



# JOURNAL OF INDIAN RESEARCH



*Mewar University*  

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*Knowledge to Wisdom*

## Mewar University

# Journal of Indian Research

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# CHAIRPERSON'S MESSAGE

The third issue of the Journal of Indian Research is well in time. This reflects our commitment to steer quality research and innovation. We have been receiving quality papers from dozens of universities from India and abroad. When most of our top notch universities are struggling to bring out quality journals to publish research papers, the endeavor on behalf of a nascent Mewar University is in the right direction. But, we have miles to go. None of the Indian universities are among the top two hundred global universities. Obviously their presence is scuttled by absence of publication from their departments. Diminished presence entails poor ranking for Indian universities.

We do not need universities that bestow only degrees. The universities ought to churn out ideas and spread those in the knowledge-societies. The absence of serious platform like Journal of Indian Research creates loss of motivation among young scholars to pursue serious research. Moreover, many of the journals are mired into ideological spectrum and controlled by splinter cabals. The young researchers have no option but to seek out shady online predatory journals for publishing even serious works. I would like to suggest all Central University departments to bring out quality research journals in their respective fields. This will be a big bang moment for novel ideas in India. If India has to become a knowledge power, there is no other way but to deepen and integrate the quality research publication.

On behalf of the Board of the Journal and the Mewar University, I extend my greetings on the occasion of the national festival of Dushehra and Diwali. We look forward for a vibrant and awesome year ahead!



CA Ashok Kumar Gadiya

## EDITORIAL

The third issue of the Journal of Indian Research is in hand. The festive season begins with Dushehra. Nine days of navratras are devoted to propitiate the Mother Goddess of Durga, Lakshmi and Saraswati. On the tenth day of Vijayadashmi, the puja concludes with the burning of effigy of Ravana, the arch-enemy of Ram, the legendary hero of virtue and normative principles in Indian civilization. This is the time to propitiate the Shakti whose embodiment is the Woman. Since Damini tragedy in last December, India has been rattled by brutal cases of attack against women. There is apparent contradiction in the flow of events in this part of the world. If the energy of Shakti moves the immobile Shiva to generate the manifest universe, the real Indian woman herself remain a victims of sexual abuse, physical violence and gender discrimination and pushed behind the walls, away from the public sphere. Some sociologists like Sudhir Kakar claim that in Indian society woman has traditionally been defined as a person through her relationships rather than her individuality. A woman is a person only when she is a mother, a daughter, a sister or a wife. Any woman who does not fit into these mental categories is a female, a 'stree', who is merely an object of enjoyment. Stripped of relational categories and just as an individual, a woman is not a person but an object, a body for male enjoyment. ( Sudhir Kakar, We are caught between extremes of traditional and western perspectives on women, Times of India, 9<sup>th</sup> January, 2013). He takes detour to justify the insecurity of woman in the nameless, relation-free atomized public space in India. But, his out-of-box thinking is bereft of any cultural foundation. In fact, there are different terminology for the woman's sacred body part while delving over the issue of the motherhood and experience for pure pleasure. A woman is a subhaga, an auspicious person. Both, the male god and the female goddess bestow pleasure and prosperity and their respective nomenclature is bhagwan and bhagwati. Saubhagya or the good luck is derived from same root. Kakar is ostensibly wrong in his views about stree as something demeaning. Stree, if unmasked of all relational sheaths, is an object of enjoyment, a subhaga; it thereby also signify auspiciousness and good luck. Indian culture teaches us to treat auspicious categories as pure and venerable. Stree ought to be venerated just as a relational woman personality like mother, sister or a bahu.

One of the article in this issue is "Stree Shakthi Program in Karnataka: A Case study of Davangere District" authored jointly by Kavitha S. and Prof P. Laxmana that discuss how women self-organize through Self-Help Groups(SHG) and bring positive changes in their lives. There are two more articles on woman empowerment. Dr. Yoginder Singh has contributed the paper on "Effect of Self Help Group in Economic Empowerment of Rural Women in Himachal Pradesh". Moshreka Aditi Huq and Ashraful Azad of University of Chittagong, Bangladesh has written about the marginalization of women in Bangladesh's politics in their well-formulated piece "Four decades of Women in Bangladesh: Changes and challenges in Empowerment and Development." Moshreka Aditi Huq is a budding organic intellectual from South Asia. She was deeply involved in Shahbag uprising in both Dhaka and Chittagong and an active participant in issues pertaining to women's voice in public arena. Without much effort, focus in this issue has crystallized around the subject of the Stree-Shakti.

The originary Shakti principle in Indian thought-world is that of Parvati, the daughter of the Parvat

(mountain). The Himalayas is the abode of her Shiva. We are publishing two papers on the Himalayas that complement the papers on empowerment of women. Achyut Aryal, a young and energetic researcher based in Kathmandu has explored how Tibetan refugees living in Nepal turn violent due to the silencing of their voices in the mainstream Nepalese media in a well researched paper, “The Spiral of Violence: A Study of Tibetan Refugee’s Aggression Expression in Nepal”. Amit Kumar who is working with a news channel has covered the recent tragedy in the Himalayas due to cloud burst and flash flood in, “Demystifying a Himalayan Tragedy : Study of 2013 Uttarakhand disaster”.

The first section consists of two articles that brings out the necessity for Indian categories of thinking for addressing the issue of Indian socio-political system. Ashok Kumar Gadiya and Chander Pal Singh has argued in detail the fallacies exhibited by the members of the Constituent Assembly while writing the Constitution. In their paper, “Need for Systemic Change: Historical Perspective”, they have also discussed recent debates on need for wholesome change in the Constitution so that the Indian thoughts and the local solutions for the local problems can be incorporated in the Constitution. The Constitution must spring from the soil and roots of history, culture and characteristics ontology. Most of the Constituent Assembly members were groomed in foreign soil and they tried to import only foreign element in the Constitution not commensurate with our traditional wisdom and requirement for governance in specific context. But there were few leaders during the freedom movement who shunned their western baggage of thinking and enriched Indian thought and culture with their work and commitment. Sri Aurobindo was one of those few luminaries. Niraj Kumar and Pankaj Kumar Lal has traced the genealogy of shift of categories in thinking in Sri Aurobindo’s work in well researched work, “Sri Aurobindo- Journey from Occident to Bharat”.

We have two interesting papers on modernization of library management. There are papers on management and human rights, education and commerce. Adeppalli Krishna and S. Krishna Murthy’s paper on “A Numerical method to Study the Heat transfer in Rocket nozzle throat by Inverse Heat Conduction technique”, complements the former paper. The current issue is a veritable feast of ideas .

The Chairman of the Mewar University has been a constant guide and support for this diligent endeavor. I offer since acknowledgement for his untiring zeal to promote quality research. I am also pleasantly surprised to receive loads of papers which takes a toll in chaffing out good papers to construct a multi-disciplinary issue with some basic direction. May the constant support of researchers enrich the coming issues further and the Journal of Indian Research grows into a platform for publishing quality research.

– Niraj Kumar





## NEED FOR SYSTEMIC CHANGE: HISTORICAL PERSPECTIVE

Ashok Kumar Gadiya\*  
Chander Pal Singh\*\*

### ABSTRACT

This paper examines the historical roots of Indian Constitution and argues that the crisis of political system in India is largely due to the fact that Constituent Assembly imported an alien political structure which is unsuited to Indian genus. Much of the present Constitution of India is based upon the colonial structure imposed on India by British administrators through various installments of constitutional reforms designed primarily to prolong the subjugation of India. The Constituent Assembly did not deliberate over alternatives to Westminster model or even the Gandhian ideas on the subject. The post-colonial critique from the organic intellectuals has been summarized and the necessity of structural shift from people-controlling system (Lok Niyantarak Vyavastha) to a people-controlled system (Lok Niyantrit Vyavastha), has been argued to ameliorate the maladies that afflict Indian political system.

Keywords: B.R. Ambedkar, B.N. Rau, Constituent Assembly, Constitution, Mahatma Gandhi, Government of India Act (1935), Minto-Morley Reforms (1909), Lok Niyantarak vyavastha, Lok Niyantrit vyavastha, Panchayat, Swaraj

### THE DREAM

“I shall strive for a constitution which will release India from all thralldom and patronage, and give her, if need be, the right to sin. I shall work for an India in which the poorest shall feel that it is their country in whose making they have an effective voice; an India in which there shall be no high class and low class of people; an India in which all communities shall live in perfect harmony. There can be no room in such an India for the curse of untouchability or the curse of intoxicating drinks and drugs. Women will enjoy the same rights as men. Since we shall be at peace with all the rest of the world, neither exploiting nor being exploited, we should have the smallest army imaginable. All interests not in conflict with the interests of the dumb millions will be scrupulously respected, whether foreign or indigenous....This is the India of my dreams for which I shall struggle ... I may fail, but if I am to deserve the confidence of the Congress, I shall be satisfied with nothing less.”<sup>1</sup>

(Gandhiji's statement to Reuter, September 3, 1931)

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Mahatma Gandhi's above statement provides us with a glimpse into the cherished hopes and aspirations our founding fathers had from working of the constitution in an independent India.

But, it is common nowadays to assume that we bear the mantle of democracy in South Asia and that we are the beacon of hope for the people struggling against illiberal regimes in developing world. Our contemporary leadership drumbeat about the grand achievements of Indian democracy. The narrative thrive on constant theme-unlike our neighboring countries, India has never relapsed into military coups or anarchy. But any assessment of the six decades of working of Indian democracy would not be realistic if it is not made in the light of the aspirations of the founding fathers, the fundamental values and inspirations of our freedom struggle, and the cherished expectations of the teeming millions for the newly independent India. In this context, it is imperative to sum up the high hopes entertained at the time of independence: establishment of an egalitarian, participatory democratic society; all-India nationalism; secular and moral polity; and to get its rightful place in the comity of great nations consistent with her civilizational ethos.

India is passing through critical times. Our polity is under severe strain. Faith of the people in the quality, integrity and efficiency of governmental institutions stands seriously eroded. Case for a review of the working of the institutions and for urgency of political reforms is unassailable. Subhash C. Kashyap, former Secretary General of the Lok Sabha and a prominent authority on working of Indian Constitution, has argued that with India's independence, people did not feel the glow of freedom or the transfer of power into their hands. Only the colour of masters changed. The colonial model continued even after adoption of the Indian Constitution.

At this juncture, the political system of free India stands besieged with ills which our founding fathers could not have imagined. The dream of the egalitarian society dissipated into winds. Old non-citizen-centric loyalties like caste, communalism, linguistic sub-nationalism and regionalism have become more reinforced and hardened than they were earlier. Corruption has penetrated every vein of the system and the unholy nexus of money, power and crime has assumed alarming proportions. Terrorism and naxalism pose greater threat to the nation than any external enemy; and on the whole people are losing faith in the system.

Though every citizen has the right to vote, the majority of Indian people do not have effective control over their social, economic and political destiny. In fact, the social and economic aspects of democracy do not figure at all among the list of achievements of Indian democracy. Political-bureaucratic class has reduced the sovereignty of the people to a mere right to exercise their franchise at the time of sham elections which is influenced by a paid media, government advertisement, persuasion, coercion and freebies by the people in the power. The representative character of individual legislators, the party in power, and legislature in general, is itself questionable. The fragmentary polity and the vote bank politics rule the roost is evident by the statistics. Generally, support of approximately 15-20% of electorate is sufficient for individual candidates to win the elections and the central and the state legislatures themselves represent hardly 20-25% of the electorate. No wonder that caste, community, region and other narrow loyalties decide the fate of elections while the larger issues concerning the common good of the people and the nation hardly gets enough attention. It has become impossible to win election without spending huge amount of money. Idealism and ideology rarely have a role in electoral politics. Unholy nexus of money, power, crime and politics has sniffed out any morality in public life, leading to the unsavory distinction of our country being placed as one of the most corrupt nations in the world in the global corruption barometer of Transparency International. For the common man, politics has become a dirty word and by and large the people are losing faith in the democratic institutions as amply indicated by the increase in incidences of mob violence, proliferating kangaroo courts, terrorism and naxalism. Indian democracy is facing a crisis situation and there is an urgent need to reboot institutions to meet our cherished national goals.

A plethora of writings has appeared that discusses the ailments of the political system and suggests suitable remedies. But overall, the debate on the ills besieging the system has remained focused on the working of the political system rather than questioning the system itself. Moreover, there must be some clarity on certain questions like - what do we mean by the political system? What is/are the source(s) of our political system? How can the political system be remedied?

A political system is a system of politics and government. According to Encyclopedia Britannica, “political system is the set of formal legal institutions that constitute a “government” or a “state.” More broadly defined, however, the term comprehends not only the legal organization of the state but also the reality of how the state functions. The political system is seen as a set of “processes of interaction” or as a subsystem of the social system interacting with other nonpolitical subsystems, such as the economic system. This points to the importance of informal sociopolitical processes and emphasizes the study of political development.”<sup>2</sup>

If we view the origins of our political system in the light of the above conception, it becomes very obvious that it is our Constitution that has given birth to a political system which has evolved further in the last 63 years. Indian Constitution has not only defined the state and the government, but also how the different organs of the state should interact among themselves as well as with non political systems such as social and economic systems. According to Subhash Kashyap<sup>3</sup>, Constitution of a country seeks to lay down the political structure under which a nation is to be governed. It establishes the basic organs of the State- the legislature, the executive and the judiciary- and defines and delimits their powers and relationships inter se and with the people. Constitution is the fundamental law which ordains the fundamentals of the polity. The legitimacy of all laws and all executive action has to be tested with reference to the constitutional provisions.

It is to be noted that Constitution is much more than a mere inert document. It is a living entity of functioning institutional structures. Also, every Constitution is an act of faith on the part of the people. The Constitution embodies the vision of its founding fathers and reflects the objective values and aspirations of society.

