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## Face to Face or Pre-face

*I express my immense gratification that our Journal has been ultimately upgraded to multi-lingual, multi-disciplinary, Peer Reviewed Journal. This was an outcome from our last meeting held on 27.7.2014 where we have unanimously decided that, 1. The Journal will be upgraded to International status with the name "International Journal of Integrated Research & Development". 2. The Journal might be a multi-lingual one catering to all the disciplines and the frequency of publication will be bi-annual. 3. The new three tier Editorial Body will be constructed.*

*After obtaining the ISSN for the JIRD in 2012 it was a challenging and remarkable task for the Editorial Board to acquire and upgrade its standard from the opening spell. We constructed a three tier Editorial Body of the Journal. Firstly, there is the 'Peer Review Board', whose members belong to National & International Level from every discipline, and for blind review of the papers to maintain the genuine international standard. Secondly, the 'Board of Associate Editors', every member of this body has been chosen from every discipline, for selecting, refurbishing or rejecting the papers and lastly for technical and administrative assistance we have fabricated a competent 'Editorial Board'. All these bodies have been constructed casing all leading Colleges, Universities and reputed Institutions of our country and abroad. This mammoth task has been successfully executed by the members of board of associate editors and editorial board.*

*We believe that, there is no line of demarcation in higher education and higher level of research work. Every field of knowledge is inter-linked, and must unlock the vision of the scholar community and inculcate critical thinking among us. To build up a rational and beautiful nation we need a total re-orientation of knowledge. So the motto of our Journal is to encourage the integrated research for the development and progress of human civilization.*

*Our future dream is to cross the limit and touch the sky. Though there are many language medium of the papers in our journal, we would try to arrange translation of the papers in future for maintaining the international standard. We also want to initiate a creative division of the journal, which will reflect the essence of our society.*

Sibsankar Pal  
Editor-in-Chief

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# DEMOCRACY IN INDIA: HOW FAR TRIUMPHANT IN USHERING A POSITIVE SOCIAL TRANSFORMATION?

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Paper ID : SSC/2/IRD/2014/V-1

## ABSTRACT

*Long years ago we made a tryst with destiny, and now the time comes we shall redeem our pledge, not wholly or in full measure, but very substantially. At the stroke of the midnight hour, when the world sleeps, India will awake to life and freedom. A moment comes but rarely in history, when we step out from the old to the new, when an age ends, and when the soul of a nation, long suppressed, finds utterance. It is fitting that at this solemn moment we take the pledge of dedication to the service of India and her people and to the still larger cause of humanity.*

**Keywords:** Democracy, Governance, masses, politicians

Such was the rhetoric and prescience in Jawaharlal Nehru's speech on the tryst of destiny, which he delivered in his capacity as the recently anointed Prime Minister on the eve of the attainment of Independence. Nehru continues: We end today a period of ill fortune and India discovers herself again. The achievement we celebrate today is but a step, an opening of opportunity, to the greater triumphs and achievements that await us. Are we brave enough and wise enough to grasp this opportunity and accept the challenge of the future? .... The service of India means the service of the millions who suffer. It means the ending of poverty and ignorance and disease and inequality of opportunity. The ambition of the greatest man of our generation has been to wipe every tear from every eye. That may be beyond us, but as long as there are tears and suffering, so long our work will not be over .... To the people of India, whose representatives we are, we make an appeal to join with faith and confidence in this great adventure. This is no time for petty and destructive criticism, no time for ill will or blaming others. We have to build the noble mansion of free India where all her children dwell. (1) From this brilliant piece of rhetoric, it is clear that Nehru wanted to mean that, democracy is both a sense of community and modernization which would, like fire, lead to the path of success and development of the nation. Nehru spoke also of the urgency of a concerted effort to remove mass poverty and ignorance. Again, it is true that the principles relating to such a sense of community and modernization originated mostly in cultures foreign to India and the country had already been exposed to some of them for the better part of the duration of colonial rule.

The most radical of them, namely, the principle of Universal Adult Franchise, as the basic principle of legitimacy and popular accountability, was very much prevalent at least since the 1937 elections. While these limited experiments had already planted the seeds of mass democracy, the measure was in keeping with the spirit of popular sovereignty, which was the guiding principle of India's freedom movement and whose essence Nehru described in his famous oration on 'Freedom at Midnight'. But after more than six decades of application of Universal Adult Franchise, as the main ideology of the state, and as such, the preferred instrument of social and political change, and democratic accountability, as a critical ingredient of the principle of governance, India continues to offer hope, but with an all-pervasive sense of doubt. If Nehru's bold vision has to be given its due shape by the overall success of India's democratic record, it has to contend with persistent mass poverty and illiteracy, communal conflagrations and political insurgency. (2) Democracy itself has waxed and waned from time to time, but only to revert back eventually with renewed vigour. In the meantime, structural change of the society and the economy has continued to progress, though at an uneven pace. This question of democracy and social change underpins our narrative here, which by its very nature, both limited and static in character, but the story it illustrates is vast in its dimensions and dynamics. This study also closely examines a democratic transition in the subcontinent, speculating the reasons that might have facilitated this transition. The word 'democracy' has enchanted the human race for centuries and is the most popular and fascinating term in our political vo-

cabulary. The notion of democracy as government of the people, by the people and for the people, is explicitly reflected in the opening words of the Preamble to the Indian Constitution: 'We, the People of India, having solemnly resolved to constitute India into a Sovereign, Socialist, Secular, Democratic Republic ...' The framers of the Constitution have incorporated all the different aspects of democracy – political, social and economic – in the different provisions of the Constitution. Accordingly, the political dimension of democracy emphasizes Universal Adult Franchise and share of the people in the decision-making process. Its economic aspect demands abolition of exploitation and minimization of inequalities in income and the social aspect seeks to establish a just social order free from all forms of discrimination. No doubt, the Constitution consists of a rich array of institutional framework to facilitate the development of democratic governance including, secularism, independent judiciary, free press, fundamental rights, recognition and accommodation of the diverse needs of the ethnic identities, flexible amendment procedure to meet the changing needs of time, judicial activism, Panchayati Raj Institutions etc. The objective behind the adoption of these measures is to promote the 'ideal of participation, of representation, of accountability, of self-development.' (3) However, a detailed analysis of the working of Indian democracy in the last sixty one years reveals that the 'ideal of democracy' which was foremost in the agenda of the anti-colonial struggle is in grave crisis. The socio-economic and political goals and promises remain half accomplished. To begin with, Universal Adult Franchise, the very basic yardstick of democracy has become a farce. The election mechanism has been distorted by the ugly role played by 'money power', 'muscle power' and specific system of mass-rigging with the official government representatives acting as silent spectators in the entire process. Added to this is the wide social gap between the elected and the electorate. In the second place, the 'rule of law' is surreptitiously maneuvered to meet the narrow sectarian interests of the state functionaries and the constitutional provisions are flagrantly violated. The ruling class 'obeys no disciplines, no rule, no principle of public morality, display no sense of public awareness and show no concern for the public weal'; and corruption is regarded as 'the hallmark of our leadership' and 'the ruling class is ... falling prey to feudal oligarchy of power-broker and influence peddlers.' (4) In the third place, Directive Principles of State Policy, which were regarded as 'fundamental in the governance of our country' and which sought to transform India into a 'Welfare State', have merely remained Directive Principles of State Policy. The biggest negative factor to India's democracy is poverty. Though eradication of poverty has been in the forefront of every government's political agenda, still a major section of the

population lives below the poverty line. As George Fernandez has rightly said, 'looking at the way we dedicate ourselves to eradicate poverty, whether while in the government or in the opposition, it seems to me that there is vested interest in preserving poverty.' (5) Coupled with poverty, is the vicious role played by caste and religion which act as divisive forces. The ideal of secularism as envisaged in the Preamble seems to be a distant dream as is evident from the communal conflagrations exploited by the political leaders for their self-interest. Similarly, caste has been politicized and is used by the political parties for political mobilization. Added to this is the attitudinal change in the ideology of the political parties. They are more interested in their own political gains rather than in the national interest. Moreover, the centralized character of the Indian federation has made the states mere puppets at the hands of the Central government. Last but not the least, Indian democracy is continuously tormented by the increasing phenomena of 'politicization of crime' and the 'criminalization of politics'. Politicization of crime involves the increasing use of anti-social forces for the management of elections, generation of party funds, for organizing meetings etc. Criminalization of politics, on the other hand, means direct entry of criminals into the political parties and legislatures including Parliament and the 'use of criminal methods and tactics to influence political processes and procedures.' (6) All these factors have crippled the Indian democratic system and stood in the way of democratic nation-building in India. However, the above analysis represents only the darker part of the story. It would be a distortion of truth if the positive achievements of the Indian State are not focused properly. To begin with, the defeat of the Lalu regime in Bihar in the last Assembly polls shows that democracy cannot be trampled and people misled forever. The success of democracy is reflected in the enactment of the long-awaited Freedom of Information Act, 2005, to ensure transparency in the administration. The success also lies in the accommodative role played by the Indian State in resolving ethnic conflicts by giving them autonomy in the form of statehood, sub-statehood, Autonomous Councils etc. and all these institutional arrangements have helped to maintain the unity of the country without hindering the identities of the different multicultural communities. It gives plausibility here to narrate the historical context relating to such a process of electoral democracy and its transitions in the social fabric of India. After the end of the Second World War, the defeat of Fascism implied the victory of democracy. The principle led to the foundation of the United Nations and the upholding of the principle of the Rights of Man as the minimal basis of civilized government. Since the conflict of unrestricted imperialists and conservatives on the one hand and the proponents of authoritarian modernization on

the other, the improbable mix of democracy, mass illiteracy, hunger and, of late, criminalization of politics has been much commented on. Ethnic conflict and violence are routinely reported in the media. At the national level, political democracy collapsed in 1975 when Indira Gandhi imposed Emergency rule. But after a brief authoritarian interlude, India became once again the functioning democracy, based on elections and mass participation that it used to be. This message of democracy has spread far and wide, pervading the English language as well as vernacular press. The changed political backdrop to social and economic life has increasingly become a major theme of discourse. The process of accelerated interaction of politics and society, of which mass elections are the main intermediaries, is again fraught with contradictions since seen through the eyes of the long suppressed and the exploited, representative democracy is plain and simple logic of numbers, of the cumulation of voting strength through short-term alliances and its aggressive use for the promotion of sectional interests. Such interactions appear occasionally to run into abusive political power of rogues and scoundrels. And hence, democratization can also appear to eat out into the roots of governance and civility. The pace of politicization can be quickened and deepened by giving rise to certain social forces that are capable of pulverizing the very basis of a stable government. The very concept of social change encapsulates the competing notions of social transformation at the attainment of Independence and the political process that legitimized the plurality that characterizes the discourse about change. On the other hand, a conventional view of social change can be referred to here: Social change is the significant alteration of social structures (that is, of patterns of social action and interaction), including consequences and manifestations of such structures embodied in norms (rules of conduct), values, and cultural practices and symbols. (7) Social change can be said to directly refer to such phenomena as, status, roles, norms, patterns of interaction as well as such measurable (if at all possible) non-tangibles along with their implications and consequences. Talking about social change, Clifford Geertz, the American anthropologist, advocates a 'distinction between observable social interactions and the web of meanings that those actions have for the participants.' (8) The concept of social change generally indicates a process of transition from a social order based on one set of core values to a different social order, based on a different set of values. The most important of these values is social hierarchy, as opposed to equality of status. The salient criteria, in the respect of self-definition of ordinary people, are the identity of the individual in terms of subjecthood or citizenship and his definition of the boundaries of his political universe. Democratic social change is a special case where the society changes from an order organized around un-

equal status and social hierarchy, to one where equality of legal status becomes conformistic. In terms of these definitions, the Indian parameter of democracy and social change, involving political participation, the ability of the political system to give shape to many of the initiatives from below and ideas from above in the shape of new institutions or to reinforce existing institutions and finally, the ability of the political actors of India to engage in 'two-track strategies' that combine normal political action with rational protest, has two objectives. It wishes to promote social change of a kind that promotes the spread of democratic values of equality, citizenship and federalism within the context of national unity. Secondly, it intends to bring about these changes in a democratic manner. In India, the introduction of mass democracy, rather than following structural change, preceded it. When Nehru, in his famous speech on 'Freedom at Midnight', engaged the state to this objective, he was not being entirely rhetorical or metaphorical. Universal Adult Franchise was introduced in 1952, and both the non-democratic left and non-democratic right were invited to compete equally with the centre and moderate left and right for political power through elections. It is important to mention here that India's party system stands both as one of the main influences on the nature and course of social change and as a target of the process of social change. As such, a society can claim to have become self-sustaining. By the very nature of their interaction, the structure of such institutions, their stability and legitimacy, become important windows of the process of social change. In the post-colonial context, however, the institutions of the state are an important impetus for social change as well. (9) In turn, since the state is not insulated from society, social change deeply affects the institutional structure of politics as well. A dynamic and self-reinforcing party system which would facilitate both elite decision-making and democratic accountability is the implicit ideal that underpins democratic theory. While all institutions are in a way affected by social change, it is the party system which is, properly speaking, 'in the eye of the storm'. Parties are the first line of contact the individual and the state, and as such, they are the first to register the change in the tone and content of social demands. Considering the breadth and complexity of institutions in a diverse state of continental proportions, the party system is perhaps the most effective instrument to measure the nature and course of social change in India. While there is little doubt that democracy in India 'works', for the very sake of democracy it is important to remember that the Indian democracy can blind both the Indians and the foreign observer to its shortcomings. The democratic fabric can get trapped in the fashionable duality of secularism engaged in a noisy battle against Hindutva, or liberalization as compared to socialism. The obsession with secularism, and now liber-



alization, has tended to take attention away from the fundamental issues of poverty and illiteracy, both of which have, to our great dismay, become non-issues in India's high politics. The antics of the worst kind of some weak and unstable political parties are reason enough to believe that not all the demons, that stand in the way of the deepening and quickening of the pace of democracy, have been slain yet. In the absence of ideologies, the electorate is unable to distinguish between the politicians. The people vote to power those leaders, who promise to ameliorate their miseries. The masses at the lower rungs of the society are ignorant of the workings of the democratic system. Though the Constitution provides for proximity between the Government and the electorate, it is never realized in practice. The national leaders have failed to recognize the weak social base of the country and give priority to dirty politics. The democracy, instead of evolving as a two-way communication between the Government and those governed, has remained a one-way communication. G. K. Chesterton remarked, 'Democracy means government by the uneducated' and it holds true in India. As a vast majority of the electorate is illiterate and gets swayed by false promises, enlightened public opinion has not emerged in India. By imposing the western liberal democratic ideas on the citizens, the leaders failed to take into account the major handicaps, which would hamper its evolution. By clinging to the colonial hangover of parliamentary democracy, India has failed in the socio-economic front. For the effective discharge of democracy and to bring about an all-round development in the societal frame in India, mobilization of the masses should be undertaken. Corruption and inefficiency of the politicians and the bureaucracy must be checked. Such harmful and undesirable social factors have fearfully led to the instability in the country's governance, though here the opportunity can be taken to strike a positive note that the age of materialism has helped to break, to a certain extent, the age-old yoke of casteism. According to former Prime Minister, Mr. I. K. Gujral, a second 'satyagraha' or mass movement would be required to restore an effective democracy and a positive social change and root out corruption,

nepotism and red-tapism from the democratic and social system of India.

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# CHILD ABUSE IN INDIAN CIRCUSES: A REVIEW REPORT

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Paper ID : LAW/1/IRD/2014/V-1

*"Number of cases and incidents show that child exploitations in Indian circuses are very frequent and heart touchy. In spite of having the Constitutional mandate and supported legislations the practice of child abuse is not ignorable incident. This is a bit of shocking news that when the machinery is available to handle and prohibit exploitation of children the same practice cannot be controlled or stopped efficiently. The author tries to review the situation with the help of decided cases in India. It is an effort to bring out the reality of availability of law and practice in the society."*

## ABSTRACT

*There are grave violations of fundamental and human rights and thereby abuse of children across the country like India in particular with the children who are forcefully detained in circuses, in various instances, without any contact to their families under tremendous inhuman circumstances. There are evidences of sexual abuse every day which leads to physical and emotional abuse as well. The kids are dispossessed of basic human needs of food and water.*

**Keywords:** Physical assault, child rights, child workers

I have reviewed a very important case decided by the Supreme Court of India in the light of the above topic and depicted below the review report. The name of the case is *Bachpan Bachao Andolan Vs. Union of India*<sup>1</sup>. In the present case<sup>2</sup> campaigner has filed this formally request following a sequence of events where the campaigner came in touch with many children who were trafficked into performing in circuses. The Petitioner establishes that circus is one of the very old forms of native amusement in the humankind, with humans having a key responsibility to engage in recreation. It is interesting to note that the activities that are executed in these circuses deny the artists especially children of their crucial fundamental rights. Many of them are trafficked from some family suffering from poverty and these areas are found in Nepal as well as from financially backward districts of India. For them there is no meaning of the outside world. There is no existence beyond the circus campus for them. One time they take entry into the circuses, they are restrained to the circus dome, with no liberty of mobility and preference. As per the petitioner, *"They are entrapped into the world of circuses for the rest of their lives, leading a vagrant tunneled existence away from the hub of society, which is tiresome, claustrophobic and dependent on vicissitudes"*<sup>3</sup>.

Petitioner submitted that for the first time he came to know about the troubles of children in Indian circuses which date back to 1996. During that situation, the Petitioner had rescued eighteen girls from a circus at Vidisha District of Madhya Pradesh. This action was achievable after a grievance established by a 12 year old girl, who somehow managed to flee from the circus campus. Her protest was that she and several other Nepalese girls had been trafficked and compulsory to reside and execute the given role in the circus where they were being sexually ill-treated and were kept in most merciless situation.

After realizing the incident, a skillful effort was initiated by the Petitioner to comprehend and study more about the difficulty of child labour in Indian Circuses and how to get rid of the same. This started in July 2002 with the commencement of an investigation on the crisis of child labour in Indian circuses. The conclusions in the aforesaid investigate were compiled in a statement and reported under the head *"Eliminating Child Labour from Indian Circuses"*.

After the establishment of all the above facts and figures, the Petitioner determined to realize a approach to eliminate the carry out of employing children in Indian circuses. Concurrently, arrangements were finished to put across the difficulty in face of circus owners to make them

conscious of the ethical and lawful questions relating to the make use of children in circuses. In this regard the Petitioner started a conversation with all the major circus owners and requested to them to discontinue trafficking, bondage, Child labour and other violations of child rights. The Indian Circus Federation<sup>5</sup> replied optimistically but sarcastically this organization has a very skeletal depiction from the circus trade with roughly less than ten percent of the large circuses and probably less than twenty percent of all the circuses were members of this Federation<sup>6</sup>.

The Petitioner again realised that living conditions of these children starts in the morning with training instructors' shouting abuses, pitiless physical assault and two biscuits with a cup of tea. According to petitioner, "After 3 to 5 shows and of lot of pervert comments of the crowds, the young girls are allowed to go back to their tents around midnight. Even then, life might have something else in store, depending upon the nature and mood swings of the circus owners and managers. If any child complains about the inadequate amount of food or the leaking tent in the rain or if a child is scared on the rope while performing the trapeze, he/she is scolded and maltreated by the managers or employers and sometimes even caned on one pretext or the other".

Are there any laws which can protect the rights of these children as the children are often bodily, psychologically and sexually abused in these circuses? The most awful feature is that there is no direct legislation, which is vested with powers to pact with the evils caused to the children who are trafficked into these circuses. As per the petitioner, "The Police, Labour Department or any other State Agency is not prepared to deal with the issue of trafficking of girls from Nepal holding them in bondage and unlawful confinement. There is perpetual sexual harassment, violation of the Juvenile Justice Act and all International treaties and Conventions related to Human Rights and Child Rights where India is a signatory".

The Petitioner pointed out importance of findings by the Apex Court in N.R. Nair and Ors. v. Union of India and Ors. case<sup>7</sup> where the Court upheld the rights of animals who are being made to perform in these circuses after accepting their dilemma. The state of affairs of children in circuses is no dissimilar if not inferior<sup>8</sup>.

It is important to mention here that the Petitioner's application speaks about the provisions of the Juvenile Justice (Care and Protection of Children) Act<sup>9</sup>, 2000 and also recommends that intra-state trafficking of adolescent children, their bondage and violent confinements, habitual sexual irritation and abuses should be made cognizable offences under the Indian Penal Code<sup>10</sup> as well as under

Section 31<sup>11</sup> of the Juvenile Justice Act. Children Welfare Committees under the Juvenile Act should be authorised to give damages to all those sufferers rescued from the circuses with a time bound rehabilitation packages and the State Government to build a fund for the same.

As per the report, is interesting to found that many of these children are sold to the circus owners either by the agents or their family relatives, even sometimes the underprivileged parents are promised for high salaries, comfortable life etc. In this regard, some extraordinary circuses were also noticed<sup>12</sup> that provided their workers slightly improved and permitted them to gain the freedom of partial movement outside the circus campus for limited period, however, child labour was widespread in these circuses as well and artists were not given bare minimum remuneration.

After compiling a series of reports and findings the Petitioner brings complain about living and operational circumstances of the children and has enumerated the following large categories which are as under<sup>13</sup>:

i) Insufficient Space<sup>14</sup>, ii) Meals<sup>15</sup>, iii) Sleep Timings<sup>16</sup>, iv) Poor Sanitation<sup>17</sup>, v) No Health Care Personnel<sup>18</sup>, which means that the persons working in the circus are not receiving minimum health care, vi) High Risk Factor<sup>19</sup>, it means the danger feature for the artists is very elevated as accidents and mishaps at the time of performance sessions and events are regular occurrence. vii) Remuneration<sup>20</sup>, viii) Bound by Contract<sup>21</sup>, ix) Daily Routine hindering their development<sup>22</sup>. In this regard it may be clarified that the employment of the children in circus raises many lawful complications and in that respect most important complications may be depicted as under<sup>23</sup>:

1. Deprivation of the children from getting educated thereby violates their fundamental right for education enshrined under Article 21<sup>24</sup> of the Constitution.

2. Deprivation of the child from playing and expression of thoughts and feelings, thereby violating the fundamental right to freedom of expression.

3. Competency to enter into contract for working in circus.

4. Violation of statutory provisions of law like Employment of Children's Act, 1938, The Children (Pledging of Labour) Act, 1933, The Child Labour (Prohibition and Regulation) Act, 1986, Minimum Wages Act, 1976, The Prevention of Immoral Traffic Act, Equal Remuneration Act, 1976 and Rules made there under and the Bonded Labour System (abolition) Act, 1976 read with rules made their under, the Factories Act, 1948, Motor Transport Workers Act, 1961 etc.

5. Existing labour laws and legitimacy of contracts

of employment for children.

6. *The legitimacy of contracts of employment for children and working conditions*"

Numbers of examples and incidents have been exhibited by the Petitioner in the petition of mistreatment of children in the circuses. It is important to mention here that all those illustrations and incidents display under what terrible and inhumane circumstances the children have to carry out actions in the circuses.

The examples shown by the Petitioner are only a few in the lot and there are a lot of children who are being trafficked on a regular basis into circuses. On the ground of livelihood issue the Petitioner claimed that circuses should be wholly debarred and proscribed, rather, there is a sturdy need to control this as any other business including ensuring protection mechanism and other procedures as are executed and regulated in other countries. The Apex Court received the petition from the Petitioner with the following prayers<sup>25</sup>:

"1. Issue a writ of mandamus or any other appropriate writ, order or direction, directing the Respondents to frame appropriate guidelines for the persons engaged in circuses;

2. Issue a writ of mandamus or any other appropriate writ, order or direction directing the Respondents to conduct simultaneous raids in all the circuses by CBI to liberate the children and to check the gross violation of all fundamental rights of the children;

3. Issue a writ of mandamus or any other appropriate writ order or direction to appoint special forces in the borders to ensure action and to check on the cross border trafficking;

4. Issue a writ of mandamus or any other writ order or direction applying the provisions of the Juvenile Justice (Care and Protection of Children) Act, 2000 and make intra-state trafficking of young children, their bondage and forcible confinements, regular sexual harassments and abuses cognizable offences under the Indian Penal Code as well as under Section 31 of the Juvenile Justice Act.

5. Issue a writ of mandamus or any other appropriate writ order or direction to empower child welfare committee under the Juvenile Justice (Care and Protection of Children) Act, 2000 to award compensation may be awarded to all those victims rescued from the circuses with a time bound rehabilitation package and the State Government to create a fund for the same;

6. Issue a writ of mandamus or any other appropriate writ order or direction to lay out a clear set of guidelines prohibiting the employment/engagement of children up to the age of 18 years in any form in the circuses."

As a general procedure this Court asked for reply from the Union of India and other States and Union Territories. Accordingly, counter affidavits in the form of reply has been filed on behalf of various States and the Union Territories.

Shri Gopal Subramaniam<sup>26</sup>, the learned Solicitor General standing for the Union of India has filed on paper statements<sup>27</sup> with the heading "The Indian Child: India's Eternal Hope and Future".

His submissions are as under<sup>28</sup>:

"1. Trafficking in human beings is not a new phenomenon. Women, children and men have been captured, bought and sold in market places for centuries. Human trafficking is one of the most lucrative criminal activities. Estimates of the United Nations state that 1 to 4 million people are trafficked worldwide each year. Trafficking in women and children is an operation which is worth more than \$ 10 billion annually. The NHRC Committee on Missing Children has the following statistics to offer:

a. 12.6 million (Governmental sources) to 100 million (unofficial sources) stated to be child labour; b. 44,000 children are reported missing annually, of which 11,000 get traced; c. About 200 girls and women enter prostitution daily, of which 20% are below 15 years of age.

2. International conventions exist to punish and suppress trafficking especially women and children. (Refer: UN Protocol to Prevent, Suppress and Punish Trafficking in Persons also referred as the PALERMO Protocol on Trafficking). Trafficking is now defined as an organized crime and a crime against humanity. The convention being an international convention is limited to cross border trafficking but does not address trafficking within the country. The definition of trafficking is significant:

...The recruitment, transportation, transfer, harboring or receipt of persons by means of threat or use of force or other forms of coercion, of abduction, of fraud, of deception, of the abuse of power or of a position of vulnerability or of the giving or receiving of payments or benefits to achieve the consent of a person having control over another person, for the purpose of exploitation....

3. Exploitation shall include at a minimum, the exploitation of the prostitutes of others or other forms of sexual exploitation, forced labour or service, slavery or practices similar to slavery, servitude or the removal of organs.

4. It is submitted that children under 18 years of age cannot give valid consent. It is further submitted that any recruitment, transportation, transfer,

harbouring or receipt of children for the purpose of exploitation is a form of trafficking regardless of the means used. Three significant elements constitute trafficking:

a. The action involving recruitment and transportation; b. The means employed such as force, coercion, fraud or deception including abuse of power and bribes; and c. The purpose being exploitation including prostitution.

5. Internationally, there is a working definition of child trafficking. The working definition is clear because it incorporates the above three elements. In June 2001, India has adopted the PALERMO Protocol to evolve its working definition of child trafficking.

6. The forms and purposes of child trafficking may be:

a. Bonded labour; b. Domestic work; c. Agricultural labour; d. Employment in construction activity; e. Carpet industry; f. Garment industry g. Fish/Shrimp Export; h. Other sites of work in the formal and informal economy.

7. Trafficking can also be for illegal activities such as:

a. Begging; b. Organ trade; c. Drug peddling and smuggling;

8. Trafficking can be for sexual exploitation, i.e.

a. Forced prostitution; b. Socially and religiously sanctified forms of prostitution; c. Sex tourism; d. Pornography;

9. Child trafficking can be to aid entertainment in sports:

a. Circus/dance troupes; b. Camel jockeying;

10. Trafficking can be for and through marriage. Trafficking can be for and through adoption. It is submitted that intervention is possible in cases of child trafficking only if fundamental principles are kept in mind. The fundamental principles are the following:

a. The child has to perform to the best of his ability. The growth of a child to its potential fulfillment is the fundamental guarantee of civilization; b. Empathy for troubled children by adopting non-discriminatory and attitudes free of bias; c. Children must be protected in terms of well-being under all circumstances; d. Right to freedom from all forms of exploitation is a fundamental right; e. Confidentiality of the child in respect of the child's privacy must be maintained; f. Trafficking is an organized crime which could have multiple partners including syndicates.

11. Intervention must be a joint initiative of government and non-governmental organizations which can be, in some cases, potential partners. An effective intervention must in all circumstances lead to effective and enduring protection of children from exploitation,

abuse and violence."

The Police should discharge the duties in this regard. The main point for Shri Gopal and it seems that Police has failed to perform the basic duty for protections. He submitted guidelines which may be treated as mandates:

i. Care must be taken to ensure the confidentiality of the child and due protection must be given to her/him as a witness;

ii. The detailed interview of the victim should be done preferably by crisis intervention centres/members of the Child Welfare Committee under the Juvenile Justice Act. There should be adequate breaks and intervals during the interview with a child victim;

iii. If the police employ a child friendly approach to the entire investigation, the possibility of getting all relevant information gets higher. This can be done by having a supportive environment for the child at the police station wherein attention is paid to his needs. This can be done at the police station itself or at any other place co-managed by police any NGO/CBO. Support persons for the child should be contacted and in their absence, any civil society group working with for children or members of CWC (whoever the child feels comfortable with) could be asked to the present;

iv. Due care must be maintained to attend the issues like interpreters, translators, record maintaining personnel, audio-video recording possibilities etc.;

v. As far as possible, the same investigation officer must follow up the case from investigation stage to the trial stage;

vi. There should be provision of good and water as well as toilet facilities for the child in the police station and the hospital;

vii. No child should be kept in a Police Station;

viii. Where a special juvenile police unit or a police officer has been designated to deal with crimes against children and crimes committed by children, cases relating to children must be reported by such officer to the Juvenile Justice Board or the child welfare committee or the child line or an NGO as the case may be."

It is important to mention here that the combined effect of Article 23<sup>30</sup>, of the Constitution while giving the provision for the protection and Article 39<sup>31</sup>, again for giving a special coverage for protection, whereas, Articles 14<sup>32</sup> and 21<sup>33</sup> of the Constitution of India guarantee every child to be freed from exploitation and abuse of any form. Article 23 prevents traffic in human beings, 'beggar' and other forms of forced labour.

Regarding other various relevant statutory provisions Shri Gopal stated that, "Force, assault, confinement can be dealt with under Sections 319 to 329 for simple and grievous hurt, Sections 339 to 346 for wrongful

restraint and wrongful confinement; Sections 350 to 351 for criminal force and criminal assault; Section 370 for import, export, removal, disposing/accepting, receiving, detaining of any person as a slave; Section 361 to 363 kidnapping and abduction; Section 365 for kidnapping, abduction for wrongful confinement; Section 367 for kidnapping, abduction for slavery or to subject a person to grievous injury; Sections 41, 416, 420 for fraud, cheating by personation; Sections 465, 466, 468 and 471 for forgery and using forged documents as genuine; Section 503 and 506 for criminal intimidation. It is submitted that a direction must be issued to the Commissioner of Police, Delhi and the State Governments and Union Territories that their police force are required to be sensitized to the above provisions while dealing with safety and freedom of children".

The Juvenile Act was amended in year 2006. Accordingly, This piece of legislation is a special legislation for children and explains children as 'a person upto the age of 18 years'. The Juvenile Act is enacted with a view which addresses both children who want care and those who are in difference with regulation.

According to Shri Gopal, "*the Goa Children's Act, 2003 must be viewed as a model legislation. He submitted that not only does it define child trafficking but also seeks to provide punishment for abuse and assault of children through child trafficking for different purposes such as labour, sale of body parts, organs, adoption, sexual offences of pedophilia, child prostitution, child pornography and child sex tourism. All state authorities such as airport authorities, border police, railway police, traffic police, hotel owners are made responsible under the law for protection of children and for reporting offences against children. It is submitted that until a suitable legislation is enacted, directions of a preventive nature may be issued against the police authorities in all States to protect the rights of children*"<sup>34</sup>.

Learned Solicitor General stated that every State Government must establish committees for the reason of preventing child labour. There may be an apex committee established by every State Government with the following<sup>35</sup>:

"(a) The Chief Secretary of the State; (b) Secretary incharge of Child and Women Development; (c) Director of Health and Family Welfare; (d) Commissioner of Police of the State; (e) Two Psychiatrists to be nominated by the Indian Psychiatric Society."

The State Government with the support of the said agency by a transparent method will compose committees for each district consisting of health workers, police per-

sonnel, factory inspectors and inhabitants from the civil society/NGO. The agency will be capable to examine and resolve whether there is forced service of children<sup>36</sup>.

Shri Gopal Stated that in the Ministry of Family Welfare and Child Development, a separate department may be established to deal with issues arising out of spreading of publications which are detrimental to young persons, publishing pornographic stuff in electronic structure as well as the enforcement of Section 293<sup>37</sup> of the Penal Code. This is required that there is a scope of a advance exploration study must take place on the effectiveness of the necessities of the Young Persons Harmful Publications Act, 1956, Section 67<sup>38</sup> of the Information Technology Act, 2000 and Section 293 of the Penal Code.

The Transplantation of Human Organ Act, 1994 takes initiation for removal of human parts if done without lawful power and with intention to money-making trade in human organs should be criminally accountable.

The Government of Indian in coordination with UNICEF prepared a study report connecting to trafficking. The objectives of the study were<sup>39</sup> a) To obtain a better understanding of rescue and rehabilitation processes; b) To gain a more complete understanding of the involvement of the state, the judiciary, law enforcement agencies, and NGOs engaged in rescue and rehabilitation; c) To make recommendations on the need for developing guidelines for rescue and rehabilitation. These guidelines should represent a common denominator of nationally agreed standards in this area as well as take regional variations into account.

The study report revealed the following statistics as under and shocking<sup>40</sup>:

i) There are an estimated two million children, aged between 5 and 15, forced into CSE around the world; ii) Girls between the ages of 10 and 14 years are most vulnerable; iii) 15% of commercial sexual workers in India are believed to be below 15 years old and 25% are estimated to be between the ages of 15 and 18; iv) 500,000 children worldwide are forced into this profession every year.

The guarantee of marriage, service is frequently used for attracting young children into sexual employment. The report also discusses about the trafficking of children in metropolitan brothels and the local areas. The report generates the story behind how trafficking takes place<sup>41</sup>. The importance of Immoral Traffic (Prevention) Act<sup>42</sup>, 1956 was felt and thereafter enacted immediately after the Geneva Convention on Immoral Trafficking of Women and Children document was signed by India in 1956. With regard to have data on the success of rehabilitation plans, rescue points in rehabilitation approach would have to be

strengthened which became the later parts of this report. It becomes compulsory to engage police authorities by means of sharp sensitization to a kingdom of illegality. Therefore, there has to be a particular scheme to be adopted by police with position to children<sup>43</sup>.

According to Learned Solicitor General, "a trafficked child can be brought before the Magistrate under two circumstances: a) when the raid/search or removal takes place by a police action under Section 15<sup>44</sup> of the ITPA or when the Magistrate herself/himself passes rescue orders; b) the trafficked child can also be brought before the Magistrate as an accused under Section 8A and 8B of the ITPA".

According to Shri Gopal the following guidelines are indispensable<sup>45</sup>:

a. Every Magistrate before whom a child is brought must be conscious of the provisions of the Juvenile Justice (Care and Protection of Children) Act, 2000;

b. He must find out whether the child is below the age of 18 years;

c. If it is so, he cannot be accused of an offence under Section 7 or 8 of ITPA;

d. The child will then have to be protected under Juvenile Justice Authority;

e. The Magistrate has a responsibility to ascertain and confirm that the person produced before her or him is a child by accurate medical examination;

f. The definition of a child in Section 2K means a juvenile or a child as a person who has not completed 18 years of age;

g. Once the age test is passed under Section 17(2) establishes that the child is a child/minor less than 18 years of age, the Magistrate/Sessions Judge while framing charges must also take into account whether any offences have been committed under Sections 342, 366, 366A, 366B, 367, 368, 370-373, 375 and if so, he or she must also frame charges additionally;

h. The child should be considered as a child in the protection of the Child Welfare Act.

i. The child should be handed over to the Child Welfare Committee to take care of the child. The performance of the Child Welfare Committees must be reviewed by the High Court with a committee of not less than three Hon'ble Judges and two psychiatrists;

j. A child must not be charged with any offence under the ITPA or IPC;

k. A minor trafficked victim must be classified as a child in need of care and protection. Further, the Magistrate must also order for intermediate custody of minor under Section 17(3) of the ITPA, 1956;

l. There should not be any joint proceedings of a juvenile and a person who is not a juvenile on ac-

count of Section 18 of the Juvenile Justice (Care and Protection) Act, 2002;

m. It is necessary that Courts must be directed that the same lawyer must not represent the trafficker as well as the trafficked minor;

n. Evidence of child should be taken in camera. Courts must protect the dignity of children. The children's best interest should be the priority<sup>46</sup>.

Shri Gopal asserted the need of rehabilitation of the children who are deprived. In this regard the relevance may be drawn from Section 33(3)<sup>47</sup> of the Juvenile Act. It was again clarified that rehabilitation would be the process by which the success of the Juvenile Act may be visible. Reintroduction into the world in terms of positive and aggressive occupations approaching to logic of self-worth will have to be thought of. This demands pioneering strategies and rather than claiming something else to social development.

It is important to mention here that the Board for Juvenile Welfare<sup>48</sup> will have no capability to transaction with cases of children who are in sex trade or have been trafficked. Those children are to be measured as children in want of care and defense. May be, the states where the Child Welfare institutions have not been established, these issues should be sent to the JWB<sup>49</sup>.

The National Plan of Action for Children speaks of rights which could be issue for consideration for the development of children. The recently established Ministry of Women and Child Development has correctly stated that child defense is a vital part of the country's policy to put 'Development of the child at the Centre of the 11th Plan'. Shri Gopal stated that the millennium development goals cannot be tenable unless child defense is an essential part of programme, policy and campaign for their accomplishment and success.

It was the opinion of Shri Gopal that the current child protection systems have to be first scrutinized. There should be evaluation of the delivery of these programmes, accordingly, there should be chief authority. Points of delivery and accountability have to be recognized and strengthened. The event for juvenile justice is to allow children in need of care and fortification and those in difference with law to be protected. The central government gives monetary support to the state governments and UT administrations for setting up and preservation of a range of homes, pay of staff, rations, and outfits for children in need of care and shelter of juveniles in disagreement with rule. Both Centre and state will share the cost of monetary support on 50:50 ratio.

It is interesting to note here that in order to deliver result to the event for juvenile justice, this may be necessary that nodal points are identified. The child welfare in-

stitution may be one such body. At the same time it is required that the operational of the child welfare committee may be supervised by either the Executive Chairman of the Legal Services Authority or by the High Court itself. It is also proposed by Shri Gopal that, "the financial assistance being provided for children in need and care must result in tangible results to the children whose future is sought to be rehabilitated. For that purpose, it is appropriate that a Court monitored mechanism is established. For every juvenile home, a District Judge or a Judge nominated by the Chief Justice of the High Court should be a visitor. There must be periodic internal reports which are given to the High Court and just as in case of prisons, juvenile homes must be monitored by courts and their living conditions must also be carefully examined". Therefore, Courts supervision can be fruitful in this regard.

Regarding the point of responsibility for administration, the circumstances in the juvenile home must also be informed by the District Magistrate of each district. It is needed that there should be twin treatment, - one to the court segment of the High Court; and the other to the District Magistrate and over and done to the State Government. Each State Government must introduce a Juvenile Justice Cell which will collect intermittent information of juvenile homes, e.g. the quantity of children, the position of children, the mode of rehabilitation and the existing status. The State Government must also make certain that curative help as well as psychiatric backing wherever required is presented to the juveniles on a pinnacle priority basis. District Collectors must put forward their information to the Secretary of the Department concerned who in turn must inform to the Chief Secretary. The Chief Secretary must be beneficially answerable for the management of the event for juvenile justice and also must administer the financial expenditure and the way in which the capital spent has been appropriately accounted. In this regard a certification for expenditure of capital based on central plan must be established. This documentation may be provided by a self-governing authority that will make sure that the capital allocated has in fact been exhausted for the advantage and wellbeing of the children. If the home is located within a panchayat area, then the chairman of the panchayat or the zila parishad must be also made accountable for certifying that all the capital which was planned for the home in conditions of grants or subventions has been appropriately expended.

As per Shri Gopal, "the Integrated Child Protection Programme for Street Children is also a scheme by which NGOs are supposed to run 24 hour shelters and to provide food, clothing, shelter, non-formal education, recreation, counseling, guidance and referral services for children. Considering the vulnerability of

the children, all NGOs must be directed to be registered with the concerned Collector. There must be a database of every NGO including details of all the functionaries of the NGO with full particulars including their addresses. In order to enable the enrolment in schools of street children, vocational training, occupational placement and to mobilize preventive health services including reduction of drug and substance abuse, a nodal point is necessary. The nodal point must be either a Sub Divisional Magistrate/Executive Magistrate whose work will be countersigned by a subordinate Judge appointed by the District Judge of the District. Similarly, database must be maintained in relation to the children, their parentage, present status and the present condition of their educational qualifications and whether they are capable of vocational training. It is important that occupational therapists must be able to assess on the basis of modern IQ and aptitude tests about the way in which such children can be taken forward to mainstream living by offering vocational guidance. Offering children under difficult circumstances, relevant support is an obligation and should not be a matter of charity fortuitousness in terms of magnanimous dispensation<sup>50</sup>."

Shri Gopla also provided various recommendations by way of suggestions where child care can be taken in terms of the laws available in the country, the examples are as under:

*Child-line services are provided for children in distress<sup>51</sup>,*

*Shishu Griha to promote in-country adoption<sup>52</sup>, and Schemes for working children in need of care and protection<sup>53</sup>.*

The Pilot Project to fight the trafficking of women and children for profit-making sexual exploitation Shri Gopal further stated that the Project is a basis and purpose for advancing care and fortification to trafficked and sexually ill-treated women and children. Mechanisms of the plan comprise networking with rule enforcement institutions, rescue function, provisional refuge for the sufferers, re-transportation to home and legal aid. Further mechanisms may be done from Central Adoption Resource Agency<sup>54</sup> and National Child Labour Project<sup>55</sup> for rehabilitation of child workers.

According to a report generated by the Ministry of Women and Child Development, has essentially recognized the faults and gaps in current child protection institutions. The reasons for restrictions in successful execution of programmes have been correctly acknowledged. Those reasons may be<sup>56</sup>:

1. *Lack of Prevention<sup>57</sup>,*



2. *Poor planning and coordination*<sup>58</sup>,
3. *Services are negligible relative to the needs*<sup>59</sup>,
4. *Poor infrastructure*<sup>60</sup>,
5. *Inadequate human resources*<sup>61</sup>,
6. *Serious service gaps*<sup>62</sup>, etc.

The government civil society partnership is required which will implement the scheme on a full-time and firm basis. This will engage vigorous participation of the voluntary sector, e.g. investigate and instruction institutions, law University students, advocacy groups and the commercial division. Moreover, it should be the responsibility of the Health Secretary of each state government counting under the chairmanship of the Health Secretary, Government of India to have a plan for executing the Government - Civil Society initiative. It is obligatory that there must be a half yearly policy which must be arranged by the state government and also by the central government from time to time<sup>62</sup>.

The present format shall provide hold for promote care through the Sponsorship and Foster Care Fund available with the District Child Protection Society<sup>64</sup>. The Child Welfare Committee shall recognize appropriate cases and order assignment of the child in foster-care. When the Child Welfare Committee orders the assignment of the child in foster care, a copy of the order shall be issued to the DCPS for release of funds<sup>65</sup>.

It is pertinent to mention here that the provisions of the Right of Children to Free and Compulsory Education Act<sup>66</sup>, 2009 are substantial. By desirable quality as found in the Act through Section 3<sup>67</sup>

### **3 Right of child to free and compulsory education-**

(1) Every child of the age of six to fourteen years shall have a right to free and compulsory education in a neighbourhood school till completion of elementary education.(2) For the purpose of sub-section (1), no child shall be liable to pay any kind of fee or charges or expenses which may prevent him or her from pursuing and completing the elementary education: Provided that a child suffering from disability, as defined in clause (i) of section 2 of the Persons with Disabilities (Equal Opportunities, Protection and Full Participation) Act, 1996, shall have the right to pursue free and compulsory elementary education in accordance with the provisions of Chapter V of the said Act.

, every child of the age of 6-14 years shall have a right to free of charge and unavoidable education in a nearby school till achievement of elementary education. The Central Government has notified the Act in the Gazette on 27th August, 2009 and the Act came into force with effect from 1st April, 2010. It may also be understood that Chap-

ter 6 of the Act has particular provisions for fortification of the right of children. The institution like National Commission for Protection of Child Rights, has now been established. The said Commission now collects a legal status by virtue of this Act. In observation of the presentation of the present National Commission for Protection of Child Rights, it is probable that on a close boundary between the National Commission for Protection of Child Rights, the State Governments and the Ministry of Women and Child Development, optimistic consequences should in reality be worked out.

Accordingly, a coordinated attempt must be made by the above three institutions. Looking in the State and Union Territory perspective, the accountability must rest either on the Chief Secretary or a Secretary In-charge of Children, Women and Family Welfare. It would be feasible to the State Government in suitable matters to propose a special officer for the said function not inferior than the rank of a Secretary to the State Government. Each State must advance a circular successfully demonstrating how the recommendations will be executed. On the basis of above observations the Supreme Court held that, "*From the above comprehensive submissions made by the learned Solicitor General it is abundantly clear that the Government of India is fully aware about the problems of children working in various places particularly in circuses. It may be pertinent to mention that the right of children to free and compulsory education has been made a fundamental right under Article 21A of the Constitution Now every child of the age of 6 to 14 years has right to have free education in neighbourhood school till elementary education*".

Apex Court has cautiously mentioned broad submissions and suggestions as generated by the Solicitor General and others. The Court decided to come up with a plan which will pact with the difficulty of children's abuse, methodically. The Present Court has evolved with limited directions concerning children functioning in the Indian Circuses, as under:

*"(i) In order to implement the fundamental right of the children under Article 21A it is imperative that the Central Government must issue suitable notifications prohibiting the employment of children in circuses within two months from today. (ii) The Respondents are directed to conduct simultaneous raids in all the circuses to liberate the children and check the violation of fundamental rights of the children. The rescued children be kept in the Care and Protective Homes till they attain the age of 18 years. (iii) The Respondents are also directed to talk to the parents of the children and in case they are willing to take their children back to their homes, they may be directed to do so after proper verification. (iv) The Respondents are directed to frame*

proper scheme of rehabilitation of rescued children from circuses. (v) We direct the Secretary of Ministry of Human Resources Development, Department of Women and Child Development to file a comprehensive affidavit of compliance within ten weeks”.

To conclude, it may be said that the issues of child and the model of child rights have been analysed duly in a range of international conventions and values on child fortification including the UN Convention on the Rights of the Child, 1989, the UN Standard Minimum Rules for the Administration of Juvenile Justice (the

Beijing Rules), 1985, UN Convention on the Rights of the Child in 1992 etc. The Convention inter alia prescribes standards to be adhered by all state parties in securing the best interest of the child. In India we have the Juvenile Justice (Care and Protection of Children) Act, 2000 along with Indian Penal Code which can control child abuses however, Constitution of India gives more protection about the child rights from its various provisions. Now it is a time to wait and watch for the new set of directions that Supreme Court will declare in near future.

1. (2011)5 SCC 1

2. *Ibid.*

3. “It is submitted that the Petitioner is engaged in a social movement for the emancipation of children in exploitative labour, bondage and servitude. Bachpan Bachao Andolan has been able to liberate thousands of children with the help of the judiciary and the executive as well as through persuasion, social mobilization and education.”(Extracts of original judgment)

4. Hereinafter referred as ICF.

5. “It is submitted that the Petitioner convened a meeting with the circus owners on the 18th and 19th August, 2003 where a few owners under the umbrella of I.C.F. agreed to make a declaration that there shall be no further use of children in the circuses in India and a full list of the children employed by them will be provided to the Petitioner and that they would voluntarily phase out all the children from their circuses in a time bound manner. It was also decided that the Petitioner and its partner Non-Governmental Organizations (for short, NGOs) in Nepal will help in repatriation and rehabilitation of liberated children. The Petitioner submitted that since the I.C.F. does not have enough influence even on its own members, the agreement did not get implemented. However, the Petitioner kept on receiving information and complaints from several parents through the NGOs working in Nepal. The Petitioner sent the staff of his organization to cross-check and reconfirm the facts in Bhairawa, Hetauda in Nepal and Siliguri in India and found that organized crime of trafficking of children for Indian circuses, particularly from Nepal is rampant. In February and March, 2004, the Petitioner received complaints from many Nepalese parents whose children have been trapped in circuses for more than 10 years and had never been allowed to meet them on one pretext or the other even after repeated requests to the circus owners. Majority of the complaints were for the children in the Great Indian circus (a non-federation cir-

cus) which was found to be located in Palakkad, Kerala. In June, 2004, the Petitioner came to know through credible NGOs and individuals working in Hetauda, Nepal that the daughters of 11 parents were trapped into Great Roman Circus in India. The Petitioner has since then conducted several studies and interviews with various people who are engaged in circus.”(Extracts of Original Judgment)

6. (2001)6 SCC 84

7. “The Petitioner has made various attempts to regulate and improve the conditions of children in circuses including engaging the circus owners association. However, none of them have derived good results. It is categorically submitted that the Petitioner does not want the circuses to be completely banned or prohibited but there is a strong need to regulate this as any other industry including ensuring safety and other welfare measures of all those who are working in circuses, particularly the children. Almost all the circuses employ at least 50 persons and therefore a large number of labour laws should be applied.” (Extracted from original Judgment)

8. Hereinafter referred as Juvenile Act

9. Hereinafter referred as IPC

10. Section 31 – “Powers of Committee (1) The Committee shall have the final authority to dispose of cases for the care, protection, treatment, development and rehabilitation of the children as well as to provide for their basic needs and protection of human rights. (2) Where a Committee has been constituted for any area, such Committee shall, notwithstanding anything contained in any other law for the time being in force but save as otherwise expressly provided in this Act, have the power to deal exclusively with all proceedings under this Act relating to children in need of care and protection.”

11. As per the report only 4 in numbers.

12. Extracted from original Judgment.

13. “In almost all the circuses visited by the research team, the

living conditions were quite similar, but nonetheless deplorable. There are separate sleeping arrangements for males and females, with the Company Girls segregated from the rest of the circus troupe by a boundary. There are also separate tents for the families working in the circuses. Usually 5 to 10 and sometimes even more people are crammed into a single tent, thus most of the child artists complain of insufficient space and lack of personal space and privacy."

14. "Most of the circuses provide two meals - lunch and dinner to the artists and tea also two times from the canteen run by the management. The quantity and quality of the food is variable, depending on the management. Most often, the food is inadequate to satisfy the appetite of young growing children."

15. "Sleep timings are also very erratic, depending upon the nature of the work being performed by the child artists, though on a general trend most go to bed at midnight after the last show is over, to be woken up at dawn for practise."

16. "There are no proper toilets and bathrooms. Make-shift toilets are created on the circus ground near the tents and all the company girls have to share it and the stench around them is unbearable. In general, condition of sanitation in circuses is most pathetic. It also precipitates unhygienic conditions that could lead to diseases. Invariably all the artists voiced their dissatisfaction on the issue of sanitation and hygiene."

17. "Another important issue concerning the artists is the lack of any health care personnel to look into their day-to-day health care needs as well as the accidents that are so common in the circuses. The manger or the keeper usually provides medication for common ailments such as fever, cold etc. and II looks into the first-aid needs of the artists. For a serious medical condition or an accident during training or performance, the trainer or the manager usually accompanies the patient to the nearest medical help. The management bears the charges of the treatment during that time, but later deducts it from the salary of the incumbent. However, some managements do bear the medical bill of the artists if a mishap occurs during the performance or training. Overall, it can be said that the living conditions inside the premises of the circus arena are squalid and deplorable, with no facilities and basic amenities being provided to the circus artists, not even proper sanitation."

18. "Nature of the activities in circuses is such that the risk factor for the artists is very high as accidents and mishaps during practise sessions and shows are common phenomenon. On top of that, there are no health care personnel employed by the circuses to look into the health care needs of the artists, even at the time of emergency. It was found that the lives of the children was endangered due to the risk factor involved in the circuses, especially those who were involved in items like ring of death, well of death, sword items, rope dance etc. They constituted 10% of the total number of children. Rest 60% fell in the medium risk category while 30% were not involved in any risky items. Moreover, some circuses either fail to or are ignorant about taking the necessary precautions, which further heightens the risk involved. In fact, the research team witnessed an accident while visiting one of the circuses."

19. "Besides paying meagre salaries to the children, the management of some circuses holds back the salaries of the children saying that they would be paid only to their parents when

they visit them, which rarely happens. Salary accounts are often manipulated and the loss due to accidents or mishaps is not compensated."

20. "The child artists are brought to the circuses to be contracted for 3 to 10 years and once the contract is signed/agreed upon by the parents or guardians of the children, these young, ignorant children are bound and indebted to the circus management and are unable to break away from the circus, even if they are discontented with their lives in the circus."

21. "All-round Development In the circus, their daily routine starts with practising even before the sunrise (rigorous training session initially) mostly accompanied with verbal and physical abuse and harsh physical punishments at times, for the slightest error or no error at all. From afternoon onwards until midnight, they are on the stage, performing and enthraling the audience with their vivacity and wit. They cannot share their agony and grievances or raise their voice against the torturous life they are forced to lead. For them, there is no education, no play, no recreation and their life is confined to the circuses without any exposure to the outside world. All this prohibits them from knowing the other opportunities available, as they are aware of and are exposed to just one aspect of life, that is the aspect they see in the circuses they work in. Due to the cruel and inhuman attitude of the management in some circuses, which imposes restrictions on the children for meeting their folks, and also due to the traveling nature of the troupe, most of the children end up losing contact with their parents, especially those across the border or residing at far off places even within the country. And those fortunate few, who get a chance to meet their parents, do so once or twice a year, either when their parents visit or when they are allowed to go home. Consequently, they are exposed to a world which hinders their psychological, spiritual and socio-economic development, with no knowledge of their rights, duties and scope for a better future and thus, are left with no other option but to continue working in the circuses for the rest of their lives. Instability in life, due to the circus's nomadic existence, makes it difficult for them to pursue formal education, resulting in a large number of illiterate children and adults in circuses."

22. Extracted from original Judgment

23. 21A. Right to education-The State shall provide free and compulsory education to all children of the age of six to fourteen years in such manner as the State may, by law, determine.

24. Extracted from original Judgment.

25. Hereinafter referred as Shri Gopal

26. Learned Solicitor General has broadened the scope of this petition and has tried to deal with the problem of children trafficking. (As per the original record)

27. Extracted from original Judgment.

28. Extracted from Original Judgment.

29. Article 23 - "Prohibition of traffic in human beings and forced labour- (1) Traffic in human beings and beggar and other similar forms of forced labour are prohibited and any contravention of this provision shall be an offence punishable in accordance with law. (2) Nothing in this article shall prevent the State from imposing compulsory service for public

purpose, and in imposing such service the State shall not make any discrimination on grounds only of religion, race, caste or class or any of them."

30. Article 39 – "Certain principles of policy to be followed by the State- The State shall, in particular, direct its policy towards securing— (a) that the citizens, men and women equally, have the right to an adequate means to livelihood; (b) that the ownership and control of the material resources of the community are so distributed as best to subserve the common good; (c) that the operation of the economic system does not result in the concentration of wealth and means of production to the common detriment; (d) that there is equal pay for equal work for both men and women; (e) that the health and strength of workers, men and women, and the tender age of children are not abused and that citizens are not forced by economic necessity to enter avocations unsuited to their age or strength; (f) that children are given opportunities and facilities to develop in a healthy manner and in conditions of freedom and dignity and that childhood and youth are protected against exploitation and against moral and material abandonment."

31. Article 14 - Equality before law- "The State shall not deny to any person equality before the law or the equal protection of the laws within the territory of India."

32. Article 21 - Protection of life and personal liberty- "No person shall be deprived of his life or personal liberty except according to procedure established by law."

33. Learned Solicitor General submitted that there is blatant violation of Child Labour (Prohibition and Regulation) Act, 1986, Children Pledging of Labour Act, 1933, the Bonded Labour System Abolition Act, 1976, the Factories Act, 1948, the Plantation Labour Act, 1951, the Mines Act, 1952, the Merchant Shipping Act, 1958, the Apprentices Act, 1961, the Motor Transport Workers Act, 1961, the Bidi and Cigar Workers (Conditions of Employment) Act, 1966, the West Bengal Shops and Establishment Act, 1963.

34. Extracted from Original Judgment.

35. "All dhabas/restaurants must be prohibited from employing children. It is necessary that this stipulation which already exists must be effectively enforced."

36. 293. Sale, etc., of obscene objects to young person "Whoever sells, lets to hire, distributes, exhibits or circulates to any person under the age of twenty years any such obscene object as is referred to in the last preceding section, or offers or attempts so to do, shall be punished on first conviction with imprisonment of either description for a term which may extend to three years, and with fine which may extend to two thousand rupees, and, in the event of a second or subsequent conviction, with imprisonment of either description for a term which may extend to seven years, and also with fine which may extend to five thousand rupees"

37. Section 67 – "Punishment for publishing or transmitting obscene material in electronic form-Whoever publishes or transmits or causes to be published or transmitted in the electronic form, any material which is lascivious or appeals to the prurient interest or if its effect is such as to tend to deprave and corrupt persons who are likely, having regard to all relevant

circumstances, to read, see or hear the matter contained or embodied in it, shall be punished on first conviction with imprisonment of either description for a term which may extend to three years and with fine which may extend to five lakh rupees and in the event of second or subsequent conviction with imprisonment of either description for a term which may extend to five years and also with fine which may extend to ten lakh rupees."

38. Extracted from original Judgment.

39. "Statistic obtained from the Judgment. The report also speaks about the cross border trafficking in the following way: Research on cross-border trafficking has indicated that 5000-7000 young Nepali girls were trafficked into India annually. This research also highlighted the fact that in the last decade, the average age of the trafficked girl has steadily fallen from 14 to 16 years to 10 to 14 years. These findings are supported by studies conducted by Human Rights Watch - Asia in 1995, which stated that the average age of Nepali girls trafficked into India dropped from 14 to 16 years in the 1980s to 10 to 14 years in 1991 despite the introduction of laws designed to combat trafficking of minors. Ghosh's study estimated that Nepali children constitute 20 per cent (40,000) of the approximately 2,00,000 Nepalese commercial sexual workers in India. Young girls are trafficked from economically depressed neighbourhoods in Nepal and Bangladesh to the major prostitution centres in Delhi, Mumbai and Calcutta. Social workers have reported encountering children as young as nine in Kamathipura, a red light area in Mumbai."

40. "Trafficking in women and children has become an increasingly lucrative business especially since the risk of being prosecuted is very low. Women and children do not usually come to the brothels on their own will, but are brought through highly systematic, organized and illegal trafficking networks run by experienced individuals who buy, transport and sell children into prostitution. Traffickers tend to work in groups and children being trafficked often change hands to ensure that neither the trafficker nor the child gets caught during transit. Different groups of traffickers include gang members, police, pimps and even politicians, all working as a nexus. Trafficking networks are well organized and have linkages both within the country and in the neighbouring countries. Most traffickers are men. The role of women in this business is restricted to recruitment at the brothels. The typical profile of a trafficker is a man in his twenties or thirties or a woman in her thirties or forties who have travelled the route to the city several times and know the hotels to stay in and the brokers to contact. They frequently work in groups of two or more. Male and female traffickers are sometimes referred to as dalals and dalalis (commission agents) respectively and are either employed by a brothel owner directly or operate independently. Often collusion of family members forms an integral part of trafficking with uncles, cousins and stepfathers acting as trafficking agents. In March, 1994 Human Rights Watch Asia interviewed several trafficked victims of whom six were trafficked into India from Nepal with the help of close family friends or relatives. In each case, the victim complained of deception." (Extracted from original Judgment)

41. Hereinafter referred as ITPA.

42. The Central Government has evolved the national plan of action to combat trafficking and commercial sexual exploitation of women and children in 1998. It is submitted that there has now been a very careful realization that the plan for rescue and rehabilitation must be through a conceptual map. The said map gives a very good indication of the initiatives and possibly its positive and negative outcomes. (As per the Original Judgment)

43. Section 15 – “Search without warrant-(1) Notwithstanding anything contained in any other law for the time being in force, whenever the special police officer or the trafficking police officer, as the case may be, has reasonable grounds for believing that an offence punishable under this Act has been or is being committed in respect of a person living in any premises, and that search of the premises with warrant cannot be made without undue delay, such officer may, after recording the grounds of his belief, enter and search such premises without a warrant. (2) Before making a search under sub-section (1), the special police officer or the trafficking police officer, as the case may be shall call upon two or more respectable inhabitants at least one of whom shall be a woman of the locality in which the place to be searched is situate, to attend and witness the search, and may issue an order in writing to them or any of them so to do: Provided that the requirement as to the respectable inhabitants being from the locality in which the place to be searched is situate shall not apply to a woman required to attend and witness the search. (3) Any person who, without reasonable cause, refuses or neglects, to attend and witness a search under this section, when called upon to do so by an order in writing delivered or tendered to him, shall be deemed to have committed an offence under section 187 of the Indian Penal Code (45 of 1860). (4) The special police officer or the trafficking police officer, as the case may be, entering any premises under sub-section (1) shall be entitled to remove therefrom all the persons found therein. (5) The special police officer or the trafficking police officer, as the case may be, after removing the person under sub-section (4) shall forthwith produce him before the appropriate magistrate. (5A) Any person who is produced before a magistrate under sub-section (5), shall be examined by a registered medical practitioner for the purposes of determination of the age of such person, or for the detection of any injuries as a result of sexual abuse or for the presence of any sexually transmitted diseases. Explanation.-In this sub-section, “registered medical practitioner” has the same meaning as in the Indian Medical Council Act, 1956 (102 of 1956). (6) The special police officer or the trafficking police officer, as the case may be, and other persons taking part in, or attending, and witnessing a search shall not be liable to any civil or criminal proceedings against them in respect of anything lawfully done in connection with, or for the purpose of, the search. (6A) The special police officer or the trafficking police officer, as the case may be, making a search under this section shall be accompanied by at least two women police officers, and where any woman or girl removed under sub-section (4) is required to be interrogated, it shall be done by a woman

police officer and if no woman police officer is available, the interrogation shall be done only in the presence of a lady member of a recognised welfare institution or organisation. Explanation.-For the purpose of this sub-section and section 17A, “recognised welfare institution or organisation” means such institution or organisation as may be recognised in this behalf by the State Government. (7) The provisions of the Code of Criminal Procedure, 1973, (2 of 1974) shall, so far as may be, apply to any search under this section as they apply to any search made under the authority of a warrant issued under section 94 of the said Code.”

44. Extracted from Original Judgment.

45. “Learned Solicitor General submitted that Child Welfare Committees are empowered committees under Section 31(1) of the Juvenile Justice Act. However, the standards employed by the Child Welfare Committees are not the same across the country. In order to set up uniform standards, the direction relating to review of Child Welfare Committees must be re-examined. All Superintendents of Jail must report upon a review within 15 days from today whether any person who is a child is in custody of the jail, if so, the said person must be produced immediately before the Magistrate empowered to try offences under the Juvenile Justice (Care and protection) Act, 2000. The said Magistrate must set out a report in relation to the circumstances under which such a child has been lodged in jail to the Chief Justice of the concerned High Court. Thereafter the High Court may forward a report to this Court for passing of appropriate orders in relation to the welfare of the child.” (Extracted from the original Judgment)

46. “...After the completion of the enquiry if the Committee is of the opinion that the said child has no family or ostensible support, it may allow the child to remain in the children’s home or shelter home till suitable rehabilitation is found for him or till he attains the age of 18 years....”

