रूप में भी सदा याद किया जाएगा। मात्र बावन ग़ज़लों के संकलन में दुष्यंतकुमारजी ने ऐसा करिश्मा कर दिखाया है कि आज भी इस देश के बुद्धिजीवी, लेखक, कवि, शोधकर्ता एवं साधारण पाठक भी दुष्यंत कुमार की ग़ज़लों में छुपी उस दहकती आग को समझना चाहता है।

वास्तविकता यह है कि दुष्यंत की ग़ज़लों में एक जबरदस्त कशिश हो। उनके शेर संजीदा हो दर्द हो मशाल हो अपने समय की दुःस्थिती का वास्तविक वर्णन करना और उसे बदलने का आह्वान करना उन ग़ज़लों का वह गुण है जो हमें मशाल की तरह आलोक फैलाकर सही रास्ते पर आगे बढ़ने में सहायक हो सकती है।

दुष्यन्त कुमार हिन्दी के पहले ऐसे ग़ज़लकार हैं जिन्होंने हिन्दी ग़ज़ल को सन्मानियत के परिवेश से बाहर निकलकर सामान्य आदमी की पीड़ा से जोड़ दिया। स्वतंत्रता के बाद भी सामान्य आदमी की स्थिती में कोई खास परिवर्तन नहीं हुआ उसकी बेचैनी, घुटन, बेकारी तथा विवशता अभी भी वैसी ही बनी है, जैसे पहले थी। समाज एवं शासन की विद्रूपताओं से उन्हें चिढ़ थी। अन्याय एवं अत्याचार के विरुद्ध वे तिलमिला उठते थे। इसी तिलमिलाहट को उन्होंने अपने ग़ज़ल संग्रह 'साये में धूप' के माध्यम से जनसामान्य तक पहुँचाने का सफल प्रयास किया है। अन्याय और अत्याचार को समाप्त करने के लिए वे बगावत

का ऐलान करते हुए नजर आते हैं। उनकी गज़लों की प्रमुख प्रवृत्तियों को संक्षेप में हम नीचे रेखांकित कर रहे हैं।

१) जन सामान्य व्यक्ति की पीड़ा का चित्रण :

दुष्यंत कुमार ने अपनी गज़लों के शेरों के माध्यम से सामान्य व्यक्ति की पीड़ा का भी चित्रण किया है। इस तरह से उन्होंने समाज एवं शासन का ध्यान उसकी पीड़ा की ओर खींचने का प्रयास किया है -

वो आदमी नहीं है, मुकम्मल बयान है,
माथे पे उसके चोट का गहरा निशान है।
वो आदमी मिला था मुझे उसकी बास से,
ऐसा लगा कि वो भी बहुत बेजुबान है।

२) जनसामान्य व्यक्ति की फटेहाल जिन्दगी का चित्रण :

दुष्यंत कुमार आम आदमी की भलाई के पक्ष में थे। अपने सुख की अपेक्षा वे दूसरों के सुख में अपना सुख मानते थे। आजादी मिल गई फिर भी आम-आदमी की स्थिति में कोई खास परिवर्तन नहीं आया। इस बात का उन्हें बहुत दुःख था। 'साये में धूप' की पहली गज़ल का पहला शेर आम आदमी की फटेहाल जिन्दगी की एक तस्वीर पेश करता है-

“न हो कमीज़ तो पेट पाँवों से ढूँक लेंगे
ये लोग कितने मुनासिब हैं, इस सफ़र के लिए।”

आम आदमी की कंगाली पर दुष्यंत कुमार ने एक व्यंग्यपूर्ण शेर पेश किया है -

“कल नुमारश में मिला था, वो चिथड़े पहने हुए
मैंने पूछा नाम तो बोला कि हिन्दुस्तान है।”

३) जनसामान्य व्यक्ति की विवशता का चित्रण :

दुष्यंतकुमारजी ने अपनी गज़लों के माध्यम से जन सामान्य व्यक्ति की विवशता पर भी प्रकाश डाला है।

हमारे हाथ तो काटे गए थे,
हमारे पाँव भी छीले हुए हैं।
मज़ारों से दुवाँ माँगते हो,
अकीदे किस क़दर पाले हुए हैं।

४) भारत के प्रति आदर की भावना :

दुष्यंत कुमार अपने देश से बहुत ही प्यार करते थे। वे इसकी एकता एवं अखण्डता में विश्वास करते थे। उसी के लिए मर-मिटना चाहते थे। इसी आदर की भावना को प्रस्तुत करता हुआ उनका यह शेर देखिए -

जिएँ तो अपने बगीचे में गुलमोहर के तले,
मरें तो गैर की गलियों में गुलमोहर के लिए।

५) प्राचीन परम्पराओं एवं रूढ़ियों के विरुद्ध विद्रोह :

दुष्यन्त कुमारजी की खासियत थी कि वे समय के परिवर्तन के साथ चलते थे। वे प्राचीन सड़ी-गली मान्यताओं एवं रूढ़ियों में विश्वास नहीं करते थे।

पुराने पड़ गए ड, फेंक दो तुम भी,
ये कचरा आज बाहर फेंक दो तुम भी।
लपट आने लगी है अब हवाओं में,
ओसारे और छप्पर फेंक दो तुम भी।
यहाँ मासूम सपने जी नहीं पाते,
इन्हें कुंकुम लगाकर फेंक दो तुम भी।

६) क्रान्ति में विश्वास :

दुष्यन्त कुमार जी क्रान्तिकारी गज़लकार के रूप में ही जाने पहचाने जाते हैं। उनका क्रान्तिकारी बातों में विश्वास था। दुःखों को सहते-सहते बेहाल होना पड़ा। और दुःख सहने की क्षमता नहीं। अब केवल क्रान्ति से ही काम चलाया जाएगा। यही दुष्यंत कुमार का मानना था। उनके कुछ शेरों में उनका यह क्रान्तिकारी गज़लकार ललकारता हुआ नज़र आता है।

हो गयी है पीर पर्वत-सी पिघलनी चाहिए,
इस हिमालय से कोई गंगा निकलनी चाहिए।
आज यह दीवार परदों की तरह हिलने लगी,
शर्त लेकिन थी कि ये बुनियाद हिलनी चाहिए।
पक गई हैं आदतें बातों से सर होंगी नहीं,
कोई हंगामा करो, ऐसे गुज़र होगी नहीं।

७) भ्रष्ट व्यवस्था के विरुद्ध बगावत :

दुष्यंतकुमार भ्रष्ट एवं गलत व्यवस्था के विरोधी थे।

जहाँ-जहाँ इस तरह की व्यवस्था नज़र आती, दुष्यंत कुमार उस पर करारी चोट करते थे। उनके ये दो शेर देखिए :

मेरे सीने में नहीं तो तेरे सीने में सही,

हो कहीं भी आग, लेकिन आग जलनी चाहिए।

केवल हंगामा खड़ा करने से कुछ नहीं होगा। भ्रष्ट-व्यवस्था कों उखाड़ फेंकने में वे विश्वास करते थे। उनका यह शेर बानगी के तौर पर-

सिर्फ हंगामा खड़ा करना मेरा मकसद नहीं,

मेरी कोशिश है कि सूरत बदलनी चाहिए।

दुष्यंत कुमार भ्रष्टाचार एवं कालाबाजारी के सख्त विरोधी थे। भ्रष्टाचार की आलोचना करते हुए उन्होंने यह शेर कहा -

यहाँ तक आते आते सूख जाती हैं कई नदियाँ,

मुझे मालुम है पानी कहाँ ठहरा हुआ होगा।

८) असम्भव को सम्भव बनाना :

दुष्यंत कुमारजी की दृष्टि में कोई भी बात असम्भव नहीं है। आदमी अगर ठान ले तो असम्भव भी सम्भव बन जाता है। यह काम मैं कर नहीं सकता अथवा यह मेरे लिए मुश्किल बात है। ऐसा नहीं समझना चाहिए। दुष्यन्त कुमार का यह शेर उदाहरण बतौर देखिए-

कैसे आकाश में सुराख नहीं हो सकता,

एक पत्थर तो तबीयत से उछालों यारों।

९) आशावादी दृष्टिकोण :

दुष्यंत कुमारजी की खासियत थी कि वे कभी भी निराश नहीं हुए, दुःखी नहीं हुए। हर दुःख और हर मुश्किल को उन्होंने हंसते हुए झेला है। वे आशावादी थे। आशा है तो जीवन है, यही उनका मानना था। उनके ये दो शेर द्रष्टव्य बन पड़े हैं-

इस नदी की धार में ठंडी हवा आती तो है,

नाव जर्जर ही, लहरों से टकराती तो है।

एक चिनगारी कहीं से ढूँढ लाओ दोस्तो,

इस दिये में तेल से भीगी हुई बाती तो है।

एक खँडहर के हृदय-सी, एक जंगली फूल-सी,

आदमी की पीर गुँगी ही ही, गाती तो है।

१०) समाज की बिगड़ी हालत की ओर संकेत :

दुष्यंत कुमार जी ने समाज में रहकर सामान्य व्यक्ति की तरह जीते हुए अपनी खुली आँखों से समाज की बदहाली एवं उसकी बिगड़ती जा रही स्थिति को देखा था। इस स्थिति की ओर वे जनसाधारण का ध्यान खींचना चाहते थे। इसलिए उन्होंने आसपास की खराब हालात पर कुछ शेर कहे हैं-

हालाते जिस्त, सूरते जाँ और भी खराब,

चारों तरफ़ खराब, यहाँ और भी खराब।

मूरत सँवारने में ही बिगड़ती चली गयी,

पहले से हो गया जहाँ और भी खराब।

११) परिवर्तनशीलता में विश्वास :

दुष्यन्त कुमार विश्वास करते थे। कोई भी स्थिति सदा एक जैसी नहीं रहती। परिवर्तन तो प्रकृति का नियम रहा है। इसलिए कभी आदमी को निराश नहीं होना चाहिए। दुष्यंत कुमारजी के ये शेर देखिए :

फिर धीरे-धीरे यहाँ का मौसम बदलने लगा है,

वातावरण सो रहा था अब आँख मलने लगा है।

बातें बहुत हो रहीं हैं, मेरे तुम्हारे विषय में,

जो रास्ते में खड़ा था, पर्वत पिघलने लगा है।

१२) तानाशाही प्रवृत्ति का विरोध :

दुष्यंत कुमारजी ने आपातकाल के दौरान अपनी ग़ज़लों के माध्यम से तानाशाही प्रवृत्ति के खिलाफ़ आवाज़ उठायी। उनका यह शेर देखिए :

यह जुबाँ हम से सी नहीं जाती,

ज़िन्दगी है कि जी नहीं जाती।

१३) मानवता के प्रति प्रतिबद्ध :

दुष्यंत कुमार एक मानवतावादी कवि एवं ग़ज़लकार थे। मूलतः वे एक प्रतिबद्ध रचनाकार रहे हैं। मानवता के प्रति प्रतिबद्धता उनकी ग़ज़लों के कुछ शेरों के माध्यम से भी व्यक्त हुई है। तभी तो वे कहते हैं :

मुझमें रहते हैं करोड़ों लोग चुप कैसे रहें,
हर ग़ज़ल अब सलतनत के नाम एक बयान है।

१४) अंधविश्वास की ओर संकेत :

दुष्यंत कुमारजी ने भाग्यवाद का विरोध किया है। वे 'मानव' में विश्वास करते हैं। ईश्वर पर भी वे विश्वास नहीं करते थे।

हमने तमाम उम्र अकेले सफ़र किया,
हम पर किसी ख़ुदा की इनायत नहीं रही।
ख़ुदा नहीं, न सही आदमी का ख़्वाब सही,
कोई हसीन नज़ारा तो है नज़र के लिए।

१५) जीवन की असलियत का चित्रांकन :

दुष्यंत कुमार ने जीवन की वास्तविकता की ओर हमारा ध्यान खींचा है। आकाश के तारों को देखने के बदले घर के अँधेरे को हटाना होगा। केवल सपनों की दुनिया में उड़ते रहने से कुछ नहीं होगा। दुष्यंत कुमारजी की ग़ज़ल के ये शेर देखिए :

आज सड़कों पर लिखे हैं, सैकड़ों नारे न देख,
घर अँधेरा देख तू, आकाश के तारे न दे।
दिल को बहला ले, इज़ाज़त है, मगर इतना न उड़,
रोज सपने देख, लेकिन इस कदर प्यारे न देख।
अब यकीनन ठोस है, धरती हकीकत की तरह,
यह हकीकत देख, लेकिन ख़ौफ़ के मारे न देख।

१६) स्वत्वहीन व्यक्तित्व पर व्यंग्य :

समाज में जनसाधारण की स्थिति बड़ी विचित्र होती है। साधारण आदमी अपना स्वतंत्र व्यक्तित्व खो चुका है। सत्तालोलुप लोग उसका उपयोग अपने स्वार्थ के लिए कर रहे हैं। उसका अस्तित्व एक 'झुनझुने' के सिवा कुछ नहीं है। दुष्यन्त कुमारजी का यह शेर देखिए :

जिस तरह चाहो बजाओ इस सभा में,
हम नहीं हैं आदमी, हम झुनझुने हैं।
साधारण आदमी स्वार्थी लोगों का शिकार होत जाता है, पर यह बात उसकी समझ में नहीं आती है। तभी तो

दुष्यंतकुमार एक व्यंग्यपूर्ण शेर द्वारा उसे सतर्क कर देते हैं :

तुम्हारे पाँवों के नीचे कोई ज़मीन नहीं,
कमाल ये है कि फिर भी तुम्हें यकीन नहीं।

१७) प्रेमभावना की व्यंजना :

यद्यपि दुष्यन्तकुमारजी की सभी ग़ज़लें आम-आदमी की पीड़ा का बयान लेकर सामने आती हैं फिर भी उनके कुछ शेरों में थोड़ी-सी रूमनियत झलकती है। दुष्यन्त कुमारजी के ये कुछ शेर देखिए जिनमें रूमनियत व्यक्त हुई है :

चाँदनी छत पर चल रही होगी,
अब अकेली टहल रही होगी।
फ़िर मेरा ज़िक्र आ गया होगा,
वो बरफ़-सी पिघल रही होगी।
शहर की भीड़-भाड़ से बच कर,
तू गली से निकल रही होगी।
तुमको निहारता हूँ सुबह से ऋतम्बरा,
अब शाम हो रही है, मगर मन नहीं भरा।
एक जंगल है मेरी आँखों में,
मैं जहाँ राह भूल जाता हूँ
मैं तुझे भुलने की कोशिश में आज कितने पाता हूँ।

१८) तमाशबीन लोगों पर प्रहार :

दुष्यंत कुमारजी बड़ी घृणा थी जो केवल तमाशबीन बनकर बैठ जाते थे। जो अपने स्वार्थ के लिए चुप्पी साधकर बैठ जाते थे, उन पर दुष्यन्त कुमार ने आघात किया है-

यहाँ तो सिर्फ़ गूँगे और बहरे लोग बसते हैं,
ख़ुदा जाने यहाँ पर किस तरह जलसा हुआ होगा।
ग़ज़ब है कि अपनी मौत की आहट नहीं सुनते,
वो सब के सब परीशाँ हैं, वहाँ पर क्या हुआ होगा।

१९) भाग्यवाद के विरोधी :

दुष्यन्त कुमारजी ने भाग्यवाद का विरोध किया है। वे 'मानव' में विश्वास करते हैं। ईश्वर पर भी वे विश्वास नहीं करते थे।

हमने तमाम उम्र अकेले सफर किया,
हम पर किसी खुदा की इनायत नहीं रही।
खुदा नहीं, न सही आदमी का ख्वाब सहीं,
कोई हसीन नज़ारा तो है नज़र के लिए।

२०) विज्ञापनों पर व्यंग्य :

आज का युग तो विज्ञापनों का युग है। हमारी संस्कृति तो अब विज्ञापन-प्रधान हो गयी है। उठते-बैठते, घूमते-फिरते, सोते-जागते केवल विज्ञापन ही विज्ञापन नज़र आते हैं। इन विज्ञापनों पर भी दुष्यंत कुमारजी ने चिंता व्यक्त करते हुए व्यंग्य किया है :

अब किसी को भी नज़र आती नहीं दरार,
घर की हर दीवार पर चिपके हैं इतने इशतहार।

निष्कर्ष :

दुष्यंत कुमारजी की ग़ज़लों में समाविष्ट प्रवृत्तियों का अध्ययन एवं अवलोकन करने पर हम इसी निष्कर्ष पर पहुँचते हैं कि वास्तविकता यह है कि जीवन के विभिन्न अनुभवों का चित्रण करते उनकी ग़ज़लों में एकरसता भी कही नहीं है। विचार और भावना की अतल गहराई से उपजी मनःस्थिति को व्यक्त करती दुष्यन्त की ग़ज़लें आम-आदमी से सदैव जुड़ी रही हैं। अपनी ग़ज़लों के माध्यम से दुष्यंत कुमार जी ने न केवल हमारी सभ्यता के निर्मम पहलुओं को उजागर किया बल्कि समय के अधोपतन और बर्बरता से मुठभेड़ करने में भी उनकी ग़ज़लें जन-जन की ग़ज़लें हैं।

सन्दर्भ :

- १) सायें में धूप - दुष्यंत कुमार, पृ. क्र. १३
- २) सायें में धूप - दुष्यंत कुमार, पृ. क्र. ५७१
- ३) सायें में धूप - दुष्यंत कुमार, पृ. क्र. ५९१
- ४) सायें में धूप - दुष्यंत कुमार, पृ. क्र. १९१
- ५) सायें में धूप - दुष्यंत कुमार, पृ. क्र. १३१
- ६) सायें में धूप - दुष्यंत कुमार, पृ. क्र. १५१
- ७) सायें में धूप - दुष्यंत कुमार, पृ. क्र. ३३
- ८) सायें में धूप - दुष्यंत कुमार, पृ. क्र. ३०१

९) सायें में धूप - दुष्यंत कुमार, पृ. क्र. १५१

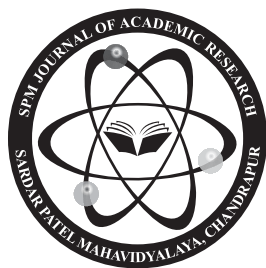
१०) सायें में धूप - दुष्यंत कुमार, पृ. क्र. ५११

११) सायें में धूप - दुष्यंत कुमार, पृ. क्र. ४९१

१२) सायें में धूप - दुष्यंत कुमार, पृ. क्र. १६१

१३) सायें में धूप - दुष्यंत कुमार, पृ. क्र. ४८१

१४) दुष्यन्त कुमार की ग़ज़लों का समीक्षात्मक अध्ययन -
डा. सरदार मुजावर



Spatio-Temporal Variations of Rural and Urban Sex Ratio in Maharashtra : A Geographical Perspectives

A. S. Bhole¹ and J. A. Sheikh²

¹Dept. of Geography, M. J. College, Jalgaon – 425 002

²Centre for Higher Learning & Research in Geography, Sardar Patel Mahavidyalaya, Chandrapur – 442 402

Email : arunbhole12@rediffmail.com

Abstract :

Human resource is one of the important renewable resource in India. Regional disparity in the geographical environment influence the distribution and utilization of human resource in our country. Sex ratio play important role in development of human resource and economic development in various parts of Maharashtra. Today increasing sex ratio in rural as well as urban area of Maharashtra has badly influence socio-economic development. Migration, regional variations of job opportunities, medical development, social tendency has influence to increase the sex ratio in the state.

Introduction :

Sex ratio is one of the important population parameter play important role on population resource. Today females per thousand males are decreasing in various parts of India. In Maharashtra State regional disparity in natural and cultural environment has influence the regional variations of sex ratio. Rural, urban and tribal environment influencing the sex ratio in the state. Increasing sex ratio in various urban and rural area create number of socio-economic problems. In the State in 1991 general sex ratio was 934 females per thousand male population, it declines in 2011 i.e. 925 females per thousand males. In the 25 districts of Maharashtra we can see variations in sex ratio. Ratnagiri, Sindhudurg, Gondia, Satara districts having lower sex ratio. Mumbai suburbs, Thane, Pune districts with very high sex ratio.

Objectives of Study :

- 1) To study spatial and temporal variation of sex ratio in Maharashtra.
- 2) To study rural and urban sex ratio.
- 3) To study causes and consequences of distribution of sex ratio.

Source of Data and Methodology :

In this basic research, investigator has used secondary data of rural and urban sex ratio. District census handbook, general population tables, population data in CD form is intensively utilize to study spatio-temporal variations of sex ratio in the study region. To know the causes for increase the sex ratio and consequences of increasing sex ratio primary data is collected with the help of door to door survey with the help of questionnaire. With the help of simplified examples from rural, urban and tribal area display the causes and consequences of increasing sex ratio.

Regional Disparity in Sex Ratio in Maharashtra :

Maharashtra is one of the developed state

in India. It having variations in natural and cultural environmental factors reflects the availability and utilization of human resource. Some part of Maharashtra having ample human resource with intensive utilization and some part with lower utilization of human resource. Preparation of female per thousand males varies from region to region in Maharashtra. Rural urban and tribal environment reflect the sex ratio in the study region.

Table no. I : Maharashtra State Sex Ratio.
Females per thousand male population

S.N.	Year	Total Sex Ratio	Rural Sex Ratio	Urban Sex Ratio
1	1991	934	972	875
2	2001	922	960	763
3	2011	925	948	799

Source – Census of India

In the Table I we can mark that the population of females per thousand males for the decades 1991 to 2011 has increased from 934 to 925. In 1991 rural sex ratio was 972 and urban was 875. It is increased in 2011 for rural area 948 and for Urban is in increased to 799. There is continuous increase in rural and urban sex ratio in Maharashtra state.

Positive Sex Ratio in Maharashtra :

As seen there are continuous increase in sex ratio in Maharashtra. But in some of the districts of Maharashtra having positive sex ratio.

Table II : Positive Sex Ratio in Maharashtra.
Females per thousand male population

S.N.	District	Total Sex ratio	Rural Sex Ratio	Urban Sex Ratio
1	Ratnagiri	1123	1146	1013
2	Sindhudurg	1136	1046	981
3	Gondia	996	998	984
4	Satara	986	993	955
5	Bhandara	984	984	982

Source – Census of India

Table II shows that the positive sex ratio in some districts of Maharashtra. Sindhudurg district

have positive sex ratio i.e. 1046 rural and 981 urban, while Ratnagiri district with very positive sex ratio i.e. 1123 females per thousand males. In the rural area of this district 1146 sex ratio and 1013 urban sex ratio, such balance sex ratio is also found in Gondia, Satara and Bhandara districts of Maharashtra State.

Negative Sex-Ratio in Maharashtra :

Large number of districts of Maharashtra having negative sex ratio. The proportion of females per thousand males is decreasing day by day.

Table III : Negative Sex-Ratio Maharashtra

S.N.	District	Total Sex ratio	Rural Sex Ratio	Urban Sex Ratio
1	Mumbai	838	..	838
2	Mumbai Suburb	858	..	858
3	Thane	880	954	859
4	Pune	910	927	899
5	Beed	912	909	926

Source – Census of India

Table III shows that some of the districts of Maharashtra state with negative sex ratio. Mumbai and Mumbai Suburb district is totally urbanized district with high sex ratio. i.e. 838 and 858. Thane, Pune, Beed districts also having negative nature of sex ratio. In these districts rural sex ratio is lower than urban sex ratio.

Spatial distribution of Sex Ratio in Maharashtra :

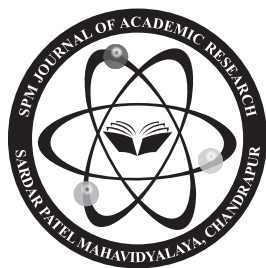
As we noted regional disparity in environment reflect the rural and urban sex ratio in Maharashtra. In the state there are 35 districts with variations in sex ratio. Urbanized districts like Mumbai, Mumbai suburb, Nagpur, Aurangabad, Pune, Nashik, Beed having high sex ratio while rural and tribal districts with lower level of sex ratio. During the survey it has been mark that the proportion of girls per thousand boys in age group 0 to 6 is continuously declining. Day by day rural and urban sex ratio in all the 35 districts of Maharashtra is increasing.

Some Observations and Findings :

- 1) In the Maharashtra State there are continuous increase in sex ratio in all districts of the state.
- 2) There are spatial and temporal variations of sex ratio in Maharashtra.
- 3) Ratnagiri, Sindhudurg, Gondia, Satara, Bhandara districts having positive sex-ratio.
- 4) Mumbai, Mumbai suburbs, Thane, Pune, Beed districts have a negative nature of sex ratio.
- 5) All over Maharashtra rural sex ratio is lower than urban sex ratio.

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Levels of Literacy Structure in Gondia District (M.S.)

Rajani Chaturvedi¹, Mamata Prasad² and Lalitkumar G. Thakur³

Associate Professor, Department of Geography, N. M. D. College, Gondia

Abstract :

In demographic characteristics of population Literacy is one of the important aspects. The degree of education is a good because of progress towards modernization. Literacy not only helps to enhance human resources but also help to control population growth & ultimately projecting towards welfare of the society. According to census of 2011 total population of the District is 1312331 comprising 662524 male and 649807 female. In the District 225100 (17%) population & 1096631 (83%) resides in urban & rural area. Round about 8.55% population added in the last ten years in the total population. As per the census of 2011 the arithmetic density of the population in the District is 234 persons per sq. km. through this figure differ in urban areas i.e. 196 persons per sq.km. in rural area and 407 persons per sq.km. in urban areas. In the last decade the pressure of population on land has been increased as this ratio was 213 persons the figure of density was 188 persons while in urban areas it was 425 persons per sq.km.

Key Words : Literacy, Demography

Introduction :

Literacy is the ability to read and write one's own name and further for knowledge & interest. The inability to do so is called literacy. The United Nations Educational, Scientific & Cultural Organization defines literacy as the "ability to identify, understood, interpret, create, communicate & compute, using printed & written materials associated with varying contexts. Literacy involves a continuum of learning in enabling individuals to achieve their goals, to develop their knowledge potential & to participate fully in their community & wider society.

Literacy is one of the important demographic characteristics of population. The degree of education is a good because of progress towards modernization. Literacy not only helps to enhance human resources but also help to control population growth & ultimately projecting towards welfare of the society.

Literacy totally depends upon the available educational facilities in an area. Education is the significant milestone of economic development & lack of education shows backwardness of a particular region. Economic progress, political awareness, social development & maturity revote around education & training.

Objectives :

- 1) To study spatial pattern of literacy
- 2) To analyze the decadal changes in literacy
- 3) Spatio temporal variation in rural & urban areras
- 4) Spatio temporal variation in male & female
- 5) Appraisal of educational facilities available in the District
- 6) To find out the factors affected to level of literacy

Hypothesis :

Due to variation in rural-urban character & gender discrimination level of literacy varies in the District.

Database & Methodology :

Present study is mainly based on the reliable & accurate census data. It is not possible to conduct individual enumeration of the required data from

secondary data has been collected from-

- A) District census handbook
- B) Other government publications
 - i) Socio-economic review
 - ii) Records of Zila Parishad
 - iii) District statistical abstract

The collected data has been processed and analyzed by using different quantitative, statistical technique. The tabulated data has been presented by cartographic technique. To calculate level of literacy, the formula is as follows:

$$\text{Crude Literacy Rate} = L/P \times K$$

Where, L is the total literate population, P is the total population & K is 100.

To find out the inter censual changes the following formula has been applied.

$$\text{Change of Index} = \frac{CY - BY}{BY} \times 100$$

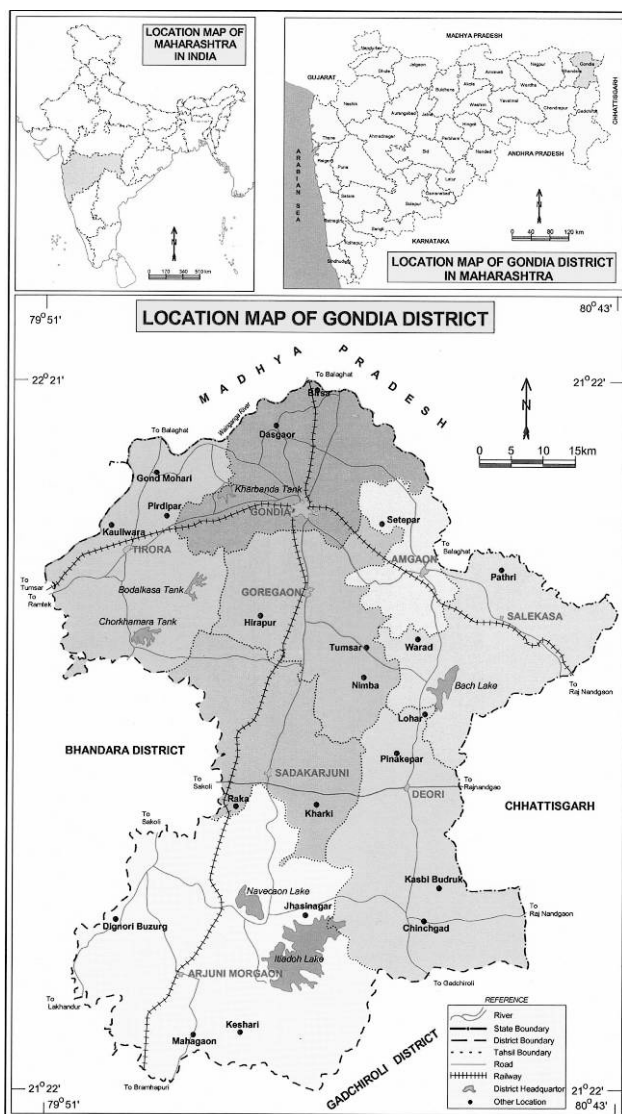
Where, CY is the current year literacy rate, & BY is the base year literacy rate.

Profile of the Gondia District :

Gondia District is the eastern District of Maharashtra comprising eight Tahsils. They are Gondia, Tirora, Amgaon, Goregaon, Salekasa, Sadak Arjuni, Deori and Morgaon Arjuni. The District is located on 20°39' N to 21°38' N and 69°27' E to 80°45' E. The District is reformed in 1st May 1999. It is separated from old Bhandara District.

According to census of 2011 total population of the District is 1312331 comprising 662524 male and 649807 female. In the District 225100 (17%) population & 1096631 (83%) resides in urban & rural area. Round about 8.55% population added in the last ten years in the total population. As per the census of 2011 the arithmetic density of the population in the District is 234 persons per sq. km. through this figure differ in urban areas i.e. 196 persons per sq. km. in rural area and 407 persons per sq. km. in urban areas. In the last decade the pressure of population on land has been increased as this ratio was 213 persons the figure of density was 188 persons while in urban areas it was 425 persons per sq. km.

In the year 2011 the sex ratio in the District is 981 female per 1000 male, though in Goregaon Tahsil this ratio is 1014 female. In the year 2001 the



sex ratio was 1005 female for the District as a whole while 1010 in the rural area & 970 in the urban area. The above distribution reveals that the District is far better than the national average. It is the indicator of increasing literacy level or rate of the District.

In the District the birth rate of the population in the year 2011 was 18.9 and death rate was 14.6 per thousand of population. Out of District total population 167669 (13.97%) population comes under the category of schedule caste & 196445 (16.36%) are scheduled tribe population.

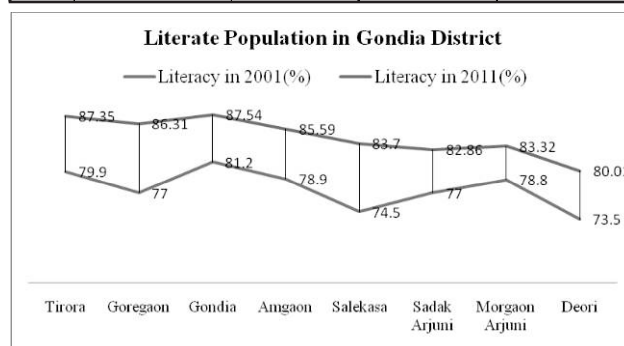
Literacy Structure in Gondia District :

As per the census 2011 the District is highly literate as the ratio of the literate population to total population is 85.41% while it was 78.5% in the year 2001. This change indicates that various measures

have been adopted to increase the literacy level of the District. It is the positive indication that the minimum rate of literate population in the District is not less than 80% & it is maximum counted in Gondia Tahsil where it is 87.54%.

Literate Population in Gondia District

Sr. No.	Tahsils	Literacy in 2001(%)	Literacy in 2011(%)	Change in Literacy (%)
1.	Tirora	79.9	87.35	9.46
2.	Goregaon	77.0	86.31	12.09
3.	Gondia	81.2	87.54	7.80
4.	Amgaon	78.9	85.59	8.47
5.	Salekasa	74.5	83.70	12.34
6.	Sadak Arjuni	77.0	82.86	7.61
7.	Morgaon Arjuni	78.8	83.32	7.09
8.	Deori	73.5	80.01	8.85
	Total	78.5	85.41	8.84



During the last decade the total growth of literate population in the District is 8.84%. The maximum growth has been counted in Salekasa Taluks, which is the most backward & tribal dominant taluka of the District.

Where in the year 2001 74.5% population registered literate. This increased upto 83.70% in the year 2011, that's why the change ratio counted 12.34% in this Tahsil. The second highest growth is counted in the Goregaon Tahsil i.e. 12.09%. the minimum growth counted in the Morgaon Arjuni, where in the year 2001, the ratio of literate population was 78.81% which increased up to 83.32%. the overall growth took place in the Tahsil was 7.09%.

Literacy Differentials in the Gondia District :

One of the most important aspects of literacy differentials in the District relates to male-female gaps in literacy rates. Gender differential in literacy rate is so pervasive that it exist in total population as well as in the rural and urban areas and in different social segments though in varying magnitude.

Out of the District total literate population

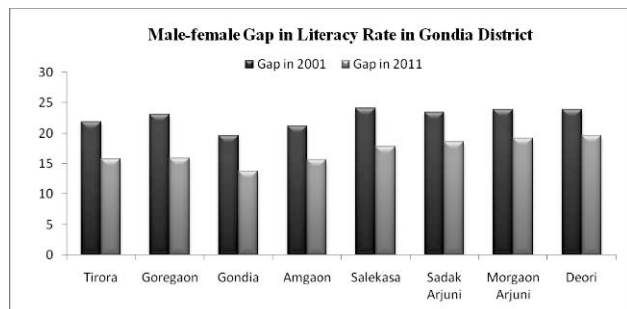
male literacy in the District as per census year 2001 was 89.6% and in the year 2011 it was 93.34% in the District. The District has counted the growth of 4.17% as a whole. The District is classified in the three categories; one in the Tahsils where growth percent is more than 6% i.e. in Salekasa 6.85% and Goregaon 6.26%. Amgaon, Sadak Arjuni and Tirora Tahsils counted growth between 4 to 6% while in the third category Gondia and Arjuni Morgaon counted the growth rate in male literacy below 4%.

Above analysis reveals one of the positive sign i.e. in the Salekasa and Arjuni Morgaon where naxalite movements are biggest problem the increasing percentage of male literacy will the problem.

Referring to the table it can be seen that there has been a wide and increasing trend of female education in the last decade i.e. 2001 and 2011. The 2011 census reveals an overall female literacy rate of 77.30% while it was 69.6% in the census year 2001. In the last decade 14.34% growth has been recorded in female literate population. The District has counted growth rate from 11.97% in Arjuni Morgaon to maximum in Salekasa taluka where it is 19.50%. Second highest growth rate has taken place in Goregaon Tahsil i.e. 19.34% again it is a positive sign to raise the economic and social status of the region.

Male-female Gap in Literacy Rate in Gondia District

Sr. No.	Tahsils	Gap in 2001	Gap in 2011	Change in Gap
1.	Tirora	21.9	15.77	6.13
2.	Goregaon	23.1	15.95	7.15
3.	Gondia	19.6	13.79	5.81
4.	Amgaon	21.2	15.65	5.55
5.	Salekasa	24.1	17.83	6.27
6.	Sadak Arjuni	23.4	18.58	4.82
7.	Morgaon Arjuni	23.9	19.14	4.76
8.	Deori	23.9	19.62	4.28
	Total	22.0	16.24	5.76

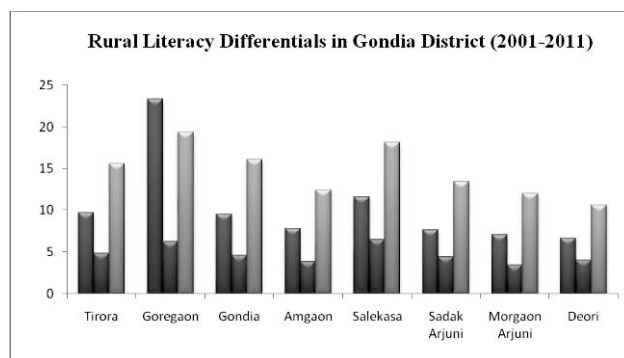


Literacy Differentials of Male & Female in the Gondia District :

One of the most important aspects of literacy differentials in the District relates to male-female gap in literacy rate. Referring back to table it can be seen that there has been a gap of literacy rate between male and female though the decline has been counted from 2001 to 2011. It was 22% aggregate for the District as a whole and 16.24% in the year 2011. The average change in gap counted for the District is 23.3% in Goregaon.

Rural Literacy Differentials in Gondia District (2001-2011) :

	Total Rural	Male Rural	Female Rural
Tirora	90.49	94.80	85.50
Goregaon	89.60	92.81	88.95
Gondia	89.60	92.81	88.95
Amgaon	89.60	92.81	88.95
Salekasa	89.60	92.81	88.95
Sadak Arjuni	89.60	92.81	88.95
Morgaon Arjuni	89.60	92.81	88.95
Deori	89.60	92.81	88.95



Male Rural Literacy in District :

Male rural literacy rate in the District was accounted 88.8% aggregate which were accounted growth of 4.51% and increased upto 92.81% in the census 2011. Maximum male rural literacy counted in the year 2001 was in Tirora 90.49% while lowest in Deori which was 85.5%. In the year 2011 it was again maximum in Tirora where 94.80% out of the total male rural population was literate and minimum was counted again in Deori 88.95%. The growth of male rural literate population in the District in the last decade ranged between 3.47 in Arjuni Morgaon to 6.47 in Salekasa Tahsil.

Female Rural Literacy in District :

In the census year 2001 out of the District total female rural 65.6% were literate and growth of 14.11% were aided in the ratio which reached up to 75.25% with regard to female literacy in the year 2001 Amgaon Tahsil occupied first position in the District having ratio 65.7 ranging upto 61.6% lowest in Deori Tahsil. In the census 2011 it was recorded 78.43 in Tirora and again minimum in Deori 68.14%. Total growth of 14.11% female literacy aided in the District out of which maximum decadal growth accounted in Goregaon 19.34% and lowest in Deori i.e. 10.61%. in the year 2001 the gender wise gap was maximum in Salekasa i.e. 24.1% Deori, Arjuni Morgaon and Goregaon it was about 23% while it was recorded minimum in Gondia Tahsil it was 19.6%. in Gondia Tahsil low differentials may be due to Urban impact.

The 2011 census reveals an overall literacy gap of 16.24% which ranges from maximum 19.62% to minimum 13.79% in Gondia Tahsil.

Table reveals that the gap of Male and Female literacy has been declined all over the District during last decade. The total change accounted was 5.76% and maximum change in gap accounted in Goregaon Tahsil where it is 9.15 while it is minimum change in gap 4.28%. with a decline in the gender gap in literacy rate it may be suggested that literacy transition in the District is fast appearing to the advanced stage.

Literacy Differentials in Rural & Urban Regions:

The 2001 census reveals an overall literacy rate of 77% in rural areas and 89.1 in urban areas. As the District is predominantly rural in nature as out of the total eight Tahsils of the District only two Tahsils i.e. Gondia and Tirora is having urban characteristics. The economy of rural areas is predominantly depends upon primary sector and does not prescribe any formal level of literacy skills for entry into workforce. In the census 2001 of the District the overall rural literacy in the District was 77% and growth of about 9.10 aided in this ratio which reached up to 84.01% in the year 2011. Rural literacy rate is marked with a great amount of regional variation from one part to another. In the year 2001 maximum rural literacy rate accounted in Tirora Tahsil which was 79% and minimum in

Goregaon Tahsil it was 70%. In the 2011 positive growth has been recorded throughout the District which again recorded maximum in Tirora (86.67%) and minimum 78.41 in Deori Tahsil. The growth of rural literacy in various Tahsils during the census 2001 to 2011 ranges from 6.68 in Deori.

In the census year 2001 ratio of urban literate population in the District was 89.1% out of which male urban literate ratio was 82.4%. In Tirora Tahsil out of the total literacy 85.2% urban literacy were recorded. In Gondia 89.8% were urban literate and out of which 95.7% male urban literate and 83.7% female urban literate accounted. In the year 2011 this ratio reached up to 92.7% overall and 97.02% male and 87.20% female urban literacy.

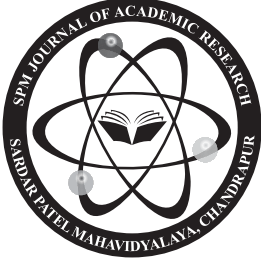
Conclusion :

Above analysis reveals some of the important aspects i.e. overall growth of literate population has been recorded in the District though the growth rate is not very high i.e. only 6.91%.

In comparison to male, female literacy growth is higher and i.e. 14.34% in female and 4.17% in male. It is a positive sign to show the awareness and importance of female education in literacy structure in urban and rural areas also show disparity. In rural areas total growth of literacy accounted 9.10% . Though in urban areas it was comparatively slow i.e. 3% while in rural areas it was 9.10%.

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६. जनसंख्या भूगोल, वसुंधरा प्रकाशन, गोरखपुर
७. सामाजिक आर्थिक समालोचन गोंदिया जिल्हा २००१ व २०११



चंद्रपूरचा गोंड राजा बीरशाहा आणि औरंगजेब संबंध (१६९६ ते १७०४)

गौतम ए. शंभरकर

जनता महाविद्यालय, चंद्रपूर.

Email : dr.gshambharkar@gmail.com

गोषवारा :-

आदिवासी गोंड समाज म्हणजे मागासलेला परंतु जंगलात असलेल्या नदी नाल्यांच्या आश्रयाने दऱ्याखोऱ्यात राहणारा बोलका प्राणी. हा समाज शहरी समाजापासून दूर राहिल्याने त्यांचा विकास होऊ शकला नाही. त्यांचा इतिहासही वंचित राहिला. वन्यसमाज म्हणून गोंड समाजास ओळखले जाते. मोगल, मुसलमान, मराठा, बहामनी ह्यांनी घडविलेल्या इतिहासाची नोंद आहे. परंतु गोंड समाजाने पूर्वमध्यप्रदेशात जो इतिहास घडविला ह्याची दखल घेतल्याचे दिसून येत नाही. गोंड राजांनी केलेली बांधकामे, किल्ले, परकोट, मंदिरे, प्रस्तर शिल्पे आजही दृष्टीस पडतात. परंतु ह्यांचा लिखित इतिहास अधिकृत मिळत नाही. तरीही ह्या गोंड राज्याकर्त्यांचा बहामनी, मुसलमान, मोगल, मराठी इत्यादी सत्तांबरोबर झालेल्या पत्रव्यवहारामुळे, त्यांचेसोबत संबंध आल्याने, त्यांनी जे काही लिहून ठेवले आहे. त्या आधारे काही प्रमाणात माहिती प्राप्त होऊ लागली आहे. तसेच त्यांनी केलेल्या लढाया, राजकारण, केलेली बांधकामे इत्यादी कर्तृत्वामुळे त्यांची माहिती समोर येऊ लागली. अशाच एका चंद्रपूरच्या कर्तृत्ववान गोंड राजाचे नाव इतिहासप्रसिद्ध आहे. तो म्हणजे चंद्रपूरचा गोंड राजा बीरशाहा होय. (१६९६-१७०४) इ.स. १६९६ मध्ये वयाच्या २० व्या वर्षी चंद्रपूरच्या राजसिंहासनावर बसून बीरशाहाने आपले कर्तृत्व सिद्ध केले. या शोध लेखामध्ये चंद्रपूरचा गोंड राजा बीरशमहा व औरंगजेब संबंधाचा आढावा घेतला आहे.

प्रस्तावणा :-

गोंड राजा रामसिंह (इ.स. १४२२-१४४७) हा अंदाजे २५ वर्षे राज्य करून बल्लारपूर येथे मृत्यु पावला. त्यास सुरजा बल्लाळसिंह (इ.स. १४४७-१४७२) नावाचा पूत्र असून तो शूर, धोरणी, महत्वाकांक्षी, राजकारण धूरंधर, विद्याव्यासंगी व संगीतात प्रविण होता. तो उच्चविद्या प्राप्तीसाठी उत्तर प्रदेशातील काशी येथे गेला. विद्यार्जन करीत असतांना सुरजा राजाच्या काही गोंड लोकांनी काशीच्या आसमंताच्या भागात धुमाकूळ घातल्याने तेथील लोक त्रासून गेले. तेव्हा दिल्लीचा सुलतान बहलोल लोदीने (इ.स. १४५०-१४८८) सुरजा व त्याच्या गोंड लोकांना पकडून दिल्लीस तुरुंगात डांबले. पुढे कैबरच्या मोहनसिंगाविरुद्ध सुलतानाने सुरजास पाठविले. तेव्हा सुरजाचा पराक्रम, शूरत्व, इमानदारी पाहून आणि सुलतानाने घातलेल्या अटी सुरजाने पूर्ण केल्याने सुलतानास आनंद झाला. सुलतानाने सुरजाची सुटका केली. सुलतानाने नर्मदेपासून गोदावरीपर्यंतचा मुलुख व त्या भागाची सनद देवून सुरज बल्लाळसिंहास 'शेरशहा' असा किताब दिला'. तेव्हापासून चंद्रपूरचे गोंड राजे आपल्या नावामागे 'शहा' हे ऊपपद लावू लागले. परंतु औरंगजेबाच्या मांडलीकत्वाखाली आल्यानंतर त्यांना राजा न म्हणता जमीनदार व शहा हे ऊपपद लावलेले आवडत नसल्याने 'सिंह' या नावाने चंद्रपूरच्या गोंड राजांना संबोधित असत. औरंगजेब बादशहाच्या दैनिक अखबारात चंद्रपूरच्या गोंडराजाचे रामसिंग, किसनसिंग, बीरसिंग, कालसिंग या नावाने नोंद आहे.

किसनसिंग हा राजगोंड असून भद्रावती पासून सुमारे १७-१८ कि.मी. अंतरावर असलेल्या चंदनखेडा येथील रहिवासी होता. हा बादशहा औरंगजेबाच्या सैन्यात सरदार म्हणून नोकरीत होता. उच्चपदस्थ सरदारांच्या तंबूवर पहारा देणे, प्रसंगी हेर हुडकून काढणे, आदेशाप्रमाणे इतर कामे करणे इ. कामे किसनसिंगाकडे होती. चंद्रपूरचा गोंड राजा रामसिंहाने (इ.स. १६६७-१६८४) औरंगजेबाचे मांडलिकत्व झुगारून स्वातंत्र्य मिळविण्यासाठी बादशहाविरुद्ध बंड उभारले. तेव्हा औरंगजेबाने सरदार किसनसिंग व एतिकदखान, हमजाखान यांना फौजेसह रामसिंगावर पाठविले. किसनसिंग व मोगल सरदार १९ नोव्हेंबर १६८४ रोजी चंद्रपूरात आले.^१ त्यांच्यात झालेल्या चकमकीत राजा रामसिंह इ.स. १६८४ मध्ये चंद्रपूरच्या राजवाड्यात मारल्या गेला. रामसिंह

निपुत्रिक असल्याने चंद्रपूरच्या प्रदेशाचा माहितगार म्हणून किसनसिंगास (१६८४-१६९६) बादशहाने चंद्रपूरच्या राजसिंहासनावर बसविले. किसनसिंगाच्या वडिलाचे नाव नरवरसिंग होते. किसनसिंग ६०० जात (पायदळ) व १०० स्वार असा सरदार म्हणून बादशहाकडे नोकरीस होता. नरवरसिंग बादशहाकडे नोकरीस असतांना किसनसिंगास नोकरीच्या निमित्ताने आपल्याजवळ बोलावून घेतले नरवरसिंगाची वंशावळ^२ पुढीलप्रमाणे होती.

नरवरसिंग चंदनखेड्याचा असून त्यास किसनसिंग व दुसरा (नाव उपलब्ध नाही) असे दोन मुले होती. किसनसिंगास दोन बायका असून दुसरीचे नाव इस्लामबाई असे होते. पहिलीचे नाव उपलब्ध नसून तिला बीरसिंग नावाचा मुलगा होता. बीरसिंगाच्या पत्नीचे नाव हिराई उर्फ गंगाबाई असून ही मदनपूर होशंगाबाद येथील ढिल्लनसिंह^३ याची मुलगी होय. दुसरी पत्नी ईस्लामबाईस कालसिंग (धर्मातरित नाव नेकनाम खान) नावाचा मुलगा व मोहनाबाई उर्फ मोमयानाबाई^४ नावाची मुलगी होती. कालसिंगाने देवगडचे राज्य मिळविण्यासाठी इस्लाम धर्म स्विकारून आईचे नाव ईस्लामबाई, बहिनीचे नाव मोमयानाबाई असे ठेवले. देवगडचा राजा बख्तबुलंदने बादशहाविरुद्ध बंड केल्याने इ.स. १६९९ मध्ये^५ त्याला बडतर्फ करून नेकनामखान (कालसिंग) यास देवगडच्या गादीवर बसविले. मुलगा कालसिंग उर्फ नेकनामखान ह्याने इस्लामधर्म स्विकारल्याने किसनसिंगास धक्का बसला व त्यातच त्याचा इ.स. जुलै १६९६ (पगडी, मोगल मराठा संघर्ष, पृष्ठ १२२-१२५) मध्ये मृत्यु झाला. औरंगजेबाचा वजीर आसदखानाच्या शिफारसीवरून^६ बिरसिंह उर्फ बिरशाहा ऑगस्ट १६९६ मध्ये चंद्रपूरचा राजा म्हणून राजसिंहासनावर बसला. बादशहाने दीड हजाराची मनसब, राजा ही पदवी, एक हत्ती, खिलतीचे वस्त्र, एक खंजीर ह्या वस्तु दिल्या^७. नेकनामखानास देवगडची राजगादी मिळाली कारण बिरसिंह व नेकनामखान यांच्यात वैर होते. (पगडी, मोगल-मराठा संघर्ष, पृष्ठ १२२-१२५) यामुळे देवगड व चांद्याचे राज्य एक होण्याची शक्यता समाप्त झाली. यावेळी बीरसिंग व नेकनामखान दोघेही औरंगाबाद येथे बादशहाच्या लष्करी छावणीत होते. तेव्हा बादशहाने नेकनामखानास देवगडावर स्थापन करून तुम्ही चांद्याला (चंद्रपूर) परत जा असा हुकुम इ.स. १६९९ मध्ये

बीरसिंगास दिला. त्याप्रमाणे बादशहाच्या आदेशाची बीरसिंगाने अंमलबजावणी केल्याचे दिसून येते.

किवर्दस :-

प्रस्तुत संशोधन लेखामध्ये गोंड राजा बीरशहाची बादशहासमोर उपस्थिती, खंडणी भरण्यासाठी तगादा, राजा बीरशहास कैद, बीरशहाच्या सुटकेसाठी प्रयत्न, कैदेतून पलायन, बीरसिंगास कैद करण्याचा पुन्हा प्रयत्न इत्यादी संदर्भात अर्थात इ.स. १६९६ ते १७०४ या काळातील चंद्रपूरचा गोंड राजा बीरशहा आणि मोगल बादशहा औरंगजेब संबंधाचा आढावा घेण्यात आला आहे.

बीरशहा-औरंगजेब संबंध : बीरशहाने खंडणी भरली :-

बीरसिंगापूर्वीच्या चंद्रपूरच्या गोंड राजांनी मोगलांचे मांडलिकत्व स्विकारून त्यांना नियमितपणे बादशहाच्या तजोरीत एकोळी (खंडणी) भरावी लागत असे. परंतु कधी-कधी आर्थिक चणचणीमुळे खंडणी भरणे शक्य होत नसे. त्यामुळे खंडणी तुंबून पडली होती. बिंद्रावण नावाचा हिंदू वसुली अधिकारी औरंगजेब बादशहाकडे होता. बीरसिंगाने यापूर्वी काही रक्कम खंडणी म्हणून भरली होती. परंतु वसुली अधिकारी बिंद्रावण याने ती सरकारी खजिन्यात जमा केली नाही. त्यामुळे बादशहाने बिंद्रावण यास नोकरीतून कमी केले. त्याच्या जागी वन्हाडचा सरदार अलिमर्दानखानास पवनारचा फौजदार म्हणून नोव्हेंबर १७०० मध्ये नोमणूक केली. (अख. २५ ऑग. १७००) ह्या आदेशान्वये अलिमर्दानखान दि. २७/०४/१७०१ मध्ये पवनार येथे बादशहाची फौजेत दाखल झाला. त्यावेळी राजा बीरसिंगाने शाही खजिन्यात एक लक्ष रुपये खंडणी भरली^९.

खंडणी भरण्यासाठी तगादा :-

राजा बीरसिंगाने खंडणी भरल्यानंतरही बरीच खंडणी शेष राहिल्याने बादशहाने खंडणी भरण्यासाठी तगादा लावला. चंद्रपूर राज्याची आर्थिक परिस्थिती बीकट असल्याने खजिना रिकामा राहत असे. तरी देखील मोगलांच्या दृष्टीने चंद्रपूर व देवगडचे गोंडराजे महत्वाचे होते. कारण त्यांच्याकडे असलेला हत्तीचा कळप व गोंड राज्यातील हिऱ्याच्या खाणीतून मिळणाऱ्या रत्नांचा साठा या बाबींचा मोगलांना मोह पडला होता व ही संपत्ती आपणास मिळावी म्हणून मोगलांची धडपड होती^{१०}. मराठ्यांना

नेस्तनाबूत करण्याच्या हेतूने बादशहा औरंगजेब दक्षिणेत आला व येथे २० वर्षांपासून ठाण मांडून बसला. परंतु वीस वर्षात बादशहास कोणताही लाभ न मिळाल्याने त्याची आर्थिक परिस्थिती डबघाईस आली होती. सैन्याचा पगार करणेही कठीण जाऊ लागले. त्यामुळेच मांडलिक राजाकडून धन मिळविणे जरूरीचे असल्याने दि. २५ ऑगस्ट १७०० मध्ये राजा बीरसिंगास हजुरात आणण्याकरीता चंद्रपूरस सैन्य रवाना केले. परंतु बीरसिंगाने त्यांना हाकलून दिले. त्यामुळे बादशहा औरंगजेबास राग आल्याने पुन्हा दि. २८/११/१७०० मध्ये गुर्जबदाराची (दंडधारी) नेमणूक करून^{११} त्यास चंद्रपूरपुरास पाठविले. त्यांनाही बीरसिंगाने हाकलून दिल्यामुळे औरंगजेब अत्यंत खवळला. वन्हाडचा सुभेदार अलिमर्दानखान यास दि. १९ मार्च १७०१ रोजी पत्र पाठवून त्या पत्रात चांद्याच्या (चंद्रपूर) राजाकडून खंडणी वसूल करावी म्हणून सुचित केले. तसेच बीरसिंग खंडणी भरण्यास आला असता बीरसिंगास हजुरात पाठवावे व येत नसल्यास कैद करून पाठवावे असा आदेश दिला. हा कडक आदेश देण्यामागे वरील कारणाशिवाय वेगळे कारण होते असे दिसते.