Surprisingly and also unfortunately, the political analysts have altogether ignored the making of the Indian political system i.e. its historical evolution. The fact that the present Indian Constitution has not been able to shake off its colonial legacy has been generally overlooked. There is a general consensus among the political thinkers and analysts that the founding fathers chose the best system possible and it is a case of wrong handling of the right system. In this context, Dr. B.R. Ambedkar’s speech in the Constituent Assembly on the eve of adoption of the Constitution is often quoted:

“... I feel, however good a Constitution may be, it is sure to turn out bad because those who are called to work it, happen to be bad lot. However bad a Constitution may be, it may turn out to be good if those who are called to work it, happen to be a good lot. The working of a Constitution does not depend wholly upon the nature of the Constitution.”<sup>4</sup>

Following this approach of ‘good’ system but ‘bad’ people to work with, piecemeal attempts have been made in the past to reform the system from time to time. So far about 118 amendments have been introduced in the Constitution, which indicates how the functioning has gone terribly wrong. It is to be noted that problems with the functioning of the democratic institutions in India have been present since the very beginning of the system. It is not that they were not present during early 1950s when towering personalities from our freedom struggle like Jawaharlal Nehru, Vallabhbhai Patel, Rajendra Prasad and Maulana Azad were in commanding positions in the new political system. The situation is only getting bad to worse with the decline of idealism and probity in the public life. The crisis in the political system is spread across the political spectrum, transcending parties and political ideologies. Every player seems to have developed a vested interest in maintaining the

status quo. They are unanimous in opposing any suggestion of making fundamental changes in the political system.

Now the question that arises is: what are the roots of this crisis? Fundamental issues relating to the working of the political system cannot be discarded completely but they do not alone constitute the core causes of the crisis. There is an urgent need to suggest a new line of inquiry: whether the present political system based upon 1950 Constitution could really be a suitable channel for expression of the democratic ethos of the Indian people, keeping in view the constraints imposed by the characteristic socio-economic matrix that has evolved and stabilized through long historical process? Could this system be expected to lead to varying results in the Indian situation? Were not these consequences already foreseen before? In short, is not the system itself burping the present crisis?

#### HISTORICAL ROOTS: 1861-1935

Rambahadur Rai, eminent journalist and crusader for systemic change is very forthright in saying that the present constitution does not reflect the ideals or ideology of either Gandhi or Jaya Prakash Narayan. Nor has it represented the Hindu ethos and civilization. He quotes a speech by Atal Bihari Vajpayee in 1992 in which the former Prime Minister said that this Constitution was not made by people of India, but it would be more correct to say that it was made by the British for Indian people and Indian people adopted it.<sup>5</sup>

It is an undisputed fact that the present Indian Constitution is a product of the historical evolution of constitutional development process during the British rule. Installments of constitutional reform (Acts of 1858, 1861, 1892, 1909, 1919, 1935) were a series of responses, one leading to another, from the colonial government to counter the advance of nationalist movement and to prolong the British rule in the new circumstances by creating new divisions in Indian society.

Not many people know that although the British rulers were imposing the representative system in bits and pieces as part of their divisive tactics to weaken the nationalist movement and prolong their rule, they were clear in their mind that the political system of Britain or her white colonies is not applicable to India. John Stuart Mill in his *Considerations on Representative Government* (1861) was categorical in his assessment that Britain would only succeed in her task in India “through far wider political conceptions than merely English or European practice can supply and through a much more profound study of Indian experience and of the conditions of Indian Government than either English politicians or those who supply the English public with opinions have hitherto shown any willingness to undertake.”<sup>6</sup> True to this principle, English statesmen from Lord Ripon (Viceroy of India, 1880-1884) onwards emphatically denied that they were trying to impose English system in India.

In contrast to the British approach, Indian congressmen, from the very first session of Indian National Congress in 1885, were more interested in British rather than Indian forms of Government. Such was their obsession with British political institutions that Dadabhai Naoroji said at 1885 session of Congress: “If we are denied Britain’s best institutions what good is it to India to be under the British sway? It will be simply another Asiatic despotism.”<sup>7</sup> Their cherished goal was to adopt the western representative institutions and they were certain that Britain will transfer these gifts slowly. Madan Mohan Malviya articulated this very point at the Congress session of 1886: “Representative institutions are as much as part of a true Briton as his language and his literature. Will ... Great Britain deny us, her first born subjects, the first of these when by the gift of the two latter she has qualified us to appreciate and incited us to desire it.”<sup>8</sup> We can only say that Macaulay was right when he said that European Knowledge will create demand for European institutions.

Lord Dufferin, the Viceroy of India (1884-88), reacted to the Indian National Congress’ demand towards the establishment of parliamentary system in India by calling it as “a very big jump into the unknown...

which England herself has only reached by slow degrees and through the discipline of many centuries of preparation.”<sup>9</sup> During the debate on the introduction of electoral principle in India in the British Parliament in 1890, Viscount Cross, the Secretary of State for India during 1886-92, said, “that no man in his senses would ever think of having Parliamentary constituencies there such as we have in England. They are absolutely unsuited to the Eastern habits and absolutely unsuited to a country like India.”<sup>10</sup> His successor, the Earl of Kimberley (Secretary of State for India during 1882-86 and 1892-94) also argued the impossibility of “parliamentary representation of so vast a country—almost as large as Europe—containing so large a number of different races is one of the wildest imaginations that ever entered the minds of men.”<sup>11</sup> In 1906, while discussing the reform proposals which fructified in the Minto-Morley reforms of 1909, Minto (Viceroy of India, 1905-10) cautioned Morley (Secretary of State for India, 1905-1910), “However much may we admire our own constitutional history, our constitution ... is the result of a long course of historical experience unknown in India, while our political party machinery, which the Bengali would imitate, is, as we know, full of faults, which we ourselves regret, and which it would be fatal to encourage here.” On his part, Morley reassured Minto: “Not one whit more than you I think it desirable or possible, or even conceivable, to adopt English political institutions to the nations who inhibit India.”<sup>12</sup>

A.J. Balfour, who had been the Prime Minister of United Kingdom from July 1902 to December 1905, made a profound statement in the House of Lords on the feasibility of western representative institutions in India. “We all admit that representative Government, government by debate, is the best form of government [only] when it is suitable, ... when you are dealing with a population in the main homogeneous, in the main equal in every substantial and essential sense, in a community where the minority are prepared to accept the decision of the majority, where they are all alike in the traditions in which they are brought up, in their general outlook upon the world and in their broad view of national aspirations.”<sup>13</sup> Balfour was speaking with reference to the great divide between Hindus and Muslims and also the water tight boundaries of the institution of caste among the Hindus.

Balfour’s conclusion on impracticality of adopting the British Constitution as a model for development of parliamentary democracy in India, albeit in more refined and developed form was articulated by the Joint Committee on Indian Constitutional Reform during 1933-34 while preparing the ground for the Government of India Act, 1935. The report of Joint Committee on Indian Constitutional Reform quoted Lord Bryce, a formidable authority on constitutional matters, to bring home the view that the English Constitution would suit merely England. “The English Constitution, which we admire as a masterpiece of delicate equipoise and complicated mechanism, would anywhere but in England be full of difficulties and dangers ... It works by a body of understanding which no writer can formulate and of habits which centuries have been needed to instill.”<sup>14</sup> Report then went on to give its final judgment as to why a parliamentary government on the Westminster model will not be feasible in India:

Parliamentary government, as it is understood in the United Kingdom, works by the interaction of four essential factors: the principle of majority rule; the willingness of the minority for the time being to accept the decisions of the majority; the existence of great political parties divided by broader issues of policy, rather than by sectional interests; and finally the existence of a mobile body of political opinion, owing no permanent allegiance to any party and therefore able, by its instinctive reaction against extravagant movements on one side or the other, to keep the vessel on an even keel. In India none of these factors can be said to exist today. There are no parties, as we understand them, and there is no considerable body of public opinion which can be described as mobile. In their place we are confronted with the age-old antagonism of Hindu and Muhammadan, representatives not only of two religions but of two civilizations; with numerous self-contained and exclusive minorities, all a prey to

anxiety for their future and profoundly suspicious of the majority and of one another; and with the rigid divisions of caste, itself inconsistent with democratic principle ... It is impossible to predict whether, or how soon, a new sense of provincial citizenship, combined with the growth of parties representing divergent economic and social policies, may prove strong enough to absorb and obliterate the religious and social cleavages which thus dominate Indian political life. Meanwhile it must be recognized that, if free play were given to the powerful forces which would be set in motion by unqualified system of parliamentary government, the consequences would be disastrous to India, and perhaps irreparable.<sup>15</sup>

Now the question arises: Why did Indian leadership in the Constituent Assembly chose to adopt Western political institutions for India against the prophecies and the warnings of the British statesmen and constitutional experts? As mentioned earlier, the answer to this question of immense historical importance lies in the nature of the mainstream of the Indian freedom struggle. Congress leaders, from the very beginning of their movement, dreamed of assimilating British political institutions in India in future. Indeed, they took pride in calling their agitation as 'constitutional'. Minto-Morley Reforms of 1909, which sowed the obnoxious seed of communal electorate in Indian politics, were seen by Surendranath Banerjea as the "growing triumph of constitutional agitation."<sup>16</sup> There was division of opinion within the Congress regarding participation in the Legislative Councils formed under the diarchy scheme of Montague-Chelmsford reforms of 1919 and a section of Congressmen participated in the elections and accepted offices. Mahatma Gandhi, who was a bitter critic of the Westminster model, calling the parliament a prostitute in *Hind Swaraj* (1909), reconciled his stand by early 1930s under the pressure of the Congressmen to participate in electoral politics and approved the formation of Congress Parliamentary Board. Congress, in the beginning, opposed and rejected the Government of India Act, 1935 but later participated in the elections under the Act and was able to form governments in eight provinces. Besides Gandhi and a few other leaders like Lajpat Rai, Bipin Chandra Pal and Subhash Chandra Bose, most of the Congress leaders remained under the spell and charm of the incorrigibility of the English political institutions. Congress leadership failed to distinguish between the British constitutional experts' opinion about the unsuitability of British institutions in India and the British imperial resolve of not transferring substantial power to natives in India. At the same time, though Congress leaders vehemently opposed communal and caste agenda of the constitutional reforms but still they viewed these as steps towards the growth of representative polity in India.

#### WORKING OF THE CONSTITUENT ASSEMBLY

There is persistent myth that along with the transfer of power on 14-15 August, 1947 the British also transferred their institutions to India. As a matter of fact, institutions continued by us after independence and/or embodied in the constitution were those which had grown and developed on the Indian soil itself, even though only partly on Indian demands and largely by British design.<sup>17</sup>

To say that the constitution was made by the Constituent Assembly which met during 1946-1949 would be both fallacious and misleading and at best a half-truth. It was not as if the Constituent Assembly was writing on a tabula rasa. From the point of Constitutional system and structure also, the Drafting Committee or the various other committees and the Constituent Assembly itself were not engaged in the task of making an entirely original or new constitution or creating novel political institutions for India. The founding fathers had taken a conscious decision not to put the past completely behind with a vengeance and start anew on a clean state. Instead, they chose to build further on the foundations of the old, on the institutions which had already grown and which they had known, become familiar with and worked, despite all the limitations and fetters. The Constitution rejected British rule, but not the institutions that had developed during the period of British rule. Thus the Constitution did not represent a complete break with the colonial past.<sup>18</sup>

K.M. Munshi, a staunch nationalist who was also a prominent member of the Constituent Assembly, sums up the overall approach of the Constituent Assembly of looking no further than the British constitutional model:

We must not forget a very important fact that during the last hundred years, Indian public life has largely drawn upon the traditions of British Constitutional Law. Most of us have looked up to the British model as the best. For the last thirty or forty years, some kind of responsibility has been introduced in the governance of this country. Our constitutional traditions have become Parliamentary. After this experience, why should we go back upon the tradition that has been built for over a hundred years and buy a novel experience?<sup>19</sup>

Constituent assembly of India was not set up by the people of India on their own initiative. It was not elected by them either. It was set up under the terms of the British Cabinet Mission proposals and promulgated by the joint statement of Cabinet Mission delegation and Viceroy dated 16th May 1946 (paragraphs 18-21). This statement decided its mandate, composition, method of working, limitations as well as its framework. Speaking on the eve of the opening of the Assembly on 8<sup>th</sup> December, 1946, Nehru conceded: "The Constituent Assembly in which we are going is not a revolutionary body. It is obvious that a revolutionary body cannot be brought into existence by the Viceroy or come as a gift from the Cabinet mission. Its greatest merit was that although it will be brought into existence by the British Government, they will have nothing to do with it after it has been set into motion."<sup>20</sup> Throughout its tenure, Constituent Assembly could not claim to call itself sovereign. Created by the Cabinet Mission Plan, after 15 August 1947, Constituent Assembly came under the purview of the Indian Independence Act, 1947, passed by the British Parliament.

Members of the Assembly were indirectly elected by the Provincial Assemblies which were themselves elected under the Government of India Act of 1935 on a highly restrictive franchise covering barely 11% of the population of British India. Native States, constituting 23% of the population of India, were denied even this restrictive and indirect franchise because the princes were given the right to nominate 93 members. Constituent Assembly consisted of some of the wisest men and women- great jurists, patriots and freedom fighters. But the fact remains that it was an elitist body of the chosen and not an assembly of representatives of the people. Most of the members were foreign- educated, western-oriented men who were nurtured in British concepts and culture and fascinated by the very British institutions which perpetuated colonial system in India. Neither the ethos and genius of India nor the vision and views of Gandhi or JP seemed to influence them much. Subhash Kashyap hits the nail when he writes that a slave looks to his master as the model and the ideal. He is anxious to copy. It was natural that we looked up to the system and the institutions of our rulers as the best.<sup>21</sup>

Muslim League, a major constituent in the original plan stayed away from the Constituent Assembly. Highlighting the crippling shortcomings of the Assembly, Gandhi asked Congress to boycott it as it would not be able to deliver an acceptable Constitution. But Congress leaders had come too close to replace the British rulers, they could no longer wait. Hence they did not heed the advice of Mahatma and went ahead with the task of Constitution making. On his part, Gandhiji was losing hold over Congress leaders and hence was not in a position to impress the power-hungry leaders with his native and revolutionary views.