47. Hereinafter referred as JWB.

58. It is submitted that the book on Trafficking in Women and Children in India edited by Shanker Sen along with P.M. Nair, IPS is a useful document. In a report called “Abolition of Child Labour in India” submitted by the NCPCR to the planning commission, certain useful perspectives are to be found....In a report submitted by the Ministry of Women and Child Development, 40% of India’s children have been declared to be vulnerable or experiencing difficult circumstances. They are entitled to special protection under Articles 14-17, 21, 23 and 24 of the Constitution. The concerns of child and the paradigm of child rights have been addressed suitably in various international conventions and standards on child protection including the UN Convention on the Rights of the Child (UNCRC), 1989, the UN Standard Minimum Rules for the Administration of Juvenile Justice (the Beijing Rules), 1985, the UN Rules for the Protection of Juveniles Deprived of their Liberty, 1990, the Hague Convention on Inter Country Adoption, 1993. India has ratified the UN Convention on the Rights of the Child in 1992. The Convention inter alia prescribes standards to be adhered by all state parties in securing the best interest of the child. (Extracted from original Judgment)

49. "The ICPS programmes are now brought under one umbrella and are as follows: a) Care, support and rehabilitation services through child-line; b) Open shelters for children in need in urban/semi-urban areas; c) Family based non-institutional care through sponsorship, foster care, adoption and aftercare". (From original judgment)

50. These should be catalogued and there should be a central registry which will provide information about the status of the child-line services at the local level. It should be the District Magistrate who must be responsible for the effect running of the child-line service. All District Magistrates in the country must post on the website their child-line service number and must give effective publicity to the services available and invite members of civil society to report any child in distress at numbers. (From the original judgment)

51. "Details of the working of the said scheme need to be collected and a database must be maintained in respect of orphans/ abandoned / destitute infants or children upto 6 years. The adoptive parents must be obliged to give reports to the District Judge who will in turn examine whether the adoptive parents have taken care of the child failing which adequate court-monitored measures may be necessary." (From the original judgment)

52. "This scheme is very important. Children who are engaged as domestic labour, working at roadside dhabas and mechanic shops have to be rescued and a bridge education has to be provided including vocational training. This must be undertaken again by identifiable points of responsibility. It is necessary that an Executive Magistrate must be allocated a certain area to be covered where children are rescued. This should be undertaken by a District Magistrate dividing his district in suitable divisions where such Executive Magistrates can rescue working children. They need to be rehabilitated. It is important that rescue will be effective only when there is scope for rehabilitation. It should not happen that in the name of rehabilitation children are put in detention homes or remand homes. That would be an act of cruelty." (From the original judgment)

53. "CARA- It is an autonomous body under the Ministry of Women and Child Development to promote in-country adoption and regulate inter-country adoption. CARA also helps both Indian and foreign agencies involved in adoption of Indian children to function within a regulated framework, so that such children are adopted legally through recognised agencies and no exploitation takes place."

54. "NCLP- Under this Scheme, project societies at the district level are fully funded for opening up of Special Schools/Rehabilitation centers provide non-formal education, vocational training, supplementary nutrition, stipends, etc. to children withdrawn from employment."

55. Extracted from original Judgment.

56. "Policies, programmes and structures to prevent children from falling into difficult circumstances are mostly lacking. This pertains both to policies to strengthen and empower poor and vulnerable families to cope with economic and social hardship and challenges and thus be able to take care of their

children, as well as to efforts to raise awareness of all India's people on child rights and child protection situation."

57. "i) Poor implementation of existing laws and legislations; ii) Lack of linkages with essential lateral services for children, for example, education, health, police, judiciary, services for the disabled etc; iii) No mapping has been done of the children in need of care and protection or of the services available for them at the district, city and state levels; iv) Lack of coordination and convergence of programmes/services; v) Weak supervision, monitoring and evaluation of the juvenile justice system.

58. i) Most of the children in need of care and protection, as well as their families do not get any support and services; ii) Resources for child protection are meagre and their utilization is extremely uneven across India; iii) Inadequate outreach and funding of existing programmes results in marginal coverage even of children in extremely difficult situations; iv) Ongoing large scale rural urban migration creates an enormous variety and number of problems related to social dislocation, severe lack of shelter and rampant poverty, most of which are not addressed at all; v) Lack of services addressing the issues like child marriage, female foeticide, discrimination against the girl child, etc; vi) Little interventions for children affected by HIV/AIDS, drug abuse, militancy, disasters (both manmade and natural), abused and exploited children and children of vulnerable groups like commercial sex workers, prisoners, migrant population and other socially vulnerable groups, etc; vii) Little interventions for children with special needs, particularly mentally challenged children."

59. "i) Structures mandated by legislation are often inadequate; ii) Lack of institutional infrastructure to deal with child protection; iii) Inadequate number of CWCs and JJBs. iv) Existing CWCs and JJBs not provided with requisite facilities for their efficient functioning, resulting in delayed enquiries and disposal of cases."

60. "i) Inappropriate appointments to key child protection services leading to inefficient and non-responsive services; ii) Lack of training and capacity building of personnel working in the child protection system; iii) Inadequate sensitization and capacity building of allied systems including police, judiciary, health care professions, etc; iv) Lack of proactive involvement of the voluntary sectors in child protection service delivery by the State UT Administrations; v) Large number of vacancies in existing child protection institutions."

61. "i) Improper use of institution in contravention to government guidelines; ii) Lack of support services to families at risk making children vulnerable; iii) Overbearing focus on institutional (residential care) with non-institutional (i.e. non-residential) services neglected; iv) Inter-state and Intra-state transfer of children especially for their restoration to families no provided for in the existing schemes; v) Lack of standards of care (accommodation, sanitation, leisure, food etc.) in all institutions due to lower funding; vi) Lack of supervision and commitment to implement and monitor standards of care in institutions; vii) Most 24-hour shelters do not provide all the basic facilities required, especially availability of shelter, food and mainstream education; viii) Not all programmes address

issues of drug abuse, HIV/AIDS and sexual abuse related vulnerabilities of children;ix) None of the existing schemes address the needs of child beggars or children used for begging;x) Minimal use of non-institutional care options like adoption, foster care and sponsorship to children without home and family ties;xi) No mechanism for child protection at community level or involvement of communities and local bodies in programmes and services;xii) Serious services and infrastructure gaps leading to few adoptions;xiii) Cumbersome and time consuming adoption services;xiv) Lack of rehabilitation services for old children not adopted through regular adoption processes;xv) Aftercare and rehabilitation programme for children above 18 years are not available in all states, and where they do exist they are run as any other institution under the JJ Act, 2000."

62. "It is necessary that poor families must be discouraged from placing their children into institutional care as a poverty coping measure. Institutionalized children have to be re-integrated into families. The following portion of the sponsorship scheme is relevant:3.1 It is submitted that this can be monitored by a representative of the Comptroller and Auditor General/Accountant General of each State as well as the Health Secretary incharge of Child Development in each State."(from the original judgment)

63. Hereinafter referred as DCPS.

64. "In view of the directions suggested, the Child Welfare Committee must directly come under the supervision of the District Judge/Judge of the High Court, it is submitted that the above implementation must also be overseen by a Court-monitored mechanism. There must be an annual report by CARA. The said report must be scrutinized by a Secretary incharge of family and social welfare. On 9th September, 2009, an office memorandum was issued by the Ministry of Home Affairs." (From the original judgment)

65. Hereinafter referred as Education Act.

66.3 Right of child to free and compulsory education-(1) Every child of the age of six to fourteen years shall have a right to free and compulsory education in a neighbourhood school till completion of elementary education.(2) For the purpose of subsection (1), no child shall be liable to pay any kind of fee or charges or expenses which may prevent him or her from pursuing and completing the elementary education:Provided that a child suffering from disability, as defined in clause (i) of section 2 of the Persons with Disabilities (Equal Opportunities, Protection and Full Participation) Act, 1996, shall have the right to pursue free and compulsory elementary education in accordance with the provisions of Chapter V of the said Act.

# PLEA BARGAINING IN ADMINISTRATION OF CRIMINAL JUSTICE IN INDIA: CONVENIENCE AND CONSENSUS

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## ABSTRACT

*India is a second largest democratic country in World. Being a democratic country the people of India always demands for good governance. People demands for social justice from which they can enjoy their fundamental rights which is ensured by the Constitution of India. A big challenge has come in the society regarding the delivering of quality of justice by the Indian justice delivery system is the delay in the dispensation of justice. 'Justice delayed is justice denied' is really a burning problem in present time.*

**Keywords:** Justice, Ple bargaining, criminal justice system

## INTRODUCTION :

Basically the Indian Judiciary is well known for its impartiality, independence and justice oriented approach. The term 'Justice' has wider meaning. Justice denotes which is fair, just and reasonable. The preamble of our Constitution provides 'justice' – social, economic and political to all its citizens. So right to get justice is a basic right. Therefore right to get speedy trial is also an important attribute of good governance.

Imparting quality of justice depends upon the public trust and confidence in the legal system. But at present heavy back-log of cases in the courts and inordinate delay in dispensing of justice is so extended that it is shaking public faith and confidence. Speedy trial is the need of the hour in recent time. Speedy trial is the essence of criminal justice which will keep intact the public faith and confidence. Cases are pending for long time in the courts denotes the oppression not only to the litigants but also society too.

Supreme Court in case of **Kadra Pahadiya vs. State of Bihar**<sup>2</sup> has held that "it is crying shame upon our adjudicatory system which keeps men in jail for years on end without jail."

In **Hussainara Khatun vs. Home Secretary, State of Bihar**<sup>3</sup> the Supreme Court held that "right to a speedy trial" is a fundamental right is implicit in the guarantee of life and personal liberty enshrined in Article 21 of the Constitution. In United States speedy trial is one of the constitutionally guaranteed right under the Sixth Amendment. **Bhagawati, J.** Held that unlike the American Constitution speedy trial is not specifically enumerated as a fundamen-

tal right, it is implicit in the broad sweep and content of Article 21.

In a significant judgment in **Abdul Rehman Antuley vs. R.S.Nayak**<sup>4</sup> the Supreme Court has laid down detailed guidelines for speedy trial of an accused in a criminal case but it declined to fix any time limit for trial of offences. The court held that the right to speedy trial flowing from Article 21 available to accused at all stages. Article 21 will be violated if there is any denial of speedy justice and unnecessarily delay is made.

Famous Jurist **Late Nani a Palkivala** has said "If I were asked to mention the greatest drawback of the administration of justice in India today, I would say that it is **DEALY**. There are inordinate delays in the disposal of cases. We, as a nation, have some fine qualities, but a sense of the value of time is not one of them. Perhaps there are historical reasons for our relaxed attitude to time. Ancient India had evolved the concepts of eternity and infinity. So what do thirty years, wasted a litigation, matter against the backdrop of eternity? Further we believe in reincarnation, what does it matter if you waste this life? You will have many more lives in which to make good. I am not aware of any country in the world where litigation goes on for as long a period as in India. Our cases drag over a length of time, which makes eternity intelligible. The law may or may not be an ass, but in India it is certainly a snail of our cases proceeds at a pace which would be regarded as unduly slow in a community of snails. Justice has to be blind but I see no reason why it should also be lame; here it just hobbles along, barely able to walk"<sup>5</sup>.

In number of cases the Supreme Court has pronounced 'right to speedy trial' is a fundamental right guaranteed



under Article 21 of our constitution. Judiciary must be cautious regarding the disposal of cases within a stipulated time so that litigants "right to speedy trial can be preserved as much as possible.

Several strategies and techniques have been taken into consideration to reduce burden of courts and ensure speedy disposal of cases. 'Plea Bargaining' is one of the strategy has been introduced through Criminal Law (Amendment) Act, 2005 by the Parliament under chapter XXI-A in the Code of Criminal Procedure, 1973 which deals with practice and procedure of plea bargaining. The concept of 'Plea Bargaining' is in place in a several countries. The concept of Alternative Dispute Resolution System has also been introduced through the Criminal Law (Amendment) Act, 2005 into the Criminal arena. The ADR system affords to all member of the society to resolve the dispute without proceeding trials. Implementation of ADR mechanism in criminal justice process is to provide speedy and less expensive justice to the people. The ADR system helps to bring the mutual solution among the disputed parties without maintaining all the formalities of the courts by establishing a contact in between the accused and victim.

The Present article is trying to elaborate the reasons for inserting 'plea bargaining' in criminal justice system in India. It is also endeavoured to highlight the convenience of the concept when it is based on the consensus of parties and utility of plea bargaining after removing some probable challenges.

### **DEFINITION AND CONCEPT OF PLEA BARGAINING :**

Plea bargaining provides pre-trial negotiation between the accused and prosecution where the accused agrees to plead guilty in exchange for certain concession in sentence. In a sentence, under a condition the guilty is pleaded by the accused, where the accused seeks leniency over punishment. Black's Law Dictionary defines the plea bargaining is a worldwide recognized model definition as "The process whereby the accused and the prosecutor in a criminal case work out a mutually satisfactory disposition of the case subject to court approval. It usually involves the accused pleading guilty to a lesser offence or to a lesser offence or to only one of some of the court of a Multi-Court indictment in return for a lighter sentence than that possible for the grave charge<sup>6</sup>"

The Wikipedia Encyclopedia defines plea bargaining is to make an agreement in which the defendants pleads guilty to a lesser charge and the prosecutors in return drops more serious charges.

The chief element of plea bargaining is mutual consensus. The salient features of plea-bargaining are as follows:

- Plea-bargaining is applicable only for those offences for which punishment of imprisonment is up to a period of seven years.
- Plea-bargaining will not be applicable where an offence affects the socioeconomic condition of the country or has been committed against a woman or a child below the age of 14 years.
- The application should be filed by the accused voluntarily.
- An accused must file an application for plea bargaining in the court where such offence is pending for trial.
- Time is to be provided both the accused and prosecution to resolve the dispute mutually which may extend to include giving compensation to the victim by the accused.
- Where satisfactory disposal of the case has been completed, the court shall dispose of the case by sentencing the accused one-fourth of the punishment provided or extendable.
- The fact or statement explained by the accused in an application should not be used for any other purposes other than for plea-bargaining.
- The decision given by the court is final and no appeal shall lie in any court against such decision.
- Plea bargaining must be approved by the court for its enforcement.
- Plea bargaining is possible not only the prior to trial but it may occur anytime before a verdict is rendered or not.

There are mainly three types of Plea Bargains —

- Charge Bargain: where the prosecutor allows the defendant to plead guilty to a lesser charge or some of the charges are filed against accused.
- Sentence Charge: Where the defendant is informed in advance what sentence will be reduced to if he pleads guilty.
- Fact Bargain: Where the prosecutor agrees not to reveal aggravating factual circumstances to the court.

### **Plea- Bargaining – Position in England :**

In England the plea bargaining was taken more subtle form where the courts are still cautious about conserving their powers of passing a sentence in open court. Here the plea bargaining is allowed only to the extent that the prosecutors and the defence can agree that the defendant will plead guilty to some charges and the prosecutor will drop the remainder. The courts in these jurisdictions have made it plain that they will always decide what the appro-

appropriate penalty is to be. No bargaining taken place over the penalty.<sup>7</sup>

### **Plea-bargaining-position in U.S.A :**

It is used in the American Judiciary in the 19<sup>th</sup> century itself. The Bill of Rights makes no mention of the practice when establishing the fair trial principle in the 19<sup>th</sup> Amendment but the constitutionality of the plea bargaining had constantly been upheld there. In the year 1969, James Earl Ray pleaded guilty to assassinating Martin Luther King, Jr. to avoid execution sentence. He finally got an imprisonment of 99 years. More than 90 percent of the criminal cases in America are never tried. The majorities of the individuals who are accused of a crime give up their constitutional rights and pleads guilty. Every minute, a criminal case is disposed off in an American Court by way of a guilty plea or nolo contendere plea. In a landmark judgment *Bordenkircher vs Hayes*, the US Supreme Court held that the constitutional rationale for plea bargaining is that no element of punishment or retaliation so long as the accused is free to accept or reject the prosecutions offer. The Apex Court however upheld the life imprisonment of the accused because he rejected the 'plea Guilty' offer of 5 years imprisonment. The Supreme Court in the same case, however in a different context observed that, it is always for the interest of the party under duress to choose the lesser of the two evils. The Courts have employed similar reasoning in tort disputes between private parties also. In Countries such as England and Wales, Victoria, Australia, 'Plea Bargaining' is allowed only to the extent that the prosecutors and defence can agree that the defendant will plead to some charges and the Prosecutor shall drop the remainder. The European countries are also slowly legitimizing the concept of plea bargaining, though the Scandinavian countries largely maintain prohibition against the practice.<sup>8</sup> In *Santobello vs New York*<sup>9</sup> it was observed that the success of plea bargaining as a procedure leading to high conviction has been proven in the United States, where its constitutionality has been upheld. The United States experiment focuses that plea bargaining accelerates the disposal of the accumulated cases and expedites delivery of justice. In the 19<sup>th</sup> century, courts gradually started accepting guilty pleas by the 20<sup>th</sup> century, the vast majority of criminal cases started being resolved with plea bargaining.

### **Plea Bargaining – position under Indian Law :**

In India, position is not similar with US Law. It has come in the Amendment Act of 2005 in the code of criminal procedure, but every time it was opposed by the court of law. The initiation of plea bargaining has to be by accused which is different from US law. The cardinal difference from US law stands that under Indian law provides

for number of negotiations between the accused and the prosecutor or with the court itself. In India, unlike US law the plea bargaining is not applicable for socio economic offences or the offences against women and children.

Law Commission of India in its 142<sup>nd</sup> and 154<sup>th</sup> report recommended the concept of plea bargaining in India. It was observed by those report that this tool will be alternative to be applied to deal with huge backlog of criminal cases. Later on Malimath committee supported this view and also cited the success rate of US law and recommended to insert this particular wing in the legal system. According the reports the plea bargaining will help in procuring speedy trial, providing certainty, saving of cost of litigation, avoiding prolonged trial and legal expenses of the parties. It was welcomed when the offences are not serious in nature and the effect is mainly on the victim not on the society, it is amicable to encourage settlement without trials.

On the basis of the recommendation of the law commission, the new chapter on plea bargaining making plea bargaining in cases of offences punishable with imprisonment upto seven years has come into effect from 05.07.2006. The chapter XXIA dealing with plea bargaining will prescribe certain procedures for plea bargaining under sections 265-A to 265-L of Cr.P.C are to be followed to make it a valid plea bargaining. Under section 265-A of Cr. P.C, the plea bargaining shall be available to the accused charged of any offence other than offences punishable with death or imprisonment for life of an imprisonment for a term exceeding seven years. Section 265-B contemplates an application for a plea bargaining to be filed by the accused which shall contain a brief description of the case relating to which such application is filed, including the offence to which the case relates and shall be accompanied by an affidavit sworn by the accused stating therein that he has voluntarily preferred, after understanding the nature and extent of the punishment provided under the law for the offence, the plea bargaining in his case that he has not previously been convicted by a court in a case in which he had been charged with the same offence. Sub clause 4(a) is to the effect that if the court is satisfied with the voluntary nature of the application, then it shall provide time for working out a mutually satisfactory disposition of the case which may include giving to the victim by the accused compensation and other expenses. Section 265C prescribes the procedure to be followed by the court in working out a mutually satisfactory disposition. Section 265D deals with the preparation of the report by the court as to the arrival of a mutually satisfactory disposition or failure of the same. Section 265-E prescribes the procedure to be followed in disposing of the cases when a satisfactory disposition of the case is worked out. Sec-

tion 265-F deals with the pronouncement of judgment in terms of such mutually satisfactory disposition. Section 265-G says that no appeal shall lie against such judgment. Section 265-H deals with the powers of the court in plea bargaining. Section 265-I makes Section 428 applicable to the sentences awarded on plea bargaining. Section 265-J contains a non obstante clause that the provision of the chapter shall have effect notwithstanding anything inconsistent therewith contained in any other provisions of the code and nothing in such other provisions shall be construed to contain the meaning of any provision of chapter XXIA. Section 265-K says that the statements or facts stated by the accused in an application for plea bargaining shall not be used for any other purpose except for the purpose of the chapter. Section 265-L makes the chapter not applicable in case of any juvenile or child as defined in section 2(K) of Juvenile Justice (Care and Protection of Children) Act, 2000.<sup>10</sup>

### THE VIEW OF INDIAN JUDICIARY OVER PLEA BARGAINING :

There are several reasons for introducing the concept of plea bargaining such as:

1. Speedy disposal of criminal cases i.e. reduction in heavy backlogs
2. Less time consuming
3. End of uncertainty of cases
4. Savings legal expenses of both the parties i.e. accused and state
5. Less congestion in jails
6. Under present system, 75% to 90% of the criminal cases results in acquittal, in this situation it is preferable to introduce the concept in India
7. It is not fair to keep the accused with hard-core criminals because if the accused is innocent then he will accept his guilt and in this situation, it is not reasonable.

In spite of those advantages of plea bargaining, the Judiciary of India has criticized the concept of plea bargaining in number of cases. In the case of *Murlidhar Meghraj Loyal vs. State of Maharashtra*<sup>11</sup> Supreme Court opined as under "we are free to confess to haunch that the appellants had hastened with their pleas of guilty hopefully, induced by an informal, tripartite understanding of light sentence in lieu of Nolo contender stance. Many economic offenders resort to practices the Americans call 'plea bargain', 'plea negotiation', 'trading out' and 'compromise in criminal cases' and the trial Magistrate drowned by a docket burden nods assent to the sub rosa anteroom settlement. It is idle to speculate on the virtue of negoti-

ated settlement of criminal cases, as obtained in the United States but in our jurisdiction, especially in the area of dangers economic crimes and food offences, this practice intrudes on society's interests by opposing society's decision expressed through predetermined legislative fixation of minimum sentences and by subtly subverting the mandate of the law."

In the case of *Kasambai vs. State of Gujraj*<sup>12</sup> the Supreme Court held that the concept of 'plea bargaining' is opposed to public policy and if an accused is to be convicted by inducing him to plead guilty by holding out a light sentence as an allurement.

In the recent case of *State of Uttar Pradesh vs. Chandrika*<sup>13</sup> the Supreme Court held that "Mere acceptance or admission of Guilt should not be a ground for reduction of sentence."

Though the Judiciary did not recognize it but it has got legislative recognition and victim may get following benefits;

- He can easily get the compensation
  - He can save himself from long term judicial process
  - Money and time both are saved.
- Apart from that Accused himself enjoys some advantages;
- In case of minimum punishment, he will get half punishment
  - If no such punishment provided, then he will get one fourth of the punishment provided
  - He may be released on probation or admonition
  - He may get the gain of period already undergone in custody under section 428 of Cr.P.C [i.e. period of detention undergone by the accused to be set off against the sentence of imprisonment]
  - No appeal lies against the judgment in favour of him
  - Admission of accused cannot be used for any other purposes except for plea bargaining
  - Time and money both are saved.

### ACCEPTABILITY OF PLEA BARGAINING – CONVENIENCE OVER CONSENSUS AND ITS MAJOR DRAWBACK :

The main reason of introducing plea bargaining in Indian Criminal Justice system is that it will keep our system active and dynamic. Successful plea bargaining will ensure quick resolution of cases involving petty offences and courts will be able to concentrate on the case involving serious offences and fulfilling its constitutional obligation to provide a speedy trial. It will play a vital role to reduce

the load over the courts as well as increasing productivity as evident by the experience of United States. Reducing backlog of the cases via plea bargaining in the court is laudable but it suffers major drawbacks:

- In the process of plea bargaining the involvement of Police would tempt coercion on innocent people. Sometimes police make accused to poor innocent people where they have to accept their guilt which they had never committed. In recent time where the acquittal rate is as high as 90% to 95%, where the poor who is the victims of this system which leads to miscarriage of justice.
- Though in procedure pleas are voluntary, there are every chances being practically coerced by prosecution.
- Sec 265-D deals with the report of the mutually satisfactory disposition to be submitted before the court, there is no provision which provides the parties any option to withdraw even if it is a result of fraud, misrepresentation or under pressure etc.
- Severe allegations made by the Human Rights Experts on the ground that police creates extreme pressure upon accused to apply for pursuing plea bargaining.
- Section 265-G of the Criminal Procedure Code denies the right to appeal. It is violative of article 21. This practice is arbitrary and unreasonable.
- Successful implementation of plea bargaining system depends upon the cooperation of all involved parties e.g. the judge, accused, victim, witness, lawyers, prosecutors and police officers. Default by any one of them may result in the delay of disposal of cases or even miscarriage of justice.

#### RECOMMENDATION :

It is evident that plea bargaining is faster and convenient than going through the cumbersome trial process. Therefore, following safeguards shall be maintained

- Judicial independence and impartiality
- Full and timely disclosure of prosecution case
- Mutual disposition record must be transparent and consistent
- Plea must be voluntary
- The role of the judge must be fair and impartial
- The legal awareness camp on plea bargaining must be held at regular intervals in jails as well as rural and urban sides.
- Special training may be arranged for the prosecutors for speedy trials
- Special Judge for plea bargain to deal with the plea bargaining applications.

- The role of the bar is important as the member of the bar should encourage the litigant to opt for the plea bargaining rather than to treat the plea bargaining a threat to their profession.
- Any court order rejecting a plea bargaining application must be preserved confidential to prevent prejudice to the accused.

#### CONCLUSION :

It is real the concept of plea bargaining is one of the valuable step which can be used as a helping hand to reduce the backlog of cases and to accelerate the concept of speedy trial. Speedy trial is essence of criminal justice and it is true that delays in trial makes denial of justice but one thing should be remembered that justice hurried is justice buried so delivering justice with speedy trial should not cause any injustice to the victims. A balance is required in between the speedy trial and delivering justice to the proper litigant. Initially, the concept of plea bargaining was criticized by a group of society including legal experts and intellectuals by saying that it will undermine and demoralize the public trust and confidence in criminal justice system and it will be partial and biased from which rich class of the society will get the benefit and innocent people will be the sufferer. A speech of Indian judiciary that more than three crore cases are pending in courts throughout the country. Indians jails have capacity of 2.56 lakh prisoners but there are more than double number prisoners behind bars. The state governments have to spend huge money just because of delayed criminal justice system. Plea bargaining will help to reduce backlog under Indian Judiciary and numbers of prisoners in jails also though there is a clear cut constitutional provision to provide speedy trial is to be fulfilled.

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# THE EXTERNAL SECTOR AND ECONOMIC GROWTH OF INDIA

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## ABSTRACT

*This paper examines the trend in the behavior of the external sector of Indian Economy and its impact on economic growth since 1982. The dynamics of the external sector has been captured in terms of the behavior of some indices like the index of trade integration, financial integration, net external position (NEXT), equity integration and also by studying the behavior of the current account balances, the capital account balances and the position of net foreign asset (NFA) as well as international reserves. For capturing the long run dynamics of causality between economic growth and the various indices we have made time series econometric analysis. It has been found that the net external position.*

**Keywords:** Trade integration, Growth, NEXT, NFA.

## I. Introduction:

It is well known that in an open economy macroeconomic structure the behavior of the macro fundamentals as well as the macro variables relating to the external sector of any economy cannot be independent of the behavior of the same in the global economy especially in the economies with which the former is integrated. Similar is the case of macroeconomic policies of any economy also. In fact the macro policies of any open economy cannot also function independently of the policies adopted by its counterpart and so these policies cannot yield contemplated outcomes unless the counteractive policies cannot yield contemplated outcomes unless the counteractive policies adopted by other countries with which the former economy is linked be favorable. The nature of inter-relationship between the macro fundamentals and especially the fundamentals of the external sector is well known from the conventional theoretical wisdom on the international economics. Obviously in an open economy macro structure not only the aggregate demand of an economy contains an external part (i.e. the demand for exportable) depending on the exchange rate and the domestic income of the foreign country but the aggregate supply of the country concerned also constitutes a part known as import component which depends on the exchange rate as well as the domestic income. Further if we consider the balance of payment (bop) of an economy then we see that the surplus in the same simply means the accumulation of foreign asset and the deficit implies the reverse i.e. the decumulation of assets i.e. the liabilities to the foreigners. The former happens when the domestic absorption is less than the national output and the latter occurs when the reverse occurs. Conversely we find all kinds of accommodating trans-

actions in the capital account of bop i.e. the sale of assets, bonds, borrowing and the reverse depending on whether the current account runs deficit or surplus. Therefore all kinds of international transactions which take place in the external sector of an economy are likely to affect not only the levels of income or output of the economy but also the growth and stability of the economy. Further the changes in the policies adopted by the countries relating to the external sector may also bring about change in the nature and magnitude of the international transactions. Given this theoretical perception we examine the behavior of the external sector of Indian economy and its impact on her economic growth since 1950-51 as it is well recognized that Indian economy has occupied a prominent position amongst the emerging market economies in the globe especially since globalization. This has mainly been reflected in terms tremendous increase in her growth rate and the inflow of foreign capital both in the form of FDI and FPI. As a fall out, India, like that of China is performing the role of leadership towards the maintenance of global economic growth and stability. We have actually tried to capture the dynamics of the external sector in terms of the behavior of some indices like the index of trade integration, financial integration, net external position (NEXT), equity integration and also by studying the behavior of the current account balances (CAB), the capital account balances (KAB) and the position of the net foreign asset (NFA) as well as international reserves since independence. For capturing the long-run dynamics of causality between economic growth and the various indices we have made time series analysis.

Now if we see the behavior of Indian economy then it is found that we have been able to increase the annual growth rate of our real GDP from around 2% to a maxi-

num of 9.7% and the spurt in the growth rate has occurred since 2003-4 especially since when our economy has been experiencing service sector revolution. The volume of trade has indeed increased tremendously over a long period since independence nevertheless our economy has been experienced current account deficit throughout the period excepting for a few years. This has accompanied by a persistent increase in the inflow of foreign capital in the form of FDI including the technical and financial collaboration and also in the form of equity investment and portfolio investment especially since the inception of the policy of liberalization in 1991. Surprisingly the inflow of foreign portfolio investment has increased to such a large extent due to the policy of equity integration that it constitutes about 75% of total inflow of foreign capital to our economy. Obviously this has created buoyancy in respect of foreign exchange reserve of our economy such that the reserve position has improved tremendously from its poor position in the late 90's. The increase in the international reserve due to the financial integration of our economy has led to the tremendous improvement in the monetary base of our economy. Alongside this seems to have produced some impact on the domestic money supply also thereby contributing towards the increase in the rate of inflation which is of course partly due to the supply side constraint of our economy. Further as a result of the increase in the inflation rate there has been substantial appreciation on the real exchange rate which has made the domestic goods costlier to the foreigners and has helped reducing the export demand thereby creating adverse impact on our BOP also.

It is also known that the behavior of the external sector is also partly the outcome of the attitude as well as the policies followed by the Govt. from time to time towards this sector. If we focus on the same then it is found that immediately after independence our Govt. followed the strategy of import substitution industrialization with its main focus on the development of heavy industry including the machinery manufacturing sector and also the infrastructure. Because of poor domestic saving (10% of GDP in early 50s) and the foreign exchange crisis of 1957-58 and also because of the poor and limited domestic skills, entrepreneurship the Govt. followed the liberal policies towards the inflow of FDI including its collaborative form and also to trade regime for the period from 1950 to 1968. However this policy continued to impose heavy costs to our economy due to large remittance by the foreign corporate to their home countries. So the Govt. introduced FERA Act in 1973 and continued to follow restrictive attitude towards the inflow of foreign capital during the 70's. As a fall out India's exportable continued to become qualitatively inferior in the world market because of poor technology and so the manufacturing exports continued to fall. Consequently, our Govt. again continued to follow the policy

of deregulation of external sector through the global liberalization of trade regime and expose the domestic industry to foreign competition during the 80's. Eventually the policy of full-fledged liberalization of trade and gradually of the financial and social sector with caution came into force since 1991. Therefore it is obvious that the liberalizing attitude to the inflow of foreign capital and trade has been in operation almost throughout the period of economic development since independent excepting for 70's. This process of policy evolution is likely to produce a robust impact on India's economic growth. So we can expect a long-run positive impact of the behavior of external sector on the growth and volatility of Indian economy. This is actually one of the motivations of this study and under this backdrop we have tried to estimate the long-run relationship between economic growth and the external sector liberalization as well as inflation.

## II. Literature Review:

As far as the literature relating to the relation between the external sector liberalization especially the financial sector liberalization and economic growth is concerned we find cross current of ideas so that issues has become much more controversial. In fact the issue of the capital account liberalization raised a storm of controversy amongst the economists especially after the East Asian Crisis in 1997-98. While some economists and even the IMF were in favor of the financial openness (Bhagwati, 1998; Rodrik, 1998; Stiglitz, 2003). The conventional view about the financial globalization has been that it would help the flow of capital from high income countries with high capital labour ratio for boosting their economic growth as the poor countries suffer from saving constraint. But it is found by Lucas that the flow of capital from industrial countries is very small and rather the emerging market economies have been acting as net exporter of capital to the richer industrial countries in the form of accumulation of foreign exchange reserve which are mainly being invested in the industrial country Govt. bonds (Lucas, 1990). There have indeed been a good number of studies which have investigated the relation between the cross-border foreign capital flow and economic growth. The cross-country regression literature and the panel data analysis do not confirm any definite evidence of positive relation between financial openness and economic growth in the developing countries (Kose, Prasad, Rogoff and Wei, 2006; Prasad, Rajan and Subramanian, 2007; Prasad et al, 2003; Henry, 2006). It is also argued that the financial integration does not produce growth effect at the initial stage of development especially when there is no sufficient development of institutional and financial structure. Rather at the initial level of development it is risky for the developing countries. In fact after a threshold level of development the financial openness becomes growth effective. So there

is a positive relation between the financial openness and the economic growth for the industrially developed countries. However some argue that the financial integration may have a catalytic effect on the development of the robust financial structure in the developing countries. It has also some collateral benefits towards the development of sound institutional structure by making the financial sector more competitive and enhancing the corporate governance system which in turn will boost the economic growth. It is further argued that the collateral benefits will accrue and exceed the cost of capital account liberalization if and only if the economy crosses the threshold level of institutional development. Henry (2006) however argues that the growth effect of equity market liberalization is likely to be of short duration unless there is sufficient growth of productivity through financial market development. In an analysis based on general equilibrium model Gourinchas and Jaenne (2006) argues that the effect of the opening up to capital inflows on GDP growth is likely to be small as the productivity growth is the main explanatory factor of long-run growth of an economy. But it is true that financial development in concomitant of successful economic growth and a growing financial sector of an economy open to trade cannot be insulated from cross-border financial flow. In fact openness to trade implicitly involves the partial openness of finance through the cross-border flow of financial resources. So the larger the volume of cross-border trade, the larger will be the volume of transaction of foreign currency through the financial sector i.e. the central bank even if there is no full-fledged financial openness or capital account liberalization. So the higher the rate of growth of an economy, the higher will be the functioning of the external sector including the financial sector. For instance Chinese policy of trade liberalization has played an important role to woo the majority proportion of FDI from East Asian countries which has used China as an export processing platform. However the country specific study on the long-run causality between the economic growth and the external sector liberalization is still scarce. This has also motivated us to undertake such an econometric study for Indian economy by covering the period from 1950-51 to 2008-09. The rest of the paper is organized as follows. Section III explains the nature and sources of the data used in this study. It also focuses on the methodology. Section IV analyses the econometric results and finally the section V presents the concluding part.

### III. Data and Methodology:

The data series that we have used in this study are mainly taken from the Hand Book of Statistics on line data of Reserve Bank of India (RBI) and also from the various issues of International Financial Statistics (IFS) published by IMF. The data on GDP, Export (X), Import (M), Forex

reserve or International Reserve (IR), Current Account Balance (CAB), Capital Account Balance (KAB), for the period from 1950-51 to 2008-09 are taken from RBI. We have taken the GDP series both at current and constant prices and then constructed a GDP series at constant 1999-2000 price and also computed the inter-temporal growth rates of GDP. Further we have computed a series of GDP implicit deflator and used the same as a proxy of inflation. On the other hand, the data series on the total foreign asset (FA) and foreign liabilities (FL) including their components (viz. direct investment abroad and in India; portfolio investment including its components i.e. equity securities and debt securities on both asset and liability sides; other investments (viz. debt instruments such as loans, deposits and trade credits); reserve assets; banks and general Govt. transactions) are not available for the entire period of our study. However the data on FA and FL including their all components are now being published by RBI and also by the IMF in the form of International Investment Position since 1997.

Fortunately the IMF in its various issues of IFS is publishing the monetary authorities' data series for various countries since 1950. Interestingly the monetary authorities' data series contains the data set relating to all kinds of financial transactions and reserve of the monetary authorities of the countries. This data measure the creation of reserve money comprising currency in circulation and the deposits of the deposit money banks and also the demand deposit of the private sector with the monetary authorities. The data focus on the sector classification of assets and liabilities with the latter further classified by degree of liquidity. On the asset side, foreign assets are shown gross of highlight the functions of the monetary authorities as the holder of international reserves and other foreign claims. The domestic assets are classified as claims on deposit money banks and if sizable, claim on official entities and the private sector. The financial liabilities constitute of the reserve money, foreign liabilities and Govt. deposit. In fact the monetary authorities' data in IFS consolidate the account of the central bank with the account arising from monetary functions of the Govt. such as the issuance of currency or holding of international reserves and position vis-à-vis the fund (IFS, IMS 1988).

Now since the data series in the form of total FA and FL as is shown in International Investment Position in IFS are not available for the entire period of our study i.e. before 1997, we use the data series of FA and FL from monetary authorities' data of IFS as proxy of financial integration. By using this data we have formed an index of financial integration (FINOPEN) of our economy in terms of the sum of FA and FL scaled by real GDP. Using the same series we have constructed the data series on the net foreign asset (NFA) position of India as well as China by

taking the difference between the FA and FL which is also scaled by the real GDP series. Further we have we have measured the net external position of India and China since 1950 by using an index (NEXT) which is formed by taking the difference between the changes in the NFA and CAB (Lane and Ferretti, 2007). On the other hand, we measure the trade integration (TRADEOPEN) of our economy in term of the ratio of X+M to the real GDP. Using these indices we have made the co-integration and the vector error correction analysis.

Further since the monetary authorities' data series on FA and FL are gross proxies for total cross-border financial transaction of our economy, we have also used the transactions in our Capital Account in the form of asset-liability as another surrogate for financial integration by forming all the above indices. Once again we have done the same time series econometric analysis for estimating the long-run relationship between the GDP growth and FINOPEN, NFA, as well as NEXT.

Since the full fledged data series on FA and FL including its all the component are available in international investment position of IFS since 1997, we have expressed these values in real term (at 1999-2000 prices) and constructed the indices like FINOPEN, NEXT, NFA and run the cross-time regression (OLS) for estimating the relation between the GDP growth and all the indices. It is expected that this will reflect the effect of full fledged liberalization of our economy we have computed Co-efficient of Variation (C.V) for almost all the macro variables by dividing the total period onto two phases viz. (i) 1950-51 to 1990-91 i.e. pre-reform and (ii) 1991 to 2008 post-reform.

Since any time series data especially the macroeconomic data involve a stochastic process, one has to examine whether the data generating process is a stationary stochastic process or a non-stationary stochastic process before undertaking any estimation of long-run causality relationship between the series. We have done this by applying firstly the Augmented Dicky-Fuller (ADF) test and secondly the non-parametric alternative to ADF (as there is the problem of size distortion and low price in ADF) the Philips and Perron (PP) test. We have incorporated both the intercept and trend component in ADF estimated relation as follows.

$$\Delta Y_t = \alpha + \beta_1 + \rho_{t-1} + \sum_{i=1}^p \gamma_i \Delta y_{t-i} \ln X_{t-1} + \sum_{i=1}^n \gamma_j \ln Y_{t-j} + \psi ECM_t + u_t \quad (4)$$

The ADF statistic is the t-value associated with the estimated coefficient of  $\rho$ , the probability distribution of which is a function of Weiner process which is used to explain the Brownian motion of a particle with large number of molecular shocks (Maddala and Kim, 1998). The

PP test that we have used is actually a non-parametric extension of the DF unit root test through the addition of a correction factor to the DF t-statistics. We have done both of the tests for all the logarithmic values of the series of indices and also for their first difference, by choosing the lag length in terms of the Akaike Information Criterion (AIC). After conducting the unit-root tests for examining the stationarity of the series, we have estimated the long-run causal relationship between the stationary series of our indices by applying the tests for cointegration and the estimation of cointegrating relationships i.e. Engle and Granger (1987) tests. Engle and Granger have shown that if two series are cointegrated then there will be a causal relation between the series in at least one direction. This helps to integrate the short-run dynamics with the long-run equilibria so that our indices move together over time. Again to capture the short-run dynamics of disequilibria we have applied the vector error correction model (ECM) which helps correcting the past periods disequilibrium. The analysis of short-run dynamics is done by first eliminating trends in the variables by taking the difference. This process is likely to give us more potential valuable information about long-run relationships between the indices (variables). In fact the Granger representation theorem explains the process of modeling the cointegrated I (I) series in the form of Vector Auto Regression (VAR) such that it can be constructed either in terms of levels (logarithmic values) of the data series, with the addition of an Error Correction Mechanism (ECM) to capture the short run dynamics.

For any two variables X and Y the model can be presented in the following forms of equations (2 to 5) such that the equations 4 & 5 incorporate the ECM.

$$\ln Y_t = \alpha + \sum_{i=1}^m \beta_i \ln X_{t-i} + \sum_{i=1}^n \gamma_j \ln Y_{t-j} + u_t \quad (2)$$

$$\ln X_t = \mu + \sum_{i=1}^p \pi_i \ln X_{t-i} + \sum_{i=1}^r \xi_j \ln Y_{t-j} + v_t \quad (3)$$

$$\Delta \ln Y_t = \alpha + \sum_{i=1}^m \beta_i \ln X_{t-i} + \sum_{i=1}^n \gamma_j \ln Y_{t-j} + \psi ECM_t + u_t \quad (4)$$

$$\Delta \ln X_t = \mu + \sum_{i=1}^p \pi_i \Delta \ln X_{t-i} + \sum_{i=1}^r \xi_j \Delta \ln Y_{t-j} + \psi ECM_{t-1} + v_t \quad (5)$$

Where  $u_t$  and  $v_t$  are the random disturbances with zero mean and they are serially uncorrelated; ECM represents the error correction mechanism for capturing short run dynamics.



#### IV. Analysis of Econometric Results of India:

The results of the unit root tests are given in table-1 where both the ADF test statistics and the PPP statistics are given in the upper part of the table and the lower part of the table presents the critical values of the test statistics at 1%, 5% and 10% levels. It follows that the null hypothesis of the presence of

**Table-1**  
**Estimated Statistics of Unit Root Tests Series**

ADF	PP		
Log(GDP)	0.454176	1.564247	
ΔLog(GDP)	-9.337181	-9.453819	
Log(NFA)	-2.659083	-1.908668	
ΔLog(NFA)	-5.450134	-3.85253	
Log(FINOPN)	-2.340334	-1.806938	
ΔLog(FINOPN)	-5.066767	-5.10178	
Log(GDPD)	-3.377243	-3.766004	
ΔLog(GDPD)	-6.359132	-6.359132	
NEXT	-7.305636	-7.303575	
Δ(NEXT)	-5.947225	-2.851709	
Log(TRADEOPEN)	-2.309826	-6.186778	
<b>Test Critical Values</b>			
1% level	-4.133838	-4.133838	
5% level	-3.493692	-3.493692	
10% level	-3.175693	-3.175693	

Source: Author's Computation from RBI and IFS data.

Now since the ADF and PP test statistics reveal that the GDP and all the indices as well as variable like FINOPEN, TRADEOPEN, NFA, NEXT, GDPD series are integrated in order one, we may have common long run trend between them through cointegration. So for capturing the long run equilibrium relations between the variables we have estimated the cointegrating the relationship between the series by applying Johanson's cointegration test. We have estimated both the trace test i.e. the LR test and the maximum eigen values. The estimated statistics of cointegration test for the relation between GDP growth and FINOPEN and TRADEOPEN are given in table-2(A) and 2(B) above. The trace statistics or the LR test statistics are given in the upper part of the tables and the maximum eigen values are given in the lower parts of the table. The trace statistics in the tables clearly indicate that there is one cointegrating equation at the 0.05 level of significance for all the series. Further the likelihood statistics corresponding to eigen values given in the tables which are used to test the hypothesis of the presence of cointegrating relations i.e. the long run equilibrium relations between the series against the alterna-

**Table - 2 (A)**

**Estimate Statistics of Cointegration Tests for GDP Growth and the Financial Openness**

	Hypothesized number of Cointegration equation	Eigen Value	Statistic	5% Critical Value	Prob.
Trace	None	0.416881	31.03625	15.49471	0.0001
	At Most 1	0.014746	.0831912	3.841466	0.3617
Max. Eigen Value	None	0.416881	30.20434	14.2646	0.0001
	At most 1	0.014746	0.831912	3.841466	0.3617

Source : Author's Computation from RBI and IFS data.

**Table - 2 (B)**

**Estimate Statistics of Cointegration Tests for GDP Growth and the Financial Openness**

	Hypothesized number of Cointegration equation	Eigen Value	Statistic	5% Critical Value	Prob.
Trace	None	0.475026	36.69149	15.49471	0
	At Most 1	0.034458	0.893541	3.841466	0.1688
Max. Eigen Value	None	0.475026	34.79795	14.2646	0
	At most 1	0.034458	1.891466	3.841466	0.1688

Source : Author's Computation from RBI and IFS data.

tive hypothesis of full rank are also higher than the critical values at 5% level. Further the p-values also indicate the high probability of rejection of the null hypothesis of the absence of cointegrating equation. So we find that there are cointegrating relationship i.e. the long run causal relationship between GDP growth and FINOPEN, TRADEOPEN, NFA and NEXT. Further there are also cointegrating relation i.e. the long run equilibrium relations between the series against the alternative hypothesis of full rank are also higher than the critical value at 5% level. Further the p-values also indicate the high probability of rejection of null hypothesis of the absence of cointegrating equation. So we find that there are cointegrating relationship i.e. the long run causal relationship between GDP growth and FINOPEN, TRADEOPEN, NFA and NEXT. Further there are also cointegrating relation i.e. the long run equilibrium relation between the GDP growth and GDPD (inflation and the financial integration) FINOPEN.

Now to confirm the persistence of the long run causal relation between the GDP growth and other indices and also between the GDPD and FINOPEN we have made the maximum likelihood estimates of the co-efficient of the cointegrating equations where GDP growth (GGDP) is treated as explained variable and other indices viz. FINOPEN, TRADEOPEN, NFA, NEXT are used as explanatory variables. The table-3 below presents the maximum likelihood estimate of the cointegrating coefficients. We have seen that the unrestricted cointegrating rank test (i.e. the trace test and the maximum eigen value) has confirmed the presence of long run equilibrium relations between gdp growth and other indices. Here in table-3 the maximum likelihood estimates of the cointegrating coefficients are also found to be statistically significant. So these estimates also confirm the presence of long run equilibrium relations between the series. But the signs of the coefficients in all the cases are negative. So it is plausible to say that there is no positive long run relation between the GDP growth and the trade integration, finan-

**Table-3**  
**Maximum Likelihood Estimation of Cointegrating Coefficients**

Dep. Var.	$\Delta$ GGDP				$\Delta$ LGDPD	$\Delta$ LGDPD
Independent Var.						
LFINOPEN(-1)	-1.682749					
	[-4.18099]					
LTRADEOPEN(-1)		-1.017043				
		[-5.26193]				
NEXT(-1)			-0.02377			
			[-5.30727]			
LNFA/GDP RATIO(-1)				-1.02958		
				[-3.77522]		
LFINOPEN(-1)					-1.50184	
					[-4.97162]	
GGDP(-1)						-0.81984
						[-9.18496]
C	-10.25923	-8.56061	-4.52997	-18.2445	-7.86895	0.882348

Source: Author's Computation.

cial integration, NEXT and net foreign asset position. The same relation also holds for GDPD and FINOPEN. So our results also confirm the existing hypothesis in the literature that there is no long run positive relation between the GDP growth and the external sector openness especially the financial openness for the developing countries because of their inadequate robust financial and institutional development. Since in India the full fledged external sector liberalization has been introduced since 1991 the long run effect is likely to be small and even negative.

It may be noted that the above results are computed by using the data series of monetary authority's data IFS as proxy of foreign assets and liabilities.

Further to capture the short run dynamics in the frame of VAR with error correction mechanism (ECM) we have estimated the vector error correction model (equations 4 & 5) such that signs of the error correction parameters indicate whether the short run disequilibrium due to external shocks are being corrected. We can say that in case of inflation rate measured by GDPD the short run disequilibrium due to external shocks are not being corrected so as to reach the long run steady state inflation rate, in other words the short run dynamics is not being captured in this case. However for the variables NEXT, NFA the error correction parameters are positive and statistically significant which clearly indicate that the short run disturbances are not being corrected to converge with the long run equilibrium path. So in case of NEXT and NFA the short run disturbances matter. Further it follows from the table that the FINOPEN, TRADEOPEN, NEXT and NFA have no significant short run effect on the GDP growth. Moreover it also follows from the table 3E that the FINOPEN has no significant short run effect of the inflation GDPD. So the higher rate of inflation measured in terms of GDP deflator can be explained by the domestic supply side constraint instead of external sector effect. But if we estimate the relation between growth and the external sector indices when the transaction is our capital account (KA) in the form of FA and FL is used as proxy for constructing the indices of Financial Integration, NFA and NEXT then also we have almost same result in our economic analysis excepting a few cases. Before undertaking the estimation of cointegrating equations and the vector error correction model, we have made ADF unit root test for judging the stationarity of the series and also to see whether the series are integrated in common order. The table-4 reports the ADF statistics along with their critical values.

**Table-4**  
Estimated Statistics of Unit Root Tests Series ADP

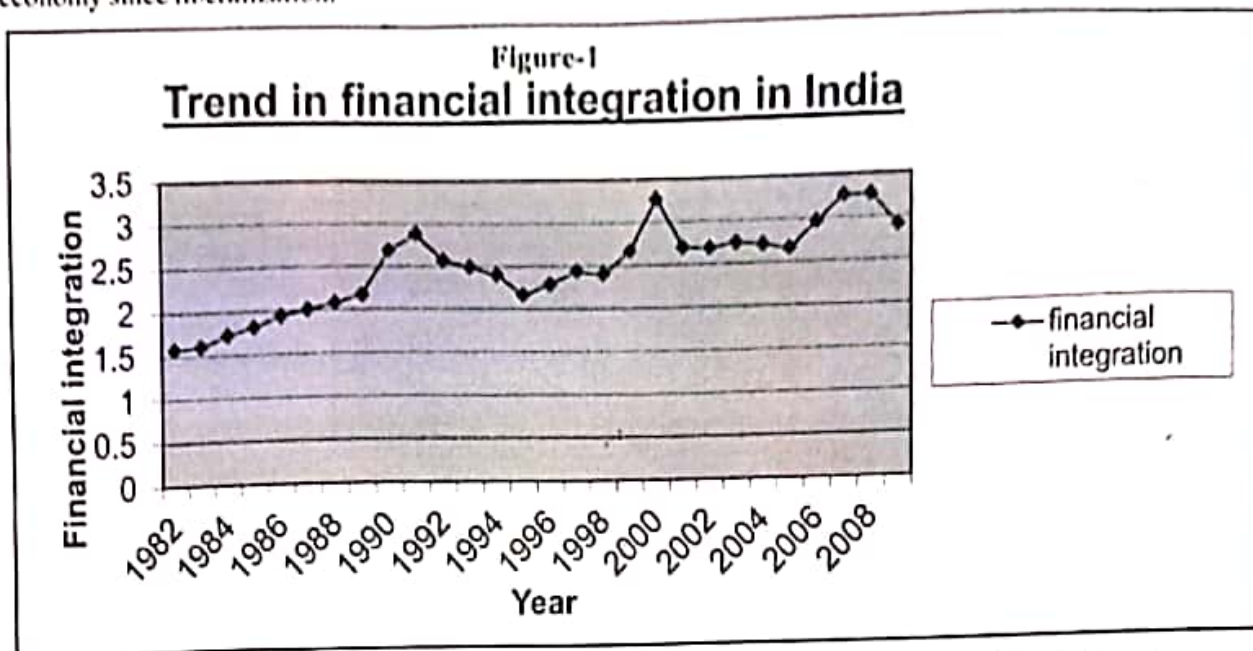
FINOPEN(KAB)	1.906261
$\Delta$ (FINOPEN)(KAB)	-7.300267
NEXT	-4.989525
$\Delta$ (NEXT)	-7.259687
RNFA(KAB)	-1.106132
$\Delta$ (RNFA)(KAB)	-8.912543
GGDP	-7.687546
<b>Test Critical Values</b>	
1% level	-3.568308
5% level	-2.921175
10% level	-2.598551

Source: Author's Computation from RBI and IFS data.

It follows that the variables FINOPEN and real NFA are non stationary in their levels but are stationary at their first differences. On the other hand the series NEXT and GGDP i.e. growth of GDP are stationary. So the series can be integrated in the same order I(1). Thus it is likely that we may have a common long run trend and thus we once again estimate the cointegrating relationship between the GGDP and the FINOPEN, NEXT and NFA by applying the Engle-Granger cointegration method. So our results once again confirm the existing hypothesis in the literature that there is no long run positive relation between the GDP growth and the external sector openness especially the financial openness for the developing countries because of their inadequate robust financial and institutional development. Since in India the full fledged external sector liberalization has been introduced since 1991 the long run effect is likely to be small and even negative.

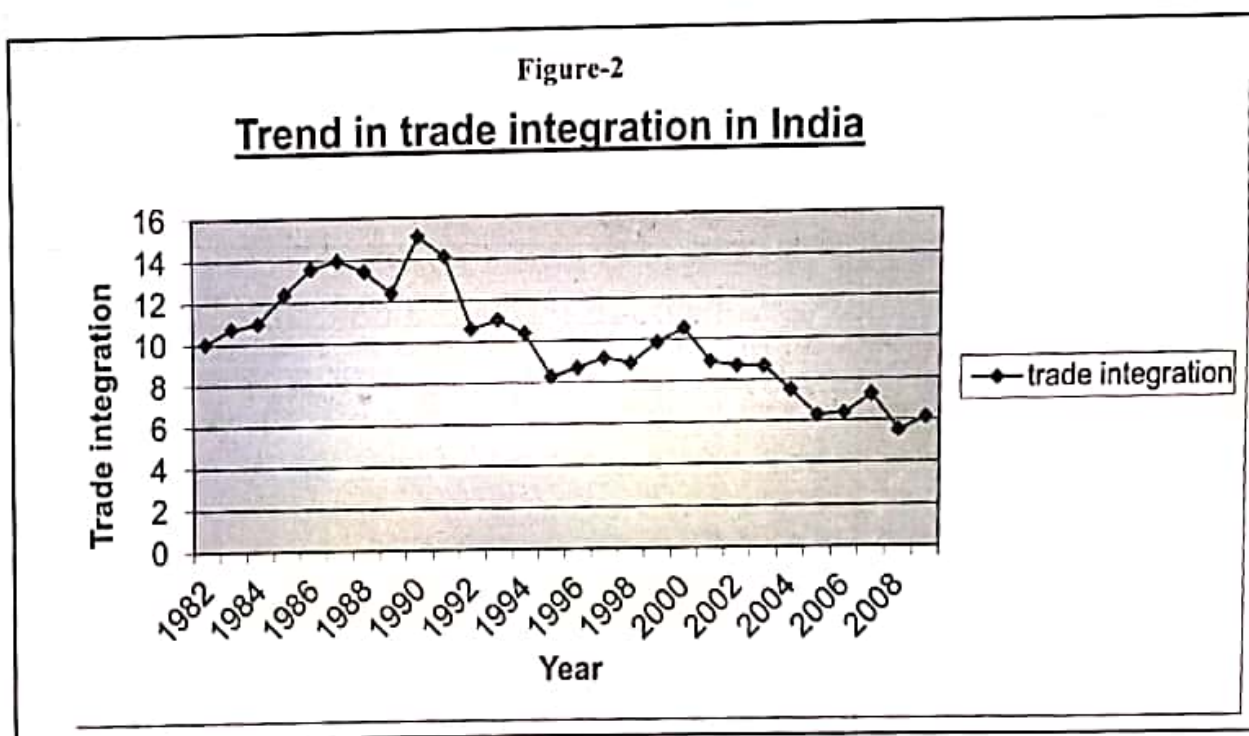
Now to capture the nature of financial integration of our economy since the inception of the process of globalization we have constructed another index of financial integration which is the sum of the portfolio equities (asset plus liabilities) and FDI stocks (assets plus liabilities) in real term scaled by real GDP for the period 1997 to 2006 on the basis of the data available from the international investment position of IFS. The Fig-1 represents the behavior of the indices of financial integration. It is quite clear from the figure that our economy has experienced a gradual increasing trend in financial integration up to 2002 followed by a steady increasing trend thereafter. So we find an exponentially increasing cross-border equity position of our economy since the period of globalization. This further indicates that there has been a remarkable shift in the structure of external position of

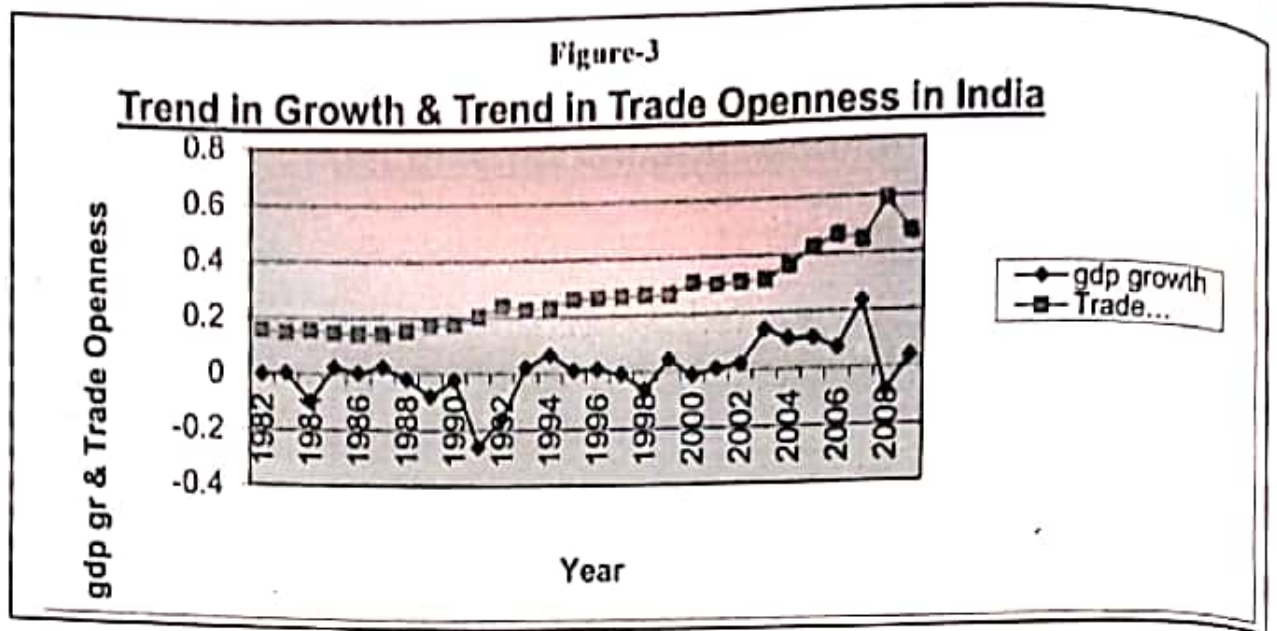
our economy since liberalization.



Further it is also true that with the opening up of our economy especially with the gradual increase in the financial openness the domestic financial assets have been brought into the ambit of portfolio decision of the wealth holders of the developed and also other developing countries. This has indeed led to a sharp increase in the inflow of FPI and FDI to our economy. Now to capture the dependence of our economy on debt financing especially the equity based financing of our economy we have again constructed an index of equity integration for the period from 1982 to 2008 by following Lane and Ferretti (2007) method. The equity integration is the ratio of the sum of

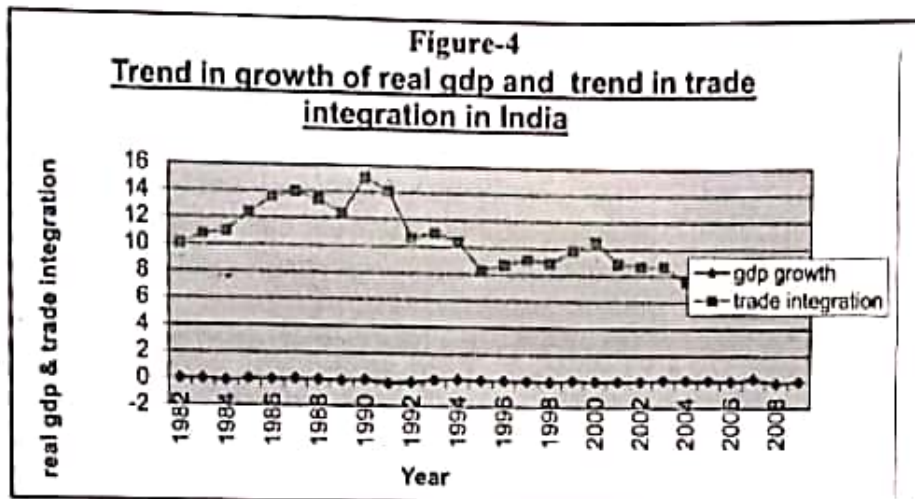
portfolio equity liability and the FDI liability to the total foreign liabilities in real term. We present the behavior of the indices in fig-2 which clearly reveals an exponentially increasing trend in equity integration of our economy since 1999. Therefore we can say that the portfolio equity liabilities and FDI liabilities as a proportion of total external liability of our economy have also increased sharply during the period of globalization. Interestingly, this has not produced any adverse effect on the growth and stability of our economy including the price stability. Rather we have been able to sustain our high conspicuous growth rate of GDP.





In fig-3 we have tried to show the relationship between the trends of growth i.e. real gdp growth and the trend in trade openness. It has been observed that the trend in real gdp growth remained more or less the same throughout the period having some fluctuations in the year 1990 and in the year 2006. In the year 1990 it had shown a

down ward trend and in the year 2006 it had shown an upward trend. In case of trade openness i.e. growth in trade up to the year 1990 i.e. prior to liberalization or globalization the rate was the same near 0.2% but after globalization the rate showed a steady rise. It rose to 6% in the year 2008 after 2008 there was a fall in the rate.



In fig-4 we have shown the relationship between the trend in real gdp growth and trend in trade integration. The gdp growth was more or less the same throughout the period but the trade integration has shown an upward trend in the year 1990 it was the maximum then after 1990 it fell and after the year 2004 it remained more or less the same.

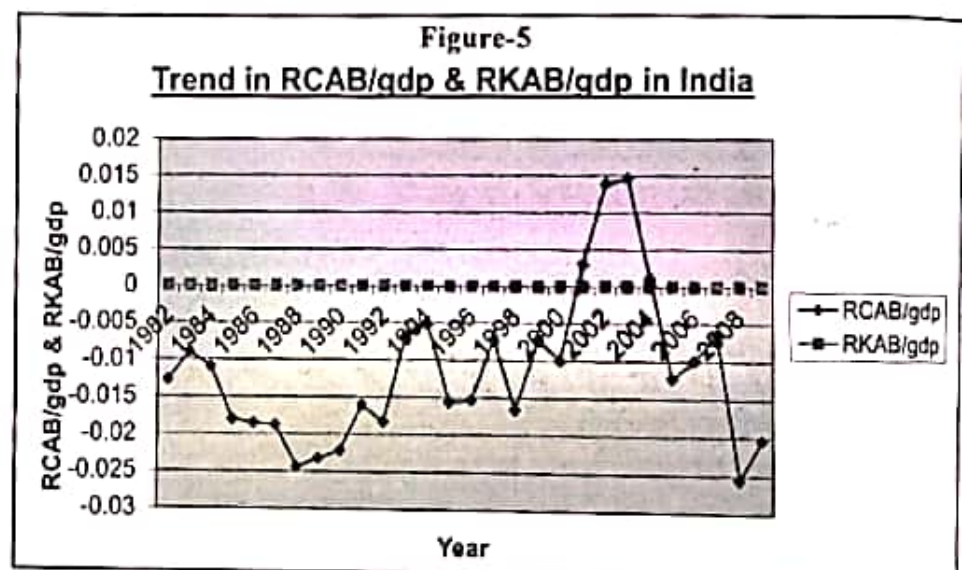


Fig-5 shows the trend in RCAB/gdp ratio i.e. the ratio of real current account balance and gdp as well as the trend in RKAB/gdp ratio i.e. the ratio of real capital account balance and gdp. The real capital account balance showed no growth throughout the period whereas the real capital account balance showed a down ward trend from the year 1984 and it reached a minimum level in the year 1990. After 1990 it started recovering and after the year 2002 it showed a steep upward trend. Again after the year 2008 it showed a downward trend.

Fig-7 shows the trend in real NFA (Net Foreign Asset) throughout the period. It has been observed that there was a fall in the foreign asset after the year 1990. In the year 1996 it showed an upward trend then after 2000 it showed a steep fall again after the year 2006 it showed an upward rise.

Fig-8 depicts the trend in net external position of India throughout the period. From the figure it is clear that there was a tremendous fluctuation in the data throughout the period.