राजा बीरसिंग हा चंद्रपूरच्या सिंहासनावर बसला तेव्हा त्यास चंद्रपूरचे संपूर्ण राज्य मिळाले. परंतु भाऊ हिस्सा म्हणून चंद्रपूरचे अर्धे राज्य सावत्र भाऊ राजा नेकनामखानास दिले नाही. ही बाब चंद्रपूरचे फर्मान देतांना बादशहाच्या लक्षात आली नाही. म्हणून नेकनामखानाने बादशहाच्या मागे अर्धा हिस्सा मिळवून देण्याबाबत आग्रह धरला. नेकनामखान बादशहाचा एवढा लाडका होता की, बादशहाची भेट घ्यावयाची झाल्यास नेकनामखानास परवानगीची आवश्यकता नव्हती.^{१२} तसेच त्याला बादशहाने कुराण ग्रंथ बक्षिस दिला होता. राजा बीरसिंगास बादशहाने पत्र लिहून सावत्र भाऊ नेकनामखानास चंद्रपूरच्या राज्याचा अर्धा हिस्सा देण्याविषयी सूचना केली. परंतु राजा बीरशहाने कोणतीच दखल घेतली नाही. नेकनामखानाने धर्मांतर केल्याने व तो धर्मभ्रष्ट झाल्याने राज्याचा हिस्सा देणे बीरसिंगाच्या मनास पटले नाही. त्यामुळे बादशहाच्या आदेशास बीरसिंगाने केराची टोपली दाखविली. औरंगजेब बादशहाचे जीवन अस्तास जात असल्याचे पाहून बादशहाचे आदेश ऐकल्यासारखे करून गोंड राजे ते काम करण्याचे टाळीत होते.

राजा बीरसिंगाने देवगडचा राजा बख्तबुलंदशी दुश्मनी

असतांना सुद्धा त्यांना मराठ्यांचा छत्रपती राजाराम यांना चादा (चंद्रपूर) व देवगड येथे येण्यासाठी मे १६९९ मध्ये पत्र लिहिले^{१३}. कारण बख्तबुलंदने देवगडच्या नेकनामखानाचा पराभव करून देवगडची गादी हस्तगत केली होती. ही बाब औरंगजेबाच्या लक्षात येताच त्याने राजा बीरसिंग व बख्तबुलंदचा बेत हाणून पाडण्यासाठी सरदार हमीदखान व लुत्फूलाखान यांना देवगडावर पाठविले. त्यांनी २१ मे १६९९ रोजी देवगड काबीज केले. बख्तबुलंदचा पराभव झाला. तसेच मराठ्यांचा सरदार परसोजी भोसले वऱ्हाडात धुमाकूळ घालीत होता असे दि. १० सप्टेंबर १६९९ च्या पत्रात नमूद आहे. छत्रपती राजारामाने परसोजीस लिहिले की, मी चांदा देवगड या भागात येत आहे. ही मोहीम दि. ३१ ऑक्टोबर १६९९ रोजी सुरु केली^{१४} ही बातमी औरंगजेबास समाजताच त्याने आपला नातू बेदरबख्त, चीन किलेपखान व झुल्फिकारखानास छत्रपती राजारामास अडविण्यासाठी पाठविले. बेदरबख्तने राजारामास परिंड्याजवळ गाठून झालेल्या लढाईत मराठा सैन्यांची पांगापांग घडवून आणल्याने राजाराम वऱ्हाड-देवगडाकडे न जाता अहमदनगरकडे वळला. तसेच झुल्फिकारखानाने पराभव केल्यामुळे राजारामास परत यावे लागले. त्यामुळे चंद्रपूरचा राजा बीरसिंग व बख्तबुलंदने रचलेल्या कटावर पूर्ण पाणी फिरले. चंद्रपूरचा गोंड राजा बीरसिंगाच्या कृतीमुळे औरंगजेबास भयंकर राग आला व त्याचे पर्यवसान पुढे वार्ईट झाल्याचे दिसून येते.

राजा बीरसिंगास कैद :-

अलिमर्दानखान यांनी यापूर्वी दिलेल्या सुचनेप्रमाणे पालन करावे अशी बादशहाने सूचना दिली. चंद्रपूरचा राजा बीरसिंगाने स्वतः खंडणी (एकोळी) भरण्यासाठी खानाकडे गेला व खंडणी भरून आल्यानंतर बीरसिंगास हुजूरत जाण्याकरीता सूचना केली असता औरंगाबाद येथे जाण्यास बीरसिंगाने नकार दिला. म्हणून अलीमर्दान खानाने राजा बीरसिंगास कैद केले (अख. २८ ऑग. १७०८) व पुढील आदेश येईपर्यंत बीरसिंगास कैदेत ठेवले.^{१५} आपण बादशहाच्या मगरमिठीत फसलो. हे बीरसिंगाच्या लक्षात आले. बीरसिंगास कैद केल्याची बातमी सैनिकांनी राणी हिराईस दिली. राणी हिराई हुशार व राजकारणात निष्णात होती. तेंव्हा राणीने मंत्रीमंडळाची बैठक बोलावून बीरसिंगाच्या सुटकेसंबंधी खल करण्यात आला.

बीरसिंगाच्या सुटकेसाठी प्रयत्न :-

चंद्रपूरचा राजा बीरसिंगास पवनारच्या एखाद्या सुरक्षित बंगल्यात बादशहाचा हुकूम येईपर्यंत नजरकैदेत सक्त पहाऱ्यात ठेवण्यात आले. राणी हिराईने मंत्रीमंडळासोबत गुप्त चर्चा करून बीरसिंगासोबत पवनारला गेलेल्या सैनिकांना बोलावून घेतले. त्यांचेकडून सविस्तर माहिती घेतली. तेव्हा औरंगजेबाकडून औरंगाबादेस अटक करून पाठविण्याबाबत हुकूम आला तर राजा सुटू शकत नाही. ह्याची राणी हिराईस जाणीव झाली. यापूर्वीच बीरसिंगाच्या सुटकेसाठी हालचाल करणे अत्यावश्यक होते. त्यासाठी योग्यप्रकारे राणीने आखणी केली.

कैदेतून पलायन :-

राणी हिराईने बीरसिंगाच्या सुटकेसाठी पावसाळा निवडला. कारण चंद्रपूर व चंद्रपूरच्या आसपासच्या भागात पावसाळ्यात भयंकर पाऊस पडतो. त्यामुळे ह्या ऋतुत शत्रुंच्या हालचालीस वेग राहत नाही. जिकडेतिडके चिखल असल्याने व जंगलातील रस्ते माहित नसल्याने हालचाली करणे कठीण जाते. या संधीचा फायदा घेऊन राणीने आपले सैन्य पवनारच्या सभोवतालच्या जंगलात लपुन ठेवले. ह्याची माहिती हेरांमार्फत बीरसिंगास कळविली. तेंव्हा बीरसिंगाने पवनारच्या नजरकैदेतून पलायन करण्याच्या दृष्टीने हालचाली सुरु केल्या. राजा बीरसिंगाने तेथील मोगल अधिकाऱ्यांना फितवून गुप्तरितीने सुटका करून राणी हिराईने पवनारपासून चंद्रपूरपर्यंत गुप्तपणे ठेवलेल्या राजसैन्यांच्या आश्रयाने बीरसिंग चंद्रपूर राजधानीत परत आला^{१६} मोगल सैन्याला आरामाची सवय असल्याने, वर्षा ऋतूत हालचाली करण्याची सवय नसल्याने राजाच्या शोधात रस दाखविला नाही. त्यामुळे खानाचा जळफळाट झाला. परंतु राजा कैदेतून सुटल्याने खानाच्या हातात काहीच राहिले नाही. राजा बीरसिंग सुखरूप चंद्रपूर राजधानीत पोहोचला. राजधानीत परत येताच बीरसिंगाने शहाराच्या भोवताल असलेल्या परकोटाची नाकेबंदी करून सक्त पहारा बसविला. बाहेरून येणाऱ्या-जाणाऱ्यांची तपासणी सक्त करून हेरांची नेमणूक केली.

बीरसिंगास कैद करण्याचा पुन्हा प्रयत्न :-

चंद्रपूरचा गोंड राजा बीरसिंग हा मोगल सैन्यांच्या हातावर तुरी ठेवून फरार झाला. हे औरंगजेब बादशहास समजताच

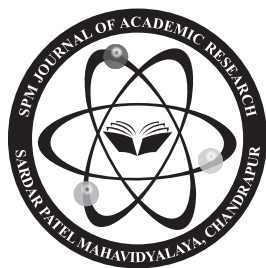
त्याचा राग अनावर झाला. मोगलांचे सैन्य किती राजनिष्ठ आहेत हे सिद्ध झाले. औरंगजेब बादशहाने पुन्हा बीरसिंगास पकडून आणण्याचा गुर्जबदारास हुकूम दिला. परंतु बीरसिंग कडेकोट बंदोबस्तात असल्याने गुर्जबदारास पकडून आणता आले नाही. त्यामुळे औरंगजेबाने त्याची मनसब ताबडतोब कमी केली. इतिहासकार खाकीखानचा आश्रयदाता महंमदमुरादखानास पवनारची फौजदारी देण्यात आली. या फौजदारास चांद्याचा जमीनदार बीरसिंगास पकडून आणण्यास अधिकाऱ्यांना चंद्रपूरपास पाठविले. परंतु चंद्रपूर शहराचा बंदोबस्त अत्यंत कडेकोट असल्याने त्यालाही रिकाम्या हाताने परतावे लागले. परंतु सजावला (अंमलबजावणी अधिकारी) नावाच्या अधिकाऱ्याने अब्दुलबेग याने बादशहाच्या हुकुमाची अंमलबजावणी करण्यात कसूर केल्याने त्याचीही मनसब ८ ऑक्टोबर १७०१ च्या आदेशान्वये बादशहाने कमी केली^{१०}. यावरून औरंगजेबाचा प्रयत्न प्रत्येक वेळी फसला हे दिसून येते.

निष्कर्ष :-

अशाप्रकारे १६९६ ते १७०४ या कालावधीत बादशाहा औरंगजेबाने गोंडराजा बीरशहास नेहमीसाठीच कैदेत टाकण्याचा प्रयत्न केला. परंतु औरंगजेबास यश आले नाही. यावरून राजा बीरशहाचे कर्तृत्व सिद्ध होते.

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Gandhian Model For Sustainable Forest Management

Baiju Prakash Somalkar

Department of Pol. Science, Raje Dharmarao College Allapalli Dist. Gadchiroli

E-mail : somalkar_prakash@rediffmail.com

Abstract:

Sustainable Forest Management concept has its origin in the World Commission on Forests and Sustainable Development, which was set up following the Earth Summit in Rio in 1992. The Commission came out with its sets of recommendations to improve the life of people who depend on forests for their livelihood. In addition, the Commission underscored the need to improve the ecological balance by projecting the social importance of forests. This was reiterated in the Millennium Summit of United Nations Conference on Environment and Development (*UNCED*) in 2000 in addition to the fixing of quantitative and time-bound targets coupled with ensuring and securing forest communities' rights and accessibility to forest resources. This gave proper direction to many countries to work on strengthening the process of forest governance and to improve the living conditions of their forest communities. This concept is very comprehensive and at the same time it encompasses many spheres of activity related to human life with the support of Nature. When one thinks of Sustainable Forest Management, especially with reference to India, the socio- economic, political, cultural, geographical and climatic factors are to be considered in addition to the historical developments that had influenced the people, governance and practices in the country. These factors must be considered when a *theoretical frame work* is designed for this concept. In this study, an attempt is made to provide a simple, but an enduring theoretical structure drawn from Mahatma Gandhi's Model of Sustainable Development which is idealistic and at the same time practical in several respects in the present context.

Key Words:

Sustainable Development, Forest Management, Tribal Community, Gandhian Model, Indian Culture, Environment.

Introduction:

Gandhian Model of Sustainable Development has potentialities for social reconstruction for perennial social and human progress locally, nationally and globally. The *unlimited growth* model of the western economists has supported the maximization of utility and profit and thus encouraged irresponsible and continuous exploitation of natural resources and environment beyond the threshold of resilience of the eco- system. Gandhiji's model is very sensitive to this issue. It calls for an effective resource management by having a check on the pace of development, rate of consumption and restraint over insatiable demand for goods and services. This model is against the over exploitation of resources, disruption of ecological balance and deterioration of environment since these are considered as a form of violence. Gandhiji wanted that economics must have its roots in *ethics* and his philosophy of *Sarvodaya*, the welfare for all, aimed at the overall development of every individual, which he called, the micro unit of development.

Planet Earth was covered with diverse natural vegetation in an estimated area of six billion hectares prior to the human domestication of plant species and invention of agriculture. On account of human habitation, urbanization and development in agriculture, industry and tertiary sectors, this pristine gift of nature, called *forest*, is just reduced to about thirty per cent of the land surface of the Earth. In addition, forests supply the essentials for the rural, poor and support them in several ways. It hardly requires any emphasis to say that the socio- cultural and economic benefits derived from forests enhance the quality of life and sustain it for long.

Destruction and degradation of forests is one of the major environmental crises of the world today. This has led to the species extinction worldwide. Moreover, its negative impact can be seen in the form of heavy soil erosion, greenhouse effect, silting of rivers and dams, flooding, landslides, denuded upland, degraded watershed, and even destruction of corals along the coast. If one surveys the Indian forest scenario, the picture is not different and quite depressing too. India's forest cover accounts for 21.02 per cent of the geographical area of the country in 2009 with a marginal increase of 0.03 per cent during 2007-

'09, which is, of course, far from the Government's Recommended resolution of 33.3 per cent. The interstate distribution of forests is also quite skewed. The deforestation process, though started even before the British period mainly to expand the agriculture, a large scale destruction of forests was recorded during the Colonial Rule on account of its commercial policy in general and the ownership policy in particular. This impact continued even after Independence. Recently, the globalization and liberalization have worked negatively on the forest development. Precisely, the polarization of development strategies in the reform-period, unplanned urbanization, mad consumerism and depressing trend in agricultural sector insensitively alienated the communities living in the forests deprived them of their basic sources of survival and made them refugees in their own land. At this juncture, Sustainable Forest Management (SFM) is recommended as the remedy for the maladies. At the Sixth session of UNFF, four global objectives⁹ on forest management were spelt out.

Forest Management in Ancient India:

A survey on Forest Management in Ancient India is useful in this context not only to admire the ancients' forethought and wisdom on forestry but to pick up the thread from them to initiate a *sustainable* and at the same time, long lasting and practical approach in Forest Management in India. The available literature on ancient Indian approach to Forest Management reveals that *sustainable* forest management was ingrained in the way of life of ancient India. The main reason for this was that forests had played an influential role in shaping their social, political, economic and cultural life and hence they integrated them in their regular course of life. Moreover, agriculture became a dominant economic activity during this period. As a result, concept of cultural landscapes promoting sacred forests and groves, sacred corridors, ethno- forestry practices, etc. was developed.

This study notes that the Ancients in India were successful in bringing sustainability in forest management because it had a strong theoretical background, of course unwritten, but Assimilated in practice and adopted as a way of life. This can be termed Ancient Indian Model of Sustainable Development.

Critical Review of Forest Management in India:

Forestry in India is the second major land use productive activity, after agriculture. It is estimated that India has 2.5 per cent of the world's geographic area and 1.8 per cent of the world's forests. Forestry contributes 1.7 per cent of India's National Income³³. Moreover, one ha of forest plantation can create 630 man-days of employment. According to the *India forest and tree cover* of the country happened to be 78.37 m ha in 2007, which was 23.84 per cent of the geographical area. It includes 21.02 per cent forest cover and 2.82 tree cover. The decadal increase i.e., between 1997 and 2007 was 3.13 m .ha.(4.75 per cent). The increase in forest cover in hill and tribal districts stood at 66,300 ha and 69,000 ha respectively compared with the previous assessment in 2005-'06. The seven north- eastern states of India had nearly one fourth of country's forest cover. This region gained 59,800 ha of forest cover in the two year's time. Almost, 97 per cent of forest cover is owned and maintained by the Government of India. It is an established fact that India, which is a rural biased economy, has over 1.7 lakh villages with a total population of 200 million are located in the vicinity of forests.

One could see the inter-state variations in the increment process of the forest cover. While some states like Jharkhand, Manipur, Mizoram, Meghalaya, gained more than 0.5 per cent forest cover, states like Haryana, Tripura and Nagaland had lost more than 0.5 per cent forest cover during the assessment period.

According to the JFM cell, Ministry of Environment and Forests (MEF), this programme has been extended to 22 per cent of country's forest land, covering 17.33m ha of India's forest area⁴⁵ through 84,642 JFM committees up until 2003. The MEF has also initiated a project entitled, *National Forest Program- India* (NFP) under the aegis of *National Forest Policy* and it has very well accepted the JFM program as a part and parcel of it and projected a target of 33 per cent of forest- tree cover for India by 2020. It has to be noted that there are many state- sponsored organizations and NGOs including women- self- help groups, which have also been involved in the participatory management of forests at present along with the JFMP. This program is credited with many positive impacts.

Gandhian Model of Sustainable Development:

Mahatma Gandhi had his roots deeply soaked in the Ancient Indian Philosophy. Though he was not an economist by profession, he had a total grip on the socio- economic, political and cultural problems that India faced during the pre- Independence days, on account of series of invasions he suffered over centuries and the wrath of subjugation from the British. The *model of sustainable development* that he designed at that time was to grant *Purna Swaraj* or to ensure a better *quality of life* to the people of his country. His model that he outlined 1930s had interwoven several concepts needed in his angle for the *reconstruction of India*. First, one must be aware that this model presupposes the spread of a certain set of *attitudes* to economic life and economic action and these attitudes themselves will lead for economic progress. It is a rare combination of idealism mixed with practical approach. His model is an alternate to individualism and socialism. In essence, his model promotes the concept that an individual or a society can improve his/ her or its quality of life only through *collaboration and co-operation*. It is the duty of society to inculcate these values through training and practice.

Indian economy which has adopted bordering on stagnation as its dominant development strategy has no doubt produced impressive results in different spheres during its plan- period. But, if quality deflators are applied, its achievements seem to be gloomy. In other words, the managers of the country are unable to sustain its development process in totality. Gandhiji's fundamental question which is considered as a *benchmark* to determine the viability of progress happens to be, does moral progress increase in the same proportion as material progress?. The short point is that Gandhiji linked SD with the improvement in the quality of life, which is a buzz-word today.

Gandhian Model of Sustainable Development & Forest Management in India:

Gandhiji felt that his mission was not merely securing freedom for India, but more to ensure *equal rights* for everyone. His concept of *Swaraja* was born out of him with the objective of uplifting the downtrodden. His concern for the *forest tribes* was special which fructified into the establishment of *All India Adim Jati Seva Sangh* at the first instance and

several organizations under the stewardship of Thakkar Bappa to work for the benefit of forest communities with the support of thousands of volunteers later. Many NGOs too were inspired and joined in this venture. Later, Khadhi and Village Industries (KVI) took a leading part in establishing the link between tribal and urban communities for a mutual support. Gandhian Model work as a theoretical base for the sustainable forest management?

- Joint Forest Management Program is a joint venture between the government and forest communities. Trust and co-operation must guide them for better results. The leader of the program must be trained to be selfless and committed to the welfare of the community
- Government might be the owner of the forest wealth. But, it must act as a facilitator in the case of the functioning of JFMP.
- Each one in this program must be trained in the Gandhian principles and live harmoniously.
- *Village reconstruction* works must be undertaken by the forest officials and each forest village must be self- contained and self-sufficient.
- *Village Swaraj* concept must be made a reality and self governance must give confidence and support to remove the bottlenecks of any kind in the path of development of forest community.
- If these communities are strong in their values, externalities and *shock* variables dare not to enter and dissuade their faith and misguide them.
- These communities can be trained in modern techniques and modes of production; but, they should see that none is Unemployed
- It is suggested that these communities could have their own co-operatives for marketing so that the link with the Consumers are direct and the income earned would be relatively larger.
- Any project accepted by the community must go with their life- style and functioning of the community. The independence or the identity of these communities need not be sacrificed at any cost.
- There must be a legal sanction of this model for JFMP to gain value among the forest

communities to come forward and organize themselves for their benefit and growth

- It will be highly desirable if the Centre could design this program, implement and monitor it for the sake of Uniformity.
- Any support from external agencies could be properly weighed and canalized for effective results.

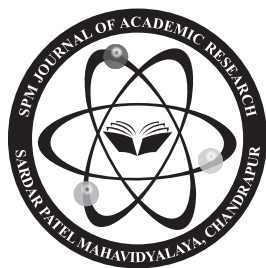
Conclusion:

The attempt made in this paper is to show that new vistas can be opened if one thinks of a remedy for the maladies of forest management. There might have been some difficulties encountered when someone attempted this model in a community. It is not due to the deficiencies in the model. It is certainly due to the deficiencies in the understanding and implementation of this model. One cannot ignore the success of the *Operation Flood* programme in this country which is based on this model. To be precise, each one in this programme must think that he/ she is a *Gandhi* and implements it with faith. Old habits die hard. If these communities are grooved in certain unhealthy tradition and approach, it would take some time to get rid of them and get convinced about this model and accept it for their benefit. Above all, this model took birth in this soil and practiced. There is no way for this model to be unsuccessful and misleading at any time. It is up to the stakeholders to see that this is workable, contributive, beneficiary and elevating,

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Impact Of Globalization On Talent Acquisition And Talent Retention In Banks

Jugalkishor Somani

Associate Professor in Commerce, Janata Mahavidyalaya, Chandrapur

Abstract :

The Process of Talent Acquisition in Public Sector Banks (PSBs) has undergone transformation of different stages of their life cycles in the pre-nationalization era the acquisition of talent was largely through the process of references from existing employees, customers, relatives, regulators etc. the nationalization of 14 major commercial banks in July, 1969 led to more structured form of recruitments which were guided by Government guidelines. Initially the PSBs had their own manpower recruitment cells and recruited people by having their own assessment tools. During the year 1978 it was felt that since the nature of work of all the PSBs was same and the service conditions of their employees and officers were similar. There was a single recruitment agency to cater to the needs of all the nationalized banks. Accordingly the Banking Services Recruitment Boards (BSRBs) were set up. The country was divided into 11 zones and as many BSRBs were established. The PSBs were required to place their indent with the BSRB well in advance to facilitate adequate account of recruitment of clerks and officers. The BSRBs were not fully equipped in the art of talent assessment and they outsourced the talent assessment activity to Institute of Banking Personnel Selection (IBPS) who had acquired good skills in carrying out the talent assessment exercise. The Mehta Committee and Narasimham Committee had recommended abolition of BSRB during 1993 and 1997 respectively. These committees had recommendations on the basis of the recruitment being far too less with banks following different modules of business and with the need for specialist officers in the new spheres of banking like Investment Banking, Wealth Management, Project Finance, Risk Management, Eproducts etc. the

recommendations of these committee were considered by the Government in consultation with the Indian Banks' Association and in 2002-03 the BSRBs were abolished.

Keywords :

Banking Service, Recruitment Board, Employment, Talent Assessment

Introduction :

Talent Acquisition is only one part of talent management which also encompasses talent development talent deployment and talent retention. The PSBs had been meeting their manpower requirements from open market individually. But since 2011, IBPS has started conducting common examination for employment assessment and testing of clerks and officers on behalf of all PSBs, IBPS would award the ranking to the candidates and such ranking will be valid for one year. The individual banks can place their indent and get a pool of so assessed and tested conditions from IBPS and examine their suitability to meet the requirement. This process of recruitment is to meet the general requirements. The banks have the freedom to recruit the company and off campus recruitment to meet their requirement of officers in different speculated fields or for lateral recruitments. The employment market has in itself become quite complex specially to recruit in officers cadre. The aspirants are influenced in deciding their career option by several factors in emerging economics like India and some of the factors influencing them are mentioned below:-

- Influence of the parents
- Peer pressures
- Individual's own mindset
- Employment value proposition
- Brand value of the bank
- Compensation package
- Ethics in employment
- Growth potential
- Work culture
- Career options
- Career stops for lateral moves.

We need the people to acquire and manage the business. It is therefore important for the talent

acquires in the banks to align themselves with the business planning and development strategy of the bank. The large scale expansion of the network of the branches should be kept in view for talent acquisition similarly the business models, growth strategy and new areas of business need to be in sync with the talent acquisition exercise. It is also pertinent to have realistic measures in place to evaluate performance in terms of quality of employee, the cost effectiveness and timeliness. The present system of performance assessment in PSBs must undergo change and the subjective elements must be minimized while assessing the performance of the employees. The recognition and reward has to be based on an objective assessment of his past performance which should also influence the re-employment decision.

The human resources in the bank cannot be considered as a mere number game. The technology on one hand and the skills and other capabilities of employees on the other hand have to be considered to measure and evaluate their productivity. The management of human capital requires a completely new mind set at work place. The employees have to be considered as an asset and as important ingredient which impact not only the productivity but also the quality of service. It is reiterated that the employees are not less important than the other shareholders like customers and shareholders. As the management focus on customer delight and shareholders value, they can't afford to give second order treatment to its staff as it does not renew the share of heart.

The recruitment policies of the bank must give due weightage in the assessment of his skills and behavior which enable the productivity as the low performing organizations cannot make a strong commitment to its employees and hence would fail to attract quality talent. Adequate investment in skill and behavior assessment tools is an important as investment in technology solution. Since the expansionary phase of 1970s is more than three decades old, the manpower recruited to manage those challenges is retiring and needs to be replaced. While striking sync with business strategies and new expansion of network of branches, the HR Managers must also have in mind the large scale retirement of existing employees which is underway.

The PSBs had not faced the problem of attrition up to the middle of 1990s before emergence of new generation private sector banks and opening up of banking space to more foreign banks.

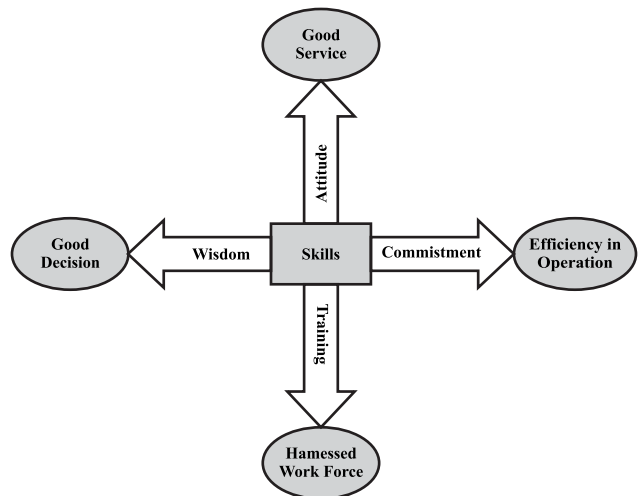
In a challenging environment which is dominated by several career options at higher end of the employees, the talent retention becomes an uphill risk and it is true for Indian PSBs too. The HR Managers in the process of talent acquisition follow the talent assessment process and promise the prospective human resource about the talent development, career progression, job enrichment, challenging work environment and next generation leadership. This on the part of the HR Managers becomes a component of talent acquisition, planning, sourcing, assessing, hiring and on-boarding of top talent. Over a period of time how to make people recommit their talents, energies and the spirit to rebuild the institution would depend on keeping the promises made by the HR Managers at the time of recruitment. The success of the past are no longer considered enough by the candidates to get attracted an employer. The aspirants for the employment today expect the following non-monetary response from employer,

- Guidance and assistance on emotional factor is turbulent times .
- Sound and realistic employee policies
- Regular communication from the leaders i.e. reach out
- Job security
- Employee should know that the leaders value his contributions
- Meaningful work assignment
- News before it is in the news
- Freedom to express and communicate with superiors
- Promotion potential and career progression
- Broad understanding the health of the business
- The environment of trust and transparency
- Equitable workload balancing
- Reinforcement of core values to mention a few

The structural transformation in the post-liberalisation and globalization era sprouts from many important factors. These factors are :

- Changed business positioning to align with global and new generation players.
- Technology positioning to implement the new business positioning
- Repositioning the people in organization to effect these changes.
- Re-skilling and retraining the people to face the new challenges.
- Preventing the talent migration to not only few players on the banking space but also to software companies catering to banking industries.
- Business Process Re-engineering .

The skill is an elementary requirement of any human resource. At the time of talent acquisition the existing skills are assessed and tested. Such skills are later blended and adapted to meet the exact requirement at workplace the banking being a service industry the combination of skill and aptitude, skill and commitment, skill and training,



skill and wisdom have very important role in final delivery of service to the customers of optimum cost and improve the brand of the bank and ultimately the bottom –line.

The following chart is a simple attempt to depict the combination of skills with other factors to achieve the desired results.

Talent Retention is human nature to look for better avenues. HR Managers need to identify this human nature recognize the same and put suitable strategies and practices in place to address the issue.

It is an important aspect of HR Manager's roll to sell dreams so the new aspirants in the employment market to attract talent. But it is equally important to help those who join the organization to realize those dreams. The promises made must be kept to retain the talent. To prevent the talent migration, we need to create the exit barriers which reflect a positive bias. Share of mind and share of opportunity go a long way to create partnership and relationship between the bank and its human resources. To achieve such a feat, we must follow the formal and informal practices. Mentoring and role modeling are very strong informal practices used for growth the development of human resources. Re-skilling and harnessing the potential of the workforce must be a continuous process in the bank. Congeniality at workplace and a work life balance are important aspects of talent retention strategy. Career progression leadership skill development, stretch assignments, technical training and preparedness to take over next generation leadership act a the strong positive exit barriers. Remarks and Recognition do play a role in Talent Retention strategy. The Banks, need to provide a diverse inclusive workplace where individual and team performances can be leveraged on a continuation basis. HR Policies should be dynamic and suitable with a focus on objectivity and transparency affording equal opportunities. Refining leadership value proposition creates a sense of perpetuality and challenge in the task.

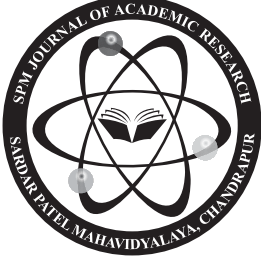
Conclusion :

The recent financial crises in the global markets have shown that Indian banking industry has mattered considerably. The reserve Bank of India has put a balanced regulatory framework in place to ensure a healthy and stable banking system which is sustainable. The stability provides a preferred place to work in the new aspirants. The entering challenges on competition front are likely to grow and that's pose of problem of talent acquisition and talent retention for HR managers, in the fierce fight for talent at higher end, those who have the spirit and explosiveness of the sprinter and gril and determination of a long distance runner shall have an edge to be in an attractive place in our banking space from the point of view of talent acquisition and

talent retention.

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वाढता डॉलर आणि भारतीय अर्थ व्यवस्थेवर होणारे परिणाम

सुनील जी. नरांजे

जनता महाविद्यालय, चंद्रपूर.

Email : sunilnaranje@rediffmail.com

गोष्टवारा :

डॉलरच्या तुलनेत रुपयाची मोठ्या प्रमाणात घसरण झालेली आहे. वर्तमान परिस्थितीत एक डॉलर चे मूल्य ६८ रुपयांपर्यंत खाली आले आहे. परंतु सरकारच्या हस्तक्षेपाने व रिझर्व्ह बँकेच्या नितीमुळे सध्या एक डॉलरला ६६ रुपयांपर्यंत स्थिर राहत आहे. नवीन गव्हर्नर डॉ. रघुराम राजन आल्यानंतर त्यांनी अवलंबिलेल्या धोरणामुळे भारतीय बाजारपेठेत म्हणजे शेअर मार्केटमध्ये उत्साहाचे वातावरण निर्माण झाले. रुपयाचे एवढ्या मोठ्या प्रमाणात अवमुल्यण प्रथमच झाले. कर्जाचा वाढता बोजा तसेच विदेशी चलनाची तुट यामुळे भारतीय रुपया कमजोर झाला व डॉलरसाठी जास्तीचे रुपये मोजावे लागले. डॉलर्स देऊन ज्या वस्तु विकत घ्याव्या लागतात त्या सर्व वस्तु महाग होतील. आपल्या देशात पेट्रोलियम पदार्थांचे उत्पादन फारच कमी आहे. पेट्रोलियम पदार्थ तसेच सोने या मौल्यवान धातू करिता आपल्याला पूर्णपणे विदेशावर अवलंबून राहावे लागते त्यामुळे ह्या वस्तु ८०% पर्यंत आपल्याला आयातच करावी लागते आणि त्याचे शोधन डॉलरमध्ये करावे लागते. डॉलरची किंमत वाढल्यामुळे आपल्याला अतिरिक्त किंमत मोजावी लागते. त्यामुळे आपल्या देशाच्या अर्थव्यवस्थेवर दुर्गामी परिणाम होतात. आपल्या देशात १२५-१५० अरब डॉलरच्या पेट्रोलियम पदार्थांची आयात केली जाते. अंतरराष्ट्रीय स्तरावर जर पेट्रोलियम वस्तुच्या किंमतीत किंचीतही वाढ झाली तरी आपल्या अर्थव्यवस्थेवर त्याचे विपरीत परिणाम होतात ह्याचे कारण असे की, आपल्याला शोधन हे डॉलरमध्ये करावे लागते. तसेच सोन्याच्या किंमती वाढत असेल तर त्याचाही विपरीत परिणाम आपल्या अर्थव्यवस्थेवर होतो

आणि म्हणून रुपया डॉलरच्या तुलनेत स्थिर रहावा या करीता सरकार ला रिजर्व्ह बँकेला आपले धोरण निश्चित करावे लागतात जेणे करुन रुपया हा डॉलरच्या तुलनेत घसरु नये.

डॉलरच्या तुलनेत रुपयाची किंमत कमी होण्यामागे बरेचसे कारण आहे. बरेचदा एखाद्या देशाच्या आर्थिक धोरणामुळे सुद्धा इतर देशाच्या चलनावर अनुकूल किंवा प्रतिकूल परिणाम होतात.

अमेरिकेच्या केंद्रीय बँकेने अर्थात फेडरल रिजर्व्ह बँकेने २००८ च्या मंदीनंतर अवलंबिलेले स्वस्त डॉलर पुरवठा धोरण समाप्त केले आणि त्यानंतर हळुहळू डॉलरच्या तुलनेत रुपयाचे अवमुल्यण मोठ्या प्रमाणात झाले.

पेट्रोलियम पदार्थ तसेच सोन्याच्या किंमती आकाशाला भिडत असल्यामुळे सुद्धा डॉलरच्या तुलनेत रुपयाची घसरण मोठ्या प्रमाणात झाली असे म्हणता येईल. परदेशी गुंतवणुकदार जेव्हा भारतामध्ये विनियोग करतात तेव्हा गुंतवणुकीमधून अधिकाधिक नफा मिळविण्याचा प्रयत्न करतात. शेअर मार्केट मध्ये परदेशी गुंतवणूकदार मोठ्या प्रमाणात पैसा लावतात आणि कमावतात सुद्धा परंतु जर शेअर मार्केट ची स्थिती बिघडत असेल सेन्सेक्स पडत असेल तर परदेशी गुंतवणूकदार लगेच आपला पैसा काढायला सुरुवात करतात आणि त्यामुळे शेअर मार्केट धडाधड पडू लागतो आणि करोडो अरबो रुपयाचा नुकसान शेअर धारकाला सोसावा लागतो. ह्याचा विपरीत परिणाम देशाच्या अर्थव्यवस्थेवर होतो. सध्या सिरीयामध्ये असलेली अशा प्रकारची परिस्थिती किंवा युद्धसदृश्य परिस्थिती पाहून अमेरिका, सिरीया मध्ये हस्तक्षेप करणार ह्या भितीने सुद्धा शेअर मार्केट घसरु शकतो अशी परिस्थिती आपल्या देशाची आहे.

सारांश :

हेच की डॉलरच्या वाढत्या किंमतीचा दुष्परिणाम देशाच्या अर्थव्यवस्थेवर खोलपर्यंत होतो. देशाच्या आर्थिक विकासावर, उद्योगावर दरमाणसी उत्पन्नावर महागाई वर विकास दरावर देशाच्या एकूण उत्पन्नावर राष्ट्रीय उत्पन्नावर रोजगारावर ह्याचे फार गंभीर परिणाम होतात.

बिज शब्द :

आयात-निर्यात, डॉलर, जागतिकीकरण, भाववाढ, गुंतवणूक, सेन्सेक्स, चलनसाम्य, अवमुल्यन

परिचय :

मागील दोन महिन्यापासून डॉलरच्या तुलनेत रुपयाची मोठ्या प्रमाणात घसरण सुरु आहे. त्याला थांबविण्याची चिन्हे दिसत नाहीत वर्तमान परिस्थितीत एका डॉलरला ६० ते ६६ रुपयापर्यंत मोजावे लागतात. रुपयाचे प्रथमच इतक्या मोठ्या प्रमाणात अवमुल्यन झाले. कर्जाची वाढती थकबाकी तसेच विदेशी चलनाची तुट यामुळे भारतीय रुपया कमजोर झाला. डॉलरसाठी जास्त रुपये मोजावे लागत असल्यामुळे डॉलर्स देऊन विकत घ्यावा लागणाऱ्या वस्तु महाग होतील. प्रामुख्याने सर्वप्रथम पेट्रोल दरवाढ होणे अटळ आहे. भारताचा निर्यात व्यापार कमी झालेला आहे आणि या कामासाठी करावा लागणारा जास्तीचा खर्च हा रुपयाच्या अवमुल्यनाचे प्रमुख कारण आहेत. आपल्या देशात मोठ्या प्रमाणात होणारी आयात थांबविण्याकरीता सरकारकडून कोणतीही प्रभावी उपाययोजना आजपर्यंत करण्यात आलेली नाही तसेच अन्य देशाशी करण्यात येणाऱ्या व्यापारातही मोठ्या प्रमाणात तोटा सहन करावा लागत आहे. निर्यात कमी झाल्याने विदेशी चलनाच्या साठ्यात घट झालेली आहे. रुपयाचे अवमुल्यन रोखण्याकरीता सरकार कडून पाहिजे तसे प्रयत्न होताना दिसत नाही. किंवा कुठल्या प्रकारची प्रभावी योजना केल्याचे दिसत नाही. त्यामुळे आपली विदेशी चलन विषयक स्थिती गंभीर होऊ शकते.

मे २०१३ च्या सुरुवातीला डॉलरचे मुल्य ५४ रुपये इतके होते मे अखेरीस ते ५६ रु. झाले आणि जून महिन्यात ते ६० रु. इतके घसरले. जुलै मध्ये ६३ रु. तर ऑगस्ट महिन्यात ६६.२४ पर्यंत रुपयाचे डॉलर च्या तुलनेत भाव घसरले. रुपयाची घसरण ही जागतिक स्थितीवर अवलंबून आहे. आर्थिक मंदिमुळे अमेरिकेतून डॉलर बाहेर जाण्याची गती थांबली आहे. कारण तेथील आर्थिक स्थिती सुधारली आहे. तसेच डॉलरचा प्रवाह अमेरिकेच्या दिशेने वाहू लागला आहे. भारताला पेट्रोलियम पदार्थाकरीता मोठ्या प्रमाणात डॉलर्स मोजावे लागते. त्यामुळे भारताच्या रुपयाचे अवमुल्यन झाले

आहे. भारताने परकीय गुंतवणुकीला भारताची दारे खुली केली आहे. तरी भारतीय राजकीय स्थिती अस्थिर असल्याने गुंतवणुकदार गुंतवणुक करीत असतांना काळजीपूर्वक गुंतवणूक करताना दिसतात. भारताला पेट्रोलियम पदार्थाची आयात करण्याकरीता १५० बिलियन डॉलर्स मोजावे लागतात. त्यामुळे घाऊक भावाचा निर्देशांक जवळपास ५% टक्के इतका खाली आला आहे.

रिजर्व्ह बँकेतर्फे १० जून २०१३ ला जे बुलेटिन काढण्यात आले त्यात २०१२-१३ च्या आर्थिक वर्षात भारतातून निर्यात होणाऱ्या वस्तुचे मुल्य ३००६ अब्ज डॉलर्स इतके आहे. तर आयातीकरीता खर्च करावी लागणारी रक्कम ४९१५ अब्ज डॉलर्स इतकी आहे. त्यामुळे या आर्थिक वर्षात व्यापारातील तोटा १९१ अब्ज डॉलर्स असणार आहे. १९९०-९१ पासून भारताच्या आयातीत वाढ होण्यास सुरुवात झाली. त्यावर्षी २५ अब्ज डॉलर्सची आयात करण्यात आली होती. त्यानंतर आयातीत सातत्याने वाढच होत गेली. आयातीत आणि निर्यातीत घट यामुळेच परकीय चलनाचा साठा कमी झाला असून रुपयाचेही अवमुल्यन झाले. त्यामुळे देशावरील विदेशी कर्जाचा भारही वाढला. आर्थिक उदारिकरण, खाजगीकरण आणि जागतीकीकरण या मार्गानेच आपल्या देशाला कर्जमुक्त करू शकतो. असा आपला समज झाला आहे. जागतिक व्यापार संघटनेने (डब्ल्यु.टी.ओ.) केलेल्या करारामुळे आयातीवरील मूल्य नियंत्रण दुर करण्यात आले. मुल्य कमी झाल्यामुळे आयातीत वाढ झाली तरी निर्यात वाढीपेक्षा ती जास्त असल्याने देशाचा तोटा वाढला.

अन्य राष्ट्रांनी भारतातून आयात केल्या जाणाऱ्या वस्तुवर नियंत्रणे लागू केली. त्यामुळे निर्यातीतील वाढ अधिक जोमाने होऊ शकली नाही १९९०-९१ मध्ये नव्या आर्थिक धोरणाचा अवलंब करण्यास सुरुवात केली. त्यावेळी तोटा जी.डी.पी.च्या ३३ टक्के इतका होता. २००८ मध्ये विदेशी चलणाचा जो साठा होता तो तीन वर्ष पुरेल इतका होता. आज सहा महिने पुरेल एवढाच विदेशी चलनाचा साठा शिल्लक आहे. आपल्या देशावर असलेल्या कर्जातही सातत्याने वाढ होत आहे. आपल्या देशातील कंपन्यांनी अन्य देशाकडून घेतलेले कर्ज त्यात समाविष्ट केले तर थकीत कर्जाची रक्कम

कितीतरी जास्त होईल.

व्यापारातील तोट्यात वाढ झाल्यामुळे परतफेड कमी झाली. परतफेडीतील शिल्लक रक्कम अन्य राष्ट्रांशी असलेले हिशोब पूर्ण करण्यासाठी द्यावी लागते. सुरुवातीच्या काळात सॉफ्टवेअरच्या निर्यातीतून भारताला मोठ्या प्रमाणात परकीय चलनाची प्राप्ती होत होती. याशिवाय अनिवासी भारतीयांकडून भारताला मोठ्या प्रमाणात प्राप्ती होत होती. त्यामुळे सुरुवातीच्या काळात परकीय चलनाचा साठा सातत्याने वाढतच होता. पण २००४-०५ नंतर आर्थिक गैरव्यवस्थापनामुळे आपल्या देशाचा व्यापारी तोट्यात वाढही ८५ पट झाली. याच काळात सॉफ्टवेअरच्या निर्यातीतून मिळणाऱ्या उत्पन्नात जरी वाढ झाली असली तरी व्यापारातून होणाऱ्या तोट्याच्या तुलनेत ती वाढ फारशी समाधानकारक नव्हती.

रुपयाचे अवमुल्यण कसे थांबवावे याचा योग्य मार्ग सरकारला अजून पावेतो मिळाला नाही. विदेशी गुंतवणूक वाढविणे हाच एक उपाय आहे. असे, सरकार विचार करते. त्यामुळे गेली २० वर्षे सरकारकडून विदेशी गुंतवणुकीचे स्वागत करण्यासाठी लाल गालीचे अंथरण्यात आले. आपल्या देशातील विदेशी गुंतवणुकीत वाढ होईल आणि देशाची विदेशी चलनविषयक स्थिती सुधारेल असा सरकारचा समज होता. परंतु हा समज चुकीचा होता. ह्या असंयुक्तीक स्थितीचा सामना करण्याकरीता जागतिक बाजारातून कर्ज घेणे हाच एकमेव उपाय सरकारजवळ शिल्लक राहावा. त्या संदर्भात अर्थमंत्र्यांनी अर्थसंकल्पीय भाषणात संकेत दिले होते. विदेशी चलनाचे वाढते संकट आणि विदेशी कर्ज घेण्याची आवश्यकता हे देशाच्या रेटिंगवर परिणाम करू शकतात. त्यामुळे देशावरील कर्जाचा बोजा वाढणार आहे.

विदेशी गुंतवणूकदार हेही विदेशी चलन निरनिराळ्या मार्गांनी देशाबाहेर नेण्याचा प्रयत्न करीत असतात. २०११-१२ या आर्थिक वर्षात व्याज डिव्हिडंड आणि रॉयल्टी यांच्या स्वरूपात विदेशी गुंतवणुकदारांनी २६ अब्ज डॉलर्स एवढी रक्कम विदेशात पाठविली त्यामुळे विदेशी चलन विषयक संकटाचा सामना देशाला करावा लागत आहे. सरकारने दैनंदिन गरजांच्या वस्तु, टेलीकॉमची साधने आणि चिनमधून

आयात केल्या जाणाऱ्या वस्तु यांच्या आयातीवर बंदी घालावी लागेल. सोन्या चांदीच्या आयातीवर नियंत्रण आणणे, विदेशी संस्थांकडून होणाऱ्या गुंतवणुकीसाठी तीन वर्ष लॉक इन पिरीयड लागू करण्याची तरतूद करणे आणि विदेशी कंपन्यांकडून अनधिकृतपणे आणण्यात येणाऱ्या वस्तुंवर प्रतिबंध लागू करणे या सारख्या कठोर उपायांनीच सध्याच्या आर्थिक संकटाचा सामना करता येईल. अन्यथा देशाला विदेशी चलनाची मोठ्या प्रमाणात चणचण भासेल. सध्या देशाचा जी.डी.पी. विकास दर ५-६ टक्के दरम्यान आहे.

संशोधनाचे उद्दिष्टे :

- १) डॉलर्सची किंमत वाढल्यामुळे भारतीय अर्थव्यवस्थेवर होणाऱ्या परिणामाची मीमांसा करणे
- २) रुपयाच्या घटत्या किंमतीमुळे उपभोग्य वस्तुच्या किंमतीवर कसा परिणाम होतो हे अभ्यासणे.
- ३) पेट्रोलियम वस्तुच्या किंमती वाढल्यामुळे देशाच्या दळणवळण व्यवस्थेवर होणाऱ्या परिणामाचे आकलन करणे.
- ४) देशातील उद्योगधंद्यांवर रुपयाच्या घटत्या किंमतीचे काय परिणाम हे ते पाहणे
- ५) देशाच्या औद्योगिक विकास दर ह्या परिस्थितीमध्ये कसा स्थिर ठेवता येईल ह्याकडे लक्ष देणे.

विधी :

अभ्यासक (संशोधक) वर्तमानपत्र, पत्रिका, मासिक व इंटरनेटच्या माध्यमाने तसेच विविध साधनाच्या आधारे संशोधन करेल.

गृहितके :

- १) पेट्रोल डिजेल महागणार ज्या वस्तुचा संबंध आयातीशी आहे अशा सर्वच वस्तु महाग होणार.
- २) सर्वसामान्य गुंतवणुकदाराची शेअर बाजार म्युच्युअल फंड आणि इतर प्रकारातील गुंतवणूक घटत असल्याने त्याचा सहभाग कमी होणार.
- ३) कंपन्यांना भांडवल मिळण्यात अडचणी येणार त्यामुळे त्याच्या कामगिरीवर परिणाम होणार.

- ४) आर्थिक विकास दरावर विपरीत परिणाम होणार.
- ५) जी.डी.पी. वर विपरीत परिणाम होणार.
- ६) औद्योगिक विकासास बाधा निर्माण होणार.
- ७) बेरोजगारीचे प्रमाण वाढणार तसेच परदेशी शिक्षण महागणार.

रुपया घसरणीची कारणे :

- * अमेरिकेच्या फेडरल रिझर्व्हचे अध्यक्ष बेन बर्नाक यानी या वर्षाअखेरपासून ब्रँड खरेदीचा वेग कमी करणार असे म्हटल्यामुळे परकी संख्यात्मक गुंतवणूकदारांनी डेट मार्केटमधून ८.७ अब्ज डॉलर तर शेअर बाजारातून ३.३ अब्ज डॉलर काढून घेतले. त्यामुळे डॉलरची मागणी वाढून पुरवठा कमी पडू लागला व डॉलरच्या तुलनेत रुपयाचे अवमूल्यन वेगाने होत गेले.
- * ज्या देशाची चालू खात्यातील तूट अधिक आहे त्या देशातील चलनाचे अवमूल्यन अधिक झाले. ब्रिक्स देशाचे २०१३ च्या सुरुवातीपासून अवमूल्यन ब्राझीलचा रियाल १५.८ टक्के रशियाचा रुबल ८.८ टक्के भारताचा रुपया २५.१ टक्के दक्षिण आफ्रिकेचा रँड २२.६ टक्क्यांनी घसरला.
- * रुपयाच्या अवमूल्यनाबरोबर सरकारने सोन्याच्या आयातीवर लादलेल्या निर्बंधामुळे सोन्याचा भारतातील भाव उच्चांक पातळीवर पोचला शिवाय अमेरिका सिरीयावर हल्ला करणार असल्याच्या बातमीमुळे आंतरराष्ट्रीय बाजारात सोन्याची मागणी वाढली.
- * निवडणूक तोंडावार असतांना सरकारला उपाय योजना करतांना बऱ्याच समस्यांना सामोरे जावे लागेल. त्यातच सीरीयाच्या युद्धाच्या शक्यतेने कच्च्या मालाचे भाव वाढू लागले आहे. घसरत्या रुपयामुळे पेट्रोल, डिझेल, गॅस व खतावरील सबसीडीचा बोजा वाढणार आहे. अन्न सुरक्षा विधेयकामुळे वित्तीय तुट ०.५ टक्क्याने वाढेल.

उपाय योजना :

- १) महसुली तुट येऊ नये म्हणून आर्थिक वर्षाच्या सुरुवातीलाच ठोस उपाययोजना करणे आवश्यक.

- २) महसुली उत्पन्नाच्या सर्व शक्यता आजमाऊन पाहाव्यात. मंजूर कर सवलतीचे अवलोकन तसेच वापर कर्त्यावर लावण्यात आलेल्या शुल्काचे प्रमाणीकरण करावे.
- ३) थकीत कर महसूल व बिगाकर महसूल कसा जमा होईल याकडे सरकार ने लक्ष देणे गरजेचे आहे.
- ४) सरकारी खर्चाची उपयोगिता वाढविण्यासाठी प्रयत्न व्हावेत.
- ५) राजकोवीय व्यवस्थापनाचा प्रयत्न अपयशी ठरतो हा अनुभव आहे यासाठी भरमसाठ मनुष्यबळ न वापरता लायक मनुष्यबळावर सरकारने लक्ष द्यावे. यामुळे बराच पैसा वाचू शकेल.
- ६) परदेशी उद्योजकांना व परदेशी गुंतवणुकदारांना गुंतवणूक करण्याकरीता प्रोत्साहन द्यावे व तसेच मोठ्या प्रकल्पांना ताबडतोब मंजूरी द्यावी.
- ७) पायाभूत उद्योगांना देशात चालना द्यावी.
- ८) आयात कमी करणे व निर्यात वाढविणे त्यामुळे देशातील परकीय चलन साठा देशातच राहील व परकीय गुंतवणूक वाढविणे आवश्यक आहे.

निष्कर्ष :

डॉलरच्या वाढत्या किंमतीचा परिणाम जगातील विकसनशिल राष्ट्रांवर मोठ्या प्रमाणात झाला. प्रामुख्याने जापान, रशिया, ब्राझील व भारतासारख्या राष्ट्रांवर वाढत्या डॉलरचा परिणाम जास्त दिसून आला. भारतीय अर्थव्यवस्थेवर जास्त अनिष्ट परिणाम वाढत्या डॉलरचा झाला असे म्हणता येईल.

डॉलरपुढे रुपयाचे अवमुल्यण होण्याची अनेक कारणे आहे. त्यापैकी प्रमुख कारण म्हणजे मागणी आणि पुरवठा अर्थशास्त्राचा हा मूलभूत नियम आहे. आज डॉलरची जी आवक आहे. त्यापेक्षा आपल्या देशाला खर्चासाठी जास्त डॉलरची गरज भासते. विदेशी गुंतवणूक संस्थांना देशातील गुंतवणुकीत रस कमी झाला आणि पैसे रोकड स्वरूपात देशाबाहेर गेले की डॉलरची मागणी वाढते. भारतीय रुपयावर सर्वात जास्त ताण आहे तो खनिज तेलाच्या खरेदीचा स्थानिक

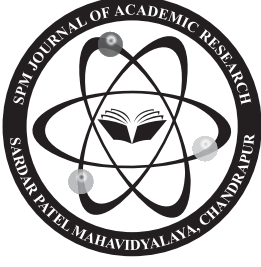
गरज पूर्ण करण्याकरीता मोठ्या प्रमाणात खनिज तेल आयात करावे लागते आणि ही गरज दरवर्षी वाढतच जाणार आहे. खनिज तेलाचे व्यवहार डॉलरमध्ये चालतात. त्यामुळे देशाला मोठ्या प्रमाणात डॉलर खर्च करावे लागतात आणि साहजिकच अर्थव्यवस्थेवर मोठ्या प्रमाणात ताण पडतो. आपल्या देशातील लोकांना सोन्याचे प्रचंड आकर्षण आहे. सोन्याची वाढती आयात नियंत्रणात आणण्याकरीता आयात शुल्क वाढवून १०% करण्यात आला तरी सोन्याची मागणी कमी होत नाही. त्यामुळे डॉलरची मागणी जास्त होते व रुपयाच्या घसरणीमुळे आपल्याला शोधन मोठ्या प्रमाणात करावे लागते. बँकमार्फत होणाऱ्या सोन्याच्या विक्रीवर निर्बंध घालण्यात आले. तरी सरकारचे हे प्रयत्न अपुरे पडत आहे. आजही सराफा पेढीवरील गर्दि कमी झालेली नाही.