The actual task of Constitution making was conducted by a few experts among whom Sir B.N. Rau deserves special mention as he was appointed as the Constitutional Adviser to the Assembly in July, 1946 by the Viceroy. Rau, a career administrator, who played an important role in finalizing the 1935 Act in the Reforms Office of the Government of India, was later appointed as Secretary in the Governor General's Secretariat.<sup>22</sup> Rau played a leading role in piloting the prototype draft of the Constitution he had prepared. He guided the various expert committees on different aspect of Constitution in the making. He almost singlehandedly collected material from abroad. With minor changes, it was Rau's prototype draft which formed the crux of the final Constitution.

Rau's role in the Constitution making has been frankly accepted by eminent members of the Constituent Assembly. "If Dr. B.R. Ambedkar was the skillful pilot of the constitution through all its different stages, Sri B.N. Rau was the person who visualized the plan and laid its foundation", writes Dr. Rajendra Prasad, the President of the Constituent Assembly<sup>23</sup>. But, what has not been properly realized and openly accepted is the significance of his role as an agent of Viceroy in the Constituent Assembly, to whom he was responsible. In fact, Rau also oversaw the framing of Constitution in Burma.

Most crucial fact about Rau's draft and also the final drafts (initial and later) was that they were based on the Government of India Act of 1935. Dr. Ambedkar confirmed the import from the 1935 Act in the following words, "As to the accusation that the Draft Constitution has produced a good part of the provisions of the Government of India Act, 1935, I make no apologies. There is nothing to be ashamed of in borrowing. It involves no plagiarism. Nobody holds any patent rights in the fundamental ideas of a Constitution." <sup>24</sup> It is interesting to note that Dr. Ambedkar, up till 1945, was not in favour of constituting a Constituent Assembly as in his opinion the task of an Assembly would merely be to duplicate the work done by the 1935 Act.

The Government of India Act, 1935, was the culmination of the constitutional reform process initiated by the colonial rulers after the Great Revolt of 1857, to merely secure the Empire. Through the various installments of periodic reform in the year 1861, 1882, 1892, 1909 and finally 1935, colonial administration, in successive stages tried to counter nationalist challenge by introducing and fomenting the divisive tendencies of class, interests, caste, creed and region. An example would suffice here. In 1907 when Minto-Morley reforms were in the making and British officials were considering the proposal of separate electorate, R.C. Dutt (a civil servant and economic historian, twice elected as the President of the Indian National Congress), made a prophetic analysis of a system of elections based on classes, castes and religious creeds:

To create electorates or hold elections in India according to caste and creed would be attended with greater danger in the future than in any European country. It would be fanning the embers to a flame which might, under unforeseen and unfortunate conditions, leading to a conflagration. It would be creating jealousies, hatreds and evil passions in every village and in our everyday life. It would be teaching us to disunite, to vote according to religion, to nurse sectional differences, and to rekindle dying hatreds and jealousies. It would assuredly lead to an increase of religious riots and disturbances in the future... <sup>25</sup>

Why did Constituent Assembly accept a constitution which to a large extent was the continuation of the colonial legislation designed to divide Indian people and prolong British rule over India? Congress leadership of the pre-independent period consisted of staunch patriots and great intellectuals of the age. But it cannot be denied that they were working in the midst of very difficult circumstances – Hindu-Muslim partition was imminent and other partitions could not be ruled out. Also, almost the entire nationalist leadership, as described earlier, had inevitably come under the influence of colonial ideology according to which India was still far from becoming a nation due to her diversities and complexities. In short, there was a tacit understanding among the important members of the Constituent Assembly that the biggest challenge before the makers of the Constitution was to maintain the unity and integrity of the nation, at whatever cost.

In a penetrating analysis, Dr. Jitendra Kumar Bajaj dwells upon the circumstances and the attitudes which were instrumental in shaping the Indian Constitution:

"The Indian Constitution was created under extremely difficult circumstances. In the initial phases of the work of the Constituent Assembly it was not clear whether the Muslim – majority areas of the country shall remain within the Indian Union or not. After formalization of the Partition of the country, the Assembly worked under the shadow of the chaos and violence associated with the climactic event



in the history of India. This, along with the prevailing uncertainty about the position of the princely states, created fears about the unity and stability of the country.

Under the circumstances, keeping the administrative machinery intact became the major concern of the makers of the constitution. This perhaps was the major reason why the Government of India Act of 1935, under which the colonial functioning, became the basis of the constitution of free India. ....In the debates ..... the members seem to be worried that granting various freedoms and rights to citizens and states of the Union may weaken the administrative apparatus inherited from the colonial administration. They seem to be constantly hedging the rights of the individuals and the states with a variety of provisos and limitations.

Besides the fear of loss of administrative control, the other major concern that informed the makers of the constitution was their firm belief that the Indian people needed to be guided towards economic and political maturity through the intervention of the state. This belief was partly a hangover of the arguments advanced by the British, who had always pretended that they were in India to provide a paternalistic administration since the people of India themselves were incapable of governing and improving themselves. The belief was reinforced by the socialist milieu of the times. Those were the times when almost everyone in the world believed that the economic and political development of nations was the responsibility of national bureaucracies.

This fear of the political and economic immaturity of the Indians led the makers of the constitution not only to provide constitutional protection to the colonial administrative machinery, but also to give extra-ordinary powers to the judiciary to oversee the functioning of the political legislatures. The makers of the constitution, it seems, were not sure that the legislatures chosen by the people of India, who they believed were largely illiterate and politically immature, would act wisely. So they created a judiciary that is known to be more powerful than any other judiciary in the world.

The concern with keeping the colonial administrative machinery intact combined with the fear of the immaturity of the Indian people led to the emasculation of the political executive. The constitution first placed all initiative in the hands of the central government. And then the initiative of the central government was so hedged in by the sanctity accorded to the bureaucratic structures and the all-pervasive judicial overseeing that the political executive at the Centre itself became powerless to initiate anything substantive. The government that came into being under the constitution was thus a caricature of the central government; the colonial administrative machinery remained intact but the power and initiative that vested in the Viceroy and even the provincial governors to direct and purposively utilize this machinery evaporated.

The makers of the Constitution also seem to have believed, along with the colonial British administrators, that India is not one nation, it is a conglomerate of numerous minorities placed alongside an uncaring and orthodoxy-ridden Hindu majority. Therefore there was a deep concern to provide extraordinary constitutional protections for the minorities on the one hand and on the other hand to give powers to the state to act in order to “reform” the Hindu majority. The provisions regarding the minorities were fortuitously kept under some control because the partition had made it imperative for the leaders of diverse minorities to be somewhat accommodative. But, the concern of reforming Hindu society through the intervention of the state remained strong.”<sup>26</sup>

With the Government of India Act of 1935 becoming the foundation of the present Constitution, the evil legacy of the constitutional reform process was passed to the post- independence political system. Soon after the new Constitution began to work, its imperfections began to manifest, leading many to become disillusioned.

By adopting the Anglo-American model for our constitution, India lost the chance to start afresh in consonance with our social reality and historical past. India adopted the colonizers system and ignored native wisdom in community-centric governance. We did not incorporate experiential reality but simply chose to adopt imported ideas. Veteran journalist Jawahar Lal Kaul writes, “After the independence, it was not necessary to go back to the 1750s days. We could have incorporated things we had learnt during the last 200 years. We could have been different from others especially the western world but that would not have been a cause of concern.”<sup>27</sup> Eminent thinker Devdutt rightly points out an important aspect which was altogether missed by the Constituent Assembly, “There were two agendas before the Constituent Assembly; To make India a nation-state, and social reconstruction. Constituent Assembly focused on first and totally ignored the second. Constituent Assembly worked on the assumption that by making India a nation-state social reconstruction would be automatically achieved but this was not to be. ...One thing is clear. That Constituent Assembly ignored the vision of Gandhi, Aurobindo and many others for whom independence meant the reestablishment of Indian civilization”<sup>28</sup>

In a nutshell, independent India could not cut the umbilical cord from its colonial past. Maladies designed to keep it enslaved through fragmentation remained in its body politic only to overgrow worse with the passage of time.

Several scholars have raised the point that besides being created by a very small group of persons (mainly Nehru, Mountbatten, and Rau), the Constitution was drafted in a great hurry. During a recent presentation, Ram Bahadur Rai raised the following points in support of his conviction:

1. T.T. Krishnamachari, A member of the Constituent Assembly, in November 1948 made the charge that Constitution has been drafted in a hurry.
2. There was no serious debate on the nature of political system to be adopted or the available options/ alternative polities in Constituent Assembly.
3. Certain issues such as Prime Minister, President, Governor, Federal Structure, Centre State relations, etc. were debated for a very short period of time.
4. Issues like Political self government (Swaraj), democratic decentralization, Panchayat, right to employment, Cow protection, prohibition, and ancient Indian ideals of governance etc. were mandatory to be included in the new Constitution were never discussed at all.
5. The task of constitution making did not take 3 years as is usually known. Real task took only one week.<sup>29</sup>

A large numbers of constitutional experts are convinced that Westminster model of parliamentary democracy is not conducive for India. Subash Kashyap argues that “The British Parliamentary system evolved through a long struggle between a hereditary monarchy and feudal lords in a small island with a large overseas empire. It is not easy to transplant foreign institutions on native soil. Also, it is not necessary that a system that succeeds in one country would succeed in another as well. For the success of the representative parliamentary democracy of the British type, there are certain pre-requisites like a. The people should have become a nation, b. There must be a general commonality of interests and agreement on fundamental national issues, c. Some economic stability and a certain level of prosperity must have been achieved already, d. There must be relative absence of social tensions and an atmosphere of reasonable peace, e. There must exist some democratic traditions, a more or less homogeneous population and political consciousness among the people at large, f. There should be a well-organized ideologically oriented, fairly stable system of two major national parties. Unfortunately, none of these pre-requisites existed in India at the time of the commencement of the constitution. They do not exist today either.”<sup>30</sup>

Very few people are aware that Dr. Ambedkar, who is considered by many as the chief architect of the Constitution, soon became disillusioned with it. He vented his embittered heart in the Rajya Sabha on 2nd September 1953. "People always keep on saying to me, "Oh you are the maker of the Constitution" My answer is I was a hack. What I was asked to do, I did much against my will." He added: "I am quite prepared to say that I shall be the first person to burn it out. I do not want it. It does not suit anybody..."<sup>31</sup>

### CRITICISM OF THE WORKING OF THE POLITICAL SYSTEM

Some of the significant defects of the Constitution can be summed as under:

1. Present Indian Constitution is not the product of the soil. It is an imported and assembled document. Constitution must be an extension of the indigenous traditions and culture. Then only the common man of the country could feel connected to the Constitution. A big problem being faced in the working of the present Constitution is that its provision do not have democratic precedents like they have in England. Taking advantage of the absence of the above mentioned precedents, the political class has developed political traditions and precedents which suit them but go against the spirit of the Constitution.
2. It is the largest written Constitution based on British model mainly which is unwritten.
3. 118 amendments have been moved so far. This no longer merely reflect the flexibility of the Constitution, but fundamental problem in the working of the Constitution.
4. There are contradictions between constitutional law and the general law.
5. Ninth Schedule, which constitutes a major portion of the Constitution, is a collection of 284 laws, created with the sole purpose of bypassing the courts.
6. Constitutional amendments have become a useful tool for party in power.
7. District Magistrate is an absolute authority in his district. Panchayats, municipalities and other local self government institutions or functionaries have to fully depend on the whims of the District Magistrate .
8. Panchayats and local self government were not discussed by Constituent Assembly.
9. Both State and Central Legislators are elected essentially to make laws, and not to execute them or to adjudicate over them. Yet, under our Constitution, they act as surrogate-makers of the executive or the Ministry, which in turns appoints the judiciary. The legislators are elected by constituencies that can relate to them. They are silhouettes of their areas. They are not necessary experts at law making but capable of representing local sentiments. Once elected, however, some of them become Ministers which calls for executive work.<sup>32</sup>
10. 42<sup>nd</sup> Amendment has made fundamental changes to the constitution.
11. Although the Constitution entails separation of powers between legislature, judiciary and executive; in reality, judiciary is gradually taking over the functions of executive and legislature's powers vis-à-vis judiciary have declined considerably.
12. The electoral system adopted under this constitution has made vote bank politics the chief objective of the political class. Thus, a fundamental conflict has been created between the needs of nation building and the polity established by the Constitution. For nation building, India needs unity and a general agreement at least on certain minimum fundamental national issues. On the other hand, for the power hungry politicians, the highest value is vote arithmetic. Religion, caste, sub- caste, language, region, and similar other primordial loyalties are invoked to divide the people, to create vested interests in

their separate parochial identities and build vote banks. All this seems to have become essential for successful participation in the democratic process.

13. There is a fundamental dichotomy between the constitutional values and the superstructure of the political system. The latter is not oriented or suited to protecting these values and time has come to consider whether our forefathers were wrong in trying to copy the western models and the Westminster system of parliamentary polity.