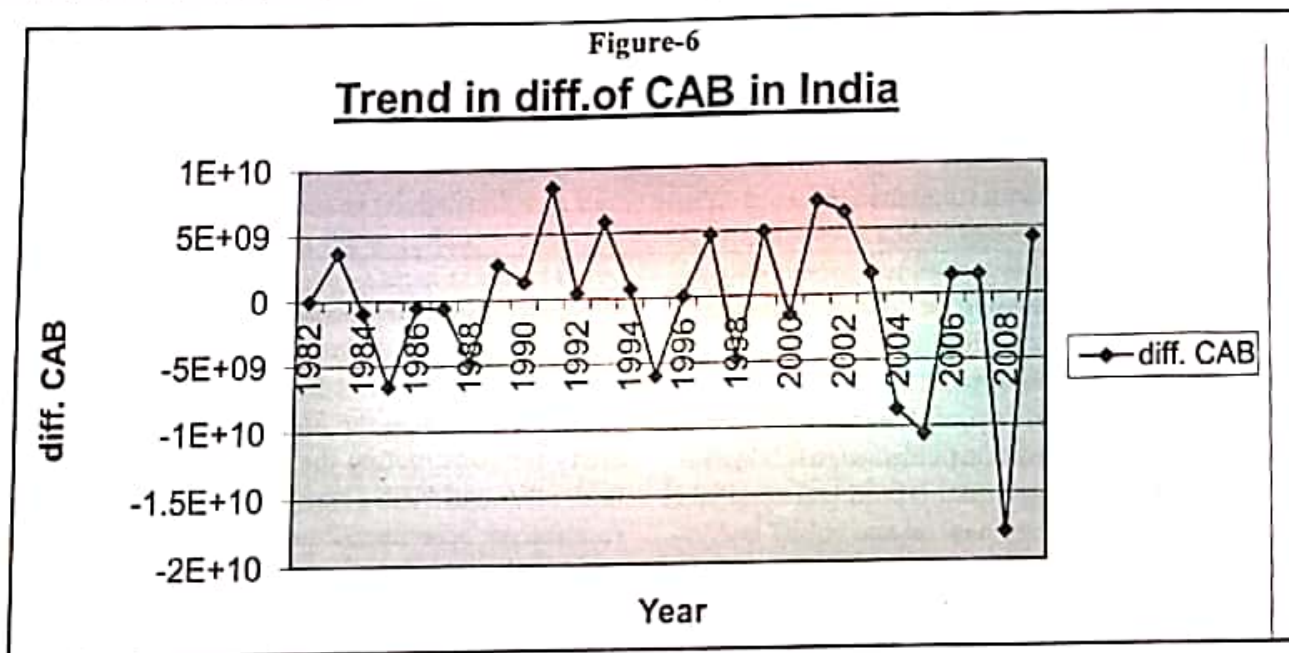


Fig-6 shows the diff, of CAB i.e. the change of current account balance throughout the period. The figure shows clear fluctuations through the period.

#### V. Concluding Remarks

In this paper we have tried to examine dynamics of the behavior of the external sector of Indian Economy and

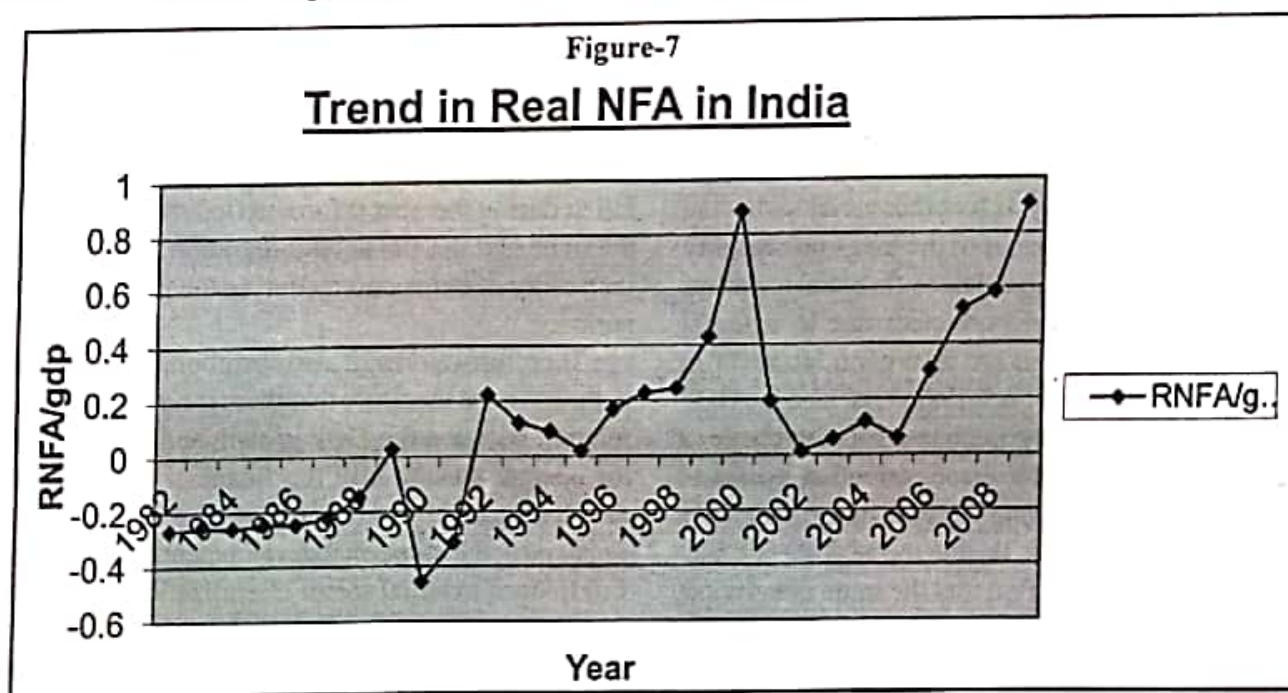
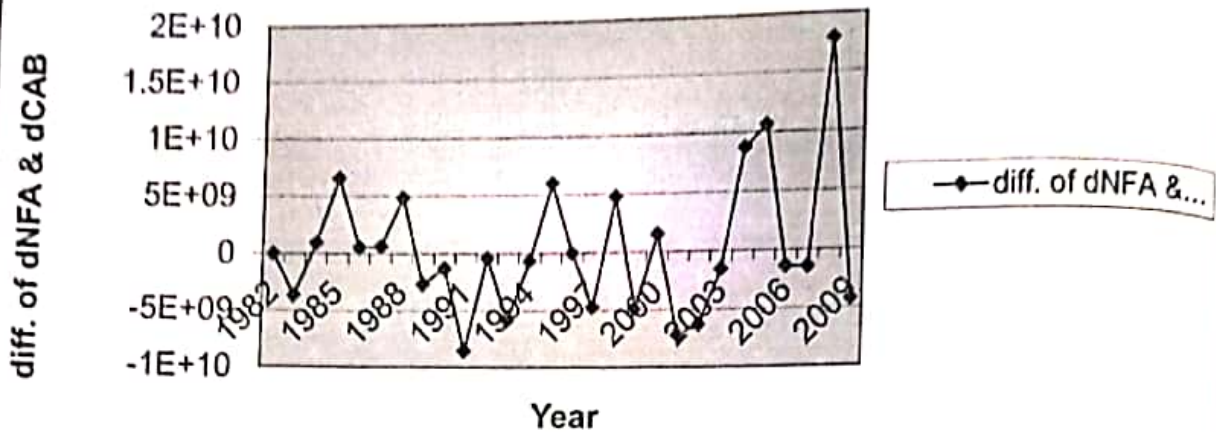


Figure-8

## Trend in net external position in India



its impact on economic growth from 1982 to 2009. This is due to unavailability of data after 2009. We have made this analysis by using different sets of data series taken from monetary authorities' data of IFS and from data on International Investment position published in IFS by IMF and also from RBI. It is found that since liberalization the discrepancy in NFA and the financial and equity integration of our economy have increased significantly. The econometric analysis (ADF and PP tests for stationarity of series) reveals that all the indices as well as the variables including the GDP growth are non-stationary at their levels but are stationary at their first differences. The co-integration analysis clearly establishes the long-run equilibrium relations i.e. causality between the GDP growth and trade integration, financial integration, the NFA, NEXT. The vector error correction estimates also confirm the correction of short-run disturbances from long-run steady state path (i.e. convergent). This happens in the case of relation between growth and financial integration, trade integration, NEXT and NFA. The similar result is also found from the co-integration analysis for other variables but the vector error correction estimates of the long-run causality between the domestic inflation and the financial openness reveals that the short-run disturbances due to external shocks are not corrected and are divergent. However in case of the relation between the inflation rate and the GDP growth although the co-integration analysis establishes a long-run causality, the vector error correction estimates reveal the divergence from long-run path due to short term disturbances which seems to be due to the domestic supply side constraint. But we find that the trade integration, the financial openness, the NFA and the net external position have no significant positive long-run contribution towards the growth of our economy. However, they have significant positive contribution to GDP growth in the short-

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run especially during the post liberalization period. Further if we estimate the relation between Growth and the external sector indices when the transaction in our capital account (KA) in the form of FA and FL is used as a proxy for constructing the indices of financial integration, NFA and NEXT then also we have almost same result in our econometric analysis excepting a few cases. Further the regression analysis for capturing impact of the full fledged liberalization on growth reveal that the variables TRADEOPEN, FINOPEN and NFA are statistically significant with positive signs. So we can safely conclude that the financial openness, trade openness and the net foreign assets position have significant positive impact on the GDP growth of our economy during the period of globalization. Further it is plausible to say that the result also supports the view that the financial integration has short-run positive effect on the GDP growth. However, the computed CVs for all the series for the pre and post liberalization period also reveal that the degree of volatility of the indices and the GDP growth has fallen during the post reform period. So we can say that the trade and the financial integration have reduced the instability of our economy during the post liberalization period.

Therefore our result also corroborate the existing hypothesis in the literature that there is no long-run positive relation between the GDP growth and the external sector openness especially the financial openness for the developing countries because of their inadequate robust financial and institutional development. Since in India the full fledged external sector liberalization has been introduced after 1991, the long-run effects is likely to be small and even negative, but the short-run positive contribution of the process of globalization towards the growth and stability of our economy is confirmed by our study.

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# ROLE OF CPRs IN A VILLAGE ECONOMY: AN EVALUATIVE STUDY

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## ABSTRACT

*The importance of Common Property Resources (CPRs) to the dwellers of the villages is no longer in question. Different forms and manifestations of CPRs play a crucial role in the development of India's rural economy through income and employment generation in providing livelihood to the poor people of that locality by way of collection of commons apart from another source of income and employment.*

*The planners and policymakers of our country usually overlook the socio-economic as well as cultural importance of Common Property Resources. As a result, the CPRs upon which the vast majority of the rural poor are depended for their survival become the worst sufferer when development programmes are launched. The marginalisation of the rural poor from their age-old socio-economic and cultural rights over the CPRs constitutes the real "tragedy of commons" in India.*

**Key-words: CI, CPRs, CSROR, LRROR, TI.**

## INTRODUCTION

All kinds of Common Property Resources (CPRs) play a vital role in providing livelihood to the poor in general in Rural as well as Urban areas. These types of resources are of crucial importance to the poor, particularly poor woman, who is the main participants in collecting these resources, in terms of sustaining their livelihood (Beck, 1994).

In the context of villages in the dry regions of India, CPRs perform several functions. Their contribution to People's Employment, Income generation and Asset accumulation are numerous (Jodha, 1980).

'Commons' means all Natural and Man-made Resources, which is used for sustaining livelihood for human life as well as animal life. There are some specific and exclusive groups those who have the common rights to utilize them. The group of individuals, households (HHs), a Para (in respect of a village), a big family by different parts, the resident of a village, a cluster of a village, a society etc. are included specific.

Right to Grazing Lands and Pastures, collects fuel and fodder for own as well as animals, right to collect fuel wood, non-timber forest produce, fodder from forests patches, right to fish collection from fish ponds, rivers,

agricultural lands, Nayanjuli, etc., right to water for irrigation and drinking, right to collect Clay and some Sand from riverbeds and river etc., right to walk, driving, transport etc. in the Roads, collects branches of trees from the Roads etc. are the examples of common Regimes (G.K.Kadekodi—2004).

**Common Property Resources (CPRs)** refer to goods that are neither completely private nor public, but collectively shared resources whose Property rights rest with a group of users (Mc-Kean, 1992).

So it can be argued that, there is a dilemma, whether, these property is either of State / Public property or Private property. It is visualized in our study that, there is no property rights in favour of commons. It is either State property or Private property.

**Property** means a “**Bundle of Rights and Obligations**”. It is usually thought of in terms of a bundle of rights and obligations as defined and protected by the Local Sovereignty. Traditionally the bundle of rights includes:

- i) Control use of the property,
- ii) Benefits from property,
- iii) Transfer or sell the property,
- iv) Exclude others from the property.

The important characteristics or elements of property rights are Access, Withdrawal, Management, exclusion and Alienation of the property.

On the other hand, CPRs are the resources to which all members of an identifiable Community have Usufructory rights.

According to **Magrath, Bromley and Carnea**, it is described as those (non-exclusive) resources in which a group of people have co-equal use rights. Membership in the group of co-owners is typically conferred by membership in some other group, generally a group whose central purpose is not the use or administration of the resources, such as village or tribe etc. (**Magrath-1986, Bromley and Carnea-1989,**)

**Jodha** defines CPRs as: “the resources accessible to the whole Community of a village and to which no individual has exclusive property rights”. (**Jodha, 1986**).

In the context of Indian villages **Jodha** categories these resources like community pastures, community forests, Wastelands (wastelands belonging to the Revenue Department of any State), common dumping and threshing grounds, watershed drainages, village ponds, rivers, rivulets-as well their banks and beds.

**Agarwal**'s developed the view of **Jodha** enumerating ‘a wide variety of essential items are gathered by rural households from the village commons and forests,

for personal use and sell: food, fuel, fodder, fiber, small timber, manure, bamboo, medicinal herbs, oils, materials for house buildings and handicrafts, resin, gum, honey and so on’.

But there is another concept namely, **Open Access Resources (OAR)**, which is defined that is everyone's property is in fact no one's property (**Gordon, 1954**). It is very similar to the conservative dictum that ‘everybody's property is nobody's property and hence it is likely to be abused, misused and overused / exploited more than the **Private Property (PPR)**’.

Many people often confuse Common Property Resources with that of open access resource where no property right is usually recognized. Some of the best examples of open access resource are the air we breathe, moon light, sunlight etc. No group, individual or state has any exclusive right over any portion of the atmospheric Oxygen. In case of common property resources rights of use are attached to specific groups or communities and non-members are excluded from their use through various types of boundary rules. The property owning groups, however, vary in size and composition with some common cultural norms and indigenous authority systems. Sometimes the state government recognizes the right to CPRs may be for the time being or may be confined to a particular community or both.

The **Santhal tribe** of West Bengal, Bihar and Orissa still enjoys hunting rights in the forests of **Ajodhya hills** in the Puruliya district of West Bengal on a full-moon night in the month of April although the patch of forest legally belongs to the State Forest Department. On that specific day the forestland becomes Common Property Resource for the adult male members of the **Santhal tribe** who enjoy hunting rights over the wild life of the region. This kind of use of the common property resource is, however, only a tip of the iceberg in terms of dependence of the rural poor on the commons. CPRs are ‘subject to individual use but not to individual possession’ (**Oakerson, 1986**). These are free goods for the individual but scarce goods for society (**Gordon—1954**). In true common property situations, use rights are shared equally and are exclusive to a well-defined group of people. But Private Property is commonly conceived of as individual property and also this property owned and held by other entities like a Company, or a Corporation, or a Co-operative Society and the property rights holding entity can legally exclude others from the benefits from it.

## DISCUSSION

According to **Chhatrapati Singh (1986:2)** till the end

of the last century, at least 80 percent of India's natural resources were common property. The CPRs then formed the backbone of India's economy, which was predominantly non-cash, and a non-market economy. Freely available wood, shrubs, and cow / buffalo dung were used for cooking and heating, mud, bamboo and other timber and palm leaves for housing, wild grasses and shrubs as fodder; and a variety of fruits and vegetables as food. Thus, no cash expenditure was required to meet the basic needs of food, fuel, housing and fodder; only physical labour and energy were necessary.

One of the pioneering researches conducted by N.S. Jodha in the mid 1980's on the CPRs in the dry regions of India has shown that CPRs contribute to employment generation, income generation and asset accumulation for rural poor.

In his another two studies in 1985 and 1990 he also analyze that a far greater reliance on CPRs for the small farmer and landless than for large farmers in the areas of grazing requirements. Collection of fuel and fodder and consumption of CPR-food for small and marginal farm households, between 31 and 42 per cent of total own farm inputs are contributed in cash or kind inflows from CPRs. Employment generated by CPRs for the poor was higher than on-farm work or public works. A drastic decline in the number of products, and increased time involved in collection, over a 30-year period was noted.

So the CPRs are very important for poor village people for their income generation, employment generation as well as their livelihood, although it is declining at very alarming rate, which is shown in the three village study of Pasha (1992), in Karnataka that CPRs made up 10 percent of gross income of poor households. The area under CPRs has declined by about 33 percent over the last 20 years and in the single village study in Ahmedabad District of Gujarat by Chen (1991) shows that the poor collect over 70 per cent of their fuel and 55 per cent of their fodder requirements, as CPRs and these resources are more important to the poor than the better off. There has been a gradual decline in CPRs in the village over the last 30 years

Although it is crucial for the poor people livelihood, but there is no proper management for these resources and the dictum is very fruitful here that 'every body's property is nobody's property'. So the village people over graze or overuse the resources and conflict arises in time of collection, which is particularly mentioned in the Beck's (1994) study in three villages of west Bengal. He pointed out that the CPRs add between 19 and 29 percent to household income of very poor villagers

and Conflict over CPRs is central to poor household's experience of poverty.

For developing countries in the early stage of economic development, the following statement generally holds:

*'Other things being equal, the higher the quantity available per capita, the better the quality and the higher the extent of utilization of the natural resources of a country, the higher the level and the faster the pace of its economic development'*.

According to Bromley (1986), some 80 percent of the world's population depends on natural CPRs for their spare and precarious existence.

One of the major causes of poverty in India, as also in other countries of the world, is lack of natural resources available to the poor. That is, most poor people are poor because they do not possess any income-generating Private Property resources (PPRs) and do not have access to CPRs or CPRs are not locally available at all in their area. Even today, most of the India's rural poor depend, to a great extent, for their livelihood on CPRs. They collect, free of charge, firewood, crop wastes, cow dung, weeds, fodder, organic manure (dry leaves' forest litter), building materials (polls, thatch and silt), fruits and vegetables, herbs, fiber etc. from CPRs. Water which is essential for survival is also collected from community ponds, lakes, rivers, canals etc. Besides, CPRs also provide raw materials for traditional occupations including art and craft, and thus indirectly support employment in these occupations.

Jodha (1986) pointed out in his study based on a survey of 82 villages in seven states in dry tropical west and south India that, CPRs add between 15 to 23 percent to poor people's income and contribute substantially to improve village equity. He estimates that the CPRs contributed Rs. 530 to Rs. 830 to the annual households income of the rural poor households in different dry regions. He further estimated that between 84 and 100 percent of the poor households gathered food, fuel, fodder, and fiber from the CPRs; in contrast, just 10 to 20 percent of the rich (large) farmers depended on the CPRs for these items.

Iyengar and Shukla (1999) observed on the basis of a survey of 15 villages of Gujarat that CPRs made up 0.1 to 11 percent of consumption expenditure of farm households and between one and 22 percent of non-farm households of rural households.

In the context of villagers of India, CPRs perform several functions: Contribution to people's employment, income generation and asset accumulation. By the estimate by Beck (2000), CPRs currently add some US \$5 billion a year to the incomes of poor natural households in India or about 12% to household income of poor rural households. This is about two and a half times of the total World Bank lending to India in fiscal 1996, about twice foreign direct investments in India in 1996, and more than twice the amount of official development assistance in the same year. CPRs are therefore of major importance to the poor.

CPRs, as sources of physical supplies as well as employment and income, eliminate the rural inequalities between the rich and the poor. CPRs also greatly contribute to the poor man's nutrition by facilitating his food gathering from forests, pond, and other sources and strengthening his self provisioning system.

*In West Bengal*, though many of these poor people, whether they belong to general caste or schedule caste or tribes, have been allotted vested land and ownership rights (called Patta), the amount is so small and the quality of the land is so poor and that they can hardly manage their families with the income from the property. Hence, they look for some other sources of income and CPRs become an important source for them. But while we recognize the importance of CPRs in the life of these poor rural people, it is also painfully observed that the areas under CPRs are gradually declining. Another important observation is that there is lack of quality management and overall planning of these resources, which has not been given adequate attention earlier. Beck and Ghosh (2000) makes several observations on the basis of a study of CPRs in seven villages in West Bengal carried out between 1993 and 1996, selected from different agro-ecological zones of West Bengal.

**The main findings from this study are:**

- i) CPRs made about 12% of poor households' income.
- ii) Fuel and fodder were the most important CPRs accessed by the poor and
- iii) Women and girls are mainly responsible for collection of CPRs.

## OBJECTIVES

- (i) To make an attempt to enquire into the nature and existence of CPRs in rural areas of Jungle Mahal.

- (ii) To investigate the contribution of CPRs towards the employment and income generation for the dwellers of the said area.

## METHODOLOGY :

For our study, at first, we select the district namely Purba Medinipur in South Bengal, on the basis of different types of CPRs, different types of collection procedure of CPRs, special features of the districts to identify the different Agro-Climatic Zones.

At the next stage, for collection of recorded data, we identified the specific Block namely *Bhagwanpur-II* and the surveyed Village / Mouza namely *Ramchak—Shyamchak (J.L.No. -248)* in the District of *Purba Medinipur* and collect information about Land Use Classification before the year 1915 (CSROR Dag No. And CSROR Khatian No. Wise) from the District Records Room of the Office of the District Magistrate, and at the next stage, collect data about Land Use Classification after 1970 (LRROR Dag No. And LRROR khatian No. Wise) from Block Land & Land Reforms Office under the Block Land & Land Reforms Officer.

This is not a stereotyped district of West Bengal, which is surrounded by one side, the Bay of Bengal; other sides are Paschim Medinipur, Orissa, and Rupnarayan River. It is a river-based district in West Bengal.

This district was formed in January 01, 2002, consisting four subdivisions, namely Tamluk, Contai, Haldia, And Egra (which was constituted in the same date from the area of Contai.) with the Districts Head Quarter at Tamluk. There is no heavy industry.

The subdivision Contai has a strong economy with Fish, Kaju-nut, agriculture, and strong Literacy rate. Quite a few agro-based cottage industries are prominent in this district.

The Block Bhagwanpur II is more or less poor area, maximum people depends on agriculture more specifically on Paddy cultivation.

## ANALYSIS AND INTERPRETATIONS :

As per the statistics of the Cadastral Settlement Record of Right (CSROR), the size of the Land Holdings of the selected area in various form are as follows:

**Table-01**  
*Land Use Classification: Total Lands 167.51 Acres.*  
*In Cadastral Settlement Record of Right (on or before 1915.).*

Private Lands (in decimals)		Government Lands (in decimals)	
Bastu	13.00	Nayanjuli	3.02
Kala Land	35.41	Bhagard	0.00
Agricultural Land	96.32	Burial Grounds	0.00
Waterbodies	14.59	Waterbodies	1.80
Roads	1.89	Roads	1.11
Mandir / Pirsthan	0.37		
Total:	161.58	Total:	5.93

*Source: Field Survey*

Also as per the statistics of the Land Reforms Record Of Right (LRROR), the size of the Land Holding of the selected area in various form are as follows:

**Table-02**  
*Land Use Classification: Total Lands 168.06 Acres.*  
*In Land Reforms Record of Right (on or after 1970.).*

Private Lands (in decimals)		Government Lands (in decimals)	
Bastu	13.00	Nayanjuli	3.02
Kala Land	35.41	Bhagard	0.00
Agricultural Land	96.32	Burial Grounds	0.00
Waterbodies	14.59	Waterbodies	1.80
Roads	1.89	Roads	1.11
Mandir / Pirsthan	0.37		
Total:	161.58	Total:	5.93

*Source: Field Survey*

The comparison and change of the total land use classification in our surveyed area in between CSROR and LRROR is shown below

**Table-03**  
**Total land Use Differences:**

Land Classification	CSROR	LRROR	Change	%Change
Bastu	13.00	25.00	+12.00	92.31
Kala Land	35.41	5.41	-30.00	-84.72
Agricultural Land	96.32	126.14	+29.82	30.96
Waterbodies	14.59	2.89	-11.70	-80.19
Roads	1.89	2.12	+0.23	12.17
Mandir / Pirsthan	0.37	0.57	+0.20	54.05
Nayanjuli	3.02	2.52	-0.50	-16.56
Bhagard	0.00	0.21	+0.21	0.00
Burial Grounds	0.00	0.50	+0.50	0.00
Waterbodies	1.80	1.55	-0.25	-13.89
Roads	1.11	1.11	0.00	0.00
Hariparia	0.00	0.04	+0.04	0.00
Total:	167.51	168.06	-0.55	-5.87

*Source: Field Survey*

From the total land use classification, we can segregate the Common Property land Resources (CPLR) in both time frame like CSROR and LRROR. And the comparison and change is shown in the following Table 04. Let us locate the CPRs from the land use pattern mentioned in the Record of Right.

**Table-04**  
**Commonly Used Common Property Land Resources:**

Land Classification	CSROR	LRROR	Change	%Change
Private Roads	1.89	2.12	+0.23	+ 12.17
Mandir / Pirsthan	0.37	0.57	+0.20	+ 54.05
Nayanjuli	3.02	2.52	-0.50	- 16.55
Bhagard	0.00	0.21	+0.21	+ 0
Burial Grounds	0.00	0.50	+0.50	+ 0
Waterbodies	1.80	1.55	-0.25	- 13.89
Government Roads	1.11	1.11	0.00	+ 0
Hariparia	0.00	0.04	+0.04	+ 0
<b>Total:</b>	<b>8.19</b>	<b>8.62</b>	<b>+0.43</b>	<b>+ 35.78</b>

This is a medium size village consist of 132 households and the total population is equal to 802 only. Commons is also very low here. Grazing is possible in roads and in the field in post harvest session. Various branches of trees, dried trees from roads, some vegetables, small fish, genri, googlie etc. are collected from Khal, agricultural lands, private ponds and area etc.

Fish estimation is present here by leasing the total area of agricultural lands from the rainy season to winter season and the received money is divided into the owner's of land by their land share. Huge fish is grown here and some people live with only fish and crab catching.

The demographic information of total households and their classification of the surveyed area are explained in the Table 05. Also in Table 06, the caste and Occupation is shown of the dwellers in the surveyed area.

**Table-05**  
**Information regarding the Surveyed Village:**

Total No. Of households	132	No. Of primary School	01
Total No. Of SC households	42	No. Of SSK	01
Total Population	802	No. Of Tube well	02
Total Male Population	406	No. Of Mandir	04
Total Female Population	396	No. Of Pirsthan	01
Total Population	802	No. Of Hariparia	01
Total Male SC Population	126	No. Of Bhagard	01
Total Female SC Population	146	No. Of Burial Ground	01
Total SC Population	272	No. Of Khaspukur	01

*Source: Field Survey*

**Table-06**  
**Caste and Occupation:**

Name of the Caste	SC/ST/OBC/Oth.	Total no. of Families	Profession									
			DL	Fish & Crab Catcher	DL +agr	BUS	SER Org	SER Unorg	AGR +SER	AGR +BUS	Agr	Oth.
KARAN	GEN	34	02	00	05	02	01	01	00	07	13	03
CHASI	GEN	18	04	02	05	00	01	00	00	05	00	00
TANTI	OBC	19	05	02	06	02	00	00	02	00	02	00
NAPIT	OBC	19	02	03	06	00	01	01	01	00	04	00
BAGDI	SC	42	12	11	14	00	00	03	01	01	00	00
<b>TOTAL</b>	<b>132</b>	<b>25</b>	<b>18</b>	<b>36</b>	<b>06</b>	<b>03</b>	<b>05</b>	<b>04</b>	<b>13</b>	<b>19</b>	<b>03</b>	

**Source: Field Survey**

**NOTE:** DL: Daily Labour, BUS: Business, AGR: Agriculture, SER ORG: Service in Organized Sector, SER UNORG: Service in Unorganized Sector, AGR+SER: Agriculture and Service, AGR+BUS: Agriculture and Business.

The table show that 32% families of that Mouza are belongs to SC category, 29% families are OBC category and 31% families are of General category.

In case of profession 19% families are Daily Labour, 13.60% are based on only Fish and Crab catching, 2.27% are of service in organized sector, 3.78% are of service in unorganized sector, 14.40% are of depends on agriculture solely and 16.66% are depends on joint profession and lastly 2.27% are based on other profession.

CPRs although share some of the physical qualities, their types varies from place to place within India as well as West Bengal. There is a lot of variation in the types of CPRs bearing different connotations. Despite variation of CPRs in West Bengal, they are more or less same in that particular Mouza.

**Puratan Patit:** It is locally called Danga, Dhosa, Kala, Patitt, Khariban etc. These lands are generally for Private possession and the public does not have any right to use and extract these lands. But the owners of this land are allowed to use to the villagers and extract these lands generally. For this the resident of the village can use the lands and when the owners are restricted to use the villagers or encroach these lands for his private use, there is no right to protect from this encroachment. The villagers get benefits by grazing animals, used as a playground, collecting some output etc. from these types of lands.

**Village Water Bodies:** Locally termed as Pukur Parh, Pukur, Doba, Khaspukur etc. It is both private as well as public possession. From Private pukur etc villagers are used that for the villagers access their daily sustenance and some output until the owners of that area is restrict to use it. But the land in Khaspukur is under the Panchayat i.e. under the management of Local Govt the villagers are taken Lease from the Panchayat by the amount fixed by the Panchayat, and the villagers are get share of the output comes from the Khaspukur and the resident by the side of that Pukur is used for daily sustenance. The villagers who are lived in the side of that Pukur access the vegetables and other output, which is grown here.

**Canal, Canal Parh:** In this particular field we include Nayanjuli, Khal, Khal Parh, Nala etc. Most of the cases the ownership of the lands is of under Govt Dept. Here the particular villagers or particular Para where the canal or Nala is situated allows access. In maximum cases, the conflict arises because, who can access or use these lands. Water drainages facility comes from the place. As here are no grazing and playing grounds, the villagers are grazing animals in the Nayanjuli and Khal Parh, by the side of the Nala etc. and the boys and girls are playing here.

And many people live by catching fish from that area and it is a source of collecting fish to some people.

**Garden:** It is termed as in that area is Bansbagan, FalaerBagan, Jambagan etc. It is absolutely private lands and the poor villagers get some benefits from these lands.

**Religious Place:** Locally termed as Debasthan, Mandir etc. for Hindu's God and Pirsthan etc. for Muslim's God. This is a common use place generally for the villagers in respect of their Religion. But in respect of our study it is a common place for use only one day in a year because the place is under private possession, and it is customary to use the resident of the village only the festival day.

**Roads:** We are all in this locality called this as Path, Rasta, and Kancharasta. It is types of lands that are generally are of Govt. dept as well as private ownership. Here all are free to use this land, whether it is public or private. From here some output like dried trees, branches of trees, dried leaves, etc. the villagers collect.

**Places of Burning of the Dead or Burial Ground**  
Most of the cases the places are in under private possession or in community possession. But it is customary to use this land. It is also called Samadhasthan, Kabarasthan etc. In our work area there is no particular Places of Burning of the Dead, it is used Khal Parh for the aforesaid purpose.

**Bhagard, Hariparia:** Here is no land for Bhagard but the villagers used Khal Parh for the said purpose. It is a common use place but the ownership of the land under the Govt. dept. and the Hariparia is used as a universal dustbin, particularly for the crockery /earthenware, when these are broken or in a special case, like when a person died, then all the relatives are rejected all the crockery used by them. It is customary to the villagers. It is place of private ownership in respect of our village. It may be both private as well as public lands.

**School:** This is a place of education. All children of the villagers are studied here. The lands may be private or public but in our case it is a private land and donated to the school authority and the playgrounds of the school are used as a Commons.

**Agricultural lands** are Private Lands, not common lands but from the rainy season to Winter season there is no restriction to collect fish, crab, by using by fish catches (locally called Mugri, Footjal, Chhip, Fishing Net etc.) in agricultural lands as well as in blank lands, etc. and the some food and fodder (locally termed as Grass, Hensai Sarkathi, Genri, Googlie etc.) from the divider of the lands (called locally as Aal) and the villagers get benefit from these products.

And in the post harvest period, they collect Fuel from lands as the residual part of paddy tree (Locally called Lara), grazing animals, the children are playing, used as

open sanitation, used as a short-cut route of traveling here and there.

In reality, to the common villagers, the official status of the above-mentioned categories of lands does not bear any relevance; they use them until they are allowed to use it. In common parlance the lands and resources belongs to them, excluding the properties having Private ownership. In above we have seen that the classification that usually followed by the Govt. and all the resources are more or less used as common and this plays a crucial role in that village economy.

The villager's use all the resources by use and customary rights, and it has been seen that there is no property rights according to properties features and there is no written rule for use this resources.

by the most senior man of that particular village. So they can play a crucial role in managing the disputes, but they are not interested for proper management of these resources because most of the resources are under private ownership, anytime they can encroach their property for their private purpose. Therefore it is needless to them.

In the agricultural lands, the small fish are growing rapidly, because the saline water entered into the agricultural lands and huge amount of the pisces are entered in that area with this salted water. They are growing here and the villagers are catching this for their livelihood as consumption as well as sale in the market. The food (fish & crab etc.) and fodder (grass & others.) which is grows abundantly in these lands are procured by the inhabitants of this village.

**Table-07**  
**Caste Wise Income and Employment Distribution from CPRs**

Particulars	SC HHs	OBC HHs	GENERAL HHs	TOTAL HHs
Households Surveyed	11	07	11	29
Average Annual Common Income (Rs.)	4725.00	3008.00	3206.00	3725.00
Average Annual Total Income (Rs.)	38903.00	57790.00	47073.00	46561.00
Percentage Of Common Income varies	6.11—15.0	4.03—12.75	2.56—20.30	2.56—20.30
Time Consumed for Common Income (Hrs.)	1236.31	821.43	978.64	1038.45
Employment day	155	103	122	130
Mouza wage rate (Rs.)	62.00	62.00	62.00	62.00
Opportunity cost of Labour (Rs.)	9610.00	6386.00	7564.00	8060.00
Average Value of Commons collected per Hour (Rs.)	3.82	3.66	3.28	3.44

*Source: Field Survey*

The table shows that the total HHs surveyed only 29 out of the Mouza's total HHs are 132. This shows that SC people's average Common Income (CI) is Rs. 4725 annually with 6.11 to 15.0 percent of their total income (TI) whereas for the general HHs collect Commons Rs. 3725 annually with 2.56 to 2.030 percent of CI with their TI. And the employment generation for the inhabitants of the village is more than another work arising from public or cultivation work.

So it is clear that the SC people's dependency on CI is more compared to General people in respect of their average annual CI, whereas the OBC people is the middle point of their dependency on CI.

### CONCLUSION AND INFERENCES

As there is no written rule for use of the common resources or there is no property rights for use this resource, sometimes the conflict arises in collection times between various caste people, rich and poor people, various class of people in the village area. And the villagers manage the disputes arising out of collection of Common resources by a social meeting, or by the statutory elected Panchayat, or

Much literature argued that, there is a declining trend in CPRs, in amount and quality but in our study we reveal that the common area is not declining in case of common lands in compare to CSROR & LRROR, it is more or less same. But when we include Kala Lands as Commons (although it is a private lands) to this comparison, then the trend is declining. And the reasons for declining the CPRs area and the quality of commons in our case are as follows:

- Encroachments of Private lands for both poor and rich for their personal use and restricted to use these lands as Commons.
- Changes in the usage pattern of the CPRs, because most of the kala lands (Patit Land) are transformed into agricultural lands.
- Quality deterioration of physical productivity of the Common Resources.
- Overexploitation and overgrazing of the Commons.
- Excessive population pressure.

And lastly we carefully observed that the amount of collection of Commons is depending on the political power and manpower of the villagers that the principles followed



by 'Might is Right' and the Poor People suffer from it. And the woman and children are the principal collector Commons of any HHs.

This study can be simulated in some other localities of southern part of West Bengal as well as other regions where same sort of physiographical features are observed. Though a generalization can not be made out of the small scale study but considering the cosmo-cosm of this particular sample the overall planning of such agro-based coastal rural belt needs a special attention on the part of the local as well as other state machinery to develop the economy of this region and to remove the mal distribution of resources in a very natural way. Besides the economy of this region sustainable development of the national economy and the harmonious ecological balance can be maintained with a little effort.

Now the Panchayat Raj Institution comprising Gram Panchayat, Panchayat Samities and Zilla Parishad can devise appropriate management policies. Resources are still available in the countryside but the issue that merits special attention is how to use them without overexploiting and depriving others of the benefits of CPRs which leads to what is known as "the tragedy of the commons":

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# কয়েকটি বিপরীত কথা

সুপর্ণা সেনগুপ্ত

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বঙ্গলি মহাসিন মহাবিদ্যালয়

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## ABSTRACT

'এদেশে পুরুষ-মেয়েতে এতটা তফাৎ কেন যে করেছে, তা বোঝা কঠিন। বেদান্তশাস্ত্রে তো বলেছে, একই চিৎসত্তা সর্বভূতে বিরাজমান।' স্বামী বিবেকানন্দের নারীশিক্ষা তথা নারীপ্রগতির বিষয়ে এ ধরনের উক্তিগুলি সুপরিচিত হলেও তিনি এর সম্পূর্ণ বিপরীত বহু মতও ব্যক্ত করেছেন। পাশ্চাত্যের মেয়েদের কর্মজীবন তথা বহির্জগতে স্বাচ্ছন্দ্য তিনি স্বাভাবিকভাবে মানতে পারেননি। মেয়েদের সীমিত শিক্ষার মাধ্যমে শুধুমাত্র সুসন্তানের জননী ক'রে তোলার আদর্শই জোর দিয়েছেন। স্ত্রীশিক্ষায় পুরুষসংস্রব বর্জনের কথা বলেছেন, যা কিছুটা রক্ষণশীল তো বটেই, পুরোপুরি সন্তবও নয়। আবার গৃহবধূকে 'রাজ-রাজেশ্বরীর অর্থাৎ স্বামীর মাতার শাসন-ব্যবস্থার ভিতর মানাইয়া লইতে হইবে' মানিয়ে চলতে হবে বলেও রক্ষণশীলতার পরিচয় দিয়েছেন। এ থেকে মনে হতে পারে ১. তিনি মেয়েদের সমানাধিকারের বিরোধী অথবা ২. একালের মেয়েরা তাঁর আদর্শ থেকে বিচ্যুত।

বিবেকানন্দের নারীবিষয়ক মতাবদকে দুটি ভাগে বিভক্ত করা যায় :- তাত্ত্বিক ও ব্যবহারিক। খুঁটিয়ে দেখলে বোঝা যায় যে তাঁর মতের যেটুকু রক্ষণশীলতা বা বাস্তবতা থেকে বিচ্যুতি, সেটুকু ব্যবহারিক অংশেই। স্বল্পায়ুর কারণে তিনি নিজের মতের রূপায়ণ ক'রে যেতে পারেননি, বাস্তবের দাবির মুখোমুখি হওয়ারও অবকাশ পাননি। আজকের দিনে তাই বিবেকানন্দের নারীবিষয়ক মতবাদ বলতে তাত্ত্বিক অংশটিকেই বুঝতে হবে, যেখানে তিনি বলেন, 'মন যখন সমরস ব্রহ্মতত্ত্বে ডুবে যায়, তখন আর 'এ স্ত্রী, এ পুরুষ' — এই জ্ঞান একেবারেই থাকে না।'

পাশ্চাত্যের নারী স্বাধীনতাদর্শক বিবেকানন্দের নারীবিষয়ক তত্ত্বে একটি বিশেষ মোড়। তিনি সনাতন ভারতীয় নারীশিক্ষার সঙ্গে এর সমন্বয় সাধনের রূপরেখা তৈরি করতে চেয়েছিলেন। উপলব্ধি করেছিলেন যে শিক্ষাই এদেশের মেয়েদের সমস্যা সমাধানের একমাত্র পথ। শিক্ষিত মেয়েরা নিজেদের নিজেদের করণীয় বুঝে নেবে।

এ দেশের নারীদের প্রতি তাঁর উক্তি :- 'আমি পুরুষগণকে যাহা বলিয়া থাকি, নারীগণকেও ঠিক তাহাই বলিব। ভারত এবং ভারতীয় ধর্মে বিশ্বাস কর, তেজবিনী হও, ভারতে জন্ম বলিয়া লজ্জিত না হইয়া উহাতে গৌরব অনুভব কর, আর স্মরণে রাখিও, আমাদের অপরাপর জাতির নিকট হইতে কিছু লইতে হইবে বটে, কিন্তু জগতের অন্যান্য জাতি অপেক্ষা আমাদের অপরকে দিবার জিনিস সহস্রগুণ বেশী আছে।'

**Keywords:** পুরুষ বর্জিত স্ত্রীশিক্ষা। সুগহিনী। ব্রহ্মজ্ঞান স্ত্রী-পুরুষ ভেদহীন। শিক্ষা - ব্যক্তিগঠন।

'এদেশে পুরুষ-মেয়েতে এতটা তফাৎ কেন যে করেছে, তা বোঝা কঠিন। বেদান্তশাস্ত্রে তো বলেছে, একই চিৎসত্তা সর্বভূতে বিরাজমান।'

স্বামী বিবেকানন্দের এ ধরনের উক্তিগুলির সঙ্গে আমরা যথেষ্ট পরিচিত। ঘরের মেয়েদের বহু সন্তানের জননী হওয়া সম্পর্কে একাধিকবার বলেছেন, 'এদেশের পুরুষেরা মেয়েদের একেবারে manufacturing machine বানিয়ে তুলেছে।' আজও এ কথা সমান সত্য। বলছেন, 'মহামায়ার সাক্ষাৎ প্রতিমা এই সব মেয়েদের এখন না তুললে বৃষ্টি তোদের আর উপায়ান্তর আছে?'

আবার এর বিপরীতে এমন কিছু মত তিনি ব্যক্ত করেছেন, যা পড়লে বা শুনলে চমকে উঠতে হয়। স্বামী-শিষ্য-সংবাদের এই ষষ্ঠ ভাগেই তাঁর উক্তিতে পাচ্ছি - 'ওদেশে মেয়েদের দেখে আমার অনেক সময় স্ত্রীলোক বলেই বোধ হ'ত না - ঠিক যেন পুরুষ মানুষ। গাড়ি চালাচ্ছে, অফিসে বেরুচ্ছে, স্কুলে যাচ্ছে, প্রফেসরি করছে। একমাত্র ভারতবর্ষেই মেয়েদের লজ্জা, বিনয় প্রভৃতি দেখে চক্ষু জুড়ায়।' ব্যতিক্রম বাদ দিলে আজকের মেয়েদের সম্পর্কে তিনি কি বলতেন?

নমুনা দুই - 'ধর্ম, শিল্প, বিজ্ঞান, ঘরকন্না, রক্ষন, সেলাই, শরীরপালন

-এ-সব বিষয়ের মর্মগুলিই মেয়েদের শেখানো উচিত, নভেল-নাটক ছুঁতে দেওয়া উচিত নয়।' আমরা কবির ভাষায় বলব, 'অন্ধ হলে কি প্রলয় বন্ধ থাকে?' জৈবিক প্রবৃত্তি আসে জীবনের ভিতর থেকেই, সাহিত্য থেকে নয়। জীবনের উৎস সাহিত্য নয়, সাহিত্যের উৎস জীবন।

নমুনা তিন - 'বাল্যবিবাহ তুলে দেওয়া, বিধবাদের পুনরায় বে দেওয়া প্রভৃতি বিষয় নিয়ে আমাদের মাথা ঘামাবার দরকার নেই।' বিবেকানন্দ বাল্যবিবাহের ঘোর বিরোধী হলেও তা নিয়ে প্রকাশ্য বিদ্রোহে সামিল হওয়ার পক্ষপাতী ছিলেন না। বাস্তব হল, এ সমস্যাগুলি আজও সমাজের একাংশর ক্ষতচিহ্ন। যেটুকু নিরাময় হয়েছে, তা কিন্তু কেউ কেউ এ নিয়ে মাথা ঘামিয়েছিলেন ব'লেই।

নমুনা চার - 'মা সর্বদা আমাদের গৃহেই বাস করেন। স্ত্রীকে তাঁহার অধীনে থাকিতেই হইবে। ... পুত্রবধূকে সেই রাজ-রাজেশ্বরীর অর্থাৎ স্বামীর মাতার শাসন-ব্যবস্থার ভিতর মানাইয়া লইতে হইবে। ... মনে করুন, আমি যদি বিবাহ করিতাম, এবং আমার স্ত্রী আমার মায়ের অসন্তোষের কারণ হইত, তাহা হইলে আমিও স্ত্রীর উপর বিরক্ত হইতাম। তাহাকে অপেক্ষা করিতে হইবে, যতক্ষণ না তাহার নারীত্ব পরিপূর্ণ হয়।

এই মাতৃত্বই নারীত্বকে পূর্ণ করে। এই মাতৃত্ব পর্যন্ত তাহাকে অপেক্ষা করিতে হইবে, ইহার পরই সে সমান অধিকার লাভ করে।” এই মাতৃত্ব কি সম্ভব হওয়া? না, সংসারজননী, কর্ত্রী হওয়া, যেহেতু পুত্রবধু সম্ভবনাতী হলেও সে শাশুড়ির অসন্তোষের কারণ হতে পারে। এর নিদর্শন আছে অশ্রুসজল সুদীর্ঘ ইতিহাসে। এক কালে নির্যাতিত বধুর পরবর্তীকালে শাশুড়ি হয়ে নিজ পুত্রবধুকে নির্যাতিত আমাদের সুপরিচিত। বিবেকানন্দের এই অভিমত কি সেই ঐতিহ্যকেই দার্শনিক স্বীকৃতি দিচ্ছে না? আরও চারটি বিষয় লক্ষ্য করার মতো। এক, স্ত্রী মায়ের অসন্তোষের কারণ সব সময় কোন দোষ ক’রে হয়ে থাকেন, তা নয়। তাঁর অবস্থিতিই বহু ক্ষেত্রে অসন্তোষের কারণ। দুই, স্ত্রী এবং মায়ের মধ্যে কে ঠিক, কে বেঠিক, তা এখানে বিচার্য নয়। পদের পার্থক্যই একমাত্র বিষয়। তিন, যৌথ পরিবারে কর্ত্রীত্বের অঙ্ক এত সরল নয়। সব স্ত্রী কর্ত্রী হওয়ার সুযোগই পান না। চার, মাতৃত্ব নারীত্বকে পূর্ণ করলে পিতৃত্বও নিশ্চয়ই পুরুষত্বকে পূর্ণ করে। কিন্তু সে কথা কি বল হয় কখনও?

নমুনা পাঁচ - ‘ছাত্রীদের ধর্মপরায়ণ ও নীতিপরায়ণ করতে হবে। কাল যাতে তারা ভাল গিনী তৈরী হয়, তাই করতে হবে। এই সকল মেয়েদের সম্ভবসম্ভব পড়ে ঐ সকল বিষয়ে আরও উন্নতি লাভ করতে পারবে।’ খুবই সত্যি। কিন্তু গৃহিণী হওয়াই কি নারীজীবনের উদ্দেশ্য? শিক্ষার সঙ্গে সঙ্গে অবধারিতভাবে আর একটি ব্যাপারে এসে পড়ে, সেটি কর্মক্ষেত্র। মেয়েরা কি বহির্জগতে কাজকর্ম, মানে চাকরি, ব্যবসা প্রভৃতি করবে না? মেয়েদের শিক্ষাই বা দেবে কারা? সাধারণ পাশ্চাত্য মেয়েদের কর্মজীবন বিবেকানন্দের পছন্দ হয়নি, এ আমরা আগেই দেখেছি। এবার দেখব নারীশিক্ষা বিষয়ে তাঁর পরিকল্পনা।

- ১। মেয়েদের শিক্ষা হবে মঠের স্কুলে।
- ২। শিক্ষকতা করবেন শিক্ষিত আবাসিক ব্রহ্মচারিণী ও বিধবারা। সাধারণ কুমারী ও গৃহিণীরা শিক্ষা লাভ করবেন, শিক্ষকতা নয়। প্রয়োজনে তাঁরা থাকতেও পারবেন।
- ৩। শিক্ষার বিষয় হবে পূর্বোক্ত ধর্ম, শিল্প ইত্যাদির সঙ্গে ‘ধর্মশাস্ত্র, সাহিত্য, সংস্কৃত, ব্যাকরণ, ‘চাই কি - অল্প-বিস্তর ইংরেজীও’। থাকবে শিশুপালন এবং অবশ্যই জপ, ধ্যান, পূজা।
- ৪। ছাত্রীদের অভিভাবকেরা পনেরো বছরের কমবয়সী মেয়েদের বিয়ে দিতে বা দেওয়ার চেষ্টাও করতে পারবেন না।
- ৫। পুরুষ-মঠের সন্ন্যাসীরা ‘দূর থেকে স্ত্রী-মঠের কার্যভার’ চালাবেন।

এর ফলকল্পনা :-

- ১। মেয়েরা সুস্থ এবং সুগৃহিণী হবে।
  - ২। তারা সবল সুসন্তানের জন্ম দেবে।
  - ৩। সমাজ ও দেশের সার্বত্রিক কল্যাণ হবে।
- সন্ন্যাসী বিবেকানন্দ মঠকেই স্ত্রীশিক্ষাকেন্দ্ররূপে দেখতে চেয়েছেন। পাশ্চাত্য শিক্ষার প্লাবনে সমকালে স্ত্রীশিক্ষার বিষয়ে ভাবতে বাধ্য হলেও সাধারণভাবে স্ত্রীশিক্ষা তখনও ঐচ্ছিক। তবু একালে দাঁড়িয়ে আমরা কিছু বিরুদ্ধ যুক্তির অবতারণা করতেই পারি।
- ১। প্রাতিষ্ঠানিক শিক্ষা যদি পুরুষের কাছে বহির্জগতের দরজা খুলে দেয়, নারীর কাছেও দেবে। কাজেই এভাবে শিক্ষিত মেয়েরা নিছক গৃহিণী ও জননী হবে, এই হিসাবটাই একমাত্রিক ছিল।
  - ২। ছেলেদের শিক্ষার যা যা বিষয়, মেয়েদেরও তাই-ই হওয়া উচিত।

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সেলাই, রামা তথা গৃহকর্ম শেখানোর দায় প্রতিষ্ঠানের না হয়ে পরিবারের অধ্যক্ষদেরই থাকা বাঞ্ছনীয়। অথবা কোন ছেলে না মেয়ে পড়াশুনোর বাইরে কী কী শিখতে চায়, সে বিষয়ে তার মত বা ইচ্ছার অবকাশ থাকা উচিত।

- ৩। মঠবাসী, অর্থাৎ পরিবারকেন্দ্রিক সংসারশ্রমের বাইরে থাকা শিক্ষাদাত্রীদের দ্বারা সংসারযাত্রা শিক্ষা নিয়ে প্রশ্ন থাকতেই পারে।
  - ৪। শিক্ষাক্ষেত্রে বিভিন্ন ধর্মাবলম্বীদের একত্র পড়াশুনোর সুযোগ থাকা উচিত এবং সেই কারণেই জপ, ধ্যান, পূজা প্রভৃতি প্রতিষ্ঠানের বিবেচ্য হওয়া উচিত নয়।
  - ৫। সংস্কৃত বিষয়টি কিন্তু আদিরসের শিক্ষাদানে নভেল-নাটকের উপর দিয়ে যায়। ধর্মশাস্ত্রেও এ সব প্রচুর। ব্যাকরণেও পর্যাপ্ত মনিমুজো পাওয়া যাবে বৈ কি।
  - ৬। পুরুষ সন্ন্যাসীদের ‘দূর থেকে স্ত্রী-মঠের কার্যভার’ চালানোর বিষয়টি স্পষ্ট নয়। যে বিবেকানন্দ মেয়েদের স্বতন্ত্র প্রতিষ্ঠান চেয়েছেন, তিনি নিশ্চয়ই স্ত্রী-মঠ পরিচালনার চাবিকাঠি পুরুষ-মঠের হাতে রাখতে চাননি। মনে হয়, শিক্ষাসহায়ক কাজের কথাই বলেছেন।
- পুরুষ-সংস্রব বর্জনের প্রস্তাব দুটি কারণে হতে পারে। এক, পবিত্রতাহানির সম্ভাবনা; দুই, পূর্ণত নারীস্বরাজ। প্রথমটির উত্তরে বলব, পথেঘাটে মেয়েদের আজও যা সহ্য করতে হয়, তার কী বলব, পথেঘাটে মেয়েদের আজও যা সহ্য করতে হয়, তার কী হবে? দ্বিতীয়টির ক্ষেত্রে ভেবে দেখুন, সর্বত পুরুষবর্জন সম্ভব কি না। বাবাকে বাদ দেওয়া যাবে? আজও মেয়েদের শিক্ষাপ্রতিষ্ঠানগুলিতে অন্তত শিক্ষাকর্মীগণের অধিকাংশ পুরুষ। আবার ছেলেদের শিক্ষাপ্রতিষ্ঠানগুলিতেও এই সব পদে কিছু মহিলা থাকেনই।
- বাস্তবে শিক্ষকের অভিজ্ঞতা বলে, অস্বস্তিকর বিষয়গুলি সহশিক্ষাতেই পড়ানো সহজ। পাশে ছেলে থাকায় মেয়েরা সতর্ক থাকে, পাশে মেয়ে থাকায় ছেলেরা।

বিবেকানন্দের দেহাবসান হয় ১৯০২-এ। তিনি নিজের পরিকল্পনার সম্পূর্ণ রূপায়ণ এবং ফলাৎপত্তি দেখে যেতে পারেননি। যুক্তিবাদী বিবেকানন্দ আরও বেশি দিন পৃথিবীতে থাকলে আমরা নিশ্চয়ই স্ববিরোধিতার উর্দ্ধে তাঁর নারীবিশয়ক মতাদর্শের পূর্ণাঙ্গ, সুপরিণত রূপটি পেতাম। উল্লেখ্য, শাশুড়ি-বউ বিষয়টি নিয়ে এত রক্ষণশীল কথা বলার পরে নিজেই স্বীকার করেছেন, ‘বধুস্বদ্বীয় জ্ঞান আমার সম্পূর্ণ নয়। মাতা এবং ভগ্নী যে কী, তাহা আমি জানি, অপরের বধু আমি দেখিয়াছি মাত্র, তাহা হইতে যেটুকু জ্ঞান সংগ্রহ করিয়াছি, তাহাই আপনাদের বলিলাম।’ তা ছাড়া তিনি সারা দেশের স্ত্রীশিক্ষার খসড়া করেননি, নিজের সংগঠনের মাধ্যমে একটি মডেল তৈরি ক’রে সমাজ তথা দেশকে বার্তা দিতে চেয়েছেন।

প্রশ্ন এক, বিবেকানন্দ কি মেয়েদের প্রকৃত উন্নতির বদলে সীমিত আপডেট করতে চেয়েছিলেন? অথবা, প্রশ্ন দুই, একেলে মেয়েরা কি গাড়ি চালিয়ে, অফিসে বেরিয়ে, অধ্যাপনা ক’রে কিংবা শ্বশুরবাড়ি থেকে আলাদা হয়ে কি ‘স্বামীর মাতার শাসন-ব্যবস্থার’ অধীন না থেকে বিবেকানন্দের আদর্শ থেকে চ্যুত হয়েছেন?

স্ত্রীশিক্ষা প্রসঙ্গে বিবেকানন্দের মতবাদকে দুটি ভাগ করা যায়, তাত্ত্বিক ও ব্যবহারিক। ব্যবহারিক অংশেই আমরা পূর্বোক্ত মডেলটি পেয়েছি।

সেই সময় দেশবিদেশ দেখে যেমনটা হওয়া উচিত বলে পরিব্রাজক বিবেকানন্দের মনে হয়েছিল, তেমনটাই তিনি ব্যক্ত করেছেন। পক্ষান্তরে, ব্রহ্মজ্ঞানী বিবেকানন্দ স্ত্রী-পুরুষের ব্যবহারিক ভেদকেই মেনে নেননি। প্রবন্ধের প্রথম উদ্ধৃতিতেই তার স্বাক্ষর মেলে। তিনি বলেছেন, 'আমরা 'আমি-তুমি'র plane-এ লিপ্সভেদটা দেখতে পাই। আবার মন যত অন্তর্মুখ হ'তে থাকে, ততই ঐ ভেদজ্ঞানটা চ'লে যায়। শেষে মন যখন সমরস ব্রহ্মতত্ত্বে ডুবে যায়, তখন তার 'এ স্ত্রী, এ পুরুষ' - এই জ্ঞান একেবারেই থাকে না।'° বাল্যবিবাহ নিবারণ এবং বিধবাবিবাহের প্রসঙ্গে আমরা তাঁর যে উক্তিটি একটু আগে দেখেছি, তার ঠিক পরেই বলেছেন, 'আমাদের কাজ হচ্ছে স্ত্রী পুরুষ - সমাজের সকলকে শিক্ষা দেওয়া। সেই শিক্ষার ফলে তারা নিজেরাই কোনটি ভাল, কোনটি মন্দ সব বুঝতে পারবে এবং নিজেরা মন্দটা করা ছেড়ে দেবে।'°

শান্তি-বউ-বিষয়ক মতটি প্রদত্ত হয় ক্যালিফোর্নিয়ায়। বিবেকানন্দ সচরাচর বিদেশে ভারতের নিন্দা করতেন না। ভারতীয় সমাজের ভালো দিকগুলিই তুলে ধরতেন, অসুস্থিকর বিষয়গুলির যথাসাধ্য যুক্তিগ্রাহ্য ব্যাখ্যা উপস্থাপিত করতেন, সোজা কথায় ডিফেন্ড করতেন। এই অংশে তারই ছায়াপাত লক্ষ্য করা যায়।

পুরো বিষয়টি পর্যালোচনা ক'রে আমরা বলতে পারি, বিবেকানন্দের নারীবিষয়ক মতটিকে শুধু তাঁর পরিকল্পনায় সীমিত ক'রে দেখলে ভুল হবে। তাকে দেখতে হবে তাঁর তত্ত্বের চিরন্তন আদর্শের আলোকে, যেখানে তিনি মেয়েদের সমস্যা সম্পর্কে বলছেন, 'অবশ্যই আছে - অনেক সমস্যা আছে - সমস্যাগুলিও বড় গুরুতর। কিন্তু এমন একটিও সমস্যা নাই, 'শিক্ষা' এই মন্ত্রবলে যাহার সমাধান না হতে পারে। ... শিক্ষা বলিতে কতকগুলি শব্দ শেখা নহে; আমাদের বৃত্তিগুলির - শক্তিসমূহের বিকাশকে শিক্ষা বলা যাইতে পারে; অথবা বলা যাইতে পারে - শিক্ষা বলিতে ব্যক্তিকে এমনভাবে গঠিত করা যাহাতে তাহার ইচ্ছা সন্ধিষয়ে ধাবিত হয় এবং সফল হয়।'° এই মত কিন্তু কোন দেশে, কোন কালে সীমাবদ্ধ নয়।

পাশ্চাত্যের যে মেয়েদের দেখে তাঁর 'পুরুষ মানুষ' মনে হয়েছিল, তাঁদের প্রসঙ্গেই পরে শিষ্য শরচ্চন্দ্র চক্রবর্তীকে বলেছেন, 'দেশাচারের ঘোর বন্ধনে প্রাণহীন, স্পন্দনহীন হয়ে তাদের মেয়েরা এখন কি হয়ে দাঁড়িয়েছে, তা একবার পাশ্চাত্য দেশ দেখে এলে বুঝতে পারতিস।'° বস্তুত পাশ্চাত্যের নারীসমাজের স্বাতন্ত্র্য বিবেকানন্দের ভাবনাকে যথেষ্ট প্রভাবিত করেছিল। পাশ্চাত্যভ্রমণ তাঁর নারীবিষয়ক মতাদর্শের মোড় ফিরিয়ে দেয়। আগ্রহী পাঠক শ্রীশ্রীরামকৃষ্ণকথামৃত দ্বিতীয় ভাগের পরিশিষ্ট অংশের দ্বিতীয় পরিচ্ছেদ দেখে নেবেন।

একালের পরিপ্রেক্ষিতে বিবেকানন্দের আদর্শ বলতে তাই আমরা তাত্ত্বিক অংশটিকেই বুঝব। শিক্ষার ফলে মেয়েরা নিজেদের অবস্থান এবং উন্নতির পথটি বেছে নিয়েছেন। জোর দিয়ে বলা যায়, একালের কর্মরত

মেয়েরা ও স্বশুরবাড়িতে বিদ্রোহ করা মেয়েরা বিবেকানন্দের আদর্শ থেকে চ্যুত হননি। বরং তাঁরা এই আদর্শের বহুধাফলিত রূপ।

শেষ করব এদেশের নারীদের প্রতি তাঁর প্রেরণাবাক্য দিয়ে। 'আমি পুরুষগণকে যাহা বলিয়া থাকি, নারীগণকেও ঠিক তাহাই বলিব। ভারত এবং ভারতীয় ধর্মে বিশ্বাস কর, তেজস্বিনী হও, ভারতে জন্ম বলিয়া লঙ্ঘিত না হইয়া উহাতে গৌরব অনুভব কর, আর স্মরণে রাখিও, আমাদের অপরাপর জাতির নিকট হইতে কিছু লইতে হইবে বটে, কিন্তু জগতের অন্যান্য জাতি অপেক্ষা আমাদের অপরকে দিবার জিনিস সহস্রগুণ বেশী আছে।'°

নির্দেশিকা:

- ১। স্বামি-শিষ্য-সংবাদ ৩৫।
- ২। তদেব ৬।
- ৩। তদেব।
- ৪। তদেব। বাল্যবিবাহ বিষয়ে রবীন্দ্রনাথের 'হিন্দুবিবাহ' প্রবন্ধ (১২৯৪ বঙ্গাব্দে সায়েন্স হলে পঠিত বক্তৃতা) তুলনীয়।
- ৫। তদেব।
- ৬। ভারতের নারী। ১৮/০১/১৯০০-তে ক্যালিফোর্নিয়ার প্যাসাডেনায় শেক্সপিয়ার ক্লাব হইসে প্রদত্ত বক্তৃতা।
- ৭। স্বামি-শিষ্য-সংবাদ ৬।
- ৮। তদেব ৩৫।
- ৯। পূর্বোল্লিখিত 'ভারতের নারী' শীর্ষক বক্তৃতা।
- ১০। স্বামি-শিষ্য-সংবাদ ৩৫।
- ১১। স্বামি-শিষ্য-সংবাদ ৬।
- ১২। ভারতীয় নারী - তাহাদের অতীত, বর্তমান ও ভবিষ্যৎ। ডিসেম্বর ১৮৯৮ 'প্রবুদ্ধ ভারত' পত্রিকায় প্রকাশিত সাক্ষাৎকার।
- ১৩। স্বামি-শিষ্য-সংবাদ ৩৫।
- ১৪। পূর্বোল্লিখিত 'ভারতীয় নারী - তাহাদের অতীত, বর্তমান ও ভবিষ্যৎ' শীর্ষক সাক্ষাৎকার।

নির্বাচিত গ্রন্থপঞ্জী :

- ১। স্বামী বিবেকানন্দের বাণী ও রচনা, ষষ্ঠ ও নবম খণ্ড, কলকাতা, উদ্বোধন কার্যালয়, জন্মশতবার্ষিক সংস্করণ।
- ২। রবীন্দ্র রচনাবলী, ত্রয়োদশ খণ্ড, কলকাতা, পশ্চিমবঙ্গ সরকার, জন্মশতবার্ষিক সংস্করণ।
- ৩। গুপ্ত, মহেন্দ্রনাথ, শ্রীশ্রীরামকৃষ্ণকথামৃত, দ্বিতীয় ভাগ, কলকাতা, প্রকাশক এ.কে.গুপ্ত, সপ্তদশ সংস্করণ, চতুর্থ পুনর্মুদ্রণ।

# VASCULAR ARBUSCULAR MYCORRHIZAL (VAM) STATUS OF SOME IMPORTANT MEDICINAL PLANTS FROM FORESTS OF JOYPORE, BANKURA, WEST BENGAL.

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## ABSTRACT

The paper reflects Vascular Arbuscular Mycorrhizal (VAM) status of ten (10) medicinal plants of economic importance in lateritic area of Joypore forest Range, Bankura District. The forest is Sal (*Shorea robusta*) dominated which is dry deciduous type, co-dominated by Mahul (*Madhuca indica*) and Parasi (*Cleistanthus collinus*) as tree species, whereas other species found there as shrubs are *Vanguireca spinosa*, *Flemingia chapper*, *Aristolochia indica*, *Smilax ovalifolia*, *Hemidesmus indicus*, and *Ichnocarpus frutescens*. Herbaceous species found there are *Desmodium triflorum*, *Costus speciosus*, *Phyllanthus amarus*, and *Elephantopus scaber* along with other seasonally available plant species. The community is dynamic along the gradient change of seasonal factors from time to time. Hence, the associated Vascular Arbuscular Mycorrhizae (AVAM) species found here are dynamic which also change the pattern of climax formation, in the said community and exhibit 10 to 99 percent of infectivity to host plants during monsoon.

**Keywords :** Joypore forest range, VAM status of 6 shrubs and 4 herbs, percentage of VAM infectivity.

## INTRODUCTION :

Medicinal plants are now showing much better attitude towards the present day study all over the world for their natural healing property without any harmful side effects. They are the products of nature's factory for different chemicals that actually perform the activities of different healing kinds due to presence of active principles. The growth and quality improvement of medicinal plants is very necessary because, it is used for the treatment of many diseases of ethnic community as well as the modern community.