अनेक प्रकारच्या घोट्यामुळे आर्थिक आघाडीवर ठोस दिशा नसल्याने शेअर बाजारात अस्थिरतेचे वातावरण आहे. त्यामुळे विदेशी वित्तसंस्था द्विधा मनस्थितीत आहे. दिर्घ मुदतीच्या गुंतवणुकी संदर्भात असलेली आवकच या गर्तेतून बाहेर काढू शकेल. परंतु मूलभूत सुविधांचा अभाव आपल्याकडे असल्यामुळे रुपयाची वाताहत चालूच राहणार आहे. रुपयाच्या अवमुल्यनाचा सर्वात जास्त फटका आयातदारांना बसणार आहे. जितके रुपयाचे अवमूल्यन होईल तितक्या प्रमाणात त्याचा खर्च वाढणार आहे. आर्थिक आघाडीवर काहीही विपरीत घडले तर त्याचा सर्वात मोठा आघात सर्वसामान्य माणसावर होतो त्याला प्रचंड भावववाढीला तोंड द्यावे लागते.

सरकारने दैनंदिन गरजांच्या वस्तु टेलीकॉमची साधने, विज प्रकल्पासाठी लागणारी साधने आणि चिनमधून आयात केल्या जाणाऱ्या वस्तु यांच्या आयातीवर बंदी घालणेच योग्य ठरेल. सोन्या-चांदीच्या आयातीवर नियंत्रण आणणे विदेशी संस्थांकडून होणाऱ्या गुंतवणूकीसाठी तीन वर्ष लॉक पिरियड लागू करण्याची तरतूद करायला पाहिजे. विदेशी कंपन्यांकडून अनधिकृतपणे आणण्यात येणाऱ्या वस्तुवर प्रतिबंध लागू करायला पाहिजे अशा कठोर उपायायानेच सध्याच्या आर्थिक संकटावर मात करता येईल. अन्यथा देश विदेशी चलनाच्या तुटवड्याच्या संकटात सापडेल.

संदर्भ :

- १) दैनिक लोकमत वर्तमानपत्र
- २) दैनिक सकाळ वर्तमानपत्र
- ३) दैनिक लोकसत्ता वर्तमानपत्र
- ४) लोकप्रभा मासिक
- ५) इंडिया टूडे
- 6) <http://money.cnn.com/2011/10/24/pf>
- 7) <http://www.99varius./biz/en/2011/03/24>
- 8) <http://in.wikipedia.org/wikf>
- 9) www.marketing9/com/bundling
- 10) <http://www.research and markets.com>.



मुक्त व्यापार करार आणि भारतीय अर्थव्यवस्था

वसंत हरणे^१, किशोर मोहरीर^२

^१जनता महाविद्यालय, चंद्रपूर

^२सरदार पटेल महाविद्यालय, चंद्रपूर

प्रस्तावना :

जागतिकीकरण म्हणजे व्यापार, वित्त, रोजगार, तंत्रज्ञान, दळणवळण, विदेशी स्थलांतर, पर्यावरण, राहणी शासन समाजव्यवस्था, संस्कृती अशा सर्व क्षेत्रातून होत राहणारे रुपांतर होय उरूवे येथील वाटाघाटीच्या फेरीमध्ये गॅटच्या सभासद राष्ट्रांनी डंकेल मसुद्याला स्विकृती दिल्यानंतर जागतिक व्यापार संघटनेची स्थापना करण्याचा मार्ग सुकर झाला. १०४ सभासद राष्ट्रांच्या प्रतिनिधींनी स्वाक्षरी केल्यानंतर जागतिक व्यापार संघटनेच्या स्थापनेसंबंधीचा करार १ जानेवारी १९९५ रोजी अंमलात आला भारत हा जागतिक व्यापार संघटनेचा संस्थापक सभासद आहे. गॅट ही काही औपचारिक संघटना नव्हती. विभिन्न राष्ट्रांच्या प्रतिनिधींना विशिष्ट प्रश्नावर चर्चा व वाटाघाटी करता याव्यात, याकरिता निर्माण करण्यात आलेली ती एक कायदेशिर व्यवस्था होती. जागतिक व्यापार संघटना ही मात्र एक आंतरराष्ट्रीय व्यापाराशी संबंधित असलेली जागतिक संघटना आहे. एकुण १४६ देशांनी ह्या संघटनेचे सभासदत्व स्विकारले आहे.

आर्थिक सूधार कार्यक्रम अमलात आल्यानंतर एकाधिकारावर नियंत्रण हे उद्दिष्ट न राहता स्पर्धात्मक वातावरण निर्मिती प्रमुख उद्दिष्ट झाले. या संदर्भात भारतीय केंद्र शासनाने एस.व्ही. एस राघवन यांच्या अध्यक्षतेखाली समिती नेमली राघवन समितीने २२ मे २००० रोजी शासनाला अहवाल सादर केला या समितीने एम.आर.टी.पी. च्या कायद्या ऐवजी नविन स्पर्धा कायदा लागू करावा, अशी सिफारस केली. त्यानुसार शासनाने स्पर्धा कायदा पारित करण्याचा निर्णय घेतला. हा कायदा डिसेंबर

२००२ मध्ये पारित झाला.

बाजारात मुक्त आणि निकोप स्पर्धेचे वातावरण निर्माण व्हावे या उद्देशाने हा कायदा करण्यात आला. स्पर्धेतील वर्चस्वावर या कायद्याचे बंधन नाही. परंतु वर्चस्व प्रस्थापित करून त्याचा गैरवापर होत असल्यास त्यावर बंधने आहेत २००२ चा स्पर्धा कायदा अधिक लवचिक असून स्पर्धात्मक वातावरण निर्मिती यावर या कायद्याचा भर आहे या कायद्यात दंडात्मक तरतूदीचा समावेश करण्यात आला आहे.

आर्थिक व्यवहाराचे उदारीकरण आणि जागतिकीकरण हे १९८० च्या दशकानंतर आपल्या देशात परवलीचे शब्द झाले. आर्थिक उदारीकरण ही संकल्पना व्यापक अर्थाने वापरली जाते. बाजार यंत्रणा आणि मुक्त स्पर्धा यातील अडथळे दूर करण्याच्या सरकारच्या धोरणास आर्थिक उदारीकरणाचे धोरण म्हणतात. यात उद्योगाची उभारणी करतांना शासकीय नियम शिथील असावेत तसेच शासकिय अधिकाऱ्यांची वृत्ती उदार असावी या बाबी अभिप्रेत आहेत. आर्थिक उदारीकरण म्हणजे अर्थव्यवस्थेतील गुंतवणूक उत्पादन आणि आयात निर्यात यासाठी अनावश्यक-निर्बंध-नियंत्रण नियमन आणि परवाना पद्धती कमीत कमी करण्याची प्रक्रिया आहे. आर्थिक उदारीकरणाच्या माध्यमाने अर्थव्यवस्थेत निकोप स्पर्धेचे वातावरण निर्माण करण्यात येते. यात सरकारी नियंत्रणे व हस्तक्षेप कमीत कमी होण्याकडे धोरणाचा कल असतो.

अर्थव्यवस्थेतील कोणत्याही क्षेत्रात उत्पादन गुंतवणूक व वितरण यासाठी मुक्त प्रवेश आणि कोणत्याही उद्योगातून मुक्तपणे बाहेर पडण्याचे स्वातंत्र्य या अटी पूर्ण झाल्यास उदारीकरणाची नीती अमलात आणण्यात आली असे म्हणता येईल.

मुक्त व्यापाराचा अर्थ :

वस्तू आणि सेवांच्या खरेदी विक्रीला व्यापार असे म्हणतात. असा व्यापार जेव्हा एकाच देशामधील जनतेमध्ये होतो तेव्हा त्याला देशी व्यापार (Domestic Trade) असे म्हणतात. याउलट दोन देशातील जनतेमध्ये जेव्हा वस्तूंची देवाणघेवाण होते त्याला 'विदेशी व्यापार' (Foreign Trade) असे म्हणतात. तर जेव्हा कोणत्याही देशाचा

कोणत्याही देशाशी कोणतेही निर्बंध न लादता जो व्यापार होतो त्याला 'मुक्त व्यापार' (Free Trade) असे म्हणतात.

सामान्यतः जगातील कोणताही देश वस्तू, सेवा, भांडवल आणि मानवी संसाधन याबाबत स्वयंपूर्ण नाही. या चारही बाबींची देवाणघेवाण देशादेशात होत असते. भारताचा विचार केल्यास भारत हा विकसनशील देश आहे. भारताचा पूर्णपणे विकास झालेला नाही. म्हणून भारताला विकसनशील देश असे म्हणतात. भारतामध्ये विकासासाठी लागणाऱ्या सर्व बाबी उपलब्ध आहेत परंतु भांडवलाची कमतरता असल्यामुळे भारताच्या विकासात अडथळे निर्माण होत आहेत.

भारताचा विदेशी व्यापाराबाबत आयात निर्यातीची तुलना केल्यास भारतात आयात निर्यातीमध्ये असंतुलन दिसून येते. भारताची आयात जास्त आणि निर्यात कमी असल्यामुळे व्यापार शेष तोटा वाढतांना दिसतो आणि या व्यापार शेषामुळे भारताची अर्थव्यवस्था बिघडतांना दिसते. यासाठी आयात निर्यात संतुलन असणे आवश्यक आहे.

जगातील कोणताही देश वस्तू, सेवा, भांडवल, आणि मानवी संसाधन याबाबत स्वयंपूर्ण नाही. या चारही बाबींची देवाणघेवाण देशादेशात होत असते. परंतु अनेक देशांची सरकारे आपला देशातील उद्योगांना व मालाला विदेशी उद्योग व मालापासून संरक्षण देण्याच्या हेतूने आयातशुल्क, संख्यात्मक बंधने आणि टॅरिफ कोटा अशी बंधने लावतात. आयात शुल्क आकारल्याने आयात होणाऱ्या वस्तुची देशात येतांना किंमत वाढते. कराचा दर जितका जास्त तितकी किंमत वाढते आणि मग आयात केलेली वस्तू देशांतर्गत मालाशी स्पर्धाशील राहत नाही. दुसरे बंधन असते संख्यात्मक (Quota) एखाद्या वस्तुच्या आयात मात्रेवर (किती नग, किंटल, टन, लिटर, इ) लावलेल्या बंधनास कोटा म्हणतात. आयातीस परवाना आवश्यक असणे आयात करावयाच्या वस्तुची मुक्त आयात मर्यादित आयात आणि प्रतिबंधित आयात अशी वर्गवारी करणे यामुळेही आयातीवर संख्यात्मक बंधने आणली जातात. आयातीवर तिसरे बंधन आहे टॅरिफ कोटा यात आयात शुल्क व संख्यात्मक बंधने यांचे मिश्रण असते. विशिष्ट प्रमाणातील आयातीस विशिष्ट दर आकारला जातो. आयातीच्या वाढत्या संख्येसाठी आयात शुल्काचा दर

वाढता असतो. परिणामतः अधिक आयात करणे फायद्याचे ठरत नाही. या तीन बंधनांशिवाय देशांतर्गत सहाय्य आणि निर्यात अनुदाने अश्या दोन सवलतीमुळे सुध्दा आंतरराष्ट्रीय व्यापार विस्थापीत होतो. मूक्त राहत नाही. देशांतर्गत सहाय्य (Domestic Subsidy) दिल्याने मालाची किंमत कमी होते व त्या मालाची निर्यात कमी किंमतीला करणे शक्य होते. तसेच निर्यात अनुदानामुळे निर्यात वाढते व तेथील स्थानिक उद्योगांना स्पर्धेला तोंड द्यावे लागते थोडक्यात आयात शुल्क संख्यात्मक बंधने व टॅरिफ कोटा या तिन निर्बंधामुळे तसेच देशांतर्गत सहाय्य व निर्यात अनुदाने या दोन सवलतीमुळे आंतरराष्ट्रीय व्यापार मुक्त राहत नाही.

मुक्त व्यापाराचे फायदे :

व्यापार मुक्त होणे म्हणजे आयात निर्यातीवर कुठलेही बंधन नसणे अथवा कोणत्याही सवलती नसणे. यामुळे कोणत्याही देशातील वस्तू व सेवा अन्य कोणत्याही देशात मुक्तपणे विकल्या जाऊ शकतात. अशा मुक्त व्यापारामुळे उत्तम दर्जाच्या वस्तु व सेवांचा मूबलक पुरवठा वाजवी दराने जगातील सर्व बाजारपेठेत होऊ शकतो किंबहुना ज्या देशाच्या बाजारपेठा मुक्त असतील अश्या सर्व बाजारपेठा मिळून एकच विशाल बाजारपेठ होते. सर्व उत्पादक व वितरकांना स्पर्धाशिल राहिल्याशिवाय उद्योग व्यापार करताच येत नाही. सतत नाविण्याचा व सुधारणांचा पाठपुरावा करावा लागतो. खर्च कमी करून किमान किंमतीला माल बाजारपेठेत आणावा लागतो. सहाजीकच यांचा फायदा ग्राहक उपभोक्ते यांना भरपूर प्रमाणावर होतो. नविन तंत्रज्ञान उत्पादन पध्दती, उत्पादनाचा दर्जा, खर्च या साऱ्याच बाबतीत सतत सुधारणा करणे आवश्यक होते अन्यथा दुसरा स्पर्धक बाजारपेठ काबीज करतो.

मुक्त बाजारपेठेचे हे फायदे असले तरी सर्व देशांना आपल्या बाजारपेठा सर्व वस्तुंसाठी कायमच्या खुल्या करणे अशक्य आहे. प्रगत देश आपल्या आर्थिक ताकदीने व प्रगत तंत्रज्ञानाने उत्तम दर्जाची उत्पादने कमी किंमतीला विकून विकसनशिल व अविकसित देशाच्या बाजारपेठा काबीज करू शकतात. असे झाले तर स्थानिक उद्योग उभे राहू शकत नाही व औद्योगिक विकास व पर्यायाने अर्थव्यवस्थेचा विकास होऊ

शकत नाही. म्हणून अनेक देश आयातीवर निर्बंध लावतात व निर्यातीला प्रोत्साहन देतात. मुक्त व्यापाराचे काही फायदे व तोटे पाहिल्यानंतर असे लक्षात येते की बाजारपेठा मुक्त हव्यात पण त्या सर्वच वस्तुसाठी आणि सेवांसाठी करता येणे शक्य नाही प्रत्येक देशाला काही वस्तू व सेवांच्या बाबतीत अन्य देशापेक्षा तूलात्मक लाभ असतो. तर काही वस्तू व सेवांची अतीव आवश्यकताच असते. मूक्त व्यापार करार दोन देशात त्याला विपक्षीय करार असे म्हणतात. काही वेळा असा करार एक देश दुसऱ्या काही देशाच्या समुदायाबरोबर करतो. उदा युरोपियन युनियन, आग्नेय, आशीयातील देशांचे मंडळ इत्यादी. तर कराराचा तिसरा प्रकार म्हणजे अनेक देश मिळून एक करार करतात त्याला बहुपक्षीय करार म्हणतात. जगातील १५४ राष्ट्रांनी एकत्र येऊन जागतीक व्यापार संघटनेचा केलेला करार हा बहुपक्षीय करार आहे. सध्या जगभरात सुमारे २०० मुक्त व्यापार करार अस्तित्वात आहेत भारताने काही देशाबरोबर मुक्त व्यापार करार केले आहेत त्यातील महत्वाचे काही करार पुढील प्रमाणे आहेत.

१) श्रीलंकेबरोबरचा मुक्त व्यापार करार :

२८ डिसेंबर १९९८ रोजी दोन्ही देशांच्या पंतप्रधानांनी सह्या करून हा करार केला कराराची परिशिष्टे पूर्ण करण्यासाठी २/२/२००० रोजी पत्रांची देवाणघेवाण झाली. १/३/२००० पासून कराराची पूर्ण अंमलबजावणी सुरू झाली भारताने १३५१ वस्तुची आयात शुल्काशिवाय करण्याचे वचन दिले. ५२८ टेक्सटाईल्स आयटेमवर २५ टक्के आयात शुल्क कपात, चहा व तयार कपड्यासही २७९९ वस्तुवर ५० टक्के कर कपात व पुढे तिन वर्षात १०० टक्के कपात याशिवाय चहाच्या आयातीसाठी एक कोटी पन्नास लाख किलो तसेच कपड्याच्या कमाल आयातीसाठी ८० लाख नग असा कोटा निश्चित केला या बदल्यात श्रीलंकेने कच्चा माल व उद्योगासाठीची यंत्रसामुग्री अश्या ३१९ वस्तू करमूक्त केल्या. ८८९ वस्तूवर ५० टक्के आयात शुल्क कपात केली. व पुढे पहिल्या वर्षी ७० टक्के दुसऱ्या वर्षी ९० टक्के व तिसऱ्या वर्षी १०० टक्के आयात शुल्क कमी करण्याचे मान्य केले. १९८० वस्तुसाठी कोणतीही सवलत नाही. तर उर्वरित २७२४ वस्तुवर आठ .टप्प्याटप्प्याने संपूर्ण आयात कर रद्द करण्याचे

ठरविले.

२) थायलंड बरोबरचा मुक्त व्यापार करार :

९ ऑक्टोबर २००३ रोजी भारत व थायलंड यांनी मुक्त व्यापार केला व त्याबरोबर शेती सहकार्य पर्यटन सहयोग, व्हिसातून सूट आणि जैव तंत्रज्ञानाविषयी सहकार्य असे चार आणखी करार केले. आयात शुल्काशिवाय आयात करण्याच्या काही वस्तुची यादी निश्चित केल्या गेली. त्याचबरोबर आयातीत होणाऱ्या एकदम वाढीच्या वेळेस स्थानिक उत्पादकाचे हितसंबंध जपण्यासाठीच्या उपाय योजनावरील संधी झाली.

३) सिंगापूर बरोबरचा सर्वकश आर्थिक सहयोग करार :

८ एप्रिल २००२ रोजी भारत सिंगापूर या दोन देशांच्या पंतप्रधानांनी एक संयुक्त अभ्यासगट नेमला या अभ्यासगटाच्या सात बैठकी झाल्या व त्यानंतर त्याने अहवाल दिला. दोन्ही देशातील व्यापार व गुंतवणूक वाढीसाठी परस्पर सहकार्य उपयोगी पडेल असा निष्कर्ष अहवालात होता ८ एप्रिल २००३ रोजी हा अहवाल स्वीकारून दोन्ही देशांनी त्या आधारावर मुक्त व्यापार कराराची चर्चा करण्याचा निर्णय घेतला.

४) भारत आशियान व्यापार करार :

ASEAN म्हणजे आग्नेय आशियाई देशांचा संघ यात अकरा देशांचा समावेश आहे त्यांचा GDP दोन ट्रिलियन डॉलर्स आणि लोकसंख्या १६० कोटी आहे. दिनांक १३ ऑगस्ट २००९ रोजी भारत व आशियान यांचे दरम्यान मुक्त व्यापाराचा करार झाला आशियान हा जगातील चौथा मोठा व्यापारी भागीदार आहे टेक्सस्टाइल, स्टील, आणि प्लॅटेशन क्रॉप्स हे व्यापारातील मोठे घटक आहेत देशाच्या समुहाशी मुक्त व्यापारासाठी केलेला हा भारताचा पहिलाच करार आहे. १ जानेवारी २०१० पासून या कराराची अंमलबजावणी करण्यात आली. शेती कापड व रसायने यातील ४८९ वस्तु नकारात्मक यादीमध्ये ठेवून त्यावरील आयात शुल्कात कपात न करण्याचे भारताने म्हटले आहे. काळा चहा, कॉफी, काळे मिरे, व रबर यांना संवेदनशील यादीमध्ये टाकून त्यावरील आयात कर २०१९ नंतर कमी करण्याचे ठरविले आहे.

समारोप :

मुक्त बाजारपेठेचे वरिल फायदे तोटे असले तरी सर्व देशांना आपल्या बाजारपेठा सर्व वस्तुसाठी कायमच्या खुल्या करणे अशक्य आहे प्रगत देश आपल्या आर्थिक ताकदीने व प्रगत तंत्रज्ञानाने उत्तम दर्जाची उत्पादने कमी किंमतीला विकून विकसनशील व अविकसित देशांच्या बाजारपेठा काबीज करू शकतात. असे झाले तर स्थानिक उद्योग उभे राहू शकत नाहीत. व औद्योगिक विकास व पर्यायाने अर्थव्यवस्थेचा विकास होऊ शकत नाही.

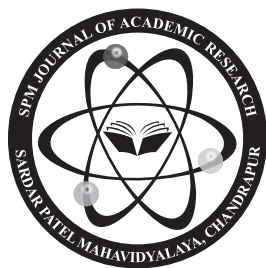
भारताच्या दृष्टीने विचार करावयाचा झाल्यास भारताने जर आयात कमी आणि निर्यात जास्त यावर भर दिल्यास भारताच्या दृष्टीने हा करार फायदेशीर ठरू शकतो.

निष्कर्ष :

- १) व्यापारातील आयात आणि निर्यातीमध्ये संतुलन असले पाहिजे.
- २) मुक्त व्यापाराचा फायदा प्रगत देशांना जास्त प्रमाणात होईल.
- ३) अविकसित देश स्पर्धेमधून बाहेर फेकले जातील.
- ४) मुक्त व्यापार व्यवस्थेमुळे रोजगाराच्या नविन संधी उपलब्ध होतील.

संदर्भ ग्रंथसूची :

- १) आधुनिक व्यापार संघटन आणि व्यवस्थापन डॉ. कोपर्डेकर डॉ आष्टीकर हिमालया पब्लिशिंग हाऊस आवृत्ती २००७
- २) भारतीय अर्थशास्त्र डॉ मेघा कानेटकर श्री साईनाथ प्रकाशन, नागपूर प्रथम आवृत्ती २०१२
- ३) डॉ. विनायक गोविंदकर यांचा लोकमत वर्तमानपत्रातील लेख.



Expectations Management in Higher Education: Achieving a win - win Situation

Santosh Sadar

Department of Business Administration and Management, Sant Gadge Baba Amravati University, Amravati
E-mail : hodmba@sgbau.ac.in

Abstract :

Indian higher education system has changed drastically in the process of globalization. Perceived values and expected values of students (customer) do not match anywhere. Similarly teacher finds that expected values and actual values of student are mismatching. In the process of liberalization, privatization and globalization owners of the institutes of higher education are making failure attempts through teachers to match perceived values, expected values and actual values of their students. The noble profession – teaching does not remain passion, it turn up into profit making activity. Education became product (service) in the market and students became customer for the product. There is least scope to correct this product after sales (on completion of degree). It is highly difficult to correct it even if there is warranty and guarantee. The introduction of information communication technology has changed the role of teacher. ICT has changed the satisfaction level of customer (student). The teacher – student relationship has also changed simultaneously. There is high need to maintain values of education with ethics and morality in the profit making environment. Hence tremendous pressure is with teachers to satisfy their student (customer) in class room as well as out of class room. Attracting and retaining students in the educational institutes' premises in general and in class room in particular is extremely difficult. Therefore the pressure is with old generation teachers to satisfy new generation student in the era of information communication technology.

Key Words :

Product (Education), Customer (Student), Profit Making Activity (Education Institute), Processor (Teacher), Perceived Values, Expected Values, Actual Values, Customer satisfaction, Competitive Pressure, Generation Y

Education in India

Education is the birthright of every child, but it is pity that about 30 million children out of 200 million in the age group of 6-14 years are deprived of school education. The enrollment in ratio is about 96 per cent in primary education in India. At the same time close to 40 percent is dropout at primary education level. About 80 million admitted in primary schools discontinued their study midway. School education is recognized as to build a foundation for national development. Higher education plays an important role in shaping economic and social development. But only a small fraction of students enrolling primary education is completing high school education. Only 20 percent population had completed primary education, 13 percent secondary education and 3 percent tertiary education. India's gross Enrollment rate (GER) is about 13.5 percent for higher education; it is among the lowest in the world.

Market forces have come to dictate and determine the goals and structure of education. Liberalization Privatization and Globalization (LPG) has become a multi dimensional challenge. Worldwide consumerism is also threatening education in many ways. There are political interferences and decline in the quality of the faculty, which are detrimental to higher education. Nearly 600 million of the Citizen of India is not literate. 440 million people are below the poverty line. Similarly nearly 300 million are unemployed and about 45 million unemployed are registered with the employment exchanges. Less than half of female higher education graduates join the economically active

population. Among India's 15-29 years old, only about 2 percent have received formal vocation training. According to Science Report 2010 of UNESCO, in the category of global patents, India's share is merely .5 percent. India's contribution to the world research publication is only 3.7 percent. Investment in education and training in India is at hardly 4.1 percent of GDP.

In the 21st century students have to be positioned as the discoverer and teachers have become a guide to academic excellence. Education institutes are working to redefine academia to be more engaging and challenging. Teachers are adapting to facilitate class discussions and flipped classrooms. The higher education is becoming student centric (customer oriented). The intentions of the education and particularly higher education and the approach of institutes of higher learning are critical to implement with effectiveness and difficult to release competitive pressure. A recent study indicates that only ten percent MBAs are employable despite robust demand to management graduates in the market. According to the latest report only 10 percent of Graduates are directly employable in India and only 25 percent of engineering graduates are directly employable. The reason is rapid mushrooming of three tier institutes of higher education. The institutes of higher education are mostly absence of socio economic perspective and a social consciousness. Therefore the institutes fail to impart quality education to build value based graduates and post graduates.

Teacher for Every Answer?

Teaching is recognized as noble profession. The students had paid considerable attention to their teachers in the class and off the class prior to the introduction of information communication technology (ICT). The students were compelled to take class notes beside active listening and understanding the lectures of the teachers. The teaching of teachers in the

classroom had become the course material for the students. The students could not have the access to the online databases and search engine prior to introduction of ICT. The students were required to spend a considerable amount of their academic life for submission of assignments and attempting examinations. In this period the teachers had an upper hand over the student in the learning environment. It was because of (1) availability of references material were very limited and (2) teachers were perceived to be persons with an answer for every question that came in the minds of the learners. Hence the entire learning process was lecture oriented. It was more of the supply side factors rather than the demand side (student-customer) factors.

Introduction of information communication technology in higher education started providing answers to every question that twinkle in the mind of learner. Search engine can provide N number of references for a particular topic or jargon. But the author personally does not agree for the same. The students of Y generation need an interesting teaching pedagogy and cannot listen to continuous lectures about half an hour. New generation students give more importance to the off-the-class room learning than the class room learning. These students are good in getting through the examinations just a week before preparation of examination. There is high pressure to transform the education process from the examination orientation to learning orientation. It resulted into a wide gap between intention of education and implementation of education in real life. Hence may be we hardly had co-ordination, co-operation between business management education institutes and industry – business in the country. The competitive pressure in respect to customer satisfaction need be released by considering supply side (student-customer) factors.

Competitive Pressure on Higher Education

At the time of independence, the number

of universities was no more than 20, and colleges around 500 and the total enrolment were less than one lac. By the end of the 2012, the Indian higher education system grown into one of the largest in the world with 634 universities, 33023 colleges, faculty strength of 8.17 lac and an estimated enrolment of 16974883 students. The higher education institutions include 43 central universities, 297 state universities, 129 deemed universities, 100 private universities and 65 institutions of national importance established through central legislation and another 5 institutions established through state legislations. NAAC have accredited 148 out of 416 universities and 3934 out of 20677 colleges by March 2009. Out of NAAC graded colleges, 68 percent colleges scored “B” grade, 23 percent colleges scored “C” grade and 9 percent colleges were in “A” grade category. Out of the total accredited universities, 46 percent universities are rated as “B” grade, 23 percent are rated as “C” grade and 31 percent rated as “A” grade.

More than 80 percent of the students are joining in graduation and out of which only 12 percent of the students are reaching post graduate course and only one percent of the students are joining in research courses. According to Assocham eco Pulse Study 2008 depicted, Russia has emerged as the frontrunner in the quality of education parameter to compare several largest emerging economies of the world. Indian has been with the score points of 3.3 on the scale of 10. China the largest sized among the developing countries and with the fastest growing GDP, has secured second place with score points 6.7. Brazil is positioned at third place with 5.56 score points as the quality of education in Brazil remains stable across all levels of primary, secondary and higher education. Mexico has been ranked at fourth place on the strength of its higher education.

There is high deficit of teachers in higher education institutes in terms of quality and quantity. The paucity of qualified faculty on full time basis and approved by the authority is serious

concern. Almost all university teaching departments and colleges, institutes are under staff as far as teaching and research is concern. The teacher student ratio stipulated by apex organizations may not see in most of the institutes. Many of the institutes of higher education are under staff in terms of qualified teachers. These institutes outsource almost the entire teaching to so call visiting faculty. The average age of teacher in these institutes may range from 25 to 30 years with a senior faculty working as Dean or Director or Principal. The fresh pass out post graduates has demand as a teacher because of their easy availability and low payment. The teachers in these institutes of higher education look at teaching profession as time pass activity. In some cases to whom no takers are there in employment market, they prefer teaching in higher education institutes. Sometimes student-teacher finds in same age group. Therefore it find difficult to develop teacher –s student relationship in right perspective of higher education. There is tremendous pressure with teacher in spite of all odds with them including absence of work environment, work culture, basic facilities, job security, reasonable compensation, work life, orientation to profession etc. But administrator expects better examination results, better job placement to students and healthy nexus with all stakeholders. These teachers have to look after administrative assignments and routine work of the institute on priority basis because in most of the institutes administrative and support staff is missing. There is high need to release this pressure with teachers in higher education, so as to get better results from teaching of the teachers.

Customer Satisfaction

The changing structure of higher education has started recognizing the students as customer of education institutes. Prior to this change in higher education students had right approach and aptitude towards in class and off class learning from teachers. The students themselves also have feelings as customer of

education institution. Because of this approach the students have expectations from institutes and particularly from teachers in the capacity of customer of educational institutes. The perceived expectations of students from higher education are far away from actual expectation. The filling of gap between perceived and actual expectation requires long day residence of students in the educational premises. Students are neither ready to turn up to classes nor to education premises. The expected expectation of students and expected expectation of teachers from students and owners expectations from students does not match anywhere. The students are valued customer for the institute owners. The owners wanted to satisfy these customers on various parameters. In most of the cases this satisfaction goes at the cost of teachers' credential, ethics and value of teaching profession, teaching methodology and students' proper assessment. The higher education has started losing its value, market credentials and legacy.

Education is facing new challenges in this LPG era. The cost of education particularly higher education and technical education is raising manifold. Bank loan are not adequate to open the doors for the deserving poor students. World class infrastructure is confused with quality of education. National Knowledge Commission has recommended achieving a GER more than 15 by 2015. About 1500 universities are required by 2015, to upgrade the quality of higher education. The higher education has to produce 2.5 million graduates every year. In world University ranking Indian is nowhere in this recently realized university ranking (2000). Indian universities and institutions are not in top 200 world ranking.

Education needs additional investments of nearly Rs. one to two lac crores per year. Present investments are about Rs. 78000 crore per year. Higher education is in the purview of the State Government; hence 90 percent is finance by State and 10 percent by Central government. According to the planning commission of India,

the world will have 56.5 million fewer skilled workers than it needs by 2020. Indian higher education system has capacity to shape graduate as skilled and professional human resources. There is high need to concentrate on education in general and particularly on higher education on priority.

Meeting Gap between Teaching and Learning

There is huge gap between learners want and teachers teach because of various factors. But it needs to narrow down by shifting to learners oriented education system. Following are the suggestions for the same.

1. Customer is always right is the maxim of the business management education institutes in the present scenario then the institute should produce employable students and hand over them to the industry.
2. There should be industry institute interaction or partnership or co-ordination or co-operation in making students employable. A matching of demand - supply for required number of human resources shall be there.
3. The curriculum of higher education programme shall be industry ready. People from industry shall be partner in designing curriculum as well as in designing teaching pedagogy also.
4. Teachers are expected to delearn the outdated concepts and practices and relearn the new concepts or development in the practical environment.
5. The business and industry have to come forward to allow students for learning purposes. Industry and business in India hardly allows to students even during summer internship programme or in training programme to learn in reality.
6. Industry visits and industry working during academic programme are only paper completion work, it has no meaning. The industry and business people need to be serious to allow students for practical learning.
7. The new generation students need an entertainment oriented teaching process. It does not mean that teachers should become entertainer. Teachers need to design their innovative teaching methods so as to students shall have self interest in learning.
8. Students should assess continuously on various parameters. Examination shall not be single parameter for assessment of students. Out of class room teaching rather informal way of teaching shall be there and assessment of this learning shall be on continuous basis on different parameters.
9. Self assessment of students on different parameters can be proved better and healthy learning environment. Students will learn self assessing themselves as well as the assessment remains transparent and clear.
10. There shall be good combination of faculty from business and industry with core faculty to teach various subjects and institutes shall provide industry exposure to the faculty.
11. Teachers should get regular feedback from students as well as industry people and administrators. Similarly students should get feedback from teachers, industry people and administrators.
12. Participation of students in designing assessment programme is highly well come. Students shall be allowed to contribute case studies, situations, business stories etc in the curriculum.
13. The institutes shall provide all basic facilities to students and teachers separately, which required for longer stay in educational premises. It is also expected that the institute should keep their promises to teachers and students.

14. There shall be regular interaction of administrators and teachers with all stakeholders particularly with students.

The perceived and expected value and expectations of students could not match because of high pressure with teachers. The actual expectation and values of students are quite mismatching with their perceived value and expectation. The gap can be filled in by teachers provided their pressure of unwanted factors except teaching can be release timely.

Type wise distribution of Degree awarding Universities

SN	University Level Institution	No	Percentage
1.	Institution of National Importance and Other University Level Institutions	65	10
2.	Deemed Universities	129	20
3.	Private Universities	100	16
4.	State Universities	297	47
5.	Central Universities	43	07
6.	Total	634	100

Students Enrollment by Stages in Higher Education 2010-11

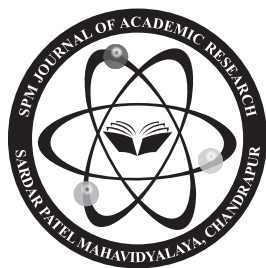
SN	Course	Total	Percentage
1.	Post Graduate	2049124	12
2.	Research	137668	01
3.	Diploma/Certificate	171618	01
4.	Graduate	14616473	86

Score Point for Quality Education on the Scale of 10

SN	Country	Score Point
1.	India	3.29
2.	China	6.77
3.	Russia	7.28
4.	Brazil	5.57
5.	Mexico	5.45
6.	indonesia	2.68
7.	SouthAfrica	3.89

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Towards inclusive growth with Micro-Insurance

Kavita B. Hingane¹ and R. P. Ingole²

¹Dept. of Mgt Studies and Research, Sardar Patel Mahavidhyalaya, Chandrapur.

²Dept. of Commerce, Sardar Patel Mahavidhyalaya, Chandrapur.

E-mail : kavitahingane18@gmail.com

Abstract :

India is enjoying rapid growth and benefits from a young population. Its middle class is growing rapidly but 70 percent of the population is still rural, often very poor, and handicapped by poor health and health services, and low literacy rates. Although the type of risks faced by the poor such as that of death, illness, injury and accident, they are more vulnerable to such risks because of their economic circumstance. Micro insurance is of supreme importance for protecting poor lives against accidents, threats and other types of risks. With the liberalization of Indian economy, Micro-insurance has got momentum. The public sector Insurance Companies has emphasized on exploiting the potential of rural India as it provides immense opportunity in the globalization era. This paper highlights the importance of micro insurance for the upliftment of rural poor and also focuses on the initiatives taken by private and public insurance companies in the growth of rural India and also helps to understand how micro insurance is helpful in alleviation of poverty.

Keywords :

Micro Insurance, Upliftment, Contingencies, Liberalization, Globalization, IRDA.

Introduction :

The insurance is primarily a social device adopted by civilized society for mitigating the incidence of loss of income to families by unforeseen contingencies. In India, when life insurance companies started operating in the middle of 20th century the evil play natural to all business had its sway. Micro-insurance is considered by low premium and low coverage limits and sold as typical risk-pooling and marketing arrangements and designed for low income people and businesses not served by typical social or commercial insurance.

“Micro-insurance is the protection for the low-income population against specific dangers in exchange for regular payments of proportional premiums to the probability and costs of the involved risks”. - Churchill

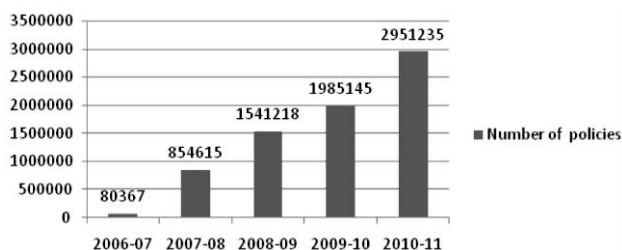
Micro-insurance is thus designed with the objective of protecting poor people and also designed with the environment that surrounds them, their needs, and possibilities. It is necessary that the product is developed for people ignored by traditional insurance markets.

Objectives Of The Study :

In the study following objectives have been tried to achieve:

- To study the importance of Micro Insurance for the upliftment of rural poor's and alleviation of poverty in India.
- To study the initiatives taken by private and public insurance companies for the growth of rural India.

Development of Micro-insurance In India



Traditionally in India, rare micro-insurance schemes were introduced, either by non-governmental organizations (NGO) due to the felt need in the communities in which these organizations were involved. These schemes have now gathered

momentum partly due to the development of micro-finance activity, and partly due to the regulation that makes it mandatory for all formal insurance companies to extend their activities to rural and well-identified social sector in the country (IRDA 2000). As a result, increasingly, micro-finance institutions (MFIs) and NGOs are negotiating with the for-profit insurers for the purchase of customized group or standardized individual insurance schemes for the low-income people.

The present day India is now firmly in growth trajectory. The Indian economy is growing @7 to 8 % for the last 5 years and it is going to continue to grow at a rate of 7.5 % during current year 2011-12. The calendar year 2010, the global life insurance premium grew by 6.4%, while the premium in emerging economy grew by 13.8 % and Indian life Insurance premium grew by 21.95 %.

As 23 % of population in India is in the age band width of 20 to 34 years and 65 % are them unbanked. The banking sector in India has more than 87051 branches, but 38% of them are in rural India. This year bank have identified 73000 habitations with a population of more than 2000 for financial inclusive. Clearly there is a definite understanding about the need to include each and every segment of population for a healthier and inclusive growth of economy and the country.

Given the above background, LIC has taken Micro- Insurance channel by way of a conscious initiative for spreading insurance amongst those who have been left behind so far. It is, with this clear understanding that, if the growth is not inclusive, then it cannot be sustainable, that LIC has formed Micro-insurance as a totally separate business vertical as soon as the relevant regulations for micro insurance were formed by IRDA way back in November 2005. The first micro- insurance policy. “Jeevan Madhur” was launched at the hands of the president of India, his Excellency, Dr. A. P. J. Abdul Kalam on 28.09.2006. During the year 2010-11, the business in Micro-insurance for LIC more than 29.5 lakh policies being sold. Almost 8 % of the total policies sold by LIC came from Micro-insurance.

Micro- insurance offers a viable alternative for low income households to manage their risks. It is also the means to tap the unexplored segment for the

insurance sector. Micro-insurance not only serves the saving needs of the economically challenged people, but also serves to meet the risk potential needs of the population in emerging economies in financial fragile homes in India.

Even though, we have more than 285 million policy holders, there are millions of those who have limited capacity to save but compatible insurance is not made available to them.

Many times, the Micro- insurance is understood in terms of a product which can sustain only on subsidies and government intervention etc. In principle, Micro insurance is like any other insurance and the only differentiating factor is that the whole quantum of insurance, along with premium is small in size. In classical style, Micro-insurance is like any other insurance and the only limited in size with simple terms and conditions, so that, it is affordable and easy to understand specially for the niche segment, for which, it is meant. Today, LIC has successfully implemented Micro-insurance schemes by way of 2 products "Jeevan Madhur"- which is an Endowment Plan and "Jeevan Mangal"- which is a term Insurance plan. Both these plans have captured the imagination of the target segment and have stood on their own. During the recently announced valuation result, "Jeevan Madhur" plan supports a bonus rate of Rs. 26 % for terms beyond 11 years and 21 % for term less than 11 years.

In five years time, LIC has successfully engaged community organizations, such as NGOs and SHGs. In addition, MFIs and some sections – 25 companies have helped in creation of dedicated, separate marketing channels that is cost effective and efficient in terms of reach and enablement. Today, more than 10040 such agents are selling Micro-insurance across the country in all states. It is continuously trying to expand the bandwidth of the channel. Leveraging other avenues to expand the reach is very high in our priority.

The total number of Micro-insurance policies sold during the year 2010-11 was 29.5 lakhs. The share of Micro-insurance policies in LIC total portfolio has also continuously increased, year after year as it can be seen from the chart below.

Progress of Micro-Insurance in LIC

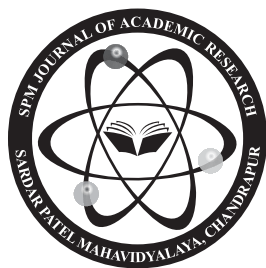
Through Micro Insurance, LIC has very successfully provided "micro" or small ticket component to the robust product spectrum of the Corporation. There is definite intent to tap the latent potential existing at the lower reaches of the socio-economic pyramid. In urban as well as rural areas, started selling micro insurance, we are also covering the future aspirant's class.

Conclusion :

In five years, the micro insurance business vertical of LIC has become a powerful and robust channels. By year end, almost 1 crore policies would have been sold. This will be big feathers in cap for a vertical which created entire distribution network from scratch and created entire distribution network from scratch and created a totally separate and different but fully IT driven robust business processes. In coming times, we shall be totally revamping the premium payment options and back end processing for this line of business. It will be in tune with the growing needs of distribution force and the emerging big size of Micro-insurance business.

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Emerging Interest of corporate Sector in II Tier and III Tier City

Bina M. Moon¹ and Rajesh P. Ingole²

¹Dr. Ambedkar Arts, Commerce & Science College, Chandrapur.

²Commerce Dept. Sardar Patel Mahavidyalaya, Chandrapur

E-mail : btanu2007@rediffmail.com

Abstract:

As Indian economy experiences the boom in all sectors triggered by its economic and investment policies, the metros or the Tier I cities are the ones that are inundated with burgeoning investments in the industrial and the services sector. Along with large-scale investments has boomed the realty sector creating congestion, arising out of an increasing demand for residential and commercial properties. This congestion in realty structures has forced the respective governments and many investment companies to seek out for alternative smaller cities leading to a demand for Tier II and III cities. The large scale investments by the corporate sector in the smaller cities apart from initializing economic prosperity and job opportunities has also created demand for realty spaces. Recent trend also shows that due to lack of availability of business equipped infrastructure and exorbitant property prices in the existing metros, the IT, ITES and the BPO companies are vying for the smaller cities where they are promised better infrastructure, state-of-the-art office spaces and also skilled manpower.

Key wards :

Tier I City, Tier II City, Tier III City, Corporate grant emerging in II and III Tier, Multinational, Retail Outlets.

Introduction to 2 Tier & 3 Tier Cities

India is a vast country and in India there are more number of small cities & areas as compare to metropolitan cities. The growths of the Indian Economy will not only dependent solely upon the Big Cities and the focus should not be completely on Big Cities; there is big scope in developing small cities also. If the Small city also gives benefit to the economy then it will naturally lead to the Fast & Positive growth of the Country.

Keeping this in mind the major corporate giants are turning their faces to small cities also because in the small cities they will get everything cheaper like land, labour, machinery etc. as compare to metropolitan cities. And so the investment will be very low as compare to big cities. And as always said that Consumers of Small Cities are more Brand Loyal & Conscious. So this will prove a brighter side to them with a long term success.

Ahmadabad, Chandigarh, Indore, Kolkata and Nagpur are the Tier III cities in India which are best positioned to emerge as major centres for the off shoring of activities by IT companies over the next five years, according to a recent Jones Lang LaSalle report titled "India - The Next IT Offshoring Locations. Tier III Cities".

The report, which is part of the firm's World Winning Cities research, highlights these five cities as fulfilling the requirements that IT companies look for when deciding on off shoring locations, namely availability and costs of labour and real estate, business environment as well as physical and social infrastructure.

Vincent Lottefier, Country Head of Jones Lang LaSalle India said, "The continuing cost pressures characterizing India's Tier I cities, Bangalore, Mumbai and Delhi and Tier II cities, Hyderabad, Chennai and Pune, are encouraging more companies to actively look at Tier III cities to satisfy their future requirements for the off shoring of business processes. However, for firms entering India for the first time, Tier I cities are likely to prevail for some time, as they provide higher comfort levels."

"Tier III cities currently provide cost advantages of 15%-30% over Tier I and II cities through lower labour and real estate costs and reduced staff attrition rates and this gap is expected to widen

further. Of the five leading Tier III cities identified in our research, Kolkata and Chandigarh are best positioned to mature into major centres over the next five years," added Lottefier. These Tier III cities are already witnessing extensive interest from occupiers, with demand of 1.2 - 1.5 million sq ft expected over the next year. This interest is likely to trigger further growth in infrastructure and commercial real estate, similar to the growth experienced in Hyderabad and Pune in recent years.

In addition to the five cities identified in this report, a number of other cities are also emerging as potentially suitable locations for IT off shoring. While they have not yet attracted the same level of occupier interest, cities such as Cochin, Trivandrum and Mangalore are beginning to appear on the radar screens of IT firms. These and other emerging cities will be examined in a future report.

Each of the identified five cities has its own characteristics that will appeal to different types of activities and firms. From a human capital perspective, Kolkata and Nagpur provide the largest manpower pools with these cities being comparable to Pune (Tier II) in terms of future labour availability. Nagpur currently provides a cost advantage of about 15% over Kolkata, which offers a 10% cost advantage over Pune.

From a real estate perspective, Kolkata provides the largest availability of grade A office space, with large developers such as DLF and Unitech, who have traditionally operated in Tier I cities now operating in Kolkata. From a facility cost view, Nagpur and Ahmadabad provide a 25%-30% cost advantage over Kolkata and Delhi.

Ahmadabad and Chandigarh provide the highest cost advantage amongst the subject Tier III cities and are therefore likely to attract occupiers that place a high weight on the cost factor.

One of the basic reasons for investments flocking in to the smaller cities is available properties and affordable prices. Moreover, the special initiatives taken by the respective governments in providing the smaller cities with infrastructural facilities and creation of SEZs, has played a vital role in promoting these small towns into cities of the future. Keeping in view all the congenial factors necessary for setting up corporate infrastructure, the investing companies

ranging from pharmaceuticals to financial institutions, automobiles to the IT & ITES sectors; to the retail and real estate sector are opting for the smaller cities transforming them into India's fastest growing cities in a matter of few years.

The large scale investments by the corporate sector in the smaller cities apart from initializing economic prosperity and job opportunities has also created demand for realty spaces. While developers from all the nearby areas flock in to cater to the real estate demands, the property markets in these smaller cities are witnessing along with a changing skyline, an unprecedented hike in real estate prices. While the realty trend in Tier I cities have reached a saturation point, with the yield gap witnessing significant margin of 9.5 to 10 per cent, the Tier II cities record a yield of 10.5 to 11.5 per cent. However, the emerging winners in the present real estate scenario of India are the Tier III cities, which offer greater yields of up to 12 percent. This rising prices and promising future of these cities are driving investors to buy properties predicting long-term gain in years to come.

A careful study of these Tier III cities reveals the close proximity of these cities, to the most happening cities of India like Delhi, Mumbai, Bangalore to name a few. Thereby, it will be no mistake if they are called the extension cities of the booming metros. Of late, the tier II cities like Pune, Kolkata and Hyderabad have made business opportunities and infrastructural development like never before. Now it is the turn of the Tier III cities or the smaller cities like Jaipur, Ghaziabad, Kochi, etc. to make it big into the realty business as the government and the corporate sector target them as 'India's Next Destination Cities'.

Example Of Corporate Giants Emerging In 2 Tier & 3 Tier Cities

MEDIA

BIG Cinemas: AB BADA MAZAAAAYEGA.

Adlabs, a Reliance ADA Group company is one of the largest entertainment conglomerates in India. What started as a laboratory for processing ad films over three decades ago, has today become a key player in the entertainment and media industry through its production, distribution, exhibition and post production services. It pioneered the concept of multiplexes across the country, gave a corporate face

to movie making, and introduced the IMAX and 6D viewing experiences to India. Adlabs has always been at the forefront of change and opportunity.

REALESTATE

Real estate is a legal term (in some jurisdictions, notably in the USA, United Kingdom, Canada, and Australia) that encompasses land along with anything permanently affixed to the land, such as buildings, specifically property that is fixed in location. **Real estate law** is the body of regulations and legal codes which pertain to such matters under a particular jurisdiction. Real estate is often considered synonymous with real property

However, in some situations the term "real estate" refers to the land and fixtures together, as distinguished from "real property," referring to ownership rights of the land itself.

For Example People of Maharashtra are now very keen to invest in NAGPUR now-a-days as it is centre of India and also an upcoming city as per India's Growing Scale, so here is a brief information about the ORANGE CITY – NAGPUR as a Real Estate point of view.

Nagpur, Maharashtra derived its name from the river Nag that flows through it. Also known as the 'Orange city' of India, Nagpur, once a small country town has in recent times metamorphosed into a metropolis with luxury apartments and condominiums, lavish showrooms, malls with multiplexes, hi-tech healthcare facilities and better infrastructure with smooth roads and flyovers. The data itself speaks for Nagpur real estate witnessing a major spurt.

Moreover, Nagpur gradually developing into a BPO hub in the lines of Pune as infrastructural facilities, skilled work force and easy accessibility to major destination cities in India and abroad proves advantageous. The recent foray of high players in the field like Genpact (formerly GE Capital) into the city is sure to bring major boot to the economic and realty sector of Nagpur.

Another favorable reason for investments into the city is the availability of workforce who are gradually shifting base to Nagpur following the growth of job opportunities and congestion in the nearby cities of Mumbai and Pune. This consistent migration into the city has led to large demand for

residential spaces in the city. Housing in Nagpur is becoming simple due to real estate agents in Nagpur who know the city trends and are aware of Nagpur property prices.

Still branded as an upcoming city, the property prices in Nagpur may not be as exorbitant as its cousin cities of Mumbai and Pune but due to all these factors there has been a significant moderation in the quality of residential and commercial properties in Nagpur leading to substantial price escalation in the last couple of years.

Nagpur, in recent times has developed into a centre of brisk business with several IT companies starting their operational bases in the city and there are reports of technology giants like Infosys and Wipro making serious consideration setting up independent facilities for its operations and other amenities in the likes of educational institutions, healthcare and entertainment facilities.

Multinational Retail Outlets

Eight retailers and textile companies have tied up with weavers in Varanasi to give a boost to textile clusters. Some of the retail chains that have signed up are Pantaloons, Big Bazaar, Fab India, Calico, Advantage Shilpi and UP Exporters. The tie up has been facilitated by Entrepreneurship Development Institute of India (EDI) through its Integrated Handloom Cluster Development Programme.

Kirana stores have an ally on their side in their fight to compete with large stores and malls. Hindustan Lever Ltd. has tied up with almost 175 local kirana stores in Ahmedabad to make them as 'Super Value Stores' (SVS), that offer products that come with free gifts just like large stores do. The growth of malls and modern format stores has severely cut into the profit margins of FMCG companies and has also drastically reduced the number of customers in kirana stores. With this tie up, both stand to gain with lower prices, higher discounts and several promotional discounts.

Reliance Retail has purchased about 40,000 sq ft of space at Star City Mall in New Delhi's Mayapuri Vihar, which will become the anchor tenant for the mall, which is being developed by Mahatta Towers Pvt. Ltd. According to sources, the space will be used as a food and grocery supermarket.

Another location chosen by the company was

in a mall developed by Omaxe Constructions in Greater Noida which has been leased and will be developed as a hypermarket format store. In Ahmedabad, the company has purchased 200,000 sq ft of space in the Iskon Mall, which will be developed as a hypermarket. The company has also purchased space in Jamnagar and Rajkot.

Menswear brand Van Heusen is aiming to reach a turnover of Rs. 5 billion in the next 3-5 years. FMCG major, Hindustan Lever Ltd. (HLL) is planning to soon launch 'Project Shakti', its rural initiative in Bihar and Jharkhand. With this project, the company plans to cover 500,000 villages with 100,000 women entrepreneurs or Shakti Ammas over the next two years. ITC is setting up 50 of its rural supermarkets called Choupal Sagars by the March 2007.

At the opening of Adidas' Sports Performance Centre (SPC) in Chennai, Andreas Gellner, Managing Director of Adidas India marketing said that the company was seeing the growth of the brand more from its exclusive stores such as the SPC's. These new stores are the company's large format stores and use a sports and performance inspired design.

The real estate venture of the retail division of the Future Group, Kshitij Venture Capital has tied up with an equal joint venture partner, Atul Ruia of Mumbai and Sharyans Resources of Chennai to develop a plot in Velachery into a 2 million sq ft mall. The company is planning to develop it as a mixed use retail, possibly including a hotel.

Levi's Strauss & Co. is planning to retail exclusively from its own stores instead of multi-brand-outlets (MBOs) to be able to make the brand more exclusive. The company has already begun to phase out many of its 460 MBOs and is gearing up to increase its exclusive stores from 110 to 250 by end 2007 across the country.