Bajrang Muni, an organic political philosopher, has dedicated his life to the systemic change campaign and has done seminal work in this field. He is convinced that most of India's current problems are rooted in a singular malady i.e. her Constitution has discarded the societal control over polity. In Indian tradition since time immemorial, society held a pivotal position over individual, state and even religion. Due to its colonial origins, the Constitution has pushed society completely out of the picture. Family and village have no role to play in the current constitutional structure. Gandhiji's vision was to reinstate societal authority, keeping political authority secondary. But the political class which replaced British rulers took over and social authority receded into background. Decline of the power of society resulted in a moral and social decline leading to a spurt in corruption, caste conflicts, communalism, individual crimes, economic disparity and exploitation.

Many nationalist thinkers and workers share Muniji's conception. Govindacharya, another prominent political thinker, argues that "There is a total disconnect between the ancient traditions of India and today's constitution. The present constitution has inverted the ancient Indian four-pillared order of Dharm Satta (religious authority), Samaj Satta (social authority), Raj satta (political authority), and Artha Satta (money power), needed to run a country. Today when it comes to running the polity, Artha Satta seems in the forefront and Dharma Satta and Samaj Satta have become redundant. Centuries of slavery have sowed doubts in our mind about our glorious past. British rulers and anglicized natives saw India through the eyes of Europe. But, even after the freedom from British rule, anglophiles not only continue to look at India from the western perspective, they have made it their mission to turn/transform India into a brown Europe. This psyche, alien to Indian thought and traditions, is clearly visible in the present Constitution. As a result of the disconnect between the constitutional provisions and the basic features of Indian society, there has developed a skewed relationship between State and the society, which can be illustrated through several examples:

- Indian society has traditionally considered family as the basic unit of society. All the traditional rights were vested in family. Whereas the constitution and legal system recognise individual as the basic unit of the society and therefore Constitution and the legal framework derived from it talks about individual rights ignoring the privileges of the family.
- Marriage as a lifelong sacrament is a distinct conception present in Indian society but the modern legal system and individual rights promote divorce, a concept unknown in our past.
- On one hand, Constitution condemns caste privileges and atrocities but on the other hand it recognises caste through reservations and protections. All of us are aware that the electoral system has almost institutionalised caste politics.
- This Constitution has caused social disintegration through divisive politics based on caste, language, gender, and backwardness.

Constitution has squarely failed to achieve the task it set before itself in the form of Preamble. The high principles and values embodied in the Preamble and Directive Principles of State Policy have largely remained mere words on paper and have not been followed or fulfilled in practice.

## SOCIALISM AND JUSTICE

Nehru had vowed that so long as there were tears and suffering, the work of the Constituent Assembly would not be over. He had told the CA that its first task was “to free India through a new constitution, to feed the starving people, and to clothe the naked masses, and to give to every Indian the fullest opportunity to develop himself according to his capacity.” The Constitution was relevant only as an instrument of social change. A Constitution which was not able to solve the problem of the ‘poor and the starving’ was merely ‘a paper constitution-useless and purposeless.’ But the current predicament is unsavoury:

- Poverty is endemic and growing consistently.
- After six decades of independence, our basic problems remains the same - poverty, illiteracy, backwardness, overpopulation, shortage of food supply, unemployment,
- After 1992-93 Indian government has deliberately dumped whatever façade of socialism it used to boast about.

## SECULARISM

The Constitution of India as given to us by the founding fathers did not recognize any state religion. It embodied the principles of non-discrimination of religion among the fundamental rights vide articles 14, 15, 16 and 19. Under Article 25, the Constitution guarantees that all persons are “equally entitled to freedom of conscience and the right to freely profess, practice and propagate religion. Every religious denomination is free to manage its religious affairs (Article 26). No one can be compelled to pay for promotion or maintenance of any religion or to take part in any religious instruction; wholly state-funded educational institutions are barred from imparting any religious instruction (Article 27 and Article 28). The language, script and culture of minorities are protected and no citizen can be denied admission to any educational institution on the ground only of religion etc. (Article 29). Article 30 ensured the right of minorities to establish and administer their own educational institutions.

Thus, the Constitution can be said to have sought to establish a secular order under which the dominant religion or majority of the population does not enjoy any special privileges or preferential treatment at the hands of the state and the religious rights of the minorities were protected in different ways.

But what has happened during the last 63 years is quite different and far off the mark from the vision of the founding fathers. The Constitution has been amended to allow discrimination on communal/caste grounds. Religious minorities as well as religious majority have been converted into political minority and political majority, respectively.

We are still plagued by the virus of communalism. Discrimination on communal grounds are common. Politics of minoritism has led to the disenchantment of the majority. Slogan of secularism is used as mere political expediency. Where there is discrimination between man and man on the grounds of religion, where governors, ambassadors, Ministers and other high functionaries are appointed or not appointed because on the criteria of the community or caste to which they happen to belong to by accident of birth, where even for the highest office of the Head of State, caste and communal calculus are seriously and shamelessly discussed, where there are separate laws and codes for different communities, where the administration of places of worship can be entrusted to Government Officers, where under a 1925 Sikh Gurudwara Act, the state government spends lakhs of rupees for conducting elections for the Shiromani Gurudwara Prabhandak Committee and this Committee controls the huge gurudwara funds and runs the Akali politics, where no government has the courage to enforce the laws with regard to misuse of religion during elections, where parties with communal denominations not only exist but participate in elections, where even fundamental rights are demanded and conceded on grounds

of communities, it has become a cruel joke to evoke the notion of secularism to characterize the nature of Indian state. This constitution has reduced India into a hypocritical nation.

Against the dreams of our founding fathers, as a people and as a nation, we are more divided than ever before. We are all anxious to find and strengthen identities of counter- national narrative. The smallest minority in the country today is that of 'being Indian'.

### THE WAY AHEAD

The only alternative that can be visualized is to reduce the role of the State. The State must be minimalist in its scope and should recede in the background while focussing on security and justice. The society's role should once again be maximalist. All residuary powers apart from the law, order and justice must be vested in the society. There is a need to establish people controlled system (Lok Niyantrit Vyavastha) in place of people controlling system (Lok Niyantak Vyavastha)

### AT INTELLECTUAL LEVEL

1. Intensive research on the origin and working of our political system to clear myths surrounding it and to infuse clarity
2. Redefining the rights and privileges of state and society.
3. Initiating debate on the Constitution in the intellectual forums: universities, colleges, bar councils, etc.

At the level of masses:

1. Taking the debate to electronic and print media.
2. Public awareness through meetings, pamphlets etc.
3. Use of the religious class especially the spiritual teachers could very effectively drive home the message to big section of society.
4. Mass movements to be led by apolitical leaders of the society. The systemic change will never come from the political class as it has vested interest in continuing with the present system.

Any questioning of the Constitution draws a lot of ire from liberals and Dalits. They get perturbed at the very mention of drafting a new Constitution and allege the academic community with hidden intention to humiliate Dr Ambedkar who drafted this Constitution. They also apprehend that it is because of this Constitution that Mayawati, Mulayam and other backward leaders got a chance to come in power and if the new structure is implanted, this might be antagonistic to the rise of backward communities in the echelons of power. Such people should be convinced that their apprehensions are misfounded and there can not be any framework for a political system without the fundamental concept of egalitarianism and non-discrimination.

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## SRI AUROBINDO- JOURNEY FROM OCCIDENT TO BHARAT

Niraj Kumar\*

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### ABSTRACT

Modern Indian history is characterized by renaissance in manifold sphere. The rediscovery of ancient spirit of liberty (svatantrata) not only led to the biggest non-violent independence movement, but it also impregnated the arts and literature, spirituality and religion, ancient thoughts and modern novelty. Sri Aurobindo (15 August 1872 – 5 December 1950) emerges as the most prominent face of this manifold renaissance. He was foremost a thinker and a revolutionary. He was a fugitive and a saint. He was a commentator on Greek drama and interpreter of Indian culture. He meditated over effulgent sun, what he termed as trataksadhna, and himself radiated the fiery thoughts through his columns in Bande Mataram. He had a prophetic voice which could apprehend the coming turbulence of world wars and the breaking of colonial yokes in India. Nowadays many of his ideas are emerging as catechism to define Bharatiyata. But, his journey to discovery of Bharat was not linear, as he like other bhadraloka Bengali family, was groomed in the western education system. This paper reconstructs the transition from Occidental categories of thinking to Indian categories in Sri Aurobindo's early writings.

Keyword: Bande Mataram, Baroda, boycott, chhayamay, Greek, Nationalist, Ramakrishna, shakti, swadeshi, tantra, Vivekananda, yoga,

### BIOGRAPHICAL SKETCH

Sri Aurobindo was born on 15<sup>th</sup> August, 1872 in Calcutta at 4.52 A.M. in the brahmamuhurat. His birth date and India's Independence Day coincides, something which he had inklings a score of years before India achieved independence. When he was 5 year old, he was sent for studies along with his two elder brothers Benoy Bhusan and Mano Bhusan to Loreto Convent School at Darjeeling. In 1879, trio went to England for education and Sri Aurobindo lived there for fourteen years. The brothers were reared first in an English family at Manchester. Later, Sri Aurobindo joined St. Paul's School in London in 1884. In 1890, he got a scholarship for further studies at prestigious King's College, Cambridge. He remained there till 1892. In 1890, he also qualified the toughest examination in colonial India and much sought out job of Indian Civil Service. But, his formative years of grooming in occidental culture began to have counter-movement. British superiority and Greek tradition of western culture had pushed him to the wall. There was no escape but to bounce back with own cultural strength. Aurobindo did not appear for the riding examination after the end of two years of probation. He was disqualified for the civil service. He must have felt pleasantly relieved.

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The destiny had different plan in store for the young lad. The Gaekwar of Baroda was visiting London. Brilliant that he was, Sri Aurobindo was offered an appointment in the Baroda State Service and left England for India, in February, 1893. In a way, the journeys of two towering personalities who redefined Bharatiyata intersected. Exactly this was the moment when Swami Vivekananda was planning to embark on a journey to the west and to propagate the superiority of Indian civilization over decadent Occidental civilization.

Sri Aurobindo remained in the Baroda Service from 1893 to 1906. He became Professor of English and later Vice-Principal in the Baroda College. It was here in Baroda that he was finally rooted in the Indian tradition and got enamored with the ancient Indian scriptures like Mahabharat, Upanishads, and literature of Kalidas. In England, he was given overdose of occidental education upon instruction of his father. But, in Baroda, Sri Aurobindo learned Sanskrit to study Indian civilization, first hand. He was closely following the works both of Indian and western orientalis on Indian civilization. He would read John Woodroffe (Arthur Avalon)'s massive enterprise on bringing out obscure texts on tantra and read Dayananda, Swami Vivekananda, Bankim Chandra Chatterjee for understanding the modern currents in ancient thoughts. After refreshing studies of Indian civilization, he was also getting restless with current Indian condition under colonial rule. The job with the Baroda princely state was a stumbling block for his political activities. He was quite active with propagating Swadeshi philosophy. When the agitation against partition of Bengal flared up in 1905, he left his job as Vice Principal in Baroda College and joined the movement. He came back to Calcutta and took charge as the Principal of the swadeshi-inspired Bengal National College. In a way, if his London days made him to flatter with the western culture, Baroda stay turned him into a radical Swadeshi-proponent. But, this transformation towards discovery of Bharat, which began at political level, soon gripped his soul. Within a decade, Sri Aurobindo underwent metamorphosis and his soul was radicalized into the radiating entity of Bharatiyata.

When Sri Aurobindo landed in Bengal, he was in the forefront of the leadership of the Nationalist faction of the Indian National Congress. He was instrumental in making Tilak as the head of this group. The Moderate vs. Nationalist struggle culminated in the Surat split of 1907 between two factions of the INC. The Nationalist faction of Tilak-Aurobindo-Lala Lajpat Rai put forward the idea of swaraj as the final goal unlike the Moderates who were reluctant to take on the colonizers frontally. Under the swaraj scheme, it was envisioned to create indigenous institutions/organizations in the realm of education, production, trade, governance, jurisprudence and complete non-cooperation with the Government. Swaraj was to move hand in hand with the policy of Boycott of British and foreign goods. In fact, the Boycott was meant not only against the foreign goods but also foreign institutions like British law courts, Government universities and colleges. Sri Aurobindo became the brain of the new movement. Apart from running the Swadeshi college, Aurobindo could see the power of print medium to energize more and more young men to rise up against the demeaning colonial rule. The party financed the new venture a daily paper, Bande Mataram. Sri Aurobindo became the acting editor. The newspaper could run only for a year. This had to close down in 1908. This newspaper emerged as the voice of India in international affairs and domestic political thinking. Sri Aurobindo kept an eye over the affairs in Persia and China, Egypt and Russia. But, Sri Aurobindo was arrested in Alipore Conspiracy case in May, 1908 and implicated in the activities of revolutionaries led by his brother Barindra Ghose. He spent 12 months in Alipore jail. This was the period when he was deeply integrated into yoga. When he came out of the jail in May, 1909; he started a weekly English paper, Karmayogin and a Bengali weekly, the Dharma. On 31<sup>st</sup> July, 1909, he wrote "An Open Letter to My Countrymen" after rumours were afloat about his deportation after certain report was submitted by the Calcutta Police to the British government. Sri Aurobindo was a changed man. He pleaded for passive resistance and rapprochement with the moderates and declared the editorial as

his last political will. Sri Aurobindo stated, "In case of my deportation it may help to guide some who would be uncertain of their course of action, and, if I do not return from it, it may stand as my last political will and testament to my countrymen."<sup>1</sup> In February, 1910, Sri Aurobindo left Calcutta for Chandranagore which was under French control. The experience in Alipore jail was life-changing. He bid goodbye to politics. The work of bringing out Karmayogi was entrusted to Sister Nivedita.