To avoid the unwanted part of the raw drugs, it is always advisable to raise the medicinal plants through organic cultivation practices. The cultivation of medicinal plants and development of their active constituents has assumed greater importance in recent years due to their tremendous potential in modern and traditional medicine. They are also used as raw materials for pharmaceutical, cosmetic and fragrance industries. These are also used to sale in the local market and industries for the company's selected products. This is as because most of the allopathic doctors are now prescribed allopathic drugs including some ayurvedic products which are actually the products of some medicinal plants. About 80 % of the population in developing countries depends directly on plants for its medicine. In India there are more than 8000 species which have been identified as medicinal plants. It is reported that for 65 % of population, traditional medicine is

the only available source of health care (1). In the past decade people used plants to cure their ailments by the form of infusion, decoction, poultice, powder or other form directly or in the form of paste along with boiled water, lime and turmeric. This practice is going on in the rural areas of Indian Villages, where the people staying in forested areas and in remote villages. It is as because these sites are far from the civilized or modern market. Not only that, other reason is that they are financially weaker; therefore they could not purchase all the available modern medicine from market. After that, all the modern medicines have their side effects; therefore scientists suggested using the traditional system which is employed in rural areas since time immemorial. People have their own land, so that they can easily cultivate, regenerate or sale all the usable medicinal plants in their own garden. The indigenous system of medicine practiced in India is based mainly on the use of plants. Charak Samhita (1000 BC-100 AD) has recorded the 2000 vegetable remedies. Ancient medicine was not solely based on empiricism and this is evident from the fact that some medicinal plants which are used in ancient times still have their place in modern therapy (2). Plants have their different components which have the potential to cure the diseases. So, it may be used to cure the ailments as anticancerous, anti malarial, antidiabetic, antihemorrhoidal, anthelmintic, antidiysenteric or antispasmodic. This is due to the active principles of the plants

found in different parts like roots, fruits, bark, seeds, whole plant, flower, rhizome, corm etc. The compounds used for the therapy are alkaloids, saponins, glycosides, steroids, or other group of compounds which have the strong power to cure the diseases. But to develop the active principles in the plant, VAM infectivity is required because the association is mutualistic and enhances the growth and development of the plants. The reason is that VAM fungi support plants to grow better in a stress condition and supply phosphate and Zinc. Angiosperms, mainly shrubs and herbs grow better in a soil where all the nutrients are not exactly high or higher. In the said area plant having minimum roots. Plant roots have extensions of root epidermal cells known as root hairs. While root hairs greatly enhance the absorption surface, the addition of symbiotic mycorrhizae fungi vastly increase the area of the root for absorbing water and minerals from the soil (3). Therefore, Mycorrhizae fungi is said to be a amazing soil microbes for successful colonization in rootlets of seedlings (4, 5).

Before study the growth and inoculation of VAM fungi on selected medicinal plants, study of plants of different microclimates is essential, as because the rhizospheric roots of different plants at different microclimates are being infected by VAM fungi of varied types and the infectivity is also different. So, study of medicinal plants and infectivity of roots by VAM elements are the pre requisites for the study of soil spores in different seasons and at different zones of lateritic forests. Therefore, this study is a preliminary study of VAM fungi on 10 important plants including the study of active principles and parts used for the same in the said area. This may be a boon to develop biofertilizer in later stage to develop the local economy to pursue the social status of better kind.

#### AREA UNDER STUDY

The study area is Joypore (Jaypur/Jaipur) which is an administrative division in Bishnupur Sub-division of Bankura District, West Bengal. It lies in between 23 02 51 N and 87 26 48 E. The total area is 262.74 sq. km. The forested site of the study area which was selected for study of VAM associated with medicinal plants was Joypore forest range of Panchet Division (Forest), it comprises 4 beats namely Adhkatha, Joypore, Machantala and Kuchiakhole. The four beats are more or less same having dominant sal vegetation and which is dry deciduous type filled with some other tree species of valuable kind.

#### Materials and Methods

The roots of medicinal plants were collected from field by digging out off soil randomly. Collected roots were marked in polythene bags with rhizospheric soil and placed in a laboratory and washed thoroughly by tap water. Fine rootlets were chopped into 1cm length and immersed in 20% KOH solution in separate test tubes for three days. Next, solution of used KOH in the test tube was drained and again washed

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out using distilled water. This set was then treated with mild HCl (5 %) and wait for 5 minutes. After that, it was again washed thoroughly by distilled water and stained with Camel ink and vinegar (1:4) water and preserved in lactic acid, glycerin and water solution in the ratio 14 : 1: 1 (vol.) for further use. This treatment is called as cold treatment (6). Roots those are still pigmented (*Vangueria spinosa*, *Hemidesmus indica*, *Ichnocarpus frutescens*, *Smilax ovalifolia*, *Costus speciosus*, *Elephantopus scaber*) were bleached using freshly prepared alkaline hydrogen peroxide (Hydrogen peroxide: Ammonium hydroxide: water :: 10:3:567) for 10-20 minutes. Bleached roots were washed in tap water then soaked in mild HCl solution for 5 minutes, stained in ink as stated previously. After that the root samples were examined under light fitted compound microscope. Selected samples from watch glass were placed on clean grease free slides. Five root cuttings having 1 cm length from each vial was taken on a slide and mounted by a fine cover glass. For each species, 20 slides were taken for consideration and therefore, total length of roots used for the study of VA-mycorrhizal infection was 1 meter. In each case infection thread, vesicle (Balloon like protuberance), arbuscule (Labyrinth form), coiled hyphae, inter radicular vesicles, sclerotium, internal spore (round and yellowish), and percent of infection were recorded for the study of VAM. Side by side for the identification of host plants, twigs of the same plants were also collected and herbarium specimens were prepared for crucial analysis and for the study of taxonomic and ecological purpose following standard literature (7). To study the ecotype and variables of species from microclimate to microclimate even to study the species producing Non Timber Forest Produces (NTFPs) in the forest, some published papers and thesis have been consulted (8, 9 and 10). To identify the host species, available literature have been studied with the study of herbarium specimens housed in the Central National Herbarium (CAL), time to time for those that collected from lateritic region of southwest Bengal (11-17).

#### RESULTS AND DISCUSSION

From the present study it is concluded that among 10 medicinal plants studied (Table 1), highest infection percentage of host plants was observed in case of *Aristolochia indica*, *Flemingia chapper* and *Phyllanthus amarus* (99%) followed by *Costus speciosus* (98%), whereas lowest infectivity was observed in case of *Vangueria spinosa* (27%). From the study of soil, it is concluded that number of spores associated with per 10gm soil collected from the rhizosphere of specific medicinal plant was noticed

minimum to maximum (Table 2). The highest value was observed in case of *Elephantopus scaber* (166), followed by *Phyllanthus amarus* (154), where as lowest spore number was noticed in case of *Hemidesmus*

*indicus* (14). All the plants are effective medicinal plants of the said area, so their associated VAM fungi are important to enhance the growth and development of the host plants.

Table 1 Plants of medicinal importance at Joypore forest Range, Bankura, West Bengal.

Sl. No	Name	Family	Local Name	Parts Used	Uses	Active Principles	Annual Occurrence
1.	<i>Aristolochia indica</i> L. (Ref. 18)	Aristolochiaceae	Iswarmul/ Hansalata	Roots	Antiinflammatory, Antipyretic	Aristolochic acid	Round the year
2.	<i>Costus speciosus</i> Koen. (Ref. 19)	Costaceae	Keu	Rhizome, Leaves, Stem	Antidiabetic plant	Costunolide, Eremanthin	Going to be died in winter and summer
3.	<i>Desmodium triflorum</i> (L.) DC. (Ref. 20)	Fabaceae	—	Whole Plant	Diarrhoea, Galactogauge, Tonic, Diuretic	Stachydine, Pyrolidine, Urosolic acid, Vitexin.	Dried during summer
4.	<i>Flemingia chapper</i> Benth. (Ref. 21)	Fabaceae	Barasalpani	Whole Plant, Root	Root used as Cataract	Genistein	Leaf less during summer
5.	<i>Elephantopus scaber</i> L. (Ref. 22)	Asteraceae	Hatikan	Roots	Astringent, Cardiac agent	Sesquiterpene lactones	Dried from pre winter to pre summer
6.	<i>Hemidesmus indicus</i> R. Br. (Ref. 23)	Periplocaceae	Anantamul	Roots	Leprosy, Leucoderma, Skin disease, Itches, Arthritis	2-hydroxy, 4-methoxy benzoic acid, p-methoxy salicylic aldehyde, coumarins.	Round the year
7.	<i>Ichnocarpus frutescens</i> (L.) R. Br. (Ref. 24)	Apocynaceae	Kalilat	Whole plant	Atrophy, bleeding gum	Phenylpropanoids, Glycosides	Round the year
8.	<i>Phyllanthus amarus</i> Schumacher (Ref. 25)	Euphorbiaceae	Chotoamala/ Bhuamla	Whole plant Root, Leaves	Jaundice, Hepatitis	Phyllanthin, Hypophyllanthin	Dried during summer
9.	<i>Smilax ovalifolia</i> Roxb. (Ref. 26)	Smilacaceae	Ramdatoon/ Kumarika	Root	Veneral diseases	Chopachinne Smilacine, Sarsapogenin, Sarsapic acid.	Round the year
10.	<i>Vangueria spinosa</i> Roxb. (Ref. 27)	Rubiaceae	Maynakanta	Bark and fruits	Antibacterial	Epicatechin	Round the year

**Table 2 VAM infectivity of Medicinal plants of Joypore forest, Bankura, West Bengal.**

Sl. No.	Name of the Plant	A:V	IP	OS	SN	IRV
1.	<i>Aristolochia indica</i> L.	2:1	99	CH	143	-
2.	<i>Cheilocostus speciosus</i> (L. Konig.) C. Specht = <i>Costus speciosus</i> Koen.	80:73	98	CH	108	-
3.	<i>Desmodium triflorum</i> (L.) DC.	7:2	55	CH	55	-
4.	<i>Flemingia chapper</i> Benth.	1:3	99	CH	108	-
5.	<i>Elephantopus scaber</i> L.	13:14	50	CH	166	+
6.	<i>Hemidesmus indicus</i> R.Br.	40:0	40	-	14	-
7.	<i>Ichnocarpus frutescens</i> (L.) R.Br.	1:1	79	-	52	-
8.	<i>Phyllanthus amarus</i> Schumacher	25:7	99	CH, IRS	154	+
9.	<i>Smilax ovalifolia</i> Roxb.	60:0	60	CH	95	-
10.	<i>Vangueria spinosa</i> Roxb.	3:1	27	-	53	-
Total Species 10						

N.B.: A:V-Ratio of Arbuscle and Vesicle, IP-Infection percentage, OS-Other Structures, SN-Number of spore per 10gm soil, IRV-Inter radicular vesicles, CH-coiled hyphae, (+)-Present, (-) -absent, IRS-Inter radicular spore.

Medicinal plants and VAM fungi are mutuality share the components in the said ecosystem which need study in better managerial way, because the VAM fungi may be regarded as biofertilizer for those medicinal plant improvement in the *ex-situ* site. This depends upon the Traditional Knowledge and skill perception on technology based knowledge by researchers and scientists through rigorous study in field as well as in laboratory. Therefore, proper valuation of the Traditional Ecological Knowledge (TEK) is essential. Therefore, TEK would work towards a better conceptualization and management of wild ecology, preservation of ethno medicine as well as sustainable societal development for the indigenous population under study (28). But for validation, skill technology is required which may be a boon to sustain the system as a whole for near future. Therefore, such skill on medicinal plants are required to make it complete outside the forest even to develop biofertilizer to develop local economy. So, study on such mycorrhizae is required which is having potential effect on plant and environment in the said area. So, technologically managed ecosystem, ecosystem wise restoration can only be achieved. And therefore, some short term solution, but long term affectivity may be posed for their sustainable development. Not only that, proper and justified management may be made to the forest ecosystem for checking its weakness, to work with the knowledge based system through the traditional way, which need for the local people as a whole for local communities

that are comprehend and appreciated. Their perception is intermingled with ecological and social system which can run the knowledge pool in a holistic way rather than the comprehend way for the absolute fulfillment of the ecosystem in a better managerial way.

### Conclusion

There is a relation in between spore number and vesicle formation in a particular situation with particular species of plant. Vesicles number if increase then the number of spore automatically increase in this case. But the fact is that it is not fit with the infection of the rootlets. This means that, if infection is more the number of spores produced by VA mycorrhizae in soil may not be more. It depends upon the number of vesicle. By and large, the spore formation is directly related with number of vesicles. But, always it is under prediction because soil of the said species of particular kind may not fit with species space that is always underneath the ground. It is always associated with other types of roots which are produced by other plants in the same microclimate. So, actual prediction in each case may not correct with the composition there which lead to develop an association and need specific study in the same microclimate for individual species. That always depends upon the interactions of the composite VAM fungi and composite rootlets produced by higher plants or lower groups and vary time to time even from season to season. So, more and more association or composite study is to be required for the fixation of actual results.

Another conclusion is that, cold treatment and ink used for the study of VAM fungi is better because it is less expensive and less time consuming. Not only that, there is no side effect during laboratory work, which is always associated with chemical dyes or fluorescence dyes dur-



ing staining, and other treatment rather than cold treatment. So, for further study always need cold treatment and for staining which need Chilpork or Camel like simple ink.

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# SECHIUM EDULE OF CUCURBITACEAE: A MOST PROMISING PLANT AS DRUG VEGETABLE IN DARJEELING AND SIKKIM HIMALAYA

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## ABSTRACT

*Darjeeling and Sikkim Himalaya fall under the jurisdiction of Eastern Himalaya. A large number of drug plants are available here. Some of them are used by herbal companies, but a large number of drug plants and the products of them are being used by local people through medicine men of the same area. A small number of drug plants and their similar products are used frequently in the said area with potential ecological as well as economical significance. But, a few numbers is used broadly by the people which are superfluous i.e. colloquially they used the same from time immemorial. So, the present study is a study of squash (Sechium sp.) from the hill area to know more about the identity of plants as well as the present research of the same drug plant in the said area. It broadcasts the distribution, ecology and economy of the product in the hilly areas in Darjeeling and Sikkim of India.*

**Keywords:** Sechium-Eskush, Medicinal use, Taxonomy, Marketing and Management

## Introduction:

Darjeeling district and Sikkim of India is very close to their position and give similar attributes both in geography as well as in climate which govern more and more diverse pattern of vegetation with high degree of distribution. Not only that, all the neighbouring areas like Bhutan and Nepal including some countries nearer to the areas of northeast India give us similar products as these belong to similar geographical situations. By and large, we have a scope or opportunity to get some vegetables and drug products in the same range including Darjeeling and Sikkim Himalaya. So, if we study in the said two sites of Eastern Himalaya, some plants of great importance will come out having wide ecology and economy that may be the governing force to skip out other plants and drugs apart from them. Remembering these themes, the present author studied some aspects of one major drug vegetable in the said area with some explanations taking from some sources published time to time. Family Cucurbitaceae has some genera which are very much famous over the world. Among them, summer squash, winter squash, watermelon, cucumber, muskmelon, patel (*Trichosanthes*) etc. are common available local plant products. But, in the hills of both the States, the most promising one is Eskush, which is called squash or

scientifically called Sechium. The usable parts for the same plant are root, fruits, twigs, leaves and flowers. Marketed products are root, twigs and fruits. Fruits available in the market round the year, but the price vary from time to time due to availability of fruits more, less or lesser even least amount in the market. During rainy season, the twigs are available in the market. People of Hill districts use these luxuriantly for daily dish preparation. Fruits available in the market but these are varied kinds. Therefore, to know about the plants and their importance a review has been taken for consideration to discuss about the identity and the present status of the drug plants for future study and research.

If you study more, then it is crucial that Jeffrey's (1980) and Chakravarty's (1982) checklists of the Cucurbitaceae of India are now more than three decades old (Pandey *et al.*, 2013) which have some error that need to clarify to study the genera in details. Over this time, knowledge of the family's representatives even their critical characters over the range of distribution on the Indian sub-continent has grown considerably through botanical exploration day by day. The additions of the work of Naithani (1990), new treatments for Thailand (De Wilde and Duyfjes, 2008a) and China (Lu *et al.*, 2011), and revisionary work on some

genera, such as *Trichosanthes* (De Boer and Thulin, 2012) and *Coccinia* (Holstein, in press) made the same family more purified and analysed critically. Added to this, the online availability of taxonomic literature and specimen images, and molecular phylogenetic studies clarifying natural clade boundaries more predictable and more justifiable (e.g., Kocyan *et al.*, 2007; Schaefer *et al.*, 2009; Sebastian *et al.*, 2011; De Boer *et al.*, 2012), have led to many taxonomic and nomenclatural changes. Studies of Asati and Yadav (2012) on Vegetables of North East India have placed the genus in a particular position with specific subscription in which one important vegetable is *Sechium edule*. They studied range of diversity of these crops in which the cho-cho (*Sechium* sp.) is moderately distributed. The area of concentration is limited in areas like high hills of Meghalaya, Manipur, Mizoram, Nagaland, Sikkim and Darjeeling Hills of West Bengal. As per the study made by the present author, it is evident that *Sechium edule*, belongs to the family Cucurbitaceae is an important vegetable plant in entire Darjeeling and Sikkim Himalaya. Not only that it is also reported that this plant is used as vegetable which grows abundantly in the hills of Meghalaya, Mizoram, Manipur, Sikkim and Nagaland (Firdous *et al.*, 2012). In hilly Darjeeling of West Bengal, the fruits, tuberous roots and twigs are used as vegetables. Four varieties of Eskush (so called *Sechium edule*) are available from Kalimpong and Darjeeling areas due to presence of colour and outer spines, one with pale yellow, one with light green, another is dark green, last one is spine less, the light green is very common. This species having light green ecotypes are cultivated throughout the area (Das, 2014). Pandey *et al.* (2013) have described the species as *Sicyos edulis* with taxonomic type and distribution in India. The following is the synonyms and other information made the species easy to study.

In the market the demand of *Sechium edule* is high because it is used as pumpkin with high potential for its ecological and medicinal significance. In Nepal, it is available nearly round the year. At Dharan, Nepal, thirty vegetables were found both in winter and summer season but not throughout the year in which one important marketed species is *Sechium edule* (Photo Plate-1). Nineteen vegetables along with *Sechium edule* root were appeared only in winter season (Shresta and Rai, 2012). The plant is economic because all the parts are marketed but available season wise, i.e. during monsoon the vegetable part mainly twigs available, the fruit is available but the price is high, while root is only available during late winter or summer. The availability of fruits as well as other parts found common during post monsoon. In the late summer availability of fruits become lesser due to completion of production so, only the way of preservation takes place by which we

can get the quality squash fruits. Late summer need plantation to get the early vegetable obtained from the sprouting twigs which ultimately flourish luxuriant growth of the vegetation and get started flowering from July in hill Darjeeling. The peak season is august to October in each year, though in Kalimpong area it is available during April to May in a lesser quantity.

### Present Position of the Drug Plant:

*Sicyos edulis* Jacq., Enum. Syst. Pl. 32. 1760.,  
*Sechium edule* (Jacq.) Sw., Fl. Ind. Occid. 2(2): 1150. 1800.

Type: "In insulis Caribaeis vicinaque Americae continente detexit novas."

*Sechium americanum* Poir., Encycl. (Lamarck) 7: 50. 1806.

Type: "Cette plante croît naturellement à la Jamaïque, où on la cultive aussi à cause de ses fruits que l'on mange, & qui s'emploient dans les ragoûts."

Distribution in India: Cultivated throughout India.

Distribution outside India: Native to Mexico, cultivated throughout the tropics.

Image: <http://www.flowersofindia.net/catalog/slides/Chaco.html>

GenBank: Sebastian *et al.* (2012) and numerous other sequences.

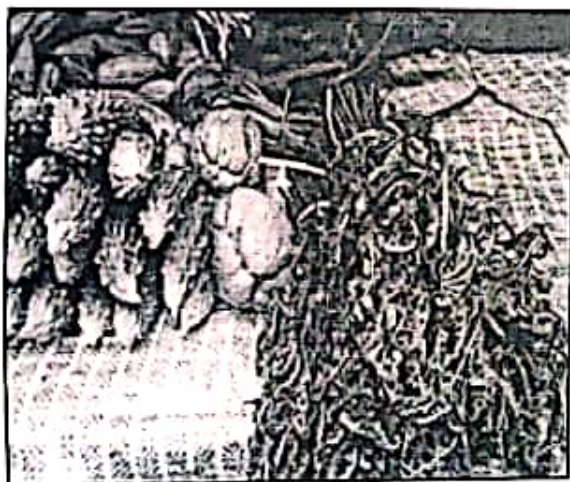
Comments: Molecular data show that *Sechium* is embedded within the genus *Sicyos* (Sebastian *et al.*, 2012).

The use of decoction of leaves and fruits of *Sechium edule* relieve urine retention, burning sensation during urination and also dissolve kidney stones. It is also used for the treatment of arteriosclerosis and hypertension (Gordon *et al.*, 2000). The various pharmacological studies suggested us about the *S. edule* which having diuretic properties, antioxidant activity (Ordonez *et al.*, 2006), anti-inflammatory and cardiovascular properties. The same species is used in case of severe hypokalemia in pregnancy (Jensen *et al.*, 2006). It has also been reported that the extract of *Sechium edule* having antimicrobial activity (Adrana *et al.*, 2009).

The roots, leaves, stems and fruits of the plant contain 5-O-glycosyl flavones and 3-C-glycosyl and were detected by LC-photodiode array-MS (Sicilano and De Tommasi, 2004). The extract of the seeds of *Sechium edule* contain twenty known Gibberellins. Gibberellins A8 and Gibberellin A8 catabolites are the major gibberellins found in *Sechium edule* (Albone *et al.*, 1984). According to Firdous *et al.*, 2012, the ethanol extract of fruits of *Sechium edule* possess anticonvulsant and Central Nervous System

(CNS) depressant activity.

PHOTO PLATE -1 (Figures: 1-9)

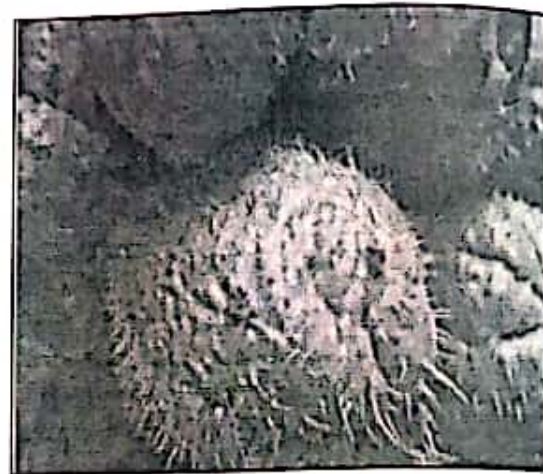
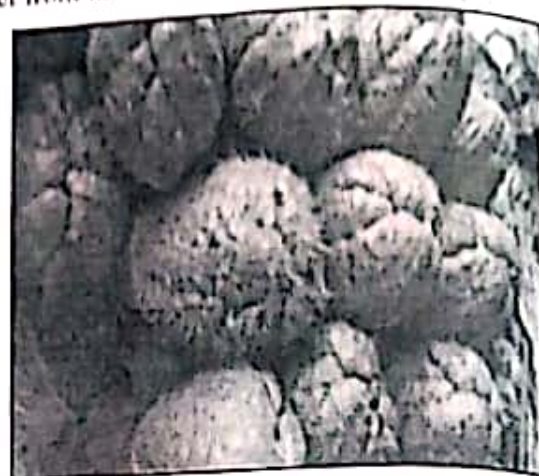


Figures (1-3): Upper left habit and habitat of growing *Sechium* during early monsoon, Upper right twigs marketed in Darjeeling Mall, West Bengal, India, for sale (Indian Rs. 20/- per pack, 2014/June 29\*), Lower one is fruits of *Sechium* in between Bittergourd and Diplazium at Mall Market, Darjeeling, the current rate of fruits of *Sechium* is Rs. 30/-per kg (Indian price in the year 2014). This is smooth type and glossy.

Figures (4-6): Fruits of *Sechium* with large spines,

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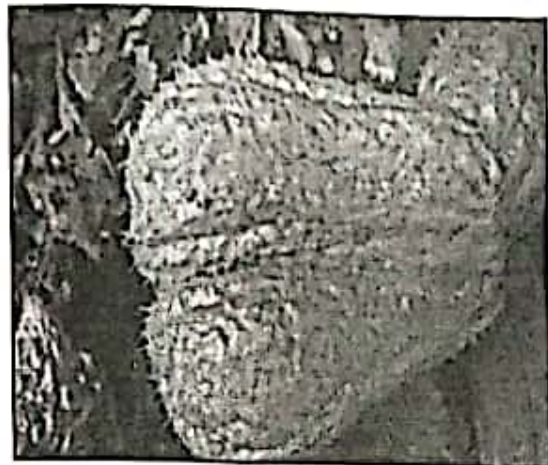
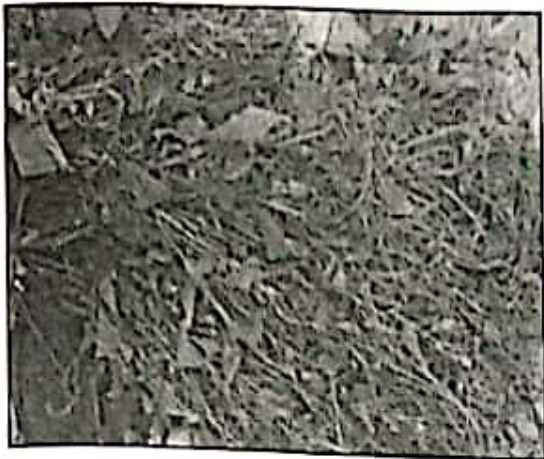
middle one with small but irregular spines, lower one twigs as vegetable very much popular in market and available in market from the end of the May to January.



Figures (7-9): Fresh twig as first flash in the market, middle one is joined squash rare in occurrence, right one is squash marketed at Singmari market, Darjeeling (price Rs. 30/-per kg. During June, 2014)

#### Conclusion:

For the use as vegetable it is important because it is available in hills and having medicinal properties. In the US it took on the name "Vegetable Pear" in the 1920s. It



was used as staple of New Orleans homes. The plant is generally self-sufficient plant and resistant to most diseases and pests, homeowners traditionally planted mirlitons (squash) to run along fences (The vine can grow to 50 ft.), over shrubs, and even straight up trees (Hill, 2009, 2010). In Darjeeling and Sikkim area it is cultivated in homestead gardens to follow up the ecology of New Orleans Homes. So, everybody planted in villages the same for the development of local economy even for the home use of the same plant which is promising medicinal one as vegetable. So, need to study about the plants and their ecology and economy to make it more sustenance though the development of separate body in hills for different prod-

ucts in near future.

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# ROLE OF MICROFINANCE IN RURAL DEVELOPMENT

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## ABSTRACT

*Microfinance in India has made its way over the years and it has become an important mechanism of delivery of credit particularly to rural poor. "Inclusive growth" is one of the important objectives of eleventh five year plan in India, the process in which each and every unit of the different sectors of the society are taken in the process of economic Growth and Development. In this respect Microfinance plays an important role in the financial inclusion of the people at the grass root level. However, the Government, since the inception of the planning various rural development programmes, land related legislations and schemes have been introduced, to up lift the condition of the rural poor of the country.*

*There have been a number of studies undertaken in India and other developing countries that have brought out the success of various micro finance programmes in alleviating rural poverty, promoting development of individuals, communities and developing small enterprises. The ultimate recognition of the viability, suitability and efficiency of microfinance as an agent and institution of development has recently come about, because of the pioneering work undertaken by Prof. Yunus of Bangladesh.*

*The present paper focuses on the significance of Microfinance and Self-Help Groups in developing and empowering the real poor of the country. The paper is organized into three sections. The first section makes a brief discussion upon the various rural development programmes started and implemented in India. The second section explores the major thrust of the paper i.e. the role of Microfinance and Self-Help Groups (SHGs) in the development of rural poor. The different sub-sections present the details of the origin of Microfinance in India; NABARD's Role; SHG-bank linkage; MFI-bank linkage etc. The last section comes up with the assessment on the working of Microfinance in India and certain important suggestions on the improvement of the same.*

*Hence the essence of this paper is to bring into the fore, the importance of Microfinance as a tool for rural development and provide some valuable inputs for further development in this direction.*

**Keywords: Rural, self-help, micro finance**

## INTRODUCTION

In the pursuit of economic development and planning, microfinance were engineered by a few well thinking planners to generate income and employment and alleviate poverty especially in developing countries (purna chandra parida and anushree sinha).

Micro finance refers the entire range of financial and non financial services including skills up-gradation and entrepreneurship development, rendered to poor for enabling them to overcome the poverty.

Rural development is one of the buzzword that has been assuming huge importance in the Indian Economy since many years. Steps have been taken for the actualization of this word but still there remains a huge distance to be covered in this direction. Among the various policies

and programmes that have been introduced for the rural development, Microfinance also is a significant and successful one. The present paper focuses on the importance of Microfinance and Self-Help Groups in developing and empowering the rural people. The paper is organized into three sections. Section (1). Makes a brief discussion upon the various rural development programmes started and implemented in India. Section (2) which is the main crux of the paper i.e. the role of Microfinance and Self-Help Groups (SHGs) in the development of rural poor. This section has sub-sections which discuss the concept of microfinance in India; its need; its origin; the role played by microfinance in rural development etc. The last section (3) comes up with the assessment on the working of Microfinance in India and certain important suggestions on the improvement of the same.



## SECTION 1: RURAL DEVELOPMENT PROGRAMMES IN INDIA :

Rural development has been a paramount concern since the beginning of the five year plans in India. The main rural development programmers constitute the following parts:

- i) *Provision of basic infrastructural facilities:* Various schemes and missions have been started to provide benefits in the rural areas in the form of schools, health facilities, roads, drinking water, electrification etc. Mention may be made of the Flagship programmes like Bharat Nirman, Indira Awaas Yojana, National Rural Health Mission, Rajiv Gandhi Rural Drinking Water Mission and Rural Infrastructure Development Fund.
- ii) *Schemes for the promotion of rural employment:* Since the decade of 70s the Indian Government have been introducing comprehensive programmes for providing employment to rural population like Integrated Rural Development Programme (IRDP), National Rural Employment Programme (NREP), Rural Landless Employment Guarantee Programme (RLEGP), Jawahar Rozgar Yojana (JRY) etc. However many of them have been restructured and renamed with the passing of time. In recent years National Rural Employment Guarantee Scheme (NREGS) which is now MNREGA has been quite successful in providing 100 days of guaranteed unskilled manual work to the rural adults. Together with this Swarnajayanti Gram Swarojgar Yojana (SGSY) and Sampoorna Grameen Rozgar Yojana (SGRY) have also achieved good results in terms of wage and self employment.
- iii) *Improving agricultural productivity in the rural areas:* Agricultural sector is the primary sector of the country, contributing around 17 percent to the total national income. The Planning Commission has been assessing the trend growth of various parameters that contribute to agricultural growth and improve the income generation in this sector. Some of the schemes which were started with the aim of improving productivity are- National Food Security Mission; Rashtriya Krishi Vikas Yojana; Integrated Schemes for Oilseeds, Pulses and Maize; Macro Management of Agriculture Scheme; Debt Waiver and debt relief Schemes; Fixing MSP; Crop-Insurance etc.
- iv) *Assistance through Financial Institutions and Microfinance:* For a very long period of time Non-institutional sources were the major sources of

credit for the rural areas. However in the post-independence era, the scenario slowly changed and Cooperatives started acting as prime institutional source of credit. Eventually Bank Nationalisation was taken up with the objective of helping the agriculture sector. Further rural credit was strengthened with the formation of NABARD in 1982, Local Area Banks in 1996-97, Regional Rural Banks (RRBs). However since the decade of nineties, one major innovational step was taken for the financial inclusion of the rural poor in the form of MICROFINANCE. It is seen as a provision of financial service to mostly low-income people, especially the poor and very poor who are without tangible assets. It is provided through the various Micro-Finance Institutions (MFIs) and Self-Help Groups (SHGs).

## SECTION 2: ROLE OF MICROFINANCE AND SELF-HELP GROUPS IN INDIA'S RURAL DEVELOPMENT

2. i. *MICROFINANCE AS A CONCEPT IN INDIA:*  
Microfinance is the provision of a financial service in small amounts by the financial institutions to the poor in the form of thrift, credit, insurance, leasing, money transfer etc. These provisions are aimed at economic growth and development of the poor by enabling to participate in various micro-business and micro-entrepreneurial activities. Thus Microfinance is one of the tools for fighting poverty by empowering and uplifting the rural poor leading to rural development.

However focusing on the different types of microfinance services in India, there are two different models viz. SHG-bank linkage model and MFI - Bank Linkage Model. SHG-bank linkage model involves the SHGs financed directly by the formal financial institutions viz., Commercial Banks, Regional Rural Banks and Cooperative Banks. On the other hand, MFI - Bank Linkage Model covers financing of Micro Finance Institutions (MFIs) by banking agencies for on-lending to SHGs and other small borrowers. Out of these two, SHG-bank linkage model has been assuming larger importance in the recent years in rural scenario and have emerged as prominent agents of financial inclusion for the poor.

2. ii. *ORIGIN OF MICROFINANCE IN INDIA:*  
The origin of microfinance in India can be traced back to the enactment of the cooperative credit societies Act, 1904 which was passed for providing production credit loans to the farmers through Primary Credit Societies. The formation of long term co-operative credit institutions to meet investment credit needs of the farmers started in 1928. With the various priority sector targets under social bank-

ing in 1907 and after bank nationalization in 1969, microfinance concepts in banking institutions once again came to the forefront. Microfinance in the name of Self-help groups (SHGs) first emerged in MYRADA (formerly acronym of Mysore Resettlement and Development Agency, now full name) in 1985. In 1986/87 there were some 300 SHGs in MYRADA's projects. However the actual and better application of micro-credit came into existence with the action research project 'Grameen Bank' in 1976 in Bangladesh, initiated by Dr. Mehmud Yunus, Professor of Economics in Chitgaon University of Bangladesh. This Grameen Bank model supported and supports landless poor, particularly women, to promote self-employment through the micro-credit disbursements and within a short period of time it became a major hit. Following its success, NABARD in India adopted the model in a modified form to fight poverty and empower women, especially in the rural areas through a pilot project named as Self-Help Group-Bank Linkage programme in 1992. After this, India has witnessed the rise of various micro-finance institutions through the length and breadth of the country.

### 2. iii MICROFINANCE IN RURAL DEVELOPMENT OF INDIA:

Microfinance is one of the key strategies of poverty alleviation and rural development. It offers timely and adequate small loans to the rural poor and in turn opens up avenues of micro enterprises and business for them. Thus microfinance opens the door of financial freedom and eventually can help in rural development.

NABARD (National Bank for Agriculture and Rural Development) has been acting as the major device of spreading microfinance activities. Success in microfinance in India would have been incomplete without the role played by NABARD. Thus in order to know the significance of microfinance in rural development, throwing some light on some of the major activities of NABARD becomes imperative:

- NABARD provides refinance support to the banks that provide loans to the SHGs to the extent of 100 percent. The total refinance disbursed stood around Rs, 3173.56 crore during 2009-2010.
- NABARD utilizes the Micro-finance Development and Equity Fund (MFDEF) for promotion of various micro-finance activities such as formation and linkage of SHG, training and capacity building of members, capital and soft loan assistance to MFI, livelihood propagation, studies, documentation, etc. During 2010-11, Rs 47.38 crore was released, of which Rs 29.95 crore was grant support for promotional activities and Rs 17.43 crore for Capital Support and Revolving Fund Assistance to MFI.
- NABARD continues to provide grant assistances

to various SHGs (Self Help Promoting Institutions) and agencies for promoting quality SHGs and for better credit linkage. It also conducts various awareness and sensitization programmes for SHG members and the representatives of their promoting institutions.

- NABARD had launched the Micro-Enterprise Development Programme (MEDP) during 2005-06 for skill up gradation and development of sustainable livelihoods/venturing into micro-enterprises by members of matured SHG. During the year, 1,606 MEDP were conducted for 37,138 members on various location-specific farm, non-farm and service sector activities.<sup>2</sup>
- NABARD has established a Centre for Micro finance Research (CMR) at Bankers Institute of Rural Development, Lucknow to take up research studies in the field of microfinance. The CMR functions with four sub-centres viz., Indian Institute of Bank Management (IIBM), Guwahati, Institute of Financial Management and Research (IFMR), Chennai, Institute of Development Studies (IDS), Jaipur and Chadragupta Institute of Management, Patna (CIMP).
- NABARD has extended financial support to Joint Liability Groups consisting of tenant farmers, Small-scale Activity Based Groups and has launched Pilot Project on SHG-Post Office linkage Programme in various parts of the country.

Now let us discuss briefly about the SHGs and their role in rural development of India.

A Self-Help group (SHG) is a group of 10 to 20 individuals having homogenous social and economic background, coming together to save small amounts on a regular basis to a common fund which is used to meet the emergency needs. The primary aim in the formation of SHGs was to uplift the financial condition of rural poor. In India, SHGs are either NABARD sponsored or Swarnajayanti Gram Swarajgar Yojna (SGSY) sponsored.

As on 31 March 2010, a total of 69.53 lakh SHGs were having saving bank accounts with the banking sector with outstanding savings of Rs 6198.71 crore as against 61.21 lakh SHGs with savings of Rs 5545.62 crore as on 31 March 2009, thereby showing a growth rate of 13.6 per cent and 11.8 per cent, respectively. Thus, more than 97 million poor households were associated with banking agencies under SHG-Bank Linkage Programme.<sup>3</sup> So far SHGs have been very successful in improving the socio-economic condition of the rural poor through its various financial and entrepreneurial activities.

Regarding the non-performing assets of bank loans to SHGs it stood at 2.94 per cent as on 31<sup>st</sup> March, 2010. During the year 2009-10, fund support of Rs 9.93 crore

was provided for capacity building, exposure visits and awareness-building as against Rs 6.10 crore during 2008-09. The cumulative fund support for the purpose as on 31 March 2010 stood at Rs 45.02 crore. During 2009-10, 6,804 training/capacity building programmes were conducted covering 2, 53, 868 participants.<sup>4</sup>

Another major intermediaries of Microfinance in India are the MFI-Bank linkage Models.

These models work under various legal forms like NGO MFIs, Cooperative MFIs, and NBFC MFIs incorporated under Section 25 of Companies Act, 1956 etc. These MFIs provide loan support to various groups and small borrowers and they in turn are financed by SIDBI, Public Sector Commercial Banks, RRBs, and Cooperatives etc. The total amount of finance from banks and financial institutions to MFIs as on 31 March 2010 was to the tune of Rs 13955.74 crore.

Moreover the role of MFIs in rural development can be lined up in the following points:

- Bringing the rural poor within the purview of formal banking.
- Providing collateral free loans to the rural population e.g. marginal farmers, artisans, labourers etc.
- Training and capacity building programmes for the members conducted on regular basis.
- Various micro enterprises and business activities were set up under the SHG-bank linkage Programme.
- Moral, emotional and practical support to the members especially the women section.
- Innovative activities on part of some of the groups have really turned out to be fruitful and have diversified their sources of income
- MFIs give the rural poor wider experience of the world outside the home and promote their socio-economic roles.
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- MFIs give the rural poor wider experience of the world outside the home and promote their socio-economic roles.

### SECTION 3: ASSESSMENT AND SUGGESTIONS

The Microfinance initiative has been quite successful as it is in well alignment with the rural set-up of the country. There has been a good increase in the outreach of MFIs by taking into the fold some of the really backward and neglected areas. Women empowerment seems to be rising at a rapid pace with the women-SHG covering more than the 50 percent of the total SHG number. Various capacity building measures by NABARD have helped in awareness, sensitization and skill formation of the rural population engaged in both the farm and non-farm activities. Most importantly people from rural areas are getting into banking habits which is directly related with their economic upliftment. NABARD with the help of Commercial Banks, RRBs, Cooperatives and SIDBI are actively trying to change the fate of rural poor. However like any other programme, Micro-Finance Programme has also been suffering from some serious flaws related with the quality of the bank-linkage programmes, proper use of the loans by the loanees, uneven coverage of these programmes among the different states of the country etc. Thus considering these loopholes few suggestions can be made in this direction:

- Though number wise MFIs are doing well but now the focus should be on their quality and sustainable outreach. This calls for proper planning, approach and management of all the microfinance schemes.
- Microfinance programme should try to bridge the gap of the geographical differences of the country. Studies in the last few years reveal that most of the SHG-bank linkage programme was serving the southern states and these needs to be evened out throughout the country.
- Steps should be taken for the entry of more private banks in the rural financial sector by providing conducive environment to them.
- MFIs operating in rural areas should be given additional incentives in terms of interest rate structures.
- Adequate credit rating agencies should be introduced for assessing the credit worthiness of the MFIs.
- There should be proper infrastructural, technical and marketing facilities for the products produced by different SHGs.
- NABARD should initiate more programmes for the rural poor, not only related with finances but should also cover insurance, savings and remittances facilities etc.

- The interest rates charged under the various microfinance schemes should be lowered and made more reasonable to the poor.
- Local and Regional Governments should actively participate in the microfinance programmes targeted for the rural poor and should take area-specific approach for better results.

#### CONCLUSION:

Till date people in rural India are quantitatively and qualitatively out of the purview of formal financial inclusion which acts as a major hurdle behind the rural development. Thus in this circumstances Microfinance can drag them into the mainstream and equip them with tools for personal and societal development. The various initiatives taken by NABARD have shown very encouraging results. Though it is very clear that the MFIs have played and are playing significant role in fighting the rural poverty and underdevelopment, still a lot needs to be done. There exist many short-falls in the implementation and execution of microfinance programmes, which if wiped out could give wonderful result of successful poverty alleviation, paving way for rural development. All in all, it can be concluded that inadequacies in the steps of rural development can be well balanced by effective and poor-oriented MICROFINANCE INSTITUTIONS.

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<sup>2</sup> NABARD ANNUAL REPORT 2011, pp-32.

<sup>3</sup> Status of Micro Finance 2009-10, p-vii www.nabard.org

<sup>4</sup> Status of Micro Finance 2009-10, p-xiii, www.nabard.org

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منور ہو گیا تھا۔ جب حافظ کرامت انٹرنس حافظہ 1911ء میں شہر لکھنؤ میں پیدا ہوئے اس دوران اس شہر میں ہر طرف شعر و شاعری کے ڈنگے بج رہے تھے۔ اس ماحول کا اثر حافظ کے ذہن و دل پر بڑا گہرا ہوا، دوسری وجہ یہ بھی تھی کہ حافظ کے والد حافظ محمد شفیع جو تجارت کے ساتھ ساتھ شعر و شاعری بھی کرتے تھے جب گھر میں ہی شاعرانہ ماحول ہوتا ایسی صورت میں حافظ کو شاعری سے دلچسپی ہو جانا کوئی بڑی بات نہیں۔ انہیں بچپن سے ہی شاعری کا ذوق ہوا اور کم عمر میں ہی عظیم شعراء کے سینکڑوں اشعار یاد کر لئے۔ ابتدائی تعلیم لکھنؤ میں ہوئی، انہیں زبان اردو کے علاوہ مرہٹی اور قاری زبان پر مہارت حاصل تھی۔ چونکہ مرز مین لکھنؤ پر پیدا ہوئے تھے اس مناسبت سے تخلص حافظ کے بعد لکھنوی جوڑ لیا جبکہ تجارت کے سلسلے میں شہر کلکتہ پہنچے اور وہیں سکونت اختیار کر لی، وہ زندگی کے آخری ایام تک کلکتہ میں رہے اور شعر و شاعری کرتے رہے اور اسی شہر میں 1999ء میں جہان فانی کو خیر باد کہا۔

حافظ کرامت انٹرنس کی دو کتابیں پردہ و خفا سے نکل کر منظر عام پر آچکی ہیں۔ پہلی کتاب ”دیوان حافظ“ جو چھ سو بیس صفحات پر مشتمل ہے۔ یہ ایک ضخیم دیوان ہے جس میں بے شمار غزلیں موجود ہیں۔ دوسری کتاب ”گلستان حافظ“ ہے جس میں حمد، مناجات، نعت، منقبت، مرثیہ، نظم، قطعہ، رباعی، مثلث اور غصہ جیسے شعری اصناف پر طبع آزمائی کی ہے۔ لیکن ان کا اصل میدان غزل ہے، انہوں نے غزل کو ہی اپنا مقصد حیات بنایا۔ دراصل ان کے دل میں شعر و شاعری کے علاوہ قرآن حفظ کرنے کا جذبہ بھی موجزن تھا اس لیے انہوں نے قرآن حفظ کیا اور حافظ قرآن ہوئے، اس مناسبت سے انہوں نے اپنا تخلص ”حافظ“ رکھا۔ بہت سے ناقدین و قارئین کو اس بات کا اعتراض ہوگا، خاص کر قاری والوں کو کہ اب تک تو قاری کا عظیم شاعر حافظ شیرازی کو سنتے آئے تھے یہ اردو میں حافظ کہاں سے پیدا ہو گیا؟ لیکن ان کا اعتراض کرنا بے بنیاد ہوگا کیونکہ وہ خود حافظ قرآن تھے۔ حافظ لکھنوی نے اپنی کچھ غزلوں کے مقطعے میں حافظ قرآن ہونے کا فخر یا اندازا اختیار کیا ہے۔

خلاصہ (Abstract)

حافظ کرامت انٹرنس حافظہ 1911ء میں شہر لکھنؤ میں پیدا ہوئے۔ ابتدائی تعلیم لکھنؤ میں ہوئی۔ کچھ دنوں کے بعد حافظ اپنے والد محترم کے ساتھ تجارت کے سلسلے میں شہر کلکتہ آ گئے اور زندگی کے آخری ایام تک شہر کلکتہ میں رہے۔ بچپن سے شعر و شاعری کا ذوق رہا اور زندگی کے آخری مرتبہ شعر و شاعری کو اپنا اوڑھنا بچھونا بنا لیا۔ انہوں نے غزل، قطعہ، رباعی، نعت، حمد، منقبت، نظم ان سبھی اصناف شاعری پر طبع آزمائی کی ہے مگر انہیں اصل میں غزل سے زیادہ دلچسپی تھی، یہی وجہ ہے کہ انہوں نے مختلف موضوعات پر بے شمار غزلیں لکھیں۔ ”دیوان حافظ“ اس بات کا ثبوت ہے کہ ایک ضخیم دیوان ہے جس میں ہر موضوعات میں غزلیں مل جاتی ہیں۔ ان کی شاعری میں سادگی بیان ان کا خاص وصف ہے۔ تصوف، رند و میخانہ زندگی کے حقائق، تحریک آزادی، جشن آزادی، تقسیم ہند کا خوشچکان سانچہ، طنز و طعانت ان سبھی کی رنگہ رنگی ملتی ہے۔ بیت کے اعتبار سے بھی ان کی غزل، مکمل معلوم ہوتی ہے۔ انہوں نے تشبیہ، استعارہ، رمزیت، کنایہ، تلمیح، نازک خیالی، قاری کے تراکیب، الفاظ کا برملا استعمال، ان سبھوں کا فنی اعتبار سے بڑی کامیابی کے ساتھ استعمال کیا ہے۔

جہادی الفاظ (KeyWords):

شاعری، غزل، حافظ، حیات و کائنات، تحریک آزادی، جشن آزادی، خیالات و جذبات، تقسیم ہند، سادگی بیان، جدت خیال، ندرت فکر، تصوف، نفا، تصور مرگ، رندانہ، طنز، یہ محبوب حقیقی، محبوب مجازی، نسا طیبہ عناصر، تنزل، اسجھامیہ، تنوع، رمزیت، نازک خیالی، قاری کے تراکیب، الفاظ کے درو بست، خوبیاں، خامیاں۔

مرز مین لکھنؤ ابتداء سے ہی علم و ادب، تہذیب و تمدن اور شعر و شاعری کا گہوارہ رہی ہے۔ اس شہر میں بڑے بڑے ادیب اور قد آور شاعر پیدا ہوئے۔ جب شہر دہلی پر تاجی آئی اس دوران بہت سے شاعروں نے لکھنؤ میں پناہ لی اور یہاں کے مکرانوں اور نوابوں نے ان کا خیر مقدم کیا۔ اس وقت کا لکھنؤ شعر و شاعری کی روشنی سے روشن و

حافظ تجھے یہ دولت عظمت ہوئی نصیب

نصیب نما سے حافظ قرآن ہو گیا

فلام مصطفیٰ بلیاوی نے اپنے مضمون

”دو باتیں“ میں حافظ ہونے کی تصدیق اس انداز سے کر دی ہے:

”حافظ لکھنوی اس معاملے میں بہت خوش

نصیب ہیں کہ وہ حرف حافظ شخص ہی نہیں رکھتے بلکہ بجز تعالیٰ

حافظ قرآن بھی تھے اور ہر سال ماہ رمضان شریف میں پورا

قرآن پاک سنا تے تھے“

گرچہ حافظ کو قدیم شعراء کے سینکڑوں اشعار

یاد تھے مگر شاعری میں پہچلی پیدا کرنے کیلئے استاد کی ضرورت ہوتی

ہے۔ شروعات میں حافظ نے اپنا کلام اسد رود و ولوی کو دکھایا اور پھر

بعد میں اثر اور پھر مصور کے شاگرد ہوئے جس کا اعتراف خود انہوں

نے اپنی غزل میں کیا ہے

فیض اثر کے بعد مصور کے فیض سے

ہیں کامیاب محفل شعر و سخن میں ہم

حافظ لکھنوی نے اپنی شاعری کے ذریعہ انسانی

دوست ہونے کا ثبوت دیا ہے۔ انہوں نے اپنی شاعری میں عشق و

عاشقی اور گل و بلبل کے علاوہ فلسفہ تصوف، نفسیاتی حقائق،

پند و نصیحت، وسعت خیال، تجسس، حیات و کائنات اور دنیا کی بے

ثباتی جیسے مضامین پیش کر کے انسانی ذہن و دل کو خواب غفلت سے

بیدار کیا ہے۔ فقیر ربانی و جو القادری حافظ کی شخصیت پر چند جملے تحریر

کرتے ہیں:-

”ایسے حالات میں اگر یہ کہا جائے کہ شاعری

انسانی دل و دماغ کی کوئی خدمت نہیں کر رہی تو بے جا نہ ہو گا لائق

تعمین ہیں وہ شعراء جو کام کی شاعری کرتے ہیں اور قابل احترام

ہیں وہ شعراء جو مکرر رسا سے نجات آخر کا سامان فراہم کرتے ہیں ان

ہی چند سرمایہ داران شعراء میں جناب حافظ کرامت الرحمن حافظ

لکھنوی کی محبوب ترین شخصیت بھی ہے۔“

حافظ کو اپنی شاعرانہ عظمت کا احساس تھا اور

اکثر وہ مشامروں میں شریک بھی ہوتے اور طرحی مشاعرے کو ترجیح

دیتے تھے۔ مگر اپنی تجارتی مصروفیات اور خاندانی الجھنوں میں الجھ کر

رہ گئے۔ ان کی زندگی میں نہ تو ”دیوان حافظ“ شائع ہوا اور نہ ہی ”

گلستان حافظ“۔ انہیں ان کی زندگی میں وہ شہرت نہ مل سکی جس کے

وہ مستحق تھے۔ ضد حافظ کا بیان ہے کہ انہوں نے رومی اور عطار کے

افکار بھی اپنی غزل میں شامل کئے ہیں

رومی، عطار کا مفہوم حافظ نے لکھا

یہ محفل کب ہوا یا بے طریقت سے الگ

بیسویں صدی کے وسط سے تھوڑا قبل کا زمانہ

ترقی پسند تحریک کا زمانہ تھا۔ اس تحریک سے تعلق رکھنے والے شعراء

وادب کے ذہن میں یہ بات آگئی تھی کہ انقلاب کا مطلب

جاگیردارانہ نظام، سرمایہ داری، معاشی اور اقتصادی استحصال،

بھوک، افلاس اور مذہبی اجارہ داری کے خلاف جنگ ہے۔ انہوں

نے شاعری کے ذریعہ اشتراکیت کا پرچار کیا، جنسی مسائل، پر خاص

توجہ دی، خیالات و جذبات کو زیادہ اہمیت دی جانے لگی، شعراء

ہیئت اور جمالیاتی ذوق سے نظریں چرانے لگے، سماجی انادیت کا

بول بالا ہو گیا۔ ترقی پسندوں نے نظم کو اہمیت دی اور غزل کو تا ریکیوں

میں ہٹکانا چاہا مگر حسرت اور فیض نے غزل کے ذریعہ اپنے خیالات

واڈکار کا اظہار کیا۔ انہوں نے اچھی شاعری کے لئے فن اور زندگی کی

انادیت دونوں کو یکساں اہمیت دی۔ غزل کے ذریعہ حیات و

کائنات کے وہ تمام مضامین پیش کئے جانے لگے۔ اس عہد میں غزل

کے ذریعہ اپنے خیالات و جذبات کا اظہار کرنے والوں میں حسرت

اور فیض کے علاوہ مجاز، پرویز شادہی، واسق جون پوری، علی سردار

جعفری، احمد ندیم قاسمی خاص طور سے اہم ہیں۔ اسی عہد سے تعلق

رکھنے والوں میں ایک گمنام نام حافظ لکھنوی کا بھی ہے۔ حافظ نے

اپنی غزل میں زندگی اور حالات کے مسائل کو بھی جگہ دی ہے۔ حافظ

کے عہد میں آزادی کی تحریک زوروں پر تھی۔ ہر طرف انگریز بھارت

☆☆☆  
یہ نگر حواش ہندو، تاریکی شب چمائی ہے جگتا  
کشتی کا سہارا کوئی نہیں ساحل کا خدا ہی مانف ہے

☆☆☆  
گلستان میں ہر مست خاک اڑ رہی ہے  
گلوں سے یہ موسم میں کیا ہو رہا ہے

☆☆☆  
نہیں معلوم وہاں کون سی دلچسپی ہے  
واپس آتے نہیں جو ملکِ عزم جاتے ہیں

☆☆☆  
اس رنجِ گل کا باغ میں آتا ہے جب خیال  
آنکھوں سے خون رونا ہوں فصلِ بہار میں  
حافظ نے روایت سے بناوٹ نہیں کی، قدیم

شعراء کے کلام کا باضابطہ مطالعہ کیا، جس کا اثر ان کے کلام میں جگہ  
جگہ ملتا ہے۔ حافظ کہیں میر سے متاثر نظر آتے ہیں تو کہیں سودا سے،  
کہیں پر غالب کا غلبہ ہے تو کہیں مومن سے اثر قبول کیے ہوئے  
ہیں۔ ان کی غزل میں شاد، حسرت، ہمت، احمد نراز، اثر لکھنوی اور  
مصور کا اثر نمایاں معلوم ہوتا ہے۔ انہوں نے ان شعراء کا اثر ضرور  
قبول کیا مگر ان کا اپنا ایک خاص رنگ ہے، وہ خاص رنگ ان کے  
بیان کی سادگی ہے۔ ان کی شاعری اسی سادگی بیان کی وجہ سے بالکل  
اگلی اور خوشنما معلوم ہوتی ہے۔ انہوں نے روایتی شاعری کی ہے مگر  
زندگی سے تعلق رکھنے والے تقریباً ہر موضوعات کی نظر اندازی بھی کی  
ہے اور ان کی شاعری میں بہت خیال اور ندرت فکر کی کارفرمائی بھی  
ملتی ہے۔ ڈاکٹر محمد منصور عالم حافظ کی شاعری پر بحث کرتے ہوئے  
فرماتے ہیں کہ:

”حافظ کی بساط شاعری پر ہر طرح کا رنگ و  
آہنگ ہے، لفظی، لفاظی، سلاست، بیان اور طرکی ادا بھی حافظ کے  
کلام میں بدرجہا تم موجود ہیں۔ غزلوں میں کوئی قدیم رنگ قبول نہ لایا

چھوڑا کا نعرہ بلند ہو رہا تھا۔ ہندوستان کے نوجوان اپنے خون سے  
آزادی کی کیریں کھینچ رہے تھے تو دوسری طرف شعرا اپنے قلم کی  
طاقت سے انگریزوں کے حوصلے پست اور ہندوستانی نوجوانوں کے  
حوصلے بلند کر رہے تھے۔ حافظ نے بھی اپنی شاعری کی ذریعہ  
نوجوانوں کے خون کو گرم کیا اور آزادی کا پرچم بلند کیا ہے

میر جنداں میں پہنچی جس گزری جوش بہاراں کی  
تو سن کر قیدیوں نے کروئے زنجیر کے کلوے  
ہندستان جب انگریزوں کی قید سے آزاد ہو  
گیا، ہندوستانیوں نے بڑے جوش و ثروش سے خوشیاں منائی۔ حافظ  
بھی خود کو نہ روک سکے اور ان کے قلم سے یہ شعر نکل پڑا

خزانِ رخصت ہوئی آئے بلبلو دور بہار آیا  
چمن میں آتشِ گل کا تماشا ہم بھی دیکھیں گے  
ہندستان تو آزاد ہو گیا تھا مگر آزادی کی خوشی

دیباہت نہ ہو سکی۔ ہندستان کے بیشتر علاقوں، شہروں اور  
دیہاتوں میں فرقہ وارانہ فسادات شروع ہو گئے، ایک انسان  
دوسرے انسان کے خون کا پیاسا ہو گیا۔ ہر طرف خون کی ہولی سمیٹی  
بارہی تھی، گلیوں سے سڑکوں تک خون بہتا ہوا نظر آ رہا تھا۔ ہر طرف  
سے رونے اور سسکنے کی آواز آرہی تھی۔ ہندستان کے سینکڑوں بچے  
یتیم ہو گئے، سینکڑوں عورتیں بیوہ ہو گئیں، ہزاروں ہزار کی تعداد  
میں لوگ بے گھر ہو گئے۔ لوگ ایک شہر سے دوسرے شہر بھاگ رہے  
تھے۔ بہت سے لوگوں کو مجبوزا اپنا وطن چھوڑنا پڑا۔ واقعی تقسیم ہند  
اور ہجرت کا واقعہ دل کو دبلا دینے والا واقعہ ہے۔ اس خون  
خوار سانحہ کا اثر ہندوستان کے ادیب و شاعر پر ہوا اور انہوں نے  
پُرورد اور پر سوز انداز میں اپنے دل کا غبار نکالے۔ حافظ لکھنوی نے  
بھی اپنی نظروں سے خون آلود ماحول کو دیکھا تھا۔ انہوں نے دل  
سوز انداز میں اپنے خیالات و جذبات کی ترجمانی کی ہے۔

اگر وہ دل لئے ہوئے اس گل کی یاد میں  
آنکھوں سے خون روتے ہیں مچن چمن میں ہم

کوٹنا ہو جانا لازمی ہے۔

یہ دنیا دار قافی ہے لہجہ میں تجھ کو رہتا ہے  
نہ اس آنگی اے اہل دول حیر پتھر کی

☆☆☆☆

ہر چیز کو فنا ہے کسی کو بجا، نہیں  
کیوں آپ اپنے حسن پر اترائے جاتے ہیں

☆☆☆☆

عبث بھولے ہوئے ہوتے تھکا دار قافی پر  
گھڑی ہوگی نہ عشرت کی نہ یہ خواب گراں ہوگا  
حافظ نے تصور مرگ پر بھی چند اشعار کہے  
ہیں۔ ان کی نظر میں موت کا ایک وقت معین ہے انسان لاکھ کوششیں  
کر لے مگر وہ بچ نہیں سکتا کیوں کہ موت کا فرشتہ وقت پر آتا ہے اور  
روح کو قبض کر کے لے جاتا ہے۔ ان کے ذہن میں ایک سوال یہ بھی  
بیدا ہوتا ہے کہ کیا مرنے کے بعد آرام ملے گا یا نہیں؟ تصور مرگ پر  
یہ اشعار دیکھئے

دل یہ کہتا ہے کہ آرام ملے گا مر کر

نہ ملا مر کے بھی آرام تو پھر کیا ہوگا

کون جانے کس گھڑی آئے بلانے کیلئے

کوئی بھی واقف نہیں ہے موت کے پیغام سے

ڈاکٹر محمد علیم الدین حافظ کی صوفیانہ شاعری پر

بحث کرتے ہوئے اس طرح رقم طراز ہیں:

”خالص صوفیانہ رنگ کے اشعار حافظ لکھنوی

کے عیاں بہت پائے جاتے ہیں۔ جس سے اس بات کی تصدیق

ہوتی ہے کہ ان کی صوفیانہ شرب سے حصہ وافر ملا تھا۔ یہی وجہ ہے کہ

کیف و سوز میں بھی حافظ کا رواں اسلوب اور بے ساختہ لہجہ طریقت

و حقیقت خادان شریعت اندہ (حضرت مجدد الف ثانیؒ) کا پابند

رہا۔“

حافظ کی غزل میں رندانہ اشعار کثرت سے

ہے لیکن جذبات خیال اور حسن بیان کا دامن کہیں بھی ہاتھ سے نہیں  
چھوٹا ہے۔ چھوٹی بجزوں میں جو غزلیں ہیں ان میں زیادہ سادگی و  
صفا اور بر جستگی ہے اور اس سے معلوم ہوتا ہے کہ وہ ایک  
قادرا لکلام شاعر تھے اور فن شاعری پر ان کو عبور حاصل تھا۔“

اردو شاعری کی دنیا میں تصوف ایک ایسا رنگ  
ہے جس میں غالباً اردو کے بیشتر شعراء رہتے ہوئے ہیں، ولی، سراج،  
میر تقی میر، درد، آتش، غالب، اور دوسرے درجنوں بڑے شعراء  
ہیں جن کی شاعری صوفیانہ افکار سے خالی نہیں، ان میں ایک اور نام  
حافظ لکھنوی کا ہے جنہوں نے صوفیانہ رنگ میں ڈوپ کر شاعری کی  
ہے۔ حافظ جب محبوب حقیقی کا ذکر کرتے ہیں تو عشق و محبت کے سمندر  
میں ڈوب کر، جب وہ بے چین ہو جاتے ہیں تو خدا وحدہ لا شریک  
سے دعا کرتے ہیں، کبھی اپنا حال دل سناتے ہیں تو کبھی انہیں  
تلاش کرتے ہوئے نظر آتے ہیں۔ تصوفانہ مزاج ان کے رگ و پے  
میں چھایا ہوا تھا۔ انہوں نے صوفیانہ مضامین خوب بانٹھے ہیں۔  
ان کی غزل میں وحدۃ الوجود، معرفت و وحدانیت، فنا و بقا، دنیا کی  
بے ثباتی، تصور حیات، تصور مرگ جیسے مضامین خوب ملتے ہیں۔

حافظ خدا کی وحدانیت کا ذکر کرتے ہیں اور  
وحدۃ الوجود کے تاثر ہیں۔ ان کا کہنا ہے کہ خدا کا جلوہ ذرے  
ذرے میں موجود ہے صرف دیکھنے والے کی نگاہ خاص چاہئے۔

موجود کس مقام پر وہ لاسکناں نہیں  
میر ذرے سے عیاں ہے مگر پھر بھی عیاں نہیں

☆☆☆

چمن ہو دشت ہو دریا ہو سہ ماہ انجم ہو  
یہ دنیا آپ ہی کے حسن کی معلوم ہوتی ہے  
حافظ کی نگاہ میں دنیا فانی ہے اور دنیا میں  
رہنے والی تمام چیزیں قافی ہیں، سبھی کوٹنا ہو جاتا ہے، دنیا والوں کو وہ  
صحیح کرتے ہوئے یہ کہتے ہیں کہ وہ اپنی ظاہری خوبصورتی، مال  
دولت اور ساز و سامان پر اترائے نہیں کیوں کہ دنیا کی ساری چیزوں



پائے جاتے ہیں۔ ان کے کلام میں ساغر، شراب، میخانہ، رند،  
میش، خوار، ستوار، سپہ، کج ساقی جیسے الفاظ کا استعمال خوب ہوا  
ہے۔ ان کی غریب اشعار میں دلکشی بھی ہے اور مستی بھی، بیکر تراشی بھی  
ہے سائنسی بھی۔

اگر مغان مغل ممدی سا جت ہے کے مغل نے کی  
تو جگہ پلا دے مگھوں سے وہ ساغر وینا کیا جانے