Pantaloon Retail India Ltd. (PRIL) is planning a Rs. 20 billion expansion and has acquired 4 million sq ft of land in various locations in the country and will soon be acquiring another 46 million sq ft of land by 2010. The company plans to have 40,000 stores in 90 cities in formats such as eZone, Collection I, Furniture Bazaar, Big Bazaar, Central Mall and Electronic Bazaar, targeting Rs. 300 billion as turnover.

PRIL plans to open 22 Central malls, more

than 100 Furniture Bazaars, 85 eZones and 130 Electronic Bazaars. The company's home furnishings division, Home Town will open in Noida in November this year, with stores in Pune and Bangalore early next year.

Levis Signature:

LEVI STRAUSS sees India, with its opportunity of \$35 million, as a key market along with China and Russia, according to Mr John Anderson, President, Levi Strauss, Asia Pacific.

Vishal Retail Ltd / Vishal Megamart:

Started as a ready-made apparels retailer in Kolkata in 2001, today, they have 54 stores spread over 18 states across India, out of which over 40 outlets are located in tier-2 and tier-3 cities. In 2003, it acquired the manufacturing facilities from Vishal Fashions Private Limited and M/s Vishal Apparels. Subsequently, it diversified its portfolio of offerings to include other retail goods.

ITC / Wills lifestyle:

ITC entered the Lifestyle Retailing business in 2000 with its Wills Lifestyle chain of specialty stores. The company's main retail venture is through garments retailing and now it is entering into the agri-retailing as well.

Godrej / Lifespace Stores:

Godrej & Boyce Mfg. Co. Ltd started its retailing division in 2003 to bring all Godrej products under one roof. Initially, they were just called Godrej showrooms but in 2005 the showrooms were branded as "Godrej Lifespace Stores". There are already 49 Lifespace stores across 25 cities covering over 1,40,000 sq. ft. Currently, holding about 28 per cent of the market share in the furnishing and home appliances market, Godrej Lifespace is planning to open 100 more stores by 2010, including Tier 2 and Tier 3 cities to consolidate its position.

Bata:

Not just India's but Asia's largest footwear retailer, Bata entered into India way back 1931. Today, Bata operates 1250 outlets across the country garnering 35 per cent market share in the organized sector and nearly 9 per cent of the footwear market.

Havells India Ltd. :

"Havells Galaxy" in Chandrapur. A one-stop-shop for all your lighting and electrical

needs!!! Chandrapur: Havells India Ltd, a US\$1.2bn company, and one of the largest and fastest growing electrical companies in the world, opened exclusive showroom in Chandrapur - "Havells Galaxy".

Merits of Corporate Emergence :

1. Various reasons to invest in 2 & 3 Tier Cities.
2. Approx 80% of India's population lives in 2 tier & 3 tier cities of India
3. The input cost like manpower, land, resources etc is much lower as compare to metro cities.
4. I.T Companies also build their IT Parks at a much lower rates as compare to metros
5. As per PLC (Product Life Cycle) it is very necessary to give much attention to the new product to grow because already established cities will not give much returns as compared to 2 & 3 tier cities as they are already established and grown.
6. High running rates of land is a very important issue to invest in 2 tier & 3 tier cities
7. Multinational grow their turnover as well as their popularity
8. Enters thru their own way to capture the market
9. An increase in demand of Corporates Retail Outlets, Multiplexes & Branded Super Markets had been seen through our surveys.
10. A demand of more exposure for these Corporates Giants had been asked by the end-user.
11. Competition will be Healthy in these Markets.
12. More Product Flow, Income Flow will be seen in these type Economy
13. Nagpur is in the heart of the country. When Boeing sets up their maintenance base for Asia there and MIHAN (Multimodal International Hub Airport at Nagpur) comes up, this city will see a change. It would be a city for logistics.
14. Employment will increase at a huge scale.
15. More number of developed Cities in the Country.

De-Merits of Corporate Emergence :

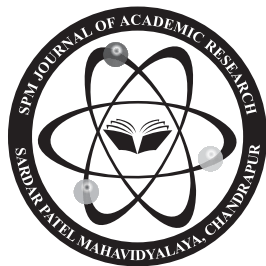
1. Bad Effect on the good Agricultural Land
2. Although Chennai is considered a metro, it is not

really one. While it has lot of characteristics of a metro, prices have not gone up like the other metros. One can still afford a house or land. It has diversified industries such as auto and foundry. It has attracted a lot of investments from industries without much price increase so far. So believe Chennai is set to witness the next boom.

3. The small & backward areas will be still left as it is.
4. Air, Sound Pollution will increase and cause harsh effects to our Geographical Conditions.
5. Chances of more Demand & less Supply.
6. Market will be not much stable.
7. Many types of Piracy & Imitations actions will be taken to destroy the Healthy Competition in the Market.

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The State of e-Learning in Higher Education: An Eye Toward Growth and Increased Access

Vandana A Giratkar

Deptt. Of Chemistry, S. P.College, Chandrapur

Email: giratkar.vandana@gmail.com

Abstract:

e-learning refers to the use of electronic media and information and communication technologies (ICT) in education. e-learning is broadly inclusive of all forms of educational technology in learning and teaching. e-learning is inclusive of and is broadly synonymous with multimedia learning, technology-enhanced learning (TEL), computer-based instruction (CBI), computer-based training (CBT), computer-assisted instruction or computer-aided instruction (CAI), internet-based training (IBT), web-based training (WBT), online education, virtual education, virtual learning environments (VLE), m-learning, and digital educational collaboration.

Keywords:

e-Learning, Satellite, m-learning

Introduction:

e-learning includes numerous types of media that deliver text, audio, images, animation, and streaming video, and includes technology applications and processes such as audio or video tape, satellite TV, CD-ROM, and computer-based learning, as well as local intranet/extranet and web-based learning. The use of the Internet and related technologies for the development, distribution and enhancement of learning resources.

SWOT analysis of e-learning:

- Redundant storage space
- High-bandwidth required to broadcast courses over the Web
- Computer-based-training (CBT)
 - Interactive educational software presented on floppy disks and CDs
 - Allows students to take a self-paced course in any number of subjects
 - Since no downloading is necessary, bandwidth is not a concern with CBT courses

	e-Learning SWOT Analysis
Strengths	Ability to offer education to large numbers of students from distant locations.
	Lower costs (travel, instructor fees).
	Shorter courses mean less time commitment necessary from corporate students.
	Lower cost means education is more accessible to people with limited financial resources.
	Use best instructors making best courses available to all.
Weaknesses	Large commitment to technology needed from universities, corporations offering e-learning courses.
	Lack of face-to-face contact with students.
	Current technology does not support low-cost, high-bandwidth, synchronous student-teacher interaction.
Opportunities	Ability to reach the world instantaneously with the latest news and technologies.
	Ability to train sales force and employees about product advancements.
	Access to courses from a variety of universities.
	Decrease long-term education expenses by shifting learning programs to the Web.
Threats	Lack of student interest.
	Equipment and technology requirements restrict adoption of e-learning.
	Lack of human interaction deters the learning process.
	Most corporate instructor-led courses last 4-5 days, comprehensive coverage of some topics could be lost in a shorter e-course.

e-Learning Technologies and Infrastructure:

- Video-conferencing technology
- Streaming audio and video

Educational approach:

The extent to which e-learning assists or replaces other learning and teaching approaches is

variable, ranging on a continuum from none to fully online distance learning. A variety of descriptive terms have been employed to categorize the extent to which technology is used. For example, 'hybrid learning' or 'blended learning' may refer to classroom aids and laptops, or may refer to approaches in which traditional classroom time is reduced but not eliminated, and is replaced with some online learning.

e-learning in higher education:

In the United States, e-learning has become a predominant form of post-secondary education. In 2009, 44 percent of post-secondary students in the USA were taking some or all of their courses online, this figure is projected to rise to 81 percent by 2014.¹ During the fall 2011 term, 6.7 million students enrolled in at least one online course.

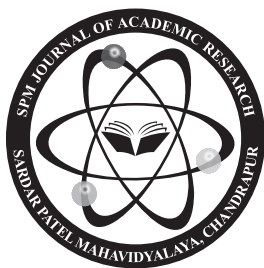
The increasing influence of globalization and the emerging information society, set new requirements for all areas of social life, including to higher education. E-Learning became an important instrument in the new Higher Educational Environment in the digital age which creates student-centered learning and educational practice, offering new more flexible learning methods.

Conclusion:

The development of new information technologies in the 21st century is expanding the range of information resources, it is also creating conditions for the formation of a global informational, educational and cultural space and therefore changes occur in the education system. The paper underlines that high results cannot be achieved in the learning and the educational process without integrating new information and communication technologies in the education system. The use of enormous integrated set of computer and internet tools and resources allows us to achieve more efficient and effective training. The students are no longer passive consumers of the educational programs and services, but active participants in the educational process. Their skills and competencies to work effectively with digital technologies are prerequisite for successful and responsible solving and presentation of scientific problems and cases.

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Synthesis and Analysis of Aspirin at 273 K

D. S. Wahane

Department of Chemistry, Sardar Patel Mahavidyalaya, Chandrapur-442401

Email : wahane8884@rediffmail.com

Abstract:

Aspirin (o-acetylsalicylic acid / 2-(acetytoxy)-benzoic acid) was first synthesized by Bayer. It has an antipyretic, analgesic and anti-inflammatory properties hence most popular drug of all time. Aspirin is synthesized at room temperature. The most difficult task is isolation, purification and determination of its purity. Actually there are several ways to determine product's purity; melting point, chromatography, mass spectrometry, spectrophotometry, and others. We used melting point characterization and ferric chloride test for purity determination. Melting point is a physical property inherent to a substance's identity. Purer the substance, the smaller the melting range. More impurities lower the melting point of any compound. In this view, it is a best property to determine the purity of any compound.

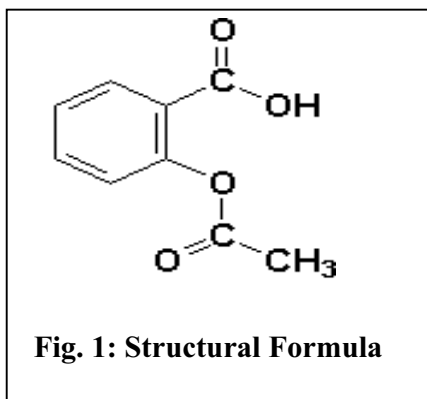
Key Words :

Aspirin; antipyretic; Anti-inflammatory; Purity; Melting point

1. Introduction:

Aspirin (acetyl salicylic acid (ASA) / 2-(acetytoxy)-benzoic acid / 2-Ethanoyl oxy benzene carboxylic acid) is one of the oldest synthetic drugs¹. One of the oldest recorded attempt for the discovery of aspirin appeared in England, in 1763, crediting the bark of willow trees with a beneficial effect in improving pain due to fevers, aches, and pains. But first synthesized successfully by Felix Hofmann in 1890 of the Bayer Company in Germany and marketed under the name "Aspirin". In 1899, aspirin was submitted in Berlin for registration. A year later, it was patented in the USA. It was first used for a treatment to cure arthritic pain. Its main effect is as a pain killer and fever depressant, but also used to lowers the incidence of heart² attacks. It has remained one of the most popular drugs of all time due to its good medicinal properties.

It has also antipyretic, anti-inflammatory properties. In the last few decades other drugs such as acetaminophen (Panadol or Tylenol) and ibuprofen (Advil) have taken much of the market for ASA, but ASA remains an important and widely used drug. In 1950, aspirin was included in Guinness World Records as the best selling pain killer. An international aspirin award is given each year in honor of this drug. In this experiment, we synthesized and analyzed Aspirin at 273 K.



2. Physical Data³ of Aspirin:

Formula : $C_9H_8O_4$
 Molar mass : 180.157 g/mol
 Melting point : 135°C
 IUPAC Name : 2-(acetytoxy)-benzoic acid
 Density : 1.40 g/cm³

Stability : Stable at RT (Keep dry)
 Soluble in : Water, Ether, and Ethanol

3. Materials and chemicals

Salicylic acid (AR Grade –Aldrich, India), acetic anhydride and phosphoric acid (AR grade, S. D. Fine Chemicals, India) are some analytical reagents used and added in proportionate quantity as they are received. Double distilled water was used for the preparation of all the solutions.

4. Synthesis

4.1: Synthesize⁴ of Aspirin

1. Measure out 2.5 grams of salicylic acid into a 50 mL Erlenmeyer flask.
2. Add 5.0 mL of acetic anhydride and 5 drops of 85% phosphoric acid. Swirl the mixture.
3. Heat the mixture at 75°C, for 15 minutes, Stir the mixture occasionally during heating.
4. When reaction has reached completion (no vapors appearing), carefully add 20 mL of distilled water. Allow the mixture to cool to near room temperature. Transfer the flask to an ice bath for about five minutes. As the mixture cools, crystals of aspirin should form in the flask.
6. Transfer the contents of the cooled flask to a Buchner funnel assembly. Filter the mixture with vacuum suction. When most of the liquid has been drawn through the funnel, turn off the suction and wash the crystals with 5 mL of cold, distilled water. After about 15 seconds, turn the suction back on. Wash the crystals with cold, distilled water twice more in this manner.
7. Store the aspirin crystals in a safe place and prepare to test their purity.
8. Conduct the reaction in a well-ventilated area of the room which takes place as shown in fig. 1-

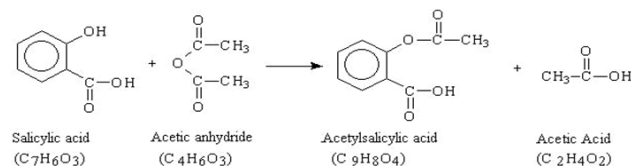
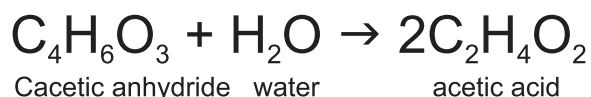


Fig.2: Reaction of synthesis of Aspirin

4.2: Isolation and Purification

Once the aspirin is prepared it must be isolated from the reaction solution and purified. The aspirin is insoluble in cold water, and can be isolated by filtering the chilled reaction solution. Purification is necessary to remove any unreacted salicylic acid and acetic anhydride, as well as the acetic acid product and phosphoric acid. Acetic anhydride is caused to decompose by the addition of water once the formation of aspirin is complete.



The acetic acid and phosphoric acid are water soluble and can be removed by washing the aspirin with chilled water. Salicylic acid is only slightly soluble in water and is not completely removed in the washing step. Final purification is accomplished by the process of **recrystallization**⁵. The impure aspirin is dissolved in warm ethanol. The solution is then cooled slowly, and the aspirin crystallizes out of solution leaving the salicylic acid and other impurities behind.

5. Result and Discussion

5.1: % Yield Calculation

During the crystallization process, swirling greatly increased the rate of crystallization. The synthesis yield⁶ was calculated from the masses recorded in the experiment. The % yield of crude product was summarized in table 1.

5.2: Melting Point Characterization

It is a physical property inherent to a substance's identity. . The purer the substance, the smaller the melting range. More impurities lower the melting point of any compound. The melting point is used to ascertain the temperature at which the kinetic and potential energy of the molecules are equal. However, since melting does not occur at a single temperature, a melting point range is found. This melting range represents the range where the solid aspirin melts into a liquid. In the solid phase, the aspirin is packed to obtain the lowest energy configuration in the lattice.

At the melting range, a sufficient amount of energy is added to overcome the hydrogen bonds, dipolar-, electrostatic-, and Vander-Waals forces that

exist in the lattice. These forces also are present in the liquid state, but they are weaker. Purity will be determined based on the values of the melting⁷ range; less pure substances will have a lower melting point and a larger melting range. The melting point data are summarized in Table 2. The narrowness and precision of the range indicates high purity. In addition, the maximum temperature of melting, $T = 135^\circ\text{C}$, corresponds with the maximum temperature of the melting point range, $T=133.7^\circ\text{C}$.

5.3: Determination of Purity by Ferric Chloride Test⁸

This test determines if there is any salicylic acid (Phenol) present in the product inform of impurity. Salicylic acid (Phenol) forms a colored complex with the ferric ion. Take three small test tubes. Add 0.5 mL of water to each of the 3 test tubes. Dissolve a small amount of salicylic acid to first test tube, add a similar amount of prepared aspirin to the second test tube and use the 3rd test tube as a control (only water). Add 1 drop of 1% ferric chloride solution to each test tube, shake and observe the color change (if any). The presence of salicylic acid is usually indicated by a color ranging from red to violet. The resulting color indicates the product is impure. The purple color indicates the presence of a phenol group. The intensity of the color qualitatively tells how much impurity is present.

Conclusion

The yield of purified aspirin was 1.59 g or 63% yield. Future experimenters could take steps to better the yield. Carefully checking the cleanliness of all glassware before beginning the purification to improve yield. The wide range and low value of the mp of the crude product indicates that before recrystallization, the aspirin was not very pure. After recrystallization, the small mp range of aspirin (133.7°C - 135°C) and ferric chloride test indicates a pure compound. In ferric chloride test the intensity of the color qualitatively tells about the purity of synthesized compound. This melting point's values and test correlates well with the literature standard value (135°) of aspirin. From this data, it is cleared that synthesized and isolated compound is pure aspirin.

Table 1: The % yield of crude product

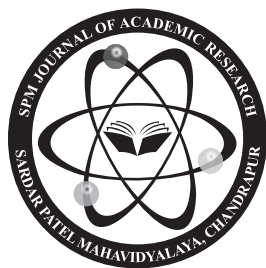
S. No.	Observation	Before recrystallization	After recrystallization
1	Crude product + watch glass	31.77 g	31.49 g
2	Watch glass	29.90 g	29.90 g
3	Crude product	1.87 g	1.59 g
4	% yield of crude product	1.87 g/2.52 g = 74%	1.59 g/2.52 g = 63%

Table 2: The melting point data

S. No.	Temperature	
	Initial Melting pt	final Melting pt
1	125	132
2	131	135
3	132	135
4	131	129.5
Average	131.3	133.7

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Ashoka: The Engaged Ecologist

R. K. Kamble¹ and P. P. Vaidhya²

¹Assistant Professor, Department of Environmental Science,

²Assistant Professor, Department of English,
Sardar Patel Mahavidyalaya, Chandrapur - 442 402.

E-mail : rahulkk41279@yahoo.com

Abstract

Human beings and environment are two integral part of the planet earth since time immemorial. Utilization of natural resources for the development has lead us this day of light and indiscriminate use of natural resources will show the light of tomorrow. Rulers in the history throughout the world were utilising natural resources for their economic upliftment. However, in the name of development various unethical traditions were set up such as killing of animals, destruction of trees and forest and pollution of water resources and so on. In the history of world rulers, king Ashoka set an example in various ways by developing first welfare state, cessation of capital punishment, reforms in irrigation, agriculture, education and so on. However, he had given proper attention for protection and conservation of natural resources. He set an example by establishing first hospital for birds and animals, constructed wells for drinking water and rest houses along road side, planted banyan trees and mango parks for travellers and bests. He was instrumental for prohibiting killing of animals (ahimsā) in his royal kitchen and developing medicinal herbal gardens thus preserving animals and plant species from depletion. An attempt has been made to through light upon practices adopted by king Ashoka during his tenure for protection and conservation of environment and ecology and thus setting an ideal example of an engaged ecologist for the world. Ashoka seems to be the first engaged ecologist ruler of the world.

Keywords:

Ashoka, Ecology, Environment, Pollution

Introduction :

Advances in science and technology are matter of pride for man. But they are also responsible for disturbing the ecosystem. The very fact that the earth supported once about four billion species of life, and that the number today has come down to only four and half million species shows how life is being extinguished gradually. There is no guarantee that the remainder will not disappear also. We should strive hard for all living beings survival because their survival is linked with ours (Asoka 2300, p. 125).

Ashoka's ruling in India was an excellent example of first Welfare State in India. To have an effective and working Welfare State, work on different fronts is a prerequisite. The array of welfare measures incorporates protection and conservation of environment also. At the time of Ashoka there were no particular problems of air, water, soil, noise and other kinds of pollution. People used to explore the nature at its utmost. Even at royal courts poaching, eating meat, non violence, wars were common. However, the steps taken by king Ashoka were pioneer in this field of protection and conservation of the ecology and environment. Ashoka took initiatives for the protection of forest and other living beings in his royal court and empire. The purpose of this paper is to examine the evidences from all available sources with a view to ascertaining the relative variability and reliability of Ashoka's efforts as an engaged ecologist in the history of World.

Non-violence

Ashoka twenty six years after his coronation declared that the following species of animals exempted from slaughter, viz. parrots, mainas, ruddy geese, wild geese, nandimukhas gelatas, bats, mango tree ants, terrapins, female tortoise, boneless fish, vedaveyakas, gangapuputakas, skate fish, river tortoises, porcupines, tree squirrels, leaf hares, twelve antler stages, bulls set at liberty, household vermin's, rhinoceroses, white pigeons, village pigeons and all the quadrupeds which are neither useful nor edible. Those she goats, ewes and sows, which are neither pregnant or milch, are not to be slaughtered, nor their young ones which are less than six months old. This reveals Ashoka's concern to

ensure the preservation of all species. Cocks are not to be caponed. Husks containing living beings should not be burnt. Forests must not be burnt either uselessly or in order to destroy living beings. The living must not be fed with the living (Sircar, p. 64-65). Fish should neither be killed nor sold on the three days of every monthly period, the fullmoon day in the month of Tishya (Tishya also called as Pushya was the birth star of Ashoka) (January-February), the fourteenth, the fifteenth of every bright fortnight and the first of the dark fortnight in each case and in every first day. These and the other species of animals should not be killed in the forests and the fisherman's locality. Bulls and other animals are not to be castrated on those days, also on the eighth, fourteenth, fifteenth days of the fortnight and on the days of Tishya and Punarvasu, on the three days of every three monthly periods and on every auspicious day. Horses and bullocks should not be branded on those days (Asoka 2300, p. 126).

Minor Rock Edict IV (Greek Version) states that "the king abstains from the slaughter of living beings and other people including the king's hunters and fishermen have given up hunting. And those who could not control themselves have now ceased as far as they could" (Sircar, p. 40). In the Rock Edict I (Girnar Text) stated that "here no living being should be slaughtered for sacrifice and no festive gathering should be held. Many hundred thousands of living beings were formerly slaughtered every day in the royal kitchen for the sake of curry. But now, when this record relating to Dharma is written, only three living creatures are killed daily for the sake of curry, viz., two birds and one animal (two peacocks and one antelopes—the antelope, however, not invariably). These three living beings too shall not be killed in future" (Sircar, p. 41; Smith, p. 158).

Kandahar Edict of Ashoka states that in the year 16, King Priyadarshi, expelled from the prosperous population, people who love hunting of fishes and creatures (Schlumberger). Animal fights were much enjoyed before Ashoka's regime, elephant, rhinoceroses, bulls, rams, and other beasts being pitted against one another. Such entrainments are abhorrent to the spirit of Buddhism, and all come to an end when Ashoka resolved that there should be no more 'cakes and ale' (Smith, p. 90).

Herbs and public health

The Vraja (Rock Edict VI) had under his purview the public parks, (Udyana Rock Edict VI), mango-groves, amravatika (Pillar Edict VII), wells, kupa (Rock Edict II) or udapana (Pillar Edict VII) and travellers rest houses, nisadya (Pillar Edict VII and Cave Inscription III), along with public roads, patha or marga (Rock Edict II). The botanical gardens were set up for the growth of medicinal plants and medical officers to arrange for the chikitsa or treatment of the diseases of both man and beast (Rock Edict II) all over his empire and in the territories beyond the borders as those of the Chola, Pandya, the Satiyaputra and the Keralaputra up to Tamraparni and those of the Greek king Antiyoka and also his neighbours (Asoka 2300, p. 126). The king's naga-vana, elephant forest (Pillar Edict V) emphasise upon the special forest being assigned for elephants and the status given to them as they were prominently used for transportation, war and to show the strength of defence (Asoka 2300, p. 115).

Ashoka provided medical treatment to men and animals and caused the required medicinal herbs, roots and fruits to be imported and grown throughout his empire and also in many other countries beyond his borders, especially towards the west and along the south. He was responsible for planting banyan trees by the side of roads to give shed to man and beast and mango groves (gardens) along roads, digging wells for drinking water at an interval of half kos and building rest houses and supplying drinking water to men and animals (Pillar Edict VII) (Sircar, p. 22; Smith, p. 210).

Conclusion

Amidst the tens of thousands of names of monarchs that crowd the columns of history, their majesties and graciousness's and serenities and royal highnesses and the like, the name of Asoka shines, and shines, almost alone, a star. From the Volga to Japan his name is still honoured. China, Tibet, and even India, though it has left his doctrine, preserve the tradition of his greatness. More living men cherish his memory today than have ever heard the names of Constantine or Charlemagne"— H. G. Wells (Wells, p. 355-356).

The great emperor Ashoka in his Dharma policy gave priority to non violence, non injury to

human beings and animals and abstention from war. Many kings were used to perform asva-medha and vijapeya sacrifices, slaughtering thousands of cows. Ashoka forbade slaughtering of animals for sacrifices and food and prohibited his court from hunting expeditions and eating meat. He laid great emphasis on the necessity of treating all living beings with kindness and compassion. He gave importance to ecology & environment and public services in order to avoid unnecessary sufferings to people and animals (Asoka 2300).

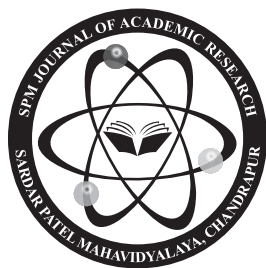
Wonderful results achieved through the persuasive efforts of Ashoka are recorded in the Rock Edicts IV; "For hundreds of years in the past the killing of living beings, cruelty to them, etc. increased...but now as a result of both percept and practice on the part of the king, the practice of dharma has increased... Abstention from the killing of living beings, non violence... and similar other acts of dharma have developed. The Beloved of Gods will encourage their further development. His sons, grandsons and great grandsons will exert similarly and instruct the people for all time."

Ashoka's dharma aims at universal good and is more humanitarian than a religious movement. Ashoka's message recorded in his inscriptions advocate the cause of sympathetic understanding of the environment leading to life of harmony and rapport. The initiatives taken by Ashoka for the protection and conservation of ecology & environment by adopting policy measures and administrative reforms makes him an engaged ecologist in the history of World. The policy and administrative reforms can even found relevance in today's society for a sustainable environment.

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Computational Study of MHD Free and Forced Convective Flow of Viscous Incompressible Fluid Past an Infinite Vertical Porous Plate

Ram Naresh B. S. Sisaudiya

Department of Mathematics, S. P. College, Chandrapur – 442402

E-mail: drrbs79@gmail.com

Abstract :

The effects of the mass transfer on the MHD free and forced convective flow of a viscous incompressible fluid past an infinite vertical porous plate has been analysed. A uniform magnetic field is applied normal to the plate. The problem is solved by finite difference technique. The effects of various physical parameters on velocity field, temperature field and concentration distribution have been studied and results are depicted by graphs.

Keywords :

Convective flow, MHD, Free and forced convection, Infinite vertical plate, Porous medium.

Introduction

The study of convective fluid flow with mass transfer along a vertical porous plate in the presence of magnetic field and internal heat generation recently used in different branches of science and technology such as cosmical and geophysical science, fire engineering, combustion modeling etc. Acharya and Singh [1] studied the effect of magnetic field on the force convection and mass transfer flow through porous medium with constant suction and constant heat flux. Ahmed et. al [2] discussed free convective MHD flow and heat transfer through porous medium between two long way walls. Ahmed and Sharma [3] analysed three dimensional free convective flow of an incompressible viscous fluid through a porous medium with uniform free stream velocity. Ambedkar and Rai [4] presented a problem on numerical solution of free convection effects of MHD Stoke's problem. Chitti and Prasad [5] analysed free convection flow of heat and mass transfer past a vertical porous plate. Ferdows et. al [6] discussed similarity solution for MHD flow through vertical porous plate with suction. Jaiswal and Soundalgekar [7] investigated transient forced and free convection flow of dissipative fluid with mass transfer past an infinite vertical plate with constant heat flux. Kumari and Nath [8] discussed transient MHD rotating flow over a rotating sphere in the vicinity of the equator. Raju et. al [9] analysed a formulation of combined force and free convection past horizontal and vertical surface. Sattar [10] studied free and forced convection flow through a porous medium near the leading edge. Sattar [11] presented a free and forced connection boundary layer flow through a porous medium with large suction.

Singh and Dikshit [12] discussed hydro magnetic flow past a continuously moving semi-infinite plate for large suction. Singh et. al [13] analysed computational study of hydro magnetic effects on the viscous incompressible dissipative fluid past an infinite vertical plate. Soundalgekar and Thakkar [15] studied MHD forced and free convectional flow past a semi-infinite plate. Singh et.al. [14] discussed a problem of numerical solutions of transient MHD free and forced convective flow of an viscous incompressible fluid past in infinite

vertical plate. Tomar et. al [16] discussed a numerical study of the three dimensional coquette MHD flow through a porous medium with heat transfer.

Formulation of the problem

Consider the unsteady laminar two-dimensional free convection boundary layer flow of a viscous incompressible electrically conducting fluid along a vertical porous plate. Let x-axis is taken along the plate and y-axis is normal to the plate. Magnetic field of intensity B_0 is applied in y-direction. The governing equations of continuity, momentum, energy and concentration respectively are given by

$$\frac{\partial u}{\partial t} + v \frac{\partial u}{\partial y} = v \frac{\partial^2 u}{\partial y^2} + g\beta(T - T_\infty) + g\beta^*(C - C_\infty) - \frac{\sigma B_0^2}{\rho} u - \frac{vu}{K}$$

$$\frac{\partial T}{\partial t} + v \frac{\partial T}{\partial y} = \frac{K}{\rho C_p} \frac{\partial^2 T}{\partial y^2}$$

$$\frac{\partial C}{\partial t} + v \frac{\partial C}{\partial y} = D \frac{\partial^2 C}{\partial y^2}$$

Where with the boundary conditions are –

- ν = kinematic viscosity
- ρ = fluid density
- σ = acceleration due to gravity
- β = volumetric expansion coefficient for heat transfer
- β^* = Volumetric expansion coefficient for mass transfer
- C_p = Specific heat at constant pressure
- T = Temperature of fluid in boundary layer
- K = Thermal conductivity
- C = mass concentration
- C_∞ = mass concentration far away from the plate
- D = molecular diffusivity
- u = velocity component in x-direction
- v = velocity component in y-direction
- B_0 = magnetic field intensity
- k = The permeability
- T_0 = fluid temperature at porous plate
- T_∞ = fluid temperature far away from the plate

with boundary conditions were –

$$u = 0, T = T_0, C = C_0 \text{ at } y = 0$$

$$u \rightarrow 0, T \rightarrow T_\infty, C \rightarrow C_\infty \text{ as } y \rightarrow \infty, t \rightarrow 0 \quad (4)$$

Method of Solutions

Now we introduce the following non-dimensional parameters –

$$\Delta T = \left[\frac{\nu^2 q'^3}{g\beta k^3} \right]^{1/4}, U_R = \left[\frac{\nu^2 g\beta q'}{k} \right]^{1/4}, t_R = \left[\frac{k}{g\beta q'} \right]^{1/2}$$

$$L = \left[\frac{\nu^2 k}{g\beta q'} \right]^{1/4}, y = \frac{y'}{L}, u = \frac{u'}{U_R}, t = \frac{t'}{t_R}, \theta = \frac{T' - T'_\infty}{\Delta T}$$

$$M = \frac{\sigma B_0^2 \nu^2}{\mu U_R}, N = \frac{\nu g\beta (C'_w - C'_\infty)}{\beta (\Delta T)}, E = \frac{U_R^2}{C_p \Delta T}$$

$$C = \frac{C' - C'_\infty}{C'_w - C'_\infty}, Sc = \frac{\nu}{D} \quad (5)$$

Equations (1) to (4) using (5) are reduced to the following non-dimensional form (after dropping the primes)

$$\frac{\partial u}{\partial t} + \nu \frac{\partial u}{\partial y} = Q + Nc + \frac{\partial^2 u}{\partial y^2} - \left(M + \frac{1}{K} \right) u$$

$$\frac{\partial \theta}{\partial t} + \nu \frac{\partial \theta}{\partial y} = \frac{1}{Pr} \frac{\partial^2 \theta}{\partial y^2}$$

$$\frac{\partial C}{\partial t} + \nu \frac{\partial C}{\partial y} = \frac{1}{Sc} \frac{\partial^2 C}{\partial y^2}$$

with the initial and boundary conditions

$$\left. \begin{aligned} u = 0, \theta = 0, C = 0, \text{ for all } y, t = 0 \\ u = 1, \frac{\partial \theta}{\partial y} = -1, C = 1 \text{ at } y = 0 \text{ for } t = 0 \\ u \rightarrow 0, \theta \rightarrow 0, C \rightarrow 0 \text{ at } y \rightarrow \infty \text{ for } t = 0 \end{aligned} \right\}$$

These are coupled non-linear equations which do not have an exact solution. So we have solved these equations by implicit finite difference method of Crank- Nicolson type because this scheme is always stable and convergent.

The finite difference approximations to these equations are the following –

$$\begin{aligned} & \left[\frac{u_{i,j+1} - u_{i,j}}{\Delta t} \right] + \nu_{i,j} \left[\frac{u_{i,j+1} - u_{i,j}}{\Delta y} \right] \\ &= \frac{1}{2} \left[\frac{u_{i-1,j+1} - 2u_{i,j+1} + u_{i+1,j+1}}{(\Delta y)^2} + \frac{u_{i-1,j} - 2u_{i,j} + u_{i+1,j}}{(\Delta y)^2} \right] \\ &+ \frac{N}{2} [C_{i,j+1} + C_{i,j}] + \frac{1}{2} [\theta_{i,j+1} + \theta_{i,j}] - \frac{1}{2} \left(M + \frac{1}{K} \right) [u_{i,j+1} - u_{i,j}] \\ & \left[\frac{\theta_{i,j+1} - \theta_{i,j}}{\Delta t} \right] + \nu_{i,j} \left[\frac{v_{i,j+1} - v_{i,j}}{\Delta y} \right] \\ &= \frac{1}{2Pr} \left[\frac{\theta_{i-1,j+1} - 2\theta_{i,j+1} + \theta_{i+1,j+1}}{(\Delta y)^2} + \frac{\theta_{i-1,j} - 2\theta_{i,j} + \theta_{i+1,j}}{(\Delta y)^2} \right] \\ & \left[\frac{C_{i,j+1} - C_{i,j}}{\Delta t} \right] + \nu_{i,j} \left[\frac{C_{i,j+1} - C_{i,j}}{\Delta y} \right] \\ &= \frac{1}{2Sc} \left[\frac{C_{i-1,j+1} - 2C_{i,j+1} + C_{i+1,j+1}}{(\Delta y)^2} + \frac{C_{i-1,j} - 2C_{i,j} + C_{i+1,j}}{(\Delta y)^2} \right] \end{aligned}$$

The boundary conditions take the following form

$$u(i,0) = 0, \theta(i,0) = 0, C(i,0) = 0 \text{ for all except } i = 0$$

$$u(0,j) = 0, \frac{\theta_{i,j} - \theta_{-1,j}}{2(\Delta y)} = -1, C(0,j) = 1 \text{ at } l = 0$$

$$u_{M,j} = U_\infty, \theta_{M,j} = 0, C_{M,j} = 0$$

Here M corresponds to ∞ The suffix i corresponding to t also $\Delta t = t_{j+1} - t_j$ and $\Delta y = y_{i+1} - y_i$ [$\Delta t = 0.01$ and $\Delta y = 0.01$]

If there are N internal mesh point along each time row, then for $j = 0$ and $i = 1, 2, 3 \dots N$, equations gives N simultaneous equation for the N. unknown. We have solved equations (10), (11), (12) with the help of (13) by Crank-Nicolson finite difference method with the help of computer and obtained the velocity compounds u, v and also the temperature field and concentration field under the influence of various parameter.

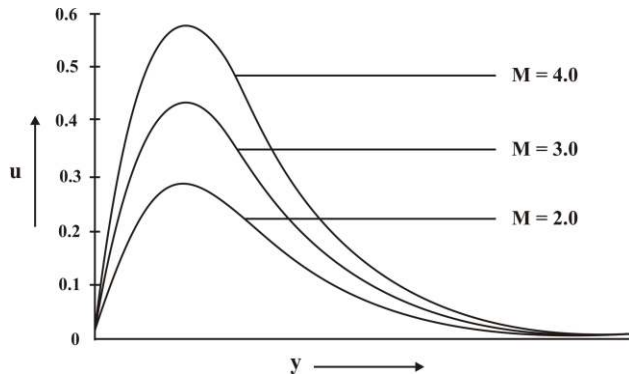


Figure 1 : Velocity distribution when $Pr = 0.71$

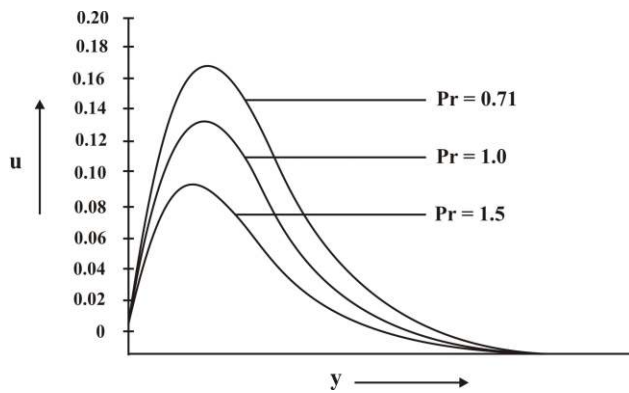


Figure 2 : Velocity distribution when $M = 0$

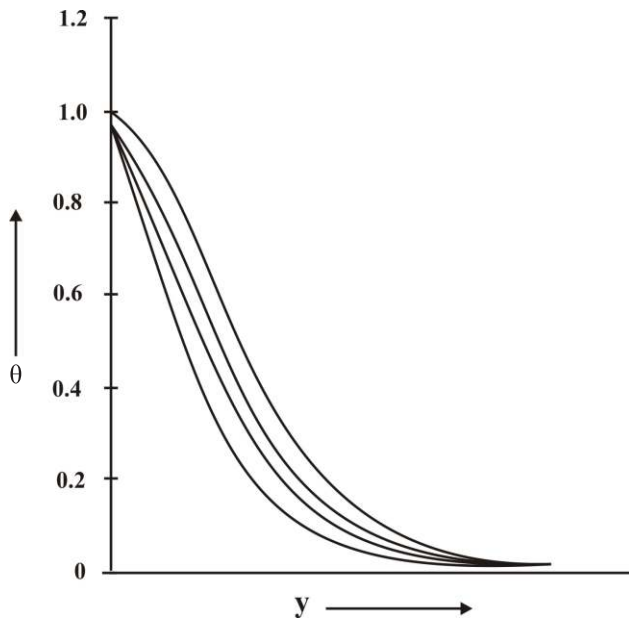


Figure 3 : Temperature distribution when $Pr = 0.71$

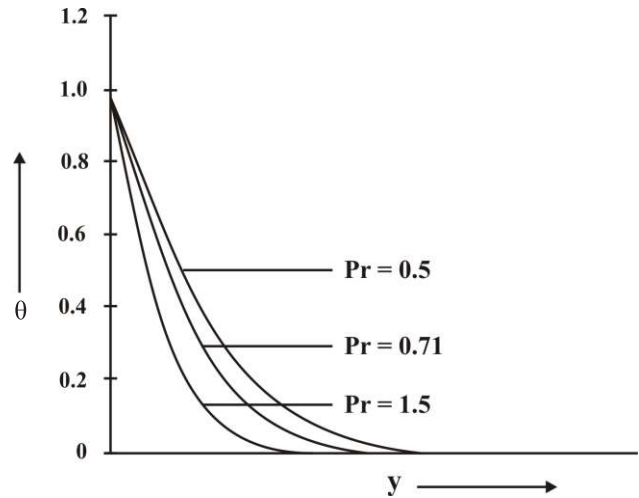


Figure 4 : Temperature distribution when $M = 0$

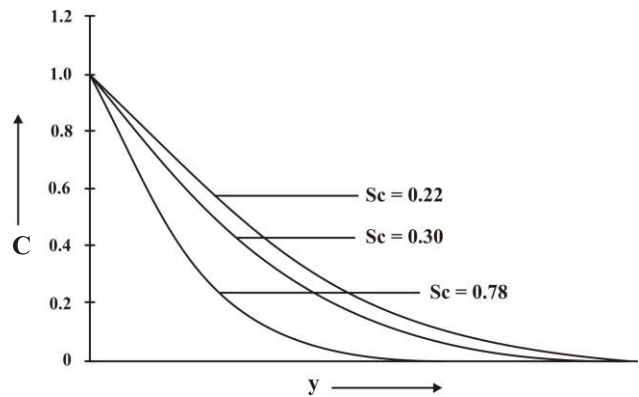


Figure 5 : Concentration profiles

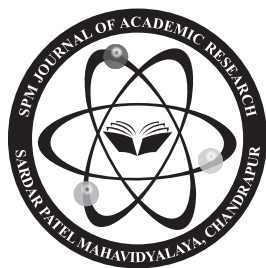
Result and Discussion

The graph of figure (1) that velocity profiles increase as magnetic parameter increases and slowly decreases. Figure (2) depicts that velocity profiles increase as Prandtl number (Pr) increases. From figure (3) it is observed that temperature field increases as heat generation parameter (S) increases. Figure (4) depicts that the temperature field decreases as Prandtl number (Pr) increases. We see that graph of figure (5) the concentration profiles decreases as Schmidt number (Sc) increases.

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Emergence of Vancomycin Resistant Staphylococcus aureus in Clinical Isolates from Ballarpur Area

P. H. Kumbhare

Associate Professor in Microbiology, Guru Nanak College of Science, Ballarpur - 442701

Email : dr.kumbhareph@yahoo.com

ABSTRACT

The virulent strains of *Staphylococci* and *Streptococci* commonly cause skin infections in human. Virulent *Staphylococcus aureus* usually cause nosocomial infections such as Boils, Post-operative sepsis, Septicemia, Abscess etc. Previously most of the virulent strains of *S. aureus* were found susceptible to Penicillin antibiotic. However in late 1980s, about 50% strains of *S. aureus* were emerged as penicillin resistant. In early 1990s the use of Vancomycin started against resistant strain of *S. aureus*. Increase in the use of Vancomycin resulted in to the emergence of Vancomycin resistant *S. aureus* in late 1990s.

With reference to this view, the present study was carried out to screen out Vancomycin resistant *S. aureus* isolates from clinical specimens such as blood, pus, abscess, wound, carbuncle etc. collected from the hospitals in Ballarpur City area. Isolation, identification and screening of Vancomycin resistant *S. aureus* was made by a standard Baur-Kirby method. Out of 50 clinical specimens isolates analyzed about 34% were found to be resistant to Vancomycin.

Key Words :

Staphylococcus aureus, Vancomycin, Antibiotic resistance, Baur-Kirby.

INTRODUCTION :

Staphylococci are widely distributed in nature and considered as ubiquitous in occurrence. They are found to be present in water, soil, food and air. Many species of Staphylococci have been reported as commensal flora of human skin (RyonCriz et al., 2005).

Staphylococcus aureus Gram positive cocci that occur in grape like cluster and produce golden-yellow pigment when cultivated on nutrient agar medium. It is considered as an opportunistic pathogen causing two types of diseases in human beings; i) Invasive or Suppurative ii) Toxigenic or Non-Suppurative. It was first observed in human pyogenic lesions and reported as commonest cause of nosocomial localized suppurative lesions such as boils, abscess, furuncle, carbuncle, impetigo etc. It also cause Pneumonia, Osteomyelitis, Urinary tract infection, Endocarditis and Pharyngitis (Fridkin, 2001).

The ability of *S. aureus* to survive in hospital environment (nosocomial infections), also the ability to develop resistance against Penicillin and other antibiotics has gain importance as a human pathogen. It may cause secondary infections of ulcer, wound and burn sepsis also associated with food poisoning due to the production of enterotoxin. Scalded skin syndrome is also caused by virulent *S. aureus* (Musher, 1977).

About 50 years ago (early 1980s), Penicillin antibiotic was used to cure the diseases caused by *S. aureus*. However within 10 years about 50% isolates turned resistant to it (Sabath, 1987). In late 1980s Methicillin was applied to treat Staphylococcal infections. However within 10-15 years, 50 % isolates became resistant to Methicillin and resulted endemics in hospitals worldwide (Tiwari&Sen, 2006). Then the use of a glycopeptide antibiotic, 'Vancomycin' started in early 1990s against Penicillin and Methicillin resistant strains of *S. aureus*. But it was observed in late 1990s that, about 34 % isolates became resistant to Vancomycin. The first case of vancomycin resistant *S. aureus* was reported in Japan in 1996 (RyonCriz et al., 2005).

The specific mechanism associated with the development of Penicillin, Methicillin, and Vancomycin resistant strains of *S. aureus* is not yet clear. However the emergence of Vancomycin

resistance seriously threatened the treatment of Staphylococcal infections.

The present investigation was therefore carried out to find out recent percentage of Vancomycin resistant *S. aureus* from clinical specimen isolates in Ballarpur area.

MATERIALS AND METHODS:

Collection of Clinical Specimens:

About 60 clinical specimens such as blood, pus, wound swab, burn swab and urine were collected in sterilized glass containers from patients in different hospitals and pathological laboratories of Ballarpur city (Maharashtra). Collected specimens were separately transferred to sterile nutrient broth medium containing 9.5 % Sodium chloride in test tubes. The tubes were incubated at 37 ° C for 24 hours to obtain the culture.

Isolation and Identification of *S. aureus* Isolates:

To obtain pure culture of *S. aureus* isolates, the nutrient broth culture of clinical specimens was cultivated on selective media viz. Mannitol Salt Agar (MSA, Himedia – M118). After incubation the colony characteristics developed on MSA was observed and noted. The well isolated colonies on MSA were picked up and grown separately in Nutrient agar slant and Nutrient broth medium to obtain pure culture of isolates.

Morphological identification of isolates was made by performing Gram staining using nutrient agar slant culture whereas motility was tested by Hanging drop preparation using nutrient broth culture. Further biochemical identification was done by standard conventional procedure i.e. Glucose, Lactose and Mannitol fermentation and IMViC test (Bergey, 1986).

Screening of Vancomycin Resistant *S. aureus* Isolates:

The screening of Vancomycin resistant *S. aureus* isolates was performed by a standard Disc diffusion method of Baur Kirby et al., (1996), using Muller Hinton Agar (MHA, Himedia-M173) medium. A 30 µg concentration of Vancomycin was used to screen out resistant *S. aureus* isolates. The isolates showing zone of inhibition less than 11 mm were considered as Vancomycin resistant.

RESULTS AND DISCUSSION:

In the present study, total 60 clinical

specimens as blood, pus, wound swab, burn swab and urine were collected from the patients in different hospitals and pathological laboratories. *Staphylococcus aureus* isolates were isolated and identified up to species level by applying different conventional morphological, biochemical and selective media cultivation studies (Bergey, 1996) as shown in the **Table – 1**.

No. of specimens collected	No. of isolates obtained	Gram's staining & Motility	Growth on Selective media (MSA-M118)	Sugar fermentation	IMViC test
60	50	Gram positive cocci, arranged in bunches like grapes and non-motile	Yellow zone around colonies	Glucose... A Lactose ... A Mannitol .. A	Indole... - ve MR ... + ve VP ... + ve CU ... - ve

Table 1. Isolation and Identification of *S. aureus* isolates:

A = Acid production, MR= Methyl red test, VP= Voges-Proskaur test, CU= Citrate Utilization test

Morphological identification was done by Gram's staining and hanging drop preparation. All the isolates found to be Gram positive cocci arranged in clusters like grapes and non-motile. Cultural identification was made by cultivation on Selective media viz. Mannitol Salt Agar (Himedia–M118). All the isolates grow on MSA and produce yellow zone around the colonies. Biochemical identification was made by Glucose, Lactose, Mannitol fermentation and IMViC test. All isolates ferment Glucose, Lactose and Mannitol, producing acid only but no gas. They give MR and VP test positive but Indole and CU test negative.

Out of 60 clinical specimens collected, 50 *S. aureus* isolates were obtained after standard morphological, biochemical and selective media cultivation studies (**Table 1**). Further, 50 isolates of *S. aureus* were screened out for Vancomycin resistance by standard disc diffusion method of Baur-Kirby (1996) using Muller-Hinton agar (Himedia – MM0443) and 30 mcg concentration of Vancomycin. The isolates showing zone of inhibition below 11 mm were considered as resistant to Vancomycin. Out of 50 isolates of *S. aureus* screened out, 17 (34 %) exhibits Vancomycin resistance whereas 33 (66 %) were sensitive to Vancomycin (**Table – 2**). Tiwari and Sen (2007) reported 30 % Vancomycin resistant *S. aureus* isolates.

Name of Antibiotic	No. of Sensitive Isolates	Percentage (%)	No. of Resistant Isolates	Percentage (%)
Vancomycin	33	66 %	17	34 %

Table 2. Screening of Antibiotic Sensitivity of *S. aureus* isolates against Vancomycin

This result indicates that, the epidemiology of Vancomycin resistant *S. aureus* in our country is also increasing over the last few decades. The incidences of infection by Vancomycin resistant *S. aureus* isolates keep changing every year and is on rise compared to last few years, (Vidhani et al., 2001).

The specific mechanism associated with the development of penicillin, methicillin and vancomycin resistant strain of *S. aureus* is not clearly understood. Previously Van-A gene that encodes Vancomycin resistance in Enterococci was considered to be responsible for it. Another hypothesis says that the cell wall composition of *S. aureus* may be responsible (Hiramatsu 1998). However studies made by Tiwari and Sen (2006) ruled out this assumption. Sabath, (1987) has reported that plasmid mediated drug resistance has acquired special significance.

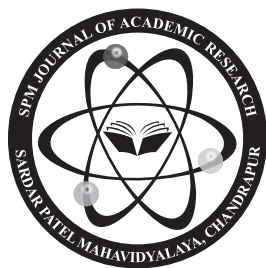
S. aureus became resistant to penicillin and methicillin (β -Lactam antibiotics) due to the production of plasmid coded penicillinase (β -Lactamase) which rapidly inactivate β -lactam ring responsible to kill *S. aureus*. A glycopeptide antibiotic Vancomycin treatment was considered to be the best therapeutic drug of choice for penicillin and methicillin resistant *S. aureus* strains. But the emergence of Vancomycin resistance in *S. aureus* isolates seriously threatens the treatment of staphylococcal infections.

This study suggests the emergence of Vancomycin resistant *S. aureus* in Ballarpur region and to provide more effective therapy against it.

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Multidrug Resistance In *S.aureus* – A Global Problem

V. U. Thool

Department of Microbiology, S. P. College, Chandrapur (M.S.) India
E-mail: vaishali.thool@gmail.com

Abstract

Staphylococcus aureus, a well armed pathogen, is prevalent in orthopaedic hospitals and causing a great setback in the outpatient departments. These strains act as a reservoir for drug resistance gene and are resistant to multiple antibiotics. Hence this study reveals prevalence of MDR from orthopaedic units of Nagpur, Maharashtra and indicates the magnitude of antibiotic resistance. The major cause of this may be unawareness and indiscriminate use of antibiotics. Methodology: In this study 82 *S. aureus* isolates were obtained from 100 pus samples. Antibiotic susceptibility test was done for each *S. aureus* isolate by the Kirby Bauer disc diffusion method (DDM) against a panel of seven antibiotics. Results: Out of 82 *S. aureus* isolates, 57 MRSA and 27 MDR-*S. aureus* were identified. Conclusion: The present study reveals prevalence of MDR from orthopaedic units of Nagpur, Maharashtra and indicates the magnitude of antibiotic resistance.

Keywords :

S.aureus, Multidrug Resistance, MRSA, Vancomycin

Introduction

Multidrug resistance is a condition enabling bacteria to resist wide variety of drugs or chemicals of different structure and functions targeted at eradicating the organism. Methicillin resistant strains of staphylococci were identified immediately upon the introduction of methicillin into clinical practice. Since then MRSA have spread worldwide and have become established (Schaberg, 1994). Already MDR to different classes of antibiotics, MRSA had been reported to acquire resistance to almost all antibiotics. The situation is scary and hence the treatment of infections due to these organisms and their eradication is very difficult except for linezolid and the glycopeptides like vancomycin. Linezolid drug has excellent activity against MRSA including MDR strains (Hannan *et al.*, 2009; Gupta *et al.*, 2003). Also once the β -lactam fails, the mainstay against MRSA infections is the use of glycopeptides like vancomycin and teicoplanin. However, the emergence of clinical infection due to MRSA with decreased susceptibility to vancomycin is a recent and certainly a worrying fact. Since 1996 VISA strains have been increasingly reported in Europe, Asia and the USA. At least seven of these VRSA strains have also been reported in the USA since 2002. VISA strains, however, represent an important public health threat, having been implicated in nosocomial infections. These strains tend to be MDR against a large number of currently available antibiotics, compromising treatment options and increasing the likelihood of inadequate antimicrobial therapy.

Table 1: Antibiogram of MDR *S. aureus* isolates (n = 27) (>4 antibiotic)

Antibiotic	Resistant	Percent (%)
Cefoxitin	26	96.30
Methicillin	26	96.30
Vancomycin	21	77.77
Tobramycin	13	48.14
Clindamycin	23	85.18
Teicoplanin	22	81.48
Linezolid	19	70.37

Methods

A total of hundred pus samples were collected for the period of one year from July 2010 to June 2011. The strains were collected from different dressing rooms of outpatient departments of orthopaedic hospitals in Nagpur (Central India). Pus samples were collected from dirty wounds on transport media swabs

and brought to the Medical Microbiology Research Laboratory of Department of Microbiology, RTM Nagpur University, Nagpur. *S. aureus* ATCC 25923 and ATCC 29213 were taken as control throughout the study.

On reception the swabs were inoculated on Brain Heart Infusion broth and incubated at 37°C for 24 hrs. The broth culture was then subcultured on Mannitol Salt Agar (MSA) and Baird Parker Agar (BPA). All the plates were incubated at 37°C for 24 - 48 hrs. Mannitol fermentation was observed and recorded from MSA plates whereas black colored colonies indicating tellurite reduction was noted from BPA plates for *S. aureus*. Preliminary confirmation of *S. aureus* was done on the basis of Tube coagulase test and Latex agglutination test. All the clinical strains of *S. aureus* were stored in glycerol solution at -20°C.