In April, 1910, he sailed for Pondicherry, another French territory and he remained in Pondicherry till his death. He remained in silent meditation for four years. In 1914, he began the publication of a philosophical monthly, the *Arya*. His popular works like *The Life Divine*, *The Synthesis of Yoga*, *Essays on the Gita*, *The Foundations of Indian Culture*, *The Secret of the Veda*, *The Human Cycle*, *The Ideal of Human Unity* appeared serially in the *Arya*. The *Arya* ceased publication in 1921. By this time, Pondicherry Ashram came into existence.

In November, 1926, Sri Aurobindo underwent powerful spiritual experience. All the external work was entrusted to his spiritual collaborator Mirra Alfassa, popularly known as Mother. Sri Aurobindo left his body on December 5, 1950.

### OCCIDENT IN AUROBINDO'S EARLY WRITINGS

While Aurobindo was studying in the King's College and also on probation for the Indian Civil Services, his first brush with writing happened. He wrote a short 1400-word piece, *The Sole Motive of Man's Existence*, in 1891. The manuscript remained incomplete and unpublished during his life time. He was just 19, but his depth of western philosophy was fathomless. He wrote on western ideas with the kind of passion which many British writers could not have dared. In this short script of a conversation among all-European characters in a banquet party, conversation turned on the subject of the Christian religion, wine, women, beauty, sex, blasphemy. All characters had European names- Julian, Helen Woodward, Corydon, Lionel, Powell, Erinna, Dufresne, Philip, O'Ruark, Marc, Pattison Ely, Helen Woodward, Ella.

Julian, a female character enjoyed throwing banquet. The due presence of wine and women made the conversations lively. Aurobindo brings in the name of Greek gods of revelry and drinking, Aphrodite and Bacchus in the script.<sup>2</sup>

When the Greek gods of excesses were mentioned, a character raises the issue of Love.

"Ah but Love is as bottomless as the sea."

"Yet Plato was an excellent diver and brought up the richest pearls."<sup>3</sup>

The conversation turned on the Christian religion and Julian, another character closed the subject by observing:

"The popular Gods should be denied but respected."<sup>4</sup>

Another character Erinna surprised by direct attack, "Yet you couple women and wine in your banquet-room".<sup>5</sup>

The influence of Hobbes, Locke and Rousseau on Aurobindo's writings are evident as he raked up the issue of state of nature. In the script, the characters converse as below:

"Ah, my friend, I only observe Nature's ordinances: in social life sex does not exist. Besides conversation requires speech as well as reason."

"You insinuate?"

"Nature gave man reason, speech to woman."

"To what end has man used reason? To make Truth incredible. To what purpose has woman employed

speech? To say nothing.”<sup>6</sup>

In fact, Aurobindo was totally embedded in the Greek philosophy when he narrates through his character Julian’s voice, “Record me a confirmed Pythagorean .....the soul of Agathon did not perish in Macedonia.”<sup>7</sup>

The young Aurobindo was pondering over the western culture of love and carnal pleasure. This was used to interpret Indian mythological figure of Kamadeva. He wrote:

How then shall I paint the idea of Love? The Greeks have described a child with a warlike bow of horn and bitter arrows tipped with steel, and modern poets inspired by this rude conception have fabled of the smart which is the herald of Love’s shaft. But these ideas however happy in themselves are by no means suitable to Love; for they are without two of his most essential elements, the subtle and the impalpable. The Hindus are more felicitous when they sing of Kama—for poetry alone can express him—the divine and radiant youth mounted on [an] emerald parrot, and bearing in his right hand a bow of flowers; the arrows too must be of the same soft and voluptuous material—for a preference I would name the shefali, the only blossom which has a soul. For Love’s arrow never pains while in the wound—it is too subtle and flower-like...<sup>8</sup>

Such was the infatuation of young writer with the cocktail of love and wine that he records through the character of Marc, “Love is spiritual champagne, the best of wines if the briefest.”<sup>9</sup>

But, the undercurrent of spirituality made infrequent eruptions in the young mind. His character, O’Ruark dissented on the issue of love with other friends, “It is a strange mania which everyone is bound to catch, mostly at a certain age—in short the spiritual measles.”<sup>10</sup>

The script which remained incomplete ends with the following scene:

“Night flew on wing’ed feet and the wine was in their speech. At last the ladies rose and left the room; to the heart of Ella it seemed as....” [incomplete]<sup>11</sup>

#### CONFLICT OF OCCIDENT AND ORIENT IN THE HARMONY OF VIRTUE (1892)

His next work which again remained unpublished during lifetime was extensive and he introduced Indian character in the conversation. This clearly establishes Aurobindo’s gradual disenchantment with alien philosophy and musings. The Harmony of Virtue contains the record of writing as “May 1892” towards the middle of the manuscript. This was again written when he was in the King’s College. He referred to The Harmony of Virtue when he wrote late in his life: “It is true that under his [Plato’s] impress I rashly started writing at the age of 18 [more likely 19] an explanation of the cosmos on the foundation of the principle of Beauty and Harmony, but I never got beyond the first three or four chapters.” Yet, the name of the principal character was no longer British or Greek. It was an Indian- “Keshav Ganesh Desai”, perhaps derived from Aurobindo’s real-life friend at the Cambridge, Keshav Ganesh Deshpande. The main conversation revolves around two characters- Keshav Ganesh and Broome Wilson. Aurobindo could see the decadence of the western civilization behind the high-flowery intellectual outpourings. His character Keshav argues,

“In Rome the triumphal chariot of Corruption was drawn by the winged horses, Culture and Art. And it is always so. From the evergreen foliage of the Periclean era there bloomed that gorgeous and overblown flower, Athens of the philosophers, a corrupt luxurious city, the easy vassal of Macedon, the easier slave of Rome. From the blending of Hellenic with Persian culture was derived that Oriental pomp and lavish magnificence which ruined the kingdoms of the East. And Rome, their conqueror, she too when the Roman in her died and the Italian lived, when the city of wolves became the abode of men, bartered her savage prosperity for a splendid decline.....Yes, the fullness of the flower is the sure prelude of decay.”<sup>12</sup>

Aurobindo swings the narrative to India. Since Kalidas's *Shakuntala* was very popular for its romantic tale and the spiritual personality of Aurobindo was coming to the fore, he wanted to harmonize the romantic tales in Kalidas with the fullness of India's ancient past. He picked up the history of Vikramaditya and discussed how the "mightiest marvel of all were the philosophers." But what was Indian philosophy during the fullness of its civilization? This was the God as the supreme goal. Aurobindo interprets Indian history differently. India lost to barbaric Muslim invaders because it was more civilized. More civilized a society becomes, more feeble it turns and thence prone to conquest by the less civilized marauders. Aurobindo's character Keshav mentions,

"What a Philosophy was that! For she scaled the empyrean on the wing`ed sandals of meditation, soared above the wide fires of the sun and above the whirling stars, up where the flaming walls of the universe are guiltless of wind or cloud, and there in the burning core of existence saw the face of the most high God. She saw God and did not perish; rather fell back to earth, not blasted with excess of light, but with a mystic burden on her murmuring lips too large for human speech to utter or for the human brain to understand. Such was she then. Yet five rolling centuries had not passed when sleepless, all-beholding Surya saw the sons of Mahomet pour like locusts over the green fields of her glory and the wrecks of that mighty fabric whirling down the rapids of barbarism into the shores of night. They were barbarous, therefore mighty: we were civilized, therefore feeble."<sup>13</sup>

But, Greek references still conjure up images in young Aurobindo's mind. Sri Aurobindo while referring to a fictional character Vallabha Swami compares him to the Indian Epicurus.<sup>14</sup>

By the end of the year 1892, his drift both in idea and geography began. One of his last recorded musings in London was that of *Stray Thought* in which he contrasts Greek and Hindu mythology:

"One step beyond the sublime & you are in the grotesque. The Greek mythology was evolved by poets and sculptors; therefore it is beautiful. The Hindu mythology fell into the hands of priests and moralists; therefore it has become hideous."<sup>15</sup>

Before bidding goodbye to the west, Aurobindo picked up two powerful tools for his writing in India, which later became characteristic of his lyrical powerful writings. Aurobindo admits in his musings, *Stray Thought*,

"It was Meredith who taught me that the epigram is the soul of style, and Plato who whispered that rhythm is its body. Words are the texture of the flesh and sentences the system of hard matter that gives it consistency: the texture of the flesh may be coarse or delicate, and as you design so you shall build."<sup>16</sup>

## ENCOUNTER WITH YOGA-THE CHALICE OF TRANSFORMATION

Aurobindo arrived in Baroda in 1893. While he was engaged in his service and writings in English literature, he also followed the Ramakrishna-Vivekananda movement closely. After Swami Vivekananda left the world on 4 July 1902, his daughter like disciple, Sister Nivedita began to tour India to spread the revolutionary message of Swami Vivekananda. Since Sister Nivedita is said to be an inspirational figure for the revolutionary extremists and forced out of Ramakrishna Mission after the monks accused her of sheltering the young revolutionary nationalists in the premises, her nation-wide tour might be seen as reinvigorating the patriotic and revolutionary spirit among young literate class across India. When she visited Baroda in 1902, she met young Aurobindo and greeted, "I hear, Mr. Ghose, you are a worshipper of Shakti". Nivedita herself was a worshipper of Kali and she wrote an inspirational book on Kali for the revolutionaries. Even the Japanese artist Okakura could not resist the devotion for the terrible Kali and he wrote the radical, anti-western work,

The Awakening of the East in 1903 with explicit reference to Kali and exhorted to not resist the temptation of sword while fighting the colonial rulers.

It was after this brief encounter that Sri Aurobindo began his practice of yoga in 1904. The spiritual practice and Sanskrit studies progressed in tandem. This was the phase when Sri Aurobindo started writing about Indian culture and civilization. But his spiritual transformation accelerated only when he deepened his spiritual practice in Alipore jail in 1908-09. He had spiritual communion with Ramakrishna. In a letter to Motilal Roy dated August 1912 or after, Sri Aurobindo wrote,

“Remember also that we derive from Ramakrishna. For myself it was Ramakrishna who personally came & first turned me to this Yoga. Vivekananda in the Alipore jail (again, not physically but in the occult plane) gave me the foundations of that knowledge which is the basis of our sadhana.”<sup>17</sup>

After this guidance, he had vision of Swami Vivekananda for two weeks in Alipore jail. He wrote:

“It is a fact that I was hearing constantly the voice of Vivekananda speaking to me for a fortnight in the jail in my solitary meditation and felt his presence.”<sup>18</sup>

Sri Aurobindo was released from custody in May, 1909. He was spiritually transformed. He records his experience about these changes in his diary immediately after his release dated 18th June 1909:

“Afternoon. All liberty of bodily movement being steadily taken away. Second voice in brain. Sri K.’s voice once in heart. “I come to slay.” First voice sometimes rises from heart still to take its place in brain. First has personality, second none as yet. Night. Bhava of Avesh in steamer shaking body; also in Kalimandir and on way to lodging. Swarupa bright star on dark background. Thin Nil triangle with very sharp apex like old Hindu pinnacle, a bright golden line in the middle.”<sup>19</sup>

Sri Aurobindo was in close interaction with Sister Nivedita when he started Karmayogi. In fact, Sister Nivedita informed him about impending deportation after which Sri Aurobindo left Calcutta and went to French territories. Sri Aurobindo’s relationship with Ramakrishna-Vivekananda movement has not been properly assessed. But, it is evident that the major influence over his life was that of three personalities, Sri Ramakrishna and Swami Vivekananda as subtle bodies (in vocabulary of Sri Aurobindo) and Sister Nivedita as the manifestation of dynamic Shakti.

Sri Aurobindo began to practice meditation over the Sun. He learnt the technique of Chhayapurusha meditation over the Sun in which one can create the actual shadow personality of a person through the power of mind. While doing such a practice, Sri Aurobindo records, he encountered chhayamay of Sister Nivedita. She was the spiritual mother of Sri Aurobindo. This event is recorded in his diary on Feb 6<sup>th</sup>, 1911. Soon after, Sister Nivedita took her last breath in Darjeeling on 13 October 1911, a few days away from her forty-fourth birthday. She too was free from physical limitation. Sri Aurobindo was happy to have regularized trikaldrishti at the end of 1911. He records in his diary on January 14, 1912:

The siege will be over in ten minutes.

Lipi. “Efficient tapas”. Interpretation. “commences from today.”

“ “European civilisation in extremis”.

“ 21years of strife before Indian civilization is willingly accepted in its flawless perfection.”<sup>20</sup>

Sri Aurobindo was certain that western civilization is falling and Indian civilization will again rise to the occasion. Therefore, when the First World War started, Sri Aurobindo launched the magazine Arya which carried his major enunciations on Indian culture and civilization like The Renaissance in India, “Is India Civilised? A Defence of Indian Culture. Sri Aurobindo came full 180 degree within a span of two decades. His

works on Indian culture and civilization remain to be interpreted with new perspective and one may discover how spiritual gossamer and innate Bharatiyata unites and weaves the personality of Sri Ramakrishna, Swami Vivekananda, Sister Nivedita and Sri Aurobindo.

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## FOUR DECADES OF WOMEN IN BANGLADESH: CHANGES AND CHALLENGES IN EMPOWERMENT AND DEVELOPMENT

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### ABSTRACT

Bangladesh emerged as an independent state in 1971. Subsequent nationalist history of the state glorified ‘men’ as savior and the women as ‘victim’. The issue of women empowerment has been in the public domain but the presence of women in decision making club has not yet resulted in active participation in nation’s power centers. Patriarchal society creates consolation by establishing quota and the market force capitalized on the cheap and attractive labor of women. The traditional mores in the society further complicates issue of identity with predetermined notion of “Women’s Ideal Role” and to choose among ‘Bengali’, ‘Muslim’, ‘Hindu’, ‘Modern’, ‘Rural’, ‘Urban’, ‘Ethnic’ and other categories of women determined by its own set of moralities and standards. This paper is an attempt to draw a general but comprehensive picture of the present situation of women in Bangladesh.