☆☆☆

ہوا چلتی ہے شخصی مست ہر شاخ گل تر ہے

پلا اے ساقی رتھیں کہ پھر دور بہار آیا

☆☆☆

مانفک مست سے بے ہوش ہیں بھی

ساقی نے آ کے بزم کو مٹانہ کر دیا

مانفک کے کلام میں طرز کے ساتھ ساتھ

ظرائف کا پہلو نمایاں ہے۔ ان کے طرز و ظرائف کا نکتہ ان

کا محبوب، شیخ، واعظ، ناسخ، زاہد، اور خود بھی ہیں۔ انہوں

نے جبکہ چند وصیحت کی بات بھی کی ہے۔

واعظ تو کیا کرتا ہے کیوں نہ کرے حور

کیا ظلم میں جانے کیلئے کام بھی ہے

☆☆☆

نہ جانے کیا اثر ہم پہ پڑا چند وصیحت کا

کہ مٹانے سے واعظ اور ہم دونوں بچ نکلے

☆☆☆

جو یکدے میں جائیں حضرت واعظ

تو شیخ جی اسے کار خواب کہتے ہیں

☆☆☆

گنوا دیں اپنا اس نیت کا تراکی اکت میں

ہوئی جو مجھ کو ذلت کیا کہوں کچھ کہ نہیں سکتا

مانفک لکھنوی نے جہاں محبوب حقیقی

سے لوگ کیا ہے اور لغو فائدہ مطامین ٹپٹیں کئے وہیں وہ محبوب

بازاری کا طرح طرح سے ذکر کرتے ہوئے نظر آتے ہیں۔ کہیں

وہ محبوب کی تعریف کرتے ہیں تو کہیں ٹکڑے لکھو، کہیں جبر کی بات

کرتے ہیں تو کہیں وصال کا رونا روتے ہیں، کہیں وہ سراپا حسن و

جمال کا ذکر کرتے ہیں تو کہیں اس کی ما زواوا کی کہانی بیان کرتے

ہیں، کہیں وہ محبوب کو چھینتے ہوئے دیکھے جاتے ہیں تو کہیں اس

کا بے پناہ خیال رکھتے ہیں۔ ان کے ادائے بیان سے اس بات کا

اندازہ ہوتا ہے کہ مانفک کا محبوب خیالی نہیں بلکہ حقیقی معلوم ہوتا

ہے۔ مانفک کے عشقیہ اشعار کے چند نمونے دیکھئے۔

دکھا دو تم ذرا رتھ را پنی دو قدم چل کر

قیامت کس طرح ہوتی ہے پر پام بھی دیکھیں گے

☆☆☆

آج آج کل سے چھپاتے ہوڑ برنڈ نو رو کو

کیا کرو گے کل جو میرا سامنا ہو جائیگا

☆☆☆

پروانے چلے جب شمع جلی عشاق چلے سو زخم سے

بیگانہ رہا جو چلے سے وہ چلے کی حالت کیا جانے

ہر روز تو وہہ کرتے ہو کب تم نے کیا ہے وعدہ دونا

باتوں سے تمہارے سنگھڑے جاملن کا خدا ہی مانفک ہے

☆☆☆

ادھر تیا رخم رخصت ادھر تم بھی ہوئے رخصت

جنازہ جو ہاتھ اپنا لگا دیجے تو کیا ہوتا

مانفک کی شاعری میں جہاں نسا طیبہ عناصر ہیں

وہیں انہوں نے غم کے پہلو کو بھی روار کھا ہے۔ ان کی شاعری میں

درد، تکلیف، تڑپ کا برملا استعمال ہوا ہے

حافظ کے اسلوب کا کمال ان کی سادگی ہے۔  
انہوں نے اظہار بیان میں خلوص سے کام لیا ہے۔ حافظ بالکل سادہ  
اور بے تکلف انداز میں اپنے جذبات کا اظہار کرتے ہیں

جو طریق عشق میں کامل ہوا

ہاں اسی کو راز حق حاصل ہوا

حافظ نے اپنی غزل میں حسن مطلع کا خوب

استعمال کیا ہے۔ اور یہ کام انہوں نے غزل میں حسن و جمال پیدا  
کرنے کے لئے کیا ہے

نہ پوچھو ہم سے کیا گذری دل بنا ہجران پر

کبھی رو یا مقدر پر کبھی تدبیر درما پر

شعاع مہر کا پر تو چہ ان کے روئے تاباں پر

نظر ہرگز ٹھہر سکتی نہیں، رخسار جاناں پر

حافظ کے کلام میں درجہ بالا خصوصیات کے علاوہ بھی بہت سی خصوصیتیں

پائی جاتی ہیں ان میں روانی، رنگینی، جنوع، رمزیت، نازک خیالی،

بہار آئیں الفاظ اور خوش لہذا قاری کے تراکیب، ان خصوصیات نے

حافظ کی غزل کو ایک دلکش اور پرکشش رنگ عطا کیا۔

حافظ کی غزل میں جہاں موضوعات کی وسعت

ہے وہیں ان کے یہاں صنعتوں کے بہترین تجربے بھی دیکھنے کو ملتے

ہیں۔ صنعتوں کے استعمال سے شاعری میں رنگینی و دلچسپی پیدا ہوتی

ہے ایسے تو انہوں نے مختلف صنعتوں کا اہتمام کیا چہ ان میں تلحیح،

تشبیہ، استعارہ، جنینس، اشارہ و کنایہ، مبالغہ اور رمز و ایما کو خوب برتا

گیا ہے۔ تلحیح کی چند مثالیں

چلے ہو طور پر موسیٰ مگر اتنا تو ہلا دو

تھیں عشق آگیا تو روئے تاباں کون دیکھے گا

ادھر نر باد آدھر شیریں مٹی دونوں کی جان آخر

نہ کام آئی کس کی بھی جوئے شیر چتر کی

☆☆☆

دامن تو سی چکے ہیں مگر اے جنوں تا

صد سے سے سیز پاک ہے کیسے رفو کریں

☆☆☆

میں تخیل ہوں ساقی محفل میں ترازیں نکالوں

جب تیرا کس چلنے حکم لے جاؤ گے تیرے ہاتھوں

حافظ کے کلام میں مرثیہ نہ کینیت نہ کے برابر

ہے۔ ان کی شاعری میں نیا طبع عناصر جگہ جگہ دیکھنے کو ملتے ہیں اور  
بیشتر کلام میں امید کی کرن نظر آتی ہے۔

قدائے ساقی کوڑ ہوں یہ امید ہے حافظ

کریں گے حشر میں میرا ب مولا جام کوڑ کو

غزل کی روح اور معیار کا پیمانہ ہمیشہ سے تغزل

ہی رہا ہے۔ حافظ کے کلام میں تغزل کا خاص اہتمام ملتا ہے اور اس میں  
موسیقی بھی موجود ہوتی ہے۔

خدا کی یاد سے جو دل بھی غافل نہیں ہوتا

تو اس دل کو کبھی اندھ سے باطل نہیں ہوتا

انہیں احساس کیوں ہوتا ملامری محبت کا

اگر سیتے میں اپنے اک دھڑکتا دل نہیں ہوتا

حافظ نے اپنی غزل میں غالب کی طرح

استفہامیہ انداز بھی اختیار کیا ہے جس کی وجہ سے ان کی غزل پر لطف  
اور اثر ہو گئی ہے

اے ہلا موت و میں تدبیر کیا کروں

مطلق نہیں ہے آہ میں تا شیر کیا کروں

☆☆☆

یا الہی خیر ہو دل آج تمہارا ہے کیوں

بار بار ان کا تصور دل میں اب آتا ہے کیوں

☆☆☆

خون رو رو کر بھلان کو دلا سکتا ہے کون

رنگ اپنا ان کی محفل میں بھاسکتا ہے کون

مجبور کرتی رہے گی۔ حافظ کے اس شعر سے میں اپنی بحث ختم کرنا چاہوں گی

خون کی برسم میں تم نے بہت غزلیں سنی ہو گی  
عطر انور اور حافظ کا دیوان دیکھتے جاؤ

حواشی و کتابیات:

- ۱- محمد اقبال (ترتیب و مقدمہ)۔ گلستان حافظ، ص ۱۹، ایجوکیشنل پبلیشنگ ہاؤس، دہلی ۲۰۰۹ء
- ۲- محمد اقبال (ترتیب و مقدمہ)۔ ایضاً، ص ۱۲، ایضاً ۲۰۱۰ء
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- ۵- احتشام حسین، سید اردو ادب کی تنہیدی تاریخ، قومی کونسل برائے فروغ اردو زبان نئی دہلی
- ۶- عبادت بریلوی، ڈاکٹر، غزل اور مطالعہ غزل، ایجوکیشنل بک ہاؤس، علی گڑھ ۱۹۸۳ء
- ۷- خالد طوی، غزل کے جدید رجحانات کتابی دنیا، نئی دہلی ۲۰۰۸ء
- ۸- ایوب الیٹ صدیقی، ڈاکٹر، آج کا اردو ادب، ایجوکیشنل بک ہاؤس علی گڑھ ۲۰۰۸ء
- ۹- حیدر اللہ شاہ ہاشمی، پروفیسر، نثر و شعری اور درجہ بلاغت، اعجاز کتاب پبلیشنگ ہاؤس نئی دہلی ۲۰۰۶ء

جیسے سحر ایہ سحر آدمی نہ مانتا پھرنا چائے ہمتوں  
وہ لکھی نہ بخت محفل بہترے حاضر دل میں  
استعارہ کی ایک مثال دیکھیں  
غزلیں رخصت ہوئی اے بلبلو دور بہار آیا  
جہن میں آتش گل کا تماشہ ہم بھی دیکھیں گے  
تشبیہ کی چند مثالیں دیکھیں

آتا رہا خیال جو زنج سیاہ کا  
اس الجھنوں میں صبح سے اب رات ہو گئی

☆☆☆

دل نہ بچنے میں رہے گناہ میں بس میں  
سامنے میرے وہ پائری صورت ہو گی  
حافظ نے بتدل اور عامیانه خیالات سے اپنی  
غزل کا دامن پاک و صاف رکھا ہے۔ انہوں نے خودداری کا اتنا پاس  
رکھا کہ کبھی بھی اپنی زبان پر دل میں بچکولے لکھانے والی محبت کو نہ لائے

پاس خودداری یہاں تک تمامیت میں مجھے

مٹ جائے ولی لب پر کبھی لایا نہ گیا

”دیوان حافظ“ کا گہرائی سے مطالعہ کرنے

کے بعد یہ بات سامنے آتی ہے کہ ان کے دیوان کے بیشتر اشعار  
اچھے ہیں۔ کچھ اشعار ذریعہ مانی اور کچھ نچلے درجے کے بھی ہیں۔ ایسا  
ہونا کوئی نئی بات نہیں کیونکہ تقریباً زیادہ تر شعراء کے دیوان میں ایسے  
اشعار دیکھنے کو مل جاتے ہیں۔ کچھ ہی اشعار کی وجہ سے انہیں شہرت ملتی  
ہے۔ حافظ لکھنوی کے اشعار میں جہاں خوبیاں ہیں وہاں خامیاں بھی  
ہیں لیکن خوبیاں اس قدر ہیں کہ چند خامیاں پر وہ خفا میں گم ہو گئی  
ہیں۔ حافظ نے بے شمار غزلیں اردو ادب کی گود میں ڈال کر اردو  
ادب کے سرمایہ میں بیش قیمت اضافہ کر دیا ہے۔ حافظ اپنی غزلوں کی  
بدولت اردو ادب کی دنیا میں آفتاب و ماہتاب بن کر چمکتے اور دیکھتے  
رہیں گے اور ان کی غزل اردو ادب کے کارنمین کو بار بار پڑھنے پر

خلاصہ (Abstract):

ذہرا احمد اور ان کے بعد آنے والے ناول نگاروں نے ناول نگاری کے ذریعہ صرف اپنے عہد کے تصور کشی کی ہے بلکہ نیا نیا مباح کرنے کی کوشش بھی کی ہے اس دور کے ناول نگاروں کی تحریر چرکا اس منصف کے ابتدائی نقوش تھیں اس لئے خامیوں سے پاک بھی نہ تھے ان کے ناولوں پر داستانوی روایت کی جھلک نظر آتی ہے اس لئے مثالیٹ پسندی، رومانیت اور جذبات کی فراوانی اس دور کے ناولوں کی خصوصیات ہیں ۱۹۳۶ء میں ترقی پسند تحریک نے ناول کو فنی و فکری سطح پر نئی نئی شاہراہ سے حصارف کر لیا اور باقاعدہ ایک نظریہ حیات دیا جس کی بنیاد "اشتراکیت" پر رکھی گئی۔ اس دور میں اردو ناول اپنے ارتقائی منزلوں کو طے کرتے ہوئے اس مقام تک پہنچ گیا تھا جہاں زندگی اور موت سے کسی بھی گوشے کو فنی و فکری کے ساتھ ناول میں پیش کیا جانے لگا۔ ترقی پسند تحریک نے ادب کو زندگی اور موت سے قریب تر کر دیا اس لئے اس عہد میں اردو ناولوں میں مثالیٹ پسندی اور رومانیت کی جگہ حقیقت نگاری، مقصدیت اور رنگینی نے لے لی۔ پریم چند، کرشن چندر، سجاد ظہیر، مصمت چغتائی اور مزیز احمد جیسے ناول نگاروں نے ناول کے معیار کو بلند کرنے اور اس کے دامن کو وسیع کرنے میں نمایاں رول ادا کیا۔

ناول ایک ایسا فن ہے جس میں وسعت اور ہر گیری کی گنجائش ہوتی ہے اس میں ناول نگار کو اپنی بات کہنے کی نہ صرف آزادی ہوتی ہے بلکہ اس کی بھی آزادی ہوتی ہے کہ وہ سماجی زندگی کے حالات و مسائل کو تفصیل کے ساتھ پیش کر سکتا ہے۔ ناول میں حقیقی زندگی کی عکاسی ہوتی ہے۔ فوق نظری عناصر سے پر تیز کیا جاتا ہے۔ گویا انسان زندگی کے بیچ وٹم، کلکتہ اور ریخت تخریب و تہ، نسا و نسا و نسا جیسے حالات کو موثر طریقے پر اظہار خیال کی جتنی آزادی ناول میں ہوتی ہے اتنی کسی دوسری نثری صنف میں نہیں ہوتی۔ یہی سبب ہے کہ دور حاضر میں ناول کو جتنی مقبولیت ملی کسی دوسری نثری صنف کو نہ مل سکی۔

بنیادی الفاظ (Key Words)

بنیاد، مثالیٹ پسندی، متنوع، افق، شکستہ، مطالبات، رول، تسکین، اعتماد، پستی، ناول نظریہ حیات، اشتراکیت، سماجی، اقتصادی۔

ناول ایک ایسی صنف ہے جس کا تعلق موت سے نسبتاً زیادہ گہرا ہوتا ہے سماجی تبدیلیوں سے اس کا براہ راست تعلق ہوتا ہے جہاں ناول ایک طرف معاشرے کے رجحانات سے اثر قبول کرتا ہے وہیں دوسری طرف ان رجحانات کو متاثر بھی کرتا ہے۔ یوں تو ہر ادب پارہ کسی نہ کسی شکل میں موت کی تبدیلیوں کا آئینہ دار ہوتا ہے لیکن ناول میں یہ ٹیوٹی کہیں زیادہ ہے کیوں کہ یہ ایک بنیاد صنف ہے اور دوسری یہ کہ یہ روایتی قصے کی ترقی یافتہ شکل ہے ان دونوں دونوں نے ناول کو سماج اور معاشرے کا آئینہ دار بنا دیا جس سے یہ صنف ادب اپنے وقت اور حالات کے مختلف رجحانات کی ترجمانی میں معاون ثابت ہو سکے اس طرح ناول کا سب سے بڑا مقصد زندگی اور انسانی معاشرے کی دستوں کو ماحاطہ کرنا ہے اور یہ ہے کہ ناول کا فن زندگی کی حقیقتوں کی عکاسی کا فن ہے۔

اردو گلشن میں ناول کو بنیادی حیثیت حاصل ہے زندگی اور معاشرے کی عکاسی جس کا مایاب ترین طریقے سے ناول میں کی جاسکتی ہے کسی دوسری صنف میں نہیں کی جاسکتی ہے زندگی اور اس میں ہونے والی گونہ گونہ تبدیلیوں کا بھر پور عکس ناول میں نظر آتا ہے ابتدائی دور سے ناول نے مختلف تحریک و رجحانات کا ساتھ دیتے ہوئے اور ترقی روتی کی منزلیں طے کرتے ہوئے زندگی کی تشکیل نو میں اہم رول ادا کیا ہے اردو ناول کے بانی

بیسویں صدی کے پانچویں دہائی میں لکھے گئے بیسویں ناولوں کا موضوع تقسیم ہند کا سانحہ اور اس سے جڑے مسائل ہیں۔ ہجرت کا کرب، نساوات، صنعتوں کا فروغ، تعلیم کی توسیع، عدم تحفظ، تہذیبی کلکتہ و ریخت، سیاسی جبر و اقتدار کا زوال و انہدام اور ایسے ہی کئی دوسرے مسائل نے اس حد تک انسانی ذہن کو مجروح کیا کہ حیات و کائنات کو دیکھنے اور سمجھنے کا نظریہ بدل گیا، سیاسی روح نرسا واقعات کا نتیجہ تھا کہ انسان کا رخ ظاہر سے باطن کی جانب مڑ گیا اور ادب کی دنیا میں جدیدیت، کا رومان عام ہوا جس میں وجودی اور باطنی مسائل پر زیادہ زور دیا گیا۔ اس عہد کے ناولوں میں فکری و فنی دونوں اعتبار سے متنوع تجربے کئے گئے۔ مختلف تصادات اور انسانی نفسیات و کیفیات کو ناول میں پیش کیا گیا۔ گزرتے وقت کے ساتھ ساتھ نئے تصورات نظریات اور فنی تجربات نے ناول کے دامن کو وسیع کر دیا۔

بین الاقوامیت نے نئی تکنالوجی اور اطلاعات کی فراہم کی وجہ سے ہمارے لئے ترقی کے راستے ہر طرف کھول دیئے۔ کمپیوٹر تکنالوجی کی وجہ سے بہت سارے کام آسانی کے ساتھ ہونے لگے۔ لیکن اس جدید تکنالوجی اور بین الاقوامیت نے ہندوستانی تہذیب اور اخلاق کو بگاڑنا شروع کر دیا۔ نئے اخلاقی طور پر بگڑنے لگے۔ پورن سائنس و کیڈ کرائس کھلے عام باتیں اور اس چیز کی پرمیکس کرنے لگے ہیں۔

جس کی وجہ سے سماج بھرتی کی طرف جا رہا ہے۔

عصر حاضر میں بدلتے تہذیبی، سماجی، ثقافتی، اقتصادی، اور مذہبی منظر نامے کی اقلیت چھٹل، ناپائیداری اور اس میں انسان کی بنیادی کمزوریاں خود فرض، اور ریاست اور بین الاقوامی سیاست کی کمزوریوں کا قائم کردہ ملامتی ڈھنگ اور نئی اجارہ داریاں قائم کئے جانے کی سازش اور ان سازشوں کو مدد دیکھانے والی قومیں بطور موضوع آج کے ادیب کے لئے اہم تخلیقی محرکات ہیں۔

عصر حاضر کے ماول نگاروں نے موضوعات کے بہت سارے اپنی دریافت کئے ہیں۔ جو آج سے قتل ممکن نہیں تھا۔ بلاشبہ ان میں کچھ یا دماغی کی کونج ہے۔ انداز کا کراؤ بھی ہے۔ لیکن اس کے علاوہ بھی بہت کچھ ہے جسے عصری صداقت کا نام دیا جاسکتا ہے۔

دنیا گلا بلائز ڈھونڈتی ہے اور برقیاتی میڈیا کی لیلٹار سے پوری دنیا زیر و زبر ہو رہی ہے۔ نئی تکنیکی ایجادات ترسیل و تبلیغ کی برحق ہوئی سبوتیس، کمپیوٹر، ٹیکنالوجی، اور تجارتی تقاضوں نے جہاں بظاہر نئی ترقیوں کے دروازے کھولے ہیں۔ وہیں مسائل بھی پیدا ہو رہے ہیں۔ جس کا کوئی آسان حل نظر نہیں آتا۔ بظاہر آسائش اور ساز و سامان سے بھرپور زندگی اندر سے کمزور اور شکستہ ہے۔ نوری نتائج اقدار ہوس نے ایمانی و بدعنوانی جیسے اقدار حاوی ہیں۔ آج کی زندگی Information high way کی زد میں ہے۔ زندگی کی تمام چھوٹی بڑی ضرورتوں مثلاً خرید و فروخت، تجارت، حصول تعلیم ترسیل سب پر اس کا اثر پڑ رہا ہے۔ جب پوری زندگی، سماج کا ڈھانچہ انسان اور ثقافتی ترجیحات سب کچھ اس قدر تیزی سے تبدیل ہو رہی ہے۔ زبان و ادب جو انہیں چیزوں کی ترجمانی کرتی ہے۔ ان میں تبدیلی کا روٹنا ہونا لازمی ہے۔ موجودہ عصری مسائل مثلاً کشمیر کا مسئلہ، یا بامری مسجد کا المیہ، فسادات، انتہا پسند سرگرمیاں، بدعنوانیاں، اور بے روزگاری وغیرہ ایسے مسائل ہیں۔ جن میں موجودہ زندگی بری طرح متاثر ہے۔

دور حاضر کے ماول نگار اپنے ماولوں میں وہی پیش کر رہے ہیں جو ان کے تجربات کا حصہ ہیں۔ زندگی کا کیوس اتنا وسیع اور رنگارنگ ہے کہ اس کی نیچنگیاں اور حیرت مایاں ہمارے لئے محرکات کا خزانہ سیٹے ہوئے اس رسم کے انتظار میں چشم بر اور ہستی ہیں۔ جو اس نامی دکھ کھ میں شریک ہونے کا موقع دیتی ہیں۔ زندگی اور زمانہ ہمارے لئے نئے تجربے، مطالبات اور واقعات کا مجموعہ، ہماری حیرت، ہکلاؤ

کا خوف، تسکین اور تسلی، امید و بیم، یقین و گمان، انتظار، اذیت کی قوتوں کو بے قرار رکھا ہے۔ اور زندگی کی معنویت، حیا و کاکاٹھ کے رہا اور رشتوں کے بارے میں سوال جواب کے سلسلے کو قائم کرنا چاروں ماول نے ہر زمانے اور ہر دور میں اپنی الگ شناخت مانگی ہے اور اپنی پہچان نئے برسوں سے کروائی ہے۔ ۱۹۸۰ء کے آس پاس رہنا ہونے والی سیاسی، سماجی اور تہذیبی سطح پر جو تبدیلیاں رہنا ہونے انہوں نے زندگی کے سانچے کو بڑی حد تک بدل دیا۔ سماجی، سیاسی، مذہبی، اور اقتصادی سطح پر نئے مسائل پیدا ہوئے جن کا حل نئی نسل کو ہی دھونڈنا تھا اس دور میں ماول نگاروں کی نئی نسل سامنے آئی ان میں حسین الحق، شمول احمد، شرف عالم، ذوقی، منظر، پیغام آقا، عبدالصمد، الیاس احمد ندوی، جوگندر پال، سید محمد اشرف، اقبال مجید، شفیق علی، امام نقوی، یحیٰی اور وغیرہ نے اپنے ماولوں میں تہذیبی کشش، معاشرت، اخلاقی قدریں، رشتوں کی پہچان، سیاسی بازیگری اور بدلتے سماج کو بہت ہی اچھی طرح پیش کیا ہے۔

عبدالصمد ایک کامیاب ماول نگار ہیں۔ ان کے اہم ماولوں میں دو گز زمین، مہاتما، خواہوں کا سویرا، مہاساگر، دھمک اور کھرنا وراق شامل ہیں۔ دو گز زمین ان کا سب سے اہم ماول ہے۔ اس ماول پر انہیں سابقہ اکادمی ایوارڈ سے بھی نوازا گیا۔ عبدالصمد نے دو گز زمین میں بہار کے گاؤں اور وہاں کے خاندان کو موضوع بنایا ہے۔ اس میں ہجرت کے مسئلے کو آفاقی رنگ عطا کیا۔ یہ ماول ان کے عیسائی مطالعہ اور مشاہدہ کا آغاز ہے۔ اس میں انہوں نے تقسیم کے اگلے کو بھی بیان کیا ہے۔ اور اس کے نتیجے میں پیدا شدہ مسائل کو موضوع بنایا۔ عبدالصمد سیاست کے استاذ ہیں۔ انہوں نے اپنے ماول کے ناما بابا میں سیاست سے خوب کام لیا ہے۔ ان کے نیاوتہ ماول سیاسی محور پر گردش کرتے ہیں۔ عبدالصمد نے اپنے ماول مہاتما میں بہار کے اعلیٰ تعلیمی اداروں میں مریہ، بدعنوانیوں اور غنڈہ گردی کا پردہ تاش کیا ہے۔ راکیش ایک محنتی اور آدرش وادوی نوجوان ہے۔ انہوں نے پی ایچ ڈی کی ڈگری نہایت محنت سے حاصل کی۔ لیکن ان کا کہیں تقرر نیکھار میں نہیں ہو پاتا ہے۔ اس لئے کہ ان کا کوئی ایجوکیشن کا ڈانڈ نہیں ہے۔ ان کے پاس رشوت دینے کے لئے پیسے نہیں ہیں۔ ان کے برعکس ان ماولوں کا تقرر ہو جاتا ہے جن کے پاس روپیہ ہے یا کوئی گاڈڈار ہے۔ عبدالصمد اپنے ماول کے توسط سے یہ بتانے کی کوشش کی ہے کہ ہمارے ایجوکیشن سٹم پورے طور پر کرپٹ ہو چکا ہے۔ سلیکشن کمیٹی کو اچھے اور قابل استاد نہیں، رشوت چاہئے۔ یہ موجودہ صورت حال ہے اور اس عتاب کا شکار صرف راکیش نہیں بلکہ

مضامین اور ایوانوں کے ذریعے ہندوستان میں سماجی سائنس کی ترقی ہے۔ فنسفر کا یہ اول  
اساطیری پیش کش اور زبان و بیان کے بہاؤ کی وجہ سے کافی پسند کیا گیا۔ اس ماول کے  
بعد فنسفر نے ظہر کر پیچھے کی طرف نہیں دیکھا۔

شمول احمد معاصر اردو ماول میں اپنی منفرد شناخت رکھتے ہیں  
جنس اور جنسی مسائل ان کے ماول کا خاص محور ہے۔ نڈی اور مہاماری ان کے دو مقبول  
ترین ماول ہیں۔ شمول احمد نے جنس کو موضوع بنا کر عورت اور مرد کے رشتے کو علاقہ  
طور پر پیش کیا ہے۔ شمول احمد کلشن کے رمز شناس ہیں ماول کے ناما باا ہنر سے بخوبی  
واقف ہیں نڈی اور مہاماری میں کرداروں کی پیش کش یا انسانی نفسیات کی گہرا کشائی  
دیکھا جاسکتا ہے۔

حسین الحق معاصر اردو ماول کا ایک بڑا نام ہے۔ ان کے  
مشہور ماولوں میں نرات اور بولومت چپ رہوشا مل ہیں۔ نرات ہندوستانی مسلمانوں  
کی تاریخ اور تہذیب کا مرقع ہے۔ خالد اشرف نرات کے بارے میں لکھتے ہیں کہ حسین  
الحق کا رات صوبہ بہار کے متوسط طبقہ کے ایک مسلم گھرانے کی زندگی کے داخلی اور  
خارجی تغیرات کی داستان ہے۔ وقار احمد اور ان کی اولادوں نے اپنی ابتدائی زندگی ٹھلی  
ٹڈل کلاس کے Slums سے شروع کی ہے لیکن تجارت اور اعلیٰ ملازمتوں نے ان کو  
اعلیٰ طبقوں میں پہنچا دیا ہے، جس کی بنا پر وقار احمد کے دو بیٹے ایک بیٹی اور ان کے بیٹے  
عجیب قسم کی معاشرتی عدم آہنگی میں مبتلا ہو گئے ہیں۔ وقار احمد اور ان کا بڑا بیٹا فیصل ہائی  
سوسائٹی کے تصنع اور غیر شخصی مزاج سے متنفر ہیں اور اپنے ٹڈل کلاس کے ماضی کو نرا موش  
کرنے کے لئے تیار نہیں ہیں جبکہ دوسرا بیٹا تمیز اور بیٹی شہل جدید صارتی معاشرے  
میں رہنا پسندتے ہیں۔ اس لئے ان کا کردار ماضی ان کے لئے کوئی اہمیت نہیں رکھتا۔  
نرات میں دکھایا گیا ہے کہ بیسویں صدی کے آخری دہائی کے ہندوستانی مسلمانوں کے  
لئے ماضی کو جوالے سے اپنی شناخت قائم کرنے یا نہ کرنے کا سوال جہاں ایک اہم  
حیثیت رکھتا ہے وہیں نرتہ وارانہ نسا دات اور ہندوؤں اور مسلمانوں میں فروغ پانے  
والی احیا پسندی اور جیاد پرستی کی کشش نے بھی مسلم مسائل کو ایک اور جہت عطا کی  
ہے۔ ایسے وقت میں جبکہ وقار احمد اور ان کی اگلی نسل ماضی کے آسیب کی گرت سے نکل  
کر ہندوستانی معیشت اور معاشرت میں نئے اعتماد کے ساتھ ترقی کی راہ پر گامزن  
تھے۔ ہندو مسلم جارح مذہبیت زبان پر انہیں قدرت حاصل ہے۔ اور ان کی باہمی آویز  
شان کے لئے ایک خطرناک چیلنج ثابت ہوتی ہے۔ "بولومت چپ رہو" ایک اسکول

ہندوستانی سماج کا زیادہ تر قائل اور ہونہار طالب علم ہیں۔ لوگوں نے راکیش کی زندگی  
مردانہ تھی۔ راکیش رومل میں سماج کو نقصان پہنچا رہا ہے۔ کیا یہ ہندوستان کے جمہوری  
نظام پر ایک بڑا ناراغ نہیں ہے؟

پیغام آفاقی اہم ماول نگار ہیں۔ مکان اور پلین ان کے اہم  
ماول ہیں۔ اس میں انہوں نے دہلی میں ایک مکان کی حفاظت میں پریشان حال  
میڈیکل سائنس کی طالبہ نیرا کو موضوع بحث بنایا ہے۔ انہوں نے اس میں نیرا کی بے  
بہی اور کمزوری کے مختلف نقوش کو اپنے ماول میں منعکس کیا ہے۔ خالد اشرف لکھتے ہیں  
کہ پیغام آفاقی کا مکان ہندوستان کے جدید شہری معاشرے کی بظاہر خوش نما و خوب  
صورت زندگی کے پس پردہ چلنے والے کرپشن، لاقانونیت اور اخلاقی بے راہ وری کی  
نشاندہی کرتا ہے۔ میڈیکل کی طالبہ علم نیرا اور اس کی بوزگی ماں تباہ ہیں، اس لئے ان  
کا کرایہ دار کماران کا مکان بڑھتا پاتا ہے۔ کمار اور اس کا معاون اشوک پولیس انسٹران  
کو خریدتے ہیں۔ عدالتوں میں نیرا کے خلاف چھوٹے مقدمات کھڑے کرتے ہیں۔  
تصدد و غنڈہ گردی کر کے نیرا کو خوف زدہ کرنے کی کوشش کرتے ہیں اور جملہ والوں کو نیرا  
کے خلاف بھڑکاتے ہیں۔ نیرا پیشہ ور سفارشیوں کے کمروں کے چکر کاٹی ہے اور کبھی  
کچھریوں میں بھٹکتی ہے اور کبھی اپنے دوست پولیس انسٹرالوک سے مدد لینے کی کوشش  
کرتی ہے لیکن کمار اور اشوک نے چیرہ تحائف، تفریحات اور دنگلوں اور سیکس کی  
رشوت کا ایسا جال پھیلا رکھا ہے کہ سارے شہر کے انسٹران اور سرکاری ادارے ان کے  
آگے سرخم کرتے نظر آتے ہیں۔

فنسفر کا شمار اردو اہم ماول نگاروں میں ہوتا ہے۔ کینٹی، کہانی  
انگل، دو بی بی، فسوں، شوش منھن، شوراب، ماٹھی ان کے قائل ذکر ماول ہیں۔ پانی  
ایک علاقہ ماول ہے۔ خالد اشرف لکھتے ہیں: فنسفر کا 'پانی' جدید علاقہ اسلوب  
اظہار کا ماولٹ ہے۔ مصنف نے ایک ایسے نرک کو موضوع بنایا ہے جو تمام آسانٹوں اور  
نعتوں سے پرے اس دنیا میں صرف پانی جیسی بنیادی شے کا طلب گار ہے اور پانی  
خوفناک رنگوں کے قبضے میں ہے۔ بیٹھے جات بخش پانی کے چشمے پر انسانی خون کے  
طلب گار رنگوں کی اجارہ داری و داخل آتے کے صارتی معاشرے میں قدرتی اور انسانی  
ذرائع پر چند انسان دشمن قوتوں کی oligarchy قائم ہونے کا اعلامیہ ہے۔ فنسفر کو  
موضوعات کے تنوع اور زبان پر قدرت حاصل ہے۔ کسی بھی موضوع یا مسئلے کو آفاقی  
صدائق میں ڈھالنا یا مسئلے کو ناقصیت بخشنا انہیں بخوبی آتا ہے۔ اس لئے کوئی بھی واقعہ

نچر کی زندگی، نچر کی داخلی کشش اور اسکولی نظام میں پھیلی گدگی کے موضوع پر جنی ہے۔ حسین الحق اپنے دلچسپ اسلوب سے اس مادل کو موثر بنانے کی پوری کوشش کرتے ہیں۔ ان کی نثر میں ایک خاص دلکشی، تاثیر اور آہنگ ہے۔

الیاس احمد گدی ایک اہم اور منفرد مادل نگار ہیں۔ "فاز اریا" ان کا نہایت مقبول مادل ہے۔ اگر یہ کہا جائے تو شاید بے جا نہ ہوگا کہ اردو مادل نگاری میں یہی مادل ان کی انفرادی پہچان کا سبب بھی ہے۔ الیاس احمد گدی جبریا سے تعلق رکھتے ہیں۔ بیان کا آبائی وطن ہے۔ یہ خطہ کوئلے کا کان کے لئے مشہور ہیں۔ ان کا مادل کا ناما بانا کوئلہ کا کان اور اس میں کام کرنے والے مزدوروں اور ان کے مالکان سے تیار ہوا ہے۔ اس میں ٹھیکے داروں، غنڈوں اور عام عوام کی زندگی کو بھی نہایت سادہ اور موثر انداز میں پیش کیا ہے۔ الیاس احمد گدی نے اس میں کوئلہ مالکان، ٹھیکے داران کا کوئلہ مزدوروں پر استحصال، ظلم اور انسانی کو خوب صورتی سے اجاگر کیا ہے۔ مادل کی قرات سے قارئین کے دلوں میں سرمایہ دارانہ نظام اور ظالم ٹھیکے داروں کے خلاف غصہ پیدا ہو جاتا ہے۔ فاز اریا ایک علامتی مادل ہے۔ تاہم ان کی معنویت اور اہمیت انہیں آناقت عطا کرتی ہے۔ دراصل یہ کول فیلڈ کا رزمیہ ہے۔ الیاس احمد گدی کا یہ مادل ان کے عمیق مشاہدات کا نتیجہ ہے۔

مشرق عالم ذوقی معاصر عہد کے ایک اہم مادل نویس ہیں۔ بیان، پو کے مان کی دنیا، نیلام کمر، شہر چپ ہے پروفیسر ایس کی عجیب داستان وایا سنامی، لے سانس بھی آہستہ اور آتش رفت کا سراغ ان کے اہم مادل ہیں۔ ذوقی کے مادل کا اختصاص یہ ہے کہ ان کا ہر ایک مادل کا موضوع ایک دوسرے سے منفرد اور مختلف ہے۔ یہی وجہ ہے کہ ان کے مادل موضوعاتی سطح پر قاری کی اکتاہٹ کا سبب نہیں بنتا۔ مشرف عالم ذوقی اپنے سماج اور اپنی تہذیب کا عمیق درک رکھتے ہیں۔ وہ معاشرتی حقائق اور شفا کیوں کا بہترین ترجمان ہے۔ وہ نیا کی ہر آن بدلتی تبدیلی سے آشنا ہیں۔ قارئین ان کے ہر مادل سے ایک نئی دنیا کی سیر کرتے ہیں اور نئے مسائل سے دوچار کرتے ہیں۔

شغف کا شمار اردو کے مشہور و معروف انسانہ نگاروں میں ہوتا ہے لیکن انہوں نے مادل نگاری کی میدان میں بھی طبع آزمائی کی ہے جس میں وہ صرف کامیاب ہی نہیں ہوئے بلکہ مادل نگاری میں ایک منفرد مقام بھی بنایا انہوں نے ہمیشہ تشکیلی اور مجرد انداز بیان کی جگہ راست بیانی کو اختیار کرتے ہوئے اہم سیاسی، سماجی

مسائل کو اپنے فن کا موضوع بنایا ہے۔ جس سے پتہ چلتا ہے کہ وہ اپنے گرد و پیش کے مسائل مثلاً فرقہ پرستی، کرپشن، مفلسی اور انسانی اقدار کے اختلاط سے نہ صرف متاثر ہیں بلکہ بے چین بھی ہیں۔ شغف نے ۱۹۹۲ء میں "کانچ کا باؤنگڈ" کے نام سے پہلا مادل لکھا جو ادبی حلقوں میں بہت مشہور ہوا۔ ان کا دوسرا مادل "بادل" منظر عام پر آیا۔ شغف نے اپنے مادل "بادل" میں موجودہ عہد کے مسلمانوں کی بے چینی اور عالمی سطح پر جنگ اور فساد کے بڑھتے ہوئے رجحان سے پیدا شدہ مسائل و نتائج پر روشنی ڈالی ہے۔ مادل میں عشق کا سہارا لیا گیا ہے۔ اس کے سہارے دنیا میں پیدا شدہ مسائل قتل، لڑکیوں کے ساتھ بدسلوکی، اغوا اور نوجوان نسل کے بدعہاروی کو دکھایا ہے۔ غرض کہ انسانی زندگی کے سیاسی و سماجی تہذیبی و ثقافتی، تاریخی و جذباتی منتشار و ترقی و تنزلی کی تصویریں واضح طور پر دیکھی جاسکتی ہیں۔

لہذا ہم کہہ سکتے ہیں کہ دور حاضر کے مادل نگاروں نے اپنے مادل میں سماج کی بدلتے ہوئے تہذیبی سیاسی، سماجی اور اخلاقی اقدار کو سمونے کی کامیاب کوشش کی ہے۔

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# GROWTH OF SERVICES SECTOR IN INDIA IN THE REFORM PERIOD- IS IT SUSTAINABLE?

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## ABSTRACT

*In this paper, we focus on the growth of the services sector and how it is dependent upon other sectors of the Indian economy for the pre and post reform periods. The study reveals that there has been service-led growth in the Indian economy but it depends significantly on the manufacturing sector in both the periods. The GDP growth rate and the growth of manufacturing sector for the entire period also significantly influence the growth rate of services. Thus in Indian economy manufacturing sector must grow proportionately to make it sustainable. We have also considered the impact of growth of agricultural and manufacturing sector and the growth rate of GDP on the growth of each sub-sector of services both in pre and post reform periods. The study reveals that although reform measures had sufficient impact on the growth of services sub-sector consisting of 'Trade, Hotels, Transport and Communications' but other sub-sectors remained unaffected. Services sector and its sub-sectors' growth are sustainable with the same pace of growth of agricultural and manufacturing sectors in Indian economy.*

**Keywords:** Service Sector, growth trend, impact of growth.

## INTRODUCTION :

Services sector has emerged as the largest and fastest growing sector in the global economy in the last two and half decades. The growth in services has also been accompanied by the rising share of services in world transactions. In line with the global trend, services sector in India has also grown rapidly in the last two decades, well above the growth rate of GDP.

Conventional wisdom tells that in the early phase of development growth of manufacturing sector exceeds the growth of the services sector and with the progresses of the country services sector grows over the growth of the manufacturing sector in terms of output and employment. In case of India, if it is taken at the initial phase of growth and development, conventional wisdom does not hold good, with the services sector taking a substantial lead over manufacturing. However, some economists have argued that the decline in manufacturing and shift to services is unsupportable in the long run as services depend crucially on manufacturing for their demand that is they have expressed doubts regarding the sustainability of the service-led-growth. According to them unless the real sectors of agriculture and industry grow fast, the service-led-growth cannot be sustained for long. As economic survey (2010-12) reports, we see internationally among the top twelve countries with highest overall GDP in 2010, India ranks 8<sup>th</sup> and 11<sup>th</sup> in overall GDP and services GDP respectively. India is the topmost country in terms of increase in services share in GDP (7 percentage points) followed by Spain and Canada (5.3 percentage points), the UK (4.5 percent-

age points) and Italy (3.2 percentage points). Again while India's growth rate of the services sector at 10.1% in 2009 was higher than that of China at 9.6%, it has declined to 7.7% in 2010 on India, while China's has remained constant. All these indicate the prominence of the services sector in India.

## OBJECTIVE

In this paper we focus on the growth trend of the services sector in India and its sub-sectors in the post liberalisation period comparing with the pre-reform era from 1970-71. We also try to compare the relation between the growth of services with the growth of manufacturing sector for the same periods and the statistical dependence of growth rates of services and its sub-sectors on the growth rates of agriculture, manufacturing and GDP and lastly we like to consider the sustainability of service-led growth in Indian economy.

The paper is arranged as follows.

**SECTION II-** provides data source, methodology and brief review of literature.

**SECTION III-** analyses growth of services sector, shares of services in GDP and statistical impact of growth.

**LAST SECTION-** concludes

**SECTION- II**

## LITERATURE SURVEY

Different writers and economists have discussed the growth of services sector in India following their own tech-

niques and methodologies.

Jim Gordon and Poonam Gupta in the IMF working paper, 'Understanding India's Services Revolution', 2003 discussed India's services sector's and its sub-sectors' growth and different causes of service-led growth in India. They view that growth in the services sector was less cyclical and more stable than the growth of industry and agriculture (in the sense of having the smallest coefficient of variation). They classified the services sub-sector in the category of 'trend growers' and 'fast growers'. Their view for growth of services sub-sectors was specialization or splintering and used input-output coefficients to measure the increase in use of outsourced services for 1993-94.

Sunil Jain and T.N. Ninan in their paper "Servicing India's GDP Growth" (2010) have estimated that the contribution of banking and insurance in GDP growth which was just 0.18% in 1960-61 rose to as high as 13.7% in 2006-07. They have also shown that the fast growth areas in services in the post reform periods have been those that have witnessed significant liberalisation. They actually pointed out communications, banking, insurance and computer related services.

M. Singh in his book "Understanding India's Services-Led Growth" (2010) calculated the backward and forward linkages of services activities to assess its likely impact on growth. Linkage measures are constructed as indices and applying the method to 1998-99 data, Singh finds that 43 out of total 115 activities had relative backward index values about 1 and 19 had high forward linkage.

However, the above mentioned papers and writings are different from ours. Here we like to focus on the growth of services and services sub-sectors in India from 1970s till 2010-11 and like to see the impact of different sectoral growths and of GDP growth on the growth of services sector and sub-sectors both in the pre and post reform periods and try to question the sustainability of services sector.

#### DATA AND METHODOLOGY :

In this paper, we have used secondary data for the period 1970-71 to 2011-12, collecting them from the Handbook of Statistics on Indian Economy (various issues), in order to compare the growth rates of services sector along with co-sectors between pre and post reform periods. We have taken absolute data for all the sectors and computed

year to year percentage growth rates of overall services sector, agricultural and manufacturing sector and also for different sub-sectors of services.

We fit regression model for the pre and post reform

period to have the impact of growth rate of manufacturing sector on the growth rate of services for both the periods. The model is of the form  $Y = \hat{a} + \hat{a}X + U$  is the linear regression model having the disturbance term  $U$ , satisfying all the properties of CLRM. Then we use the same type of multiple regression model to see the impact of growth rate of agriculture as well as manufacturing on the growth rate of services sector for the entire period. Lastly we take another multiple regression model to have the impact of the growth rates of agriculture, manufacturing as well as GDP growth rates for the pre and post reform periods as well as for the overall period on each sub-sector on services sector. The model is

$$S_{it} = a_i + \beta_1 A_t + \beta_2 M_t + \beta_3 G_t + \beta_4 D_2 + \epsilon$$

where  $D_i$  stands for dummy variable for  $i^{\text{th}}$  sector at time 't' and  $D_i = 0$  for  $t < 1991$  and  $A_t =$  Agricultural growth rate at time 't' = 1 for  $t > 1991$   $M_t =$  Manufacturing growth rate at time 't'

$G_t =$  GDP growth rate at time 't'

#### SECTION-III

##### GROWTH OF SERVICES SECTOR :

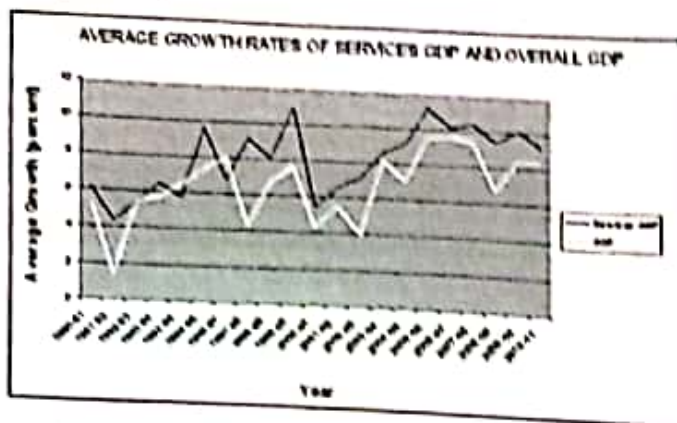
Let us consider first the growth rate of services sector in the Indian economy during the pre-reform period. In the year 1970-71, the growth rate was 3.94% which grew at 5.96% in the year 1980-81 and on an average services sector grew at the rate of 3.9% in 1970s. In 1980s this average growth rate was 6.34%. If we look at the GDP growth rate, it has increased from 2.95% in 1970s to 5.59% in 1980s, however average growth rate of services sector remained always above the growth rate of GDP at constant prices. If we consider the manufacturing sector in the same period it grew from average 4.3% in 1970s to 5.8% in 1980s. Although manufacturing remained above the services sector in 1970s, it went below the growth rate of services in 1980s. It has also been seen there is slower growth rate of manufacturing sector than services between 1970 to 1990.

TABLE 1 :PERCENTAGE GROWTH OF DIFFERENT SECTOR

YEARS	1970s	1980s	1990s	2000s
SECTORS				
AGRICULTURE	1.14	4.6	3.29	2.97
SERVICES	3.9	6.34	7.23	8.78
MANUFACTURING	4.31	5.84	5.84	8.02
GDP	2.95	5.59	5.69	7.36

Source : Handbook of Statistics on Indian Economy

(Author's calculation of year to year growth rates)  
**CHART - 1**



In order to compare comprehensively, the period of reforms can be subdivided into three phases such as, phase I (1992-93 to 1996-97), phase II (1997-98 to 2002-03) and phase III (2003-04 to 2011-12). Periods have been classified according to the growth performance of the Indian economy. The first phase was the recovery phase from the crisis of 1990-91 while India's growth rate was continuously increasing, from 1.4% in 1991-92 to 8% in the year 1996-97. The average growth rate of real GDP, during the phase was 6.5% per annum. In this sub-period services sector grew at 6.8% per annum on average, more than GDP growth rate while manufacturing sector grew at 9.5% and agricultural growth rate was 4.8% per annum.

**TABLE 2**  
**SECTORAL GROWTH RATE IN 1990s AND 2000s**

sectors / period	1992-93 to 1996-97	1997-98 to 2002-03	2003-04 to 2011-12
GDP at factor cost	6.56	5.23	8.24
Services	6.8	7.85	9.58
Manufacturing	9.5	4.16	8.86
Agriculture	4.8	0.71	4.37

Source : CSO, Planning Commission (India)

This shows that services sector contributed largely to the growth of GDP. But the overall GDP was heavily accelerated by the phenomenal growth of manufacturing sector, 9.5% per annum in the industry. Infact, this period was marked by the effect of liberalisation in terms of withdrawal of restrictions from the private sectors. For the reasons of liberalized policies there was significant increase in private investment as well as public investment which gave easy way to industrial growth. It should be noted that in the entire period of 1990s, services sector grew at an average of 7.23% while manufacturing sector's growth rate was 5.84% which shows

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the prominence of services sector (Table 1) in 1990s, to contribute for overall growth rate of Indian economy. The second phase of the reform period was marked by a deceleration in growth with the average rate of growth during this period turning out to be 5.23%. The reasons were fall in both private and public investment, low investment in agriculture (for which its minimum growth rate was at 0.71%), loosening the reform process and severe fiscal imbalances. However services sector grew at a significant rate at this phase at an average 7.55% per annum, well above the growth rate of manufacturing sector of 4.16% per annum. So manufacturing sector had taken a backseat in this phase compared to services sector. Thus the poor performance of the economy during this sub-period was due to failure of the two most important sectors of the economy- agricultural and manufacturing. However, in this phase GDP growth rate fell down to 4.3% in 1997 to 1998, which was recovered in the subsequent two years, perhaps due to rise in both public and private investment and tightening of the reform process. To this recovery services sector played very important role as it grew over 9% during this time. Within the services sector, 'Community, Social and Personal Services' and 'Trade, Hotels and Communications' were much important to give rise to the growth of the overall services sector. The overall GDP dipped to 4.4% in the year 2000-01, which was the result of the negative growth to agriculture and poor growth rate of services sector in which year industrial growth rate was buoyant.

The third sub-period (2002-03 to 2011-12) registered a significant growth in GDP at an average 8.24% due to high investments (33% of GDP in 2006-07) and FRBM act to correct the fiscal imbalance, fiscal restructuring, to some extent agricultural growth and high export growth. However this growth in national output includes a sustained growth in services at 9.58% per annum on average and manufacturing sector also grew at 8.86% per annum. Though the economy witnessed a slowdown in 2008-09 following global recession and the rate of growth declined from 9.3% in 2007-08 to 6.8% in 2008-09, the growth of services sector was near about 10% in the same year and manufacturing sector was set back to the growth rate of 4.32% and agriculture had negative contribution. Thus only services sector had significant performance even in the year of global economic slowdown. Expansion of services accelerated in the years after 2002-03, influenced by high rate of growth of communications, finance and business services. In this connection we will see how growth of services depend on growth of manufacturing sector in the periods concerned because in the long run services crucially depend on manufacturing.

**TABLE - 3**  
**REGRESSION MODEL OF GROWTH RATE OF SERVICES SECTOR ON THE GROWTH RATE OF MANUFACTURING SECTOR :**

Periods	Independent variables	Estimated Coefficient	t	P
1970-71 to 1990-91	— manufacturing	3.95(constant) 0.24	5.42 2.06	0.00 0.05
1991-92 to 2011-12	— manufacturing	6.79(constant) 0.19	8.69 2.05	0.00 0.05
1970-71 to 2011-12	— manufacturing	4.87(constant) 0.29	7.86 3.48	0.00 0.05

Source : Author's calculation.

Services sector depend crucially on manufacturing sector which is ensured both in pre reform and post reform period and also throughout the entire period from 1970-71 to 2011-12. Thus we see on a regression for 'year to year' growth rates of services on the growth rate of manufacturing, the result is significant. 1% growth rate of manufacturing sector leads to growth of services sector by 24% in the pre reform decade.

In the post reform period (1991-92 to 2011-12) we get a significant result that growth of services sector is dependent on the growth of manufacturing sector and thus manufacturing sector significantly influences services at 5% level. For the entire period (1970-71 to 2011-12) we also regress year to year growth rate of services sector on that of manufacturing sector. We see that in the long run growth of services sector is also dependent upon the growth of the manufacturing sector. Thus for both pre and post reform periods, the growth of manufacturing sector is very much significant to cause services sector growth in the Indian economy.

**TABLE - 4**

**REGRESSION MODEL OF SERVICES SECTOR GROWTH ON THE GROWTH RATE OF AGRICULTURAL AND MANUFACTURING SECTORS**

Periods	Independent variables	Estimated Coefficient	t	P
1970-71 to 2011-12	—	4.81 (constant)	7.64	0.00
	Growth rate of Agriculture	0.05	1.04	.03
	Growth rate of Manufacturing*	0.27	3.09	0.00

Source : Author's calculation.

For overall period (1970-71 to 2011-12) we regress growth rate of services sector on growth rate of agricultural as well as manufacturing sector. Thus we see that the growth of services sector again depends on the growth of manufacturing sector significantly both at 1% and 5% level but agricultural growth rate does not significantly cause the growth of the services sector for the entire period. This is because agricultural growth rate was very much poor particularly in the post reform period but to some extent manufacturing sector grew significantly which caused the service-led growth in the Indian economy.

**TABLE - 5**  
**Sectoral Share Of GDP In Percentage**

years sectors	1970-71	1980-81	1990-91	2000-01	2008-09	2010-11
Agriculture	44.3	37.4	31.4	23.9	17	14.5
Industry	22.1	24.1	25.9	25.8	25.8	22.1
Services	33.6	38.0	42.7	50.3	50.3	63.4

Source: RBI, Handbook of statistics on Indian economy

From table 5 we see there has been more or less constant share of industry in GDP since 1970-71 and decline in share of agriculture has been due to a rapid increase in the share of services from 33.6% in 1970s to 57.3% of GDP in 2008-09 and 63.4% in 2010-11. So in the reform period services have increased rapidly near about 20 percentage points. So high share of services in GDP is an unique feature of the Indian economy as in other developing economies decline in agricultural sector's share has been followed by the shift towards services sector.

**CONTRIBUTION OF DIFFERENT SECTORS TO GDP GROWTH**

**TABLE - 6**

PERIODS SECTORS	1990-91	1991-97	1996-2002	2001-08
Agriculture	23.8	21.1	11.5	7.0
Industry	35.2	29.0	20.2	29.3
Services	41.9	49.8	68.3	63.6
GDP at factor cost	100.0	100.0	100.0	100.0

Source : Sankar Acharya, 'Macroeconomic performances and policies 2000-08, printed in Misra and Puri: Indian economy

From table 6 it is clear that contribution of services sector to the growth rate of GDP has increased continuously upto the year 2002, thereafter its contribution has increased yearly, on average it declined to 63.6% because of increase in average contribution of industrial sector. During the five years period 1991-92 to 1996-97, services contributed half of total growth of GDP.

**AVERAGE GROWTH RATES OF SERVICES SUB-SECTORS IN GDP**

TABLE - 7

...ing tendencies in the growth rate as is clear from table

YEAR	1970s	1980s	1992-97	97-2003	2003-'11-'12
SERVICES SUB-SECTOR					
TRADE, HOTELS, COMMUNICATION	4.70	3.95	8.79	8.29	10.47
FINANCING, INSURANCE, REAL ESTATE, BUSINESS SERVICES	4.30	8.66	6.93	7.93	10.49
COMMUNITY, SOCIAL & PERSONAL SERVICES	4.12	3.99	3.62	7.39	6.87
CONSTRUCTION	2.42	4.88	3.45	7.25	9.81

Source: Handbook of Statistics on Indian Economy (2010-11)

From table 7 it is clear that almost all the sub-sectors of services have grown steadily from 1970s to 2003-12 except 'community, social and personal services' having fluctuations in growth rates in different decades. A study of the table reveals that 'financing, insurance, real estate and business services' were the fastest growing sectors from 1970s to 1980s and in the reform period also. During 2003-12, they grew at the rate of average 10.49% per annum, more than double rate than in 1970s. Among these sub-sectors business services grew significantly in 1990s at an average nearly 20% per year, mainly on account of IT sector. The growth of this total sub-sector was near about 14% in the year 2006-07. As from CSO, NAS (2011) data, it is revealed that banking sector has magnificent growth from 7% per annum over the period 1950-80 to 15% during 2005-06 to 2009-10. During the same period insurance sector's growth rate was from 7.2% to 17.8% respectively (Table 8). Sunil Jain and T.N. Ninan estimated that the contribution of banking and insurance to GDP growth was 0.18% in 1960-61 which increased to 13.7% in 2006-07. The largest services sub-sector in India is trade which registered a major growth in the later part of 1990s and as noted in CSO data during 2005-06 to 2009-10, its growth rate was more than 9% per annum. Trade, hotels, transport and communication together registered significant growth in 1990s, from 4% to 5% in (1970s-1980s) to 8.79% in the first part and in later part it was 8.29%. During 2003 to 2011-12 this sub-sector grew at an average rate of 10.47% per annum. In this sub-sector 'Railways and other transportations' also touched the growth rate of 9% and 8% respectively over the period 2005-06 to 2009-10. The communications services grew prominently from average 6% per annum in 1980s to 13.6% in 1990s and 26.7% during 2005-06 to 2009-10 (Table 8). The most important years of growth of this sub-sector in total are 1995-96 and 2005-06 respectively, in which years they grew at an average rate of 13.4% and 12% respectively. The sub-sectors 'community, social and personal services' had fluctu-

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7. The most spectacular growth was in the later phase of 1990s, at an average rate of 7.39% per annum. The growth declined to some extent during 2003-04 to 2011-12. In this sub-sector 'Public administration, defense' had average rate of growth of 6% per annum in 1990s which rose more than 9% per annum during 2005-06-2009-10. Again community and other services also had significant growth in the period 2005-06 to 2009-10, at an average rate of nearly 8% per annum compared to 1990s which were 8.4% and 7%. Thus growth of community services declined than 1990s.

TABLE - 8

AVERAGE GROWTH RATES OF SERVICES SUB-SECTORS (SEPARATELY) ( PERCENT PER ANNUM)

SECTORS	AVERAGE GROWTH IN 1980S	AVERAGE GROWTH IN 1990S	AVERAGE GROWTH IN 2005-06 TO 2009-10
PRODUCER SERVICES			
TRADE	5.9	7.3	9.2
RAILWAYS	4.5	3.6	9.1
TRANSPORT BY OTHERS MEANS	6.3	6.9	7.8
STORAGE	2.7	2	8
COMMUNICATIONS	6.1	13.6	26.7
BANKING	11.9	12.7	15.3
INSURANCE	10.9	6.7	17.8
REAL ESTATE & BUSINESS SERVICES	7.7	5	4.8
CONSUMER SERVICES			
HOTEL & RESTAURANTS	6.5	9.3	8.8
OTHER SERVICES	5.3	7.1	8.1
PERSONAL SERVICES	2.4	5	5.7
COMMUNITY SERVICES	6.5	8.4	7.9
GOVERNMENT SERVICES			
PUBLIC ADMINISTRATION & DEFENCE (PAD)	7	6	5.4

Source : Computed from CSO, NAS (2011), printed in Indian Economy by Misra & Puri

The growth of construction services also had significant contribution for entire growth in services sector of India. It grew from 3.45% per annum during 1992-97 to 7.25% and in the period 2003-04 to 2011-12 the growth rate was 9.81% per annum (table 7).

The Statistical Impact of Growth of Agricultural, Manufacturing and Growth of GDP on each Sub-Sector of Services Sector

TABLE - 9  
Regression model of growth rate of 'Hotels, Trade, Transport and Communications' on the growth rate of agricultural and manufacturing sectors and GDP

PERIODS	INDEPENDENT VARIABLES	ESTIMATED COEFFICIENT	t	P
1970-71 to 1990-91	-		2.05	0.056
	Growth rate of Agriculture*	1.45 (constant)	-3.10	0.006
	Growth rate of Manufacturing	-0.36	-1.17	0.259
	Growth rate of GDP*	-0.13	4.47	0.000
1990-91 to 2010-11	-	1.82 (constant)	1.42	0.174
	Growth rate of Agriculture	-0.15	-1.64	0.120
	Growth rate of Manufacturing	0.14	1.28	0.219
	Growth rate of GDP*	0.99	8.47	0.003
1970-71 to 2010-11	-	1.1 (constant)	1.94	0.060
	Growth rate of Agriculture*	-0.32	-4.91	0.00
	Growth rate of Manufacturing	0.02	0.26	0.79
	Growth rate of GDP*	1.25	7.71	0.00
	Dummy*	1.25	2.23	0.01

TABLE-10

Regression model of growth rate of 'Financing, Insurance, Real estate and Business Services' on the growth rate ;

PERIODS	INDEPENDENT VARIABLE	ESTIMATED COEFFICIENT	T	P
1970-71 to 1990-91	-	<u>0.28 (CONSTANT)</u>	-0.24	<u>0.813</u>
	<b>AGRICULTURE*</b>	-0.81	-4.18	<u>0.001</u>
	<b>MANUFACTURE</b>	0.02	0.11	<u>0.914</u>
	<b>GDP</b>	2.1	4.36	<u>0.000</u>
1990-91 to 2010-11	-	<u>2.72 (CONSTANT)</u>	1.22	<u>0.241</u>
	<b>AGRICULTURE*</b>	-0.46	-2.92	<u>0.010</u>
	<b>MANUFACTURE</b>	0.4	-2.09	<u>0.053</u>
	<b>GDP</b>	1.56	3.13	<u>0.006</u>
1970-71 to 2010-11	-	<u>2.32 (CONSTANT)</u>	2.42	<u>0.020</u>
	<b>AGRICULTURE*</b>	-0.5	-4.56	<u>0.000</u>
	<b>MANUFACTURE</b>	-0.6	1.23	<u>0.228</u>
	<b>GDP</b>	1.43	5.24	<u>0.000</u>

\*indicates significant at 1% & 5% levels Source : Author's calculation

TABLE - II  
Regression Model of the growth rate of 'Community, Social and Personal Services' on the growth rate of agricultural and manufacturing sectors and GDP

PERIODS	INDEPENDENT VARIABLES	ESTIMATED COEFFICIENT	t	P
1970-71 to 1990-91	-	1.68 (constant)	4.19	0.001
	Growth rate of Agriculture*	-0.49	3.27	0.004
	Growth rate of Manufacturing*	-0.4	2.58	0.010
	Growth rate of GDP*	1.12	3.10	0.007
1990-91 to 2010-11	-	1.14	0.39	0.702
	Growth rate of Agriculture	-0.32	-1.55	0.140
	Growth rate of Manufacturing	-0.48	-1.92	0.072
	Growth rate of GDP*	1.47	2.25	0.039
1970-71 to 2010-11	-	3.63 (constant)	3.78	0.000
	Growth rate of Agriculture*	-0.38	-3.48	0.000
	Growth rate of Manufacturing*	-0.35	-2.65	0.010
	Growth rate of GDP*	0.99	3.62	0.000
	Dummy	-0.13	-0.13	0.890

\*indicates significant at 1% & 5% levels

Using linear regression model we estimate the following equation

$$S_{it} = a_i + \beta_1 A_t + \beta_2 M_t + \beta_3 G_t + \beta_4 D_t + \epsilon$$

$D_t$  stands for dummy variable for  $i^{\text{th}}$  sector at time 't'  
where  $D_t = 0$  for  $t < 1991$   
 $= 1$  for  $t > 1991$

$A_t$  = Agricultural growth rate at time 't'

$M_t$  = Manufacturing growth rate at time 't'

$G_t$  = GDP growth rate at time 't'

The regressions are estimated for the following services activities:

I (Trade, Hotels, Transport and Communications),

II (Financing, Insurance, Real estate and Business Services) and

III (Community, Social and Personal Services) and observations are taken from 1970-71 to 2010-11. The dependent variable is average annual growth in services' activity 'i' in period 't'. The RHS variables are average growth rates in (i) Agriculture (A) (ii) Manufacturing (M) (iii) Real GDP (G) in period 't'. A dummy variable (D) measures whether reforms were carried out in each services sub-sectors, and has been taken  $D=0$  in pre reform period and  $D=1$  in the post reform period.

In case of first sub-sector (I), agriculture and GDP growth rate are much significant in the pre reform de-

cade, where we do not consider the dummy variable. However in the post reform decade, this sub-sector was significantly influenced by the growth rate of GDP at 1% and 5% level of significance. For the overall period, we see agriculture, GDP growth and reform measures all are significant at atleast 1% level to influence the growth of this sub-sector. Thus to conclude reform measures are very much significant for the growth of this sub-sector and not only that the growth of GDP also influences and is influenced by this services sub-sector both in pre and post reform period.

Now consider the second sub-sector of services (II). The regression model of growth of this sector on the growth rate of agriculture, manufacturing and GDP growth for the pre reform decades shows that both the agricultural and GDP growth are significant both at 1% and 5% level. In the post reform period also these two factors are very much significant to cause the growth of this services sub-sector. Thus we see agriculture plays very important role to influence the growth of this sub-sector for all the periods. So one can visualize that agricultural growth is much necessary for further development of different services in the Indian economy. The same results are obtained for the entire period. It should be noted that from mid 1980s agricultural growth rate has been declining and its share in GDP has also decreased, but services sector growth was

continuous. Another point is to note that economic reforms are not much significant to the growth of this sub-sector.

In case of third sub-sector of services (III), all the factors like growth rate of agriculture, manufacturing and real GDP are significant in the pre reform decades but in the post reform period only the growth of GDP is significant for this sub-sector. For all the periods taken together we get a very significant result except the reform measures. Thus agriculture, manufacturing and GDP have important effects on this sub-sector.

Thus one can conclude that different sub sectors are significantly influenced by growth of agricultural and GDP growth. The reform measures have significant effect only on the sub-sector consisting of 'Trade, Hotels, Transport and Communications'.