Antibiotic susceptibility test was done for each *S. aureus* isolate by the Kirby Bauer disc diffusion method (DDM) against a panel of seven antibiotics i.e. vancomycin (30 mcg), tobramycin (10mcg), clindamycin (2mcg), teicoplanin (30mcg), linezolid (30mcg), oxacillin (1 μ g) and cefoxitin (30 μ g). Antimicrobial susceptibility testing was performed on Mueller Hinton Agar (MHA) plates according to Clinical and Laboratory Standards Institute (CLSI) guidelines (CLSI, 2006).

Results

A panel of seven antibiotics were selected and the susceptibility pattern studied with DDM gave the results showing the highest resistance to cefoxitin (69.51%) followed by methicillin (68.29%). The resistance gradually decreased with clindamycin (41.46%), vancomycin (35.36%), teicoplanin (32.92%), linezolid (24.39%) and finally tobramycin (19.51%). The highest intermediate resistance was shown with teicoplanin (26.83%).

Twenty seven MDR isolates were selected which were resistant to four and more than four antibiotics. Also, the antibiotic susceptibility pattern of *S. aureus* isolates was studied for multidrug resistance (Table 1). 96.30% of MRSA were MDR. Eight *S. aureus* isolates were resistant to all the seven antibiotics and all of them were MRSA.

Discussion

The magnitude of the problem of multidrug resistance in MRSA is such that we are at the end of the

pipeline of antibiotics. To counteract with this global problem a wise and judicious use of existing antibiotics and developing new ones which have least chances of acquiring resistance is necessary. To add to the existing problem, the orthopaedic units are playing a foremost role. The present study reveals prevalence of MDR *S. aureus* from orthopaedic units of Nagpur, Maharashtra and indicates the magnitude of antibiotic resistance. The major cause of this may be unawareness and indiscriminate use of antibiotics. A study from the early 1990s in the five largest European countries reported that antibiotic usage ranged from 42% to 55% with the largest usage of antibiotics was from orthopaedic units where antibiotic usage as prophylaxis by the surgical specialties consisted 75% of therapy days (Halls, 1993). Adegoke and Komolafe, 2009, observed multiple resistance to 10 frequently prescribed antibiotics and suggested possible abuse of these drugs, poor hospital attendance and the need for better enlightenment campaign against the use of drug without prescription.

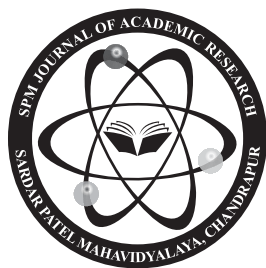
The trend of antibiotic resistance, to large number of commonly prescribed antibiotics was also observed in this study and is an alarm to preserve the effectiveness of antibiotics. In this study a high percentage of MDR-MRSA i.e. 55.55 % was seen. A comparable result of multidrug resistance in MRSA (57.10%) has been reported by Hassan *et al.*, 2011, from Egyptian University Hospital. Also a study conducted at Lahore, Pakistan reported high MDR-MRSA of 83.80% (Hannan *et al.*, 2009). It was observed in this work that seven (63.63%) of the 11 MRSA were resistant to five or more than five antibiotics. One of the epidemiological studies documented 56 isolates which showed resistance to more than six antibiotics, one isolate was resistant to 16 antibiotics and two isolates showed resistance to a maximum of 17 antibiotics. According to Hannan *et al.*, 2009, there is progressive increase in MRSA prevalence and multidrug resistance in staphylococci. It was observed that the sensitivity pattern of *S. aureus* changes dramatically when it becomes resistant to methicillin (Dar *et al.*, 2006). The high percentage of multidrug resistance in MRSA is an eye opener in the present therapeutic scenario in the developing countries.

Conclusion

To counteract with this global problem a wise and judicious use of existing antibiotics is the requirement of time and also developing new antibiotics which have least chances of acquiring resistance should be developed. The extent of the menace at a larger level should be studied so that the information can be disseminated down the path, even to primary care health workers right at the grass root level.

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Benefits of Yogasanas and Physics Behind it

C. P. Chaudhari

Department of Physics, Government Science College, Gadchiroli
E-mail: shekharbk8040@gmail.com

Abstract :

The concepts in physics are used for unpacking some mysteries of yoga. Yoga has high correlation factor with physics. In this paper, Physics, a science of motion is used to describe the posture attained by a person performing asanas. The balance of body, integrity of the pose, work within the pose and pressure exerted by body parts on the floor are explained to achieve the skill of performing asanas easily. Benefits of the yogasanas are actually the outcome based on physics principles like centre of mass, centre of gravity, force, equilibrium, action and reaction forces. Trikonasana, chakrasana, patangasana and mayurasana are explained here by correlating them with physics. While performing these asanas amount of force acting on different parts of body depends on the position of centre of gravity. This explains the distribution of a body weight at different points. The weight W of the body is always vertically downwards and is balanced by the ground forces. Observations are taken using digital weighing machines. Emphasis is given to explain the strengthening of muscles (trikonasana), improved flexibility (chakrasana), stability (patangasana) and massaging and stimulating the organs and glands (mayurasana) so that one can prevent himself from many diseases and ageing effects within the limits.

Keywords :

Trikonasana, Mayurasana, Patangasana, Mayurasana, Physics behind yoga,

Introduction :

Swatmarama introduces asanas as preparatory stage of physical purification that the body practices for higher meditation or Yoga. Asana is a body posture, means the different states of parts of body. In this state, stability and comfort of body parts and so of muscles is to be achieved. Patanjali, the founder of Ashtanga Yoga defines asana in his 'Yog sutre' as "Steady and comfortable posture". To achieve this state, we have to practice a specific movement. Traditionally many asanas are practiced in Hatha Yoga, primarily to achieve better physical and mental health. Asanas have deep impact on the entire body and mind complex; it affects different systems in the body like muscular, respiratory, blood circulatory, digestive, excretory, reproductive, endocrine and nervous system. Some of the advantages [1] of yogasanas are: yogasana

1. Improves the flexibility of the spinal column.
2. Increases blood supply or stimulates blood circulation to different parts.
3. Strengthens the muscles.
4. Helps maintain proper balance of the body.
5. Puts pressure on the digestive organs and increases their efficiency and function.
6. Removes fat.
7. Massages and tones the abdominal organs.
8. Functioning of glands and abdominal parts is also improved.

Asanas can be performed with different initial positions: standing position, sitting position and supine position [3]. Bending, Stretching, Twisting and Lifting are the processes used to complete the particular posture in the asana. Some asanas are explained here by relating them to the physical concepts of mass, force, friction and gravity by describing body postures.

Methodology :

To explain the physics behind the yogasanas the digital weighing balances are used. The balances are used to measure the ground forces and to observe changes in these forces as centre of gravity (CoG) displaces while performing the asanas. The CoG is not always within the object as in the case of unusually shaped objects [4]. Eight subjects (students), four girls and four boys between age group 19 to 21 years who

were not regular performers of yogasanas performed trikonasana, chakrasana, patangasana and mayurasana. The students were healthy without any ailments. The human body is so harmoniously arranged that if even any minute part of it were hurt a little, the whole system becomes disturbed. So to comprehend a thing a practice of asana the steady and pleasant posture is necessary [5]. Initially demonstration was given followed by practice under supervision. The final posture in asana may said to be the stable equilibrium and the balanced state of the body. While taking observations the sideway forces due to friction between body parts and ground are not taken into consideration [6]. In stable equilibrium the summation of all the forces acting on the body is zero,

$$\sum_{i=0}^n F_i = 0 \quad [5].$$

The ground forces are recorded at

the instant, the stable posture is attained by body since the location of centre of gravity is fixed in this state of the body.

Trikonasana (Extended triangle pose): The first step is standing erect position with toes touching each other and then taking away the legs as shown in Figure 1. W is a force vector called weight of the body acts through the CoG of the body, which is balanced by ground forces F_1 and F_2 also called reactions according to Newton's 3rd law of motion [5].

$$W = F_1 + F_2$$

It is important to state here that W does not changes whatever be the body posture in the asanas and is always acting vertically downward. The measurement of mass M related to W is taken on the digital weighing balance for standing erect posture. Then the observations M_1 and M_2 are taken by placing two balances at the points of reaction F_1 and F_2 for body posture in figure 1. These observations are summarised in Table I. Precautions are taken to record the mass of each person (subject) when his or her body becomes stable on the weighing balance to avoid fluctuations in the observations. These observations show that the weight of the body is nearly equally distributed on both the legs of the performer. So there is no extra tension or load acting on the particular leg.

Final position of trikonasana is extended triangle pose (Figure 2a and 2b). The force equation

for this position becomes,

$$W = F_1 + F_2 + F_3$$

Three digital weighing balances are used to measure the reaction forces, two balances below the legs and one below the left hand that is touching the floor. The observations are tabulated as Table II and Table III.

In the first position (figure 2a) and final position (Figure 2b) of trikonasana a change in values of ground forces are observed. Observations reveal that the distribution of these forces is unequal. Here, the values of M_2 and M_3 for same performer may vary depending upon the load of body applied on the left leg and left hand at the instant of measurement, but variation in M_1 is less or ignorable and almost independent of variation in values of M_2 and M_3 . The unequal distribution of the values of masses gives rise to unequal magnitudes of ground reactions. It is observed that $M_2 + M_3$ is large in magnitude as compared to M_1 since in the final posture the centre of gravity is shifted towards left leg. This results in more pressure on left leg and left hand. This is the reason that the regular practice of trikonasana increases the load holding capacity of the muscles of thighs and calves [3] (strengthening of muscles). This is one of the benefits of yogasanas.

Chakrasana: In Chakrasana weight W of the body (action) is balanced by the four ground forces (Figure 3). That means the sum of all forces acting on the body is zero. Ground forces act on the body where hands and legs touch the ground. In this posture the reaction F_1 exerted on each palm is nearly equal also the reaction F_2 exerted on each leg is nearly equal.

$$W = 2F_1 + 2F_2$$

The CoG of the body is not lying inside the body in this case, but below the back, as shown by dark rounded spot in the Figure 3. The distance 'D' is a separation between the points of ground forces i.e. the distance between hands and legs (Figure 3). To study the gain in flexibility practice of chakrasana is given to two beginner groups, a group of four girls and other group of four boys. Instructions were given to them to try to reduce D by bringing hands and legs nearer and nearer within stress limit. The measurements in the value of D in meters are recorded and a graph of D versus practice months is plotted.

The graph revealed the decrease in D for all

subjects, which is the measure of their flexibility. As the flexibility is inversely proportional to D, it is concluded that the flexibility of each subject is improved. After long and regular practice D may be reduced to zero, i.e. the maximum flexibility condition. For this position with D zero, both hands need to be rested on ankles forming the ring shape (chakra) of the body. The CoG is then shifted at the centre of the ring shaped posture. Now the W is balanced by two ground forces only.

$$W = 2F_1$$

Where, $2F_2=0$, since palms are not touching the ground. This is the condition of maximum flexibility in chakrasana.

Patangasana: In this asana, the body looks like that of a kite (patang) flying in the air, hence the name Patangasana. In this position, only the right leg (say) is left standing on the ground. The rest of the body is lifted and forming a parallel line with the ground, with the arms spread away from the body [3]. Such a difficult posture is attained by the performer by keeping the centre of gravity of the body within the hip joint. It is observed that the ground force measurement is difficult for new performer as the reading of digital balance fluctuates continuously since CoG oscillates from its equilibrium position and the body becomes unstable. It is observed after few weeks practice the oscillations of the CoG of patangasana performer are minimized and the stable equilibrium may be adjusted by body for short durations. Thus patangasana improves balance or stability of the body.

Mayurasana: In this position, the entire body is kept parallel to the ground, with most of the weight on the elbows that are pressing onto the abdomen. The palms touching the ground are kept about 3 to 4 inches apart, which help in balancing the body [7]. Actually, the distance between the palms is so adjusted that any instability of the body should not displace the centre of gravity outside the line joining two palms avoiding any accident. The feet should be kept together and stretched horizontal. In this position the elbows are pressing the abdominal organs with ground reaction $W/2$ each. The inhale and exhale process produces the movements in of the organs in pressed abdominal cavity, performing the massage of organs by elbow. The force (reaction) on the abdomen also stimulates the pancreas reducing the risk of diabetics.

Mayurasana massages the abdominal organs and activates the glands. In mayurasana body looks like a lever pivoted at elbows near belly region. So, one should know the balance point of the body to acquire steady posture. Regular practice by the performers showed the improved balancing of the body.

Result and Conclusion:

In the present work, benefits of asanas are explained on the basis of physics principles. Four asanas viz. trikonasana, chakrasana, patangasana and mayurasana are practiced by group of eight yoga performers, four girls and four boys. These asanas are studied by taking into consideration the shifting of centre of gravity, ground forces and equilibrium (balanced state) of the body.

In trikonasana, change in the ground reactions show the shifting of centre of gravity from the original position so that ground reaction will be more on one of the two legs. The leg showing more reaction will be benefited and muscle power of that leg i.e. thigh and calf increases. It is observed that for any posture $W - (F_1 + F_2 + F_3) = 0$ or sum of all external forces acting on the body is zero.

In chakrasana CoG of body is shifted from abdomen to the point below the back i.e. at the centre of the curved body posture without losing balance. Graph1 and graph 2 show the reduction in the distance D between legs and hands as practice continues. This increases the flexibility of the body.

Whatever may be the posture, the stability of the body needs the centre of gravity to be fixed between the points of ground forces so that $\sum_{i=0}^n F_i = 0$

In patangasana the bird like posture is possible because the weight W of the body is balanced by and aligned with only single point of ground reaction that is located in the toes.

In mayurasana pressure is developed on the abdomen by elbows. The respiration process introduces relative motion between abdominal organs and elbows. This generates frictional force on the called massage i.e. mayurasana massages and increases blood circulation in abdominal organs.

Discussion :

Adjusting a posture in Yogasana is a mechanical process. As mechanics is a branch of physics and all asanas are based on principles of

physics. The Sanskrit term hath refers to the use of persistence or force, and Hathyoga is translated by the Monier-Williams dictionary as "a kind of forced Yoga or abstract meditation" (forcing the mind to withdraw from external objects; treated of in the Hath pradipika by Swatmarama and performed with much self-torture, such as standing on one leg, holding up the arms, inhaling smoke with the head inverted).

To increase a weight lifting capacity or power of any muscle no dumb-bell or multi-station gym or any tool is necessary if asana practice is regularly done. Asana performer simply has to shift centre of gravity of his body away from its normal position so that ground forces are unequally divided without losing balance of the body.

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Table I: Observations corresponding to Figure 10

Sr. No.	M mass related to W (Kg)	M ₁ mass related to F ₁ (Kg)	M ₂ mass related to F ₂ (Kg)
Girl 1	48	23.9	24.1
Girl 2	52.6	26.1	26.5
Girl 3	55.6	27.5	28.1
Girl 4	45.5	22.3	23.2
Boy 1	57.3	28.1	29.2
Boy 2	68.2	34.2	34.0
Boy 3	73.3	36.6	36.6
Boy 4	62.4	31.2	31.2

Table II: Observation table for posture in figure 2a

Sr. No.	M mass related to W (Kg)	M ₁ mass related to F ₁ (Kg)	M ₂ mass related to F ₂ (Kg)	M ₃ mass related to F ₃ (Kg)
Girl 1	48	9.7	21.4	16.9
Girl2	52.6	12.5	21.7	18.4
Girl 3	55.6	12.8	22.7	20.1
Girl 4	45.5	9.2	20.2	16.1
Boy 1	57.3	13.4	23.8	20.1
Boy 2	68.2	15.1	28.3	24.8
Boy3	73.3	17.6	30.1	25.6
Boy 4	62.4	14.7	26.4	21.3

Graph 2: Performance graph showing relation between D and practice time in months for boys

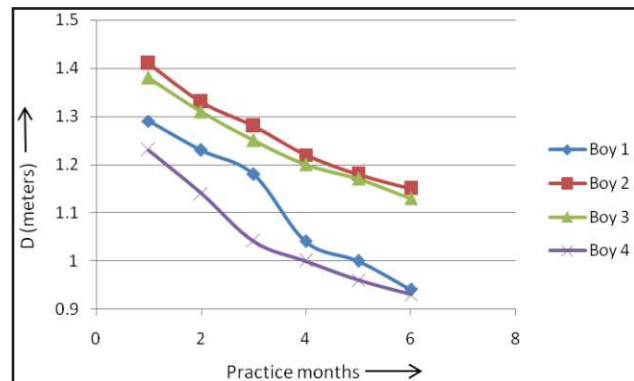
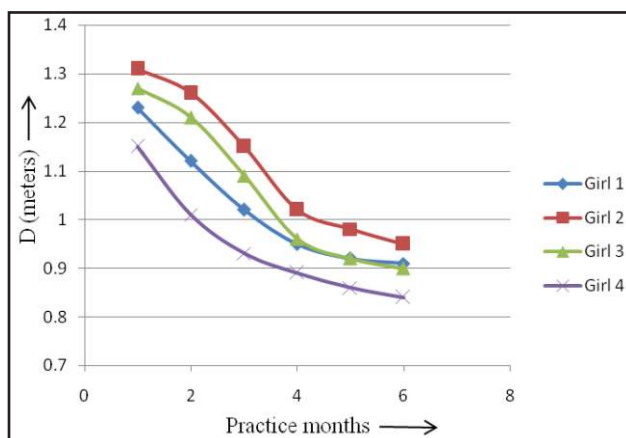
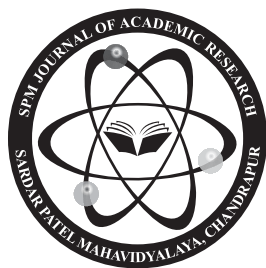


Table III: Observation table for posture in figure 2b

Sr. No.	a mass related to W (Kg)	a ₁ mass related to F ₁ (Kg)	a ₂ mass related to F ₂ (Kg)	a ₃ mass related to F ₃ (Kg)
Girl 1	48	9.7	21.4	16.9
Girl2	52.6	12.5	21.7	18.4
Girl 3	55.6	12.8	22.7	20.1
Girl 4	45.5	9.2	20.2	16.1
Boy 1	57.3	13.4	23.8	20.1
Boy 2	68.2	15.1	28.3	24.8
Boy3	73.3	17.6	30.1	25.6
Boy 4	62.4	14.7	26.4	21.3

Graph 1: Performance graph showing relation between D and practice time in months for girls





Study of Molecular Interactions in Aqueous Thiamine Hydrochloride (Vitamin B1) at 298.15K

V. G. Dudhe¹ and V. A. Tabhane²

¹Department of Physics, Shree Shivaji Arts, Comm. & Science College, Rajura, Dist. Chandrapur -442 905

²Department of Physics, Pune University, Ganeshkhind, Pune

E-mail: vishalgdudhe@gmail.com

Abstract :

Ultrasonic velocity, density and viscosity of different concentration of Thiamine hydrochloride (Vitamin B₁) in water have been studied at temperature 298.15K. The measurements were carried out by using the ultrasonic pulse echo overlap (PEO) technique at a frequency 5 MHz. Measurement of densities have been carried out by hydrostatic plunger method and viscosity by Oswald's viscometer. Adiabatic compressibility, acoustic impedance have been calculated from the experimental data. The variation of these parameters with the concentration shows associative molecular interaction in the given sample.

Keywords:

Vitamin B₁, Ultrasonic velocity, Density, Viscosity, Adiabatic compressibility Acoustic impedance

Introduction:

Ultrasonic investigation in polymers, drugs and vitamins carrying considerable importance in understanding intermolecular interaction. Further, such studies as a function of concentration are useful in gaining insight into the structure and bonding of associated molecular complexes and other molecular processes¹⁻⁴.

Vitamins are organic compounds needed by cell and organs to maintain their function and developments. They take role in enzymic processes as co-enzymes or their precursors and in genetic regulation processes. They may also act as antioxidants. Most vitamins cannot be synthesized by the body, thus must be taken through the diet. Vitamins are classified as water soluble and fat soluble vitamins. Thiamine hydrochloride (Vitamin B₁) is water soluble vitamin. It is necessary to study aqueous solution properties of vitamin B₁ in order to understand the mechanisms of their action in details.

In this work ultrasonic velocity, density, viscosity, adiabatic compressibility and acoustical impedance etc. of vitamin B₁ as a function of concentration have been studied in order to understand the molecular interaction between the component molecules.

Experimental:

In the present study, Thiamine hydrochloride (Vitamin B₁) supplied by Loba Chem. used for preparation of different concentration of vitamin B₁ by dissolving in double distilled water.

The ultrasonic velocities in these solutions were measured using a ultrasonic interferometer working at 5 MHz freq with accuracy 0.1 m/s. The density was measured using a hydrostatic plunger method. The viscosity of liquid was measured by Oswald's viscometer. Thermostatically controlled water circulation system is used to maintain a temperature at 298.15K with an accuracy of 0.05°C. Ultrasonic velocity, density, viscosity, adiabatic compressibility and acoustical impedance are calculated by using following standard formulae.

1] Ultrasonic Velocity:
$$u = \frac{2d}{t} \text{ m/sec}$$

Where, d = Separation between transducer & reflector
t = Traveling time period of ultrasonic wave.

2] Density:
$$\rho = \left[\frac{W_a - W_l}{W_a - W_w} \right] \times \rho_w \text{ kg/m}^3$$

Where, W_a = Weight of the plunger in air

W_l = Weight of the plunger in the experimental liquid

W_w = Weight of the plunger in water

ρ_w = Density of water

3] Viscosity:
$$\eta = \left[\frac{\rho \times t_l}{\rho_w \times t_w} \right] \times \eta_w \text{ N s/m}^2$$

Where, t_l = Flow Time in experimental liquid

t_w = Flow Time in water

η_w = Viscosity of water

4] Adiabatic Compressibility:

$$\beta = [1 / u^2 \rho]$$

5] Acoustic impedance (Z):

$$Z = u. \rho$$

Concentration	Ultrasonic Velocity m s ⁻¹	Density Kg m ⁻³	Viscosity Ns/m ² x10 ⁻³	Adiabatic compressibility β x 10 ⁻¹⁰ m ² N ⁻¹	Acoustic impedance (Zx10 ⁶) Kg m ⁻² s ⁻¹
0	1495.99	997.04	0.89	4.4815	1.4915
0.02	1499.44	999.71	0.8957	4.4490	1.4990
0.04	1502.36	1003.42	0.9204	4.4154	1.5074
0.06	1505.81	1006.54	0.9264	4.3815	1.5156
0.08	1508.36	1008.37	0.9355	4.3588	1.5209
0.10	1509.06	1010.32	0.9504	4.3464	1.5246

Result and Discussion:

Linearly change in ultrasonic velocity and adiabatic compressibility with the concentration of aqueous Thiamine hydrochloride is an indication of the existence of weak interaction between the components of the aqueous Thiamine hydrochloride which is shown in figure 1 and figure 4.

Variation of density with concentration is shown in figure 2 which show that the density is increasing linearly and increasing value of viscosity indicates an increase of frictional resistance force that may be due to change in i) effective molecular area or ii) the cohesive/adhesive forces or iii) relative random velocity between the components of mixture or combination shown in figure 3.

Variation of acoustic impedance with concentration is shown that acoustic impedance increases linearly with different concentration of aqueous Thiamin hydrochloride. This in turn shows that molecular interaction is associative.

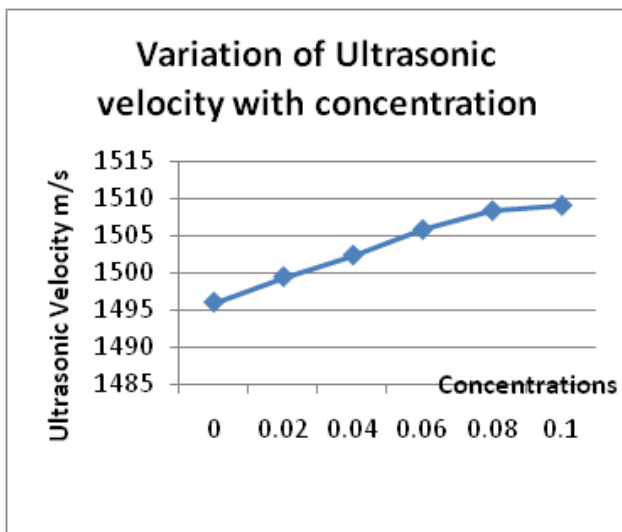


Fig. 1

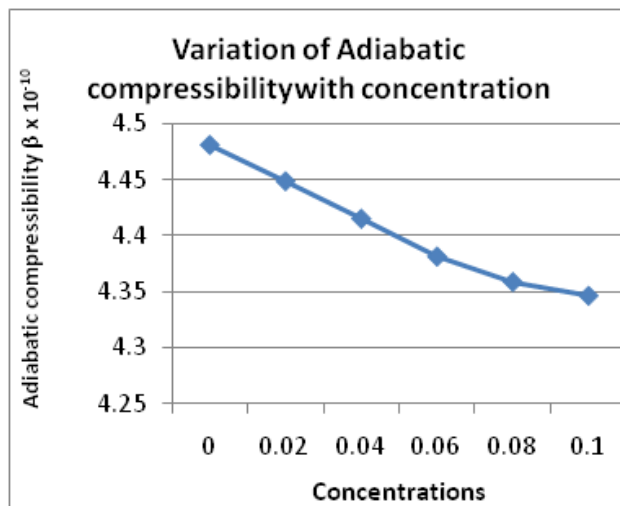


Fig. 4

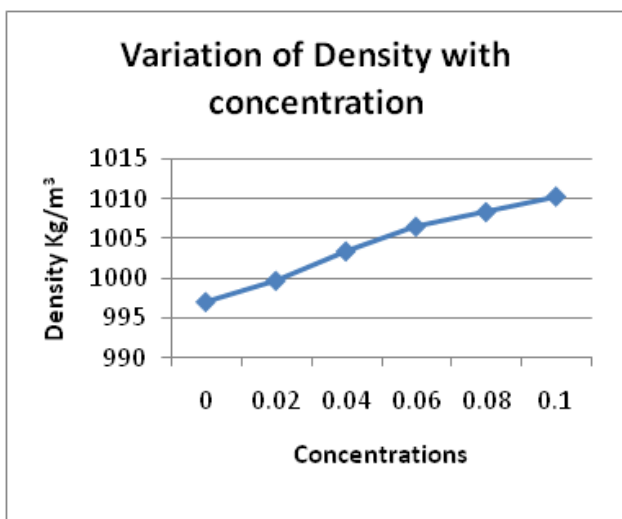


Fig. 2

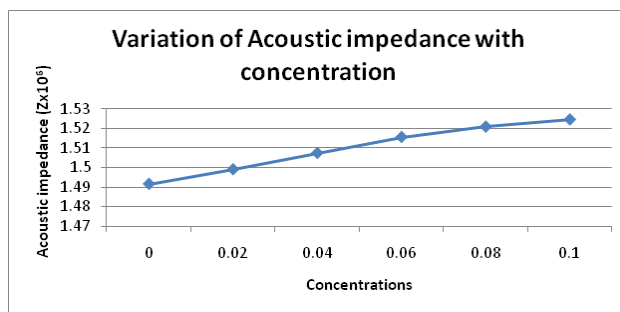


Fig. 5

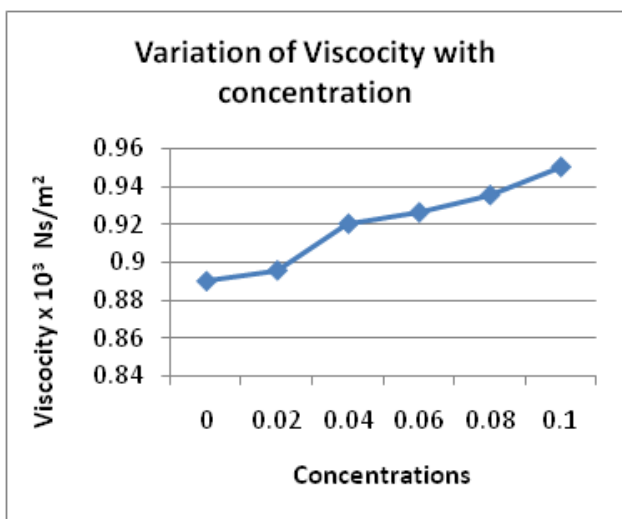


Fig. 3

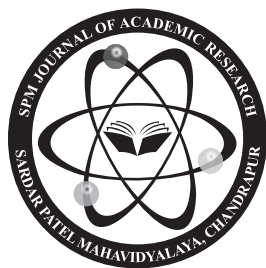
Conclusion :

The present study shows the experimental data for ultrasonic velocity, density and viscosity at 298.15K for Aqueous Thiamine hydrochloride and from experimental data acoustical parameter have been calculated. It has been concluded that the weak interaction due to formation of hydrogen bonding between the molecules of vitamin Thiamine hydrochloride and water.

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Acoustical Behaviour of Sucrose in Aqueous Ammonium Chloride Solution at Different Temperature

Urvashi P. Manik

Department of Physics, Sardar Patel College Chandrapur

Abstract :

The ultrasonic velocity, density and viscosity of Sucrose in 0.5M ammonium chloride solution at different temperature 288⁰K, 283⁰K and 278⁰K have been measured. By using ultrasonic velocity different parameters namely adiabatic compressibility, relaxation time, acoustic impedance has been calculated. The variation of these parameters with respect to the molarity and elevation of temperature have been explained on the basis of solute-solvent interaction and structure forming tendency of solutes in the solvent.

Keywords :

Ammonium chloride, sucrose, density, viscosity, velocity, adiabatic compressibility, relaxation time, acoustic impedance.

Introduction :

In recent years, ultrasonic waves have acquired the status of an important probe to study the structure and properties of the basic sciences. Ultrasonic techniques are best suited to the physico-chemical studies of the systems. The ultrasonic parameters viz. ultrasonic velocity, attenuation and their variation with concentration in liquid mixtures and solutions, help us to understand the interactions in the mixtures.

The use of the ultrasonic waves is one of the well-recognized approaches for the study of molecular interactions in liquids, liquid mixtures and solids. The relaxation parameters, chemical and structural aspects of liquid systems and formation of complexes can be studied by ultrasonic techniques.

The use of ultrasonic waves has proved to be a useful probe also for generating more information on many areas. Review articles on various topics such as organo-metallic chemistry, biotechnology, polymerization, and medical utility in conjunction with other fields have been published by various workers. The propagation of acoustics waves in liquid media has considerable practical and fundamental significance.

Ultrasonic is versatile non destructive technique and highly useful for investigation of various physiochemical properties such as adiabatic compressibility, relaxation time, acoustic impedance of solution at different temperature. Recent development was found use of ultrasonic energy in medicine, engineering and agriculture. Ultrasonic study on amino acid with aqueous solution of electrolytes and non electrolytes provides useful information in understanding the behaviour of liquid system. Ultrasonic study has also been made for simple carbohydrates in water.

Fank and kalgud have also used the same method to study the thermodynamic properties of several carbohydrates like ribose, galactose. Carbohydrates are present abundantly in living nature and have been the subject of numerous investigation because of their abilities to preserve biosystems such as cells, vaccine or therapeutic protines employed in the food, pharmaceuticals and cosmetic industries.

Carbohydrates and metal cation coexist in biological fluids and the interaction between

Carbohydrates and metal cation are subject of current interest because of the importance of carbohydrates. Thermodynamic and transport properties of carbohydrate electrolyte solution are more frequently required by chemist and engineers. Very few attempts have been made of study the molecular interaction among the carbohydrates in the solutions. Hence the molecular association, physico-chemical behaviour and acoustic properties of multicomponent liquid mixtures of sucrose in aqueous ammonium chloride solution at different temperature by measuring ultrasonic velocity, density and viscosity have been studied.

Experimental Details :

Ammonium Chloride was dissolved in distilled water to give 0.5M solution. This solution is used a solvent for preparing sucrose solution of different concentration. All the compounds should be accurately weighted. The solutions were allowed to stand for sometime before every measurement to avoid air bubbles.

The velocity of ultrasonic wave in 0.5M ammonium with sucrose has been measure, using multi frequency ultrasonic interferometer with high degree of accuracy. The measuring cell of interferometer is specially designed double walled vessel with provision for temperature constancy. The densities of solution are measured using a 10ml specific gravity bottle. The specific gravity bottle with the experimental liquid is immersed in a temperature controlled water bath.

The viscosity of solution are measured using a viscometer which is calibrated with double mark. The viscometer with the experimental liquid is immersed in a temperature controlled water bath. The time flow of solution was measured using stop watch.

Result And Discussion :

The values of density, viscosity and ultrasonic velocity and the acoustical parameters such as adiabatic compresiblity, relaxation time, acoustic impedance, Gibb's free energy, internal pressure at 278.15K, 283.15K and 288.15K are presented in table 1, 2 and table3 respectively.

Table.1: values of velocity, density, viscosity, Acoustic impedance Adiabatic Compressibility, Relaxation time, Internal Pressure, Gibb's Free Energy at 278.15⁰ K.

Molarity	Velocity U (m/s)	Density P(kg/m ³)	Viscosity η(10 ⁻³ Pa-s)	Acoustic impedance Z(10 ³ kg/m ² s)	Adiabatic Compressibility β _{ad} (10 ⁻¹⁰ m ² /N)	Relaxation time τ(10 ⁻¹⁰ s)	Internal Pressure P(10 ⁹ N/m ²)	Gibb's Free Energy ΔG (10 ⁻² kg/mol)
0.00375	1456.6481	1007.3343	1.6597	146.7331	4.6786	10.3534	3.4466	2.4966
0.005	1457.1940	1012.4122	1.6680	147.5280	4.6517	10.3454	3.4644	2.4956
0.0076	1457.1940	1014.3558	1.6712	147.8113	4.6427	10.3452	3.4691	2.4954
0.01	1459.399	1017.0322	1.7232	148.4255	4.6165	10.6069	3.5229	2.5325
0.015	1461.610	1022.2627	1.7320	149.4149	4.5790	10.5744	3.5349	2.5279

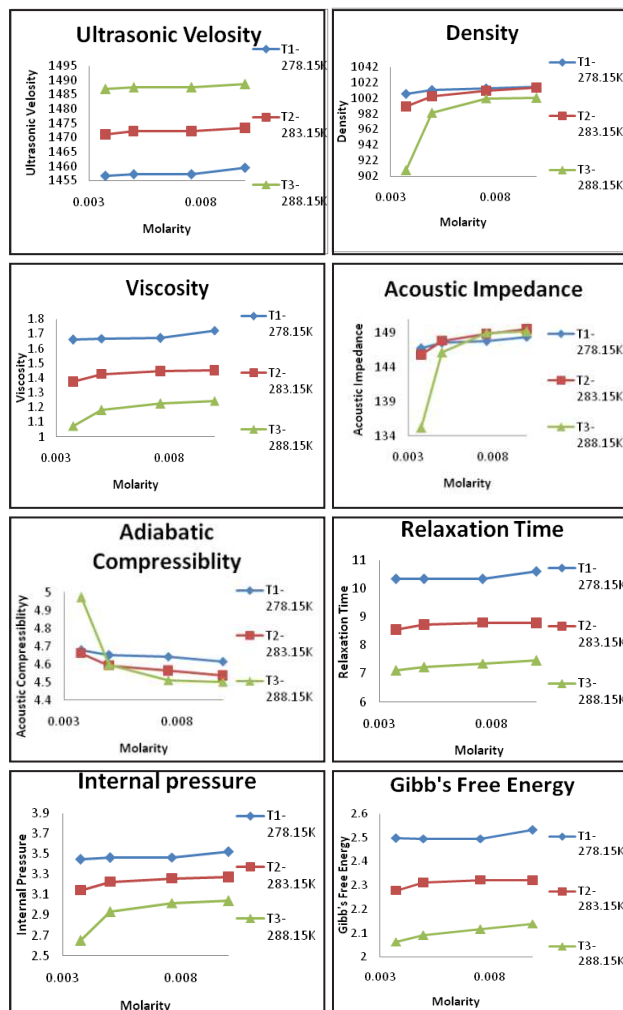
Table. 2: values of velocity, density, viscosity, Acoustic impedance Adiabatic Compressibility, Relaxation time, Internal Pressure, Gibb's Free Energy at 283.15⁰ K.

Molarity	Velocity U (m/s)	Density P(kg/m ³)	Viscosity η(10 ⁻³ Pa-s)	Acoustic impedance Z(10 ³ kg/m ² s)	Adiabatic Compressibility β _{ad} (10 ⁻¹⁰ m ² /N)	Relaxation time τ(10 ⁻¹⁰ s)	Internal Pressure P(10 ⁹ N/m ²)	Gibb's Free Energy ΔG (10 ⁻² kg/mol)
0.00375	1471.083	991.3063	1.3748	145.8293	4.6614	8.5447	3.1437	2.2779
0.005	1472.205	1004.2963	1.4257	147.8530	4.5941	8.7331	3.2265	2.3109
0.0076	1472.205	1011.0701	1.4463	148.8502	4.5633	8.7998	3.2614	2.3225
0.01	1473.329	1015.1669	1.4522	149.5674	4.5379	8.7866	3.2726	2.3202
0.015	1473.892	1015.6232	1.4750	149.6913	4.5325	8.9139	3.2925	2.3419

Table.3: values of velocity, density, viscosity, Acoustic impedance Adiabatic Compressibility, Relaxation time, Internal Pressure, Gibb's Free Energy at 288.15⁰ K.

Molarity	Velocity U (m/s)	Density P(kg/m ³)	Viscosity η(10 ⁻³ Pa-s)	Acoustic impedance Z(10 ³ kg/m ² s)	Adiabatic Compressibility β _{ad} (10 ⁻¹⁰ m ² /N)	Relaxation time τ(10 ⁻¹⁰ s)	Internal Pressure P(10 ⁹ N/m ²)	Gibb's Free Energy ΔG (10 ⁻² kg/mol)
0.00375	1486.955	909.4837	1.0736	135.2361	4.9729	7.1185	2.6524	2.0641
0.005	1487.523	982.8173	1.1805	146.1963	4.5983	7.2377	2.9298	2.0896
0.0076	1487.523	1001.7768	1.2239	149.0166	4.5113	7.3618	3.0188	2.1158
0.01	1488.676	1002.1373	1.2452	149.1857	4.5027	7.4757	3.0416	2.1394
0.015	1489.250	1008.6875	1.2534	150.2187	4.4700	7.4703	3.0588	2.1383

From table 1, 2 and 3, it can be seen that, the measured ultrasonic velocity increases with the increasing concentration of sucrose and increases with increasing temperature...The density increases with increasing concentration of solutes but it decreases with increasing temperature. The gradual increase in density, viscosity and velocity with solute concentrations at all the temperatures may be due to association between solute and solvent molecules. The decrease in density, viscosity and velocity with temperatures indicates decrease in intermolecular forces. The adiabatic compressibility decreases with increase in concentration of solute as well as temperature. The specific acoustic impedance increases with increases solute concentration as well as temperatures. The relaxation time and Gibb's free energy increases with increase in concentration of solute but the same show reverse trend for increase in temperature.



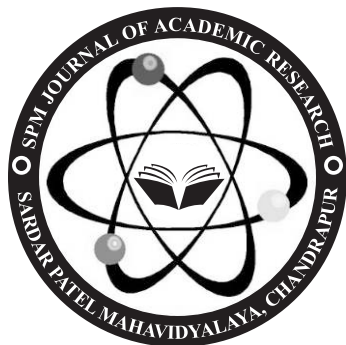
Conclusion :

Since the sucrose show a good association between -OH groups of solute and water. which lead to higher ultrasonic velocity, which is the direct result of hydrogen bonding between solute and solvent molecules.

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Optical And Electrical Properties Of Chemical Bath Deposited Bi_2S_3 Thin Films On Amorphous Glass Substrates

R. M. Thombre

Department of Physics, M.G. College, Armori, Dist. Gadchiroli. (M.S.)

Email - thombrerm123@gmail.com

Abstract:

V-VI binary compounds are important class of materials. Among these, Bi_2S_3 material is the most potential material for photo conducting, electrochemical and electronic devices. Optical properties of transparent polycrystalline Bi_2S_3 thin films $\{t = 0.0046\mu\text{m}\}$ on amorphous glass substrate at constant temperature 60°C by chemical bath deposition technique have been studied. As deposited thin films were surface homogeneous, from photon absorption coefficient and electrical resistivity studies it is found that optical energy gap of Bi_2S_3 polycrystalline thin film is 1.58 eV and Bi_2S_3 forms n type conductivity.

Keywords:

Bi_2S_3 thin films, chemical bath deposition, optical density, Amorphous glass substrate, Energy gap

Introduction:

V-VI binary compound and their pseudo binary solid solutions are highly anisotropy crystallize in homogeneous layered structure parallel to the c-axis^[1,2]. There has been various studies on thin film characterization of Bi_2S_3 including optical and electrical properties^[3]. There are various method for thin film deposition. Among these, chemical bath deposition (CBD) technique is unique least costly, low temperature technique simple and suited for large area deposition of any configuration^[4,5]. Bi_2S_3 thin films have been studied by many researchers^[4,5,6,7] using with and without complexing agent on CBD technique. In the present paper Bi_2S_3 thin films on glass substrates have been grown using chemical bath deposition (CBD) technique^[8,9]. Metal ion control have been done by ethylene diamine tetraacetic acid as the complexing agent at 60°C.

Experimental Details:

The chemicals used in growing thin films of Bi_2S_3 were as follows.

1. Bismuth nitrate [$\text{Bi}(\text{NO}_3)_3 \cdot 5\text{H}_2\text{O}$]
2. Sodium thiosulphate [$\text{Na}_2\text{S}_2\text{O}_3 \cdot 5\text{H}_2\text{O}$]
3. Ethylenediaminetetraacetic acid [EDTA] [$\text{CH}_2\text{N}(\text{CH}_2\text{COOH})_2$]
4. Concentrated nitric acid [HNO_3]

The substrates used for the deposition of Bi_2S_3 thin films were commercial microscope glass slides [$25 \times 75 \text{ mm}$]. Before deposition the substrates were degreased with aqueous detergent cleaned with distilled water, rinsed with acetone and finally dried in air.

0.2 M solution of bismuth nitrate in concentrated nitric acid (10cc) was added to 0.2M Sodium thiosulphate. After stirring for half an hour the solution become clear and homogeneous. The solution was taken in a 50cc beaker in which the glass substrates were hold hours. The Bi_2S_3 layer of thin film deposited on both sides of the glass substrate portion of the substrate. The deposition on single slide of the substrate was protected and on vertically. The beaker and solution under unstirred condition was kept in CBD at 60°C for 2 immersed other side it was wrapped out with soft cotton and cleaned that portion with acetone completely. The deposited substrate then was washed with distilled water and dried in air at

room temperature.

The reaction mechanism in the solution takes place as under

$\text{Na}_2\text{S}_2\text{O}_3$ in water dissociates as



In acetic medium $\text{S}_2\text{O}_3^{2-}$ dissociated as



The electrons released reacts with S as



And the $\text{Bi}_2 + 3\text{S}_2 \quad \quad \quad \text{Bi}_2\text{S}_3$

From EDTA complexed bath



Thickness measurement of the film:

Thickness of the film formed on glass substrate was determined by weight difference method. The film thickness is given by,

$$T = m/A.d \dots \dots \dots (1)$$

Where,

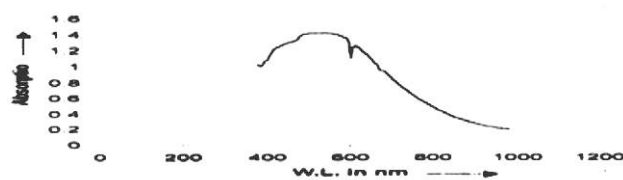
M = weight in grams of the Bi_2S_3 thin films deposited on glass substrate.

A = area in cm^2 of the Bi_2S_3 thin film deposited on glass substrate.

D = density of Bi_2S_3 [6.78 gm/cm^3]

The thickness of the Bi_2S_3 thin films was found to be $t = 0.0046 \mu\text{m}$

Analysis of the optical absorption spectra is one of the accurate methods for determination of optical constants i.e absorption coefficient α and energy gap (Eg). And understanding the type of transition across the forbidden energy gap and developing the band structure of semiconductors. The absorption A transmittance of the thin film were measured at normal incidence using Elico. SL 159 uv Vis Spectrometer in the visible spectra range 400nm to 1000nm.



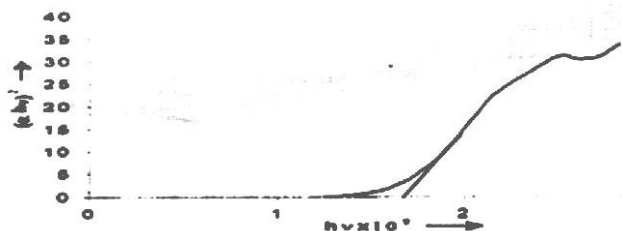


Table 2 : Light absorption coefficient constant in the Bi₂S₃ thin film.

λ nm	T %	$\alpha = 1/t \ln[1/T]$	h ν (eV)	$(\alpha h\nu)^2$ eV ²
380	0.093	5.163×10^4	3.266	28.433×10^9
386	0.100	5.006×10^4	3.214	25.88×10^9
392	0.093	5.163×10^4	3.165	26.70×10^9
404	0.082	5.440×10^4	3.071	27.91×10^9
422	0.060	6.120×10^4	2.940	32.37×10^9
440	0.054	6.350×10^4	2.820	33.70×10^9
458	0.050	6.510×10^4	2.708	31.07×10^9
476	0.046	6.694×10^4	2.606	30.43×10^9
494	0.039	7.050×10^4	2.512	31.36×10^9
512	0.038	7.110×10^4	2.423	29.68×10^9
530	0.038	7.110×10^4	2.341	27.70×10^9
548	0.038	7.110×10^4	2.264	25.905×10^9
566	0.039	7.050×10^4	2.192	23.899×10^9
584	0.042	6.890×10^4	2.125	21.446×10^9
602	0.080	5.491×10^4	2.061	12.81×10^9
620	0.056	6.266×10^4	2.002	15.74×10^9
638	0.069	5.812×10^4	1.945	12.74×10^9
656	0.087	5.308×10^4	1.891	10.07×10^9
674	0.106	4.879×10^4	1.841	8.068×10^9
692	0.129	4.452×10^4	1.793	6.372×10^9
710	0.156	4.039×10^4	1.747	4.979×10^9
728	0.186	3.656×10^4	1.704	3.882×10^9
746	0.218	3.311×10^4	1.663	3.033×10^9
764	0.252	2.996×10^4	1.624	2.368×10^9
782	0.289	2.699×10^4	1.587	1.834×10^9
800	0.327	2.430×10^4	1.551	1.420×10^9
818	0.368	2.173×10^4	1.517	1.087×10^9
836	0.406	1.960×10^4	1.484	0.846×10^9
854	0.445	1.760×10^4	1.453	0.654×10^9
872	0.481	1.590×10^4	1.423	0.513×10^9
890	0.516	1.440×10^4	1.394	0.402×10^9
908	0.546	1.320×10^4	1.366	0.329×10^9
926	0.573	1.211×10^4	1.339	0.263×10^9
944	0.598	1.120×10^4	1.314	0.216×10^9
962	0.619	1.040×10^4	1.289	0.181×10^9
980	0.634	0.990×10^4	1.266	0.157×10^9
998	0.640	0.970×10^4	1.243	0.145×10^9

Fig. 1 shows a representative curve of A Vs λ of Bi₂S₃ thin film. The % transmission and absorption coefficient $(\alpha h\nu)^2$ and photon energy h ν eV for Bi₂S₃ thin film ($t=0.0046\mu\text{m}$) are given in the table 1.

Fig. 2 shows a photon absorption coefficient $(\alpha h\nu)^2$ Vs h ν . The extrapolation of the linear part of the plot near the fundamental absorption edge to the ordinate was used to obtain the band gap value. The band gap is calculated at single thickness of the Bi₂S₃ film this is as given by,

$$E_g = h\nu + \alpha^2(h\nu)^2/A^2 \dots\dots\dots(2)$$

The energy gap of the Bi₂S₃ thin film from the slope of a straight line to a curve in form fig.2 and calculated by using eq.(2) is $E_g=1.7\text{eV}$.

The study of electrical resistivity of Bi₂S₃ thin film with

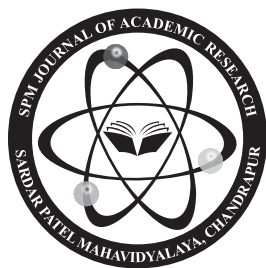
temperature shows that the Bi₂S₃ material as semiconductor nature and its thermoelectric measurements shows n type conductivity of the material.

Conclusion :

The optical and electrical properties of the Bi₂S₃ thin films prepared in the present investigation by using CBD deposition technique at 60^oc are satisfactorily explained. The study of the present result are in close agreement with literature report^[6,7]

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Electrical and optical properties of Spray pyrolytically Fe_2O_3 annealed thin films

R. M. Thombre

Deptt. Of Physics, Mahatma Gandhi Art, Science & Late N. P. Commerce College, Armori, Dist. Gadchiroli.
Email-thombrerm123@gmail.com

Abstract :

The present study aims at investigating of optical, electrical and structural properties of Fe_2O_3 thin films prepared using an aqueous solution of FeCl_3 (AR grade) and 2% H_2O_2 Glass substrate temperature was 400°C . The lattice parameters a and c of the films were calculated. The hexagonal structure of Fe_2O_3 thin film was confirming form X-Ray diffraction. The energy band gap of annealed films were determined from optical transmission data Electrical resistivity is determined by two probe method as fun of thickness of the film and heating effect.

Keyword :

Spray pyrolysis, Fe_2O_3 annealed thin films, optical and electrical properties energy band gap.

Introduction :

Ferric oxide has studied extensively as a photo anode, due to its relatively small band gap (2.5 eV.) good chemical stability and easy preparation. Its absorption co-efficient is of the order of 10^4 cm^{-1} (Pawar et al. 1989). It is much interest in the utilization of semiconductor electrode for liquid junction solar cell (Gerischer H 1969; Gleria et al 1975; Kennedy 1976; Frank 1975; Fuji et al 1975). The photoconductivity of Fe_2O_3 studied by Hardees et al 1976 by chemical vapour deposition method.

Spray pyrolysis is the simple and more convenient method of preparation of thin film. Few attempts have been made so far to prepare Fe_2O_3 thin film annealed at 100°C for 2-5, hours by (Pawar 1989; Tembhurkar 1996).

A number of electrodes have been tried for this solar energy conversion; conventional semiconductor like Si, Ga, As, GaP, CdS, etc. have suitable band gap but they are unstable in the electrolytes. On the other hand, semiconductor their band gaps are high enough, which makes them transparent for most part of the spectrum. Hence Fe_2O_3 is consider for solar energy conversion, Shamlal et al. 2004 prepared tin oxide film by spray pyrolysis, Murthy et al. 1999 studied thickness dependent optical properties of CdO by the same method.

The Present study has been made to discuss the optical, electrical and structural properties of annealed Fe_2O_3 polycrystalline thin film.

Experimental:

The experimental setup for spray pyrolysis deposition is designed and fabricated by us, as described elsewhere (Pawar 1985, Tembharkar 1992). Aqueous solution of ferric chloride (AR grade) of 0.001M was used for spraying the films on hot substrate at $400 \pm 10^\circ\text{C}$. Iron oxide thin films were deposited on glass substrate. The temperature of the substrate measured by precalibrated thermocouple was maintained at $400 \pm 10^\circ\text{C}$ Pawar 1987. The specially designed chromatographic spray nozzle was used for fine spray of solution on the hot glass substrate. A compressor pressure 10 kg/cm^2 spray was in the solution. The rate of flow of solution was maintained at 3 ml/min.

The optical absorption and (% Transmission) with ELICO – 150 UV – VIS spectrophotometer in the

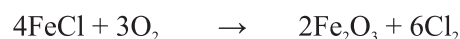
wavelength range 380 – 1000 nm. The electrical resistivity was measured by following two probe dc methods in the temperature range 300°K to 500°K .

The structural characterization was carried out with X-ray diffraction technique using Philips diffraction meter and $\text{Cu K}\alpha$ radiation.

Result and Discussion :

The Fe_2O_3 thin film by spray pyrolysis technique consist of a thermally stimulated chemical reaction between cluster of liquid or vapour atoms of different chemical species. Every sprayed droplet reaching to the preheated hot surface of substrate to forms the single crystal or a cluster of crystalline product. The reaction for the preparation of Fe_2O_3 form Fe_2Cl_3 is

$$\Delta 400 = 10 \pm 0^\circ$$



The concentration of sprayed solution is 0.01 M sprayed with different volumes for varying thickness, and the film were studied for structural, optical and electrical properties.

(a) Structural properties: The structure of the film was studied by XRD pattern. The XRD data for polycrystalline film shows that both deposited and air annealed film were polycrystalline in nature with well define peaks. The film deposited at substrate temperature of $400 \pm 10^\circ\text{C}$ were annealed in air at 1000°C for two the five hours. The film constant of α and γ and its values of the diffraction peaks at 2θ are $26.7, 31.6, 34.0, 35.8, 49.5, 58.0, 64.1, 64.3, 66.0$. It clearly reveal the formation of Fe_2O_3 film is polycrystalline in nature. However, the relative intensity ratios of these peaks agree with data reported by ASTM data (S. H. Pawar et al. 89).