Keywords: Bangladesh, Empowerment, Gender, Equality, Women.

### INTRODUCTION

“Day passes, at night my eyes are shaded with tears. There is no one and no light in the evening in my hut. My husband says, what is the necessity of lighting a lamp, as there is no child in this hut? To him, spending fuel for a lamp is a waste of money for an empty hut. He remains in the mosque or roams around in the bazaar to pass the time. He comes back late at night. For me, only the darkness and loneliness remain as friends forever. No one realizes there is a person inside the dark hut; my existence diminishes with the darkness. Everyone forgets that I am alone in the dark.”

Hiramon, aged 31, a childless woman in a village  
(Quoted in Nahar and Richters, 2011)

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“If a male construction sector helper earns Tk.220 a day, doing the same work a female construction sector helper would get Tk. 160–180 a day. We women workers receive 30–60 taka less than a man; we feel bad but can’t do anything. The sardars [leaders], contractors and male co-workers say women can’t climb stairs carrying heavy loads like men, can’t cut earth the way men do, so it is obvious that they would get less than men. However, the fact is this is an excuse to give us fewer wages.”

A female construction worker in Sylhet, aged 43

(Quoted in Choudhury, 2013)

“Women’s participation in politics fully depends on the husbands’ attitude. Many husbands now allow their wives to get involved in politics, because husbands can be successful in business through the political connections of their wives. Besides, the position of the wives enhances the status of the family. After getting that, husbands do not let their wives work for politics.”

A female Member of Parliament

(Quoted in Chowdhury, 2009)

“After my oath I went to the chairman and asked him to assign me some work. The chairman became annoyed and said the government has brought out the women from their houses to create unnecessary trouble in the Union Parishad. [He said] “What will you do in the Union Parishad? Go upstairs and sit with my wife and spend your time. I do not find any work for you. No specific work is mentioned in the manual for women.”

Hasnehena, a Union Parishad Member

(Quoted in Mukhopadhyay and Meer, 2004; Mukhopadhyay, 2005: 33)

“A policeman asked another policeman to take off my blouse, so that I could not join in the procession again. Police poked different parts of my body with sticks. After viewing my pictures in the newspapers, I thought that I could never show my face to anyone. Once I thought to commit [sic] suicide.”

Moni Begum, a female activist

(Jai Jai Din, 18–24 May 1999, quoted in Chowdhury, 2009)

In many ways the above comments reflect some significant aspects of women in Bangladesh. Since the independence of Bangladesh, especially in the last two decades, slogans of women’s empowerment are meme. From Union Council to the Parliament, from micro-credit program to national budget, from ready-made garments to the armed forces; the issue hogs the centre stage. The discussion on empowerment of women has entered the mainstream but the major limitations are found regarding women’s actual presence either ornamentally or turning them into victim except few high profile instances. Women have come to occupy some space in the political institutions either as the alternative of men or to beautify the space. Their issue is often raked up in media, but in most of the cases either as victim of sexual violence or as sexual object. They are in work force only to be used as cheap labor or as symbol of customer attraction.

Can a genealogy of this permanent subjugation of women be drawn? Exactly how true is the empowerment of women in Bangladesh? What are the impacts of national and international developing agencies which focus



on facilitating women empowerment initiatives, and often take political initiatives to bring them into decision making orbit or market driven demand for women labor?

This article is a humble attempt to draw the comprehensive picture of women in Bangladesh. This kind of effort to discuss about women is usually limited by generalization. In this article, we have followed mainly the secondary sources to bring out a comprehensive picture on women empowerment in Bangladesh.

#### WOMEN'S UNIVERSAL STRUGGLE AND THE BANGLADESHI NARI

The history of women in this world has its own dimension and continuity which includes their captivity, struggle, frustration, hopes, changes and challenges. The universal subordination of women is evidently found everywhere through the course of time. Either from the East to the West or from the North to the South, women have been following the ideals established within the precincts of male dominated society. Women had to win all the eligibility through their sacrifice. Although Bangladeshi women, as half of the total population, are equal to men in numbers; during last four decades of independence, they continue to face hurdles and harsh challenges. Somewhere, liberty in true sense is a mirage for them in the constrained societal environment and political structure. Bangladeshi women live in a patrilineal and patriarchal social system by custom. From birth to death; women, here have to go through restriction, suppression and domination which disable them from getting true freedom and rights. As a developing country, Bangladesh is trying to achieve basic development goals and expectations. But true achievements will come only when this significant half of population would get actual rights and access.

In Bangla literature, women are often compared with flowers. But how can the flowers bloom into spring if it is forced by various constraints? It is a flower that grows in a prison. They are guarded and tied up with the ropes of male dominance. They act and do as the society expects them to act and do. In a country like Bangladesh, society has established a standard for women where women are still treated as inferior. Historically, well-known patriarchy has manifested itself as a very invincible notion which regulates social, cultural, economic, religious, political and legal arenas of Bangladeshi women's life. As an independent country Bangladesh has left behind more than 40 years survival. In this journey, we have to see how many miles have been passed in achieving dignity, justice, rights and status of women. Society has got some positive changes in its approach and perspectives which has helped women to come out from their barriers and boundaries. Still, basic challenges are waiting to confront them where they are put to fight against so many problem oriented obstacles.

Writing history of women requires particular insight that is already best described in Joan Kelly's statement, 'Woman's history has a dual goal: to restore women to history and to restore our history to women' (Kelly, 1984:1). Women history is not a simple history; it is herstory- a fluid genre that consists of their extended journey, a historical expression of women's own being. The secondary position and subordination of women is universal in modern societies. It was not so during the early dawn of civilization. Historically, there were flourishing matrilineal societies. Remnants are still found among Garo from Mymensing, Khasi from Sylhet and Meghalaya, Bangladesh and India respectively, so are from Mosuo in Yunnan, China. But with the emergence of the notion of private property and family, women's responsibility started getting uprooted from their previous position and status. Friedrich Engels wrote, 'Destroying matrilineal system was such a global historical defeat of women. Men captured even the authority of household. Thus women became subjugated; as chained they became rather a machine of reproduction' (Engels, 2002:41). Well known feminist writer and philosopher Simone De Beauvoir noted, "the evolution of woman's condition is to be explained by the concurrent action of these two factors: sharing in productive labor and being freed from slavery to reproduction" (quoted in Stearns, 1978: 3). According to the philosopher Gerda Lerner, 'Patriarchy was not a significant event; rather it was a moment in the big historical canvas from where the male domination got started'. (Quoted in Barua, 2011:

77). August Bebel argues that during the transition from savagery to barbarism, matriarchy was replaced by patriarchy. Subsequently through the gradual stages of civilization, women were created as gendered subject with characteristics deprivation.

Historically, Indian sub-continent including Bengal had matrilineal systems in many places as well. In the province of early Rarho, Shukhna, Tamralipi, Harikel, Gourha, Samatat and Banga, there were different ethnic groups like Kol, Bheel, Munda, Shabar and Nishadas who used to follow matrilineal system in many ways of their lives (Falguni, 2010:20). Women were comparatively free. But the changing pattern of power applied by men began to push women into subjection. Women related concerns in Bengal got a new fillip during the British era and emergence of Bengali Bhadrakalok class. Much of the rare documents about women from society's subaltern classes are still to be retrieved and deciphered.

From 16th to 19th centuries, various radical socio-political changes began to roll. With the industrial revolution in western countries, participation of women in societies increased. From the fifth to the seventh decade of the 20<sup>th</sup> century, rise of nationalist and feminist women movements as well as writings on woman issues, opened a new chapter for their existential liberty. Particularly since 1970, feminist philosophical approach formed a distinct shape. This time women moved forward with theoretical analysis and explanation with their protests (Maytra, 2007:21). In the Indian sub-continent ideas regarding women began to gather steam since late 19<sup>th</sup> century. The participation of women in resistances against British colonial rule initiated a nationalist motivation (Begum, 2002:15-17). In the meantime, banning the practice of burning sati and remarriage of Bengali widow created milestones in positive thinking for women. In Bengal, the sacrifice of revolutionary Pritilata Waddadar and the enlightened voice of Begum Rokeya has become the milestone in discourse about women empowerment. Bangladeshi women took strong part in Language Movement of 1952, Mass Uprising in 1969 and in the Liberation War of 1971 against West Pakistan's brutal colonial regime; ignited flame that has brought courage and inspiration to today's women in Bangladesh. In 1971, large number of women in Bengal fought, suffered, got injured and became war-affected. Women's participation was extensive. Women from all places rendered support to the freedom fighters. With the joint collaboration of men and women, Bangladesh won liberty and established independence and sovereignty. But the nationalist history of Bangladesh silenced the voice of many women in protecting the honor and chastity of mothers and sisters. This self-assumed role of protector establishes the hegemony of men over women. Narratives of the war, while accounting for the death did not enlist the name of women who died or were raped. In the list of shaheeds, only the name of two women who were members of intellectual group was included. (Mohsin, 2004)

Struggle of women never ends. Women in Bangladesh continue to fight for establishing a regime of equality, rights and dignity. They have experienced changes and have tough challenges in their own land. In Bangladesh, concerns and thinking exclusively regarding women, were becoming more apparent at the beginning of 1980. National and international, both factors were quite influential in these matters (Muhammad, 2012: 105-111). Today, Bangladesh for women is no longer a compact notion.

#### WOMEN IN BANGLADESHI SOCIETY: UNDER THE VISIBLE AND INVISIBLE VEIL

When one talks about the women in Bangladesh, we usually think of veiled women in villages and modern women in urban centers. But the veil which stereotypes women in Bangladesh is much more than being a physical signification. Religion, nationalism, ethnicity, state, modernity-all in Bangladeshi context have their own determined set of moralities both for men and women. Therefore, a woman in Bangladesh is not just a woman; she is expected to behave as a Muslim women, Hindu women, Bengali women, Chakma women, modern women etc. Whoever she may be, she has to fit in a type and has to perform the roles set by moral authority.

From the existing literature on women's health, nutrition, education, economic activities, labor and empowerment, political and legal condition, matter of equality and status; they are seen comparatively inferior to men. Tied however, the changing pattern of women's role, participation, mobility and empowerment is getting visible. Changes in mentality, awareness and consciousness, supportive actions towards women demonstrated by social institutions, national and international initiative are having positive effects.

In spite of having made certain achievements in women's life, these are yet not satisfactory for building a gender- equitable society. Gender discrimination is widespread in all features of society. Bangladesh's constitution though guarantees equal rights to every citizen, in the issues relating to family, marriage, divorce, inheritance and conservation- traditional laws are followed which are often discriminatory against women. Women are disadvantaged at receiving proper healthcare. The maternal mortality rate is still high. The progress in enrollment of female children at primary and secondary school level is still slow. In political engagements of society, women face threatening challenges. Poverty usually affects majority of poor women, children and women- headed families. Empirical data, taken from surveys across developing countries including Bangladesh show, households below the poverty line is suggestively higher for female-headed families (ADB, 2001:x). Economically, a huge number of women are working in numerous sectors in both rural and urban areas, but their security, wages and rights are not properly granted. Bangladesh also faces challenge of insecurity of refugee women. Problem regarding the insecurity of minority and indigenous women is also in the radar of policy makers.

#### FOUR DECADES OF PAID AND UNPAID LABOR: WOMEN WORKERS IN INFORMAL AND FORMAL SECTORS

Marxist philosopher Rosa Luxemburg in her *The Proletarian Woman* writes,

"The woman of the people has always worked hard. In the savage horde, she carried heavy loads, collected foods; in the primitive village, she planted grains and ground them, and she made pottery; in ancient times, as a slave, she served the masters and suckled their offspring at her breast; in the Middle Ages, she labored in the spinning room for the feudal lord. But since the establishment of private property, the woman of the people has, for the most part, worked separately from the great workshop of social production, and therefore also of culture, cooped up in the domestic constriction of a miserable familial existence. Capitalism was the first to rip her out of the family and put her under the yoke of social production, forced into other's fields, into workshops, into buildings, into offices, factories and warehouses."

(Cited in Hudis & Anderson, 2005: 243).

The concept, Labor of woman became an international phenomenon. Women confronted ups and downs by following the changes in global economy and politics. Coming through different events and from the various fields of financial stages, uncounted and undocumented women came out to take financial responsibilities for their survival and family. Before Bangladesh's independence, during the 1960s, numbers of landless family increased. Sometimes they were reduced into acute rural proletarian families. In spite of having unequal wages and pattern of hard work, they became engaged into diverse working sectors. Similarly, from 70's and 80's in the national and international market, cost of livelihood suddenly became high. In many ways, women from middle class families began to start engaging themselves in various professional working sectors in urban areas. Increase of number of Bangladeshi women in labor market was also the outcome of domestic economic hardship and the integration of Bangladeshi economy with global economic order. Expanding activities of national and international organizations to some level, influenced labor of women. In this process, they brought women in different development scheme and microcredit programs. On the other hand, Bangladesh began to

provide comparatively cheap women labor in industrial market.