### CONCLUSION

This paper studies the growth of services sector in India for the post reform period comparing with pre reform decades. In line with the global trend services sector in India has also grown rapidly in the last two decades, well above the growth rate of GDP. When GDP grew at an annual average rate 2.59% in 1970s to 5.59% in 1980s, services sector grew from average 3.94% in 1970s to 6.34% in 1980s. In the reform period, services sector contributed largely to the growth of GDP. In 1990s services sector grew at an average rate of 7.23% per annum, when manufacturing and agricultural sector had taken back seats, particularly in the second phase of the decade. In the last decade (2000s) there was a sustained growth in services at an average of 9.58% per annum, although the economy witnessed a slowdown in the year 2008-09 following global recession. Within the services sub-sectors, 'Trade, Hotels and Communications' and 'Community, Social and Personal Services' were much important to give rise to the growth of the overall services sector. The rise in the services sector's share in GDP marks a structural shift in the Indian economy and takes it closer to the fundamentals of developed economy. The share of services in GDP has continuously increased from 33.6% in 1970s to 63.4% in 2010-11 and decline in agricultural sector's share has been followed by the shift towards the services sector. In period 2008-12 services sector contributed the maximum 70.7% of the growth of GDP, followed by fall in agricultural and industrial sector's contributions.

Services sector crucially depends upon the manufacturing for their demand, so we see from our regression result both for pre and post reform period, the growth of manufacturing sector is very much significant to cause the growth in the services sector in Indian economy. Again for overall period our concern is not the agricultural sector, but manufacturing growth is very much significant for services. This result reveals that services sector growth

must be supported by proportionate growth of the industrial sector.

We have also considered the impact of growth of agricultural, manufacturing and growth of GDP on the growth of each sub-sector of services both in pre and post reform periods. For overall periods we considered impact of reform measures using a dummy variable along with other factors. In the pre reform period the growth of the sub-sector (Trade, Hotels, Transport and Communications) is significantly explained by agricultural and GDP growth rates but in the post reform period, only GDP growth is significant. For the entire period (1970-71 to 2010-11) we see along with agricultural growth and GDP growth rates, reform measures are very much significant for the growth of 'Trade, Hotels, Transport and Communications'. This is because in the pre reform decades agricultural growth was dominant to some extent and the growth of GDP was also influenced by different services growth for which this particular sub-sector grew rapidly for the entire period. There was also sufficient impact of the reform measures on this sub-sector.

In case of another sub-sector (Financing, Insurance, Real Estate and Business Services) both the growth of agriculture and GDP growth influenced this significantly, although reform measures were not significant. In case of sub-sector consisting of different services all the factors like growth rates of agriculture, manufacturing and real GDP growth are significant in the pre reform and post liberalisation periods. But reform measures have no impact on this sub-sector as per overall regression result reveals.

So one can conclude that although reform measures have sufficient impact on the growth of services sub-sector consisting of 'Trade, Hotels, Transport and Communications' but on other sub-sectors are unaffected. It is the agricultural, manufacturing growth and overall GDP growth rates are important for services sector to grow. Thus services sector and its sub-sectors' growth are very much dependent on agricultural and manufacturing sector, for this reason only services sector's growth may not be sustainable without the support of other sectors of the Indian economy.

Above conclusion is also supported by recent data. The growth rate of 5.5% in quarter I, 2012-13 shows a sharp fall from the 8% growth in quarter I, 2011-12. This fall in growth is distributed across all sectors, agricultural from 3.7 % to 2.9%, industrial from 5.6% to 3.6% and services from 10.2% to a low of 6.9%. More significantly, on a quarterly basis, services sector growth has been continuously decelerating from fourth quarter, 2010-11. So we need to concentrate on the sustainability of the growth of services sector over a longer time horizon.



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# ধর্ষণ : দুর্বল পিতৃতন্ত্রের পুংলিঙ্গনির্মাণ

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## ABSTRACT

মাতৃকেন্দ্রিত সমাজের পতন ঘটিয়ে শাসনের ব্যাটিনটি হাতে তুলে নেবার পর আর যাতে সেটি হাতছাড়া না হয় তাই যুগে যুগে সকল সমাজব্যবস্থায় রাষ্ট্রশাসকদের সঙ্গে গটিছড়া বেঁধে পুরুষ ও পিতৃতন্ত্র মানবীজাতির উপর সর্বকালের ছড়ি ছুরিয়ে তাকে তাঁবে রাখতে চেয়েছে। এরই প্রয়োজনে কখনও সে তৈমুরলঙ্গ, কখনও হাতে গোলাপ সাজাহান। চায়ের খুরি করতেই হাতে পায়ে বেড়ি কপালে ভোগের সিন্দুর লেপে দিয়ে তাকে বাঘের খাঁচায় পুরেছে। কখনও তাকে জীবন্ত সমাধি দিয়ে চূড়ান্ত রোমান্টিক গান গেয়ে কেঁদেকেটে ভুবন ভরিয়ে দিয়েছে। আবার কখনও দুর্ধর্ষ প্রতিপক্ষের সামনে তেবলে গিয়ে বুকের ময়দান থেকে ভাগলবা হয়ে সেই নারীশক্তির পাখের কাছে বসে মা মা করে হেঁদিয়ে মরেছে। এ সবই তার রাজ্যপাট সামলানোর বাহানা মাত্র। প্রাচীনকালে বা মধ্যযুগে মানবীকে মানহারা হতে হয়নি। কেননা সেটিই ভবিতব্য হিসেবে তাকে বোঝানো হয়েছিল। গণগোল শুরু হলো ব্যক্তিস্বাতন্ত্র্যের কালে। গণতান্ত্রিক অধিকার অর্জন করে যখন সে পুরুষের সমকক্ষ হয়ে উঠল, লেখাপড়া চাকরিবাকরি—সকল ক্ষেত্রে যখন সে পুরুষকে প্রায় পিছনে ফেলে দিতে সক্ষম হলো, এবং এমনকি পুরুষের ভোগের দুনিয়ায়ও সে পদক্ষেপ করল—নাইট ড্রাব ডিক্সো থেক বার-টার ইত্যাদি জায়গায় যাওয়া-আসা শুরু করল, ভোগ্য হিসেবে নয়, ভোগী হিসেবে, তখনই পুরুষকুলের বীরপুঙ্গবরা ক্ষ্যাপ্ত হয়ে উঠলেন। শুরু হলো আবার তাকে পাখের নিচে রাখার প্রচেষ্টা। এরই অঙ্গ হিসেবে বিশ্বময় নারীনির্ধাতনের এত রমরমা। বিজ্ঞাপনে নারী হয়ে উঠছে ভোগ্য পণ্য। প্রসাধন সামগ্রীর বিজ্ঞাপনের বাড়বাড়ন্ত সেই ভোগের দুয়ারকে প্রশস্ত করে তুলছে। মেয়েরাও না জেনেবুঝে বা অজ্ঞতার কারণে তার শিকার হচ্ছেন। সমাজের এই অন্তর্নিহিত ব্যাধিকে তোলাই দিচ্ছে কম্পিউটার দুনিয়া। এই সামাজিক আবহে ক্রমাগত বেড়ে চলেছে ধর্ষণের মতো অতি গুরুতর অপরাধ। ধর্ষণ এখন কেবল জোরজবরদস্তি যৌনতা আদায়ের ফিকির মাত্র নয়, বীভৎস হত্যার ভয়াল রূপ ধর্ষণকে করে তুলেছে বর্বর জন্তুদের হননক্রিয়া। এই হত্যালীলা এত বিকৃত যে এর বিবরণ শুনে সুস্থ স্বাভাবিক মানুষের রক্ত হিম হয়ে যায়। যত দিন যাচ্ছে তত প্রেমহীন যাপনের দিনরজনী অসহ্যকর হয়ে উঠছে। কেন? সমাজবিজ্ঞান ও স্নায়ুবিজ্ঞানের যৌগ পথরেখা ধরে এই প্রশ্নেই উত্তর খোঁজার চেষ্টা হয়েছে এই সন্দর্ভে।

**Keywords:** পুরুষপ্রাধান্য, পিতৃতন্ত্র, ধর্ষণ, ধর্ষণের বিবিধতা, পুংলিঙ্গনির্মাণ।

অদ্ভুত আঁধার এক এসেছে এ-পৃথিবীতে আজ...

যাদের হৃদয়ে কোনো প্রেম নেই—প্রীতি নেই—করুণার আলোড়ন নেই—

—জীবনানন্দ

শক্তিতত্ত্বের ভক্তিরূপ

বেশির ভাগ মানুষই একে বলে থাকেন নারকীয়, পৈশাচিক বা পাশাবিক। নরক ও পিশাচ মানুষের কল্পনার তিস্ত ফল মাত্র। প্রবঞ্চিত, উপেক্ষিত ও দুর্বল মানুষের কাল্পনিক ভয় এবং প্রতিশোধ নেবার ভাবনা ছাড়া এর কোনো বাস্তব অস্তিত্ব নেই। ফলে আবিষ্কৃত ভয়াবহ বর্বর ধর্ষণ ও বেদনাতুর মৃত্যুর কারবারীদের আচরণকে পৈশাচিক বা নারকীয় বললে তার অপরাধ ও গুরুত্ব অনেকখানি খাটো হয়ে যায়। আর পশুসমাজে আর যাই হোক ধর্ষণ

নামক বস্তুটি নেই। আছে কেবল বংশরক্ষার জন্য প্রজননের প্রতিযোগিতা। সেই প্রতিযোগিতা আবার বছরের একটি নির্দিষ্ট সময়ে ঘটে থাকে। সেখানে হারজিৎ আছে। আছে বিজয়ী-বিজিতের রক্তপাত। পশুদের চিন্তাশক্তি নেই। বিবেচনাবোধ নেই। তাই যৌনবিনোদন নেই। যৌনতা ও যৌনবিনোদন এক জিনিস নয়। কারণ যৌনবিনোদন কেবল দৈহিক নয়, চিন্তাশরী। ইন্দ্রিয়জ সুখ কেবল তৃপ্তি। সেই সুখ মগজের অনুমোদনে আনন্দ হয়ে ওঠে। আনন্দ

ইন্দ্রিয়বাহি হলেও শেষপর্যন্ত ইন্দ্রিয়াতীত। মানুষ মূলত যে যৌনতার চর্চা করে তা আনন্দময় বিনোদন। এবং বহুভবের। কারণ মানুষ গভীর চিন্তাক্রমতার অধিকারী। তার বহুবিধ বিবেচনাবোধ আছে। তাই যৌনতাকে সে কেবলমাত্র বংশরক্ষার অতি ক্ষুদ্র পরিসর থেকে উদ্ধার করে নিয়ন্ত্রিত বিনোদনের চিন্তাপ্রাণ রূপ দিতে পেরেছে। তাই ধর্ষণকে পাশবিক বলে পণ্ডদের অপমান করার অধিকার তাদের নেই। তাহলে বিশ্বভোগ্য ধর্ষণদের আচরণের কী ব্যাখ্যা হতে পারে? কেন ওরা এমন হুলিউডি হরর ফিল্মকেও লজ্জায় ফেলে দেওয়ার মতো নজিরবিহীন বীভৎস ঘটনা ঘটায়? ধর্ষণকারীদের অতীতজীবনে কি এ ধরনের অপরাধের কালিমালিপ্ত ইতিহাস ছিল? বা যারা ধর্ষণ করে তারা কি সকলেই দাগী অপরাধী বা কুখ্যাত ধর্ষক? আমাদের আশেপাশে কি অমলকান্তি কিশোর তরল বা যুবা নেই যারা কলঙ্কের কোনো দাগ ছাড়াই এই ধরনের তাৎক্ষণিক অপরাধে লিপ্ত হয়ে পড়ে না? জন্মসূত্রে তো কেউ কীচক জরাসন্ধ বা দুঃশাসন নয়। তাহলে মানবমনের কৃষ্ণগহ্বরের কোন উচটানে এই ধরনের অপরাধ সংঘটিত হয়? প্রশ্নটি নিঃসন্দেহে জটিল; এবং ততোধিক কঠিন এর সদুত্তর খুঁজে পাওয়া। এ বিষয়ে এত শাস্তিকারী ও পরম্পরবিরোধী মতামত উঠে আসছে যে, সার সত্য খুঁজে বের করা বেশ কঠিন হয়ে পড়ছে।

কাকে বলে ধর্ষণ? মাফ করবেন, আমরা অহিনের সংজ্ঞা দিয়ে ধর্ষণের বিষয়টিকে মাপজোক করব না। আভিধানিক অর্থেই ধর্ষণের সংজ্ঞা বুঝে নেবো। হরিচরণ বন্দ্যোপাধ্যায় বঙ্গীয় শব্দকোষ-এ জানিয়েছেন, ধর্ষণ শব্দটি এসেছে ধর্ষ থেকে। এই শব্দটি আবার নিষ্পন্ন হয়েছে ধৃষ ধাতু থেকে; [ধর্ষ পুং ধৃষ্ + অ (ঘঞ)-ভা] এর অনেকগুলি অর্থ রয়েছে। তার মধ্যে যৌন অত্যাচার জনিত অর্থটি হলো : স্ত্রী-দুষণ বা সতীধর্মানাশ। আর ধর্ষক [—র্ষক পুং] শব্দটিরও অনেকগুলি অর্থ নির্দেশ করেছেন তিনি। তার মধ্যে যৌনহেনস্থা বাচক অর্থগুলি হলো : নট, পারদারিক, দুষক বা স্ত্রী-দুষক। বলাৎকার শব্দেরও অর্থ বাংলাতে গিয়ে হরিচরণ সুপ্রাচীন, প্রাচীন ও মধ্যযুগের অর্থের পাশাপাশি একালের বিশেষ অর্থটিও নির্দেশ করেছেন। তিনি অভিধানকারের সীমানা লঙ্ঘন না করেও যতদূর সম্ভব ধর্ষণের একটা বিশিষ্ট অর্থকে তুলে ধরেছেন। তবে তাতে ধর্ষণের বহুধা ব্যাপ্ত দিকগুলি প্রত্যাশিত কারণেই অনুলিখিত থেকে গিয়েছে। কারণ ধর্ষণ সাম্প্রতিক কালেই ব্যাপক হারে বেড়েছে এবং ভয়াবহ বা আরও বিকৃত রূপধারণ করেছে। ফলে বিশ শতকের প্রথমার্ধে সংকলিত অভিধানে ধর্ষণের এ কালের বীভৎসতা সঙ্গত কারণেই ধরা পড়েনি।

এই প্রসঙ্গে আর একটি কথা বলে নেওয়া যাক। বঙ্গীয় বুদ্ধিজীবীদের একটা ক্ষুদ্র অংশ, দু একটি রাজনৈতিক দল বা গোষ্ঠী এবং সংবাদমাধ্যমের কেউ কেউ সমাজের আঁতের কথা ভেবে ধর্ষণ শব্দটি ব্যবহার করেন না। পরিবর্তে প্রয়োগ করেন নারীনির্যাতন নামক নরম নিরাপদ নিরীহ স্ত্রীল একটি সমাসবন্ধ পদ। কারণ তারা মনে করেন, ধর্ষণ শব্দটি নিজেই দূষিত, অস্বীল; এর মধ্যে রয়েছে এমন নিষ্ঠুরতা, যা নাকি সুকুমার পোলাপানদের দুর্ভর্মে প্ররোচিত করতে পারে; শিশুরা ভুল বুঝতে পারে। সর্বোপরি শিশু সমাজে শব্দটি উচ্চারণে সম্মানহানি হতে পারে। যে সমাজের বীরপুত্রেরা শিশু থেকে বুদ্ধা—নগরবন্দর-গ্রামগঞ্জ—মেয়েদের ধর্ষণ করে মেরে লাট করে দিচ্ছে অহরাত্র, তার আবার সম্মানহানির ভয়! ধর্ষণের করাল ভয়াবহতাকে নারীনির্যাতনের মতো কোমল শব্দে আচ্ছাদিত করলেই কি সত্যকে ধামাচাপা দেওয়া যায়? নাকি এও পুংমনস্তব্দের শাস্তি জলে চুবিয়ে

ধর্ষণের মতো একটি অতি গুণ্য অপরাধকে সমাজের সহনশীলতা ও গ্রহণযোগ্যতার ভুরি নিয়ে আসার একটি অতি কুশীল সাংস্কৃতিক প্রয়াস? এই সম্বন্ধে আমরা ধর্ষণকে ধর্ষণই বলব। নারীনির্যাতনের ছায়ায় একে এই সম্বন্ধে আমরা ধর্ষণকে ধর্ষণই বলব। নারীনির্যাতনের ছায়ায় একে এই সম্বন্ধে আমরা ধর্ষণকে ধর্ষণই বলব। নারীনির্যাতনের ছায়ায় একে এই সম্বন্ধে আমরা ধর্ষণকে ধর্ষণই বলব।

ইংরেজিতে rape শব্দটি এসেছে ল্যাটিন rapere শব্দ থেকে। এর অর্থ চুরি বা বাজেয়াপ্ত করা অথবা বহন করে নিয়ে যাওয়া। প্রাচীনকালে সংস্কৃত বিবাহ শব্দটির অর্থের সঙ্গে এর মিল রয়েছে। সুপ্রাচীনকালে বিশ্বভূখণ্ডের সর্বত্রই মেয়েদের বলপূর্বক হরণ করে নিয়ে যাওয়া হতো। এবং তাতে সমাজের নৈতিক অনুমোদনও ছিল। মহাভারতে বলপূর্বক হরণ করে বিবাহের বহু উদাহরণ রয়েছে। বলা বাচ্ছল্য, ভোগ করাই ছিল এর অন্যতম উদ্দেশ্য। কারণ প্রাচীনকালে নারী কেবল ভোগ্য হিসেবে পরিগণিত হতো। তার যা কিছু মান-সম্মান সব ওই পুত্রাথেই। মূল্যবান সম্পদের বেশি মূল্য সে কালের সমাজ তাকে দেয়নি। তাই দুঃশাসন স্ত্রীপত্নীকে পাশা খেলায় অর্জন করে এবং বিবস্ত্র করার অধিকার পায়। ধর্মপুত্রেরও পাশা খেলায় স্ত্রীপত্নীকে বাজী ধরতে রাজধর্মে আটকানি। পাশ্চাত্যে একসময় রেপ শব্দটি উচ্চারণ করলেই লোকে বুঝত পরস্মীহরণ বা বাজেয়াপ্ত করা হয়েছে বা হবে। অর্থাৎ কোনো একটি মিনসে অপরের বা বাজেয়াপ্ত করা হয়েছে বা হবে। অর্থাৎ কোনো একটি মিনসে অপরের বা বাজেয়াপ্ত করা হয়েছে বা হবে। অর্থাৎ কোনো একটি মিনসে অপরের বা বাজেয়াপ্ত করা হয়েছে বা হবে। অর্থাৎ কোনো একটি মিনসে অপরের বা বাজেয়াপ্ত করা হয়েছে বা হবে।

ধর্ষণের বহিরঙ্গে যৌনতা থাকলেও এর উৎসভূমিতে কেবল যৌনতা থাকে তা নয়। কোন প্ররোচনা কী অসুখ বা কোন ভূত একজন ধর্ষকের, যে আসলে কয়েকদিন আগেও হয়তো বিরাজ করত মানবসত্তায়, মনের সব আলো নিবিয়ে দেয়? এই প্রশ্নটাই আসল ও মূল্যবান। এ কারণেই মনোবিদদের কাছে মানুষের যৌনজীবনের সবচেয়ে অজ্ঞেয় এবং প্রায়শ গুচ্ছবাহীন অন্ধকারাচ্ছন্ন দিক বলে বিবেচিত হয়েছে একজন ধর্ষকের মন। এই মনের ইতিহাস-ভূগোল বা অতীত-ভবিষ্যৎ জানার চেষ্টা চললেও

এখনও তার অনেকটাই অজ্ঞাত ও গবেষণাধীন। এ কেবল নারীর উপর যৌন প্রতিহিংসা চরিতার্থ করাই নয়; তার অনেক চোরাগোস্তা ও হাণ্ডহুঁর আছে বলেই মনোবিদগণ মনে করেন। কিছুকাল আগেও মনে করা হতো, যৌনলিঙ্গ পূরণের জন্যই পুংপ্রবাহের এই কাজে জড়িয়ে পড়ত। কিছু পরে সাধারণ মানুষের মনে একটা ধারণা গড়ে দেওয়া হলো যে, মেয়েদের উত্তেজক পোশাক-আশাক বা হাবভাব এর জন্য দায়ী। অতি সম্প্রতি ভাবানো হলো, ধর্ষণ মেয়েদের উপর যৌনউপায়ে হিংসা চরিতার্থ করা। বর্তমানে নানা ধরনের গবেষণায় বিবিধ ভাবনা উঠে আসছে। এবং সেসব বক্তব্য এত বেশি বিতর্কিত স্ববিরোধী ও বিপ্রতীপ যে, আসল সত্যে উপনীত হওয়া বেশ কঠিন হয়ে পড়ছে। সম্মতিযৌনতা তা সে বিবাহিত বা তথাকথিত বৈধ সম্পর্কের ভেতরে বাইরে যাই হোক না কেন, তার সঙ্গে ধর্ষণের তফাৎ দুটো ও পৃথিবীর দূরত্ব ও গুণগত মানের মতোই। অথবা তার চেয়েও বেশি। হিংসার মাধ্যমে যৌনতা আদায় করা এবং নারীশরীরটিকে বর্বরভাবে ধ্বংস করে দেওয়ার পিছনে যে মনটি সক্রিয় হয়ে ওঠে বারমুজা ট্রান্সেলের মতোই তার হালহাতিশ করা অত্যন্ত কঠিন বলেই মনস্তাত্ত্বিকরা মনে করেন। কারণ বিচ্ছিন্ন ব্যক্তি এই কর্মটি করলেও সে গড়ে ওঠে আমাদের বৃহত্তর চেনা সমাজের মধ্যেই।

তাকে চেনা বেশ একটু মুশকিলই বটে। তাই ধর্ষকের মনের ছবি আঁকতে গেলে উঠে আসছে নানা অনাকাঙ্ক্ষিত প্রসঙ্গ, তার বহু দিগদিগন্ত। কান টানলে মাথা ভেঙে আসবেই। কোন 'পুরুষ'রা ধর্ষণ করে? মনের কোন রসায়নে কিংবা কথায়নে কোন কোন বয়সের পুরুষমানুষের মনে ধর্ষকাম জাগে? মনের গহনে কতখানি অন্ধকার থাকলে সে প্ররোচিত হয় গ্রহন ঘৃণ্য কাজে? সুন্দর মুখ কিম্বা সুঠাম নারীশরীর অথবা কেবল উদ্ভিন্নযৌবনা নারীই কি ধর্ষকামের প্ররোচনা? তাহলে তাপসী মালিক কেন ধর্ষিত হয়? ধরে নিচ্ছি সে না হয় রাজনীতির শিকার। কিন্তু দিল্লী, কামদুনি, মুম্বাই, বড়োদ্রা, বদায়ুন সহ সমগ্র দেশের ধর্ষণের ঘটনাগুলির পরিসংখ্যান সে কথা বলে না। আজকের সমাজ বলা ভালো পুরুষপোষিত তথা শাসিত সমাজ একে কি আদৌ 'ঘৃণ্য' বলে মনে করে? বিশেষজ্ঞ মনোবিদরা ধর্ষকের মনের অতি গহনে নিহিত পাতালছায়ার সন্ধান করতে গিয়ে বেশ দিশেহারা হয়ে দেখেছেন এই বিষয়ের কোনো সহজ মানে বই নেই। সত্তর ও আশির দশকে মনে করা হতো, এবং এখনও অনেকে মনে করেন, মেয়েদের উত্তেজক পোশাক-আশাক ও হাবভাবই ধর্ষকামে মেতে উঠতে প্ররোচিত করে তরুণদের। কিম্বা সত্তর-আশির হলুদ বই বা হালের বুল্লামখুল্লা পর্ণগ্রাফিকে অনেকেই কাঠগড়ায় দাঁড় করাবেন জানি। ব্যক্তিগতভাবে আমি বেশ কয়েকজনকে চিনি যাঁরা সিরিয়াল দেখার মতো পর্ণগ্রাফি দেখতে দেখতে নিয়মিত ভিনার সারেন। এঁদের একজনকে জিগ্যেস করেছিলাম উত্তেজনা জাগে কিনা। তিনি হাসতে হাসতে উত্তর দিয়েছিলেন, ফিফটি পারসেন্ট আমেরিকান দম্পতি নাকি রাতের খাবার খেতে খেতে পানু দেখে। আর তিনি দেখেন গ্যান্ডগেদে সিরিয়াল একঘেয়ে নিউজ আর বোকা বোকা সিনেমা দেখার মজাদার বিকল্প হিসেবে। আমি জানি না পানুদর্শনে কতখানি 'ফান'রস পান করা সম্ভব। কিন্তু ও বস্তু যে 'ব্যাাদের যুগেও ছেল' এবং পরেও, তার নানান হালহাতিশ বা পাথুরে প্রমাণ রয়েছে। অনেকেই জানেন না বলে মনে করেন, বাৎসর্যায়নের কামসূত্র সেকালের একটি হলুদ মলাটের পানুবই ছাড়া আর কিছু নয়। আমি অনেক শিক্ষিত

লোক এবং বেশ কয়েকজন অশ্যাপককে দেখেছি কামসূত্র কিনে পবনের কাগজে মলাটি দিয়ে কাচমাচ মুখে বাড়ি ঢুকতে। জেনে রাখলে মেয়েদের নয় যে, বাৎসর্যায়ন মহাশয়ের কামসূত্র প্রথমে সতটা কামকলার বিবৃতি, 'তার চেয়েও বেশি সেকালের উন্নত জীবনশৈলীর সূচকিৎস; যাদের কোথায় কোন নই ও বাদসম্ম' সাজাবেন 'তার বিবরণ সহ যৌনবিনোদনের বিজ্ঞানসম্মত যৌথ উপায়সমূহের জীবন্ত বর্ণনা এ বইয়ের সম্পর্ক। এরপরেও যদি কামসূত্র পড়তে বা বাড়ি নিয়ে যেতে বুক দুকদুক করে তাহলে প্রমথ চৌধুরীর বই পড়া নিষ্প্রকটি পড়ে নিন।' ভয় কেটে যাবে।

ফের মূল কথায় আসি। মেয়েদের তথা কথিত 'অসংযত পোশাক বা পর্ণগ্রাফিকে ধর্ষণের প্ররোচনা হিসেবে চিহ্নিত করলে সত্য ও অর্ধসত্যের মাঝখানে একটা পরিখা সৃষ্টি হবে। দুপারে দাঁড়িয়ে 'তুমুল যুদ্ধ ও চাপানো যেতে পারে। কিন্তু প্রকৃত সত্য থেকে যাবে দুরাতোয়ার বইরে। এ কারণেই তসলিমা নাসরিনের মতো অতি সচেতন মানুষ ও দিল্লী ধর্ষকদের প্রতিক্রিয়া জানাতে গিয়ে হয়তো অজ্ঞাতে 'আধন্যাংটো পোশাক-আশাক বা চলচ্চিত্র ও দূরদর্শনের কুকচিকর দৃশ্য ও দিল্লীপানের কথা উল্লেখ করেছেন। এগুলি প্ররোচনার খুচরো উদাহরণ হতে পারে; কিন্তু আসল কারণ নয়। কেননা ব্যামি ও উপসর্গ এক বস্তু নয়। অশিক্ষা কৃশিক্ষা বা সুশিক্ষার অভাবকেই অধিকাংশ বুদ্ধিনির্ভর মানুষ ধর্ষণের কারণ হিসেবে চিহ্নিত করবেন জানি। কিন্তু তাঁদের কপালে রীতিমতো ভাঁজ ফেলে দেবে বহু ধর্ষকের ভারি ভারি ডিগ্রি দেখলে। ভারতীয় উপমহাদেশে তথা সমগ্র বিশ্বে রুচিশীল পোশাক ও বোরখাধারিণী ধর্ষিত মেয়ের ও শিক্ষিত বা শিক্ষক ধর্ষকের সংখ্যা এত বেশি যে, এই তত্ত্ব প্রমাণ করার জন্য কোনো পরিসংখ্যান দেওয়ার প্রয়োজন পড়ে না। এ বিষয়ে সংশ্লিষ্ট গবেষকরা পেনহিল প্রেথিসমোগ্রাফ ডিভাইস ব্যবহার করে দেখিয়েছেন, যৌনদৃশ্য দেখে বা বর্ণনা শুনে পুংদেও রক্ত সঞ্চালনের পরিমাণ ভীষণ রকম আপেক্ষিক। এই আপেক্ষিকতা থেকে কোনো সিদ্ধান্ত নেওয়া হলে সেটা অবৈজ্ঞানিক হবে বলেই তাঁরা মনে করেন। আমার বন্ধুর 'ফান'রস পান করার কথা পুনরায় মনে পড়তে পারে। একটা সময় মনে করা হতো, যৌন রেনিগেড তথা কল্পনার জগতে উড়াল দেওয়া নারীবিরোধী বিষাদগ্রস্ত তরুণসমাজের একটা অংশ এই বিকৃতির শিকার। আবার বহু নারীবাদী এবং ফেমিনিজমে বিশ্বাসী বহু পুরুষই ধর্ষণকে নারীর উপর 'পুরুষমানুষের' স্বাভাবিক ঘৃণা ও বিদ্বেষজাত অপরাধ বলে মনে করেন। এইসব ধারণাগুলি আসলে সত্যের ভগ্নাংশ ও প্রকৃত সত্যকে আড়াল করার একটা মেধাবী প্রচেষ্টা মাত্র, যা আমাদের দৃষ্টিকে মেঘলা করে দেয়।

১৯৮৭ সালে ইউনিভার্সিটি অব আরিজোনা মেডিক্যাল স্কুলের এক মনস্তাত্ত্বিক ডক্টর মেরি কস ৩১৮৭ জন কলেজ পড়ুয়া মেয়ের উপর সমীক্ষা চালিয়ে দেখেছেন, যেখানে ১৫ শতাংশ ধর্ষিত হয়েছেন সেখানে দশজনের আটজন ধর্ষিত হয়েছেন চেনা পুরুষের দ্বারা; আর ৫৬ শতাংশ জানিয়েছেন, ডেটিং করতে গিয়ে তাঁরা ধর্ষণের শিকার হয়েছেন। ভারতীয় উপমহাদেশে এই চিত্রটি অবশ্য এর বিপরীত হতে পারে। কিংসটনের কুইন কলেজের মনোবিদ তথা যৌন নিপীড়নে আহত মেয়েদের চিকিৎসকদের ডাইরেটর ডক্টর হার্ভার্ড বারবারি জানিয়েছেন, অধিকাংশ সম্মতিযৌনতার মধ্যেও থাকে জবরদস্তি যৌনতা, যা মেয়েদের মনটিকে নানাভাবে বিপর্যস্ত করে দেয়। এবং সম্মতিযৌনতা আদায় করে যে পুরুষরা তাদের বেশির ভাগই



পরিবারের সদস্য। তাঁর আবিষ্কারের চমকপ্রদ দিকটি হলোঃ শরীরের অর্ধাংশ ঘটেছে সপ্তাহান্তে শনিবারে মধ্যাহ্নপুরে; বাকি অর্ধাংশ সন্ধ্যা সাড়ে সাতটা জটিল থেকে রাত দুটোর মধ্যে। এর ৭১ শতাংশ শরীরই পরিষ্কৃত; অত্যন্তই কেবল থেকেছে নিরাপদ সময় ও সুযোগের সম্মানে। ট্যাগটিকে মূল্য নিয়ে আসতে ইতিমধ্যে সে রচনা করে নিয়েছে একটি গাং। আশি ও নব্বইয়ের দশকে করা সমীক্ষার সঙ্গে আমীরের সমীক্ষার একটিই পার্থক্য—সে হলো বয়সের। উত্তর আধুনিক জমানায় ধর্ষণে জড়িয়ে পড়েছে মহাবয়সীরাও। আর বদল ঘটেছে নগর অনুযায়ী শঙ্কের ব্যবহারে। দিঘীর নির্ভর কাণ্ড স্বর্ভবা।

আমীর ধর্ষণকে দুটি কাটাগরিতে বিভাজিত করেছেন—ক্রিমিনাল রিপ ও সাইকিয়াট্রিক রিপ। আমীরের মতে, সাইকিয়াট্রিক রিপিস্টার উচ্চশিক্ষিত ও মহা-উচ্চ মধ্যবিত্ত শ্রেণি থেকে আগত। সেখানে আচরণবাদীরা তিন ধরনের ধর্ষকের কথা বলেছেন—ডেট রিপিস্ট, পোটেনশিয়াল রিপিস্ট ও সেক্সুয়াল অ্যাগ্রেশন। তবে সকল বিশেষজ্ঞ মেনে নিয়েছেন যে, মূলত শিক্ষা ও সংস্কৃতিহীনতাই ধর্ষণের লাইফ লাইন। কেন্ট স্টেটের সাইকোলজির শিক্ষক ডক্টর গর্ডন নাগায়াম হল ধর্ষকদের কাণ্ডকারখানা অনুযায়ী চার ধরনের ধর্ষণের কথা বলেছেন। টাইপ একঃ অস্থির। এরা ট্যাগটিকে প্রলুব্ধ বা প্রভাবিত করে; লক্ষ্যপূরণে যে কোনো রকম হিংসার আশ্রয় নিতে পারে। টাইপ দুইঃ স্বীকৃতি। এরা নিজেদের ভুলচুক ও বিপর্যয়কে সামাল দিতে গিয়ে মনে মনে বিশ্বাস করে ফেলে মেয়েরা ধর্ষণে আনন্দ পায় বা ধর্ষিত হতে চায়। পৌরুষকে হারিয়ে খোঁজে। প্রণয়পাশার খেলোয়াড়রা এই জাতের। টাইপ তিনঃ বাঁধন ছেঁড়া আবেগে নিয়ন্ত্রণ হারিয়ে এরা খাদে গড়িয়ে পড়ে। ডক্টর হলের মতে এরা অত্যন্ত রাগী এবং ভয়ংকর বিপজ্জনক। যে কোনো হিংস্রতার আশ্রয় এরা নিতে পারে। টাইপ চারঃ শৈশবে স্কুলে বা পরিবারে অপব্যবহৃত হয়ে এরা অভিজ্ঞতার অনুরূপ বা আরও বিকৃত অভিজ্ঞতার পুনরাবৃত্তি ঘটাতে চায়।

একজন নারীবাদীকে যদি জিজ্ঞেস করেন, ছেলেরা কেন ধর্ষণ করে? এর উত্তর পাবেন, মোটের উপর পুরুষরা নারীবিরোধী ও স্বভাবতই ক্রোধী; এবং এই 'রাগ'মোচনের জন্য মেয়েদেরই বেছে নেয়। অতি সাংঘাতিক ভুল ধারণা এটি। অত্যাচারিত হতে হতে মেয়েরা পুরুষকেই ভিলেন ভেবে নিচ্ছে। এমনকি শিক্ষিত মেয়েরাও এর ব্যতিক্রম নন। অথচ পাশে একটি নারীকে পেলে একজন পুরুষের বুক ফুলে ওঠে; পৃথিবীকে তখন তার সুন্দর ভুবন বলে মনে হয়। হিরোইজমে প্রাণিত হয়ে দেশোদ্ধারে বা সমাজসংস্কারে মেতে উঠতে দ্বিধা করে না। ঘরে বাইরে-র সন্দীপ ব্যতিক্রম। পথের দাবীর অপূর্ব জেনারেল ট্রেন্ড। অন্যদিকে প্রতারণিত বা প্রত্যাখ্যাত হলে একসময় সে দেবদাস হয়ে আত্মনিগ্রহে প্রাণ বিসর্জন দিত। এখনও অনেক দেবদাস আছেন যারা নিরুচ্চারে বা অগোচরে দেবদাসের বা শ্রীকান্তর ধনাত্মক ভূমিকা পালন করে থাকেন। অ্যান্ডিড বাধ ছোড়ে কয়েকটা আকাট মুখ। তারা প্রেমিক নয়। তাহলে কী করে বলি পুরুষ মাত্রই নারীবিরোধী। আসলে এই কুটনর প্রণয়ের উত্তরে আচরণবাদী গবেষকদের বক্তব্য হলোঃ হরমোনের ভুলভাল স্টিমুলিই এর জন্য দায়ী। ধর্ষণের কারণ হিসেবে বহুকাল ধরে এই দুই দৃষ্টিভঙ্গির ব্যাখ্যা চলে আসছে। ওয়ান ইস্টু ওয়ান যৌন হেনস্থা ও নিপীড়নের ক্ষেত্রে উপরোক্ত মতামতকে মান্যতা দিয়ে অতি সম্প্রতি ডক্টর হল ধর্ষণ নিয়ে এক ওপেন ফোরামে জানিয়েছেন, এ বিষয়ে যাবতীয় গবেষণাই আপেক্ষিক ও অসম্পূর্ণ।

এই যদি হয় উন্নত দেশের ভাল, যেখানে কিনা নারীপুরুষের সমানায়িকার সুপ্রতিষ্ঠিত বলে দাবী করা হয়, ধর্ষণবিহীন রূপবেশা ও নিরুচ্চনের সমাপান সূত্র, সেখানে উন্নয়নশীল ও অনুরাগ দেশগুলির কী ভাল হবে তা সত্যজ্ঞেই অনুমেয়। 'তবুও পশ্চিমের দেশগুলি বসে না থেকে পুনে নিজে সমস্যার ব্যাপ্তি ও ঘটনতা।' 'তাই তাঁরা পরীক্ষানুলকভাবে উচ্চশিক্ষায় ধর্ষণের বিষয়টিকে পাঠ্যতালিকার অন্তর্ভুক্ত করে বন্যেচিত পদক্ষেপ করতেন। হয়তো নৃকি হয়ে যাচ্ছে খুব।' 'তবু তাঁরা শ্রেণিকক্ষে বসাতেন ধর্ষিত ও ধর্ষককে।' আর আনন্দের বেশ? 'যে দেশের মানুষের বিশেষত মেয়েমানুষের চলতে চলতে কেটি কেটি বেবদেবীর ভয়, সেখানে 'পরাম'পুরুষকে বচিয়ে কে নিজেদের মরে মিন কাটবে? 'তাই ধর্ষণের সঙ্গেই নিয়ের পিড়িতে বসিয়ে দেওয়া হচ্ছে ধর্ষিতকে। এ ব্যাপারে অভিজ্ঞতাবক ও পুলিশকুল একই ভাবনার শরিক। 'খাপ খুলেছি কি খাপ পপ্পরয়েত! মরুর শাসক থেকে দেশের শাসক এক সুরে গান গায়। এ কারণেই উন্নয়নশীল দেশে ধর্ষণ বহুমাত্রিক উদ্বেগ-বিদেয় চরিতার্থ করতে হয়ে উঠছে পুরুষশাসিত সমাজের অবচেতনের 'ইন' চালিত একটি গোপন ও সংগঠিত সাংস্কৃতিক (অপ) প্রবণতা। এই সোসাল সাইকি ভাইরাসের মতোই ছোঁয়াচে ও অতি দ্রুত ছড়িয়ে পড়ছে। তাই ধর্ষণকে পড়াশুনোর অন্তর্ভুক্ত করার কথা উঠলে এ দেশ সত্যি ভিরমি খাবে।

রাত কত হলো?

উত্তর মেলে না।—রবীন্দ্রনাথ

শক্তিশিক্ষার কথা মৃত

কেননা আমাদের দেশজ সমাজ এ ব্যাপারে ঠিক মৌলবাদী না হলেও মৌলবাদী। ঘা প্যাঁচড়া যত ঢেকে রাখা যায় ততই মঙ্গল। টোটকা কবিরাজি, তাবিজ-কবচেই আমাদের বিশ্বাস বেশি। আর এহেন দেশিয় চিকিৎসায় আমাদের বিশ্বাস স্থাপনের মধ্যে দিয়ে ইদানীং আমরা বেশ পৌরুষের জেরনার চাষবাস করে চলেছি। হারানো জমি পুনরুদ্ধারের জন্য এতদিন কেবল স্ত্রীলিঙ্গনির্মাণ করে এসেছে এ দেশের পিতৃতন্ত্র ও পুরুষপ্রধান সমাজ। এখন শুরু হয়েছে পৌরুষেরও নির্মাণশিল্প। এই শিল্প যে এখন দুর্বল গতিতে এগোচ্ছে তা আমরা হাডেমজ্জায় টের পাচ্ছি। একদম চূপিসাড়ে না হলেও দীর্ঘকাল ধরে প্রায় নিরুচ্চারে একটা বিরাট বড়ো বিপ্লব এই উপমহাদেশে ঘটে গিয়েছে। জীবনের প্রায় সর্বক্ষেত্রে কী করে যে মেয়েরা পুরুষদের কখনও ডিঙিয়ে কখনও বা সমকক্ষ হয়ে অর্ধেক আকাশ দখল করে নিয়েছে এটা বুঝেই পুরুষতন্ত্রের শ্বাসবায়ু বেরিয়ে আসার জোগাড়! কাছা খুলে তেড়েফুড়ে উঠে সে আবার রাজার আসনে ফিরে যেতে চায় যেখানে পুরুষ দাতাকর্ণ ও মেয়েরা দাক্ষিণ্যে উচ্ছল—হাতে শাখা, মাং ভরি সিন্দুর, পরনে ঢাকাই শাড়ি, মাথায় ঘোমটা। তাই ভারতবর্ষের সব ভাষার সিরিয়ালগুলিতে নজর বোলালেই বোঝা যায় কেন এত ঐতিহ্যবাহী পোষাক ও অলঙ্কারের এত ঘনঘটা। প্রায় সব সিরিয়ালগুলিতেই প্রেম ও বিয়ে ছাড়া কোনো গীত নেই। বিয়ের আগে প্রেম। প্রেমের আগে পরে বিয়ে। এই একুশেও একটির জায়গায় দুচারটি বিয়ে। আর বিবাহের আসর যেন রাজপ্রাসাদ, হাজার জৌলুসে পূর্ণ। জিনস-টপশোভিত কলেজে পড়া মেয়েটিও শেষ পর্যন্ত পেন্সিট্রি ডগায় ক্রিমের মতো এই ট্রাডিশনের মায়ালোক কেন যে বর্জন করতে পারে না! আর পুরুষ চরিত্রগুলি দেখুন। শাসনে আসনে লোমশবক্ষ 'স্বাস্থ্যবান' ও 'স্বাধীন' 'পরাক্রমের' কাছেই

মাথা নত করছে পরিবার ও পরিসরের মেয়েরা। যে পুরুষটি উদার মুক্তচিন্তা প্রেমময় বিনত মৃদুভাষী, হয়তো বলপ্রয়োগে অনিচ্ছুক স্বভাবের, সে হয়ে যায় মেনিমুখো মিনসে। মেয়েছেলের সমান। তাকে তার মেয়েবন্ধুরাও টিটকিরি দেয়। সে একা হয়ে যায়। দিব্যস্বপ্নপ্রাপ্ত এই অতীত মুখরোচক হৃদয়স্বামী গঞ্জিকগমের উপস্থাপনার সামান্য হেরফেরা হলেও এটিই ভারতীয়া দূরদর্শন চ্যানেলগুলির জনপ্রিয় ধারাবাহিকগুলির প্রধানতম বিষয়। কেটি কোটি জনতা রাতদিন এগুলি ভক্ষণ করছেন নির্বিবাদে এবং নির্বিচারে। দেখলে মনেই হয় না এ দেশে ভয়াবহ দারিদ্র আছে, খাদ্যহীন বস্ত্রহীন আশ্রয়হীনদের সংখ্যা ভোটেরগুলিকাকে ক্রমশ স্বাস্থ্যবান করে তুলছে। এই ধারাবাহিকগুলির কেন্দ্রবিন্দুতে থাকে আসলে যৌনতা। এবং তার আশ্বাসনের নানান ফলিফিকির। এটিই জীবনের মূল মন্ত্র। ওই বস্তুটি আশ্বাসিত হলেই এই ইহজীবন ধন্য হয়ে যাবে। এই বার্তাটিই ক্রমে ক্রমে টাগেটি পিপল্-এর কাছে পৌঁছে দিচ্ছে প্রবল পরাক্রমশ মন্টিন্যাশনাল ও কর্পোরেট পোষিত চ্যানেলগুলি। সিনেমা নয়, তাঁরা বুঝে গিয়েছেন, টিভি চ্যানেলগুলিই পুংলিঙ্গনির্মাণের সেরা মাধ্যম ও শত্রুবিনাশের অন্যতম হাতিয়ার। জনতাজনাদর্শনের ঘরে ঘরে বিনোদনের আর তেমন কোনো বিকল্প নেই বলে আমরাও দিনশেষে কর্মক্রান্তি অপনোদনের নিমিত্ত সপরিবার এই মিষ্টান্নাবরণে শোভিত বিষমণ্ড গিলে চলেছি।

এভাবেই স্ত্রীলিঙ্গনির্মাণের পাশাপাশি আমরা নিজেরাও পৌরুষনির্মাণের মজুর হয়ে উঠছি। এবং অজান্তে। একান্ত নির্বিবাদে। রোদনরেখার দাগও এতে পড়ে না। এবং শল্যচিকিৎসার কোনো বেদনা ছাড়াই। আটের দশকের মাঝামাঝি কবিতা সিংহের 'পৌরুষ' নামের একটি বিস্মৃতপ্রায় উপন্যাসে সেই পৌরুষনির্মাণের ইতিকথা ধরা পড়েছিল কিছুটা। তারও অনেক আগে 'চোখের বালি'র মহেন্দ্র বন্ধুর পছন্দ করা মেয়েকে জোর করেই বিয়ে করেছিল। কারণ মায়ের পছন্দের মেয়েটি ছিল খেড়ে, অর্থাৎ কিনা ব্যক্তিত্বময়ী। জীবনসঙ্গিনী নির্বাচনের ব্যাপারে কে আর সংঘাতের সুযোগ করে দিয়ে আপন পশ্চৎ নিধন করে! তাই কচি মেয়েই ভালো। তাকে কাদার তালের মতো নিজের হাতে গড়েপিটে নেওয়া যায়। ঘর আলো করে সম্রাজ্ঞী বিরাজিত হলেন। আবার রাজত্বও রইল। উনিশের শেষ দশকের মহেন্দ্রর উত্তরসূরী বিশের জোয়ান দশাতেই মুখ ফুটেই ঘোষণা করে দিল—বিয়ে যদি করতে হয় খেড়ে মেয়ে কদাচ নয়। মানিক বন্দ্যোপাধ্যায়ের 'পুতুলনাচের ইতিকথা' উপন্যাসের কুমুদ কিম্বা মননশীল শশী ডাক্তারের মনে এই সোসাল সাইকিই তো নিনাদিত হয়। পুরুষের যৌনাকাঙ্ক্ষা অদৃশ্য পুরুভূজের রূপধারণ করে বেডরুমকে যে আসলে এ কালেও 'বিবর' বা 'জন্তুর বাসা' করে তোলে, ছেঁটে দেয় মেয়েদের উড়বার ডানা দুটি তা মোক্ষম মালুম হয় সর্বাধিক প্রচারিত দৈনিকের পাত্রপাত্রীর বিজ্ঞাপনগুলি পড়লে। 'শত ক্রেশের ব্যবধানেও' যে প্রেম রচিত ও প্রাণবন্ত হয় বিহারী ও বিনোদিনীর যাপনচিহ্নের পথরেখায়, তার ধারাটি বিশ শতকে তেমন জলসেক পেল না। বরং পিগম্যালিয়ান সিনড্রোম নিয়ে মহেন্দ্র কুমুদ মধুসূদনদের দলটাই ক্রমশ ভারি হয়ে উঠল বিশ এবং একশ শতকেও। আর এই শত্রুকে তোলাই দিয়ে আমরাও গড়েতুলছি যে অদৃশ্য জীবনদেবতা, সে আর কিছু নয় পুরুষতন্ত্রই। জগ্ন অবস্থাতেই নারীনিধন; আর ছেলে হলে জোড়া পাঁঠাবলি। এ তথ্য গাঁজাখুরি নয়, মেরা ভারত মহানের। খুব ছোটোবেলা থেকেই আমরা শিখে যাচ্ছি, দেখে যাচ্ছি, ছেলেদের সাত খুন

মাফ; পুরুষের বিগড়ে যাওয়ার কারণ মেয়েরাই। এভাবেই গড়ে উঠছেন দেবতা। এই দেবতার পূজার একমাত্র অর্ঘ্য হলো যৌনতা। তিনি এখন অশিল কৃশা নিয়ে জেগে উঠছেন। মুখে তার উদার হাসি। বাইরে তার প্রগতির দঙ্গা উঠতীন। প্রায় শতাব্দীকাল ধরে তার রাজপাট দুর্বল হয়েছে। তখি 'আতত' তথা মানতার পিতৃতন্ত্র নীরবে এবং মানিকটা 'অগোচরেই' কিন্তু বহু যতনে বহুদিন ধরে নির্মাণ করে এসেছে মেয়েমানুষ ও পুরুষমানুষ নামক দুটি পরস্পর সম্মানস্রাল কিন্তু বিপরীত সংস্কৃতির মানসদপার। আমাদের প্রাত্যহিক জীবনযাপনশৈলীর সংস্কৃতির গভীরে নিহিত রয়েছে তার সেই নির্মীয়মান সাদা-কালো দুটি কক্ষ। 'দাদা ওটা পেডিস সিট।' বলে পিল্লি করতেও আমাদের তাই বাধে না। মেয়েরাও নানা কারণে পারেনি এই দাঙ্গিণা বর্জন করতে! অতি প্রবীণেরও ইতরামির হাত থেকে বাঁচতে নবীনাও সিট ছেড়ে দিয়ে মানবিক হতে পারে না। এই তো আমাদের পৌরুষের দৈনন্দিন ইতিহাসের হরপ্পা মহেঞ্জোদাড়ো।

কাকে বলে পৌরুষ? শারীরিকভাবে একটি পুংদেহের অধিকারীকেই পিতৃতন্ত্র তার কাল্পিত পুরুষ বলে বিবেচনা করে না। এটি একটি কৃত্রিম ও সামাজিক ধারণা মাত্র। সামাজিক নির্মাণের মাধ্যমেই তাকে গড়ে তোলা হয়। যদি কোনো পুরুষমানুষ উলকটা বোনে, স্ত্রী ও নতনপালনে অধিক আগ্রহী হয়, অতি বিনয়ে বা ইনিয় বিনিয়ে কথা বলে সে হয়ে যায় মেয়েলি, ন্যাকা, মেনিমুখো; এক কথায় পৌরুষহীন। একটু বেয়াল করলে দেখবেন, মেয়েরাই এমন পুরুষদের পছন্দ করেন না; আড়ালে আবডালে হাফলেনডিস বলে ব্যঙ্গ করেন। তাঁরা পছন্দ করেন একটু রাফ আও ঢাক বন্য বলশালী বদরাগী পুরুষদের। অস্ত্রাতসারে হলেও পৌরুষনির্মাণে মেয়েরাও একটা গুরুত্বপূর্ণ ভূমিকা পালন করেন। কেমন সেই পৌরুষের নির্মাণশিল্প? অস্ট্রেলিয় তাত্ত্বিক আর ডবলিউ কোনেল তাঁর 'ম্যাসকুলিনিটিস' নামক বইটিতে তার বিস্তৃত পরিচয় দিয়েছেন। পৌরুষকে তিনি চারটে স্তরে বিন্যস্ত করেছেন। একঃ আধিপত্যবাদী পৌরুষ—যতই লক্ষ্মক্ষম মারো না কেন, রাজনৈতিক ক্ষমতা থেকে শুরু করে সংস্কৃতি—চালকের আসনে থাকবে পুরুষই। দরকার হলে নারীকেই গদিয়ান করে। চাণক্য কিম্বা গোয়েবলসরা থাকুন তাঁকে ঘিরে। সাপও মরবে, লাঠিও অটুট। সংস্কৃতির জগতেও জারি থাকবে সেই ট্র্যাডিশন। প্রশাসনের প্রধান ছবিও আঁকবেন, রাজ্যপাটও চালাবেন। তা বেশ বেশ! তাঁর ছবি ছবি হোক না হোক, তাকে তোলাই দাও। কিন্তু মনে রাখবে ছবিটা আমিই বুঝি, তুমি নও। তোমার স্বীকৃতির চাবি আমার হাতে। তুমি যতই ভালো দেশ চালাও, দল চালাও, চালাও প্রশাসন অথবা উল্টোটা—মনে রেখো আমিই তোমাকে ওখানে সেটল করেছি। ওটা পার্ম্যানেন্ট সেটলমেন্ট নয়। তোমার মাধ্যমে আমারই বার্তা যাচ্ছে। হয় বিধবা হিসেবে ক্ষমতা পেয়েছে, নয়তো আমরাই তোমার পূজা চড়িয়েছি। এটা পৌরুষের ঔদার্য। সম্রাট সাজাহান পুং ছিলেন বলেই না তোমার স্বরণপ্রাসাদ! নইলে তুমি কোথায় গড়াতে! কোন লেসবিয়ান মেয়েছেলে তোমার চোপায় মুঞ্চ হয়ে তাজমহল গড়ে দেবে!

দুইঃ অধীনতামূলক পৌরুষ—ঘরে ঘরে দোর্দণ্ড প্রতাপ স্বামী সাপ্লাই দিলে গোলায় যাবে রাজ্যপাট সে হুঁশ আছে? অতএব কিছু মেনিমুখো মিনসেও চাই। তারা দাসী-বাদীকে রানি সম্রাজ্ঞী বিবেচনা করে ঘরে বাইরে সপ্তলন বজায় রাখবে। যেমন ধরো নিখিলেশ। বডুকে একেবারে পরপুরুষ বন্ধুর হাতে সঁপে দিয়ে কেমন উদার উদাস—এ ভরা বাদর মাহ ভাদর শূন্য

মন্দির মোর। প্রেমের দুয়োর দিয়ে এসো। জড়িয়ে ধরব। তার আগে নয়।  
নইলে প্রেমের মূল্য থাকবে না যে। প্রেমও তো পুরণের মহান সৃষ্টি।  
তাকে রক্ষা করতে অমন দুচারটে নিখিলেশকে হাতে রাখতে হয়। সুরেশ  
বৌ নিয়ে গালালেও মহিম বীতরাগ মহিমায় অটল থাকে না কি। গহরকেও  
তো দুনিয়া থেকে বিখাদময় বিদায় নিতে হয়। আর অমিত রায়দেরকে  
দিয়ে লিখিয়ে নিতে হয়, চিরবিরহের বিখাদগাথা—গ্রহণ যত করেছেো পৃথী  
তত করেছেো আমায়। এটসেটরা এটসেটরা...

তিন : আপসকামী পৌরুষ—এরা হবে শিক্ষিত রুচিবান 'সমোস্কৃতি'  
পরায়ণ। মেয়েছেলেকে জননী ও কন্যা জ্ঞান করে জগজ্জীবনকে উজ্জ্বল  
করবে। দিনে রাগবে, রাতে রাগমেচন করবে। ছেলেমেয়ের ভেদজ্ঞানের  
বিরুদ্ধে লড়াই করবে। মোমবাতি মিছিল করে দশদিশ আলো করবে।  
কুলের চাকার পাশাপাশি কালের চাকাও চালাবে। এভাবেই তারা ঘর-বারের  
সময় সাধন করবে। দে আর ভেরি ভেরি ইনটেলেকচুয়াল অ্যাণ্ড প্রগ্রেসিভ।  
যাকে বলে ব্যালাপিং ফ্যাক্টর। চাঁদের গায়ে চাঁদ। কবিতা লিখবে, লিটল্  
ম্যাগ করবে; এই অধমের মতো পোস্ট মডার্ন প্রগ্রেসিভ ম্যাটার নিয়ে  
আটিকেল লিখবে। ডিকনস্ট্রাকশন নিয়ে সেমিনারে আকাদেমিসভায় মিঠে  
মিঠে বুলি কপচাবে। আপামর নারীজাতি এদের জন্য নীরা হয়ে উঠবে।  
মেঘবালিকারা ভাববে এই আমার সত্যিকারের দোস্ত, 'অনন্ত দাম্পত্য'-এর  
দোসর; রবীন্দ্রসদন নন্দন আকাদেমি আলোয় আলোয় আলোকিত হয়ে  
উঠবে। এ যে মুহূর্তের আলো মাত্র, আসলে যে সারা জীবনের অন্ধকারের  
শেকল তা বুঝতেই পারবে না। এরাই আমাদের সম্পদ। উ মাগো মরে  
যাই। তবে না জগৎটা ঠিকঠাক চলবে! বুয়েছ বাপু!

চার : প্রান্তিক পৌরুষ—এরা বড়ো কর্কশ। অশিক্ষিত। অধশিক্ষিত।  
ব্যালাপ বোঝে না। ব্যালাস শিটও না। বড্ড রাগী। বদ রাগীও। আণ্ড  
মুখুজ্জের মতো গোর্ফ থাকতেও পারে, নাও থাকতে পারে। তবে বুদ্ধিতে  
গর্বে। সংসারের আসল ডিপ্লোম্যাসি বোঝে না। এঁড়োটাইপ। মেয়েছেলেকে  
লাই দেয় না। মাথায় তোলে না। বৌয়ের পা টেপার বদলে সপাটে লাখি  
কষায়। পুং পুং ভাব বজায় রাখার জন্য মালফাল টানে। রাগীও চলে।  
ঘরে বেশি তেড়িবেড়ি করলে বয়কট; কেবল পাতে মারাই নয়, জাতেও  
মেরে তালুক দিয়ে বসিয়ে দেয়। খতম বিষ দাঁত। এই তার মোক্ষ ও মুখ্য  
দর্শন। এই দার্শনিক পুংরাই পঞ্চয়েতের খাপ; খাপ খোলা মেয়েছেলের  
দণ্ডমুণ্ডের কর্তা। এঁরাই ভোটের তালিকার জানপ্রাণ বলুন স্বাস্থ্য বলুন,  
সবকিছু। দেশের শাসনকর্তাদের নির্বাচক বলে কথা! মোটের উপর এ  
দেশে এঁরাই সংখ্যাগরিষ্ঠ। এই একুশেও। 'সমোস্কৃতি' বানদের কাছে এঁদের  
জনাই না কথা শুনতে হয়!

একবার ভাবো তো গোটা উনিশ জুড়ে কী ঔদার্যটাই না দেখানো  
গিয়েছিল। পৌরুষের দোর্দণ্ডপ্রতাপ ছিল মধ্যযুগ থেকে আধা উনিশ তক।  
সে এক দিন ছিল বাপ-ঠাকুরদার। ঘরে বৌ, রেজিস্টারে হিসেব রাখতে  
হতো; বাইরে বাঈ—সেখানেও হিসাবের বালাই নেই। তখন কি অত  
ধর্ষণধর্ষণ বলাৎকার ইত্যাদি ছিল? বরং ফতোয়াশাসিত সুদিনের কী রংবাহার  
ছিল! তারপর তো বাকি অর্ধেক জুড়ে ডানা কেটে ছেঁটে শিক্ষে টিকে দিয়ে  
ও নিয়ে আমরাই তাকে পায়ের তলা থেকে তুলে পাশে বসিয়ে সুন্দর  
করেছি। নইলে নবকুমার কেন কপালকুণ্ডলার সম্মতির জন্য অপেক্ষা  
করবে? একটু স্বামীগিরি ফলালেই পাগলাটে মেয়েটা কোলকাঁখে দশবিশটা  
বাচ্চা নিয়ে বরের ঘর করত। জলে ঝাঁপ মারত না। বিশের কোঠায় গিয়ে

'আসন একটু টেলোমলো হলো বলেই না 'যোগাযোগ'র মনুসুদন সম্মতির  
গার ধারেনি। তবেই না রক্তের যোগাযোগ সম্ভব হয়েছে। আমাদের  
পরমপুরণের পিশাবতার রবির ঐ গ্রেট মনুসুদন। পুরাণের মনুসুদন শত  
কোটি গোপিনীর সঙ্গে শত কোটি মূর্তিতে রাসদীলে করেছিলেন।  
অর্বাচীনকালের বিশেষ মনুও দীলা করলেন; আবার বংশরক্ষাও করলেন;  
তবে না আমাদের প্রায়শ্চাসন। আমাদের এই পরম আধ্যাতিক মনুসুদনরাই  
ঘরে ঘরে পরম আদরে শোভমান ও সংখ্যাগরিষ্ঠ। আমরা যা ছিলান,  
আমরা যা হৈলাম এবং আমরা যা হৈতে চাই সেটা জ্ঞান দিতে হয়  
মাকোমানে। তাই দিল্লীর রাম সিংহ ও সম্প্রদায়, মুম্বাই বা কামদুনির  
পুংপ্রবরদের মার্ভে আগমন। যা মারবার জনাই পুংদেণ্ডের সঙ্গে লৌহদণ্ড।  
প্রথমটি বিনোদনের ও পরেরটি শাস্তির প্রতীক। ওই যাকে বলে প্রতীকী  
আন্দোলন। জানেনই তো মেয়েছেলের বাড়বাড়ন্ত মোটেই ভালো কাজ  
নয়। একটু আধটু শিক্ষে দিতে হয়। এতে সমাজ যাতসহ হয়। আবার সেই  
ঘায়ে আমরাই তো দেশজোড়া মলম লাগাচ্ছি, না কি? নইলে  
দিল্লি-কলকাতা-মুম্বাইতে আমরা মোমবাতি মিছিল করলাম কেন? এতে  
এত গেল গেল রোয়াব তোলার কী আছে? রানকৃষ্ণ অনুতকপায় ভক্তির  
শিক্ষে দিতেন। আমরা এখন ভাষণে দিচ্ছি: তাতে কাজ না হলে য-কতকও  
দিচ্ছি। ভাবুন তো ঘরের বৌ-কিরাও আজকাল বারে যাচ্ছে, কেলাবে  
যাচ্ছে, মালফাল যাচ্ছে, ন্যাংটো হয়ে সাতার কাটছে কেলাবের সুইনিং  
পুলে! পুরুষমানুষের কাজ কি তাদের সাজে বলুন তো? তাই ঘরের  
মেয়েছেলেকে ঘরে ফেরাতে পুরুষমানুষ অমন মাঝে মাঝে একটু আধটু  
রেগে গেলে অত দোষ ধরতে নেই বাপু! ওগুলো বিচ্ছিন্ন ঘটনা! এমন  
তো কতই হয়। ধর্ষণ নিয়ে অত ধ্যাটামো করবেন না। দেখবেন সব ঠিক  
হয়ে যাবে। মিলে সুর মেরা তুমহারা!!!

পথের শেষ কোথায়?