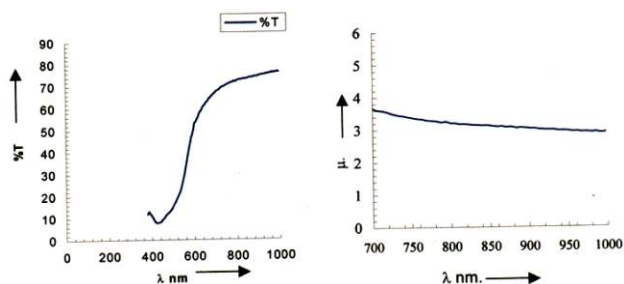


Fig.1 percentage transmission

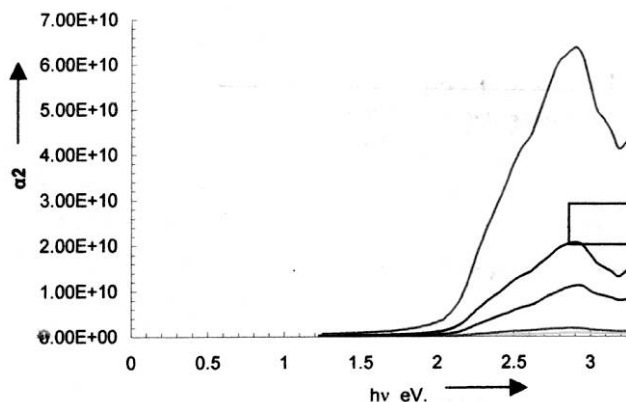


Fig.2 refractive index vers wavelength

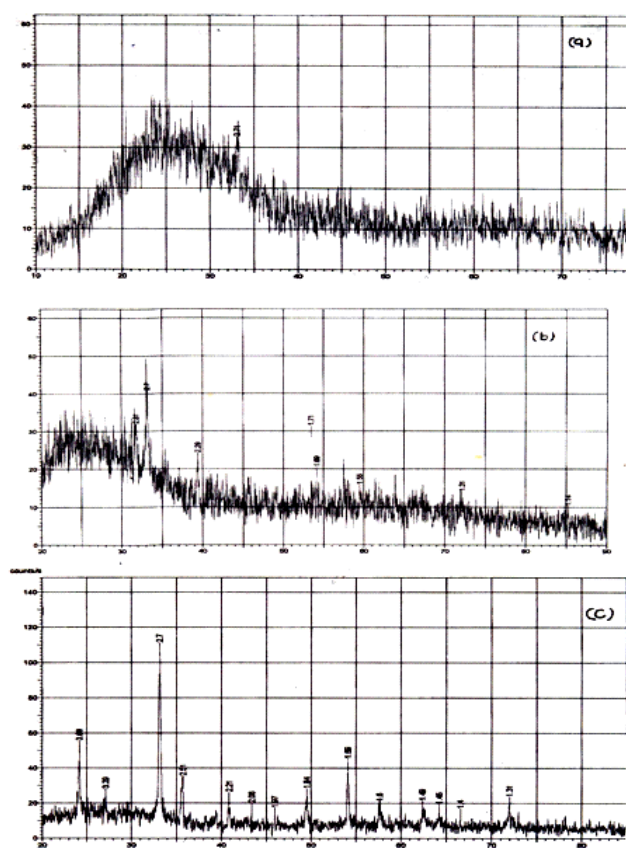


Fig.3 direct band gap of Fe₂O₃

(b) Optical Properties:

The ferric oxide films of different thickness are characterized by measuring optical absorption in the wavelength range 300 -1000 nm.

The variation of optical absorption (α) with wavelength (γ) for Fe₂O₃ thin film prepared from 0.01 m solution of FeCl₃ for different thickness were studied and shown in Fig. 1. All the films shows step absorption edge on longer wavelength side.

The αt was higher for more thick films.

The optical data were analyzed to estimate band gap energy (E_g) of the films. The plot of (ρ), carrier concentration (n) and mobility (μ) of Fe₂O₃ film is measured from temperature 473°K and 573°K using a two point probe method (Ranyan) to measure electrical resistivity.

The variation of resistivity with temperature was studied for annealed and unannealed Fe₂O₃ film and data were analyzed by plotting the graph (1) $\log \rho$ versus $1/T$. All the plots Obeeyed the following equation.

$$\rho = \rho_0 \exp (-E_g/KT) -1 \text{-----} (*)$$

Where: ρ is resistivity, E_g -- is energy gap. K -- Boltzmann constant and T -- Absolute temperate. The resistivity decreases with increases at film thickness. This can be attributed due to the increase of grain size with increase in film thickness. The resistivity of prepared films was in the range 102 – 107 Ω cm.

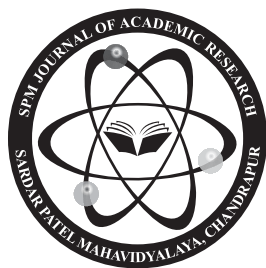
Conclusion:

The Fe₂O₃ thin film deposited by spray pyrolysis using FeCl₃ solution (0.1m) XRD results indicates that the film of Fe₂O₃ is hexagonal and electrical properties of the film were studied and found to be thickness dependent.

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Fish Diversity Of Tadoba Lake Tadoba Andhari Tiger Reserve, District Chandrapur, Maharashtra, India

P. M. Telkhade¹ and A. S. Bele²

¹Arts, Commerce and Science College, Tukum, Dist. Chandrapur (M.S.)

²Department of Zoology, Sardar Patel College, Chandrapur (M.S.)

E-mail : ptelkhede@yahoo.in

Abstract:

Biodiversity is essential for stabilization of ecosystem and protection of overall environmental quality. Fishes are rich source of food and nutrition and became an important and delicious food of man. The present investigation deals with the fish diversity in Tadoba lake, Tadoba during the year June 2006 to May 2007. Tadoba Andhari Tiger Reservoir and Tadoba Lake a very prominent tourist spot of Maharashtra State. The Tadoba lake spreads in 120 ha. area. Taking into consideration national heritage, it is a need of hour to protect this precious wealth from further degradation keeping this in view present piece of study has been taken. The results of present study reveal the occurrence of 39 species belonging to 6 Orders and 17 Families. Among the collected species order Cypriniformes was most dominant.

Key words :

Tadoba lake, Ichthyofauna

Introduction :

Each ecosystem has its characteristic abiotic or biotic features and therefore thorough understanding is essential for its effective management and conservation. Fishes are one of the important elements in the economy of many nations as they have been a staple item in diet of many people. They constitute slightly more than one half of approximately 54711 recognised living vertebrate species, there are descriptions of an estimated 27977 valid species of fishes (Nelson, 2006).

In India potential of fish culture is yet to be fully exploited. Fish biodiversity of reservoir is essentially represents the fish faunal diversity and their abundance. Lake conserves a rich variety of fish species which supports to the commercial fisheries. The fresh water sources like tanks, dams, and lakes contains about 20,000 fish species in world and 2179 species in India. Various workers have studied fishes of India like Day (1978), Khanna (1992), Jayaram (1994), Ghate and Wagh (1995).

Tadoba Andhari Tiger Reserve covers 625.40 Sq.Kms., the forest of Chandrapur Forest Division and to a certain extent forest of Brahmapuri Division and another 700-800 Sq.Kms. of Contiguous Forest Land which act as buffers for the Tiger Reserve on the North East, East South and South Western parts. Tadoba Andhari Tiger Reserve and Tadoba Lake is a very prominent tourist spot of Maharashtra State. Taking into consideration national heritage, it is a need of hour to protect this precious wealth from further degradation.

The present investigation was undertaken to study fish diversity in Tadoba lake, Tadoba. The objective of the study was to assess the fish diversity of the area.

Materials and Methods:

The Tadoba Lake is a lake present in Tadoba Andhari Tiger Reserve. As the forest is reserved the catching of fishes is not allowed for the local fishermen as well as the lake water fishes were not allowed for the marketing. Also there is fear of having crocodiles. To study the fish fauna a fisherman was arranged for catching fish. The fishes were caught with netting, brought to laboratory, washed, cleaned, observed and then identified up to species by referring standard literature of Day (1958), Datta and

Shrivastava (1988), Talwar and Jhingran (1991) and Jayaram (1994).

Results and Discussion:

The lake has rich Ichthyofauna in protected area and conserved lot of fishes. The fish fauna of this lake comprised of 39 species belonging to 6 order 17 families of these (Table 1.1). The species belonging to Cypriniformes were observed to be dominant among the Ichthyofauna of this lake.

In present investigation the following species shows their dominance like *Clarieas batrachus*, *Heteropneustus fossilis*, *Notopterus notopterus*, *Wallago attu* and in frequent the fishes like, *Rosbora daniconius*, *Mystus seenghala* and *Chanda nama* observed. Pawar *et al.*, (2003) reported 11 fish species belonging to 5 Orders and Order Cypriniformes was dominant with 6 species from Sirur dam near Mukhed, Nanded (M.S.). Sharma *et al.*, (2007) reported 29 species of fishes belonging to six orders from Kishanpura Lake, Indore and stated that Cypriniformes was dominant with 15 species, followed by Siluriformes with 6 species. Due to more fecundity of major carps and suitable environmental condition relatively higher population density of Cypriniformes was evident in the lake.

In present study of Tadoba Lake Order Cypriniformes shows its dominance. Similar observation was noted in some Indian reservoirs. The population of predatory fish *Mystus* species, *Channa* species, *Wallago attu*, *Sylionia silondia* and other dominates the catches of many reservoirs. The recent contribution in the study of Ichthyofauna are made by Venkateshwaralu (2002), Datta *et al.* (2003), Patil (2002), and Pailwan (2005), in different fresh water bodies.

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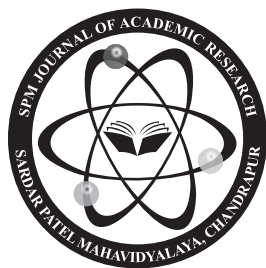
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Table 1.1 : Diversity of Ichthyofauna of Tadoba Lake

S. N.	ORDER	FAMILY	GENUS	SPECIES
1	Perciformes	Nandidae	<i>Nandus</i>	<i>nandus</i>
2	Clupeiformes	Notopteridae	<i>Notopterus</i>	<i>notopterus</i>
3	Cypriniformes	Cyprinidae	<i>Oxygaster</i>	<i>bacaila</i>
4	Cypriniformes	Cyprinidae	<i>Glossogobius</i>	<i>gyrus</i>
5	Cypriniformes	Clariidae	<i>Clarias</i>	<i>batracus</i>
6	Cypriniformes	Saccobanchidae	<i>Heteropneustus</i>	<i>fossilis</i>
7	Cypriniformes	Cyprinidae	<i>Chela</i>	<i>laubuca</i>
8	Cypriniformes	Cyprinidae	<i>Salmostoma</i>	<i>bacaila</i>
9	Cypriniformes	Cyprinidae	<i>Salmostoma</i>	<i>clupeoides</i>
10	Cypriniformes	Cyprinidae	<i>Amblypharyngodon</i>	<i>mola</i>
11	Cypriniformes	Cyprinidae	<i>Danio</i>	<i>devario</i>
12	Cypriniformes	Cyprinidae	<i>Esomus</i>	<i>danricus</i>
13	Cypriniformes	Cyprinidae	<i>Rasbora</i>	<i>rasbora</i>
14	Cypriniformes	Cyprinidae	<i>Puntius</i>	<i>amphibius</i>
15	Cypriniformes	Cyprinidae	<i>Cirrhimus</i>	<i>reba</i>
16	Cypriniformes	Balitoridae	<i>Noemacheilus</i>	<i>botia</i>
17	Cypriniformes	Balitoridae	<i>Lepidocephalus</i>	<i>guntea</i>
18	Cypriniformes	Balitoridae	<i>Lepidocephalus</i>	<i>thermalis</i>
19	Cypriniformes	Cobitidae	<i>Lepidocephalichthys</i>	<i>guntea</i>
20	Cypriniformes	Cyprinidae	<i>Puntius</i>	<i>ticto</i>
21	Cypriniformes	Cyprinidae	<i>Puntius</i>	<i>sophore</i>
22	Cypriniformes	Bagridae	<i>Mystus</i>	<i>vitatus</i>
23	Cypriniformes	Bagridae	<i>Mystus</i>	<i>seenghala</i>
24	Cypriniformes	Bagridae	<i>Mystus</i>	<i>bleekeri</i>
25	Cypriniformes	Ciluridae	<i>Ompok</i>	<i>bimaculatus</i>
26	Cypriniformes	Cyprinidae	<i>Puntius</i>	<i>sarrhana</i>
27	Cypriniformes	Cyprinidae	<i>Rasbora</i>	<i>daniconius</i>
28	Cypriniformes	Cyprinidae	<i>Oxygaster</i>	<i>chipoiedis</i>
29	Ophiocephaliformes	Ophiocephalidae	<i>Ophiocephalus</i>	<i>punctatus</i>
30	Ophiocephaliformes	Ophiocephalidae	<i>Ophiocephalus</i>	<i>striatus</i>
31	Ophiocephaliformes	Ophiocephalidae	<i>Ophiocephalus</i>	<i>murulus</i>
32	Ophiocephaliformes	Ophiocephalidae	<i>Ophiocephalus</i>	<i>orientalis</i>
33	Siluriformes	Bagridae	<i>Mystus</i>	<i>cavasius</i>
34	Siluriformes	Siluridae	<i>Wallgo</i>	<i>attu</i>
35	Siluriformes	Schilbeidae	<i>Ailia</i>	<i>coila</i>
36	Siluriformes	Sisoridae	<i>Bagarius</i>	<i>bagarius</i>
37	Perciformes	Cichlidae	<i>Oreochromis</i>	<i>mossambica</i>
38	Perciformes	Centropomidae	<i>Chanda</i>	<i>ranga</i>
39	Synbranchiformes	Mastacembelidae	<i>Mastacembelus</i>	<i>armatus</i>



Studies on Chlorophycean Diversity of Pindavani Pond of Bhadrawati, Dist- Chandrapur (M.S.), Inda.

N. V. Harney¹, A. A. Dhamani² and R. J. Andrew³

¹Deptt. of Zoology, Nilkanthrao Shinde Science and Arts College, Bhadrawati Distt. Chandrapur-442 902

²P.G. Deptt. of Zoology, N.H. College, Bramhapuri, Distt. Chandrapur-441 206

³P.G. Deptt. of Zoology, Hislop College, Nagpur-440 001

Email : narendra_harney2008@rediffmail.com

Abstract

The phytoplankton in aquatic ecosystems is an important biological indicator of the water quality. While phytoplankton are major primary producers and the basis of the food chain in open water, some species on the other hand can be harmful to human and other organisms by releasing toxic substances into the water. The present paper describes the diversity of Chlorophyceae of Pindavani pond, located near the Bhadrawati town of Chandrapur district. Qualitative and quantitative analysis of Chlorophyceae community was undertaken on monthly basis from October 2005 to September 2007. A total of 22 chlorophycean species were identified during the period of Oct. 2005 to Sep. 2006, while a total of 23 chlorophycean species were identified from Oct. 2006 to Sep 2007. Among the different species in Pindavani pond *Ankistrodesmus* was dominant and the present study demonstrated that the Chlorophyceae was maximum during the summer season and minimum during the monsoon season. The seasonal fluctuation of this group is discussed in the light of recent literature.

Key words

Pindavani pond, Chlorophycean diversity, Seasonal variation.

Introduction

Phytoplanktons are the autotrophic component of the plankton community. Since they obtain energy through the process of photosynthesis and must therefore live in the well-lit surface layer (termed the euphotic zone) of a water body. Phytoplanktons are the base of most of the lakes food web and fish productions is linked to phytoplanktons production (Ryder *et al.*, 1974). The present investigation has been undertaken to study the qualitative and quantitative analysis of chlorophyceae community at the Pindavani pond located near Bhadrawati town of Chandrapur district.

Material and Methods

The Pindavani pond is situated on south of Bhadrawati town and is about 207 m above mean sea level. The Geographical position is 79° 06' 53" E longitude and 20° 05' 50" N latitude. Sample for planktonic study were collected monthly from each pond. The samples were collected in the morning hours between 8.30 to 10.30 a.m. 50 Lt. of water sample was filtrated through the plankton net made of bolting silk number 25 with mesh size 64 limes. The collected samples were allowed to settle down by adding Lugol's iodine. Normally, sedimentation requires 24 hrs. After which supernatant was removed and concentrate was made up to 50 ml depending the number of plankton and preserved in 5% formalin for further studies.

The quantitative study of chlorophyceae was done by Sedgwick – Rafter cell method, the concentrated sample was shaken and immediately one drop of sample was taken on a clear micro side with the help of a standard dropper, the whole drop was then carefully covered with the cover glass and observed. Identification up to genera and whenever possible up to species level was classified according to keys given by Prescott (1954), Edmondson (1959), Sehgal (1983), Adoni (1985) and APHA (1985).

Result and Discussion

Phytoplankton is the pioneer of an aquatic food chain. The productivity of an aquatic environment is directly correlated with the density of phytoplankton. The phytoplankton population in any aquatic system is biological wealth of water for fishes and constitutes a vital link in the food chain. They form a bulk of food for zooplankton.

During the year 2005-06, 22 species were recorded among which *Ankistrodesmus* sp. (328 no./lit.) is dominant followed by *Chlorella* sp. (281 no./lit.), *Volvox* sp. (225 no./lit.), *Coelastrum chodati* (46 no./lit.), *Cosmarium granatum* (39 no./lit.) *Microsterias pinnatifida* (33 no./lit.), *Vorticella* sp. (31 no./lit.), *Glaeocystis gigas* (30 no./lit.) the other Chlorophyceae recorded are *Chlorococcum humicola* (15 no./lit.), *Netrium digitus* (15 no./lit.) and *Staurostrum* sp. (15 no./lit.), *Closterium leibleimi* (14 no./lit.), *Trochiscia pachyderma* (13 no./lit.), *Nitella* sp. (12 no./lit.), *Cylindrospermum* sp. (11 no./lit.), *Oedogonium* sp. (10 no./lit.), *Pleurodiscus* sp. (7 no./lit.) and *Spirogyra* sp. (3 no./lit.).

During the year 2006-07, 23 species were recorded among which *Ankistrodesmus* sp. (293 no./lit.) is dominant followed by *Chlorella* sp. (207 no./lit.), *Volvox* sp. (128 no./lit.), *Vorticella* sp. (39 no./lit.), *Glaeocystis gigas* (35 no./lit.), *Euastropsis richteri* (30 no./lit.), *Coelastrum chodati* (30 no./lit.), *Trochiscia pachyderma* (28 no./lit.), *Microsterias pinnatifida* (27 no./lit.), *Oedogonium* sp. (27 no./lit.). Other Chlorophyceae recorded are *Nitella* sp. (23 no./lit.), *Goniocloris* sp. (21 no./lit.), *Pediastrum tetras* (18 no./lit.), *Staurostrum* sp. (18 no./lit.), *Pleurodiscus* sp. (18 no./lit.), *Hydrodictyon* sp. (18 no./lit.), *Cosmarium granatum* (17 no./lit.), *Closterium leibleimi* (13 no./lit.) and *Chlamydomonas* sp. (13 no./lit.).

Chlorophyceae was the most dominant group among all the planktons. The dominance of Chlorophyceae was also recorded by Sakhare and Joshi (2002) in Yeldari reservoir, Nanded district, Maharashtra and Jayabhaye *et al.*, (2007) in Parola dam, Hingoli district, Maharashtra. Somani and Pejaware (2003) reported 14 genera of Chlorophyceae in Masunda, Thane, Maharashtra. Kumawat and Jawale (2003) recorded 14 genera belonging to Chlorophyceae from a freshwater pond at Dharmapuri in Beed district, Maharashtra and 59 genera of phytoplankton from a fishpond at Anjale. Pawar *et al.*, (2006) reported 26 species of Chlorophyceae and observed *Ankistrodesmus falcatus* as a dominant species in Chlorophyceae in Petwadas dam of Kandhar of Nanded district, Maharashtra. Tiwari and Chouhan (2006) reported 34 species of Chlorophyceae in Kitham lake, Agra, Uttar Pradesh. Waghmare and Mali (2007) reported 10 species of Chlorophyceae in a minor

irrigation dam of Kalamnuri, District Hingoli, Maharashtra. Hafsa Sultana Laskar and Susmita Gupta (2009) reported 18 taxa of chlorophyceae in Chatla floodplain lake, Barak Valley, Assam, North East India. Mukherjee *et al.*, (2010) reported 8 species of chlorophyceae in a polluted eutrophic lake, Ranchi. Elif Neyran Soylu and Arif Gonulol (2010) recorded 31 genera of chlorophyceae in a eutrophic lagoon (Liman lake) of Turkey. Anjayan, K.V. and Parameshwara Naik, T. (2011) reported 9 genera in lentic water bodies of Bhadrawati taluk, Shimoga District, Karnataka. Shinde *et al.*, (2012) recorded 15 genera in Harsool-Savangi dam, Aurangabad, India. Harney *et al.*, (2013) reported 24 species of chlorophyceae in Malhara pond of Bhadrawati of Chandrapur district (M.S.), India.

Among the different species in Pindavani pond *Ankistrodesmus* was dominant followed by *Chlorella* sp., *Volvox* sp., *Coelastrium chodatii*, *Cosmarium granatum* and *Micrasterias pinnatifida*. Rajshekhar *et al.*, (2007) observed the dominance of *Chlorella vulgaris* in a eutrophic lake at Kalpacum. The presence of pollution indicator species like *Ankistrodesmus* sp., *Spirogyra* sp. as per Palmar pollution indicator species shows that the Kanhala pond is completely eutrophic and Pindavani pond is moving towards eutrophication. The phytoplankton in aquatic ecosystems is an important biological indicator of the water quality. While phytoplankton are major primary producers and the basis of the food chain in open water, some species on the other hand can be harmful to human and other organisms by releasing toxic substances into the water.

In the present investigation, Chlorophyceae was maximum during the summer season and minimum during the monsoon season. Reddy (1984) found a positive correlation between temperature and green algae in Tungabhadra river, Karnataka. Kumawat and Jawale (2003) observed dominance of Chlorophyceae in the month of April. Khaekar and Deshpande (2007) reported similar observation during the assessment of Naik lake, Nagpur, Maharashtra. Factors such as high temperature, low nitrate and bright sunlight are favorable for the population of green algae (Rao, 1955).

Jayabhaye *et al.*, (2007) reported maximum Chlorophyceae population during the summer and

minimum during the rainy season in Parola dam, Hingoli, Maharashtra. Factors such as high temperature, low nitrate and a bright sunlight are favorable conditions for high population of green algae (Rodhe, 1948). In the present investigation also the dominance of Chlorophyceae was recorded in Pindavani pond probably be due to high level of dissolved oxygen. Dhakar (1979) and Singh (1997) have also observed that the green algae prefer water with high concentration of dissolved oxygen.

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Table 1 : Monthly variation of Chlorophyceae diversity in Pindavani Pond During 2005-06

Sr. No.	Components	Winter				Summer				Monsoon				Total
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	
1	<i>Ankistrodesmus sp.</i>	0	0	0	0	14	41	23	148	102	0	0	0	328
2	<i>Chlamydomonas</i>	6	8	4	6	0	0	0	0	0	0	0	0	24
3	<i>Chlorella sp.</i>	11	3	6	0	31	1	43	0	0	102	46	38	281
4	<i>Chlorococcum humicola</i>	0	0	0	6	3	2	4	0	0	0	0	0	15
5	<i>Closterium Leibleimi</i>	0	0	2	9	2	1	0	0	0	0	0	0	14
6	<i>Coelastrum chodati</i>	6	2	14	9	2	2	4	0	0	0	0	7	46
7	<i>Cosmarium granatum</i>	11	16	5	1	4	0	2	0	0	0	0	0	39
8	<i>Cylindrospermum sp.</i>	1	1	8	1	0	0	0	0	0	0	0	0	11
9	<i>Euastropsis richteri</i>	6	2	2	6	3	2	4	0	0	0	0	0	25
10	<i>Gloeocystis gigas</i>	0	0	6	11	1	6	6	0	0	0	0	0	30
11	<i>Hydrodictyon sp.</i>	3	9	4	1	0	0	0	0	0	0	0	0	17
12	<i>Micrasterias pinnatifida</i>	6	14	3	5	2	1	2	0	0	0	0	0	33
13	<i>Netrium digitus</i>	1	2	1	5	2	1	3	0	0	0	0	0	15
14	<i>Nitella sp.</i>	1	7	4	0	0	0	0	0	0	0	0	0	12
15	<i>Oedogonium sp.</i>	1	1	4	4	0	0	0	0	0	0	0	0	10
16	<i>Pediastrum tetras</i>	1	2	13	6	2	0	0	0	0	0	0	0	24
17	<i>Pleurodiscus sp.</i>	1	2	0	0	0	0	0	0	0	0	0	4	7
18	<i>Spirogyra sp.</i>	0	0	0	1	1	0	1	0	0	0	0	0	3
19	<i>Staurastrum sp.</i>	0	0	5	2	5	1	2	0	0	0	0	0	15
20	<i>Trochiscia pachyderma</i>	0	0	1	6	1	1	4	0	0	0	0	0	13
21	<i>Volvox sp.</i>	11	2	18	26	31	36	41	0	0	0	44	16	225
22	<i>Vorticella sp.</i>	6	11	2	11	1	0	0	0	0	0	0	0	31
	Total	72	82	102	116	105	95	139	148	102	102	90	65	1218

Table 2 : Monthly variation of Chlorophyceae diversity in Pindavani Pond During 2006-07

Sr. No.	Components	Winter				Summer				Monsoon				Total
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	
1	<i>Ankistrodesmus sp.</i>	0	0	0	0	16	21	21	137	98	0	0	0	293
2	<i>Chlamydomonas sp.</i>	9	1	2	1	0	0	0	0	0	0	0	0	13
3	<i>Chlorella sp.</i>	2	1	6	0	21	22	31	0	0	76	40	8	207
4	<i>Chlorococcum humicola</i>	0	0	0	7	2	5	10	0	0	0	0	0	24
5	<i>Closterium leibleimi</i>	0	0	2	1	2	8	0	0	0	0	0	0	13
6	<i>Coelastrum chodati</i>	1	10	11	1	2	2	3	0	0	0	0	0	30
7	<i>Cosmarium granatum</i>	6	1	1	4	2	2	1	0	0	0	0	0	17
8	<i>Cylindrospermum sp.</i>	7	1	11	11	0	0	0	0	0	0	0	0	30
9	<i>Euastropsis richteri</i>	6	7	6	1	2	4	4	0	0	0	0	0	30
10	<i>Gloeocystis gigas</i>	0	0	1	1	6	11	16	0	0	0	0	0	35
11	<i>Goniocloris sp.</i>	6	4	1	0	0	0	0	0	0	0	0	10	21
12	<i>Hydrodictyon sp.</i>	4	2	7	5	0	0	0	0	0	0	0	0	18
13	<i>Micrasterias pinnatifida</i>	1	13	1	6	2	3	1	0	0	0	0	0	27
14	<i>Netrium digitus</i>	1	11	2	4	2	4	1	0	0	0	0	0	25
15	<i>Nitella sp.</i>	3	19	1	0	0	0	0	0	0	0	0	0	23
16	<i>Oedogonium sp.</i>	6	8	6	7	0	0	0	0	0	0	0	0	27
17	<i>Pediastrum tetras</i>	1	3	1	1	2	0	0	0	0	0	0	10	18
18	<i>Pleurodiscus sp.</i>	1	1	0	0	0	0	0	0	0	0	0	16	18
19	<i>Spirogyra sp.</i>	0	0	0	11	2	2	10	0	0	0	0	0	25
20	<i>Staurostrum sp.</i>	0	0	6	1	6	4	1	0	0	0	0	0	18
21	<i>Trochiscia pachyderma</i>	0	0	1	12	2	5	2	0	0	0	0	6	28
22	<i>Volvox sp.</i>	6	8	9	11	17	26	3	0	0	0	37	11	128
23	<i>Vorticella sp.</i>	6	8	2	11	12	0	0	0	0	0	0	0	39
	Total	66	98	77	96	98	119	104	137	98	76	77	61	1107

Table 3 : Seasonal variation of Chlorophyceae in Pindavani Pond During year 2005-06

Sr. No.	Components	Winter			Summer			Monsoon		
		Mean	S.D.		Mean	S.D.		Mean	S.D.	
1	Chlorophyceae	93.000	±	17.117	121.750	±	22.264	89.750	±	15.106
	Total	93.000	±	17.117	121.750	±	22.264	89.750	±	15.106

Table 4. :Seasonal variation of Chlorophyceae in Pindavani Pond During year 2006-07

Sr. No.	Components	Winter			Summer			Monsoon		
		Mean	S.D.		Mean	S.D.		Mean	S.D.	
1	Chlorophyceae	84.250	±	13.349	114.500	±	15.075	78.000	±	13.172
	Total	84.250	±	13.349	114.500	±	15.075	78.000	±	13.172



Right To Information in 2013: A Road Ahead

Pankaj D Kakde

Assistant Professor, S. P. College of Law, Tadoba Road, Tukum, Chandrapur.

E-mail : kakdepd@gmail.com

Abstract

The enactment of Right to Information Act, 2005 and its implementation usurped a new era in protecting democratic rights of the people in India. It provided for the machinery by which the Constitutional guarantee of freedom of information received legislative execution. This was a significant step in ensuring transparency and accountability in governance. The law was hugely welcomed by all concerned and gripped the entire nation in its fold. It is now eight years that the law has become effective and will very soon complete a decade of its existence. The timely review of its working is necessary to understand and analyze its functioning in all these years. The review of its working is also important amidst the reports both in favor and against its efficacy in achieving objectives stated therein.

Introduction

The enacting of Right to Information Act, 2005 has marked the beginning of new era in advancing transparency and accountability in public governance in India. The much-needed legislation has opened a gateway for the common citizen to receive information about the functioning of the State and its various agencies. This has also enabled the citizens to know the status of the work they have assigned to different public authorities in routine governance. It took the rulers fifty-eight years to provide this significant right to the people of the country that has set for itself a goal of achieving the status welfare state. Thanks to the untiring efforts of few public personalities having strong conviction in favor of RTI, who made the impossible, possible. The country, which was suffering with the rampant corruption and heavy red-tapism the legislation, proved to be a boon to fight these evils. It was evident from the nature and provisions of the act that it had the potential to cater the principles of good governance and achieve goals of democracy. The RTI Act is almost completing a decade of its existence and it is time to review the status of the law in terms of its success in achieving the goals and objectives for which it was enacted. The need to review is felt amidst the reports that the public offices are flooded with the RTI applications and they are finding it difficult to cope up with the increasing demands of information from the citizens, RTI activists and others concerned. Also, it was expected that the implementation of the much hyped law will bring down the level of corruption significantly in India. But, the revelation of increasing number of scams and frauds in government in recent years have raised serious doubts on the efficacy of the laws like RTI in regulating and controlling corruption in India.

Democracy literally is a form of Government, where everything rests in the hands of people. The people where rule themselves with the goal of achieving common good and welfare; on the principles of equality, justice and liberty; with respect for fundamental right of the people, and conferring limited powers on the different agencies of the governance, the system is referred as democracy. In participative democracy, people can't remain passive on their rights. They must know how they are governed and whether the representatives they have elected to govern them are fulfilling their

expectations. The well-informed citizenry is one of the highest values in any kind of democracy. And, this becomes altogether important in participative democracy. The citizens are expected to keep themselves aware of the governing policies and its effect on them and their well being. The representatives in the system are expected to disseminate timely information to the citizens about the policies and the decisions to be implemented in governing the state.

The Right to information has always been a part and parcel of the Constitutional scheme adopted for governance in India. The India Constitution enshrines in its different provisions the ideal of transparency and accountability in public governance. The Right to information is admitted a status of Fundamental Right and several times the Indian Judiciary has underlined the importance of Right to Information. The right being the part of freedom of speech and expression is also subject to similar limitations and restrictions to which freedom of speech and expression is subjected to. Before RTI Act of 2005, in view of these restrictions imposed on the freedom of information and in absence of any procedure prescribed for obtaining information, the citizens were not effectively exercising their right to information. The enactment of RTI removed this handicap and diluted the restriction imposed on the freedom of information to a considerable extent and also provided a very simplified procedure to obtain information from the government in different matters.

Awareness of the Law

The effectiveness of the beneficial law like RTI always depend upon how well it is used by the people in realization of their rights there-under. Though the reports suggest that there is considerable increase in the number of RTI application nationwide still the awareness about the RTI in rural areas is a cause of concern. In rural population, still very few people understand their right under the Act qualitatively. There is an express obligation on the Government under the Act to take initiatives in this regard. It seems that the government has not yet fulfilled its obligation and there is a general apathy of the government in this regard.

Quality of Information Provided

The information provided under the RTI Act

must be true and faithful and at the same time must fulfill the purpose for which it is seek. For this, it is necessary that both the information seeker and the provider must be competent to understand their respective roles. The Act provides for the appropriate training to be administered to the people as well as the PIO's in enabling them to play their respective roles effectively. But, this part of the law has been neglected to a considerable extent as a result of which, the quality of information is suffering to a great extent. It is necessary for the effective implementation of the law that this quality be improved. Most of the times the information is not provided in time and trivial reasons are cited for the same. Since the applicant do not understand exactly what and when to demand, he often applies for the information irrelevant to his cause. This puts him into unnecessary financial burden and the whole object of the Act then is defeated. It is therefore necessary to find solutions to this serious constraint faced in implementation of the law.

Huge flow of RTI Applications.

The RTI Act of 2005 since its enactment has gripped the entire nation, and has been extensively used by the citizens, NGO's and Public Commissions. The wave of RTI in India resulted into flood of RTI application filed in different departments of the government. This no doubt has advanced the purpose of this enactment but at the same time created challenges in execution of its provisions. The efficacy of any law depends upon its execution and implementation. The increasing flow of RTI application is creating challenges as to its execution and the machinery established there under it seems, is crumbling due to the pressure exercised thereupon. In answering the question in Lok Sabha the State Minister for Public Grievances informed the House that in the year 2011-12 till the month of May 2012, total 3.74 lakh application were received under RTI Act. The concerns have been expressed at different levels on this increasing number of RTI applications. Especially the public information officers appointed under the Act in different government offices are under a tremendous burden of providing requisite information within prescribed time. This is seriously hampering the implementation of the Act.

The Pachyderm Bureaucrats

The Act is implemented in its letter but not in

spirit. The provisions of the law though have become effective and are implemented all over India, the spirit behind the law has not sipped into the officials responsible for its effective implementation. The act fails to be effective to serve its purpose for the very simple reason that it provides for the appointment of bureaucrat as a public information officer. The Indian bureaucrats enjoy the distinction of being one of the most thick-skinned in the world. The government functionaries are overflowed with personnel's who least believe in transparency and accountability as the principles of good governance. These people have worked with the same tendency for years and are really susceptible to any kind of change therein. It will be foolish to expect any kind of change in the tendency of the bureaucrats only by enacting RTI Act. When the exigencies of poverty, frustration of unemployed youths, disability of old age and helplessness of the deprived failed to change the tendency of these crooked personalities, what a piece of legislation can do? The law definitely is a tool for social transformation but it has its own limitations, it cannot transgress the boundaries of natural justice and due process. Hence, what is required to achieve the results, for which the law is enacted, is developing conscience amongst the officials. The change in thinking and attitude of the public officers is the key to the success of RTI Act. It may be argued that the law has created a much-needed deterrence amongst the officials. It has provoked them to work in much more efficient manner and with accountability also. But creating deterrence can't be the purpose of law and the ideal state can't be created with the use of deterrence. Moreover, life of deterrence is very short and sometimes may effect adversely. Thus, some kind of social or moral backing is necessary to accelerate the results. The officers shall feel responsible; they must be made to understand what an important role they are playing in administration and good governance. The moral standards shall be uplifted to the higher level. The reasons for the downfall of the moral standards shall be found and addressed immediately. No doubt this is not easy to actualize but the efforts in right direction may support the enforcement and effective implementation of the RTI Act.

Conversion Of Democracy Into E-Democracy

There are some practical difficulties in the implementation of the RTI Act. The government

offices in India are full of files and papers. The country that is superpower in the field of computer software and information technology has remained backward in transforming its government functionaries into the e-enabled public utilities. Where the information about the whole world is available on the fingertips, one has to wait for the information in India for weeks and months. The government offices are flooded with paper and files, unorganized most of the times, which makes it too difficult to search and hand over it to the individual in need of it. To simplify the process and get rid of the difficulty; the conversion of democracy into e-democracy is a viable solution. The system shall be developed where the people shall have an option to elect from traditional governance and e-governance, so that the computer literate population can do their work with the help of IT and those who cannot, can use the offices. The functions in the office shall be computerized to free them from red tapism and its undesired consequences. An online communication-tracking tool, for total transparency and accountability in governments and government organizations, a web enabled platform, neutral paper-less intra-office and inter-office communication tool, developed using open source tools, is an ideal option for the Governments and its employees, as it can empower all to perform their duties in the light of the Right to information Act of 2005. It would help to digitize all communications and track pending communications and files and help the superiors in a Government organization to see at a glance, all pending. This is not at all difficult for the software giant like India. It will also require a proper training to the officials on one hand and to the people on other, which can be done through demonstrations.

Conclusion

The scenario is not very encouraging. In India, the people still are not aware of the fundamentals of democracy and their role therein. The public response to their most fundamental responsibility of electing representative in democracy is still not taken very seriously. The average turnout of the voters during election is less than 50% most of the times. In this environment of maximum non-participation, what kind of change the RTI Act will bring upon is seriously doubtful. The need of hour is thus to inculcate these fundamentals of democracy in the society at grass root levels. The people shall be

made feel the importance of democracy and the principles on which it survives. Making people participate in the democracy is the key to its success and so to the success of RTI Act, 2005. The right to information will only then be the meaningful right.

The people's right to official information is an indispensable element of a functioning democracy. The ideal of a "government by the people" presupposes that the people have access to information on matters of public concern in order to effectively exercise its governing power. The RTI Act no doubt is a giant step forward in ensuring the above. In the few years of existence, the Right to Information (RTI) Act has already generated a mass movement in the country that is bringing the lethargic, often corrupt bureaucracy to its knees and changing power equations completely. From issues related to ration cards, passports, driving licenses, civic problems, government aid money for poverty alleviation to flood relief, notices are being filed across the country, with government officials, for a change, at the receiving end. If they do not reply satisfactorily within a month, their salaries are liable to be cut, as per the new law. Many have already faced the worst. The legislation gives Indians the power to ask officials about almost anything, except issues of national security, cabinet papers and information protected by the courts. For a nominal fee, officials have to deliver reports on the progress of applications for voter's ID card, water and electricity connections. Based on this conclusion, following are the suggestions for the improvisations.

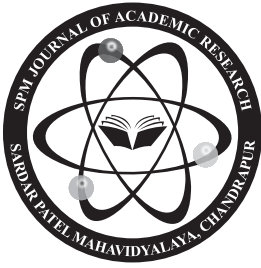
1. Nurturing and promoting the democratic values in the society as well as the officials.
2. Making people aware of the law and its utilization.
3. Encouraging the participation of NGO's in the awareness drive and implementation of the Act.
4. Efforts should be taken to inculcate high moral standards among the officials.
5. Immediate attention shall be paid to introduce paperless offices in India.

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Presentation of African Ethos through African Heroic Epic and Toni Morrison's Beloved

Benny M. J

S. P. College of Law, Chandrapur

Abstract

Toni Morrison always wanted her novels to be read from Afro-centric approach. The black cultural ethos that we meet in her novels stems from both Afro-American and American culture. Her *Beloved* is typically African in content and style. It reflects the values and themes of the African Heroic Epic. In *Beloved* she has employed the oral narration technique of the Epic. One can also notice in *Beloved* the typical disorderly narration peculiar to African Epic. There is also stylistic similarities between the *Beloved* and the Epic. Morrison draws mainly upon two popular African Heroic Epic Tradition in her treatment of the *Beloved*: The Nyanga Epic Tradition and The Mande Epic Tradition. She has imbibed the richness and complexity of African culture exposed in the epic which is clearly evident in *Beloved*. She has taken the concept of the evolution of the hero from the Nyanga Epic Tradition in her novel. From the Mande Epic Tradition she has imbibed the supernatural and magical qualities of the hero and infused them in her *Beloved*. Thus the novel is a successful attempt by Morrison for the survival of the individual and African community through the medium of epic. By presenting the African Epic hero through the women characters she also gave voice to their (women's) long over-looked contribution to community and culture.

Key Words

Heroic Epic, black cosmology, African Ethos, Nyanga Epic Tradition, Mande Epic Tradition

Toni Morrison always wanted that her novels be read from an Afro-centric approach and not from a Euro-Centric approach. In one of her interviews in 1983 with Nellie McKay, she said: her novels are written according to “some structure that comes out of a different culture ... I represent how characters and things function in a black cosmology” (McKay 425). According to Morrison novels, stories should serve the community from which they originate. She claims that her novels reflect Afro-American and African culture. They are steeped in black cosmology and she tries to re-create the cultural values and ethos of her community.

The black cultural ethos that we meet in her novels stems from both Afro-American and African culture. She consistently draws on African folklore and mythology in her novels. Her emphasis on dream, omens and myths in her novel *Sula*, points to a western heritage, says Montgomery (Montgomery 127). She told McKay that *Song of Solomon* “comes out of a black myth of a flying man” (McKay 418). Even when she was thinking of writing *Tar Baby* she researched a story about a tar lady in African mythology. These borrowings are very intentional and conscious, for she believed these borrowings will help her and her readers to delve into African culture, ethos and cosmology. She frequents these folklores so that she could go deep into a culture (black) much older than that blacks cobbled together in America.

Morrison's *Beloved*, perhaps one of her best novels, too is typically African in content and style. It reflects the values and themes of the African heroic epic. However, one cannot forget the fact that *Beloved* represents a transformation of this epic tradition – transforming the features of African culture, helping to create an Afro-American culture in order to maintain the African values under new conditions. The African heroic epics existed as a vital form of African oral literature at the time of the trans-Atlantic slave trade and easily served as expressive models for spiritual song creation and performance. These epics existed in bits and pieces during the slavery and afterwards and Morrison draws upon the transformed African heroic epic tradition in *Beloved*. Exploring some of these African values as they evidence themselves in the African heroic epic and in *Beloved* will illustrate the ways in which the epic and the novel create and endorse cultural values.

The African heroic epic helps unifying the people and reminding them of their values. The epic gathers community and tells its stories. Morrison wants to re-live her African life, heritage, values through her novels. She conceived her novels to be music which is very close to African culture. her novels became a means of cultural survival and preservation for her people. According to Anthony J. Berret, Morrison's novels create a “literary culture in which African Americans can find themselves represented and integrated into modern society” (113). In this way her novels became a sort of cultural monument to the African-American community. They contain the music, drum beat, dance, drama, song and poetry. Thus her novels are real “performances” of African and Afro-American culture. She herself has said that her novels are outgrowths of the oral tradition (McKay 421) and they are attempts to capture authentic “black language” and “the way words are put together, the metaphors, rhythms, the music” (Ruas 219). The oral nature of Morrison's novel then, echoes the epic performances. Since reading her novel is equal to performing it as the epics, she demands a participatory attitude from her readers. “My writing expects, demands participatory reading” (Tate 125).

In *Beloved*, then, she draws readers in as both audience and creators. The oral nature of the prose begs to be read aloud to share Morrison's role as creator in that they participate in the sound of the work. This reading of her texts aloud would help Morrison to deliver those texts in their true meaning and their sound would deliver to the readers what actually contain. Thus she envisions for her novels group solidarity and mass participation. *Beloved* highlights the importance of both storytelling and participatory reading. Sethe and Denver, perform as story tellers time and again- both trying to satisfy Beloved's insatiable need to be entertained, which is an indication of her cultural starvation. Beloved (and Denver too, for that matter) needs to hear stories in order to feel a sense of belonging, a sense of community. The stories that Denver and Sethe tell relate the story of their family – Denver's birth, Sethe's ear rings and finally the more troubling and guilt-laden stories of Sethe's actions in the woodshed.

Denver's storytelling about her birth is a striking example for participatory story telling. For Denver, the story is a way of keeping Beloved's

attention, a “net to hold Beloved” (76). As the details are added by her, the story comes alive: “Denver was seeing it now and feeling it.” Here Denver speaks while Beloved listens and the monologue becomes, in fact, a duet As the two did the best they could to create what really happened” (78). Through this storytelling both girls try to re-capture the past and re-write their own histories. Morrison, thus made her monologue of the *Beloved* to become a duet, a chorus for the readers through participatory reading.

Another feature that Morrison is very conscious about is the disorderly narration which one finds in African heroic epic. The narrator often repeats certain incidents and events that he had already told earlier. In other words African heroic epic defy traditional chronological narration. They are not chronologically organized (Biebuyck, “African heroic Epic” 24; Seydon 315). Morrison's steam-of-consciousness technique also defy chronological ordering. For example, there are multiple versions of the story of Denver's birth. Sethe tells Denver a little bit about Denver's birth at the beginning of the narrative (31-35) and Denver subsequently re-tells the story to Beloved, adding more details and rounding out the understanding of the event (76-85). These techniques go to prove that her texts like the African epic are not stagnant text, but they are vibrant, living, and growing with every reader. It circulates as an ongoing, drifting narrative in order to serve the fluctuating needs of the community. Again, like the African epic, *Beloved* functions as a circular narrative. The refrain in the final section of the novel repeated three times, with slight change in its third use. “It was not a story to pass on” (274) becomes “This is not a story to pass on” (275). The change from past to present tense signifies repetition with a difference, reminding us of the interdependence of past and present within the story itself and also the growth of the text. The section (as well as the novel) culminates in the name of the girl that the section describes: “Beloved” (275). This name, the last word of the novel, immediately recalls the first word of the novel, the title, calling us to back to the beginning through the circular technique.

There is stylistic similarity between the epic and *Beloved*. In the African epic, the narrator uses the “finest nuances of the grammatical system” and superior poetic usages. He also possesses a

sophisticated grasp of the metaphorical properties of the “word” (African Heroic Epic 28). Morrison is a master of language. She brings her descriptions to life by using evocative and unusual images. 124 is a house “palsied by the baby's fury” (5), Baby Suggs dies “soft as cream” (7), and Sethe's dress is “stiff, like rigor mortis” (153). Here, along with this, Morrison's use of Synesthesia is remarkable. Sethe considers the size of the miracle: its flavors (161) and the dying landscape have “insistent and loud voices” (116). She then colors her language with the African-American accent. This adds lyricism to her language. Barbara Hill Rigney writes: “musical quality of language, a sound and rhythm... pervade (Morrison's) work.. Morrison sings her novels” (8).

Morrison also has imbibed the richness and complexity of African culture exposed in the epic which is clearly evident in *Beloved*. The African values of harmony, restraint and community are richly found *Beloved*. These values are the main themes in epic. The three themes are interrelated within the epic and the societies: excess (a lack of restraint) leads to destruction (a lack of harmony within the community). There is an obvious parallel of this structure in *Beloved* too. Baby Sugg's excess of hospitality and generosity lead the community to envy, thus disrupting the harmony of the community. Sethe's excessive love drives her to murder her own daughter, upsetting the harmony even further (163). Finally Sethe's excessive pride prevents the community from helping her (256).

Among the African heroic epic two traditions are very popular: The Nyanga Epic Tradition and the Mande Epic Tradition; both have been profusely used by Morrison in her *Beloved*. The Nyanga heroic epic outlines the evolution of the hero from a reckless young man to the mature true chief. In other words, there are two proto-types for heroes – the adventurous hero unschooled in the ways of wisdom, and the true chief guided by wisdom. However, in two of the six recorded versions of this epic, the hero and chief are separate characters, and in one case they are brothers. This model of the hero and the chief can be applied to *Beloved* and Denver; in such a reading, *Beloved* represents the reckless hero and Denver transcends this level and becomes the true chief. The Nyanga hero is young, impetuous, full of pathos and is guided by a reckless ambition. Morrison's *Beloved* too is driven by a “reckless ambition” – she wants to take back her life

by “joining” with Sethe (213). She has not received education and cannot distinguish between right and wrong.

Another nature of the reckless hero of the Nyanga epic is possession of supernatural powers. Beloved too returns from the dead. She is monomaniac: she has one goal – to reclaim her life by “joining” with Sethe – and she does not care whom she hurts as long as she is successful. She effectively drives away Paul D and eventually alienates Denver, the loving sister who nursed her back to life and jealously guarded her secret. Just like the Nyanga hero Beloved too uses mental and emotional trickery to defeat Sethe. She does not engage in direct physical combat with Sethe; rather, she capitalizes on her mother's sense of guilt and love in order to wear Sethe down. Beloved could have chosen simply to kill Sethe – perhaps the strangling in the Clearing is evidence of this. Instead, however, she chooses to displace Sethe: “The bigger Beloved got, the smaller Sethe became” (250). Beloved becomes the mother, Sethe the child, and the possession, fought with the mind and heart, not the hands, seems complete. However, Beloved's destructive actions are beyond the concept of Nyanga hero. She seems to have overstepped her world which amounts to an invasion. The Nyanga hero brings conciliation and harmony after he has received teaching. This progression is noticeable in Denver and not in Beloved. So Morrison has followed the two hero format of the Nyanga epic – the reckless Beloved remains reckless while Denver grows into a true chief. Denver comes to the realization that to claim another's identity is not to claim one's own. Denver eventually understands this distinction, while unlearned Beloved is destroyed by her inability to understand it.

The second popular epic tradition is the Mande epic. The Mande epic highlights the supernatural and magical qualities of the hero. The focus of the heroic quest is to discover the sources of the hero's magic power (Roberts 125). The hero's battles are not of weaponry, but rather of sorcery, and physical conflicts are superseded by supernatural ones (Johnson 317-318). The resolution of the conflict, then, involves spells and magic (Johnson 125). This aspect of epic hero is evident in the *Beloved* in the “ghost” Beloved. Consistent with Morrison's idea of black cosmology Beloved is a ghost with supernatural powers, and Denver is her very mortal

sister. The Mande epic believes in a dialectic tension between the individual and the group. This tension is best illustrated by the intersection of two axes: the “father-childness” (Fadenya) and the “mother-childness” (Badenya). The first one is individual's axis and the action tends towards individual reputation. The second axis emphasizes the community. Mande society recognizes the benefits and drawbacks of both axes, and strives towards and equal intersection of the two (Bird & Kendall 14). The successful hero in Mande tradition is one whose actions bring benefit to the society and in this process he dies and not lives. But his action benefits community by restoring a disrupted harmony. Applying this Mande philosophy to the characters of Beloved and Denver will demonstrate that although only Denver lives, Beloved, too, functions as an epic heroine.

Both Beloved and Denver attempt to increase their life-force. Beloved's attempt is obvious – by returning from the dead she is literally going beyond her means. Because Beloved's life has been taken from her, she must acquire some other life-force. As a parasite Beloved finds a host in Sethe: (“Sethe's smiling face is the place for me” (213). Beloved inverts the mother-daughter relationship, because she physically came from Sethe, is a part of Sethe. Beloved believes that Sethe is a part of her as well. In fact, Beloved seems to think that Sethe belongs to her: “It is the face I lost” (213). The Mande hero acquires his adversary's life by weakening the life-force of his opponent (Bird & Kendall 17). Beloved too attempts the same ploy with Sethe & succeeds in weakening Sethe. Beloved preys on Sethe's feelings of guilt, forces her to explain her actions that day in the woodshed. When Sethe's life-force becomes sufficiently vulnerable, Beloved begins to “join” (213) with Sethe, confident that she “will not lose her again” (214). Later on women community effectively defeat Beloved by restoring Sethe's rightful life-force. Through Beloved's greedy desire to increase (indeed almost reverse) her life-force, Denver and other women realize the disequilibrium in the in the community and strive to restore the harmony. Denver increases his life-force in an acceptable way and enters the community. She does not take another's life-force but rather adds to the community's life-force by restoring harmony between 124 and the community.

In this process of restoring the harmony, the

society too has a role to play. Morrison complicates this role by portraying the community ambiguously. The day after the party at 124, the community is envious of Baby Suggs and Sethe. Interestingly, this characteristic is most often found on the “father-childness” (fadenya) axis of the Mande tradition – jealousy indicates a selfishness that promotes the individual over community (Bird & Kendall 15). This envy might be one indication that the community must shoulder some of the responsibility for the tragedy at 124. Added to it, the community's pride which is also a part of the 'fadenya' (“father-childness”) axis, prevents them from warning Sethe about school teacher. Yet, ironically, Sethe's pride and not her actions that upsets the community most. The balance between the individual and the community is disrupted here. To restore this balance, Morrison believes that, both community and the individual need to relinquish their pride. Morrison implies that asking, not asking, is the key to a harmonious community. For example, when Stamp Paid accuses Ella (and the community) of being inhospitable to Paul D, Ella answers, “can't nobody read mind long distance. All he have to do is ask somebody” (186). Similarly when Denver asks the community for help, they offer it willingly. Asking involves two-way communication, the equal intersection of 'fadenya' and 'badenya.' Denver accomplishes this when she asks for help. Beloved, on the other hand, never asks for anything – she simply takes: “it was Beloved who made demands ... (she) invented desire” (240). Selfish and greedy, Beloved does not reconcile 'fadenya' and 'badenya,' and consequently is not accepted by the community.

In Mande epic hero can find a successful blending of magic and reality. This is also found in *Beloved*. The Mande epic privileges the supernatural over the natural, whereas Morrison intertwines the two. For example, Beloved is very much a supernatural character; not only is she a ghost, but she also possesses supernatural, if not magical, powers. She returns from the dead, knows about things she could not possibly know (like Sethe's ear rings), and even disappears into thin air (in the storehouse with Denver). Furthermore, she uses these powers to increase her life-force. After mysteriously driving Paul D away, she literally feeds on Sethe: “Beloved ate up (Sethe's) life, took it, swelled up with it, grew taller on it” (200).

Opposite to magical Beloved is the human Denver. Vulnerable, lonely, afraid to love and afraid not to love Denver cannot understand her mother's actions. Like Beloved, Denver is victimized by Sethe, but she overcomes this victimization through human courage and strength rather than through magic. Beloved tries to survive by claiming her “self.” In terms of survival, then, Denver is more successful. And as Morrison herself admits: she is interested in survival – “who survives and why” (McKay 420). Denver as a human being, successfully increases her life-force by discovering the human power of her “self.” Finding and asserting this self, Morrison illustrates, enables Denver to endure and even triumph in the African-American community.

Conclusion

Beloved is Toni Morrison's desire and wish for the survival of the individual as well as the African-American community. As Theodore O. Mason Jr. reminds us, Morrison is “a writer particularly interested in depicting, and there by preserving and perpetuating, the cultural practices of black community” (172). Her use of the African epic in *Beloved* throws to light to her pre-occupation with cultural formation and preservation. The African tradition of story telling to unite the community is very well employed in *Beloved*. Her novel thus becomes a cultural record. One addition that Morrison did to the storytelling tradition is by making the narrators women. She positions women at the center of her narration in order to give voice to their long overlooked contributions to community and culture. Reading *Beloved* through the lens of the African heroic epic, then sheds light on the African cultural ethos as well as on the “cobbled together” culture Morrison refers. Critics have held that African traditions, myths, ethos linger in African-American culture; as Karla Halloway writes: “in beliefs and value system, religion and language echoes of the original culture persist” (Mooringss and Metaphors 167). *Beloved* testifies to this assertion and it echoes the values, ethos, culture set forth in the African epic hero.