The rural women of Bangladesh are ruthlessly disadvantaged. 80% of women used to live in rural areas in the late 80's. Among them, 70% of rural women were small cultivator, tenant, and landless households. Some of them worked as day laborers, part time or seasonal laborers. They used to provide labor in post-harvest activities and other small tasks. 15%-20% of women, mostly in poor landless households, depended on casual labor, collecting, begging, and other irregular sources of income. Their income was vital to household survival. The other 10% of women were in households mainly in the professional, trading, or large-scale landowning categories, and they usually did not work outside the home (Wikipedia, 2013). In fact, women are fulltime workers in their families and households where their contribution is unacknowledged most of the time. In rural agricultural society, patrilineal ideals seem to be very strong. Major portion of rural women never get introduced to education in formal. Though investment of women's labor makes a sizeable contribution in total agricultural production; they do not have legal or social recognition for their labor. It is notable that men are addressed as peasant because they have ownership of lands. On the contrary women are never addressed as peasant as legally they do not own lands (Parvez, 2000). In agriculture, during cultivation, women play the vital roles in pre-harvest and post-harvest activities. But these are considered as extension of women's regular household responsibilities. On the basis of the economic activities of rural working women, their labor is divided into two segments. Labor for own household and outside home. In families, rural women are ensuring all the existence of succeeding generations from childbearing to rearing. In attending to it, they are also doing the other necessary extended activities. Additionally, at the same time they are doing socially recognized outer economic activities like serving as day laborers, working in road constructions, small business within micro-credit scheme etc. The rural women who do not work outside, their activities are divided into two parts as well. One is making incomes through rearing livestock, selling vegetables, sewing products, making cloths and processing dry foods etc. Another one is cooking, maintaining household jobs, gathering-collecting-making dry foods etc. (Muhammad, 2012:126-129). This is amply evident. Women in rural sectors share much of the workload. They are visible and invisible workers in our economy. It is seen somewhere that indigenous women workers are less paid than majority of women laborers. They face work and wage related discriminations in various other ways. Often their payments are delayed, they are paid partially and sometimes even they face physical harassment (Chakraborty, 2004:64). Changes in working pattern have come but in matter of recognition, Bangladesh has to work hard.

Due to the changing pattern of the economy, women came out from their house and sought employment outside their home in urban areas. Before independence there were 0.8 million of working women (Begum, 1988:56). Liberation war was the most significant breakthrough as these men-women equality was enshrined in constitution, and official recognition was extended for women's labor. Because of the rehabilitation of women, quota for freedom fighters family, development schemes for post-war affected people; gradually women were engaging themselves in outer working spheres. Besides, poverty, famine and starvation also compel them to work outside. In a report, Female Status in Bangladesh published in 1980, it was mentioned that in 1975, just after the famine, under foreign authorized food for work project, 30% of included workers were women. Without any kind of encouragement or campaigning, women came willingly to do hard physical labor like digging soil and canals for sanitation and irrigation, road construction, constructing dam for flood management etc. Undoubtedly, these women's economic demands were so acute that, this left the previous socio-cultural bindings behind (Casters, 1992:104). In the last two decades, particularly employment of younger women has been on rise. Poor women found their job scopes in various informal sectors along with brick fields, building roads, construction sites, glass and electronic factories, tobacco and chemical factories, garment factories, shrimp factories, small handicraft sectors and tea gardens etc.

For last three decades, the number of women workers in the garment sector increased very fast. In fact garment industry is the most important working sector for working women now. The major part of export income comes from this sector. But in this sector workers are facing unsecured working atmosphere. Recent tragic events at Tazrin Fashion and Savar Rana Plaza killed more than thousand garments workers most of them being women. These garment factories do not pay proper wages or provide proper job environment, trade union rights, facilities and necessary human security. Even thence, more and more women laborers join the sector each day. As per government statistics, almost 1.8 million new laborers join workforce every year, majority of them are women. In Bangladesh, 90% of working women came from the process through economic marginalization. There are no such effective legal organizations or institutions who can talk in favor of them (Jamali, 2012:78). In Bangladesh, participation of women in national-international organizations, teaching, health care, research sectors has increased in last two decades. In fields of business and commerce, emergence of women entrepreneur is picking up pace. In numerous urban areas including big cities, women are joining white collar jobs. Positive changes in women empowerment are quite significant in urban areas of Bangladesh.

#### WOMEN IN POLITICS: WOMEN'S MOVEMENTS AND THEIR POLITICAL EMPOWERMENT IN THE CONTEXT OF BANGLADESH

Politically, Bangladesh is a very dynamic state. For many years of colonial dominance and oppression, as well as historical ups and downs, people of this country upholds unique political features in their worldview. History of political empowerment of women in Bangladesh does not hold a long period of time but it has always been demonstrated in a qualitative way. In the past, women luminaries like Begum Rokeya, Sufia Kamal, Ila Mitra, Pritilata Waddeder showed immense courage. The British era had stages of movements for independence and revitalization of society. Women's movements during Pakistan period and post-independence age had socialist philosophical influence and effect of nationalist ideologies (Guhathakurata, Begum & Ahmed, 1997:186-187). Later, these practices paved out for democratic rational. Many small organizations of women stood against socially discriminatory class related issues and exiting patriarchal practices. Call for equality, approaches to weakening gender discrimination, protests against violence, torture, and against fundamentalist's activities in society has been effective in crystallizing women issues and solidarity.

Women's right to political participation is a universal recognized phenomenon. But still there are gaps between official formal politics and meaningful exercise of solid political implementation. Patriarchal attitude in society, cultural factors, religious and economic factors, legal, political, organizational and psycho-biological factors are equally responsible for this lagging behind. Since independence, Bangladesh achieved unique political changes, though effective degree of participations are needed to build further participation. Presently, the Prime Minister and the leader of main opposition party and even the speaker of the national parliament are women. When we estimate degree of general participation, it is quite low. Bangladeshi women got their voting rights in 1972. The Constitution of Bangladesh proclaims equality of all citizens before law (Article 27). It noticeably affirms that: (1) steps shall be taken to ensure participation of women in all spheres of national life, (2) women shall have equal rights with men in all spheres of state and public life (Article 28(2)). (Khanam, Khanam & Khan, 1996:91). Besides, in other big political parties of Bangladesh, presence of women leadership is comparatively low. National parliament is the highest institution for adoption and implementation of law and rights. There must be suitable formation of parliamentary structure where women representatives can ensure their seats and participate in meaningful policy deliberations on equal basis. With this objective, after independence of Bangladesh, to ensure female participation, Article 65(3) was added in the Constitution by reserving 15 seats for women for next 15 years. In the year 1979, reservation of seats had been expanded with 30 more seats which were to expire on 14th April, 2001. This law has been abolished again (Begum, 2002:99).

Table 1 reveals that during the year 1972 -75; there were 33 full male ministers while none from women. The number of male state-ministers was 17 and for female it was merely two. Between the years of 1975-82, number of full male ministers was 63; where female ministers were again two only. During same years, number of male state-ministers was 38 and female ministers only four. During the years 1982-90, number of full male ministers was 85, while that of females only three. Male and female state-ministers were 48 and one respectively. During the year 1991-96, male and female full ministers were 20 and one, whereas male and female state- ministers were 16 and two. The respective figure for the year 1996- 97 were 14 and 3. From this numbers it becomes clear that participation speed of female members was slow (B.B.S Report, 1997 in Begum, 2002:101).

Table 1: Women's Representation in Parliament, 1973–2013

Parliament	Reserved/ quota seats for women	Women in elected / general seats	Total number of women MP
1st Parliament (1973–75)	15	0	15
2nd Parliament (1979–82)	30	2	32
3rd Parliament (1986–87)	30	5	35
4th Parliament (1988–90)	0	4	4
5th Parliament (1991–95)	30	4	34
6th Parliament (1996–96)	30	3	33
7th Parliament (1996–01)	30	8	38
8th Parliament (2001–06)	45	7	52
9 <sup>th</sup> Parliament (2009 -2013)	50	19	69

Source: [www.ecs.gov.bd](http://www.ecs.gov.bd) ; Pandey, 2008.

Women's participation in local government is also showing some signs of change. There are reserved seats for women in every municipal and local government sector. Local government has two way systems. These are Union Parishad and Zilla Parishad. Before 2000, the number of reserved seats was 4,434 and 64 respectively. At city level, there were 6 city corporations and 119 municipalities. In every sector, the number of reserved seat for women is three. In the year 1997, government opened a new chapter to establish direct election system containing women leadership with adding "Ka" dhara of Union Parishad Ordinance 1983. It was the implementation of women rights even at grassroot level. This step was very encouraging for all. Women candidates during local elections rose to about 45000 for 12,882 seats. Direct election was conducted on these three seats under each Union Council. This event was very inspiring and had positive influence in favor of ideas regarding leadership of women and their consciousness of political rising. From the report of election commission it is clear that in this election, 85% women voted (Begum, 2002:101).

Union Parishad chairman is the primary source of power and authority at village level. The UP chairman acts as administrator, judge, leader, representative, development implementer and the authority of certification. But presence of women is extremely low in the position as indicated in Table 2. Even the elected female chairwoman is called chairman which indicates the power of male dominated society.

Table 2: Women as the Elected Chair of Union Parishads

Year of election	Total no. of Union Parishad	Total no. candidates contesting for the post of chair	Women candidates contesting	Women elected as chair
1973	4352	-	-	1
1977	4352	-	-	4
1984	4400	-	-	6
1988	4401	18566	79	1
1992-93	4451	17444	115	24
1997	4479	-	102	23
2003	4223	21376	232	22

Source: Sultana, 2000; Pandey, 2008 and [www.ecs.gov.bd](http://www.ecs.gov.bd)

It is to mention that activities like election designs, formulating rules and regulations, decision making and other procedures are mainly made by male. To determine welfare steps for women requires women policy makers. Therefore, in every sector of society, whenever planning or implementing for women issues are required; we need men and women equally.

#### DAUGHTERS OF THE SOIL: WOMEN'S' RIGHTS ON LAND AND PERSONAL LAWS

Issues and questions regarding women's rights are now getting more attention than general concerns and focuses. In 1995, it was recognized during the Beijing Women's Conference that women's rights on land and agricultural issues are virtually issues of national economy and politics, not only the judicial problems (Parvez, 2003:57). Women of Bangladesh face competition for land ownership, control, administration and its judicial managements. The insufficiency of land makes it sharper. The existing law and patriarchal values are not suitable for women to have proper rights on immovable property like land. The accurate land policy, rights and its valid application for women is required in our laws. Frequently, women loose rights in all kinds of land. Among the landless people of Bangladesh, majority are women. At the same time, somewhere women are owner of their lands legally, but the production and security are controlled by male members. For last several decades, women are losing rights in huge amount of wetlands too. Even ethnic women are losing their rights over lands. Through construction of dams, hydro-electricity project, plantation of rubber, commercial forestry; indigenous women are being uprooted from their places. In the name of development and donor-driven policies, ethnic women are often put in vulnerable life situations. To ensure developments of women in society, their rights on land must be appropriately designed and mentioned in our Constitution and legal frameworks. The participation and representation of women and their leadership must be ensured in land-related areas. Recognition of women's due welfare in land rights is not simply empowering them in society but also necessary for holistic women development.

Since 1971, Bangladesh's laws is applicable to all citizens without discrimination based on religious beliefs or sex, with only exception: its personal laws. Some reforms, particularly laws against domestic violence and acid attacks, have addressed family issues and apply across the religious field. Personal laws on marriage, divorce, separation etc. remain stringent. In Bangladesh, Muslims, Hindus, Christians have separate personal laws. The personal laws discriminate against women with respect to marriage, separation, divorce and maintenance. Women frequently fail to identify marital property and its division on the equal basis after separation or divorce. Through this practice, men actually get benefitted and women remain deprived. Though the Muslim personal laws have some positive aspects, but it is still discriminatory when it comes to involvement of women issues.

Hindu personal law is minimally codified with discriminatory elements. Similarly, personal law of Christians also discriminates against women. Thus, discriminatory personal laws of Bangladesh harm women and their dependents during marriage and upon separation or divorce, with contribution to violence against women and poverty in female-headed households (Human Rights Watch, 2012:4-12). Many poor divorced and separated women confront severe economic hardship, loose marital homes and lack all kind of resources to deal reality of life. One can see that family courts have some primary duties for enforcing personal laws of Bangladesh. But these are plagued with procedural, judicial and administrative problems. People, especially women are most of the times not conscious about the procedures and knowledge of this court. Government of Bangladesh has taken small but important steps toward addressing the problems through approving supportive initiatives to improve and reform personal laws. With the collaboration of national and international organizations, services are being provided to eliminate discrimination against women. More comprehensive study and exploration are to be made to strengthen mechanisms for implementing laws and to pave out the ways regarding these issues.

## CONCLUSION

Since the Liberation War of 1971, for more than forty years, Bangladesh has witnessed lots of ups and downs in many ways. Progress in women's life is coming but still they have a long way to go. When women risks taking active role in powerful position of society either in family or in the politics or business, they are depicted as out of natural place having lost the 'ideal' position. Society accepts working women only when they are in womanly jobs. At the same time, working women coming from unprivileged section of society has to face greater difficulties. True liberation of women demands holistic development of women's existence and livelihood where it shall include qualitative development for every woman of Bangladesh.