এই সামাজিক মনস্তত্ত্বই একুশ শতকে দুর্বল হয়ে যাওয়া বাহবনী  
পৌরুষকে চাগিয়ে তুলতে উঠে পড়ে লেগেছে। পর্দায় আমাদের নায়কের  
সংজ্ঞা আমূল বদলে গিয়েছে। দাদার কীর্তির বোকাহা বা সরল পেলব  
বিশ্বাসী পেশিহীন পরহিত্তরত যুবাটি আর নায়কের মর্ঘদা পাচ্ছে না। আবার  
পর্দা থেকে সপাটে বেরিয়ে এসে তিনিই এখন সমাজসংস্কারে উঠে পড়ে  
লেগেছেন। সমাজশাসনে ছোরাপিস্তল রেপটেপ কোনো অস্ত্র প্রয়োগ  
করতেই তিনি পিছ-পা নন। এদিকে পর্দাতেও নব্য পরিবর্তনের রং লেগেছে।  
আসলে আমরাই এই রং লাগিয়েছি, লাগাচ্ছি। অনেকদিন ধরেই আমাদের  
এই আরাধ্য কাঁচা মূর্তির গায়ে এক ফেরত দুফেরত করে রং লাগানো  
চলছে। তাই জিভের আড় না ভেঙে কথা বলতে না পারলেও চলবে;  
কিন্তু নায়কের গতরে বাইসেপস্-ট্রাইসেপস্ চাই-ই চাই। পেশিসর্বস্ব  
নাচনকৌদনে দক্ষ ভিলেনক্যালানো সবজাঙ্গা জামাখোলা মুখোশহীন  
অরণ্যদেবটিই হয়ে উঠছে আমাদের এখনকার মহানায়কের রোলমডেল।

একদা ষাটের দশকে ফরাসি মেয়েরা একটু অন্যভাবে ডানা মেলতে  
চেয়েছিল। নিজের শরীরের উপর নিজেরই নিরঙ্কুশ আধিপত্য রক্ষা ও  
আস্বাদন করতে সমুদ্রবেলাভূমিতে তাঁরা নির্বসন হয়ে 'সানবাথ' নিত।  
বাট-সন্তরের অভিনেত্রী ব্রিজিত বার্দো প্রথম 'টপলেস' হয়ে সূর্যস্নান করে  
এক নতুন নারী আন্দোলনের জন্ম দিয়েছিলেন। এরপর থেকেই ফরাসি  
সুন্দরীরা সি-বিচে আপাদমস্তক আবরণহীন হয়ে সানবাথ নিতে শুরু করেন।  
এবং এটি একটি ফেমেনেনের জন্ম দেয়। বার্দোর বক্তব্য ছিল স্পষ্ট—নগ্নতা  
ও যৌনতা এক বস্তু নয়। তাই একে সমানুপাতিক করে দেখাও উচিত নয়।



যারা এভাবে ভাবেন, দেখেন, তারা পুরুষের আবিষ্কারেই আসলে  
তুলে ধরেন। সর্বোপরি নারী তাঁর নিজের নগ্নতার অমিষ্কারকে উপভোগ  
করতে চাইলে কেন সেটা দেখ হবে? দেখ যদি কোথাও ঘটে থাকে সেটি  
পুরুষের অনুদার চোখে। আঙকের হাইটেক জমানা উপরোক্ত  
নায়ক-মহানায়কদের অনুসারীদের দৌরাখে এই উপলেস সুন্দরীদের ছবি  
সোসালসাইটের বিশেষত ফেসবুকের মাধ্যমে ছড়িয়ে পড়ছে। দুর্ভাগ্য হতে  
পড়ছে এঁদের ব্যক্তিগত জীবন। বাড়ছে 'গ্রাকমেডিং' পিকাসোর দেশে  
টপলেস সুন্দরীদের এখন সূর্যস্নান উঠে যাওয়ার মুখে। প্যারিসের এক লেখক  
(আসলে লেখিকা) ভ্যালেরিয়া কোস্টা অত্যন্ত দুঃখের সঙ্গে জানিয়েছেন,  
ফেমিনিষ্ট মুভমেন্টের একটা ধারা হয়তো অচিরে শুকিয়ে যাবে।

এই একশ শতকেই, এবং এমনকি পশ্চিমের অতি আধুনিক দেশে  
যদি এই হাল হয়, তাহলে আমাদের দেশের অবস্থাটা কেমন দাঁড়াতে পারে?  
এ দেশের এমন অনেক উপজাতি সম্প্রদায়ের মহিলা আছেন যারা নগ্নবন্ধেই  
খেতখামারে কাজ করেন। নাগাল্যান্ডের একটি উপজাতি সম্প্রদায়ের  
মেয়েরা গরমকালে লুঙ্গির মতো পোষাক পরে ঘরেবাইরে কাজ করেন।  
কেন তারা বন্ধাবরণী করেন না—একটি সমীক্ষকদের এহেন প্রশ্নের উত্তরে  
এক নাগাসুন্দরী উত্তর দিয়েছিলেন, গরম লাগে। তাই তিনি তা করেন না।  
এই সহজ জীবন ও উত্তরের প্রতিক্রিয়ায় তথাকথিত সভ্যরা কী ভাবলেন,  
তা নিয়ে এঁদের কোনো মাথা ব্যথাই নেই। সভ্যতা কাকে বলে, বিবর্তনের  
সঙ্গে এর যোগসূত্র কোথায় তা না জেনেই তথাকথিত সভ্য রাষ্ট্র বা ব্যক্তি  
আন্দামানের জাওয়াদের সভ্য করতে গিয়ে নিজেদের অসভ্যতাকেই একবার  
জগৎসভায় তুলে ধরেছিলেন। আসলে প্রশ্নটা ঘুরে ফিরে আসছে দেখার  
চোখের তথাকথিত পৌরুষ নিয়েই। ব্রিজিত বার্দোকে গুলি মার্কন, আমাদের  
দেশের পুরুষের চোখে লালসা ছাড়া অন্য কিছু আছে কি? ছুড়ি-বুড়ি  
কারওর রেহাই নেই চোখের ধর্ষণ থেকে। এ ব্যাপারে দেশবিদেশে কোনো  
ভেদ দেখি না। আসলে আমরাও এখন বেশ গ্লোবাল হয়ে উঠছি কিনা!  
বিশ্বজুড়ে যে পেশিনির্ভর পৌরুষের নির্মাণযন্ত্র চলছে, ভারতীয়  
উপমহাদেশেও আমরা তার শরিক। আমরা শিখে নিয়েছি, বিশ্বসাথে জুড়ে  
থাকতে হয়, নইলে পিছিয়ে পড়তে হয়।

এই সোসাল সাইকিরই প্রতিষেধক হিসেবেই গড়ে উঠেছে নারীবাদ।  
এ আর এক ভ্রান্তির চোরাবালির চর। একদা চোরা পুরুষবিদ্বেষেই এইসব  
সংগঠনগুলির হৃদয়স্থ চালিত ও নিয়ন্ত্রিত হতো। এখন আর সেটি সংগোপন  
নয়, বরং এগুলি আরও প্রকাশ্যে সোচ্চার। অক্রমণই আত্মরক্ষার সেরা  
শব্দ—এই মানসেই নারীবাদী সংগঠনগুলি গায়ে গতরে পুষ্ট হচ্ছে। এ  
কালের পিতৃতন্ত্র ও কখনও চায় না নারীবাদের অবসান হোক। কেননা তারও  
বৈশিষ্ট্য থাকার অব্যয় বাহানা এগুলি। নারীপুরুষ সবদিক থেকে যতই  
কাছাকাছি আসবে, সমানাধিকারে হাত ধরাধরি করে এগোবে পিতৃতন্ত্র  
ততই প্রমাদ ওণবে। তাই অপরাঙ্ক মদতে নারীকেন্দ্রিক সংগঠনগুলি  
বাহবা পাচ্ছে। আমাদের যাপনের প্রতিটি পরতে, শিল্পে-কলায়-সাহিত্যে,  
খানা-পিনা-সোনা-য় এবং নানা প্রকরণে নারী ও পুরুষ, মেয়েছেলে ও  
ব্যাটাছেলের ভূবন ক্রমশ সুনির্দিষ্ট ও স্ফুর্ন হয়ে আসছে, ততই তথাকথিত  
পৌরুষের দাঁতনখ ধারালো হয়ে উঠছে। জোরদার হয়ে উঠছে নানা ধরনের  
ও নানা ভাবনার নারীবাদী সংগঠনগুলি। এভাবে নারী ও পুরুষ ক্রমাগত  
দূরে সরে যাচ্ছে। হাইফেনের মধ্যে এখন সাইরেন বাজছে। ক্রমশ তারা  
হয়ে উঠছেন প্রতিপক্ষ। এই বিভাজন কতটুকু কামা বা সুন্দর? সুন্দরের

কথা ছেড়ে দিন, প্রশ্ন উঠবে মানবসভ্যতার বিবর্তনের আন্তরিক নিয়মের  
ফল হিসেবেই কি এই বৈষম্যের বাড়বাড়ন্ত? এইভাবে চলতে থাকলে তো  
নারী পুরুষ একদিন সম্মুখসম্মুখে এসে পৌঁছবে। শেষ বিধিগুণটা কি তবে  
নারী পুরুষ একদিন সম্মুখসম্মুখে এসে পৌঁছবে। শেষ বিধিগুণটা কি তবে  
নারী পুরুষ একদিন সম্মুখসম্মুখে এসে পৌঁছবে। শেষ বিধিগুণটা কি তবে  
নারী পুরুষ একদিন সম্মুখসম্মুখে এসে পৌঁছবে। শেষ বিধিগুণটা কি তবে  
নারী পুরুষ একদিন সম্মুখসম্মুখে এসে পৌঁছবে। শেষ বিধিগুণটা কি তবে  
নারী পুরুষ একদিন সম্মুখসম্মুখে এসে পৌঁছবে। শেষ বিধিগুণটা কি তবে  
নারী পুরুষ একদিন সম্মুখসম্মুখে এসে পৌঁছবে। শেষ বিধিগুণটা কি তবে  
নারী পুরুষ একদিন সম্মুখসম্মুখে এসে পৌঁছবে। শেষ বিধিগুণটা কি তবে

এ কথা মানতেই হবে যে, নারী ও পুরুষের শরীরগত পার্থক্য  
অনেকখানি। দেহের তফাৎ মনেও তো সঞ্চারিত হয়। প্রাকৃতিক কারণেই  
নারীকে গর্ভধারণ করতে হয়। অনেকটা সময় ধরে সন্তানপালন করতে  
হয়। সেই দীর্ঘ সময় তাকে শারীরিকভাবে দুর্বল থাকতে হয় বা অসহায়তাস্থি  
মেনে নিতে হয়। মাসের চার-পাঁচটা দিন প্রকৃতির হেনস্থা ও অস্বস্তি সহ্য  
করতে হয়, তা যতই আধুনিক ব্যবস্থা থাকুক না কেন। ব্যাটাছেলের এইসব  
হ্যাঁপা নেই। বাইসেপস-ট্রাইসেপস ফুলিয়ে সে দিব্য গায়ে হাওয়া লাগিয়ে  
ঘুরে বেড়াতে পারে। ছেলেকদের এই শারীরিক অ্যাডভান্টেজ তাদের মানসগঠনে  
যেমন সহায়ক, তেমনি মেয়েদের এই দেহজ অসহায়তাগুলিও তাদের মনের  
প্রকৃতি গঠনে সক্রিয় ভূমিকা পালন করে। সত্যি করে? এর উত্তর খোঁজার  
আগে একটি অভিজ্ঞতার কথা বলি। দীর্ঘ বাসযাত্রায় চলছি। আমার পাশের  
সিটে এক সুবেশা যুবতী কোলে চার-পাঁচ মাসের বাচ্চা নিয়ে বসে রয়েছে।  
মেয়েটিকে দেখে মধ্যবিশ্ব শিক্ষিত পরিবারের বলেই মনে হলো। এক-দেড়  
ঘন্টা চলার পর বাচ্চাটি তারদ্বরে কান্না জুড়ে দিল। বোধহয় খিদে পাওয়ায়  
বাচ্চাটি কাঁদছে। যুবতী মায়ের উসখুসুনি দেখে তাই মনে হলো। এক বাস  
পুরুষ যাত্রী। পাশে আবার এক পুংযাত্রী। আশেপাশে মহিলা যাত্রী প্রায় নেই  
বললেই চলে। বাচ্চাটির কান্না চড়ছে। বুঝতে পারছি মেয়েটির অস্বস্তি বাড়ছে।  
মেয়েটি অনুভব করছে তার দুই পরতের বন্ধাবরণী ক্রমে ভিজে যাচ্ছে  
অমৃতধারায়। বধিত শিশুটির জন্য তার বুক ফেটে যাচ্ছে। তবু সে এক বাস  
লোকের সামনে শিশুটিকে স্তন্যপান করাতে পারছে না। তার শিক্ষা রুচি  
স্বাভাবিক নারীসুলভ লজ্জা তার ইচ্ছার বিরুদ্ধে চলে যাচ্ছে। মেয়েটি দেহাতি  
বা উপজাতি সম্প্রদায়ের হলে হয়তো এ সমস্যা হতো না। বাচ্চাটির কান্না  
ক্রমশ বাড়ছে। বাসের লোকগুলি নিঃশব্দে বিরক্তি প্রকাশ করছে। শেষপর্যন্ত  
মেয়েটি চোখ বুজে বাসের মিনসেঙলোকে খোঁজাই কেয়ার করে অপটু হাতে  
করুণ শব্দের মতো দুধে আর্দ্র স্তন বের করে বাচ্চার মুখে পুরে দিল। মুহূর্তে  
সে যুবতী নারী থেকে মা হয়ে গেল। আর বাসভর্তি পুরুষকুলের কেউ কেউ  
মানবসমাজের সবচেয়ে পবিত্র দৃশ্যটি লক্ষ্যকে চোখে গিলতে লাগল, কেউ  
বা চোরা চাহনিতো। এও তো দর্শনের মাধ্যমে ধর্ষণের উৎসবে মেতে ওঠা।  
একদিকে একটি নারী শারীরিক কারণেই পরম স্নেহময়ী মা হয়ে উঠছে। আর  
অন্যদিকে পুরুষ হয়ে উঠছে ধর্ষকামী। নারী ও পুরুষের এই মানসগঠনের  
পার্থক্য কি কেবল শারীরিক কারণেই গড়ে উঠল? নাকি এর আরও গহনতর  
কোনো প্রাকৃতিক ইশারা রয়েছে?

নারী ও পুরুষের লিঙ্গগত ও শারীরিক পার্থক্যের বৈজ্ঞানিক দিক ও  
সামাজিক বিশেষত্ব অত্যন্ত গুরুত্বপূর্ণ। কারণ, এই পার্থক্যের উপর নির্ভর

করেই নারী ও পুরুষের আচরণগত ভিন্নতাগুলি গড়ে ওঠে। বৈজ্ঞানিকরা ঠিক এইখানে এসে একটু হতভম্বও হয়ে পড়েছেন। লিঙ্গ ও শরীরে তফাৎ থাকলেও মস্তিষ্ক তো একই। নাকি সেখানেও রয়েছে বিপরীত লিঙ্গের স্বেদা? এই নব জিজ্ঞাসা থেকেই এবুশ শতকের বৈজ্ঞানিক নারী ও পুরুষের মস্তিষ্কের নিউরাল ম্যাপ আঁকতে সচেষ্ট হয়েছেন। 'তুলনা করে দেখতে চেয়েছেন জীবনানন্দের কবিতার মতো (ভালোবেসে দেখিয়াছি মেয়েমানুষের/ঘৃণা করে দেখিয়াছি মেয়েমানুষের) পুরুষ কেন একই সত্ত্বা মেয়েদের প্রতি কখনও বা অতি দ্রবীভূত ও কখনও নির্দয়। আর মেয়েরাই বা কেন অতিরিক্ত নারীসুলভ বা মেয়েলি। মাসব্যয়ক আগে আমেরিকার প্রসিদ্ধিগে অবন্যশাল আকাদেমি অব সায়েন্স-এর জার্নালে এই বিষয়টি নিয়ে অত্যন্ত চমকপ্রদ একটি গবেষণাপত্র প্রকাশিত হয়েছে। ইউনিভার্সিটি অব পেনসিলভেনিয়া-র সেকশন অব বায়োমেডিক্যাল ইমেজ অ্যানালিসিস, ডিপার্টমেন্ট অব নিউরো-সাইকিয়াট্রি, ও পেরেলম্যানস্কুল অব মেডিসিনের গবেষকগণ মিলিতভাবে এই গবেষণাটি সম্পন্ন করেছেন। তাঁরা আশা প্রকাশ করেছেন যে, এই গবেষণা নারীপুরুষের আচরণগত পার্থক্যের কারণ বৃদ্ধিতে সাহায্য করবে এবং মানুষের দীর্ঘদিনের পালিত এই কৌতূহলের অবসান ঘটাবে কেন নারী ও পুরুষের মনের বিভাজন ও দূরত্ব এতখানি।

উপরোক্ত ইউনিভার্সিটির গবেষকদলের সহকারী অধ্যাপক দিল্লী আই আই টি-র প্রাক্তনী রাগিনী ভার্মা\* ও তাঁর সহকর্মী গবেষক অধ্যাপকরা একটি সমীক্ষামূলক নিউরো-সাইকিয়াট্রি গবেষণা করেন। এর জন্য তাঁরা বেছে নেন ৮ থেকে ২২ বছর বয়সী ৯৪৯ জন মানুষ। এর মধ্যে নারীর সংখ্যা ৫২১ জন এবং পুরুষের সংখ্যা ৪২৮ জন। ডিফিউশন টেনসর ইমেজিং (DTI) নামক একটি বৈজ্ঞানিক পদ্ধতির সাহায্যে তাঁরা এঁদের মস্তিষ্কের সংযোগের (Connectivity) চরিত্র পর্যবেক্ষণ করেন। DTI এমন একটি পদ্ধতি যা প্রয়োগ করে মস্তিষ্কের সংযোগের কার্যকারণ ও নানাবিধ আচরণের ধরনধারণ পর্যবেক্ষণ করা সম্ভব। এটি আসলে ডিফিউশন এম আর আই। মস্তিষ্কের বিভিন্ন অংশের মাঝে যে সংযোগগুলি থাকে ডিফিউশন ম্যাগনেটিক রেজোন্যান্সের সাহায্যে তার ম্যাপিং করা হয়। এক কথায় প্রায় নির্ভুলভাবে মস্তিষ্কের ছবি তোলা যায়। এবং এই পদ্ধতি প্রয়োগ করে দেখা গিয়েছে যে, মস্তিষ্কের মধ্যে একটি Connectome অর্থাৎ ইলেকট্রিক ওয়ারিংয়ের মতো নেটওয়ার্কের গঠন রয়েছে। গবেষকরা দেখেছেন, মেয়েদের মস্তিষ্কের সুপ্রাটেনটোরিয়াল অংশে স্নায়বিক সংযোগের সংখ্যা ছেলেদের তুলনায় অনেকটাই বেশি। এখানেই থাকে ডান ও বাম গোলার্ধের মধ্যবর্তী মস্তিষ্কের সবচেয়ে বড়ো অংশ সেরেব্রাম। অর্থাৎ মেয়েদের সেরেব্রামে দুই গোলার্ধের সংযোগ বেশি ভালো। সংযোগ যত বেশি হবে স্নায়ুর সক্রিয়তা তত বাড়বে।

কিন্তু পুরুষদের মস্তিষ্কের ক্ষেত্রে দেখা গিয়েছে, তাদের এক একটি গোলার্ধের নিজস্ব স্নায়বিক সংযোগ বেশি ভালো। বিষয়টি বুঝবার সুবিধার জন্য সেরেব্রামের এক একটি গোলার্ধের সঙ্গে এক একটি শহরের তুলনা করলে দেখা যাবে আমাদের সেরেব্রামে রয়েছে দুটি শহর। মেয়েদের সেরেব্রামে এক শহর থেকে আর এক শহরে যাতায়াত অনেক সহজ। আর সহজ বলেই তা বেশি করে ঘটেছে। অপরদিকে পুরুষের ক্ষেত্রে একই শহরের মধ্যে যাওয়া-আসা অনেক বেশি এবং সহজ। কিন্তু দুটি শহরের মধ্যে যাতায়াত মেয়েদের তুলনায় কম। মস্তিষ্কের সেরেবেলাম অংশে আবার উল্টো ঘটনাই ঘটে চলেছে। ছেলেদের সেরেবেলামে দুই

গোলার্ধের মধ্যবর্তী স্নায়ুর সংযোগ বেশ ভালো। অর্থাৎ এখানে আবার এক শহর থেকে আর এক শহরে যাওয়া-আসা করা যায় অতি সহজে। কিন্তু মেয়েদের সেরেবেলামে প্রতিটি গোলার্ধের নিজস্ব স্নায়ুসংযোগ অতিরিক্ত ভালো। অর্থাৎ এখানে একই শহরে যোগাযোগ ব্যবস্থা অতি উত্তম। এই পরীক্ষায় এটাই প্রমাণিত হয় যে, নারী ও পুরুষের মস্তিষ্কের গঠনে ও ব্যবস্থাপনায় বেশ খানিকটা ভেদ রয়েছে। স্ট্রাকচারাল Connectome-ই মানবমস্তিষ্কের এই লিঙ্গগত প্রভেদ সৃষ্টি করেছে এবং তাঁদের আচরণগতের ভূমিকা আলাদা করে দিচ্ছে। এর ফলে 'পুরুষের' 'মস্তিষ্ক' হয়ে 'উঠছে' ইনট্রাহেমিসফেরিক, আর মেয়েদের ইন্টারহেমিসফেরিক। ব্যাস যত বাড়ছে ততই পার্থক্য প্রকট হচ্ছে। বয়ঃ সন্ধিক্ষণে ও যুবাবস্থায় পার্থক্য আরও চওড়া হচ্ছে। ফলে পুরুষের মস্তিষ্কের সেরেবেলামের সঙ্গে যখন অগ্রমস্তিষ্কের সংযোগ ভালো থাকে তখন দেখা যায় এঁরা একটি কাজের বিভিন্ন অংশের মধ্যে সনদ্বয় ঘটাতে পারছেন তথা সে কাজে পারদর্শী হয়ে উঠছেন সহজেই। নারীদের ক্ষেত্রে আবার দেখা যাচ্ছে দুই গোলার্ধের মধ্যে বেশি সংযোগ ঘটায় ফলে তাঁরা কোনো ঘটনার তথ্য বিশ্লেষণে ও তাকে প্রক্রিয়াজাত করার ব্যাপারে পুরুষদের থেকে এগিয়ে থাকছেন।

এই নিউরো-সাইকিয়াট্রিক সমীক্ষার তথ্য থেকে একটা বিষয় পরিষ্কার হয়ে যাচ্ছে যে, ছেলেদের মস্তিষ্ক এমনভাবে গঠিত যে, তাদের অনুভূতি ও প্রতিক্রিয়ার মধ্যে সমন্বয় বেশ জোরদার। উল্টোদিকে মেয়েদের মস্তিষ্ক বিশ্লেষণধর্মী; অনুভূতির সঙ্গে তার সংযোগ সুদৃঢ়। "পরীক্ষার ম্যাপগুলো থেকে আমরা দেখি পুরুষ ও নারীর মস্তিষ্কের গঠনের মধ্যে রয়েছে পার্থক্য এবং একইসঙ্গে তারা একে অপরের পরিপূরক। এর থেকে বোঝা যেতে পারে কেন পুরুষেরা কিছু কাজে পারদর্শী এবং নারীরা অন্য কাজগুলোতে পারদর্শী"। বলেছেন একদা গণিতের স্নাতকোত্তর বর্তমানে বায়োমেডিক্যাল ইমেজ অ্যানালাইজার রাগিনী ভার্মা। উদাহরণ দিয়ে তিনি বলেছেন, "পুরুষেরা একটি নির্দিষ্ট কাজ শিখতে বা করতে পারে ভালোভাবে; যেমন সাইকেল চালানো বা দিক নির্দেশ করা। আবার নারীদের রয়েছে প্রখর স্মৃতিশক্তি এবং বোধশক্তি; যার ফলে তাঁরা একসঙ্গে অনেকগুলো কাজ সম্পন্ন করতে পারে; এবং বয়ঃ মানুষের কাজে লাগবে এমন পরিকল্পনা করতে পারে। নারী ও পুরুষের এমন আলাদা আলাদা ক্ষমতা থাকার কারণ কী? রাগিনীদের উত্তরঃ সম্ভবত নারী ও পুরুষ যাতে বিভিন্ন (অনুকূল বা প্রতিকূল যাইহোক না কেন) পরিস্থিতিতে একে অপরকে সাহায্য করতে পারে সে কারণেই প্রকৃতি এমনভাবেই সাজিয়েছে তাঁদের মস্তিষ্ক, একে অপরের প্রতিযোগী বা প্রতিদ্বন্দ্বী বানিয়ে নয়, বরং পরিপূরক হিসেবে। গবেষকদলটি দাবী করেছে, লিঙ্গভেদে মানবমস্তিষ্কের এই বিভিন্নতার আবিষ্কারটি অত্যন্ত চমকপ্রদ; তাঁদের ভাষায় 'ইউনিক'।

নিউরো-সাইকো এই পরীক্ষাটি ও তার সিদ্ধান্তটি ভবিষ্যতে সামাজিক ক্ষেত্রে অত্যন্ত গুরুত্বপূর্ণ হয়ে উঠবে এতে কোনো সন্দেহ নেই। এই 'ইউনিক' আবিষ্কারটি উত্তর আধুনিক মানুষকে নারীপুরুষের জীবনযাপনের প্রচলিত শৈলী নিয়ে গভীরভাবে ভাবতে বাধ্য করবে। যদিও অতি সাম্প্রতিককালের এই বৈজ্ঞানিক সিদ্ধান্তটিকে চূড়ান্ত ধরে নেবার কোনো কারণ নেই। তবুও একটি বিষয় স্বচ্ছ হয়ে উঠেছে যে, যদি আমরা যৌনবিনোদনের ক্ষেত্রটি ছাড়া সর্বত্র লিঙ্গনিরপেক্ষ থাকতে না পারি তবে আমরা মানুষ নই; অন্তত সভ্য মানুষ নই। নারীবাদ, ফেমিনিজম, মহিলামুক্তি সংঘ, একলা বাঁচো

আসোসিয়েশন, লেসবিয়ানের উদার আকাশ, হোমোর দায়হীন ধরাতল, নিগূহীত পুরুষ সংঘ, মেনিমুখে মিনসে সমিতি—এসব রোগের বিহিত নয়। ভয়কের ভূমিকা অনাখানে। সেই ভূমিকাটাই আমাদের বুঝে নিতে হবে। এইসব টোটকা কবিরাজি তাবিজ কবচ দিয়ে আর যাইহোক মানবসমাজের দুষ্ট ক্ষত ধর্মকে নিমূল করা যাবে না। উপরোক্ত গবেষণার সারাংশসারকে যদি আমরা সঠিক ও সমযোচিত বলে ধরে নিই, তাহলে দেখা যাচ্ছে নারীপুরুষের মস্তিষ্কের বিভিন্নতা গড়ে উঠেছে পরস্পর ঝগড়াঝাটি করবার জন্য নয়; বরং মিলেজুলে থাকবার জন্যই। বিবর্তনের স্বাভাবিক প্রক্রিয়ায় প্রাণিকুল যাতে কখনই অন্তর্ধাতী হয়ে বিলুপ্ত না হয়ে পড়ে সেই জন্যই কি এই প্রকৃতিপ্রদত্ত শুশ্রুষা? সেই বার্ভাই কি এই গবেষণার মাধ্যমে উঠে এসেছে? অর্থাৎ এখনও পর্যন্ত আমাদের মনে নিতে হচ্ছে যে, মানবসভ্যতাকে এগিয়ে নিয়ে যেতে হলে পরস্পরকে হাত ধরতেই হবে। সভ্যতাকে গুলি মারুন, যদি আমাদের নিতান্ত বেঁচে থাকতে হয় ক্রমশ বিপর্যস্ত এই ধরাধামে, তাহলেও বিসর্জন দিতে হবে পুরুষতন্ত্র ও নারীবাদ। দুটোই আসলে বিভেদের প্রাচীর। এই সৃষ্টি করা বৈষম্যের অ্যান্টিবায়োটিক তাহলে হয়ে উঠছে মিলে সুর মেরা তুমহারা। তাহলে এটাও আমাদের মনে রাখতে হচ্ছে যে, কোনো পুরুষ যদি মেয়েছেলে দেখলেই ছোঁক ছোঁক করেন, কিম্বা কামাতুর ঘোলাটে চোখে মেয়েদের দিকে তাকান, অথবা বাহুবলে ঝোপঝাড় পোড়োবাড়ি পরিত্যক্ত কারখানা ঘর নিদেনপক্ষে ফাঁকা বাস আশ্রয় করেন, নিকেশ করে দেন প্রকৃতি প্রদত্ত দোসরকে, তাহলে তিনি পুরুষও নন, মানুষও নন। সভ্য তো ননই। অন্যদিকে এটাও মনে নিতে হবে, কটুর নারীবাদী বা গোপনে বা প্রকাশ্যে পুরুষবিদ্বেষী, কিম্বা মৃদুভাবে হলেও পুংদ্রোহী যিনি, যিনি মনে করেন, পুরুষমাত্রই নষ্ট ভ্রষ্ট কামুক, যিনি সমগ্র পুরুষকুলের মুখে নুড়ো জ্বলে দিয়ে অন্তরাধার শান্তি চান, তিনিও একইরকম ভাবে নারী নন, মানুষ নন, সভ্যও নন। পিতৃতন্ত্র যেমন আমাদের দূশমন, তেমনি ফেমিনিজমও আমাদের অগ্রগতির অন্তরায়। অন্তত যদি আমরা প্রকৃতির নির্দেশ সোনা মুখ করে মনে নিই। নইলে পথহারা হওয়া ছাড়া আমাদের আর কোনো ভবিষ্যৎ থাকবে না।

সহায়ক গ্রন্থ নিবন্ধ ও তথ্যসূত্র :

- ১। আমীর, মেনাচেম, প্যাটার্নস্ ইন ফোর্সেবল্ রেপ, শিকাগো, ইউনিভার্সিটি অব শিকাগো প্রেস, ১৯৭১। আমীরের বইয়ের তথ্যগুলি ফিলাদেলফিয়া পুলিশ ডিপার্টমেন্টের ১৯৫৮-১৯৬০ সালের নথিভুক্ত ধর্ষণের ঘটনাসমূহ থেকে গৃহিত।
- ২। বোডে, জ্যান্টে, ফাইটিং ব্যাক, হাউ টু কোপ উইথ দ্য মেডিক্যাল, ইমোশনাল অ্যাণ্ড লিগাল কনসিকোয়েন্স অব রেপ, নিউ ইয়র্ক, ম্যাকমিলন, ১৯৭৮। লেখক নিজে ধর্ষিত হয়েছেন। ফলে ধর্ষণের বীভৎস অভিজ্ঞতা তার রচনায় যেমন রয়েছে, তেমনি ধর্ষিত মেয়েরা কীভাবে যাপনশৈলী গড়ে তুলবেন তার গুরুত্বপূর্ণ দিকনির্দেশিকা রয়েছে এই গ্রন্থে।
- ৩। ব্রাউনমিলার, সুসান, আগেনস্ট আওয়ার উইল : মেন, উইমেন অ্যাণ্ড রেপ, নিউ ইয়র্ক, সামিন অ্যাণ্ড কাস্টার, ১৯৭৫। এই গ্রন্থে ধর্ষণ বিষয়ে সামগ্রিক ও সূষ্ঠ সমীক্ষা বিধৃত হয়েছে। বিরাট অংশ জুড়ে রয়েছে তথ্য সহ ধর্ষণের ইতিহাস।
- ৪। বার্জেস, অ্যান উলবার্ট অ্যাণ্ড লিগা লিটল হোলস্টেরম, রেপ : ভিক্তিম

- অব ক্রাইসিস, বাউ, মেরিলাণ্ড : রবার্ট জে. ব্র্যাডি, ১৯৭৪। এই বইতে ধর্ষিতের মানসিক বিপর্যয়কে কীভাবে ভেতর থেকে মেরামত করা যায় সে বিষয়ে আলোচনার পাশাপাশি ধর্ষকের উদ্দেশ্য ও তার সঙ্গে সমাজ ও প্রতিষ্ঠানের রসায়ন নিয়ে বিশ্লেষণ রয়েছে।
- ৫। চ্যাপেল, ডানকান, রবলে গিস, অ্যাণ্ড গিলবার্ট গিস (সং), ফোর্সেবল্ রেপ : দ্য ক্রাইম, দ্য ভিক্তিম অ্যাণ্ড দ্য অফেণ্ডার, নিউ ইয়র্ক, কলম্বিয়া ইউনিভার্সিটি প্রেস, ১৯৭৭। সম্পাদিত এই বইতে বিভিন্ন লেখকের রচনায় ধর্ষণের বহু দিক বিবিধ দৃষ্টিকোণ থেকে উন্মোচিত হয়েছে।
- ৬। কোনেল, নোরেন অ্যাণ্ড কাসান্দ্রা উইলসন (সং), নিউ ইয়র্ক র্যাডিক্যাল ফেমিনিস্ট, রেপ : দ্য ফার্স্ট সোর্সবুক ফর উইমেন, নিউ ইয়র্ক, নিউ আমেরিকান লাইব্রেরি, ১৯৭৪। নারীসচেতনতা ও ধর্ষণ বিষয়ে নিউ ইয়র্ক শহরে অনুষ্ঠিত সম্মেলনে প্রদত্ত ভাষণসমূহের (১৯৭১) সংকলন এই বইটি।
- ৭। গেজার, ন্যাসি অ্যাণ্ড ক্যাথেলিন শ্যার, সেক্সসুয়াল অ্যাসাল্ট : কন্ট্রোলিং রেপ ইন আমেরিকা, নিউ ইয়র্ক, গ্রোসার অ্যাণ্ড ডানলপ, ১৯৭৬। ধর্ষণের সমস্ত দিক সম্পর্কে সাধারণ ধারণার একটি ভালো বই।
- ৮। গ্যাগনন, জন এইচ. অ্যাণ্ড উইলিয়াম সাইমন, সেক্সসুয়াল এনকাউন্টারস্ বিটুইন অ্যাডাল্টস্ অ্যাণ্ড চিল্ড্রেন, ডিস্ট্রিবিউটেড বাই সেক্স ইনফরমেশন অ্যাণ্ড এডুকেশন কাউন্সিল অব দ্য ইউ. এস. (SIECUS), ১৮৫৫ ব্রডওয়ে, নিউ ইয়র্ক, ১৯৭০।
- ১০। গ্যাগনন, জন এইচ. অ্যাণ্ড উইলিয়াম সাইমন, দ্য সোসাল মিনিং অব প্রিজন হোমোসেক্সুয়ালিটি, ডিস্ট্রিবিউটেড বাই সেক্স ইনফরমেশন অ্যাণ্ড এডুকেশন কাউন্সিল অব দ্য ইউ. এস. (SIECUS), ১৮৫৫, ব্রডওয়ে, নিউ ইয়র্ক, ১৯৭০। এই নিবন্ধে দণ্ডপ্রাপ্ত মহিলা ও পুরুষদের যৌনাচরণের বিভিন্ন দিক আলোচিত।
- ১১। হিলবারম্যান, এলাইন, দ্য রেপ ভিক্তিম, নিউ ইয়র্ক, বেসিক বুকস্, ১৯৭৬। ধর্ষণ পরাধের উপর সামগ্রিক আলোকপাত করা হয়েছে এই গ্রন্থে। সেইসঙ্গে রয়েছে পাঁচটি প্রবন্ধ যেখানে ধর্ষিতদের সঙ্গে আলাপচারিতার উপর নির্ভর করে লেখা বিভিন্ন পরামর্শ ও সহায়তার নানান দিক।
- ১২। হোলমস্ট্রম, লিগা এল. অ্যাণ্ড উলবার্ট বার্জেস, দ্য ভিক্তিম অব রেপ : ইন্সটিটুশনাল রিঅ্যাকশনস্, নিউ ইয়র্ক, জন উইলি, ১৯৭৮। লেখকরা বস্টন সিটি হসপিটালে চিকিৎসারত ১৪৬ জন ধর্ষকের উপর সমীক্ষা করেছেন; কথা বলেছেন ধর্ষিতদের সঙ্গে। এবং ধর্ষণের অভিযোগের অব্যবহিত পরে পরেই সাক্ষাৎকার নিয়েছেন অভিযুক্তদের। এমনকি লেখকরা আদালতের সামগ্রিক গুনানিও অনুসরণ করেছেন।
- ১৩। হোরোস, ক্যারল ভি., রেপ, নিউ ক্যানন, সিটি, টবি পাবলিশিং কোম্পানি, ১৯৭৪। গবেষণাধর্মী এই বইটি রচিত হয়েছে ধর্ষক ও ধর্ষিতদের উপর গভীর পর্যবেক্ষণের ভিত্তিতে। সেইসঙ্গে আলোচিত হয়েছে যৌননিগ্রহের হাত থেকে আত্মরক্ষার বিবিধ উপায়। এমনকি বিবৃত হয়েছে একজন ধর্ষক পুলিশ ও আদালতের কাছে কী আশা করে সেই বিষয়টিও।
- ১৪। স্যানফোর্ড, লিগা সিরহার্ট অ্যাণ্ড অ্যান ফেটার, ইন ডিফেন্ড অব আওয়ারসেলভস্, রেপ প্রিভেনশন হ্যাণ্ডবুক ফর উইমেন, নিউ ইয়র্ক,

- ডাবলডে, ১৯৭৭। অসাধারণ এই বইটি ছাত্ররাও পড়তে পারেন। ছবি সহ আখরক্ষার কৌশলসমূহ এবং আত্মশক্তি বাড়ানোর উপদেশ এই বইটির প্রধান বিষয়।
- ১৫। স্টোরাক্সা, ফ্রেডেরিক, হাউটু সে নোটু এ রেপিস্ট অ্যাণ্ড সার্গাইভ, নিউইয়র্ক, রাগাম হাউস, ১৯৭৫। ধর্মের আক্রমণ থেকে নিজেকে রক্ষা করার বিষয়ে সুনির্দিষ্ট কতকগুলি উপায় বাংলােছেন। সবচেয়ে বড়ো কথা, প্রচলিত বা অধিক প্রচারিত কৌশলগুলির কথা না বলে লেখক ভিন্ন ধরনের আখরক্ষার কথা শুনিয়েছেন।
- ১৬। হুইলার, স্ট্যান্টন, সেক্স অফেনসেস : এ সোসিওলজিক্যাল ক্রিমিক, দ্য অ্যাণ্ড কনটেম্পোরারি প্রোবলেমস্, স্প্রিং, ১৯৬০। এই নিবন্ধটিতে বিভিন্ন ধরনের যৌন অপরাধের চরিত্র ও ইতিবৃত্ত বিধৃত।
- ১৭। ফোর্সেবল্ রেপ, ফাইনাল প্রোজেক্ট রিপোর্ট বাই দ্য ন্যাশনাল ইন্সটিটিউট অব ল এনফোর্সমেন্ট অ্যাণ্ড ক্রিমিনাল জাস্টিস, ইউনাইটেড স্টেট্ ডিপার্টমেন্ট অব জাস্টিস, মার্চ ১৯৭৮। এই রিপোর্ট রচিত হয়েছে ধর্মের প্রতিরোধে পুলিশ আইন ও আদালতের ক্রমাগত বেড়ে চলা প্রভাব নিয়ে। রিপোর্টের যাবতীয় তথ্য গৃহিত হয়েছে পুলিশ আইনজীবী ও ধর্মকর্মীদের কাছ থেকে।
- ১৮। উইলিয়াম এফ. ম্যাকিবিন, টোড কে. শ্যাকেলফোর্ড, অ্যারন টি. গোয়েটজ্ অ্যাণ্ড ভালেরি জি. স্টারট, হোয়াই ডু মেন রেপ? অ্যান ইভোল্যুশনারি সাইকোলজিক্যাল পারসপেক্টিভ্, গ্রেগরিডা অ্যাটলান্টিক ইউনিভার্সিটি, ২০১২।
- ১৯। গ্রিনফিল্ড, এল., সেক্স অফেনসেস্ অ্যাণ্ড অফেণ্ডারমস্, ওয়াশিংটন ডিসি, ব্যুরো অব জাস্টিস্ স্ট্যাটিস্টিকস্, ইউ এস, ডিপার্টমেন্ট অব জাস্টিস্, ১৯৯৭।
- ২০। হল, জি.সি.এন., শনড্রিক, ডি. ডি., অ্যাণ্ড হির্সচম্যান, আর., দ্য রোল অব সেক্সুয়াল অ্যারোসাল ইন সেক্সুয়ালি অ্যাগ্রেসিভ বিহ্যভিয়ার : এ মেটা অ্যানালিসিস, জার্নাল অব কনসালটিং অ্যাণ্ড ক্রিনিক্যাল সাইকোলজি, সং-৬১, ১৯৯৩। স্মুটস্, বি. বি., মেল অ্যাগ্রেসন আগেনস্ট উওমেন, হিউমেন নেচার, সং-৬, ১৯৯২।
- ২১। রাইস, এম. ই., দ্য কজেস অব রেপ, ওয়াশিংটন ডিসি, আমেরিকান অ্যাসোসিয়েশন প্রেস, ২০০৫।
- ২২। মেনার্ড স্মিথ, জে., পি. গওয়েটি (সং), ফেমিনিজম অ্যাণ্ড ইভোল্যুশনারি বায়োলজি, নিউইয়র্ক, চ্যাপম্যান অ্যাণ্ড হল, ১৯৯৭।
- ২৩। থনহিল, এন., অ্যাণ্ড থনহিল, আর., ইভোল্যুশনারি অ্যানালিসিস্ অব সাইকোলজিক্যাল পেইন অব রেপ ভিক্টিমস্, পার্ট-১ : এফেক্টস অব ভিক্টিমস্ এজ্ অ্যাণ্ড ম্যারিটাল স্ট্যাটাস, এথোলজি অ্যাণ্ড সোসিওলজি, সং-১১, ১৯৯০।
- ২৪। থনহিল, এন., অ্যাণ্ড থনহিল, আর., ইভোল্যুশনারি অ্যানালিসিস্ অব সাইকোলজিক্যাল পেইন অব রেপ ভিক্টিমস্, পার্ট-২ : এফেক্টস অব স্ট্রেনজার, ফ্রেন্ডস্ অ্যাণ্ড ফ্যামিলি মেম্বার অফেনডারস্, এথোলজি অ্যাণ্ড সোসিওলজি, সং-১১, ১৯৯০।
- ২৫। থনহিল, এন., অ্যাণ্ড থনহিল, আর., ইভোল্যুশনারি অ্যানালিসিস্ অব সাইকোলজিক্যাল পেইন অব রেপ ভিক্টিমস্, পার্ট-৩ : দ্য

- এফেক্টস অব ফোর্স অ্যাণ্ড ভায়োলেন্স, এগ্রেসিভ বিহ্যভিয়ার, সং-১৬, ১৯৯০।
- ২৬। থনহিল, এন., অ্যাণ্ড থনহিল, আর., দ্য ইভোল্যুশনারি সাইকোলজিক্যাল অব মেনস্ কোয়েরসিভ্ সেক্সুয়ালিটি, বিহ্যভিয়ারাল অ্যাণ্ড ব্রেইন সায়েন্স, সং- ১৫, ১৯৯২।
- ২৭। ক্রিস্টোফার, এফ. এম., ওয়েনস্, এল. এ., অ্যাণ্ড স্টেকার, এইচ. এল, এগ্রেগোরিং দ্য ডার্ক সাইড অব কোর্টশিপ : এ টেস্ট অব এ মডেল অব মেল প্রম্যারিটাল সেক্সুয়াল অ্যাগ্রেসিভনেস্, জার্নাল অব ম্যারেজ অ্যাণ্ড দ্য গ্যামিলি, সং-৫৫, ১৯৯৩।
- ২৮। বাস, ডি. এম., দ্য স্ট্যাটেজি অব হিউম্যান মেটিং, আমেরিকান সায়েন্টিস্ট, সং-৮২, ১৯৯৪।
- ২৯। রাসেল, ডি. ই. এইচ., রেপ ইন ম্যারেজ (সং), ইণ্ডিয়ানা পোলিস : ইণ্ডিয়ানা ইউনিভার্সিটি প্রেস, ১৯৯০।
- ৩০। স্যাণ্ডে, পি. আর., দ্য সোসিও-কালচারাল কনটেম্প্ট অব রেপ : এ ক্রস-কালচারাল স্টাডি, জার্নাল অব সোসাল ইস্যুজ, সং-৩৭, ১৯৮১।
- ৩১। শ্যাকেলফোর্ড, টি. কে., আর ইয়ং উওমেন দ্য স্পেশাল ট্যাগেটস্ অব রেপ-মার্জার?, অ্যাগ্রেসিভ বিহ্যভিয়ার, সং-২৮, ২০০২।
- ৩২। ডিন, কে. ই., অ্যাণ্ড মালামুথ, এন. এম., ক্যারাকটারিস্টিকস্ অব মেন হ অ্যাগ্রেস্ সেক্সুয়ালি অ্যাণ্ড মেন হ ইমাজিন অ্যাগ্রেসিং : রিস্ক অ্যাণ্ড মডারেটিং ভ্যারিয়েবলস্, জার্নাল অব পার্সোনালিটি অ্যাণ্ড সোসাল সাইকোলজি, সং-৭২, ১৯৯৭।
- ৩৩। বার্গেন, আর. কে., অ্যাণ্ড বুকোভেক, পি., মেন অ্যাণ্ড ইন্টিমেট পার্টনার রেপ : ক্যারাকটারিস্টিকস্ অব মেন হ সেক্সুয়ালি অ্যাবইউস দেয়ার পার্টনার, জার্নাল অব ইন্টারপার্সোনাল ভায়োলেন্স, সং-২১, ২০০৬।
- \*রাগিনী ভার্মা, অ্যাসিস্ট্যান্ট প্রফেসর, সেকশন অব বায়োমেডিক্যাল ইমেজ অ্যানালিসিস, ডিপার্টমেন্ট অব রেডিওলজি, ইউনিভার্সিটি অব পেনসিলভানিয়া, সুট নম্বর--৩৮০, ফিলাডেলফিয়া, পিএ-১৯১০৪, দূরভাষ-২১৫-৬৬২-৭৪৭১, ফ্যাক্স-২১৫-৬১৪-০২৬৬, ই-মেল--ragini.verma@uphs.upenn.edu। গবেষকদলের বাকি শিক্ষকরা হলেন, মধুরা ইন্দ্রহালিকর, সেকশন অব বায়োমেডিক্যাল ইমেজ অ্যানালিসিস, অ্যালেক্স স্মিথ, ঐ, ড্রিউ পার্কার, ঐ, থিওডোর ডি. স্যাটারহোয়াইট, ডিপার্টমেন্ট অব নিউরো-সাইকিয়াট্রি, মার্ক এ. এলিয়ট, সেন্টার ফর ম্যাগনেটিক রেজোন্যান্স অ্যাণ্ড অপটিক্যাল ইমেজিং, ডিপার্টমেন্ট অব রেডিওলজি, কোশা রুপারেল, ডিপার্টমেন্ট অব নিউরো-সাইকিয়াট্রি, পেরেলম্যান স্কুল অব মেডিসিন, হাকোন হাকোনারাসন, সেন্টার ফর অ্যাপ্রায়েড জেনোমিক্স, চিঞ্জরেন হসপিটাল অব ফিলাডেলফিয়া, রাকেল ই. গার, ডিপার্টমেন্ট অব নিউরো-সাইকিয়াট্রি, পেরেলম্যান স্কুল অব মেডিসিন, রুবেন সি. গার, ঐ। এঁদের গবেষণার শিরোনাম Sex differences in the structural connectome of the human brain. PNAS। প্রকাশিত হয় ২ ডিসেম্বর, ২০১৩, সংস্কার জার্নালে।

# অনুমান প্রমাণ অথবা অপ্রমাণ

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## ABSTRACT

ভারতীয় দর্শনে সকল গ্রন্থানের পরে সমধিক গুরুত্ব পেয়েছে অনুমান। অনুমান নিয়ে ভারতীয় দার্শনিকদের মধ্যে যে বিতর্ক রয়েছে তা যেমন রোচক, তেমনি অত্যন্ত জ্ঞানসমৃদ্ধ। আস্তিক্য ও নাস্তিক্যবাদী দর্শনের প্রবক্তারা অনুমানকে বিপ্রতীক দৃষ্টিকোণ থেকে বিচার করেছেন। এই নাতিদীর্ঘ সম্পর্কে আমরা অনুমান প্রমাণবিরোধী দুই শিবিরে বক্তব্য ও যুক্তিদারা স্পষ্ট করতে চেয়েছি।

**Keywords:** অনুমান, প্রমাণ, অদ্বয়ব্যাপ্তি সাধ্যের লক্ষণ, সক্রিয়া ব্যাঘাত

ভারতীয় দর্শনের প্রায় সবকটি গ্রন্থানেই প্রত্যক্ষের পরে অনুমানের স্থান স্বীকৃত হয়েছে। তবে লোকায়ত বা চার্বাকদর্শন ও শব্দাদ্বৈতবাদী পাণিনিদর্শন অনুমানকে প্রমাণ বলে স্বীকার করেন না। বহুবিধ যুক্তির সাহায্যে তাঁরা অনুমানের প্রামাণ্য খণ্ডন করেছেন। ভারতে অবাক লাগে, অন্য দুই নাস্তিক গ্রন্থানে (বৌদ্ধ ও জৈন) কিন্তু অনুমান স্বমহিমায় বিদ্যমান। তাই আস্তিক হলেই অনুমানবাদী হবেন, আর নাস্তিক হলেই অনুমানবিরোধী হবেন এমন একটি চরম কথা ভারতীয় দর্শন সম্বন্ধে অস্তত বলা যায় না। বর্তমান নিবন্ধে অনুমাণ প্রামাণ্যবিরোধী উক্ত দুই শিবিরের মত তুলে ধরা হয়েছে এবং প্রসঙ্গত নৈয়ায়িকরা কীভাবে তাঁদের যুক্তির সমালোচনা করেছেন তা-ও আলোচনা করা হয়েছে।

বিরোধীদের প্রথম যুক্তি, অনুমানবাদীদের দেওয়া অনুমান-লক্ষণটি নির্দোষ নয়। অনুমানের যে কোন লক্ষণই দু'রকম জ্ঞানের উপর নির্ভরশীল — হেতু-সাধ্যের ব্যাপ্তির জ্ঞান ও পক্ষধর্মতা জ্ঞান। কিন্তু অনুমেয় সাধ্যের স্বরূপ কি? 'পর্বতঃ বহিমান্ ধুমত্' — এই পরিচিত অনুমানের পরিপ্রেক্ষিতে সাধ্যের চাররকম অর্থ করা হয় — (ক) বহিরূপ ধর্ম, (খ) আশ্রয় পর্বত, (গ) পর্বত ও বহি, (ঘ) বহিরূপ ধর্মযুক্ত আশ্রয় বা ধর্মী পর্বত।

প্রথম অর্থটি নিলে ব্যাপ্তিগ্রহে কোন অসুবিধা হয় না, যেহেতু ধুম বহি দ্বারা ব্যাপ্ত; কিন্তু পক্ষধর্মতা দেখানো যায় না। বহিরূপ ধর্মকে সাধ্য বলা হলে হেতুকে পক্ষের ধর্মরূপে বর্ণনা করা সম্ভব নয়, যেহেতু ধুম বহির ধর্ম।

সাধ্যের দ্বিতীয় অর্থটি গ্রহণ করলে অদ্বয়ব্যাপ্তির গ্রহণ অসম্ভব হয়ে যায়। 'যেখানে পর্বত, সেখানে বহি' এরূপ ব্যাপ্তিগ্রহ হয় না।

তৃতীয় অর্থটি গ্রহণ করলে অদ্বয় বা পক্ষধর্মতা কোনটিই হয় না। পর্বত ও বহি দুটিই সাধ্য হলে দু'টির মধ্যে থেকে আশ্রয়রূপ একটিকে গ্রহণ করে (পর্বত) পক্ষ করা যায় না। তাই পক্ষধর্মতার অবকাশ থাকে না। আবার যেখানে ধুম, যেখানে পর্বত ও বহি — এমন অদ্বয়ব্যাপ্তিও অযৌক্তিক। প্রায় সব অনুমানবাদী দার্শনিক সাধ্যের চতুর্থ অর্থটি স্বীকার

করেছেন। সেটি হল ধর্মবিশিষ্ট ধর্মী। প্রকৃত অর্থে আমরা ধর্মবিশিষ্ট রূপে পর্বতেরই অনুমান করি। সাধ্যের এই লক্ষণে অনুমিতির ক্ষেত্রে বা সিদ্ধান্ত কখনে কোন সমস্যা হয় না। কিন্তু ব্যাপ্তি ও পক্ষধর্মতা প্রদর্শনে বিশেষ সমস্যা হয়। 'যেখানে ধুম আছে, সেখানে বহিবিশিষ্ট পর্বত আছে' এমন অদ্বয়ব্যাপ্তি কেউ-ই করেন না, এমনকি ধুমকে বহিবিশিষ্ট পর্বতের ধর্মরূপেও কেউ গ্রহণ করেন না।

সাধ্যের কোন লক্ষণই নির্দোষ নয় বলে অনুমানের প্রামাণ্যনিশ্চয় হয় না। বৌদ্ধ দার্শনিকগণ এই সমস্যার কথা চিন্তা করেই সম্ভবত প্রাথমিকভাবে ধর্মবিশিষ্ট ধর্মীকে সাধ্য বললেও ব্যাপ্তির ক্ষেত্রে সাধাশব্দ গৌণভাবে কেবল ধর্মকে বোঝাবে এবং পক্ষধর্মতার ক্ষেত্রে কেবল ধর্মীকে বোঝাবে — একথা পরিষ্কারভাবেই বলেছেন। ধর্মোত্তরপ্রদীপের রচয়িতা দুর্বক মিশ্রের উক্তি স্মরণ করা যায় —

সমুদায়স্য সাধ্যত্বাদ্ ধর্মায়াত্রৈ চ ধমিনি।

অমুখ্যেৎপ্যকদেশত্বাৎ সাধ্যত্বমুপচার্যতে।। (পৃ: ৯৭, ন্যায়বিন্দু, ধর্মোত্তরপ্রদীপ)

তাই চার্বাক ও শব্দাদ্বৈতীদের মতে, অনুমান লক্ষণে পক্ষ, সাধ্য প্রভৃতি সব শব্দই গৌণ অর্থে (উপচারপূর্বক) প্রযুক্ত হওয়ায় অনুমানের বাস্তবিক (উপচার ব্যতিরেকে) কোন লক্ষণই হয় না। উপচারিত বা আরোপিত অর্থ কখনই প্রমাণ বলে স্বীকৃতি দাবি করতে পারে না।

অনুমানবিরোধী দার্শনিকদের দ্বিতীয় যুক্তিটি সরাসরি ব্যাপ্তির ধারণার সঙ্গে যুক্ত। অনুমানবাদীর মতে অনুমানের ভিত্তি হল ব্যাপ্তিজ্ঞান। কিন্তু চার্বাকমতে ব্যাপ্তিজ্ঞান সম্ভবই নয়। তাঁরা প্রশ্ন রাখেন — ব্যাপ্তি কি সামান্যাকারে গৃহীত হয়, না বিশেষ বিশেষ ক্ষেত্রে বিশেষাকারে? যদি 'যেখানে ধুম সেখানে বহি' এভাবে সামান্যাকারে গৃহীত হয়, তবে পর্বত প্রভৃতি বিশেষ ক্ষেত্রেও গৃহীত হবে, যেহেতু বিশেষ সামান্যের বাইরে নয়। সেক্ষেত্রে ধুম থেকে আর বহি অনুমান করার প্রয়োজন নেই। যা প্রমাণিত, তা আবার অনুমানের দ্বারা প্রমাণ করার অর্থ হয় না। আবার যদি বিশেষাকারে গৃহীত হয়, তবে বিশেষ থেকে সামান্যাকারে ব্যাপ্তিগ্রহণ

ও অনুমান — দুটিই অসম্ভব হয়ে যায়। একটি বিশেষ ক্ষেত্রে (ধরা যাক মহানসে) বিশেষ ধুম ও বিশেষ বহির ব্যাপ্তি গৃহীত হলে, তার দ্বারা অন্য একটি ক্ষেত্রে (যেমন পর্বতে) পর্বতীয় ধুম ও পর্বতীয় বহির ব্যাপ্তি বা পর্বতীয় ধুম থেকে পর্বতীয় বহির অনুমান, কোনটিই সম্ভব হয় না। অতএব ব্যাপ্তিগ্রহই যেখানে অসম্ভব, সেখানে অনুমানের আলোচনা নিরর্থক।

বিরুদ্ধবাদী চার্বাক ও ভর্হরি তৃতীয় যুক্তি উত্থাপন করলেন যে, ব্যাপ্তিগ্রহ অথবা বা ব্যতিরেক কোন উপায়েই সম্ভব নয়। চার্বাক প্রত্যক্ষ ছাড়া অন্য কোন প্রমাণ স্বীকার করেন না। তাঁর মতে কোন ব্যক্তিই সম্ভব ধুম বা সমস্ত বহি প্রত্যক্ষ করতে পারে না; তাই এ দু'য়ের ব্যাপ্যব্যাপক সম্বন্ধের জ্ঞান কারো হতে পারে না। যদি ধরে নেওয়া যায় এমন কোন সম্বন্ধ আছে, তা হলেও, সেই সম্বন্ধের জ্ঞান যদি না হয়, তবে তা থাকা বা না থাকা সমান। যদি অনুমানবাদী মনে করেন কোন ব্যক্তি অলৌকিক ক্ষমতাবলে অতীন্দ্রিয় বস্তুকে প্রত্যক্ষ করতে পারে, তবে তার পক্ষে আর অনুমানের কি প্রয়োজন —

কিং বিদ্যচক্ষুষামেষামনুমানপ্রয়োজনম্। (পৃঃ ১০৭-১০৮, ন্যায়মঞ্জরী, প্রমাণখণ্ড)

অতএব স্বীকার করতেই হবে, আমাদের প্রত্যক্ষ সীমাবদ্ধ। যদিও বহুস্থানে আমরা ধুম ও বহির ব্যাপ্তি প্রত্যক্ষ করে থাকি, তবুও নিশ্চিতভাবে বলতে পারি না, 'এমন কোন ধুম নেই, যা বহিব্যাপ্ত নয়। আবার কোন ব্যক্তিকে প্রত্যক্ষ করে সামান্যের মাধ্যমে অপ্রত্যক্ষ অপর একটি ব্যক্তিকে অনুমান করা উচিত নয়। কারণ বৌদ্ধদের মত অনুমানবাদীও সামান্যকে পরমার্থসং মনে করেন না। তাই কিছু কিছু জ্ঞাত ও অজ্ঞাত — দুটি বিষয়ের মধ্যে দুরতিক্রম্য এক ব্যবধান থেকেই যায়।

বিপক্ষ দৃষ্টান্তের ভিত্তিতে সামান্যকার ব্যতিরেকব্যাপ্তির জ্ঞানও সম্বন্ধি দুঃসাধ্য। বহিবিশিষ্ট ধর্মীর চেয়ে বহিরহিত ধর্মীর সংখ্যা অনেক বেশি। সমস্ত বহিহীন স্থল প্রত্যক্ষ করা এককথায় অসম্ভব। তাই সামান্যকারে 'যেখানে যেখানে বহি নেই, সেখানে ধুম নেই', একথা বলা যায় না। তাছাড়াও ভর্হরি তাঁর বাক্যপদীয় গ্রন্থে দেখিয়েছেন বস্তুর স্বভাব স্থান-কাল-অবস্থাতে পরিবর্তিত হয়ে থাকে। তাঁর ভাষায় —

অবস্থাদেশকালানং ভেদাদ্ ভিন্নাসু শক্তিষু।

ভাবানামনুমানেন প্রসিদ্ধিরতিদূর্লভা।। (বাক্যপদীয় ১ম, ৩২নং কারিকা)

যেমন, পিঙ্গলী শুষ্ক শ্লেষ্মা প্রশমিত করলেও আর্দ্র অবস্থায় বাড়িয়ে তোলে। হিমালয় পর্বতে জল প্রচণ্ড ঠাণ্ডা হলেও ওই পর্বতে উষ্ণকুণ্ডের জল অত্যন্ত উষ্ণ হয়। সুতরাং একথা বলা চলে না যে, 'যা জল, তা শীতল' বা 'যা পিঙ্গলী, তা শ্লেষ্মা-প্রমশনকারী'। তাই 'যা ধূমবান্ তা বহিমান' একথাও নিশ্চিতভাবে বলা যায় না। এমন অবস্থা বা সময় হতে পারে যখন ধুম বহিকে ছেড়ে থাকবে। ভর্হরি একথাই বলতে চেয়েছেন, ব্যাপ্তিই যখন সম্ভব নয়, তখন ব্যাপ্তিনির্ভর অনুমানের যথার্থতা কীভাবে প্রমাণিত হবে! চার্বাকও বহু যুক্তি দিয়ে দেখিয়েছেন ব্যাপ্তি প্রত্যক্ষ করা যায় না; অনুমানের দ্বারা গৃহীত হয় বললে অনবস্থা দোষ হয়; শব্দজ্ঞানের দ্বারাও তা প্রমাণ করা যায় না — এভাবে শেষ পর্যন্ত দেখিয়েছেন প্রত্যক্ষ

ছাড়া আর কোন প্রমাণ নেই।

অনুমানবিরুদ্ধবাদীর চতুর্থ যুক্তি হল, প্রতিটি অনুমানকেই তুল্যবল প্রত্যনুমান দ্বারা খণ্ডন করা যায়। সম্ভবত বৌদ্ধসম্মত বিরুদ্ধাব্যভিচার বা ন্যায়সম্মত সংপ্রতিপক্ষের কথা মাথায় রেখেই তাঁরা এই যুক্তি দিয়েছেন। অনেক সময়ই দেখা যায়, কোন ব্যক্তি একটি বিষয়ে প্রমাণ করার জন্য যথায়োগ্য হেতু দ্বারা সেটি অপ্রমাণ করেছেন। তাই ভর্হরির মতে অন্ধ ব্যক্তি যোমন বন্ধুর পথে হাতড়ে হাতড়ে কোনক্রমে চলে, হেঁচট খায় ও পড়ে যায়, অনুমানের উপর নির্ভর করলেও যে কোন সময় পতনের আশঙ্কা থাকে।

চার্বাক মতে ধুম দেখার পর বহি আনতে যে প্রবৃত্তি, তা অনুমানমূলক নয়, সম্ভাবনামূলক। বহি থাকতে পারে, এই সম্ভাবনার বশেই কোন ব্যক্তি তা আনতে যায়। সম্ভাবনাই লোকদাতা নির্বাহ করে। "ধূমাদিজনানন্তরম্ অগ্ন্যাদিজ্ঞানে প্রবৃত্তি প্রত্যক্ষমূলতয়া (সম্ভাবনয়া) ভাস্ত্য বা যুজ্যতে" (পৃঃ ৭৬, চার্বাক দর্শন, পঞ্চানন শাস্ত্রী)। সম্ভাবনার দ্বারা যে প্রবৃত্তি হয় তা ভ্রমমূলক। কোথাও ফললাভ হয়, কোথাও হয় না। মণিধারণে যেমন, কারও শুভফল হতে পারে, নাও পারে, তেননি এই প্রবৃত্তির ফলও যাদৃচ্ছিক বা আকস্মিক। এজন্য অনুমানের যথার্থ জ্ঞান সম্ভব নয়।

এইসব বিরোধী যুক্তির উত্তর দিতে গিয়ে নৈয়ায়িকরা বলেছেন, সর্বত্রই মানুষের ব্যবহারে লোকযাত্রানির্বাহে অনুমানের প্রয়োজন। যে কোন মানুষ বয়স-জীবিকা ইত্যাদি নির্বিশেষে জানবযাত্রা নির্বাহ করতে গিয়ে প্রত্যক্ষের মত অনুমানের উপরেও সমানভাবে নির্ভর করে। ভর্হরির স্বীকার করতে বাধ্য হয়েছেন, অনুমাননির্ভরতা বিষয়ে বালক ও পণ্ডিতের মধ্যে কোন তফাত নেই। তাই জ্ঞানাত্মক অনুমানকে অস্বীকার করা যায় না।

বস্তুবাদী দার্শনিক বুঝেছিলেন, কেবল যুক্তির সাহায্যে অনুমান বা অনুমানের মূল সামান্যকার ব্যাপ্তিগ্রহকে সাধন করা প্রায় অসম্ভব। তাই ভাববাদের বিরুদ্ধে ভারতীয় বস্তুবাদের প্রখরতম অস্ত্রটিকে তাঁরা এক্ষেত্রেও প্রয়োগ করলেন। যার নাম স্বক্রিয়াব্যাঘাত। তাঁরা প্রশ্ন তুলেছেন, অনুমানবিরুদ্ধবাদীরা কি অনুমানকে অস্বীকার করেন, অথবা অনুমান লক্ষণটিকে। অনুমানকে অস্বীকার করলে 'স্বক্রিয়াব্যাঘাত' দোষ হয়। অর্থাৎ ভাববাদীরা যা বলেন, তার সঙ্গে তাঁদের আচরণ বা ক্রিয়ার যথেষ্ট ফারাক দেখা যায়। জগৎকে মিথ্যা বলেও ভাববাদী দার্শনিক 'মিথ্যা' ক্ষুধা নিবারণের জন্য 'মিথ্যা' অন্নগ্রহণ করেন। 'মিথ্যা' শিষ্যকে 'মিথ্যা' গ্রন্থের মাধ্যমে বিদ্যা বিতরণ করেন। এই ব্যাঘাত বা স্ববিরোধ থেকে নিষ্কৃতি পাবার একমাত্র উপায় জগৎসংসারের ব্যবহারিক সম্ভা, অধিকাংশ অদ্বৈতীকেই যার শরণ নিতে হয়েছে। শব্দাধ্বৈতীও অদ্বৈতবাদী, আর সাধারণভাবে অদ্বৈতীদেরও অনুমানের উপর বিশেষ আস্থা ছিল না।

সাংখ্যকারিকার ব্যাখ্যায় অনুমানের আলোচনার প্রারম্ভে তদ্বকৌমুদীকার বাচস্পতি মিশ্র এদিকে আমাদের দৃষ্টি আকর্ষণ করেছেন। তার মতে, অন্যের অজ্ঞতা সংশয় প্রভৃতি দূর করার জন্য দার্শনিকরা নিজ নিজ বস্তুব্য পরিবেশন করেন। কিন্তু অপরের অজ্ঞতা, সংশয় ও বিপর্যয় আমি জানব কিভাবে? সেক্ষেত্রে আমার নিজের অনুভূত অজ্ঞতাদির ভিত্তিতে অপরের অজ্ঞতাদির অনুমান করে থাকি। বিরোধীরাও একই উদ্দেশ্যে একইভাবে অন্যের অজ্ঞতাদি অনুমান করে

তা দূর করার জন্য নিজেদের গ্রন্থগুলি লিখেছেন বা লেখেন। এভাবে অনুমানকে অস্বীকার করতে গিয়েও তাঁরা অনুমানেরই আশ্রয় নেন। এটি স্বক্রিয়াব্যাঘাত ছাড়া আর কি হতে পারে?