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Code of Conduct in Legal Profession

Abhay Butle

S. P. College of Law, Chandrapur
E-mail : abhayjb@rediffmail.com

Abstract

The paper attempts a comprehensive view of the challenges before the legal profession in the modern era. The challenge before the legal profession is to resolve the basic paradoxes which it faces. To adapt to changing social values and revolutionary technology. To reorganize itself in such a way as to provide more effective, real and affordable access to legal advice and representation by ordinary citizens. To preserve and, where necessary, to defend the best of the old rules requiring honesty, fidelity, loyalty, diligence, competence and dispassion in the service of clients above mere self-interest and, specifically, above commercial self-advantage. Yet to move with the changing direction of legal services in a global and national market. So, if in modern era do not open our services in the legal field for others defiantly we are going to lose something. We cannot think of growing without considering the effect of modernization on this profession. So the Author suggestion is that we must liberalize our rule of conduct which is according to fit to modern era.

Key Words :

Advocacy, Legal Profession, Legal Process Outsourcing(LPO), Intrenational Negotiation.

Introduction

Legal profession plays an important role in the administration of justice. The lawyer assist the court in arriving at a correct judgement. Every profession has its code of conduct, pertaining to the rights and wrong based on the principles of morality. Advocacy is a profession for a public service and therefore requires highest standards of integrity and honesty. Lawyers in our country have historically contributed handsomely to each of these areas of justice -- whether it was the struggle for Independence, the framing of our Constitution or just governance. Even today, in the Cabinet, we have outstanding lawyers some of whom have been members of this illustrious association. The role of lawyers is not confined to courts alone or advising clients in business deals. It extends to being an integral part of our system of administration of justice, and justice not just in the legal sense but justice that's social, economic and political as set out in the preamble of our Constitution.

In India, the term "lawyer" is often colloquially used, but the official term is "Advocate" as prescribed under the Advocates Act, 1961. Other Nations tend to have comparable terms for the analogous concept.

It is possible to have different views of what a lawyer does. Some may say that a lawyer is a business person, not unlike the barber, the doctor or the shop owner, providing a service to paying customers. Others will see a more public-abiding role for the lawyer, providing a service to paying clients but also maintaining an eye on the public interest, justice, and fairness of society. This difference in view will account for differing opinions about what a lawyer should do in a morally difficult position in democratic societies; lawyers surely fill an important role that no other professional fills. The lawyer is the guardian of the rule of law, the ideal that all people stand equally before the law and neither expects nor receives special treatment from it. In emerging democracies, this role is especially important for lawyers, who have the potential to become the great levelers between the powerful and the less so. To be sure, the market for lawyer services, even in the most well-established democracies, is tilted sharply toward the corporate world and toward those with means. The law field has grown phenomenally in the past few decades as a

consequence of growth in International Trade and International Economic Law. Areas like corporate sector, new financial industries, privatization intellectual properties have generated an increasing demand for legal service.

An advocate is prohibited from entering appearance in a case where there is already another advocate engaged for a party except with the consent of such advocate. However if such consent is not produced, the advocate must state the reasons for not producing it, and may appear subsequently, only with the permission of the court. An advocate is restrained from demanding any fees for imparting training to enable any person to qualify for enrolment. But in the light of modern era, there are few areas in professional ethics which require examining. The rule of professional Conduct prohibits Indian lawyer to solicit work and advertise either directly or indirectly, even the signboard or name plate should be of a reasonable size. So the Indian lawyers are strictly prohibiting from any kind of advertisement but the foreign layers have fully fledged rights of advertisement. In this particular area the act of ethics to be observed.

Advocates are not allowed to take fees on the contingency of result of the case. Though it is the rule but can we prevent the lawyers from indulging in such practice mostly the foreign law firms. Professional ethics prescribed that an Advocate shall not permit his professional services or his name to be used in aid or to make possible, the unauthorized practice of law by any agency. The LPO sector generates demand for the knowledge needed to develop the industry as well as a demand for transnational regulation. Similarly, international negotiations on the liberalization of legal services challenge the concept of the legal profession as a unique and learned profession that is fundamentally distinct from other kinds of professional services that can be purchased, evaluated, and regulated like any other necessary commodity on the global level. This in turn has profound implications for the legal understanding, for the maintenance and legitimacy of entry barriers into the profession, and the overall competition in the legal services market. These examples illustrate that focusing on the intersections of different globalization processes may provide new insights and raise new questions about the evolution of the profession. So it is necessary in the light of above discussion to examine this area as to whether such

practice can be permitted in India in modern era.

Conclusion

The legal Profession is a profession of great honor it has been created not for private gain but for public good.

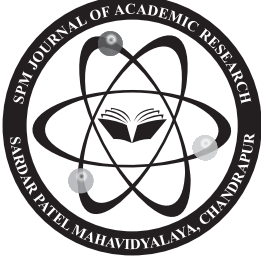
Lawyers are individuals who have a wide range of responsibilities and duties when it comes to their profession. Their role in society is even more important as they are acting as a voice for others. A lawyer's function therefore lays on him a variety of legal and moral obligations toward: the client; the courts and other authorities before whom the lawyer pleads the client's cause or acts on his behalf; the legal profession in general and each fellow member of it in particular; the public for whom the existence of a free and independent profession itself is an essential means of safeguarding human rights in face of the power of the state and other interests in society. The challenge before the legal profession is to resolve the basic paradoxes which it faces. To adapt to changing social values and revolutionary technology. To reorganize itself in such a way as to provide more effective, real and affordable access to legal advice and representation by ordinary citizens. To preserve and, where necessary, to defend the best of the old rules requiring honesty, fidelity, loyalty, diligence, competence and dispassion in the service of clients above mere self-interest and, specifically, above commercial self-advantage. Yet to move with the changing direction of legal services in a global and national market.

So, if in modern era do not open our services in the legal field for others defiantly we are going to lose something. We cannot think of growing without considering the effect of modernization on this profession. So the Author suggestion is that we must liberalize our rule of conduct which is according to fit to modern era.

After the independence the legal profession in India is very much developed. In 1951 the All India Bar committee was constituted under the Chairmanship of Justice S. R. Dass . It recommended that a common roll of advocates should be maintained and it should be authorized to practice in all courts in the country.

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अल्पभूधारक कोरडवाहू शेतकरी व ताण-तणाव

(विशेष संदर्भ : यवतमाळ जिल्ह्यातील वणी तालुक्यातील पूरड, नेरड, चेंडकापूर, पंचधार
या गावातील अल्पभूधारक कोरडवाहू शेतकऱ्यांच्या ताणतणावाचे अध्ययन)

जयश्री कापसे^१, विक्रम बोडे^२

एस. आर. एम. कॉलेज ऑफ सोशल वर्क, चंद्रपूर

Email ID : jaya-dev@ymail.com

गोषवारा :

शेतकऱ्यांच्या आत्महत्यांनी देशासमोर एक गंभीर आव्हान उभे केले आहे. शेतकऱ्यांच्या आत्महत्या कुठे व किती संख्येने झाल्या. यापेक्षा त्यांच्यावर ही परिस्थिती कशी व कां आली याबाबत टीप करण्याचा प्रयत्न या शोधनिबंधात करण्यात आला आहे. आपला देश कृषीप्रधान आहे. जगातील ज्या प्राचीन शेतीव्यवस्था राहिल्या त्यांचा भारत एक भाग राहीला आहे. असे असतांनाही शेतकरी आत्महत्या कां करतोय या कारणांचा शोध घेण्यासाठी प्रस्तुत संशोधनात शेतकरी, शेतकऱ्यांची शेती, उत्पन्न, खर्च, कर्ज, शासनाच्या योजना इत्यादींचा आढावा घेतला गेला. मानसशास्त्रीय दृष्टिकोणातून आत्महत्येचा सहसंबंध ताणतणावाशी आहे त्यामुळे शेतकऱ्यांच्या ताणतणावाचा शेतकऱ्यांच्या पीकाला योग्य भाव न मिळणे हे शेतकऱ्यांच्या ताणतणावाचे प्रमुख कारण असून शेतकरी शासनाच्या भूमिकेबाबत नकारात्मक आहेत. शेतीला लागणारे भांडवल, होणारा खर्च, होणारे उत्पन्न व कर्जाची परतफेड याचा ताळमेळ न बसल्यामुळे शेतकऱ्यांचा ताणतणाव वाढतो असेही या संशोधनात दिसून आले.

बिजशब्द :

यवतमाळ जिल्हा अल्प-भूधारक कोरडवाहू शेतकरी, ताण-तणाव

प्रस्तावना :

शेती करणाऱ्या शेतकऱ्याला पुरातन काळापासून बळीराजा असे संबोधण्यात येते. हा बळीराजा शेती करणारा प्रथम राजा होय. बळी प्रल्हाद पुत्र विरोचनाचा पुत्र होय. कश्यप सागराच्या पूर्व भागात बळीचे साम्राज्य होते. भृगुकच्छ (भडोच) हे त्याचे नगर होय. बळीने नर्मदा नदीच्या दक्षिणेस महाराष्ट्र, विदर्भ कर्नाटक, सह्याद्री या प्रदेशात कृषीभूमी तयार केली होती. गणराज्ये निर्माण करून त्यात गणपती गणाधीश, कृषी क्षेत्रावर खंडनायक, खंडपती खंडेश्वर, गढनायके, गढपती, गढेश्वर, असे अधिकारी नियुक्त केले होते. इ.स. पूर्व ७५०० वर्षांपूर्वी आशिया खंडातही या व्यवसायास प्रारंभ झाला. भारताच्या शेतकरी हा इ. सन पूर्व ते इ. सन पर्यंत प्रचंड हालाखीत जगतो आहे. परंतु शेतकरी गरीब का आहे ? यावर कोणी चिंतन करीत नाही असे आपल्याला दिसून येते. बळीराजा अन्नदाता जगाचा पोशिंदा अशा गोड आणि लबाड शब्दांनी शेतकऱ्यांची भूलषण करण्यात सगळे धन्यता मानत आले आहेत प्रत्यक्ष शेती आणि शेतकरी या देशाच्या अर्थ व्यवस्थेतील महत्वपूर्ण घटकाला अगदी पहिल्या पंचवार्षिक योजनेपासून सापन्त वागणूक मिळत आली आहे. आज शेतीला उद्योगाचा दर्जा देऊन कृषिक्षेत्राचा विकास करण्याच्या गोष्टी केल्या जात आहे.

परंतु भारतातील बहुतेक शेती बेभरवशावर पावसावर आधारित असल्याने उत्पादनाची आणि पर्यायाने उत्पन्नाची कुठलीही हमी नसते भारतात पाच एकरापेक्षा कमी शेत असणाऱ्या शेतकऱ्यांची संख्या जवळपास ८० % आहे. आणि एकूण शेती क्षेत्रापैकी केवळ १५% शेतीलाच सिंचनाव्दारे नियमित पाणीपुरवठा करणे शक्य आहे. उर्वरित ८५ % शेतजमीन कोरडवाहू आहे. अशा परिस्थितीत शेतीला उद्योगाचे स्वरूप कसे प्राप्त होईल.

शेतकऱ्यांच्या घामाची किंमत निसर्गाच्या लहरीवर अवलंबून असते. निसर्गाने साथ दिली नाही तर शेतकऱ्यांनी चुलच पेटत नाही. परंतु शेती शिवाय पर्याय नाही. शेतजमीनीचा तुकडा हेच एकमात्र उत्पन्नाचे साधन आहे. अशा परिस्थितीत बळीराजा कर्जाच्या दलदलीत रूतणे क्रमप्राप्त ठरते वेळ प्रसंगी ताण निर्माण झाल्याने आत्महत्या करीत असतो. शेतीचा एक उद्योग म्हणून विकास करायचा असेल तर आधी शेतकऱ्यांच्या

मुलभूत समस्या दूर करायला हव्यात शेतकऱ्यांच्या डोळ्यावरील कर्जांमुळे निर्माण झालेला ताण-तणाव कशा प्रकारे कमी करता येईल याची दक्षता घ्यावी लागेल.

महाराष्ट्राची शेती :

महाराष्ट्र राज्यात तांदूळ, बाजरी, ज्वारी, रागी आणि तूर या प्रमुख अन्नधान्याचे पिक काढण्यात येते. राज्यातील प्रमुख व्यापारी पिके कापूस, भुईमुंग, ऊस व तंबाखू ही होत. महाराष्ट्रातून अन्नधान्याचे उत्पादन ७ टक्के कापसाचे २१ टक्के ऊसाचे १५ टक्के होते. महाराष्ट्रातून सर्वात जास्त ज्वारी या पिकाखाली ४० टक्के क्षेत्र व्यापले आहे.

सध्या स्थितीमध्ये शेतकऱ्यांना ताण तणाव येत असल्यामुळे आत्महत्याचे प्रमाण सतत वाढत आहे. राज्यात प्रत्येक दिवसाला एकूण आत्महत्यांमध्ये सरासरी ४२ आत्महत्या घडतात. नॅशनल क्राईम रेकॉर्ड ब्युरोने ही आकडेवारी प्रकाशात आणली आहे. (छउठइ) ने गोळा केलेली माहिती नुसार महाराष्ट्रात कर्जबाजारी शेतकऱ्यांच्या आत्महत्येमध्ये महाराष्ट्र प्रथम स्थानावर आहे.

२०१२ या वर्षातील आत्महत्या		शेतकऱ्यांच्या वर्षनिहाय आत्महत्या	
जानेवारी	६५	२००१	: ५२
फेब्रुवारी	६५	२००२	: १०४
मार्च	७८	२००३	: १४८
एप्रिल	८६	२००४	: ४४७
मे	७७	२००५	: ४४५
जून	७८	२००६	: १४४९
जुलै	५७	२००७	: १२४७
ऑगस्ट	८२	२००८	: ११४८
सप्टेंबर	११०	२००९	: १००५
ऑक्टोबर	९६	२०१०	: ११७७
नोव्हेंबर	६१	२०११	: ९९८

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कित्येक वर्षांपासून शेतमालाला योग्य भाव मिळत नसल्याचे (फॉर्मर्स हॅव बीन लिव्हीन विथ ए निगेटीव्ह रिटर्न फार इअर्स) ऋज्ज च्या अहवालात स्पष्टपणे नमुद करण्यात आले आहेत. कमिशन फार अॅग्रिकल्चर कॉस्ट अँड प्रॅक्टिसेसचे

अध्यक्ष टी.एक यानी ही २९५० रुपये हा दर लागवड खर्चा पेक्षा उत्पादन कमी असल्याचे मान्य केले आहे. परंतु ९० व्या शतकाच्या पुढे यात भयंकर तफावत निर्माण झाली. सरकारी कर्मचाऱ्यांचे पगार वाढतात. त्याबरोबर महागाई देखील वाढते. यामुळे शेतकऱ्यांचा फक्त उत्पादन खर्चच वाढतो उत्पन्न मात्र वाढत नाही. यामुळे शेतकऱ्यांना महागाईचा देखील जबरदस्त फटका बसतो. शेतमालाचे भाव पक्क्या वस्तूचे भाव, कर्मचाऱ्यांचे पगार यांच्यात निर्माण होत गेलेली तफावत पुढील आकडेवारीवरून दिसून येते.

शेतमालाचे भाव/पक्क्या वस्तूचे भाव कर्मचाऱ्यांचे पगार	वर्षे १७३	वर्षे २०११
कापूस	५०० रु. प्रति किंटल	३००० प्रति किंटल
ज्वारी	२०० प्रति किंटल	१००० प्रति किंटल
गहू	४०० रु. प्रति किंटल	१६०० रु. प्रति किंटल
तांदूळ	६०० प्रति किंटल	२००० प्रति किंटल
पेट्रोल	३ रु. प्रति लिटर	७५ रु. प्रति लिटर
डिझेल	२ रु. प्रति लिटर	४८ रु. प्रति लिटर
कनिष्ठ लिपीक	१६५ रु. प्रति महिना	१६००० रु. प्रति महिना
वरिष्ठ लिपीक	६०० प्रति महिना	३५००० ते ६५०००
शेतमजुरी	५ रु. प्रति दिन	२००० रु. प्रति दिन
सोने	४०० प्रति १०ग्रॅम	३०००० प्रति १० ग्रॅम

महाराष्ट्र राज्याची स्थापना १ मे १९६० रोजी झाली. असली तरी यवतमाळ जिल्हा हा कापूस उत्पादकाच्या किंवा पांढऱ्या सोन्याचा जिल्हा म्हणून ओळखला जातो. यवतमाळ जिल्ह्याचे पूर्वीचे नाव यवत किंवा यवती असेल. माळाचा प्रदेश असल्यामुळे यवतमाळ हे नांव देण्यात आले. यवतमाळ जिल्ह्याची स्थापना १९०५ मध्ये झाली. त्या पुर्वी वणी हे जिल्ह्याचे ठिकाण होते. यवतमाळ जिल्ह्याचा परिसर मोठा आहे. क्षेत्रफळाच्या दृष्टीने हा जिल्हा अमरावती जिल्ह्यापेक्षा मोठा आहे. या जिल्ह्यात .बंजारा जातोचे लोक जास्त वसलेले आहेत. १ मे १९८१ मध्ये तहसीलाचा पुनर्निर्माणानुसार १४ तालुके निर्माण करण्यात आले होते. १५ ऑगस्ट १९९२ मध्ये झरीजामणी व आर्णी या दोन तालुक्यांना निर्माण करून एकूण १६ तालुके तयार करण्यात आले. यवतमाळ जिल्ह्याचे वार्षिक पर्जन्यमान ९९

अंश से.मी. आहे व लोकसंख्या २४६०४८२ सन २०११ च्या जनगणनेनुसार स्त्रीयांचे प्रमाण १००० पुरुषांमागे ९५१ स्त्री आहे.

यवतमाळ जिल्ह्यातील वणी येथे कृषी उत्पन्न बाजार समिती सर्वात मोठी आहे यवतमाळ जिल्ह्यात एकूण १६ कृषी उत्पन्न बाजार समिती आहे. सर्वात प्रथम यवतमाळ जिल्ह्यात कळम येथे कापसाचे पिक घेण्यात आले. आज यवतमाळ जिल्हा हा जगाच्या पाठीवर शेतकरी आत्महत्याचा जिल्हा म्हणून गाजतोय.

आपला जिव आपणच घेणे म्हणजे आत्महत्या होय. आत्महत्या करणारी व्यक्ति तीव्र नैराश्याच्या व तणावाच्या भरात आपल्या समस्यांकडे वस्तुनिष्ठतेने पाहू शकत नाही. अथवा आत्महत्याखेरीज इतर पर्यायी कृतीचा विचार करू शकत नाही. तीव्र मानसिक ताणाखाली एकाएकी आत्महत्येचा निर्णय व्यक्ति घेत असते. कारण कशापासून तरी कायमची सुटका करून घेण्याची तिला नितांत गरज वाटू लागते. व त्याची सहनशिलता संपुष्टात आलेली असते. शेतकऱ्यांच्या बाबतीतही ही तणावाची स्थिती त्यांना आत्महत्येसाठी प्रवृत्त करित असते.

उद्देश :

- १) अल्पभूधारक कोरडवाहू शेतकऱ्यांची शैक्षणिक व कौटुंबिक माहिती जाणून घेणे
- २) अल्पभूधारक कोरडवाहू शेतकऱ्यांची आर्थिक स्थिती विषयी जाणून घेणे.
- ३) अल्पभूधारक कोरडवाहू शेतकऱ्यांना येणाऱ्या ताण तणावाच्या कारणाबाबत अध्ययन करणे
- ४) शेतकऱ्यांना येणाऱ्या ताणतणावाचा परिणाम बाबत आढावा घेणे.
- ५) अल्पभूधारक कोरडवाहू शेतकऱ्यांना येणाऱ्या ताणतणावा सोबत शेतकरी कसे समायोजन करतात याबाबत अध्ययन करणे.
- ६) अल्पभूधारक कोरडवाहू शेतकऱ्यांना मिळणाऱ्या शेतीविषयक योजनांबाबत माहिती घेणे.
- ७) अल्पभूधारक कोरडवाहू शेतकऱ्यांचे शासनाच्या भूमिकेबाबत मत जाणून घेणे.

गृहितकृत्य/उपकल्पना :

- १) अल्पभूधारक कोरडवाहू शेतकऱ्यांची शैक्षणिक व कौटुंबिक स्थिती खालावलेली आहे.
- २) अल्पभूधारक कोरडवाहू शेतकऱ्यांची आर्थिक स्थिती व ताणतणाव यांचा सहसंबंध आहे.
- ३) शेतकऱ्यांच्या पिकाला भाव न मिळणे हे शेतकऱ्यांच्या ताणतणावाचे प्रमुख कारण आहे.
- ४) अल्पभूधारक कोरडवाहू शेतकऱ्यांना शेतीविषयक योजनेचा लाभ जितका जास्त तितका शेतकऱ्यांचा ताणतणाव कमी
- ५) अल्पभूधारक कोरडवाहू शेतकऱ्यांचे शासनाच्या भूमिकेबाबत नकारात्मक आहे.

अध्ययनाचे क्षेत्र :

प्रस्तुत संशोधनात अल्पभूधारक कोरडवाहू शेतकरी व ताणतणाव या समस्येबाबत अध्ययन करण्यासाठी संशोधकाने पुढील क्षेत्राची निवड केली त्यात यवतमाळ जिल्ह्यातील वणी तालुक्यातील पुरड, नेरड, चेंडकापूर व पंचधार हे अध्ययन क्षेत्र आहे.

विश्व :

यवतमाळ जिल्ह्यातील वणी तालुक्यातील पुरड, नेरड, चेंडकापूर व पंचधार या गावातील अल्पभूधारक कोरडवाहू शेतकरी सांझ यादीनुसार ३०० अल्पभूधारक कोरडवाहू शेतकरी हे अध्ययनाचे विश्व आहे.

नमुना निवड :

प्रस्तुत अध्ययनाकरीता नमुना निवड करीत असतांना संशोधनकर्त्याने एकुण ३०० अल्पभूधारक कोरडवाहू शेतकऱ्यांचा सहभाग आहे. यातून संभाव्यता नमुना निवड पद्धतीमधील साधन यादृच्छिक नमुना निवड पद्धत अंतर्गत नियमित अंकन पद्धत, या नमुना निवड पद्धती व्दारे ६० अल्पभूधारक कोरडवाहू शेतकऱ्यांची निवड करण्यात आली आहे.

तथ्य संकलन :

प्रस्तुत अध्ययनासाठी प्राथमिक व दुय्यम अशा दोन्ही

पद्धतीचा उपयोग केला आहे.

प्राथमिक पद्धत :

प्रस्तुत अध्ययन प्रामुख्याने अल्पभूधारक कोरडवाहू शेतकऱ्यांवर केला जाणार आहे. शक्यता ही आहे की, काही शिक्षित तर अशिक्षित असू शकते. म्हणून तथ्य संकल्पना साठी संरचित मुलाखत अनुसूचि या तंत्राचा उपयोग प्रामुख्याने करण्यात येईल यात बंदिस्त प्रश्न व मुक्त प्रश्न यांचा उपयोग केला आहे.

तसेच प्राथमिक पद्धतीत दुसरी महत्वाची पद्धत म्हणजे अवलोकन व निरीक्षण या तंत्राचा उपयोग केला जातो.

दुय्यम पद्धत :

माहिती प्राप्त करण्याकरीता दुय्यम पद्धतीचा उपयोग केला जाईल यात वर्तमान पत्रे, पुस्तके मासीके, इंटरनेट शासकिय अहवाल तज्ञांचा अनुभव चित्रपट लेख इत्यादीच्या आधारे माहिती गोळा केली गेली.

संशोधनाचे विश्लेषण :

बहुतांश उत्तरदाते हे ४१ ते ५० वर्ष वयोगटातील २० उत्तरदाते असून त्यांची टक्केवारी ३३.३३ टक्के आहे. बहुतांश उत्तरदाते माध्यमिक शिक्षण घेतलेले २४ उत्तरदाते असून त्यांची टक्केवारी ४० आहे. बहुतांश उत्तरदाते हे विवाहीत असलेले ४१ उत्तरदाते हे विभक्त कुटुंबात राहत असणारे ३३ उत्तरदाते असून त्यांची टक्केवारी ५५ आहे. बहुतांश उत्तरदाते हे एक हेक्टरपेक्षा जास्त शेती करीत असणारे ५४ उत्तरदाते असून त्यांची टक्केवारी ९० आहे. बहुतांश उत्तरदाते हे ११ ते २० वर्षांपासून शेती करणारे ३३ उत्तरदाते असून त्यांची टक्केवारी ५५ आहे. बहुतांश उत्तरदाते हे शेती व शेतीपुरक व्यवसाय १११००० ते १४१००० रु वार्षिक उत्पन्न असणारे २५ उत्तरदाते असून त्यांची टक्केवारी ४१.६७ आहे. बहुतांश उत्तरदाते हे खर्च भागत नसल्यास कर्ज काढत असणारे ६० ही उत्तरदाते असून त्यांची टक्केवारी १०० आहे. बहुतांश उत्तरदाते हे उत्पन्नातून शेतीवार होणारा खर्च ७१००० ते ९०००० रु खर्च करणारे २३ उत्तरदाते असून त्यांची टक्केवारी ३८.३३ आहे. बहुतांश उत्तरदाते हे मिळणाऱ्या उत्पन्नातून बचत नाही करणारे २५ उत्तरदाते असून त्यांची टक्केवारी ४१.६६ आहे. बहुतांश उत्तरदाते हे कर्ज घेतले असे होय म्हणणारे ५३ उत्तरदाते असून टक्केवारी ८८.३३ आहे.

बहुतांश उत्तरदाते हे सावकाराकडून कर्ज घेणारे २० उत्तरदाते असून त्यांची टक्केवारी ३३.३३ टक्के आहे. दुबार पेरणीमुळे कर्ज घेणारे ४९ उत्तरदाते असून त्यांची टक्केवारी ८१.६७ टक्के आहे. बहुतांश उत्तरदाते कर्जाची परतफेड ही वार्षिक हप्त्यांनी करणारे ४५ उत्तरदाते असून त्यांची टक्केवारी ७५ आहे. बहुतांश उत्तरदाते हे कर्ज हे टक्केवारी प्रमाणे परतफेड करणारे ३३ उत्तरदाते असून त्यांची टक्केवारी ५५ आहे. बहुतांश उत्तरदाते हे घेतलेल्या आज ५००० व्याज भरत असणारे ८ उत्तरदाते असून त्यांची टक्केवारी १३.३३ आहे. बहुतांश उत्तरदाते हे कर्जाची परतफेड न करणे हा प्रश्न लागू नाही असे ५१ उत्तरदाते असून त्यांची टक्केवारी ८५ आहे. बहुतांश उत्तरदाते हे शेतीला लागणारे भांडवल होणारे उत्पन्न होणारा खर्च व कर्जाची परतफेड यांचा ताळमेळ न बसल्यामुळे शेतकऱ्यांच्या ताणतणाव वाढले या विधानाला पूर्णता सहमत असणारे २९ उत्तरदाते असून त्यांची टक्केवारी ४८.३३ एवढे आहे. बहुतांश उत्तरदाते हे ताणतणावाच्या करणात आर्थिक कमतरता असल्यामुळे ताणतणाव येतो असे म्हणणारे २९ उत्तरदाते असून त्यांची टक्केवारी ४८.३३ टक्के आहे. बहुतांश उत्तरदाते हे ताणतणावाचे प्रमुख कारण शेतमालाला योग्य भाव न मिळणे हे कारणाला पहीला पसंती क्रम दिला आहे. त्यांची बेरीज ६६८ आहे. बहुतांश उत्तरदाते हे कामात उत्साह वाटत नाही. असे म्हणणारे २४ उत्तरदाते असून त्यांची टक्केवारी ४० आहे. बहुतांश उत्तरदाते हे ताणतणाव निर्माण झाल्यास कुटुंबातील भाडणे होतात असे म्हणणारे ४७ उत्तरदाते असून त्यांची टक्केवारी ७८.३३ आहे. बहुतांश उत्तरदाते हे ताणतणावाशी समायोजन कुटुंबातील सदस्याची चर्चा करणारे ५२ उत्तरदाते असून त्यांची टक्केवारी ८६.६७ आहे. बहुतांश उत्तरदाते हे शेतकऱ्यांच्या आत्महत्या रोखण्यासाठी सिंचनाची सुविधा व शेतमालाला योग्य भाव मिळावा असे म्हणणारे ५९ उत्तरदाते असून त्यांची टक्केवारी ९८.३३ आहे. शासनाच्या जास्तीत जास्त योजनांचा लाभ मिळाल्यास ताण तणाव कमी होण्यास पूर्णता मदत होईल असे म्हणणारे ६० उत्तरदाते असून त्यांची टक्केवारी १०० आहे. बहुतांश उत्तरदाते हे शासन शेतकऱ्यांना ताण तणाव येवू नये म्हणून शासन जबाबदारी पूर्णपणे पार पाडीत नाही असे म्हणणारे ३३ उत्तरदाते असून त्यांची टक्केवारी ५५

आहे. बहुतांश उत्तरदाते हे शेतकऱ्यांच्या आत्महत्या रोखण्यासाठी शासन असफलतेची कारणे भ्रष्टाचारी अधिकारी असे म्हणणारे २८ उत्तरदाते असून त्यांची टक्केवारी ४६.६७ आहे. बहुतांश उत्तरदाते हे पणण महासंघाची शेतकऱ्यांना विषयी अयोग्य भुमिका आहे असे म्हणणारे ३३ उत्तरदाते असून त्यांची टक्केवारी ५५ आहे. बहुतांश उत्तरदाते हे शासनाविषयी सिंचनाची व्यवस्था करावी ही अपेक्षा दर्शविणारे २६ उत्तरदाते असून त्यांची टक्केवारी ४३.३३ टक्के ईतकी आहे.

निष्कर्ष :

अल्पभूधारक कोरडवाहू शेतकऱ्यांचे बहुतांश वय हे ४१ ते ५० वर्ष या वयोगटातील आहे. त्यांनी माध्यमिक शिक्षण घेतले आहे व मराठी भाषिक आहे व ते वैवाहिक असून विभक्त कुटुंबात राहतात. तसेच त्यांच्याकडे एक हेक्टर पेक्षा जास्त व दोन हेक्टर पेक्षा कमी शेती आहे.

अल्पभूधारक कोरडवाहू शेतकऱ्यांच्याकडे शेती व शेतीपुरक व्यवसायातील १११००० ते १४१००० आहे व आर्थिक दर्जा मध्यम आहे. तसेच खर्च भाग नसल्यामुळे ते कर्ज घेतात व कर्ज घेण्यासाठी शेतीचा सातबारा ८ अ हा निकष देतात व कर्जाची परतफेड करतात. टक्केवारी प्रमाणे करतात शेतकऱ्यांच्या शेतीला लागणारे भांडवल होणारे उत्पन्न, होणारा खर्च व कर्जाची परतफेड यांचा ताळमेळ न बसल्यामुळे शेतकऱ्यांना ताण तणाव येतो. या विधानाशी शेतकरी सहमत आहेत. शेतकऱ्यांना ताण तणाव येतो व ताण तणाव येण्याचे कारण आर्थिक कमतरता आहे. ताण तणाव निर्माण झाल्यामुळे कुटुंबात भाडणे होतात. परंतु कुटुंबातील सदस्यांशी चर्चा करूनच ते ताण तणावाचे समायोजन करतात.

शेतकऱ्यांनी शेतकऱ्यांच्या आत्महत्येचे मुख्य कारण योग्य भाव न मिळणे, याला पहिली पसंती दिली असून आत्महत्येस प्रमुख कारण व्यसनी व आळशी याला असहमत दर्शविले आहे. शेतकऱ्यांनी शानाच्या योजनांचा अंशतः लाभ घेतला असून त्यात कृषी विषयक अवजारे घेतलेले असून त्या योजनेचा त्यांना अंशतः फायदा झाला आहे व योजना मिळवितांना अधिकारी वर्गाकडून त्यांना त्रास झाला आहे. शेतकऱ्यांना ताणतणाव येवू नये म्हणून शासनाच्या भुमिकेबाबत शेतकरी समाधानी आहेत व शासनाच्या असफळतेसाठी भ्रष्टाचारी

अधिकारी कारणीभूत आहे असे शेतकऱ्यांचे मत असून पणन महासंघाची भुमिकेविषयी अंशतः समाधानी आहे. शासनाच्या जास्तीत जास्त योजनांचा लाभ मिळाल्यास शेतकऱ्यांचा ताण तणाव कमी होईल असे शेतकऱ्यांचे म्हणणे आहे व शेतकऱ्यांची अपेक्षा शासनाची सिंचनासाठी व्यवस्था करून द्यावी.

सुचना :

१) शेतकरी :

शेतकऱ्यांनी रासायनिक खताचा वापर कमी करणे तसेच शेतकऱ्यांनी सेंद्रीय शेती करावी व शेतीला पुरक व्यवसाय करावीत.

२) शासन :

शासनानी अल्पभूधारक कोरडवाहू शेतकऱ्यांना ताण तणाव येवू न देण्यासाठी शेतकऱ्यांसाठी सिंचनाची व्यवस्था उपलब्ध करावी. तसेच शेतकऱ्यांच्या शेतमालाला योग्य भाव मिळवून द्यावा.

३) अधिकारी :

अधिकारी वर्गाची शेतकऱ्यांकरीता विविध योजनांची उपाययोजना करणे व शेतकऱ्यांना त्रास होणार नाही यासाठी कार्य करणे.

४) पणन महासंघ :

पणन महासंघानी आक्टोंबर महिन्यातील पहिल्या आठवड्यात कापूस खरेदी केंद्र सुरू करावे त्यामुळे शेतकऱ्यांची व्यापाऱ्याकडून लूट होणार नाही.

५) बँक :

बँक आणि सहकारी बँकानी शेतकऱ्यांना कमी व्याज दरात कर्ज उपलब्ध करून द्यावी.

६) समाजकार्य महाविद्यालये/कृषी महाविद्यालये :

समाजकार्य महाविद्यालय यांनी शेतकऱ्यांसाठी कृषीविषयक कार्यक्रम व शिबिरे घ्यावीत व शेतकऱ्यांमध्ये जाणीव जागृती घडवून आणावी.

कृषी महाविद्यालयांनी शेतकऱ्यांना नविन व आधुनिक तंत्रज्ञानाबाबत वेळोवेळी माहिती उपलब्ध करून द्यावी.

७) सामान्य रुग्णालय :

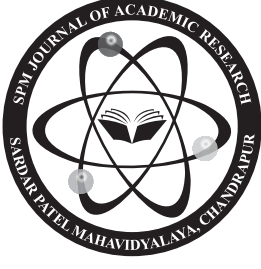
सामान्य रुग्णालयातील समुपदेशकांनी तीव्र मानसिक ताणाखाली एकाकी आत्महत्येचा निर्णय शेतकरी वर्ग घेत असतात त्यासाठी समुपदेशकांनी शेतकऱ्यांना सामान्य रुग्णालयात समुपदेशन करावे

८) समाजकार्य विद्यार्थी :

समाजकार्याच्या विद्यार्थ्यांनी आत्महत्या ग्रस्त शेतकऱ्यांच्या विधवांच्या समायोजन विषयी अभ्यास करावा व शेतकऱ्यांच्या मुलांच्या समायोजना विषयी अभ्यास करावा.

संदर्भ ग्रंथ सूची

१. डॉ. बारहाते पांगुळ नंदा, आत्महत्या वैदर्भीय बळीराजाच्या, आर. बी. प्रकाशन, नागपूर.
२. डॉ. खुपसे मार्तंड, शेतकऱ्यांच्या आत्महत्या, चिंता आणि चिंतन, समीर प्रकाशन, यवतमाळ.
३. डॉ. कडविभंडन विजय, भारताचा आर्थिक विकास आणि नियोजन, श्री. मंगेश प्रकाशन, नागपूर.
४. अॅड, ढोबळे विष्णु, शेतकऱ्यांच्या आत्महत्या, जागतिकीकरणातील शोकांतिका, सुगावा प्रकाशन, पुणे.
५. डॉ. राजहंस मानसी, प्रा. पाटील अनघा, डॉ. सुर्वे सुशील, अपसामान्यांचे मानसशास्त्र, उन्मेष प्रकाशन, पुणे.
६. झोले विनायक, कापसाचा बोनस गेला २१ ऑक्टों. २०११ लोकमत.



कचरा उचलणाऱ्या मुलांच्या आरोग्याचे व शैक्षणिक घटकाचे अध्ययन

प्रगती दिनेश नरखेडकर

एस. आर. एम. कॉलेज ऑफ सोशल वर्क, पडोली, चंद्रपूर

गोषवारा :

कचरा हा शब्द सर्वांना नेहमी ऐकायला मिळतो व रोजच्या बोलण्यात त्याचा वापर देखील केला जातो. कचरा हा मानवी जीवनाचा एक अविभाज्य घटक आहे. ज्या वस्तूचा वापर होऊन ती निकामी होते. त्याचा विचार कचरा या संकल्पनेत केला जातो. रोजच्या जीवनात अशा कितीतरी वस्तू असतात. जसे कागद, प्लॅस्टिक, खराब अन्नपदार्थ, सडलेली फळे इ. यांचा संबंध कचऱ्याशी येतो.

आपल्या समाजात कचरा करणारी माणसं प्रतिष्ठीत आणि उचलणारी मात्र अप्रतिष्ठीत समजली जातात. जे लोक कचरा करतात ते बेजबाबदारपणे वागतांना दिसतात तर जे मुलं कचरा उचलतात व शहराचे स्वास्थ्य टिकवून ठेवण्यास मदत करतात अशा मुलांना आपल्या समाजात कचऱ्याचीही किंमत नाही.

एरवी हा प्रश्न आपल्याला का पडावा? नाहीच पडत! कचरा कुंडीच्या बाहेर पडलेले कचऱ्याचे ढीग पाहून नाकाला रुमाल लावण्यापलीकडे आणि कामचुकार व्यवस्थेला शिव्या घालण्यापलीकडे आपण काय करतो? कचरा उचलणारी कचरा डेपोत दिवस-रात्र कचऱ्यातच जगणारी जिवंत हाडामासाची माणसं कचऱ्याच्या अवतीभवती जगतात आणि त्याचे काम जर पिढीजात असेल तर पिढ्या-पिढ्या कचरा उचलण्याचेच काम ते करतात. त्यामुळे त्यांची लहान मुलं-मुली शिक्षणापासून वंचित राहतात. परंतु काही मुलं असेही असतात की, शिक्षण तर शिकत असतात परंतु परिस्थितीमुळे आणि गरिबीमुळे त्यांना हे कचरा उचलण्याचे काम करावे लागते. परंतु गरिबीमुळे काही मुलं आजही शिक्षणापासून वंचित आहेत असे दिसून येते.

कचरा उचलणाऱ्या मुलांची संख्या ही चंद्रपूर शहरात दिवसेंदिवस वाढताना दिसते. कचरा उचलणाऱ्या लोकांची दिनचर्या ही सकाळी सहा वाजेपासून सुरू होत असते. मग तो कोणताही ऋतू असो. हा गट किंवा समाज कचऱ्यालाच सर्वस्व मानून आपले बालपण व तारुण्य गमावतात. अशा मुलांची संख्या दिवसेंदिवस वाढताना दिसून येते. देशातील याचा आकडा लाखोच्या घरात आहे. त्यांचे खराब कपडे व धुळीने/घामाने माखलेला चेहरा त्यांचा संघर्ष दाखवित असतो.

ही मुले शहराच्या प्रत्येक भागात दिसून येतात. परंतु जास्तीत जास्त रेल्वे स्टेशन, बस स्टॅन्ड, मंदिरे, दवाखाने, सिनेमा हॉल, गर्दिच्या ठिकाणी, कारखान्याच्या आजुबाजुला, शहराच्या मध्यवर्ती स्थळी इ. ठिकाणी सहज दृष्टिस पडतात. हे मुलं शोषित व निराधार असतात. त्यांच्यात साधारणतः अपराधी वृत्ती दिसून येते. या मुलांना योग्य शिक्षण, आहार, आरोग्य, संरक्षणाचा अभाव यामुळे ते कदाचित अपराधी वृत्तीकडे झुकलेले असू शकतात. परंतु महत्वाचे आहे हे मुलं सामान्य समाजाकडून शोषित असतात.

भारतात आर्थिक, सामाजिक, शैक्षणिक प्रगतीकरीता अनेक कल्याणकारी सेवा पोहचविल्या जातात. बालकल्याणाकरिता अनेक विकासात्मक योजना आखल्या जातात व त्यांच्या अंमलबजावणी करिता शासकीय व गैरशासकीय (NGO) संस्थाद्वारा त्या राबविल्या जातात.

मुलांच्या विकासाकरिता व देशाची साध न संपत्ती म्हणून त्याचे जतन सुदृढ व निकोप व्हावे याकरिता भारत सरकार मुला/मुलींना दहावीपर्यंत मोफत शिक्षणासोबत अनेक उपक्रम राबवित असूनही भारतीय समाज व्यवस्थेत ही स्थिती स्वातंत्र्याच्या ६३ वर्षांनंतरही कायम का आहे? असा प्रश्न माझ्यासारख्या सामाजिक कार्यात कार्य करणाऱ्या प्राध्यापकासमोर उभा राहतो. आपल्या समाज व्यवस्थेत प्रगल्भ योजना असताना अशी कुजट बुरशी चढली असावी असा समाज का आपले प्रस्थ का वाढवित आहे. हा प्रश्न पडतोच पडतो.

विषय निवडीचे कारण :-

आजच्या घडामोडीच्या जीवनात कचरा ही सर्वच स्तरातील एक मोठी समस्या म्हणून समाजव्यवस्थेत उभी आहे. कचऱ्याचे अनेक प्रकार आहेत परंतु यासाठी कोणतीही सरळ व

सोईची सेवा सामान्यतः शासन पोहचविण्यास अक्षम असल्याने कचरा कुठेही व कसाही टाकण्याची प्रवृत्ती ही बळावताना दिसते. त्यासाठी विशेष संस्कार असावेत असेही बरेचदा वाटते परंतु हे देणार कोण? हा प्रश्न पुन्हा उभा राहतो. त्यामुळे अशा कचरा उचलणाऱ्या व्यक्तिविषयी व विशेषतः मुलांविषयी सतत काळजी वजा उपाय काय असू शकतील. या मुलांचे आरोग्य, शारिरीक सदृढता, त्यांचे बालपण.... खरंच त्यांचे पालक त्यांच्याकडे दुर्लक्ष करून स्वतःच्या स्वार्थी विचाराने मुलांचे बालपण होरपळून तर निघत नसेल ना? अशा अनेक प्रश्नाच्या शोधात सदर विषयाची निवड करण्यात आली. सोबतच एक प्रयत्न असाही आहे, काय समाजाचा या मुलांकडे बघण्याचा दृष्टिकोन सकारात्मक होऊ शकेल काय?

अध्ययनाचे प्रमुख उद्देश : (Main Objectives of the Study)

- कचरा उचलणाऱ्या मुलांच्या आरोग्यासंबंधी माहिती जाणून घेणे.
- कचरा उचलणाऱ्या मुलांची शैक्षणिक स्थितीची माहिती जाणून घेणे.

संशोधनातील उपकल्पना : (Hypotheses of the Study)

- कचरा उचलणारी मुले बहुतांशी त्वचारोग व संसर्गजन्य आजाराग्रस्त आहे.
- कचरा उचलणाऱ्या मुलांची शैक्षणिक स्थिती खालावलेली आहे.

संशोधनाचे क्षेत्र व विश्व : (Area and Universe of the Study)

संशोधनाचे क्षेत्र चंद्रपूर शहरापुरती मर्यादित आहे तर एकूण कचरा उचलणारी १० ते १५ वयोगटातील मुलांचा समावेश विश्वात आहे.

नमुना निवड : (Sampling Method)

जेव्हा संपूर्ण जनसमूहावर एखाद्या कारकाचा काय परिणाम होतो हे माहिती करून घेण्यासाठी काही प्रतिनिधीक एकक निवडून त्या परिणामाचे मापन केले जाते. तेव्हा त्याला नमूना निवड म्हणतात. संशोधनाकरिता गैरसंभाव्य नमूना निवडीतील सोईस्कर नमूना निवडलेला आहे. याद्वारे ५० लाभार्थ्यांची निवड केली आहे.

संशोधनाचा आराखडा : (Research Design)

सदर संशोधनाकरिता अंशतः वर्णनात्मक व अंशतः निदानात्मक संशोधन आराखडा आहे.

तथ्य संकलनाचे तंत्र : (Methods and Tools of Data Collection)

तथ्य संकलनाकरिता प्राथमिक पद्धतीचा उपयोग करण्यात आलेला आहे. मुलाखत अनुसूचि या तंत्राद्वारे प्रत्यक्ष निरीक्षण व मूल्यांकन करण्यात आले. तसेच द्वितीय पद्धतीचा ही अंतर्भाव आहे. यात मासीके, पुस्तके इ. चा अंतर्भाव आहे.

अध्ययनाचा कालावधी : (Time Sheduled)

संशोधनाकरिता जून २०१३ ते ऑक्टोबर २०१३ (सहा महिने) सदर संशोधनाकरिता लागलेला आहे.

संशोधन प्राथमिक स्रोताद्वारे करण्याकरिता मुख्य १५ प्रश्नाची संरचित मुलाखत अनुसूचि तयार करण्यात आली. प्रत्येक प्रश्नाकरिता सारणी करून त्यातून कारकाचा शोध घेण्यात आला.

कचरा जमा करण्यामागील कारणे.**टेबल क्र. १**

अ. क्र.	पर्याय	वारंवारता	टक्केवारी
१)	आई-वडिलांचा व्यवसाय म्हणून	०८	१६.००
२)	वडिल नसणे/दूसरा संसार करणे	०६	१२.००
३)	आर्थिक अडचण	०९	१८.००
४)	दुसरे काम न मिळाल्याने	०१	२.००
५)	कुटुंबातील व्यसनाधिनता	१२	२४.००
६)	शाळेत जात नसल्याने	१४	२८.००
	एकूण	५०	१००.००

कचरा कुठून जमा करतात.**टेबल क्र. २**

अ. क्र.	पर्याय	वारंवारता	टक्केवारी
१)	कचरा डेपोमधून कचरा उचलणे	०३	६.००
२)	रस्त्यावरील कचरा उचलणे	०७	१४.००
३)	नाल्यामधून कचरा उचलणे	०६	१२.००
४)	दवाखान्याच्या आसपासचा परिसर	१८	३६.००
५)	कारखान्याच्या परिसरात	११	२२.००
६)	उकिरड्यामधून कचरा उचलणे	०२	४.००
७)	रिक्शा जागेतून/प्लॉटमधील कचरा	०१	२.००
८)	रस्त्यावरील कोणताही कचरा ढिग	०१	२.००
९)	वरील सर्व	०१	२.००
	एकूण	५०	१००.००

कचरा कोणता जमा करतात.**टेबल क्र. ३**

अ. क्र.	पर्याय	वारंवारता	टक्केवारी
१)	काच	१४	२८.००
२)	पेपर	०९	१८.००
३)	प्लास्टीक	२२	४४.००
४)	लोखंड	०२	०४.००
५)	वरील सर्व	०३	०६.००
	एकूण	५०	१००.००

कचरा गोळा करतांना सर्वसाधारणपणे कोणत्या प्रकारचे आजार होऊ शकतात.**टेबल क्र. ४**

अ. क्र.	पर्याय	वारंवारता	टक्केवारी
१)	अंग दुखणे	२१	४२.००
२)	श्वसनसंबंधीचे रोग	०८	१६.००
३)	खोकला / सर्दी / ताप	०२	४.००
४)	त्वचा रोग	०९	१८.००
५)	संसर्गजन्य रोग	०३	६.००
६)	साथीचे रोग	०४	८.००
७)	वरील सर्व	०३	६.००
	एकूण	५०	१००.००

आजारी पडल्यास उपचार कुठून घेतात :-**टेबल क्र. ५**

अ. क्र.	पर्याय	वारंवारता	टक्केवारी
१)	शास्कीय रुग्णालय	१९	३८.००
२)	खाजगी रुग्णालय	०२	४.००
३)	औषधीच्या दूकानातून	०७	१४.००
४)	घरगुती उपाय	०५	१०.००
५)	काहीही उपाय करित नाही	१७	३४.००
	एकूण	५०	१००.००

कचरा उचलतांना वस्तीतील लोकांचा बघण्याचा दृष्टिकोन :

टेबल क्र. ६

अ. क्र.	पर्याय	वारंवारीता	टक्केवारी
१)	हाकालून लावणे	०५	१०.००
२)	रागावणे	०३	६.००
३)	धमक्या दणे	०१	२.००
४)	मारणे	०१	२.००
५)	सहकार्य करणे	०१	२.००
६)	संशयीत म्हणून बघणे	३९	७८.००
एकूण		५०	१००.००

कचरा उचलणाऱ्या मुलांच्या आजाराबाबत अभ्यास करताना प्रामुख्याने लक्षात आले की, ही मुले अत्यंत उपेक्षित जीवन जगतात. यांना समाजातून चांगला प्रतिसाद मिळत नाहीच शिवाय कुटूंबातील वातावरणही त्यांच्या बालआयुष्याला योग्य वळण लावेल असे वाटत नाही. एकूणच नकारात्मक जीवन दृष्टिकोन त्यांच्या वाट्याला येतांना दिसतो. दुसरे महत्वाचे आजही समाज व्यवस्थेत एक पुरुष किंवा एक स्त्री फक्त स्वतःच्या जीवनाचा विचार करीत असताना एकमेकांना सोडून देतात किंवा कोणत्याही विवाह बंधनात एकत्र न येता ते सहज एकत्र राहतात. अशावेळी त्यांच्या मुलांचे अनेक प्रश्न तयार होतात. अशा अनेक प्रश्नाचे मारकरी मी केलेल्या संशोधनातून दिसून आले. आई-वडील वेगळे होतात व मुलांना नरक-यातना सोसण्यासाठी सोडून दिले जाते. अशावेळी त्यांना कुणी कामावरही ठेवत नाही. त्यामुळे एकतर ही मुले भिक्षावृत्तीकडे ओढली जातात किंवा या कामात येतात. त्यांना आयुष्य म्हणजे फक्त जगत आहे म्हणून एक एक दिवस पुढे ढकलणे यापलीकडे काहीही उरत नाही.

ज्यांचे आई-वडील आहेत त्यांची स्थिती फार काही चांगली नाही. कुटूंबातील व्यसनाधिनता, भांडणे, मारहाण या कारणाने ही मुले जास्तीत जास्त वेळ घराबाहेर असतात. त्यांना मार्गदर्शन करणारे कुणीही नसते. अशावेळी एखादी पोलीस केस झाली की ही मुले कालांतरांनी सराईत गुन्हेगार बनण्याकडे झुकलेली असतात. मुख्य कारण पैशाची चणचण असते म्हणून. आज मिळालेला कचरा विकून आजचा आपला व कधीकधी कुटूंबाच्या गरजा पूर्ण करणे हा त्यांचा मानस असतो. अशावेळी ते

जास्तीत जास्त पैसा मिळेल असा कचरा उचलण्याचा प्रयत्न करतात. हा कचरा प्लास्टिक व काचेच्या स्वरूपात असल्यानेही मुले दवाखाना व कारखाना येथील टाकाऊ साहित्याच्या शोधात असतात. ह्या सर्व वस्तु शारिरीक आरोग्यास अत्यंत घातक आहेत. हे माहिती असतांनाही ते मुलं याकडे दुर्लक्ष करून जास्तीत जास्त पैसा कसा मिळेल एवढंच बघतात.

त्यामुळे कालांतरांनी त्यांना त्वचेवर तसेच अनेक संसर्गजन्य आजाराने ते ग्रसीत होत जातात. यात प्रामुख्याने कुष्ठरोगाचे प्रमाण अधिक आढळते. थोड्या फार आजाराने किंवा दिर्घ आजारही जोपर्यंत मोठं रूप धारण करीत नाही तोपर्यंत हे सर्वसाधारणपणे कोणतेही उपाय करीत नाही. त्यामुळे त्यांच्यात अनेक बाबींची कमतरता दिसून येते. खाण्या-पिण्याचे हाल व अज्ञानता यामुळेही आजारास निमंत्रण दिल्या जाते. परंतु त्यांच्या कामाच्या ठिकाणी असणारी स्थिती ही अत्यंत खराब असल्याने ही मुले मोठ्या आजारास बळी पडतात व विशेषतः पावसाळ्यात साथीचे आजार किंवा अन्य स्थितीमुळे यांच्या तब्येतीवर सतत विपरित परिणाम होतो. कधी कधी मृत्यूही ओढवतो.

याशिवाय या मुलांकडे समाज व्यवस्थेकडूनही नकारात्मक भाव सतत दिसून येत असल्याने लोक यांच्याकडे चोर नजरेने बघत असतात. याचाही परिणाम इतर समाजाप्रतीचा दृष्टिकोन नकारात्मक होत जातो. त्याचा परिणाम पुढे त्यांच्या तारुण्यावस्थेपर्यंत गुन्हेगारीवृत्ती पणपतांना दिसतात.

कचरा उचलणाऱ्या मुलांच्या शिक्षणाबाबत काही प्रश्न विचारले ते पुढील प्रमाणे :

कामासोबत शिक्षण घेता काय :-

टेबल क्र. १

अ. क्र.	पर्याय	वारंवारीता	टक्केवारी
१)	शाळेत नाव आहे परंतु जात नाही	१६	३२.००
२)	शाळेत अधुनमधून जाणे	१२	२४.००
३)	रात्रीच्या शाळेत जाणे	०२	४.००
४)	शाळेत नाव नाही	२०	४०.००
एकूण		५०	१००.००

शाळेत न जाण्याची कारणे :-**टेबल क्र. २**

अ. क्र.	पर्याय	वारंवारता	टक्केवारी
१)	मित्र चिडचिडात	०१	२.००
२)	शिक्षक राग / तिरस्कार कसात	०३	६.००
३)	शाळेत पूर्ण वेळ देता येत नाही	०५	१०.००
४)	घरून कामे सांगितली जाते	०१	२.००
५)	कामावरून आल्यावर इच्छा होत नाही (आजारी असणे)	०७	१४.००
६)	पालक शाळेत जाऊ देत नाही	०३	६.००
७)	नापास झाल्यामुळे	१०	२०.००
८)	लगू होत नाही	२०	४०.००
एकूण		५०	१००.००

शाळेत जाणे आवडते काय :-**टेबल क्र. ३**

अ. क्र.	पर्याय	वारंवारता	टक्केवारी
१)	होय	१८	३६.००
२)	नाही	३२	६४.००
एकूण		५०	१००.००

शाळेत जाण्यास तयार आहे काय ? :-**टेबल क्र. ४**

अ. क्र.	पर्याय	वारंवारता	टक्केवारी
१)	होय	१८	३६.००
२)	नाही	३२	६४.००
एकूण		५०	१००.००

शाळेत केव्हा जायला आवडेल :-**टेबल क्र. ५**

अ. क्र.	पर्याय	वारंवारता	टक्केवारी
१)	आमच्यासाठी वेगळी शाळा	०२	४.००
२)	शिक्षकांनी समजावून घ्यावे	१३	२६.००
३)	कामानंतर शाळा असावी	०९	१८.००
४)	आम्हाला आवडेल ते शिक्षण	८	१६.००
५)	लगू होत नाही	१८	३६.००
एकूण		५०	१००.००

कचरा उचलणाऱ्या मुलांच्या शैक्षणिक घटकाचा विचार केला असता वरील पाच टेबलावरून हे लक्षात येते की, या मुलांना शाळेत जाण्याकरिता पूर्णतः नकारात्मक भूमिका नाही. परंतु प्राथमिक जबाबदारी कुटुंबाची असल्याने शिवाय शाळेत योग्य समायोजन मित्र, शिक्षक इ. घटकाद्वारे घडून येत नसल्याने ते

पळवाट म्हणून शाळा सोडण्याचा प्रयत्न करतात किंवा शाळेत जाणीवपूर्वक अनुपस्थित असतात.

परंतु बहुतांशी मुलांना शाळेत जाण्याकरिता आवडत नाही. यांना शिक्षक समजावून घेत नाही. शिवाय देण्यात येणारे शिक्षण हे त्यांच्या कामापासून अलिप्त ठेवणारे व आवडीचे नसल्याने ते शिक्षणापासूनही दूर जातात.

कचरा उचलणाऱ्या मुलांच्या आरोग्याचा व शैक्षणिक घटकाचा अभ्यास करतांना काही उपाय-योजना देता येतील.

- १) या मुलांना शिक्षणासोबत आरोग्याबाबत स्वच्छता शिकविणारे शिक्षण असावे.
- २) शिक्षण हे फक्त अभ्यासक्रम पूर्ण करणारे नसावे तर मुलभूत गरज पूर्ती कशी करता येईल याचाही विचार शिक्षणाद्वारे व्हावा.
- ३) आवडीनुसार शिक्षण घेण्याची संधी मिळाली पाहिजे.
- ४) कामाच्या वेळा, कुटुंबातील जबाबदारी काही प्रमाणात पूर्ण करून योग्य वेळेत लहान गटाच्या माध्यमातून त्यांना शिक्षण देण्याची गरज आहे.
- ५) याकरीता गांधीजीचे 'बेसीक शिक्षण' हा एक उत्तम पर्याय म्हणून पुढे येऊ शकतो. कारण या शिक्षणात ते सामर्थ्य आहे, ज्यातून माणूस म्हणून जीवन जगण्याची कला अवगत करू शकेल व स्वतः सोबत समाज विकासाच्या प्रवाहात प्रवाहित होऊ शकेल.

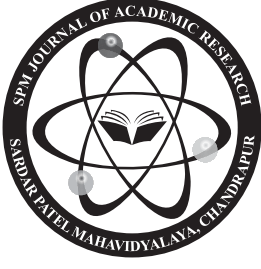
प्रमुख निष्कर्ष :- (Main Conclusions)

- १) कचरा उचलणाऱ्या मुलांना आरोग्याच्या अनेक तक्रारी आहेत.
- २) कचरा उचलणारी मुले आरोग्याच्या सोयी-सुविधेबाबत उदासीन आहे.
- ३) कचरा उचलणारी मुले आरोग्यास हानीकारक वातावरणातून कचरा उचलतात कारण त्याचा सरळ संबंध आर्थिकतेशी असतो.
- ४) समाजाचा या मुलांकडे बघण्याचा दृष्टिकोन फारसा चांगला नाही. त्यामुळे वेळ प्रसंगी त्यांच्यावर अन्याय व अत्याचार होतो.

- ५) कचरा उचलणाऱ्या मुलांचे शिक्षण जेमतेम आहे.
- ६) शाळेचा वेळ व कामाचा वेळ या बाबी जुळून न आल्याने मुले शाळेत जात नाही तर काही वेळा समायोजनाचा अभाव (सर्वस्तरावर) असल्यानेही शाळेत जाण्यास टाळाटाळ करतात.
- ७) शाळेत मिळणारे शिक्षण जीवन मार्गदर्शन करण्यासोबतच आवडीचे व व्यावसायिक नाही.

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- ७) जाधव, नरेंद्र (२०१०) लोकराज्य, पृ. ६६-६८.
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- ९) मेश्राम, सुरेश (१९९८) प्रात्याक्षिक सामाजिक संशोधन, कृष्ण चंद्र एजन्सीज, नागपूर.
- १०) सोनुने, यशवंत (२००७) मंथन, चिन्मय प्रकाशन, औरंगाबाद पृ. १८-२०.
- ११) विभावरी, (२०१०) समाजकल्याण, पृ. १०-१५.



जिवती तालूक्यातील प्रसूतीपूर्व आणि प्रसूतीनंतरच्या महिला आणि बालके यांच्या आरोग्य, पोषण आणि शिक्षणाविषयीचे अध्ययन

(विशेष संदर्भ :- पूनागूडा, भारी, सारेकसा ग्रामपंचायती अंतर्गत येणाऱ्या गावांचे अध्ययन)

कल्पना एम. कवाडे

एस. आर. एम. कॉलेज ऑफ सोशल वर्क, पडोली, चंद्रपूर

प्रस्तावना :

भारत स्वतंत्र झाल्यानंतर एक कल्याणकारी देश म्हणून घोषित करण्यात आले. त्यानुसार घटनानिर्मात्यांनी सामाजिक न्याय प्रस्थापित करण्यासाठी देशातील मागासलेल्या विशेषता आदिवासीना संरक्षण व कल्याणासाठी अनेक बाबींची तरतूद राज्यघटनेत केली. यासाठी भारतीय नागरिकांना असलेल्या सर्व अधिकाराबरोबर या जमातीसाठी आरक्षण व काही विशेष सूरक्षादेखील घटनेद्वारे देण्यात आले. त्याचबरोबर अनेक योजना, कार्यक्रम, धोरणे व आयोगाची स्थापना करून आदिवासींचा विकास व कल्याण साधण्याचा प्रयत्न केला. परंतु गेल्या पासष्ट वर्षांच्या सतत प्रयत्नानंतर देखिल आदिवासींची गरीबी, उपासमार व शोषण, आरोग्य, पोषण, शिक्षण यासारख्या प्राथमिक गरजांच्या समस्या कमी झालेल्या नाही.

भारतीय राज्यघटनेमध्ये मागासलेले, समाजापासून वंचित असलेल्यांना कायदेशिर हक्क देण्यात आलेला आहे. महाराष्ट्र हे देशातील पहिले राज्य आहे की ज्यांनी या वर्गाला सर्वांगीण विकासाची गंगा त्यांच्यापर्यंत पोहोचविण्याची महत्वाकांक्षी प्रयत्न केला आहे. विकास प्रक्रियेत लहान मुलांचेवर लक्ष केंद्रित केले आहे. बालकांच्या जन्मापासून तर प्राथमिक शाळेत जाण्यापर्यंत लक्ष केंद्रित केलेले आहे. बालकांच्या मातांचाही आरोग्य, आहार, गर्भावस्थेतील तपासणी, स्वाच्छता यासाठी सकस आहार एकात्मिक बाल विकास प्रकल्प (Integrated child Development scheme) सुरू करण्यात आलेली आहे. या योजनेद्वारे महिलांना आहाराचे महत्व, मूलांचे सुयोग्य पध्दतीने पालनपोषण गर्भावतीमाता, बालकांचेपोषण करणाऱ्या माता आणि त्यांची बालके ह्यांचेसाठी प्रतिबंधात्मक स्वरूपाची

उपाययोजना करणे, तसेच बालकांच्या वाढवर व सोबतच शिक्षण, संस्कारावर लक्ष देणे ही उद्दीष्टे होत. शासनाच्या उद्दिष्टानुसार आंगणवाडी केंद्र, बालवाडी केंद्र, प्राथमिक आरोग्य विनामुल्य तपासणी, विनामुल्य आहार, लसिकरण, गर्भवती मातांना लोह, फॉलीफ अॅसिडच्या गोळ्या, बाळंतपणाच्या वेळीही वैद्यकीय सेवा, प्रसूतिपूर्व आणि प्रसूतिनंतरची काळजी घेतली जाते. नवजात बालकांनाही अनेक सूविधा दिल्या जातात.

परंतु आजही दुर्गम भागामध्ये अनेक समस्या आपणात पाहावयास मिळते आरोग्य विषयक समस्या, शैक्षणिक समस्या, आर्थिक, सामाजिक समस्या प्रामुख्याने आढळतात.

प्रस्तूत संशोधन हे चंद्रपूर जिल्ह्यातील जिवती तालुक्यातील तीन ग्रामपंचायतीतील असून चंद्रपूर जिल्ह्याचे आदिवासी जिल्हा म्हणून ओळखला जातो. जिवती हे गाव चंद्रपूर पासून ११५ कि. मी. अंतरावर आहे. हा तालूकापूर्णपणे आदिवासी तालूका म्हणून ओळखला जातो. जिवती या तालुक्याची निर्मिती २६ जानेवारी २००२ मध्ये झाली. व्यावहारिक भाषेत पहाडी क्षेत्र विभाग असेही म्हटले जाते. कारण हा डोंगराळ भाग आहे. येथे अनेक समस्या असून लोकांच्या जीवनमानावर त्यांचा परिणाम होत आहे. म्हणजेच जीवघेण्या ठरत आहेत. म्हणून या तालुक्यातील तीन ग्रामपंचायतीचा अभ्यास करून आराखडा तयार करण्यात आलेला आहे. यामध्ये पुनागुडा, भारी आणि सारेकसा या ग्रामपंचायतीचे गावाचा अभ्यास केलेला आहे.

या अभ्यासांतर्गत प्रामुख्याने गर्भवती महिलांना प्रसूतीपूर्व आणि प्रसूतिनंतर माहिती, त्याचप्रमाणे बालकांची माहिती ६ महिने ते ६ वर्षांपर्यंतची ६ ते १४ वर्षांपर्यंतची आरोग्य, पोषण आणि शैक्षणिक माहिती गोळा करण्यात आलेली आहे.

बीज शब्द (Key word) :-

महिला, बालक, आरोग्य, आहार, पोषण, शिक्षण

उद्देश (Objectives) :-

- १) गर्भवती या महिलांनी मिळणाऱ्या सेवा आणि येणाऱ्या अडचणी जाणून घेणे.
- २) बालकांचे आरोग्य, पोषण आणि शैक्षणिक माहिती जाणून घेणे.

उपकल्पना (Hypothesis) :-

- १) गर्भवती महिलांना औषधोपचार, सूविधा पूर्णपणे मिळत नाही.
- २) बालकांना अनेक आरोग्य विषयक समस्या आढळतात. उदा. कुपोषण, मुडदुस (त्वबामजे), गोवर, न्यूमोनिया इत्यादी
- ३) महिलांना आणि बालकांना पुरक आहार मिळत नाही.
- ४) बालकांना शिक्षण घेताना अनेक समस्या येतात.

संशोधनाचे क्षेत्र (Research Scope) :-

जिवती तालुक्यातील पुनागुडा, भारी आणि सारेकसा या ग्रामपंचायती अंतर्गत येणारी गावे अध्ययनाचे क्षेत्र आहे.

नमुना निवड (Sampling) :-

प्रस्तूत संशोधनात पुनागुडा, भारी आणि सारेकसा येथील १ वर्षात प्रसूति झालेल्या महिलांचा नमुना म्हणून निवड करण्यात आलेली आहे यामध्ये संशोधनातील जनगणना पद्धतीचा (Census Method) चा वापर करण्यात आलेला आहे. यामध्ये पुनागुडा येथील १९, भारी येथील २९ आणि सारेकसा येथील १० अशा एकूण ५८ महिलांचा समावेश संशोधनात नमुना निवड करण्यात आलेला आहे.

त्याच प्रमाणे गैरसंभाव्यता नमुना निवड पद्धतीतील सोयीस्कर नमुना निवड पद्धतीव्दारे गर्भवती महिला आणि तसेच ६ महिने ते ६ वर्ष आणि ६ वर्ष ते १४ वर्षांपर्यंतच्या बालकांचा आरोग्य पोषण आणि शिक्षण याबद्दलची माहिती सर्वेक्षणाव्दारे अनूसूची भरून घेण्यात आलेली आहे.

तथ्य संकलन पद्धती (Data Collection) :-

प्रस्तूत संशोधनात प्राथमिक मुलाखत अनूसूची चा वापर करून माहिती गोळा करण्यात आलेली आहे. तसेच दुय्यम पद्धतीचा वापर करून माहिती गोळा करण्यात आलेली आहे.

सारणी व विश्लेषण :-**तीन ग्रामपंचायतीची लोकसंख्या**

गावाचे नाव	पुरुष	महिला	बालके मूले / मुली	एकूण लोकसंख्या
पूनागुडा	२८३	२५३	४४४	९८०
भारी	७२६	६९७	१०५०	२४७३
सारेकसा	१७५	१५५	२८०	६१०
एकूण	११८४	११०५	१७७४	४०६३

जातीची वर्गवारी

गावाची नावे	अनु. जाती	अनु. जमाती	विमुक्त जमाती	इतर मागासवर्गीय	भटक्या जाती	इतर
पूनागुडा	११६	६६	००	००	००	३०
भारी	२४	१८८	१८	१९१	१०६	०५
सारेकसा	००	४५	००	०५	७९	००
एकूण	१४०	२९९	१८	१९६	१८५	३५

संशोधनाचे विश्लेषण :-

जिवती तालुक्यातील पूनागुडा, भारी, सारेकसा ग्रामपंचायती यापुर्णतः आदिवासी क्षेत्र आहेत उत्पन्नाचे प्रमुख स्रोत शेती असून ६३ टक्के शेती करतात. ७४.१६ टक्के लहान शेतकरी आहेत. (२.५-५.० एकर जमीन) २५.७८ टक्के मजुरी करतात, ३४.२५ अनुसूचित जमातीचे लोक आहेत. इतर मागासवर्गीय २२.४५ टक्के आहेत, भटक्या जाती २१.१९ टक्के आहेत, ४८.७० टक्के लोक दारिद्र्य रेषेखालील आहेत. (बि.पी.एल.धारक) अंत्योदय कार्डधारक ३२.७४ टक्के लोक आहेत ८४.४२ टक्के लोकांची घरे कच्ची घरे आहेत. ९९.८९ टक्के लोक इंधन म्हणून लाकूड वापरतात. ९५.४६ टक्के लोक शौचाला उघडयावर जातात. ६५.२९ लोक हातपंप (बोरिंग) चे पाणी पितात.

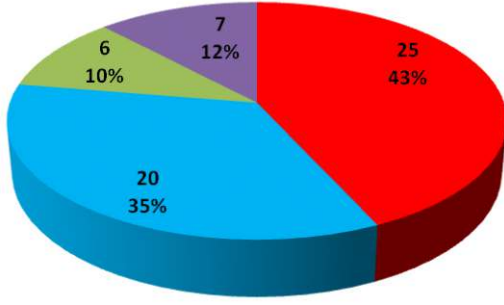
गर्भवती महिलास सकस आहार मिळत नाही. प्रसूती पूर्व तपासणी न केवळ महिलांची १०.३४ टक्केवारी आहे. ऊंचे बुस्टर डोस न घेतलेल्या महिला १०.१४ टक्के आहे. एच. आय. व्ही. मार्गदर्शन आणि चाचणी न झालेल्या महिला २४.१४ टक्के आहेत.

४३.१० टक्के महिलांची प्रसूती घरी झालेली आहे. ३४.४८ टक्के महिलांची सरकारी दवाखान्यात प्रसूत झालेल्या आहेत. कुशल व्यक्तीच्या हातून प्रसूती न झालेल्या महिला १३.७९ टक्के आहेत. प्रसूती पश्चात ४८ तासात कमीत कमी पी.

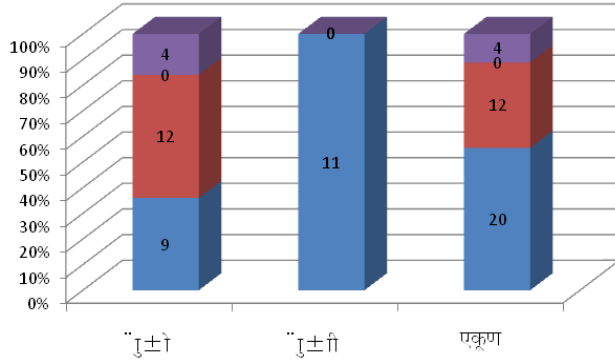
एन. सी. भेट न दिलेल्या महिला १५.५२ टक्के आहेत. जन्मता बाळाचे वजन २५०० ग्राम पेक्षा कमी असल्याची १७.२४ टक्के आहे.

जन्माची नोंद न झालेले बालके ६ महिने ते ६ वर्षे आहेत. जन्मदाखला नसलेले बालके २५.२२ टक्के आहेत, वय ६ ते १४ वर्षे बालके शाळेत जात नसलेल्यांची संख्या ११ टक्के आहे, शाळेत कधी नाव न नोंदविलेल्या बालकांची टक्केवारी ३ टक्के आहेत, आश्रमशाळेत राहणारे ३ टक्के आहेत, वस्तीगृहात राहणारे २ टक्के आहे (फक्त मूले)

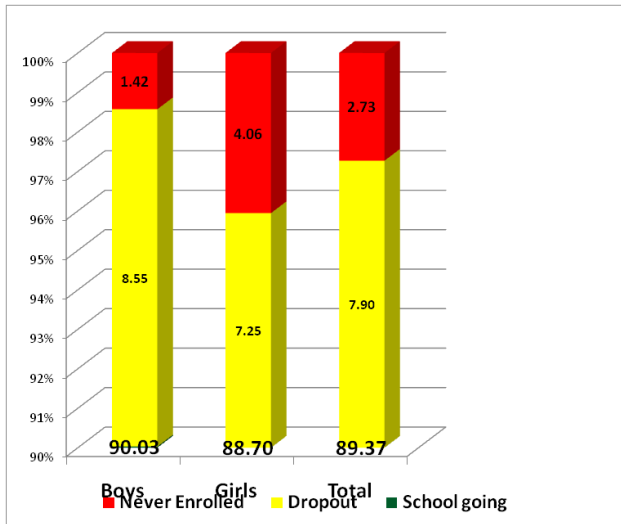
६ महिने ते ६ वर्षांच्या आतील वयोगटातील बालकांची माहिती			
६ महिने ते ६ वर्षांखालील वयोगटातील बालके	४६०		
जन्माची नोंदणी न झालेली बालके	१०६	२३.०४	
जन्मदाखला नसलेली बालके	११६	२५.२२	
अंगणवाडीतून पूरक आहार मिळत नसलेली बालके	१६	३.४८	
६ महिने ते १२ महिने वयोगटातील शिशु	१२६		
पहिले ६ महिने केवळ स्तनपान न मिळालेली शिशु	१	०.७९	
१२ महिने ते २३ महिने वयोगटातील बालके	८०		
पूर्ण लसीकरण न झालेली बालके	५	६.२५	
३ वर्ष ते ५ वर्षे ११ महिने वयोगटातील बालके	२३८		
अंगणवाडीत शालेयपूर्व शिक्षणास हजर नसलेले बालके	२७	११.३४	
६ ते १४ वर्षे वयोगटातील बालकांची माहिती			
६ ते १४ वर्षे वयोगटातील बालकांची संख्या	मुले	मुली	एकूण
	३५१	३४५	६९६
सध्या शाळेत जात नसलेल्या बालकांची संख्या	३५	३९	७४
टक्केवारी	९.९७	११.३०	१०.६३
शाळेत कधी नाव न नोंदविलेल्या बालकांची संख्या	५	१४	१९
टक्केवारी	१.४२	४.०६	२.७३
पाठ्यपुस्तके मिळत नसलेल्या बालकांची संख्या			०
टक्केवारी			०.००
कुटुंबाबरोबर सध्या राहत नसलेल्या बालकांची संख्या	२५	११	३६
टक्केवारी	७.१२	३.१९	५.१७
आश्रमशाळेत राहत असलेल्या बालकांची संख्या	९	११	२०
टक्केवारी	२.५६	३.१९	२.८७
वस्तीगृहात राहत असलेल्या बालकांची संख्या	१२	०	१२
टक्केवारी	३.४२	०.००	१.७२
बालकगृहात राहत असलेल्या बालकांची संख्या	०	०	०
टक्केवारी	०.००	०.००	०.००
इतर	४	०	४
टक्केवारी	१.१४	०.००	०.५७
काम करत असलेल्या एकूण बालकांची संख्या			७२
टक्केवारी			१०.३४
कामासाठी मजुरी मिळत असलेल्या बालकांची संख्या	२	३	५
टक्केवारी	०.५७	०.८७	०.७२



घरी प्रसूत झालेल्या महिलांची संख्या	२५
सरकारी दवाखान्यात प्रसूत झालेल्या महिला	२०
खाजगी दवाखान्यात प्रसूत झालेल्या महिला	०६
इतर	०७



	मूले	मूली	एकूण
आश्रम शाळा	९	११	२०
वस्तिगृह	१२	०	१२
बालगृह	०	०	०
इतर	४	०	४
एकूण	२५	११	३६



	मुले	मुली	एकूण
शाळेत जाणारे (School going)	90.03	88.70	89.37
गळती (Dropout)	8.55	7.25	7.90
नॉद न झालेले Never Enrolled	1.42	4.06	2.73

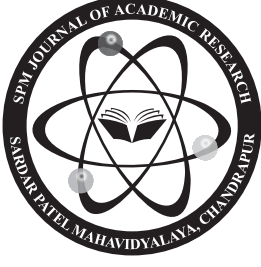
निष्कर्ष (Conclusion) :-

- जिवती तालूका दुर्गम पाहाळी भाग असल्यामुळे आधुनिक सुविधांचा अभाव आहे. दळणवळणाची साधने, माहिती आणि तंत्रज्ञान, पिण्याचे पाणी रोजगाराचा अभाव इत्यादी समस्या येथे दिसून येतात.
- गर्भवती महिलांना प्रसूतीपूर्व आणि प्रसूति नंतर आरोग्य विषयक सुविधा मिळत नाही जास्तीत जास्त महिलांची प्रसूती घरीच होतात. किंवा सरकारी दवाखान्यात होते. त्यांना पोषक आहार मिळत नाही.
- ६ महिने ते ६ वर्षांच्या बालकांना आहार, लसिकरण पूर्णपणे झालेले नाही. सकस पोषण आहारा अभावी मूले कूपोषित आहे.
- ६ वर्षे ते १४ वर्षे वयोगटातील बालकांना शैक्षणिक सुविधा पूर्णपणे मिळत नाही अनेक बालके शाळेत जात नाही.

अनेक बालके, कुटुंबासोबत राहत नाही, त्यांना शिक्षणासाठी आश्रमशाळेत किंवा वस्तीगृहात राहून शिक्षण घ्यावे लागते.

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वैवाहिक समस्याग्रस्त महिला व समुपदेशन

(विशेष संदर्भ : समुपदेशन केंद्रात येणाऱ्या वैवाहीक समस्याग्रस्त महिलांचे मत)

देवेन्द्र बी. बोरकुटे

एस.आर.एम.कॉलेज ऑफ सोशल वर्क, चंद्रपूर

Email : devrac1974@gmail.com

गोषवारा :

भारतीय राज्यघटनेनुसार महिलांना पुरुषांच्या बरोबरीने अधिकार प्राप्त झालेले आहेत महिलांना कायद्याने सुरक्षितता प्रदान करण्यात आली आहे. अनेक कायदे महिलांकरीता तयार करण्यात आले परंतु असे लक्ष्यात येते की, कायद्याने शिक्षा होऊ शकते पण प्रश्न सुटत नाही. तेव्हापासून वैवाहिक समस्या निर्माण होण्यास पारंभ झाला भारतामध्ये स्त्रि ला शक्तीचे रूप मानले जाते. आजच्या काळात स्त्रि ची अवस्था दयनिय आहे. तिला ५० टक्के आरक्षण मिळूनही तिचा छळ केला जातो. मानसिक, शारीरिक नैतिक, सामाजिक कौटुंबिक वैवाहिक अनेक समस्यांना सामोरे जावे लागते भारतात जशी जशी औद्योगिकरण व नागरीकरणात वाढ होऊ लागली तशी या समस्येची तिब्रता वाढत आहे. वैवाहिक असमायोजनातून निर्माण झालेल्या समस्यामुळे ते वैवाहिक संबंध तुटू नये त्यांच्या समस्येवर विचार करून त्याचे परस्पर समायोजन होण्याकरिता त्यांना योग्य समुपदेशनाची गरज आहे. समुपदेशनाच्या माध्यमातून अनेक वैवाहिक समस्याग्रस्त महिलांचे प्रश्न मार्गी लागू शकते.

बिज शब्द :

वैवाहिक समस्या ग्रस्त महिला, समुपदेशन, समुपदेशन केंद्र

प्रस्तावना :

महिलांवर होणारा अत्याचार व हिंसाचारांच्या घटना व त्यामुळे उद्भवणारे व असमायोजन व कौटुंबिक समस्या दिवसेंदिवस वाढत आहे. सामाजीक, आर्थिक घटक याकरीता जबाबदार आहे. पतीपत्नीच्या वैवाहिक समस्या, कौटुंबिक कलह कौटुंबिक असमायोजन शारीरीक व मानसिक छळ सामाजीक सामाजिक व कौटुंबिक अत्याचार इत्यादी संदर्भात समुपदेशनाच्या माध्यमातून समोपचाराने तडजोड घडवून समस्याग्रस्त महिलांचे जिवन सुखमय होईल या वैवाहिक ग्रस्त महिलांच्या समस्या सोडविण्याकरीता भारत सरकार मान्यता प्राप्त कौटुंबिक व सल्ला समुपदेशन केंद्र २००१ पासून चालविण्यास सुरुवात झाली. कौटुंबिक व्यवस्था अधिक मजबुत व्हावी, कुटुंब तुटण्यापासून किंवा कुटुंब विघटन होऊ नये. कुटुंबात प्रेमभाव सलोखा कायम राहावा व समाजव्यवस्था अधिक मजबुत व्हावी या उद्देशाने केंद्राच्या माध्यमातून प्रयत्न करण्यात येतात अन्याय अत्याचारापासून महिलांना संरक्षण मिळावे याक रिता सल्ला व समुपदेशन गरजेचे आहे.

कौटुंबिक अत्याचार म्हणजे काय ?

घटनेने मूलभूत अधिकार दिलेत. स्त्री स्वातंत्र्याचा पुरस्कार केला. लिंगभेदाच्या पलीकडे व्यवसाय शिक्षण कायद्याने समंत केले, परंतु सामाजिक न्यायाच्या आकडेवारीत कौटुंबिक अत्याचाराची संख्या महिलांना नव्हे तर सर्वांना आत्मपरिक्षणास भाग पाडते. संविधान निर्मितीपासून आजतागायत महिलांचे समान हक्क व त्यांचे संरक्षण यावर आपल्या देशात अनेक चर्चा व त्या दृष्टीने कायद्यांची निर्मितीही झालेली आहे. विविध विवाह विषयक कायदे असो व हुंडा प्रतिरोधक कायदा असो किंवा त्यानंतरही विविध कायद्यांमध्ये महिलांना दृष्टित ठेवून झालेले बदल असो, उदा. भारतीय दंड विधानाचे कलम ४९८ (अ)कायद्यान्वये वेळोवेळी झालेल्या या बदलांनी महिलांनी हक्काची योग्य ती दखल घेतली आहे. परंतु तरीही दरवेळी महिला विषयक नवीन प्रश्न आपल्या समाजापूढे उभे आहेत.

सन २००४ मध्ये कौटुंबिक गुन्ह्यांची महाराष्ट्र राज्य शासनाने नोंद घेतली. कौटुंबिक छळ, कौटुंबिक अत्याचार यांना आळा घालण्यासाठी ५६ व्या गणतंत्र वर्षात सन २००५ मध्ये कौटुंबिक अत्याचार महिला संरक्षण कायदा सप्टेंबर ला पारित

झाला. कौटुंबिक हिंसाचारापासून संरक्षण कायद्याची निर्मिती करून भारताने महिला हक्क संरक्षणाच्या दृष्टीने अतिशय महत्वाचे पाऊल उचलले आहे. २००५ च्या कायद्यापुर्वी कौटुंबिक हिंसाचाराची दखल आपल्या देशात कुठल्याही इतर कायद्याने घेतली नव्हती जी काही थोडी दखल महिला हिंसाचाराची किंवा त्यापुढे जातून असेही म्हणता येईली. पत्नीविरुद्धच्या हिंसाचाराची दखल घेतली होती तशी कौटुंबिक हिंसाचाराची दखल घेतली नव्हती. १९९४ मध्ये झालेल्या व्हीएनए परिषदेत व १९९५ साली झालेल्या बिजींग बैठकीमध्ये सर्व प्रथम कौटुंबिक हिंसाचारा पासून संरक्षण हा स्त्रीचा मानवी अधिकार हक्क आहे अशी दखल घेण्यात आली आणि त्यानंतर भारतात देखील त्या दृष्टीने पाऊले उचलण्यास सुरुवात झाली. सरतेशेवटी ऑगस्ट २००५ साली संसदेने कौटुंबिक हिंसाचारा पासून महिलांचे संरक्षण कायदा २००५ ची निर्मिती केली आणि महिला हक्कांच्या दृष्टीने २००५ साल ऐतिहासिक ठरले.

घर म्हणजे चार भिंती नसतात, कुटुंब म्हणले तर केवळ पती पत्नी एवढं अपेक्षित नसतं. इतरही सदस्य वेगवेगळ्या नात्याने एकाच छताखाली राहत असतात. प्रश्न अतिशय कठीण आहे. कौटुंबिक अत्याचार म्हणजे नेमके काय ? त्याचा व्याख्या काय ? नवीन कायद्यात अतिशय सूक्ष्म स्वरूपात असलेला गुन्हा किती सर्व व्याप्त आहे याचे भान ठेवून व्याख्या केल्या गेलेली आहे. कलम तीन प्रमाणे एखाद्या महिलेचा शारीरीक, लैंगिक, मानसिक तोंडी, भावनिक, आर्थिक छळ केला जात असेल तर ती महिला/अत्याचार पिडित या छळ करणाऱ्या व्यक्तीविरुद्ध गुन्हा नोंदवू शकते. शारीरीक छळ म्हणजे जो आपण नेहमी बघतो, उदा. एखाद्या स्त्रीकडून खूप अंगमेहनत करून घेणे, दिवसभर उपाशी ठेवणे, ग्रामीण भागांमध्ये नेहमी आढळणारे गर्भावस्थेत ही अंगमेहनत करून घेणे, गुलामासारखे राबवून घेणे, चटके देणे, केस ओढणे, मारणे इत्यादी सर्व बाबी शारीरीक छळामध्ये येतात. याचवेळी तोंडी बोलणं जसे की शिव्या देणे, अपमानास्पद शब्द करणे, माहेरच्या व्यक्तीवरून घालून पाडून बोलणे, मूल नसेल तर बोलणे केवळ मुली आहे म्हणून उद्धार करणे, पैशाची पैशाची मागणी करणे, पूर्तता न केल्याबद्दल अपशब्द वापरणे, नोकरी करणाऱ्या महिलेचा पगार घेणे, तिचा कामावर जातांना अपमान करणे, यासारखे अनेक मानहानी करणारे कृत्य या कलमात गुन्हा

म्हणून सामील आहेत. पत्नी म्हणजे केवळ उपभोग्य वस्तू म्हणून होणार लैंगिक छत्र यात अंतर्भूत आहे. एवढ्यावरच याची व्याप्ती नाही तर संपत्तीत मिळणारा हिस्सा, येणाऱ्या उत्पन्नात मिळणारा सहभाग, संपत्तीचा उपभोग घेऊ न देणे हे देखिल समाविष्ट आहे.

या कायद्यात सगळ्यात समाधानाची बाब ही की त्याच घरात, कुटुंबात राहून गुन्हा नोंदविता येतो, कोणत्याही इतर घटस्फोट, कायदेशीर विभागणी, पोटगी यासारख्या दात्याची गरज यात नाही. कुटुंबातील इतर स्त्री व्यक्तिकडून सुध्दा यात संरक्षण दिलेले आहे. गुन्हा म्हटला की, तो पोलिस स्टेशनमध्ये नोंदविला जातो. क्व समज येथे नाही. गुन्हांची नोंद केलेला अर्ज हा कायद्याने ज्यांना नियुक्त केलेले आहे अशा संरक्षक अधिकारी यांचेकडे द्यायचा आहे. संरक्षक अधिकारी प्रामुख्याने स्त्री असावी हे अपेक्षित आहे. त्याचप्रमाणे या कायद्यांतर्गत स्वयंसेवी संस्था यांची देखिल नियुक्ती केलेली आहे. त्यांना सेवा अधिकारी म्हणून संबोधले आहे. लिखित नमूद केलेला अर्ज हा प्रथम श्रेणी न्याय दंडाधिकारी, संरक्षक अधिकारी किंवा सेवा अधिकारी यांचेकडे देता येतो, सेवा अधिकारी किंवा संरक्षक अधिकारी या गुन्हाचा अहवाल तयार करून न्याय दंडाधिकारी यांचेकडे विनाविलंब दाखल करतो. अर्ज दाखल झाल्यापासून तीन दिवसात आरोपीला समन्स, नोटीस पाठविली जाते. प्रतिवादी सुध्दा यात फक्त दोन दिवसांच्या पर्याप्त कालावधीत आपले म्हणणे न्यायदंडाधिकाऱ्यांकडे मांडणार सेवायोजन अधिकारी किंवा संरक्षक अधिकारी अत्याचारग्रस्त महिलेला सेवा पुरविणार आहे. तिन जर निवास व्यवस्था किंवा वैद्यकीय सेवा मागितली तर या अधिकाऱ्यांना त्यांची पूर्तता करावी लागेल.

न्यायदंडाधिकारी या गुन्हांकडे सामाजिक आणि नैतिक गुन्हा म्हणून बघणार नाही. याकरीता समुपदेशन कल्याणकारी तज्ज्ञांचा अहवाल मागविणार आहे. या प्रकरणाची कारवाई मागणी केल्यास घेऊ शकते. अगदी कमी कालावधीत म्हणजे ६० दिवसांचे आत या गुन्हांची सुनावणी पूर्ण करून आदेश वठाता येणार आहे. सगळ्यात महत्वाचे म्हणजे राहत्या हक्कांच्या घरात राहून गुन्हांची योग्य दखल घेतली जाते गुन्हांमध्ये जर आर्थिक मागणी केली असेल तर त्याची पूर्तता, नुकसान भरपाई, दंड, आरोपी हा अन्यायग्रस्त महिलेला ताबडतोब देण्याचे प्रयोजन आहे. न्यायदंडाधिकारी प्रतिवादीच्या व्यवस्थापनाकडून देखील

तक्रारकर्त्यांना पगार किंवा मोबदला देऊ शकतो. मुलांचा ताबा, त्यांची शाळेतील प्रगती, देखभाल या संदर्भातील आदेश तसेच बँकेतील कामकाज वैद्यकीय मदत याचे आदेश, काही ठिकाणी मनाई हुकुम, संपत्तीचे नुकसान, अधिकाराबाबत न्यायालयीन कायदेशीर मदत देण्याचे अधिकार न्यायदंडाधिकाऱ्याला आहे. डोळसपणे आदेशाचे पालन आणि अन्यायग्रस्त, अत्याचार पिडित महिलेचे संरक्षण हा हेतू सफल होईल. जर प्रतिवादी दोषी आढळला तर एक वर्ष शिक्षा आणि रू. २००००/- पर्यंत दंड होईल. महिलांची प्रगती म्हणजेच देशाचा विकास हे सूत्र लक्षात घेऊन हा कायदा पारित झालेला आहे.

महिला संरक्षण कायद्यात केंद्र आणि राज्य शासनाची दुहेरी जबाबदारी आहे. कायद्याचा प्रचार, प्रसार होणे गरजेचे आहे. आकाशवाणी, दूरदर्शन, वृत्तपत्रे यामधून जागृती घडवून आणणे तसेच जागृती प्रतिक्रिया शिबिर, मेळावे हा आमच्या संस्थेचा मानस आहे. कायद्याची ओळख प्रत्येक घटकांपर्यंत पोहचून जागृती हा खरा आमचा उद्देश आहे.

समुपदेशन म्हणजे काय ?

एका प्रशिक्षित समुपदेशकाच्या वतीने समस्येत प्रश्नात गुरफटलेल्या वा व्यक्तिगत समस्यात अडकलेल्या व्यक्तीच्या मुलाखतीच्या माध्यमातून अस्तीत्वात असलेली समस्या सोडविण्यास मदत तसेच भविष्यात हिच समस्या पुन्हा निर्माण झाल्यास व अन्य कुठलीही समस्या निर्माण झाल्यास व्यक्ती स्वतःहाची समस्या वा प्रश्न सोडविण्यास पूर्णपणे शारीरिकदृष्ट्या व मानसिक दृष्ट्या सक्षम करणारी प्रक्रिया म्हणजे समुपदेशन होय.

सद्यापरिस्थितीत सामाजिक गतीशिलता लक्षात घेता असे लक्षात येते की सामाजिक जीवनात प्रचंड गर्दीत व्यक्ती एकाकीजीवन जगत आहे स्पर्धा, संघर्ष ताणतणाव अस्वस्थता भावनीक सुरक्षीतता जीवनातील विविध क्षेत्रातील विविध समस्या अशा स्थितीत त्याला इतरांची मदत व सल्ला व मार्गदर्शनाची गरज वाटते अशा वेळी समुपदेशकाची भुमिका महत्वपूर्ण ठरते वैवाहीक समस्या ग्रस्त महिलांना तसेच अन्याय अत्याचार झालेल्या महिलांकरीता समुपदेशन महत्वाचे आहे.

समुपदेशाची मुख्य ध्येय :

१) सकारात्मक मानसिक आरोग्य प्राप्त करणे.

- २) समस्येचे उत्तर शोधने
- ३) व्यक्तिगत परिणाम कारकतेमध्ये सुधारणा करणे
- ४) समुपदेशाव्दारे बदल व्हावा म्हणून प्रयत्न करणे
- ५) निर्णय प्रक्रिया साध्य करणे
- ६) वर्तनातील बदल साध्य करणे.

समुपदेशन केंद्र :

जिवनात येणाऱ्या समस्या जेव्हा स्वतःहा सोडू शकत नाही. अशा वेळेस त्या सोडविण्याकरीता एखाद्या समुपदेशकाव्दारे समुपदेशन करून सोडविणे आवश्यक असते अशा स्थितीत ज्या केंद्रात संपर्क साधला जातो. व समस्या सोडविण्यास मदत होते. त्या केंद्राला समुपदेशन केंद्र असे म्हणतात.

संशोधनाचे प्रारंभिक प्रश्न :

- १) वैवाहिक समस्या ग्रस्त महिलांची कौटुंबिक व सामाजीक परिस्थिती कशी आहे.
- २) वैवाहिक महिलांना कोणत्या कारणांनी समस्या निर्माण झाल्या असेल.
- ३) वैवाहिक महिलांना समस्या निर्माण होण्यास कोणते घटक कारणीभूत असू शकते.
- ४) कौटुंबिक सल्ला व समुपदेशन केंद्राची भूमिका कशी असेल.

उद्देश :

- १) वैवाहिक समस्या ग्रस्त महिलांची कौटुंबिक व सामाजीक परिस्थिती शोध घेणे.
- २) वैवाहिक समस्या ग्रस्त महिलांना उद्भवणाऱ्या समस्यांच्या कारणीभूत घटकांचा अभ्यास करणे.
- ३) वैवाहिक समस्याग्रस्त महिलांच्या समस्या सोडविण्यास समुपदेशन केंद्राची भूमिकेचा आढावा घेणे.

गृहितके :

- १) वैवाहिक समस्या ग्रस्त महिलांची कौटुंबिक व सामाजीक परिस्थिती मध्यम आहे.
- २) वैवाहिक समस्या ग्रस्त महिलांना कौटुंबिक विघटन,

अत्याचार व कायदेविषयक अडचणी हे प्रमुख कारण आहे.

- ३) वैवाहिक समस्याग्रस्त महिलांच्या समस्या सोडविण्यात समुपदेशन केंद्राची सकारात्मक भूमिका आहे.

अध्ययन पद्धती :

चंद्रपूर शहरातील सरस्वती शिक्षण महिला मंडळ अंतर्गत चालणाऱ्या कौटुंबिक सल्ला व समुपदेशन केंद्रात येणाऱ्या वैवाहिक समस्याग्रस्त महिलांच्या मताचे अध्ययन करण्याकरीता

प्राथमिक स्रोत : १) निरीक्षण पद्धत २) मुलाखत अनुसूची ३) प्रत्यक्ष मुलाखत

दुय्यम स्रोत : द्वितीय स्रोतात विषयांच्या संबंधीत पुस्तके लेख समुपदेशकाचे मत, मासिक कागदपत्रे, हस्तलिखित अहवाल इंटरनेट इ. चा तथा गोळा करण्याकरिता उपयोग करण्यात आला.

नमुना निवड : कौटुंबिक समुपदेशन केंद्रातील एकुण २० वैवाहिक समस्याग्रस्त महिलांची निवड करण्यात आली त्या नमुन्याची निवड सोयीस्कर पद्धतीने करण्यात आली.

व्याप्ती :

अध्ययनाची व्याप्ती संबंधीत अध्ययन हे सरस्वती शिक्षण महिला मंडळ व समुपदेशन केंद्र चंद्रपूर अंतर्गत चालणारे कौटुंबिक सल्ला व समुपदेशन केंद्र तिथे सेवा घेण्यासाठी येणाऱ्या वैवाहिक समस्याग्रस्त महिला यांच्याशी संबंधीत राहिल.

विश्लेषण :

धर्म :

अ.क्र.	पर्याय	वारंवारिता	टक्केवारी
१	हिन्दु	०८	४०
२	मुस्लीम	०१	५
३	बौध्द	११	५५
	एकुण	२०	१००

वरिल सारणीवरून असे दिसून येते की, एकुण २० समस्याग्रस्त महिलांपैकी जास्तीत जास्त ११ म्हणजेच ५५ टक्के महिला ह्या बौध्द धर्मातील आहेत.

कौटुंबिक संबंध

अ.क्र.	पर्याय	वारंवारिता	टक्केवारी
१	वाईट	१२	६०
२	साधारण	०८	४०
	एकुण	२०	१००

वरिल सारणीवरून असे दिसून येते की, एकुण २० समस्याग्रस्त महिलांपैकी कौटुंबिक संबंध वाईट असे म्हणणाऱ्या महिला १२ म्हणजे ६० टक्के आहेत.

मुळ वास्तव्य

अ.क्र.	पर्याय	वारंवारिता	टक्केवारी
१	ग्रामीण	१६	८०
२	शहरी	०४	२०
	एकुण	२०	१००

कुटुंबात कोणत्या सदस्यांकडून त्रास होतो.

अ.क्र.	पर्याय	वारंवारिता	टक्केवारी
१	सासु	१४	७०
२	पती	०६	३०
	एकुण	२०	१००

वरिल सारणीवरून असे दिसून येते की, एकुण २० समस्याग्रस्त महिलांपैकी अधिकाधिक कौटुंबिक संबंधामध्ये सासुकडून त्रास होतो असे म्हणणाऱ्या महिला १४ म्हणजे ७० टक्के आहेत.

माहेरून पैसे आणण्यासाठी मानसिक त्रास

अ.क्र.	पर्याय	वारंवारिता	टक्केवारी
१	नेहमी	०१	०५
२	कधीकधी	१८	९०
३	कधीच नाही	०१	०५
	एकुण	२०	१००

वरिल सारणीवरून असे दिसून येते की, एकुण २० समस्याग्रस्त महिलांपैकी कधीकधी त्रास होतो असे म्हणणाऱ्या जास्तीत जास्त महिला १८ म्हणजे ९० टक्के आहेत.

आपले पति आपल्यासोबत कसे वागते ?

अ.क्र.	पर्याय	वारंवारिता	टक्केवारी
१	चांगले	०८	४०
२	वाईट	१२	६०
	एकुण	२०	१००

वरिल सारणीवरून असे दिसून येते की, एकुण २० समस्याग्रस्त महिलांपैकी पती आपल्यासोबत वाईट वागतो असे म्हणणाऱ्या जास्तीत जास्त महिला १२ म्हणजे ६० टक्के आहेत.

कायद्याची माहिती

अ.क्र.	पर्याय	वारंवारिता	टक्केवारी
१	कौटुंबिक हिंसाचार	०२	१०
२	हुंडा प्रतिबंध	०५	२५
३	लागू होत नाही	१३	६५
	एकुण	२०	१००

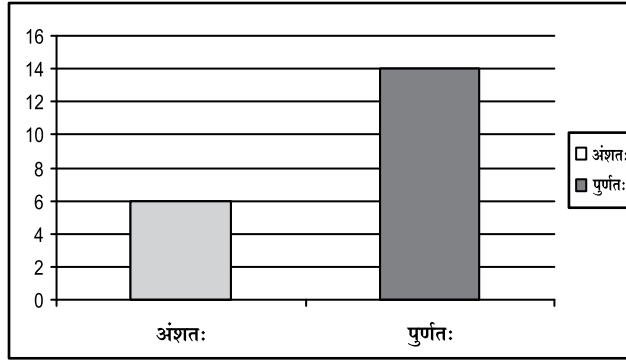
वरिल सारणीवरून असे दिसून येते की, एकुण २० समस्याग्रस्त महिलांपैकी कायद्याची माहिती नसणाऱ्या महिला जास्तीत जास्त म्हणजे १३ असून त्याची टक्केवारी ६५ आहे .

समुपदेशन केंद्रातून मिळालेल्या मदतीविषयी समाधानकारकता

अ.क्र.	पर्याय	वारंवारिता	टक्केवारी
१	अंशतः	०६	३०
२	पूर्णतः	१४	७०
	एकुण	२०	१००

वरिल सारणीवरून असे दिसून येते की, एकुण २० समस्याग्रस्त महिलांपैकी समुपदेशन केंद्रातून मिळालेल्या मदतीविषयी पूर्णतः समाधानी आहे असे म्हणणाऱ्या महिला जास्तीत १४ म्हणजे ७० टक्के आहेत.

समुपदेशन केंद्रातून मिळालेल्या मदतीविषयी समाधानकारकता दर्शविणारा स्तंभालेख



समुपदेशकाचे समुपदेशन योग्य वाटण्याबाबत समाधानकारकता

अ.क्र.	पर्याय	वारंवारिता	टक्केवारी
१	अंशतः	०४	२०
२	पूर्णतः	१६	८०
	एकुण	२०	१००

वरिल सारणीवरून असे दिसून येते की, एकुण २० समस्याग्रस्त महिलांपैकी समुपदेशकाचे समुपदेशन योग्य वाटण्याबाबत समाधानकारकता असे म्हणणाऱ्या महिला पूर्णतः म्हणजे १६ म्हणजे त्याची टक्केवारी ८० टक्के आहेत.

निष्कर्ष :

- अधिकाधिक वैवाहिक समस्याग्रस्त महिलेचे पती त्याच्यासोबत वाईट वागणूक देते. तसेच संशय वृत्तीचे असून त्याचे पती सोबत भांडण होते व मुलांवर त्याचा वाईट परिणाम होतो.
- जास्तीत जास्त वैवाहिक समस्याग्रस्त महिलांना कायद्याविषयक माहिती नाही परंतु कुटुंबातील सदस्यांना शिक्षा व्हावी असे वाटत नाही.
- जास्तीत जास्त वैवाहिक समस्याग्रस्त महिलांवर कौटुंबिक अत्याचार केला जातो.
- अधिकाधिक वैवाहिक समस्याग्रस्त महिलांना समुपदेशन केंद्र चांगले वाटते. समुपदेशन केंद्राकडून मिळालेल्या मदतीवर त्या पूर्णतः समाधानी आहे.

उपाययोजना :

समस्याग्रस्त महिला :

- लाभार्थी महिलांनी समुपदेशकाचे सांगितलेले समुपदेशन योग्य प्रकारे समजून घ्यावे
- समुपदेशकाने केलेल्या समुपदेशनाचा सखोल विचार करून त्याबाबत समुपदेश- काला प्रतीसाद देऊन येणाऱ्या समस्येतून बाहेर येण्याचा प्रयत्न करावा.
- लाभार्थी महिलांनी कुटुंबातील सदस्यांचे महत्व समजून घेऊन समस्येची तिब्रता कमी करण्यास मदत करायला हवी.
- मुलांच्या भावी पिढीचा विचार करून योग्य ते निर्णय घ्यावे.

२) कुटुंब :

- कुटुंबातील सदस्यांनी समस्याग्रस्त महिलेला समजून घ्याला हवे.
- जर महिलेकडून काही चुका होत असतील तर त्या निदर्शनास आणून देऊन चुका दुरुस्त करण्याची संधी द्यायला हवी.
- कुटुंबातील कोणताही वाद विकोपाला जाऊ नये याची काळजी घ्यावी.
- एकमेकांचे म्हणणे पूर्णपणे समजून घ्यावे व विचारांती निर्णय घ्यावा. तसेच निर्णय घेतांना इतरांचे सहकार्य घ्यावे.

३) कौटुंबिक सल्ला व समुपदेशन केंद्र :

- कुटुंबात वैवाहिक महिलांना समस्या जास्त प्रमाणात येत असल्यामुळे त्यांना योग्य असे मार्गदर्शन करावे.
- महिलांना त्यांच्या कुटुंबात स्थान मिळवून देणे आवश्यक आहे.
- कुटुंबाचे आणि त्यांच्या परिवाराचे महत्व पटवून द्यावे.
- महिलांची कुटुंबाप्रती जबाबदारी व कर्तव्य याची जाणिव करून द्यावी.

४) समाजकार्याचे आणि विधिचे विद्यार्थी :

- १) समुपदेशन केंद्राची बहुतांश महिलांना माहिती नसल्यामुळे समाजकार्याच्या विद्यार्थ्यांनी सामाजिक दृष्टिकोन ठेऊन जनजागृती करावी.
- २) समुपदेशनाच्या माध्यमातून विघटीत होणारे कुटुंब एकत्र येऊ शकते त्यामुळे कुटुंब संघटित करण्यासाठी समुपदेशकाची मुख्य भुमीका असल्यामुळे समुपदेशकाचे तंत्र समजून घेतले पाहिजे.
- ३) विधी विद्यालयातील विद्यार्थ्यांनी महिलांविषयक असणाऱ्या कायद्याची माहिती महिलांपर्यंत पोहचवावी याकरिता सामाजिक जाणिवजागृतीचे व कार्यक्रम व मेळावे इत्यादीचा उपयोग करावा.
- ४) या कार्यामध्ये सहयोग देणाऱ्या वकील मंडळीचे सहकार्य घ्यावे.

५) शासन

- १) कुटुंबाचा आर्थिक उंचावण्याकरिता शासनाच्या विविध योजनांची माहिती प्रदर्शनी व मेळावे या माध्यमांद्वारे देऊन यासंदर्भात जागृती निर्माण करावी.
- २) शासकिय योजनांचा लाभ लोकांपर्यंत पोहचत आहे किंवा नाही याकरिता देखरेख समीती किंवा पर्यायी व्यवस्था निर्माण करावी.
- ३) शासकिय योजनांचा लाभ घेण्याकरिता लाभार्थींना कागदपत्राची पूर्तता करण्याकरिता जो त्रास होतो ती कागदपत्राची प्रक्रिया सोपी व सोयीस्कर करून द्यावी ज्यामुळे लोकांना अडचण येणार नाही.
- ४) ज्या शासकिय विभागाद्वारे राबविण्यात येणाऱ्या कल्याणकारी योजनांचा लाभ घेण्याकरिता स्वतंत्र मदत केंद्राची स्थापना करावी.

संदर्भ ग्रंथ सूची :

१. कामत साधना, मानसशास्त्रीय मार्गदर्शन, प्राप्युलर प्रकाशन
२. प्रा. खेडकर अरुण, समुपदेशन समाजकार्यासाठी, हरिवंश प्रकाशन, चंद्रपूर

३. माहिती पुस्तिका, कौटुंबिक हिंसाचारापासून महिलांचे संरक्षण अधिनियम २००५
४. अॅड. बांगडे विजया, महिला सबलिकरण सोपान, हरिवंश प्रकाशन, चंद्रपूर.

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¹Department of Computer Science, University of R.T.M. Nagpur University, Nagpur.

²Department of Botany, Seth LU and MV College, Andheri (E), Mumbai 416 810.

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- **Keywords:** Please provide 4-5 keywords which can be used for indexing purpose.
- Text, Acknowledgement
- **References:** Reference list should be alphabetized in the last names of the first author of each research paper.
 - a) **Journal Article:** Kumar, R., Sharma, K., and Agarwal, V. (2005) In vitro Cell Dev Biol-Plant. 41, pp.137-144
 - b) **Book:** Naik, V.N. (1998) Flora of Marathwada, Vol.I, Amrut Publication, Aurangabad, India.
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Sardar Patel Mahavidyalaya, Ganj Ward, Chandrapur - 442 401 (M.S.)

Mob: 09423117868 E-Mail: drjasheikh@gmail.com

Editorial Communication

Dr. Vijay Wadhai

HOD, Department of Microbiology

Sardar Patel Mahavidyalaya, Ganj Ward

Chandrapur - 442 401 (M.S.)

Mob. +91 9422137698 E-Mail spm.sjar@gmail.com

www.spcollegechandrapur.ac.in

Dr. S. B. Kishor

HOD, Department of Computer Science

Sardar Patel Mahavidyalaya, Ganj Ward

Chandrapur - 442 401 (M.S.)

Mob. +91 9850110555 E-Mail s.b.kishor.spc@gmail.com

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