অন্যভাবেও স্বক্রিয়াব্যাঘাত বিশ্লেষণ করা যায়। ন্যায়কুসুমাঞ্জলি থেছে উদয়নাচার্য অনুমানস্থাপন উপলক্ষ্যে বলেছেন — “ব্যাঘাতাবধিরাশঙ্কা তর্কঃ শঙ্কাবধির্মতঃ” (ন্যায়কুসুমাঞ্জলি ৩/৭)। পূর্বপক্ষ, ধুম যে বহিঃ দ্বারা ব্যাপ্ত, সে বিষয়ে সংশয় পোষণ করতে পারেন। যদি তর্কের আকারে বলা হয় — ধুম বহিঃ দ্বারা ব্যাপ্ত না হলে বহিঃ দ্বারা কার্য হত না, তার বিরুদ্ধে কেউ আবার সামান্যভাবে কার্য-কারণ-ভাব সম্বন্ধে সন্দেহ প্রকাশ করতে পারেন। সেক্ষেত্রে তর্কের মাধ্যমে স্বক্রিয়াব্যাঘাত দেখিয়ে অনুমানবিরোধীকে খামিয়ে দেওয়া যায় এভাবে — অনুমান বা কার্যকারণভাবে অবিশ্বাসী ব্যক্তি ক্ষুধার্ত হলে অন্নগ্রহণ করত না কিংবা রোগার্ত হলে ঔষধসেবন করত না। কিন্তু ঘটনা যে, যা কিছু ক্ষুধিবারণ, তা অন্নকার্য; যা কিছু তৃষণনিবারণ, তা জলকার্য এবং যা কিছু রোগনিবারণ, তা ঔষধকার্য। এইভাবে কার্যকারণভাব কিংবা অনুমানের সাহায্য নিয়ে অনুমানবিরোধীও প্রতিদিনের ব্যবহারে প্রবৃত্ত হন। এই কারণে উদয়ন বলতে চেয়েছেন, আশঙ্কার অবধি হল ব্যাঘাত বা স্বক্রিয়াব্যাঘাত; আশঙ্কা ততক্ষণই চলতে পারে, যতক্ষণ না স্বক্রিয়াব্যাঘাত দেখা দেয়।

সায়নমাধব সর্বদর্শন সংগ্রহে বৌদ্ধদর্শনের আলোচনা প্রসঙ্গে ভিন্ন প্রকার স্বক্রিয়াব্যাঘাত সূচিত করেছেন। অনুমানবিরোধী বলেন — ‘অনুমানমপ্রমাণম্’। কথা হচ্ছে, এই বক্তব্যের সমর্থনে তিনি কোন

হেতু বা সাধন উপস্থাপিত করেন কি না। যদি না করেন, তা হলে তার নিযুক্তি তা কথাবার্তা উদ্ভাসপ্রলাপের মতই অবজ্ঞার যোগ্য। আবার যদি তিনি কোন সাধন, যেমন ‘ব্যাপ্তিগ্রহাসম্ভবাৎ’ ইত্যাদিকে উপস্থাপিত করেন, তাহলে অনুমানের সাহায্য নিয়ে অনুমানের খণ্ডন করায় তাঁর অবস্থান অবশ্যই স্বক্রিয়াব্যাঘাত দোষে দুষ্ট।

গ্রন্থপঞ্জী :

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# ROLE OF COLLEGE AND UNIVERSITY LIBRARIANS IN THE NEW ENVIRONMENT

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## ABSTRACT

*Today is an era of information and a tremendous flow of information is emerging in all fields throughout the world. Library professionals specially the librarians of colleges and universities face complex challenges due to the rapid, exponential and revolutionary advances in IT and ICT and growth of literature. Libraries have to redesign their positions to meet evolving needs of the users. Librarians need to implement new practices and new modern technologies to manage change, improve performance and competencies to face future challenges of knowledge society. Librarians have to develop skills to cope up with the changing scenario. The ICT based information handling is a viable solution in the direction of library and information services .*

**Keywords:** Information, Users, Customized Services.

## 1. INTRODUCTION

LIS professionals of academic libraries have experienced a series of changes over the past few decades with the movement of information resources from physical forms to electronic forms. Automation in libraries first started in the 1960s. And libraries began to adopt software applications and machine readable cataloguing in the 1970s. In 1980s, networking technologies, optical discs, CD ROMs and communication technologies were introduced. The primary objective of these early technologies was to automate Acquisition, Cataloguing and the Circulation to bring efficiency effectiveness in library operations and services. During 1990s we experienced revolutionary changes in application of ICT in libraries such as the internet, WWW protocols, information retrieval standards, integrated library systems and on line databases. But in the modern age i.e. the 2000s are an era of digital libraries, virtual collections, paperless environments and instant remote access to unlimited resources. Consequently, the paradigm of the library profession has been changing from time to time. In the 21<sup>st</sup> century the more and more libraries are expected to transform themselves into digital libraries. In traditional library system library services were known as documentation services, then they are recognized as information services and in the digital era they are commonly known as electronic information services. In this context the ba-

sic library functions such as collection, organization, preservation and dissemination of information have undergone a sea change. The users demands as well as information seeking behaviour have been changed. So the feature of the college and university libraries has been changing from: Traditional =>Automated=>Digital.

This change can be shown in the following way :

<i>From</i>	<i>To</i>
Library has its own collection	Library without walls
In-sourcing of all activities	Out-sourcing of several activities
Local user	User from any place
User goes to library	Library comes to user
User wants prints resources	User wants print, non-print, on-line
Issue and return of books	User-oriented information services
Local reach of resources	Global reach of resources
Resources in one medium	Resources in multiple media
Service in good time	Service just in time i.e. instant service



### 1.1 *Traditional to Modern*

Concept of library has now been changed from Trinity to Quaternity. From the establishment of library it was being thought of as a Trinity of Documents (Books), Users and library Staff. Here the role of the staff was to communicate users with documents of the library. But in the 21<sup>st</sup> century the information has replaced books and ICT has become an integral part of the library

Traditional Concept: Library Staff=>Documents=>Users  
Modern Concept: Library Staff=>Technology=>Information s=>Users

## 2. CHANGING FOCUS:

In the new paradigm the whole focus of library activities have started changing immensely. Traditionally the focus of libraries has been on providing required information through reference service or lending of documents to the users who visit the library and ask for required information mainly with the help of the information resources available in the respective library or occasionally, by obtaining documents not available in the library from any other library on inter-library loan.

Today the libraries need to focus on the following to stay relevant and play their expected roles.

### 2.1 *New Focus on Customized Services:*

In the electronic era, the users will no longer have to depend solely on libraries for information as there will be alternate means of finding, accessing and delivering information. Therefore, if library and information services are to be relevant to the users, 'contact with customers must be the emphasis' i.e. client focus has to be the key. The library has to become more business like in its dealings with users – it has to think in terms of diversification and marketing strategies; devise ways in which it can best serve the users. The whole process of the library has to be reorganized to serve the changing needs and to offer more personalized and customized services.

### 2.2 *Market Orientation & Quality Services:*

To create demand and to draw the users back to the library, the libraries will have to adopt a new market orientation and introduce quality services and products to satisfy the constantly changing needs of the users.

### 2.3 *Measurement of Library's performances by means of Increased Accessibility through Networks:*

Accessibility to information rather than extensiveness of collection should become the key measures of a library's performance. Libraries must move from 'just-in-case' collection to 'just-in-time' services, from being 'storehouse

of information' to 'access points.' The network of libraries can ensure easily and timely access to relevant information to a much greater base of users. Hence the libraries have to resort to network approach.

### 2.4 *Information Filtering and Delivery through Intranet:*

The library must act as an information filter, selecting the most relevant resources from the universe of network resources and downloading these to local storage/access facilities. The downloaded resources should also be organized intellectually and made available to the users at different levels through intranet set up for the purpose, without imposing information overload on them.

## 3. NEW ROLES OF LIBRARY PROFESSIONALS:

To cope up with the change in environment librarians have to play the following roles:

This change in focus has necessitated not only adoption new tools and techniques but also bringing changes in the mode of providing services and designing of new services to meet the changing demands of the users. Thus the LIS professionals are now required to play roles which are quite different than the role that they have been playing earlier. In fact the new roles are additional roles, as they may required to continue to play some of the traditional roles. The traditional roles and the new roles of LIS professions are:

### 3.1 *Traditional Roles of the librarians*

- Collection Development by Performing routine library jobs like book acquisition, technical processing, organization, maintenance, circulation, preservation, conservation and archiving works .
- Circulation Work and Arranging for inter-library loan.
- Providing reference and documentation services.
- Providing photocopying service

### 3.2 *New Roles of the librarians in new environment*

- I. Developing digital information resource base i.e. Digital Information Resource Base Developer.
- II. Building and managing information systems and networks i.e. Information System and Network Manager.
- III. Providing consultancy and remote support to end users i.e. Consultant.
- IV. Value addition through analysis and interpretation of information i.e. Information Analyst.
- V. Planning, developing, delivering and marketing information products i.e. Product planner and marketer.
- VI. Training and helping the end users in information search for research i.e. Facilitator/ Trainer.

- VII. Managing the contents accessible through Intranet i.e. Intranet content manager.
- VIII. Archiving e-resources for future use i.e. Archive Manager.
- IX. Developing interactive website for the library and managing its contents i.e. Content Manager.
- X. Manage both implicit and explicit knowledge available in the library i.e. Knowledge manager.

#### 4 NEW COMPETENCIES REQUIRED:

It is evident that to play such multifarious roles a librarian of 21st century specially a librarian of an academic institution will have to develop new skills and competencies of both professional and personal so that these match with the requirements of the digital era. The skills and competencies required of the new era librarians are sited below.

##### 4.1 Professional Competencies

Professional competencies are those which are required to perform the professional duties/activities of Library Personnel efficiently and effectively. Such competencies and the related skills are:

<u>Competency</u>	<u>Necessary and desired skills</u>
Education :	Professional degree, continuing education.
Commitment to job :	Concern for user needs, knowledge about current development and culture.
Global thinking :	Understanding of the vision and mission of the institution, desire for maintaining intra-institutional and inter-institutional relationships.
Planning, job assignment and organizational performance	Involvement in setting goals, determining plans and courses of action, formulating evaluation: strategies, policies and procedures, assigning jobs and goals to subordinates, supervising and guiding library staff and evaluating their performance.
Decision making :	Ability to take sound decisions despite of resistance and minimize expenses for maximum results.
Technical Knowledge:	Up-to-date knowledge of cur-

Communication skills:	Ability to understand the user needs and transmitting information accurately to the user in time.
Performance	Ability and desire to continuously analyze and appraisal investigate the use, quality and effectiveness of current services provided by the library.

##### 4.2 Personal Competencies

Personal competencies are those which are required to be a successful professional. Such competencies and the related skills are:

<u>Competency</u>	<u>Necessary and desirable skills</u>
Values and ethics	Self-discipline, loyalty, readiness to accept responsibility, willingness to admit mistakes, selflessness, modesty, humility and preparedness to make sacrifices, if required.
Leadership	Ability to earn the trust and respect of others by inspiring and empowering teams of people to achieve objectives, and commanding respect without demanding it.
Self-motivation	Readiness to take responsibility for managing the development of one's own career within the organization and beyond, commitment to lifelong learning and periodic improvement of personal skills, aptitude to be current with professional literature and discussion groups and to take initiative and demonstrate innovation.
Creativity	Keenness to apply new and evolving ideas, methods, design and technology.
Interpersonal	Ability to build strong work relationships and skills establish partnerships at all levels.
Self-appraisal	Ability to assesses one's own strength and weaknesses and find means to improve oneself.

#### 5. CONCLUSION:

It is evident that most of the ( professional and personal) competencies required by the Library Professionals in the new environment, as mentioned above, will have

to be consciously developed by the librarians themselves as the reading habit of the user through e-Books is increasing. As per global research report, prepared by Bowker's Global e-Book Monitor, 2015 may in many ways be a defining year for e-Books as they will overtake printed books in units sold. The LIS schools in the country will have to gear up to take up the responsibility of providing adequate and quality training, through regular and continuing education programmes to the would-be and existing professionals in both theoretical and practical aspects of the subject, to enable them to develop all the necessary skills for doing job effective and efficiently. They should also redesign or restructure the curricula or their instructional programmes if necessary for the purpose. The concerned authorities should come forward to remove the shortcomings of such schools for the sake of the future of the library professionals on the one hand and for providing effective library and information services in the new environment on the other. And at the same cause the existing librarians who are working in different colleges and universities specially in West Bengal should be allowed by the respective authority to participate in different on going National, International seminars /conferences/ workshops etc.

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# NAKED-EYE DETECTION OF FLUORIDE ION BASED ON CHEMOSENSOR: TUNING SELECTIVITY IN PROTON TRANSFER

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## ABSTRACT

A new turn-on fluorescent and colorimetric sensor, oxidized bis(coumarin)methane (1) for fluoride in acetonitrile was designed and synthesized. The binding ability evaluated by UV-vis and fluorescence titration experiments reveals that 1 can selectively interact with fluoride. Upon addition of fluoride to receptor 1 in acetonitrile solution, the appearance of a new absorption band around 349 nm showed a color change from colorless to yellow, which can provide a way of 'naked eye' detection of fluorides. The spectral change of 1 is due to the anion induced deprotonation and hence an increase charge density in and rigidity of the receptor molecule. Furthermore, the binding mode with fluoride was investigated by  $^1\text{H}$  NMR titration experiments. Again, the deprotonation of oxidized bis(coumarin)methane 1 is responsible for the color change.

**Keywords:** Anion recognition, Fluorescent probe, Turn On, Coumarin, DFT.

## 1. Introduction

Anion complexation, and in particular anion recognition with neutral hydrogen-bond-donor receptors, has attracted much interest in recent years with a variety of receptors containing amide, urea and pyrrole shown to have high affinities and selectivities for anionic guests. [1-10]. Among the anions, the detection of fluoride ( $\text{F}^-$ ) is of particular interest as it plays an essential role in a broad range of biological, medical and chemical processes and its established role in dental care [11] and clinical treatment for osteoporosis [12-14], fluorination of water supplies [15], or even in chemical and nuclear warfare agents [16-17]. Being small and highly electronegative, fluoride has unique chemical properties and can form strong hydrogen bonds with hydrogen-bond donors. Therefore, the design of new types of  $\text{F}^-$  receptors has attracted much attention recently [18-22]. The common binding subunits for  $\text{F}^-$  receptors include amide [23], pyrrole [24], urea [25], thio-urea [26], azophenol [27], and imidazolium [28]. In these motifs,  $\text{O-H}\cdots\text{X}^-$ ,  $\text{N-H}\cdots\text{X}^-$ ,  $(\text{C-H})\cdots\text{X}^-$  and  $\text{C-H}\cdots\text{X}^-$  hydrogen bonding played very important roles for selective anion binding. The phenolic OH group is often introduced as a strong donor and color-reporting unit [29] and its color variation can be related to either

structural *via* deprotonation or conformational changes in the receptor structure when a complex is formed or to the formation of a charge transfer complex. Of particular interest in this regard are colorimetric fluoride sensors, color changes, as signaling an event detected by the naked eye, are widely used owing to the low cost or without resorting to any spectroscopic instrumentation.

On the other hand, in the biological context the  $\text{O-H}\cdots\text{anion}$  H-bonding interactions [30-32] are almost as crucial as the ubiquitous  $\text{N-H}\cdots\text{anion}$  interactions. Smith and co-workers used bis-amides and phenols moieties [33-34] to compare the anion binding ability, and they found catechol to be a stronger H-bond donor for  $\text{F}^-$  ion and subsequently were successful even in developing a colorimetric response of  $\text{F}^-$  ion with catechol, which occurred via a new mechanism [35]. Working on the same lines we have recently demonstrated that hydrogen bonding catechol [36] or phenol [37] unit containing receptors can function as effective colorimetric sensors for fluoride ( $\text{F}^-$ ) in either organic ( $\text{CH}_3\text{CN}$ ) or aqueous solutions.

In this article, we present, to the best of our knowledge, the first example of a fluoride chemosensor based on oxidised bis(coumarin)methane (1) possessing a phenolic OH group, which is able to bind fluoride via H-bond inter-

actions or / deprotonation with an electron withdrawing nitro group which acts as a chromogenic signalling unit. Hydroxycoumarin and its derivatives are an important type of new oxa-heterocycles [38], and it is present in a variety of naturally occurring medicinally active substances [39]. Therefore, there is a great interest in the synthesis of the biscoumarin compounds, occurring naturally or not. In our research, it was found that bis(coumarin)methane containing an oxidisable H atom, which was unstable and easy to spontaneously oxidize to the corresponding conjugated products. The choice of oxidized bis(coumarin)methane as the chromogenic-sensing molecule was mainly based on the fact that the conjugated biscoumarin skeleton could act not only as a color-reporting group but also as a binding affinity control group containing an acidic H-bond donor moiety. The strong hydrogen bonding to, or deprotonation/protonation of, the coumarin moiety might modulate the internal charge transfer (ICT) state of oxidized bis(coumarin)methane and give rise to large color changes.

## 2. Experimental section:

### 2.1. General procedure

#### Preparation of 3,3'-(3-nitrophenylmethylene)-bis-(4-hydroxycoumarin) (1):

The synthesis of **1** is shown in Scheme 1. The 3-nitrophenyl bis(coumarin)methane **2** was prepared in 88% yield by condensation of 4-hydroxycoumarin **3** with 3-nitrobenzaldehyde using 10 mol% of TBAB as catalyst in water for 1 hour under reflux [40]. This resulted in precipitation of the desired compound **2** which was collected and dried in air, as a light yellow solid. Compound **1** was formed by treating the precursor **2** with DDQ in CH<sub>3</sub>CN yielded about 67%. The product was characterised by various spectroscopic techniques.

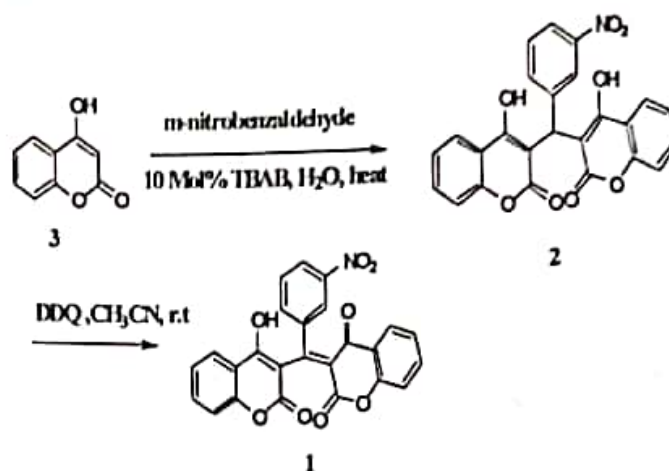
#### Compound 2:

0.55g, yield = 88%, Mp 242°C. <sup>1</sup>H-NMR (300 MHz, CD<sub>3</sub>CN): δ (ppm): 8.07 (d, 2H, J = 6.0 Hz), 7.92 (s, 1H), 7.87 (d, 4H, J = 5.8 Hz), 7.54 (m, 4H), 7.32 (t, 1H, J = 8.4 Hz), 6.41 (s, 1H); <sup>13</sup>C-NMR (75 MHz, CD<sub>3</sub>CN): δ (ppm): 173.3, 167.6, 156.2, 134.2, 130.9, 128.3, 126.6, 123.5, 121.6, 118.3, 114.9, 110.0, 104.0, 43.9; C<sub>25</sub>H<sub>14</sub>NO<sub>8</sub> (456.3846); Anal. Calcd. C 65.79, H 3.09, N 3.07, O 28.04; found C 65.88, H 3.00, N 2.98, O 29.00; LCMS (MH<sup>+</sup>+1): 457.3

#### Receptor 1:

0.30g, yield = 67%, Mp above 250°C. FTIR (KBr): 3447, 1720, 1656, 1535, 1357 cm<sup>-1</sup>; <sup>1</sup>H-NMR (300 MHz, CD<sub>3</sub>CN): δ (ppm): 9.49 (bs, 1H), 8.30 (s, 1H), 8.15 (d, 1H, J = 8.6 Hz), 7.98 (d, 1H, J = 7.5 Hz), 7.80 (d, 1H, J = 7.8 Hz), 7.70 (t, 2H, J = 7.6 Hz), 7.55 (t, 1H, J = 8.4 Hz),

7.39 (d, 1H, J = 8.0 Hz), 7.29 (t, 1H, J = 6.9 Hz), 7.05 (d, 2H, J = 7.5 Hz); <sup>13</sup>C-NMR (75 MHz, CD<sub>3</sub>CN): δ (ppm): 184.1, 167.2, 161.7, 157.5, 155.0, 153.0, 147.4, 137.5, 136.1, 134.2, 130.1, 128.1, 125.4, 125.0, 123.9, 122.9, 118.2, 117.1, 117.0, 110.9, 101.1, 95.9, 53.9; C<sub>25</sub>H<sub>13</sub>NO<sub>8</sub> (455.3767); Anal. Calcd. C 65.94, H 2.87, N 3.07, O 28.10; found C 66.03, H 2.78, N 2.98, O 28.16; LCMS (MH<sup>+</sup>+1): 455.9



Scheme 1. Synthesis of receptor 1.

## 3. Results and discussion:

### 3.1: UV-vis study

The colorimetric sensing ability was monitored by UV-vis absorption and by 'naked eye' observation in acetonitrile by addition of 10 equiv of various anions (F<sup>-</sup>, Cl<sup>-</sup>, Br<sup>-</sup>, I<sup>-</sup>, AcO<sup>-</sup>, HSO<sub>4</sub><sup>-</sup>, and H<sub>2</sub>PO<sub>4</sub><sup>-</sup> added as their tetrabutylammonium salts) to dilute solutions of receptor **1**. Specifically, as shown in Figure 1, the receptor **1** in aprotic organic solvent changes color in the presence of F<sup>-</sup> anion. The most pronounced effect is the F<sup>-</sup>-induced color change from colorless to yellow. However, in a water-containing system/protic solvent system, a significant color based response was not prominently observed. It has been very clear that the protic solvent [41] such as H<sub>2</sub>O would compete with the anionic guests for the bonding sites of hosts and therefore, could disturb hydrogen bonding interactions between hosts and guests. So the results observed indicated that visible color changes were most probably due to the deprotonation of the OH fragment by F<sup>-</sup> and not hydrogen bonding to it is responsible for the drastic color change. The receptor bound anions, hydrogen bonds were constructed to form stable complexes, and the electron density in the supramolecular system was much increased to enhance the charge-transfer interactions between the electron rich and electron-deficient moieties, which resulted in a visible color change [42]. The remarkable combination of anion-specific response/ non response makes receptor **1** an especially effective colorimetric anion sensor under the solution-phase conditions.



Figure 1. Color changes of receptor 1 in  $\text{CH}_3\text{CN}$  ( $c = 1.0 \times 10^{-4} \text{ M}$ ) before and after the addition of 1 equiv of representative anions (from left to right: Receptor 1, 1 +  $\text{Br}^-$ , 1 +  $\text{I}^-$ , 1 +  $\text{F}^-$ , 1 +  $\text{Cl}^-$ , 1 +  $\text{HSO}_4^-$ , 1 +  $\text{H}_2\text{PO}_4^-$  and 1 +  $\text{AcO}^-$ ).

Figure 2 shows that the UV-vis absorption spectra of a mixture of receptor 1 with different concentrations of  $\text{F}^-$  in acetonitrile. The receptor 1 itself displays two strong absorption bands at 261 and 319 nm and one weak band at 287 nm in acetonitrile. When increasing the concentration of  $\text{F}^-$  (25 equiv), a new absorption shoulder band at 349 nm (charge transfer band) was gradually enhanced, while the intensity of absorption bands at 261 and 319 nm were decreased correspondingly. The color of the solution of receptor 1 was changed from colorless to yellow, which could be easily observed by the naked-eyes. A clear isosbestic point was observed at 330 nm. The stoichiometry of the 1-fluoride interaction was confirmed to be 1:2 from the Job plot [43] at 349 nm.

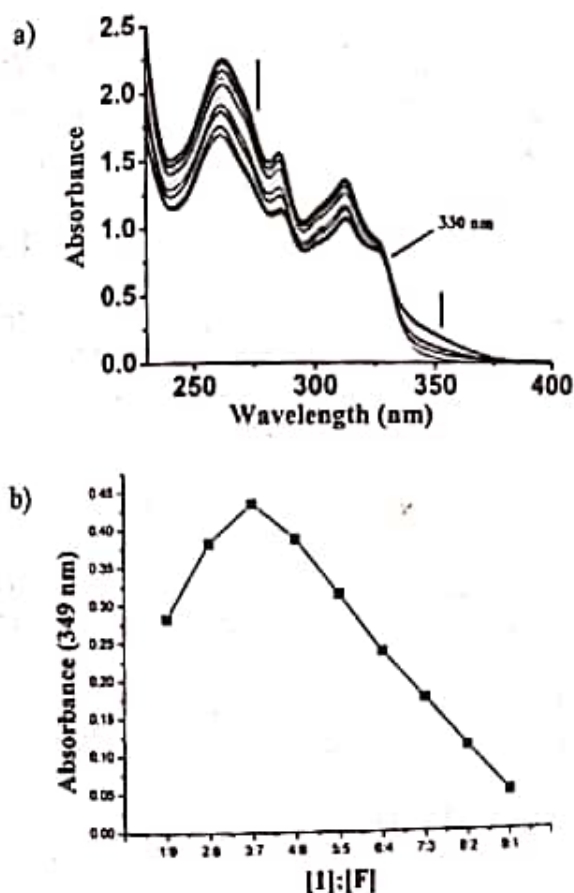


Figure 2. (a) UV-vis spectra of 1 was taken in the course of the titration of  $\text{CH}_3\text{CN}$  solution of ( $c \text{ H}^+ 1.0 \times 10^{-4} \text{ M}$ )

with a standard solution of  $n\text{-Bu}_4\text{NF}$  ( $c = 2.0 \times 10^{-3} \text{ M}$ ) at  $25^\circ\text{C}$ . (b) Job's plot for determining the stoichiometry of 1 and fluoride in UV-vis method at 349 nm.

From the absorption titration, the dissociation constant of receptor 1 with  $\text{F}^-$  was observed to be  $3.07 \times 10^3 \text{ M}^{-1}$ . Because of the small UV-vis spectral changes upon addition of the 1 equiv of fluoride ions, it is impossible to calculate the association constant from UV-vis titration spectra. However, with the increase of the fluoride ions, excess fluoride interact with the receptor-fluoride complex and induce the deprotonation of the receptor, so, the dissociation constant can be obtained from the spectral changes.

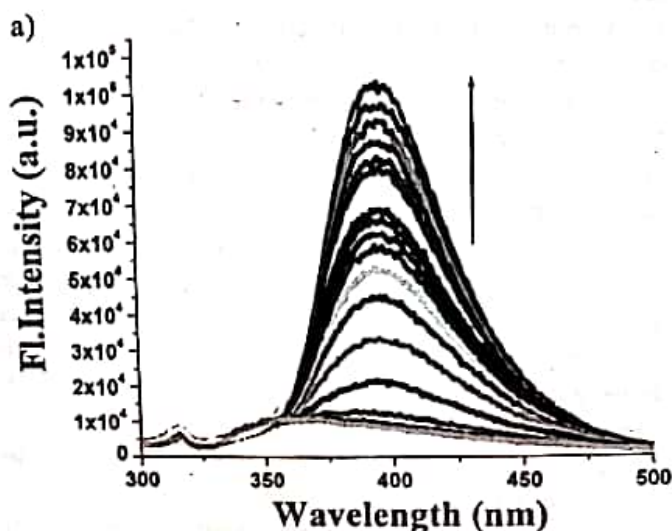
A similar, but less remarkable spectral change was observed upon addition of 100 equiv  $\text{AcO}^-$ . Parallel investigations were carried out with a series of other anions ( $\text{Cl}^-$ ,  $\text{Br}^-$ ,  $\text{I}^-$ ,  $\text{HSO}_4^-$ , and  $\text{H}_2\text{PO}_4^-$ ). The addition of other anions did not result in significant absorbance spectral changes during UV-vis titration and no noticeable changes in color was observed in the cases of  $\text{Cl}^-$ ,  $\text{Br}^-$ ,  $\text{I}^-$ ,  $\text{HSO}_4^-$  and  $\text{H}_2\text{PO}_4^-$ , even at high concentration up to 1000 equiv each (see supporting information page S9). The deprotonation occurred at higher concentration of acetate than fluoride, this is due to the higher electronegativity, smaller size and higher basicity of the  $\text{F}^-$  ions that makes them to bind strongly with the receptor 1 [44]. On the other hand no deprotonation took place in the presence of less basic anion such as,  $\text{Cl}^-$ ,  $\text{Br}^-$ ,  $\text{I}^-$ ,  $\text{HSO}_4^-$  and  $\text{H}_2\text{PO}_4^-$ . That was why  $\text{F}^-$  could be detected selectively from the other anions. Similar anion sensing properties were also observed in the more polar DMSO.

The interaction of receptor 1 with  $\text{F}^-$  was investigated through the UV/vis spectroscopic titration, and suggested that  $\text{F}^-$  first forms a H-bond complex with 1 and meantime disturbs the intermolecular hydrogen bond assembly of 1 itself (approximately 0.5 equiv of  $\text{F}^-$  are sufficient to effect near-complete disassembly). With further increasing  $\text{F}^-$  concentration, the solution color gradually turned from colorless to yellow, correspondingly, the shoulder band at 349 nm enhanced gradually. With the charge redistribution taking place within the deprotonated species, the UV-vis spectra exhibit a red shifted CT band. The new band that develops at 349 nm pertains to the deprotonated receptor 1, which was confirmed by the Bronsted acid-base reaction of adding strong base  $[\text{Me}_4\text{N}]^+\text{OH}^-$ . A stepwise increase in the concentration of the TBAOH produces results analogous to those found in the case of  $\text{F}^-$  ion and other ions are less basic than  $\text{OH}^-$  ( $pK_a = 30$  in  $\text{CH}_3\text{CN}$ ) (see supporting information page S10). It shows that in more polar solvent like DMSO, the deprotonation is being favored, as it is a very good proton acceptor [45]. The spectral behaviour revealed that deprotonation of the OH frag-

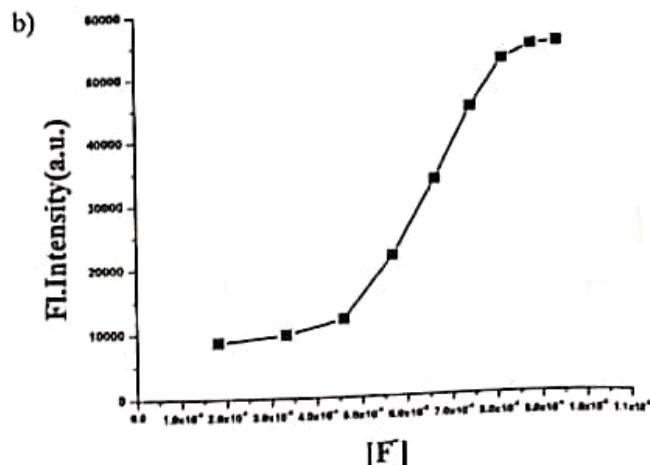
ment by  $F^-$  and not hydrogen bonding to it is responsible for the drastic color change, as a result of altering the optical properties of the chromogenic biscoumarin skeleton. Such deprotonation was related to the acidity of the H-bond donor site and the particular stability of the  $[HF_2]^-$  H-bond complex [46]. However, no color changes were observed upon addition of organic amines such as  $NEt_3$ . In contrast, the addition of  $[Me_4N]^+OH^-$  and  $F^-$  (or other anions) to a colorless acetonitrile solution of the non conjugated precursor **2** does not induce a color change and modification of the corresponding absorption spectrum. So, it corroborates the fact that the receptors provides selectivity for  $F^-$  ion which is solely based upon its deprotonation and is related to the factors (a) intrinsic acidity of the receptor (b) basicity of the anion, and (c) polarity of the solvent.

### 3.2: Fluorescence study

Fluorescence spectroscopy studies were also carried out in order to evaluate the ability of **1** to operate as a fluorescent anion sensor. Remarkable enhancement of the fluorescence was observed on addition of  $F^-$  at 394 nm following excitation at 287 nm. The changes observed in the fluorescence spectra of a solution of **1** in acetonitrile on adding up to 2.0 equiv of  $[Bu_4N]F$  are depicted in Figure 3. Concomitantly, smaller enhancements were also seen at lower wavelength at 317 nm. It was most likely due to hydrogen bonding to the phenolic OH receptor followed by deprotonation at higher concentrations of the anion (Scheme 2) and the excited state was modified considerably leading to the enhancement of fluorescence. This effect is worthy of note since anion binding causes fluorescence quenching for most of the reported sensor [47] with only a few exhibiting fluorescence enhancement [48-50]. The detection limit of receptor **1** for  $F^-$  ions at 394 nm was found to be 3.0  $\mu M$ .

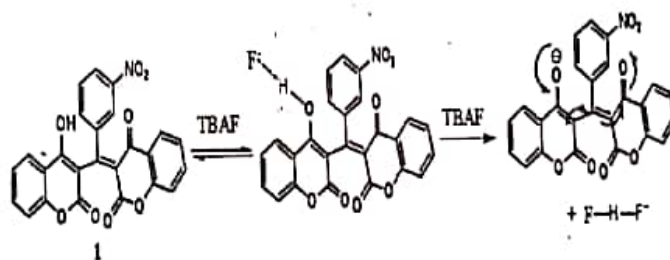


IIRD/2014/V-1



**Figure 3:** (a) Fluorescence change of receptor **1** ( $c = 1.0 \times 10^{-3}$  M) upon gradual addition of  $[Bu_4N]^+F^-$  dissolved in  $CH_3CN$  ( $c = 1.0 \times 10^{-4}$  M) ( $\lambda_{ex} = 287$  nm). (b) Fluorescence intensity at 394 nm of **1** as a function of the  $F^-$  concentration.

To confirm the selectivity of the sensor **1** towards fluoride ions, we also titrated the sensor with other anions. Upon addition of other halide anions such as  $Cl^-$ ,  $Br^-$ , and  $I^-$ , no significant change in the fluorescence spectra were observed, excluding quenching by the heavy atom effect.



**Scheme 2.** Proposed interaction mode of receptor **1** with fluoride anions.

These results suggest that receptor-fluoride interaction is indeed a two-step process shown in Scheme 2 at low fluoride concentration, receptor-fluoride interaction is the authentic hydrogen bonding, and with the increase of the fluoride ions, excess fluoride interact with the receptor-fluoride complex and induce the deprotonation of the receptor. From the results of UV-vis titration spectra, all anions investigated experience the first step; only the more basic anion  $F^-$  and  $AcO^-$  can undergo the second step.

### 3.3: $^1H$ NMR study

To investigate the binding interaction of the receptor **1** ( $c = 1.0 \times 10^{-3}$  M) with the  $F^-$  ion, NMR titrations were carried out in  $CD_3CN$ , with increasing amounts of tetrabutylammonium fluoride as shown in Figure 4. NMR spectra show that signal for the  $-OH$  proton, which is observed at 9.50 ppm shifted downfield and finally disappear completely after addition of 1.2 equiv of TBAF, indicating

the formation of a host-guest hydrogen-bonding complex [51-53] between receptor 1 and fluoride ions and finally proton transfer (acid-base) process occurs. Fluoride has a high affinity to hydrogen and it could easily induce H-O bond cleavage. It was found that the aromatic proton signals underwent upfield shifts with increasing  $F^-$  concentration from 0 to 1.2 equiv owing to charge delocalization on the entire phenyl ring with the deprotonation of O-H. Interestingly, after the addition of 1.2 equiv of fluoride ions, a new 1:2:1 triplet signal at 15.8 ppm appears, which is ascribed to the  $FHF^-$  dimer. Such a process has been found to be important in anion binding specially for basic anions such as  $F^-$  because of the high charge density and small size of fluoride. It has also been seen earlier in the case of tripodal receptor for the chromogenic recognition of  $F^-$  anions [37]. In the full deprotonated form, the polarization effect is no longer present since the anion does not remain in proximity to the receptor.

$[Bu_4N]^+OH^-$  can deprotonate receptors 1 and induce a color change. The deprotonation of the receptor were confirmed by Bronsted acid-base reaction between 1 and  $[Bu_4N]^+OH^-$ . A stepwise increase in the concentration of the TBAOH produces results analogous to those found in the case of  $F^-$  ion and other ions are less basic than  $OH^-$  ( $pK_a = 30$  in  $CH_3CN$ ). It shows that in more polar solvent like DMSO, the deprotonation is being favored, as it is a very good proton acceptor [54]. To elucidate the mechanism of interaction, the pH titration was carried out in the presence of 1.0 equiv. fluoride ion in acetonitrile solution. Similar results were obtained at high pH range. In contrast, no color change was observed upon addition of  $NEt_3$ . This further confirms our suspicion that the proton transfer between the phenolic-OH group of the sensor and the fluoride in the ground state is responsible for the pronounced color change.

### 3.4. DFT study

To elaborate upon the mechanism of the colorimetric and fluorescence enhancement by the energy and/or charge transfer model, we carried out the *abinitio* HF to DFT B3LYP/6-31+G\*\* calculations [55] (Fig. 5) for geometry optimization of receptor 1 in acetonitrile solvent. From this calculation, we noticed about the charge transfer and enhancement of color by  $F^-$  could be rationalized in terms of the occupancy of the frontier orbitals.

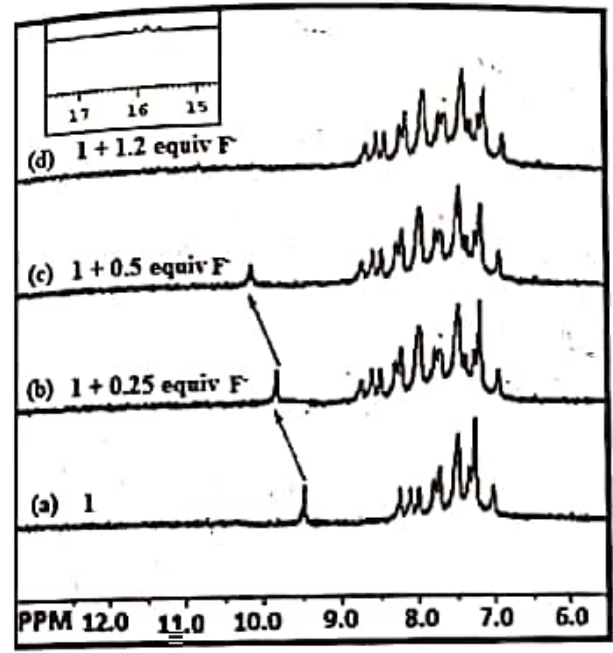
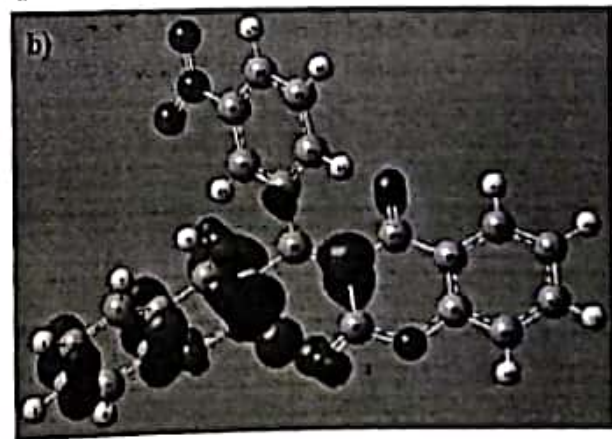
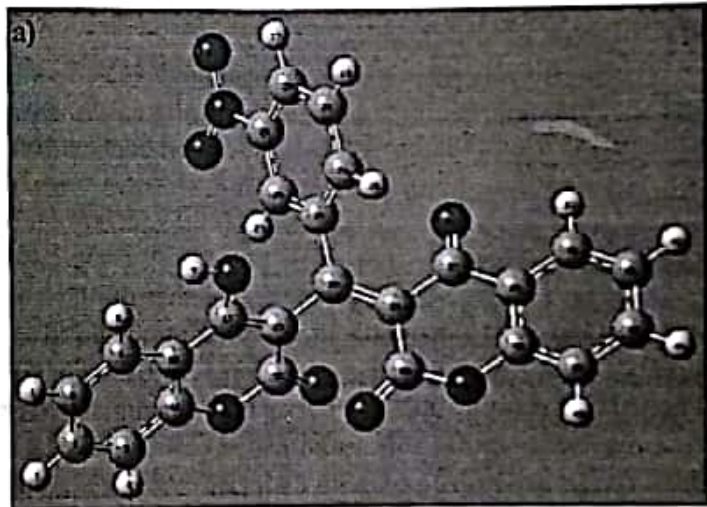
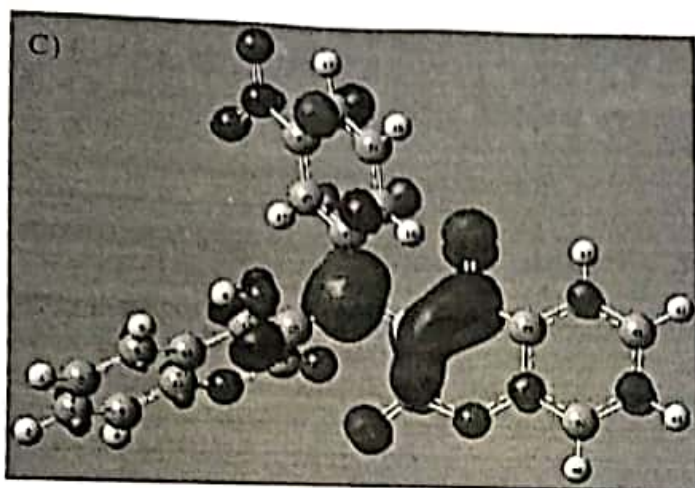


Figure 4:  $^1H$ -NMR titration spectra (a) Receptor 1 only (b) Receptor 1 + 0.25 equiv  $[Bu_4N]^+F^-$  (c) Receptor 1 + 0.5 equiv  $[Bu_4N]^+F^-$  (d) Receptor 1 + 1.2 equiv  $[Bu_4N]^+F^-$

The fluoride and acetate induced deprotonation process is fully-reversible as evidenced from the addition of  $CH_3OH$  and  $H_2O$ . The addition of polar protic solvent methanol results gradual decrease of absorbance in UV-vis studies and reverse color change from yellow to colorless. So the receptor unfortunately cannot be used in fully aqueous medium. This is presumably because protic solvent competes for  $F^-$  or  $AcO^-$  with the OH moiety, moreover, the presence of a relatively high amount of protic solvent disfavors the formation of the deprotonated receptor 1. However, in water-containing medium, no color changes were observed upon addition of organic bases such as triethylamine and the excess addition of





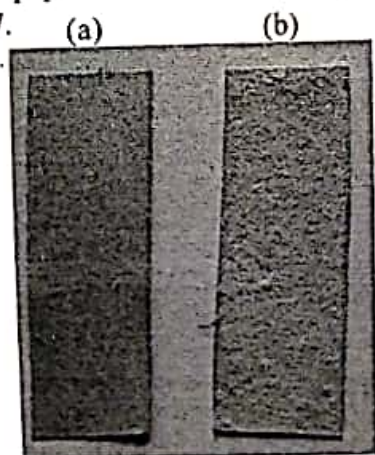


**Figure 5:** DFT B3LYP/6-31+G\*\* calculations (a) Energy minimised structure of receptor 1 (b) Position of HOMO of receptor 1 (c) Position of LUMO of receptor 1.

The  $\delta$  electrons on the HOMO of receptor 1 is mainly located on the whole  $\delta$ -conjugated nonoxidised coumarin framework, but the LUMO is mostly positioned at the center of the methylene and oxidised carbonyl moiety of the coumarin ring. Hence, the interaction of the fluoride ion with phenolic OH resulted deprotonation which brings electron density onto the  $\delta$ -conjugated framework through bond propagation and enhance the charge-transfer interactions between the electron rich (HOMO) and electron-deficient moieties (LUMO), which resulted in a visible color change.

### 3.5. Analytical Application

Generally, receptors for anions based solely on hydrogen bonding interactions cannot serve as efficient sensors in aqueous media, due to the strong solvent competition. To avoid the competing solvation effect of water, we prepared a test strips of 1 for inspecting  $F^-$  in aqueous environments by putting a filter paper ( $2.0 \times 0.5 \text{ cm}^2$ ) into the acetonitrile solution of 1 ( $2.0 \times 10^{-3} \text{ M}$ ) and then drying it by exposure to air. For detecting the fluoride anion in water, a test strips was immersed in the test aqueous fluoride containing solution (2 mM of 1) for several seconds and then exposed to air to remove water. Fig. 6 exhibits the color changes of the test papers with different fluoride concentrations at  $\text{pH} \approx 7$ .



**Figure 6.** Photographs of the test kits with 1 for detecting fluoride ion in neutral aqueous solution with different  $F^-$  concentrations. (a) none (only 1) and (b) 10mg/L.

When the fluoride ion concentration was increased, the color of the test strips changed from colorless to yellow. Clearly, the test paper can detect  $F^-$  in aqueous solution at a low limit about 100 ppm ( $0.1 \text{ gL}^{-1}$ ). Other anions such as  $Cl^-$ ,  $Br^-$ ,  $I^-$ ,  $HSO_4^-$  and  $NO_3^-$  did not cause any detectable changes. In fact, sensing  $F^-$  in natural aqueous environments without any spectroscopic instrumentation has been very useful in preventing fluorosis caused by the fluoride toxicity<sup>5</sup> in undeveloped regions. However, since many other anions such as chloride were present in most water at much higher concentrations than fluoride, it was important to know that chloride (or other common anions) did not cause color changes at concentrations normally found in water. Consequently, the easy-to-prepare test kit can be utilized to roughly and quantitatively detect and estimate the concentration of fluoride ions.

### 4. Conclusion

In summary, we synthesized an oxidized bis (coumarin) methane compound, having a conjugated biscoumarin skeleton, provides as a useful building block for the construction of colorimetric anion receptor. The presence of strong base can easily induce the deprotonation of the acidic H-bond donor moiety (OH), which modulate the internal charge transfer state of oxidized bis(coumarin)methane and give rise to remarkable color changes. However the results show that the deprotonation rather than the H-bonding is the key factor triggering the chromogenic effect. This deprotonation is being facilitated by the high intrinsic acidity of phenolic -OH groups, highly basic  $F^-$  and  $OH^-$  ions. As a colorimetric anion sensor, the conjugated biscoumarin-based receptor has displayed highly selective coloration for  $F^-$  in aprotic solvent based on the proton transfer signaling modes. The easy-to-prepare test kit based on the coumarin system provides a convenient and reliable detection of fluoride ions in everyday applications.

### Acknowledgements

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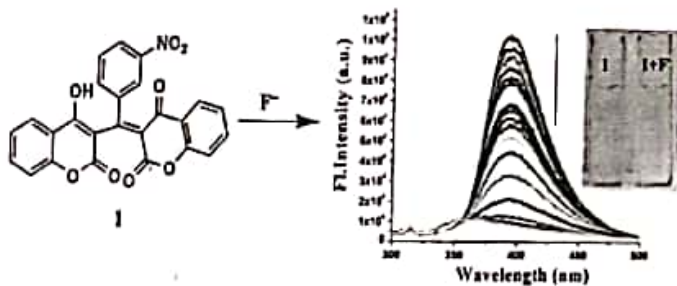
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### GRAPHICAL ABSTRACT

#### Naked-eye Detection of Fluoride ion Based on Chemosensor: Tuning Selectivity in Proton Transfer

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### Highlights :

- the first report of conjugated biscoumarin-based colorimetric chemosensor
- oxidized bis(coumarin)methane acts as colorimetric reporter
- the oxidized coumarin moiety might modulate the internal charge transfer (ICT)
- fluorescence turn-on sensing of fluoride

# MORPH DYNAMICAL CHANGES OF RIVER GANGA IN WEST BENGAL, INDIA(1964-2012) IN PRE AND POST FARAKKA PERIOD

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## ABSTRACT

The river Ganga flows through the plains from Hardwar in Utter Pradesh and the entire course below passes through the alluvial bed. The left bank of the river in Malda district upstream of barrage and right bank of river in Murshidabad district below the barrage have been undergoing heavy erosion since 1930 to prior to the construction of barrage as per available records. In post Farakka period Ganga has followed almost a same path with shifting its bank, widening its course and not changing the entire position of its previous path but the rate of lateral movement of left bank has been increased in the previous of 1977-1990, 1990-2001 and 2001-2010 along the whole stretch but after that the rate decreased. Two Experts' Committees constituted to explore the possible remedial measures to combat erosion, submitted their reports without any regard to the human aspects of the problem.

**Keywords:** Farakka Barrage, Post Farakka, Lateral Movments, Quaternary Alluvial, anastomosis appearance

## Introduction:

Rivers play an important part, not only in the shaping of the earth's surface, but also the shaping of man's life on the earth. The general theory of Dabis (1899) the "Normal Cycle of Erosion" as a genetic classification and systematic description landforms developed by the fluvial process. The river Ganga, the most important river of India, emerges from a glacier at Gangotri and flows down to the Bay of Bengal. The Ganga has continuously changed its geometry of meandering in West Bengal during the last three centuries, and former courses are left behind as moribund channels.. The Ganga in West Bengal has been encroaching to and fro within its meander belt, but after the construction of Farakka barrage, the dynamics of bend migration changed appreciably (Rudra, 2010).

## The Ganga in West Bengal:

The Course of the mighty river Ganga in West Bengal pass through Rajmahal in Sahibganj district, Jharkhand to Jalangi in Murshidabad district, West Bengal after that the course took the name Padma and enter in to the Bangladesh. The mighty river Ganga is divided in to two branches near Mithipur village in Murshidabad district which is located is about 40 km down stream of Farakka. One of

them is Bhagirathi-Hugli which takes a south ward direction and flow about 500 km south ward to reach the Bay of Bengal. The 260 km of this course is being named Bhagirathi (Karmakar, 2010). The Bhagirathi joins the Jalangi at Nabadwip, in 23°25'N and 88°24'E is known as Hugli river (Sreemani, 2011). The total length of the distributary will be called Bhagirathi-Hoogli. The inland port of Kolkata (formerly Calcutta) was constructed on the bank of Bhagirathi-Hoogli 150 km above from estuary during British rule. The Farakka barrage was constructed with the objected of Bhagirathi-Hoogli chann free from navigational hazard. Farakka Barrage did not fulfil the targeted goal. The barrage induced erosion of river Ganga in upstream of Farakka Barrage & more or less 3 laks people are homeless (Govt. of West Bengal, 2004)

The river Ganga flows through the plains from Hardwar in Utter Pradesh and the entire course below passes through the alluvial bed in a sinus pattern causing erosion in one of the bank and depositing in the other. The left bank of the river in Malda district upstream of barrage and right bank of river in Murshidabad district below the barrage have been undergoing heavy erosion since 1930 to prior to the construction of barrage as per available records. Erosion on the left bank near Panchanandapur

upstream of barrage in 1963 and erosion of the reach between Farakka to Dhulian downstream on right bank of in 1939 have been specifically recorded in Government records. The down stream erosion resulted in the abandonment of the railway line between Barharwa and Nimtita much earlier than the construction of barrage at Farakka. **Stud Area:** The course of river Ganga (below Rajmahal hills upto Farakka Barrage) passing through Manikchak, Kaliachal-II, and Kaliachak-III of Malda district, of West Bengal has been taken as a study area.

Malda district is located in the Garo-Rajmahal Gap separating the deltatic West Bengal in south and underlain by Quaternary Alluvial Deposits of two different West Bengal in south and is underlain by Quaternary Alluvial Deposits of two different ages. The study area is characterized by an elevation of 20-30 meter above mean sea level with a slope of less than five degree. In the southern part of the Kaliachak is lower that is 10-20 meter.

The river Ganga flows in south-easterly direction along the west boundary of Manikchak, Kaliachak-II and Kaliachak-III through meandering channel and has left typical oxbow lakes, cut-off meanders and abandoned channels within its extensive flat floodplain, which has been discussed later.

#### **Objectives and Methodology:**

In Malda, the river Ganga is very much affected by continuous shifting of its course and subsequent changes in channel morphology. In this present study we find the detection of nature of shifting of river course and rate of shifting after human activities like barrage on the bed of the river.

We used the Toposheets (1971-1973) (Remarks 720/16, 72p/13, 72p/14, 78D/1, 78D/2, 78D/3), Block Maps (1929-1931) (Remarks Manikchak, Kaliachak-I, Kaliachak-II, Kaliachak-III) and GIS D'Anville (1752) prepared a map of Bengal which appeared to be much better than those of his predecessors. From 1764 to 1767, Rennell carried out the first systematic survey of Bengal and his maps were first published in 1779 in a cartographic volume entitled "A Bengal Atlas" (Rennell, 1793). Colebrooke (1801) wrote an informative paper on the changing course of the Ganga with a map showing the course in 1796-1797. Prinsep in 1828, May in 1838, Tassin in 1841, and Stace in 1847 have made outstanding contributions towards the understanding the rivers of Bengal historically, but those maps cannot be reproduced in a GIS platform due to the lack of accurate coordinates. Unfortunately, most of these maps are not available in India. Since the mid-19th century, the Survey of India has published some Revenue Survey Maps and Standard Maps of Bengal. (Rudra 2010)

The present study involves application of Remote Sensing and GIS techniques in identification, classification, map-

ping, interpretation and analysis, which have been performed by using Remote Sensing Software Erdas Imaging 8.4 and GIS software ArcGIS 9.2. Field study carried out along the left bank of river Ganga in the study area to verify the present trend of river shifting.

#### **Changing Course of the Ganga between Rajmahal to Farakka:**

In the second half of the 18th Century, the Ganga was bifurcated near Rajmahal with a riverine island called Bhutni. The situation remained unchanged until the mid-19th century. As revealed from the maps of Rennell (1764-1767) and those of the Revenue Survey (1847-1849), the Ganga then flowed flanking the north-eastern side of Bhutni. Today, the river flows along the south-western side of the island. The older channel is so abandoned that Bhutni is likely to be attached to the mainland in a not distant time. Furthermore, the shape of the island has changed appreciably. In the stretch between Rajmahal and Farakka, the changing course can be understood with reference to the site of Gaur, which was the mediaeval capital of Bengal. Its archaeological ruins, along with Kalindri and Bhagirathi, two moribund distributaries of the Ganga, are still recognizable. Mukherjee (1938) noted, "Leaving the hills of Rajmahal the Ganges seemed to have passed northwards through modern Kalindri, and then southwards into the lower course of the Mahananda, east of the ruins of ancient Gaur". In making this conclusion, he referred to the maps of De Barros (from 1550) and Gastaldi (from 1561) as supporting evidence. Rennell (1793) wrote in his Memoir of a Map of Hindustan, "No part of the site of ancient Gour is nearer to the present bank of Ganges, than four miles and a half; and some parts of it, which were originally washed by the river, are now 12 miles from it. However, a small stream that communicates with the Ganges, now runs by its west side, and is navigable during rainy season. On the east side, and in some places within two miles, it is the Mahananda River; which is always navigable, and communicates also with the Ganges". Rennell's note confirms that the Ganga flowed along the site of Gaur prior to the second half of the 18th Century. Now this moribund channel is known as Chota Bhagirathi. After 1939 river Ganga changed her course gradually. According to 1956 courses two distinct meander patterns are seen with the main course coming from left to right in about half the length of river. According to 1961-62 course the right side meander just upstream of Farakka started moving towards left with tendency to form one meander similar to pre 1939 condition. Thus the swimming of the river course between left to right in its alluvial bed and banks appears a regular feature of the river. Construction of Farakka Barrage started in 1963 and the same had been commissioned in 1975 (Figure 1).

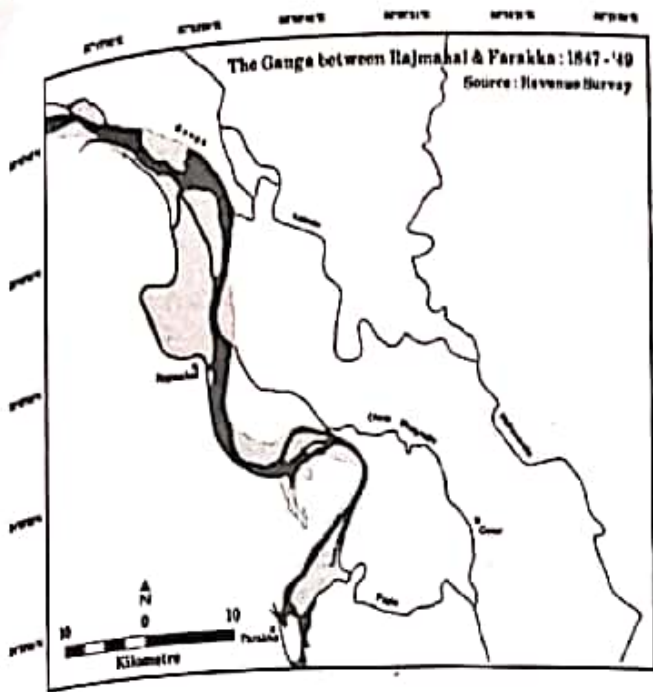


Fig. 1. The course of the Ganga between Rajmahal and Farakka: 1847- 1849.(Rudra,2010)

However, prior to that erosion has been continuing on the left bank in Malda district.(Rudra,2010) In the flood seasons between 1970-1973, the maximum width of erosion varied from 730m to 940 m each year between the places Toffi and Paranpur(Farakka Barrage Authority, 1980). (Figue2).

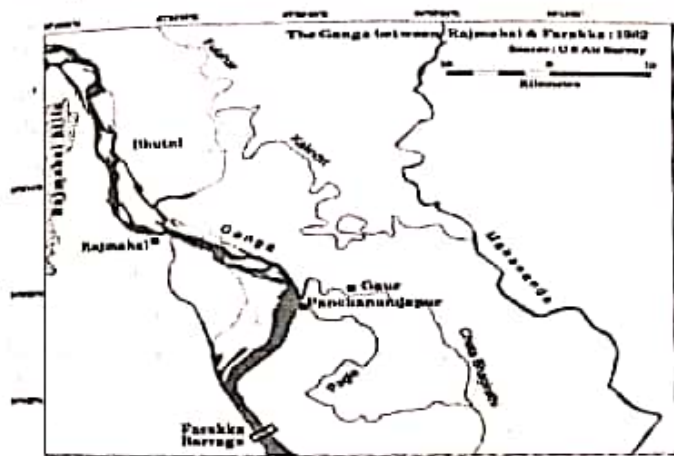


Fig. 2. The course of the Ganga between Rajmahal and Farakka: 1982. (Rudra,2010)

Between Rajmahal and Farakka the river had two meander bends in pre-barrage period. One meander bend had been intercepted by the barrage and therefore the river would try to adjust to such changes. The river has started compromising with such changes by combining two member bends into one from Rajmahal to Farakka with the concave face on the left side with deep channel there. It induced tremendous bank erosion of left bank. This is being accelerated by expansion of Central Charland resulting more sever erosion on left side. The Central charland

had joint the right bank in its expansion throwing the entire flow towards left.(Parun,1999)

Between Gadai char to Manikchak ghat the left bank has experienced landward shifting causing erosion in each temporal window except the period during 2001-2005 where the rate of erosion is lower than the rate of accretion mainly near Manikchak. During the period of 1990-2010 left bank has caused landward shifting only, along each section lines. From 1973-2010 the increase of average rate of channel width concludes that the stretch has characterized by the channel widening process. This process is much higher during 1973-1977 than the rest of the time periods.

The portion between Manikchak ghat to Panchanandapur the average landwards lateral movements of left bank in the consider stretch is higher (near 80m/year) during 1977-2001 and in the period of 1973-1977 and 2001-2010 the rate is much higher that is more than 100m/year. During 1973-1977 is has shown a tremendous high average rate of erosion(291.67) where all the section lines has been experienced by the landward lateral movement. During 1973-1977 the rate of land erosion is vigorous with an average 402.78m/year.

During 2001-2010, between Panchanandapur to Farakka has subjected to land formation along the left bank. In the last 10 years the rate of accretion is 80-122m/year. 1973-2001 the left bank of this stretch has lost the surrounding land and the rate of erosion has been much higher is 300m/year in the period of 1973-1977. The right bank in this period also shows the similar tend. During 2001-2010 the channel again has been narrow due to the reverse movements on the opposite bank.(Figure3)



Fig. 3. The course of the Ganga between Rajmahal and Farakka: 2006-2007.(Rudra2010)

#### Experts Committee Recommendation:

In 1980, Government of West Bengal constituted 'Ganga River Erosion Committee' with Sri Pritam Sing. The Committee suggested specific remedial measures.1"

ly, construction of one or two long spurs on left bank near Manikchak and one or two spurs on right bank below the barrage near village Bindugram. 2<sup>nd</sup> ly, Maintenance and strengthening of existing bull-headed spurs up stream on left bank. 3<sup>rd</sup> ly, Revetment of left bank upstream for a length of about 10.0 km up to Spur no.7 and right bank entire length of 94 km downstream of barrage up to Jalangi Bazar. 4<sup>th</sup> ly, Extension of upstream left guide bund. 5<sup>th</sup> ly, Model studies to examine whether artificial excavation can reduce shoal formation on the left bank upstream of barrage and also to examine the efficacy of the proposed upstream and downstream spurs.

After the devastating flood of 1996 in Malda and Murshidabad district, the Planning Commission of India constituted an Expert's Committee to study the bank erosion problem of river Ganga in those districts under the Sri R. Keskar. This committee suggested specific remedial measurements which are given below

- *Short Term Measurement:* 1<sup>st</sup> ly, Construction of two long spurs on the left bank upstream of barrage near Manikchak and two long spurs on right bank near Bindugram downstream of barrage. 2<sup>nd</sup> ly Renovation of all existing spurs on left bank upstream and right bank downstream. 3<sup>rd</sup> ly Bank revetment at selective reaches on both upstream left bank and downstream right bank. 4<sup>th</sup> ly Renovation of existing damaged revetment works. 5<sup>th</sup> ly, Construction of two spurs at Akhriganj and two spurs at Jalangi Bazar. 6<sup>th</sup> ly, construction of 5<sup>th</sup> retired embankment at Aswintola on upstream left bank. 7<sup>th</sup> ly, Essential dredging of kosi channel and char lands up stream and downstream of barrage. 8<sup>th</sup> ly, River behaviour studies, models, surveys and detailed investigations and updating of all requisite technical data.
- *Long Term Measures:* In long term measurement 1<sup>st</sup> of all, Extension of left guide on upstream. 2<sup>nd</sup> ly, Bank Revetment work of 10<sup>th</sup> marginal embankment on upstream left bank and downstream of barrage of barrage at suitable location. 3<sup>rd</sup> ly, Dredging on upstream and downstream of barrage at suitable location.

#### **Salient Observation Regarding Lateral Movement of Ganga:**

. In post Farakka period Ganga has followed almost a same path with shifting its bank, widening its course and not changing the entire position of its previous path but the rate of lateral movement of left bank has been increased in the previous of 1977-1990, 1990-2001 and 2001-2012 along the whole stretch but after that the rate decreased. Since 1973 river Ganga started to widen its channel. During the period of 1973-1977(post Farakka period) the rate of channel widening in the in the whole stretch has very high. This river shows anastomosis(Gregory,1977;

Majumdar & Bhandari,2010) appearance with the major channel changes by developing the large islands within the course since 1990. The particular feature has been increased gradually.

A long stretch along the left bank from Manikchak to Farakka has continuously been eroded.

#### **Conclusion:**

The river course of Ganga has shifted gradually towards East from 1973-2010. During the period of 1973 and 1977 the rate of shifting was higher (146.5m/year). In the period of four years, 1973-1977, just immediate after completion of construction of Farakka Barrage across the Ganga, the rate of channel widening process was tremendous high. So it can be said that such abnormal rate of bank erosion may be an immediate impact of this human intervention over the natural flow. Two Experts' Committees (P. Singh Committee in 1980 and G.Keskar Committee in 1996) constituted to explore the possible remedial measures to combat erosion, submitted their reports without any regard to the human aspects of the problem. Both committees recommended revetments with boulders to protect the banks from impinging currents and also construction of spurs to deflect the flow towards the opposite bank. However most of the above works have not been taken up at sight. As well as not a single sentence was spared for the rehabilitation of neo-refugees. The river management in India was guided by a colonial legacy and a 'business-as-usual' engineering approach without any concern for holistic ecohydrology. The change in morphometry of the river Ganga observed during post Farakka period has affected the cultural landscape as well as the physical landscape. The river should be allow to play with its 'khadir land' formed by its own sediments. Encroachment of land with in river basin and jacketing the river with in its basin land will invite damages beyond repairs and should be avoided. Sir W.A.English (1909) wrote " We construct reservoirs to store water and we abstract water from streams and apply it to irrigation of land without any regard to the apparent intension of nature. We protect the bank of rivers from natural erosion and we dredge up sand and mud from the places in which nature intended it to remain. There are, of course, limits within which we must confine our efforts, and success depends on a due apprehension of limits and on a just sense of proportion."

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