Across the cultural, socio-economic and political level, empowering women requires conviction in dignity and recognition of women at similar pedestal that men have. Women's participation in formal and informal working sectors, either in rural areas or urban places and in the field of taking decision or policy making has to be increased in a secured socio-cultural atmosphere. At present time, the peak of Bangladeshi politics is occupied by women leaders. Both Prime Minister and opposition leader are women. But this fact does not mean that women are politically empowered comprehensively. Most of the times women political leader and MPs came to politics either in reserved seat or as the alternative of male member of a politically well-connected family. (Chowdhury, 2009). There is a miniscule presence of women in the committees of various political parties. Participation of women politically has to be encouraged emphatically. In economic sectors, export industry facilitated the employment of millions of Bangladeshi women. This is undoubtedly a positive development as the women workers who come mainly from village would otherwise work as domestic worker or end in underage or exploitative marriage. But the rate of female employment is not satisfactory if one compares with other countries, as Choudhury (2013) argued 'the statistics reveal that the country has one of the lowest female employment rates in the world. In Bangladesh, the economically active population is approximately 57 million, of which only 17 million are women (Bangladesh Bureau of Statistics, 2011). Also, it should be wrong to assume that export industries help to empower women. They employed women as women are available as cheap, non-demanding, loyal workers. Female garments workers work hard from early morning to night at a very low wage. We only notice their suffering when they die in hundreds in man-made disasters which in fact is equivalent to 'murder'. Thousands of national and international development organizations have grown all across Bangladesh, most of which have a focus on gender equality. Their success is mainly seen due to the growing consciousness on women's rights and facilities such as education, health, economic empowerment etc. Much celebrated success of micro-credit is equally debated. But development organizations are also criticized as an extension of neoliberal project and accused for creating and maintaining



a new kind of patron-client relationship (Karim, 2008).

We opine that patriarchal society, dominant nation-state and profit -mongering market is a deadly cocktail which cannot ensure the radical change in the situation of women until and unless women themselves do not rise. Exploitation of women is universal and any change can be possible only through universal sisterhood which may come from local struggle linked up with regional and international solidarity, resistance and active participation at all level. It requires increasing the vigorous involvement and growing consciousness among women from all sections of the society. Effective cooperation and support from men and society is necessary. Bangladesh is looking forward to welcome the new light of the fresh dawn in which women shine equally with men.

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## STREE SHAKTHI PROGRAM IN KARNATAKA- A CASE STUDY OF DAVANGERE DISTRICT

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### ABSTRACT

This article examines the impact of Stree Shakti program in Davangere district of Karnataka. Stree Shakti program was introduced by the Government of Karnataka in the year 2000 with the intent of socio-economic upliftment of poor rural and urban women. Government of Karnataka has given this responsibility to the Department of Women and Child Development (CDPO) to monitor performance of the Self-Help Groups(SHG). We have collected information from CDPO on various action taken by the Government of Karnataka to protect Karnataka SHG and analysis has been done for the SHG performance in the district of Davnagere. A case study of Davangere district reveals that, day by day the SHG is losing its credence and effectiveness due to constraints of various features which could not be incorporated in Stree Shakthi program. The study also formulates certain recommendations that the Government of Karnataka ought to follow for revitalizing the scheme through reworking on SHG features and adding other financial benefits.

**Keywords:** Credit rationing, Self-Help Group (SHG), Stree Shakthi, Swarnna Jayanthi Gram Swarojgar Yojana (SGSY)

### INTRODUCTION

According to the Census 2011, female population comprises 586.5 million in India and more than 17% of world's women population. Women population in India is characterized by massive provincial difference and variety of different cultures. But, social discrimination and economic deprivation based on gender still exists, irrespective of any caste, community, religion and region. Empowerment of women has become serious issue to protect interest of women. In the Indian scenario, patriarchal mindset remains rampant. Women are dominated by men in every sphere of life. In this precarious condition, safeguarding women is necessary and the government has taken many initiatives to empower women socio-economically. Status of women in India is not up to the desired level and it has become necessary for successive incumbent governments to devise novel ways to uplift half of the population gradually and later their condition for better. Among such schemes, micro finance is one of the most drumbeated program. Micro finance is nothing but small loan facility given to the needy poor people.

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It is given to farmers, small scale industries, sick units, SHGs (Self-Help Groups) and other priority sectors. In this study, researchers have made an attempt to know how SHG program really helped poor people socio economically through micro finance. SHG can be formed by many ways in India. It can be connected through NGO's (Non-government organization), SGSY(Swarnna Jayanthi Gram Swarojgar Yojana), micro finance institutions or the CDPO (Department of Women and Child development office). In this study, we have undertaken study of SHGs which have been connected through CDPO and conducted the study how SHGs have been performing in Davangere district of Karnataka by collecting information from CDPO.

#### Brief profile of Davangere District

According to the 2011 census, Davangere district has a population of 1,946,905 with a ranking of 241 amongst a total of 640 districts in India. The district has a population density of 329 inhabitants per square kilometre (850 /sq mi). Its population growth rate over the decade 2001-2011 was 8.71 %. Davangere has a sex ratio of 967 females for every 1000 males. Davangere district is the 7<sup>th</sup> most literate districts in Karnataka with a literacy rate of 67.67% as against state literacy rate of 67.04%. The district covers a total geographical area of 5975.97 Sq km. Davanagere district has 6 taluk panchayats, 24 hoblies, 230 gram panchayats, 803 villages, 1334 habitations, and 2 city municipal councils and one City Corporation. Following are the names of the taluks that come under Davanger district : Channagiri, Jagalur, Harapanahalli, Honnali and Harihara. The district is primarily agrarian in character consisting of 2,43,747 farm households. Majority of the farm households belong to marginal (43%) and small size (30%) category. The normal rainfall of the district is 644mm. Canals account for 53 per cent of total net area irrigated. It is one of the districts of the state where large number of farmers' suicide have been reported in recent years. Though Davangere district is serviced with many public, private, commercial and regional rural banks, many poor people are still poor and have no access to these banks and facilities given by the government of Karnataka.

#### Self Help Groups(SHG): Source of Power

A SHG is a cluster of 10 to 20 people, usually poor women, from a similar class and province who come together to improve their socio-economic status. Group members are making fixed savings weekly, fortnightly or monthly basis for wealth creation. Accumulated savings is given to the needy members of the group as loan. Any income that is earned is distributed among the members. This process promotes an ethics that focuses on savings first and loan next. The setting of terms and conditions and accounting of the financial transactions (savings, internal loan and repayment, bank loan and repayment) are done in the group by nominated members. Usually SHGs are monitored by the entity with which SHG is registered. It can be NGO, CDPO, SGSY or any micro finance institution. These SHGs report to the concerned authority within a given period. Based on the performance appraisal only, SHGs are provided with further financial support in the form of loan from banks, revolving fund, subsidized loan and award etc.

#### Uniqueness of SHGs

SHG concept is unique because of several aspects:

- Firstly, it is built around both formal and informal way.
- Secondly, it helps in socio and economic development of each member through one group that leads to meaningful development.
- Thirdly, it allows flexibility in financial aspects like rate of interest, tenure of repayment, quantum of repayment, etc., at the time of emergency on certain ground rules.
- Fourthly, it allows interaction between SHG members and outside world. Earlier, women were

restricted only within the four walls of their house. But now, she has to interact with bankers to avail loan, talk to experts to gain wisdom and training on certain economic activities.

### Features of SHGs

The product design features combine the collective wisdom of the poor, the organizational capabilities of the social intermediary and the financial strength of the banks. Its features are as follow:

- Small and fixed savings at frequent intervals

The basic rule of the SHG is to make members do small fixed savings at regular intervals. In the case of regular default, the defaulting member is eliminated and new member joins in the place of defaulters. In the case of occasional default, penalty or warning will be issued.

- Obeying the rules and regulations

Each SHG should follow certain rules and regulations while doing operational activity. They should maintain books of account of each activity like savings, meeting conducted, decisions taken on internal loan and repayment, bank loan and repayment, and other activities done by the members. Everything has to be recorded in the books of account and it is monitored by supervisors and anganwadi workers deputed by the CDPO.

- Self-selection

Group members will have all rights to choose their own members. Usually they will choose their neighbors and their community people for better cooperation. If any members leaves SHG, in their place their own chosen member may join in.

- Savings first and credit later

Until and unless good amount of saving is done, credit cannot be given. Members have to understand importance of savings and how the same is recycled during dire needs. They can avail internal loan as well as bank loan only after optimal amount of saving. Even banks pitch in with support by giving loan only to those SHGs which have got a good savings. Saving is the mirror to analyze performance of SHGs.

- Intra -group appraisal systems and prioritization

Credit management is one of the major challenges for SHG leader. Because all members join SHG to get financial help. Everybody wants to get loan since it is available easily at lower rate of interest and members feel that getting loan is their basic right. When many members seek loan simultaneously, SHG leader has to take decision on the priority basis; need basis and member involvement in SHG activities. Crisis management without harming anybody's interest in the SHG is the biggest asset of a SHG.

- Credit rationing

In the SHG, credit is given on need basis and in the sequence. Everybody can get financial benefit of SHG. Many a times, it may vary with approval of all members. But leaders will make sure that all members are getting equal benefit of the SHG. Sometimes, leader can take collateral security for the amount which has been lent on conditional basis so that in the case of default that burden will not be shifted on remaining members.

- Shorter repayment terms

Smaller and shorter repayment schedule ensures faster recycling of funds, so that all members can get loan facility with shortest duration. Usually, time given to repay the loan amount varies from 6 to 12 months. Only in the exceptional cases, long duration are provided.

- Rates of Interest

Rate of interest is decided by the members. They are the participants to take loan. Usually rate of interest for loan is lesser than market rate of interest. Most of the SHGs maintain the rate of 12% interest per annum.

- Progressive lending

Repetitive loan is given only to those who do prompt repayment within the time given and without any warnings. Only record reveals who deserve progressive lending.

- A multiple-eyed operation

The operations of the SHG are transacted in group meetings thus enabling high trust levels and openness in the SHG system. SHG members facilitating openness and freedom from unfair practices generally conduct the banking transactions.

Table 1: Check list to assess the performance of SHG

S. No.	Factors to be checked	Very good	Good	Unsatisfactory
1	Group size	15-20	10-15	Less than 10
2	Type of members	Only very poor members	2 or 3 ,not very poor members	Many, not poor members
3	Number of Meetings	4 meetings in a month	2 meetings in a month	Less than 2 meetings in a month
4	Timings of meetings	Night or after 6 p.m.	Morning. Between 7 and 9 a.m.	Other timings
5	Attendance of members	More than 90%	70 to 90%	Less than 70%
6	Participation of members	Very high level of participation	Medium level of participation	Low level of participation
7	Savings and collection within the group	Four times a month	Three times a month	Less than three times a month
8	Amount to be saved	Fixed amount	Varying amounts	-
9	Interest on internal loan	Depending upon the purpose	24 to 36%	More than 36%
10	Utilization of savings amount by SHG	Fully used for loaning to members	Partly used for loaning	Poor utilization
11	Loan recoveries	More than 90%	70—90%	Less than 70%
12	Maintenance of books	All books regularly maintained and updated	Most important registers (minutes, savings, loans etc., are upgraded)	Irregular in maintaining and updating books
13	Accumulated savings	More than Rs.5000	Rs.3000-5000	Less than Rs 3000
14	Knowledge of the rules of the SHG	Known to all	-----	Not known to all
15	Education level	More than 20 % of members can read and write	---	Less than 20% know to read and write
16	Knowledge of Govt. programs	All are aware of Govt. programs	Most of the members aware about Govt prog.	None aware

### Stree Shakthi Program in State of Karnataka

To strengthen SHGs at the national level, many programs have been floated. Some of these are Swarnajayanti Gram Swarozgar Yojana (SGSY), DRDA Administration (District Rural Development Agency), NSAP (National Social Assistance Program), Micro Finance Program introduced under NABARD (National Bank for Agricultural and Rural Development). In Karnataka, many SHG development programs have cropped up. Those are Stree Shakthi Program, Shri Kshethra Dharmasthala Rural Development project. SHG under SGSY and many other NGO's are working to improve SHG socio-economically.

Different Programs by Government of Karnataka under Department Of Women and Child Development to protect interest of women<sup>1</sup>

The issue of empowerment of women as an objective has moved the center stage, with the global paradigm shift, from growth-centrism to human- development approach. In recent years, the empowerment of women has been recognized as the central issue in determining the status of women. Due to this realization, different programs have come up under Karnataka Government to develop poor women socio-economically. Some of the programs that have been introduced by Karnataka government through Department of Women and Child Development is listed below:

- Stree Shakthi – This program is introduced by the Karnataka government in the year of 2000 to empower poor women socio- economically by working through Self-Help Groups.
- Santhwana – This has been introduced to protect victims of domestic violence, rape and dowry harassment
- Karnataka Mahila Abhivudyudhi Yojane (KMAY) has been launched to ensure gender equality and to integrate women in the mainstream of development
- Working Women's Hostels - This initiative provides safe and affordable accommodation to working women
- Financial Assistance to Women Law Graduates
- Special Cell For Eradication of Social Evils
- Implementation of Protection Of Women from Domestic Violence Act,2005
- Legal Literacy
- Implementation of Karnataka Marriage Act, 1976
- Financial Assistance for the Remarriage of Destitute Widows and Marriages of Devadasis
- Swadhar – A scheme for women in difficult circumstances
- Scheme for Prevention of Alcoholism and Substance (Drugs) Abuse

Stree Shakthi is one of the most ambitious program introduced by the Department of Women and Child Development to improve socio-economic condition of the women who belong to the category of below poverty line(BPL).

Recent highlights of Stree Shakthi program:

- Savings and loans: As on 30th June 2012, Stree Shakthi group members have saved Rs.1118.05 crores since inception. 1,20,155 groups have taken bank loans of Rs.1305.97 crores and Rs.3215.88 crore of internal loan has been disbursed to commence income generating activities.
- Revolving fund: Those SHGs who have completed one year of tenure with the satisfactory result are eligible to get revolving fund of Rs.5,000 and it is a kind of seed money to SHG with no repayment

and interest. Till June 2012, about 1, 32,659 SHGs have got total revolving fund of Rs.66.33 crores.

- Kit materials: Department has issued 840.00 lakhs of kit material to 1,40,000 SHGs.
- Per kit material value is Rs.600. The kit helps in proper maintenance of books of accounts
- Incentives to SHGs for extra savings: Savings helps to streamline internal loan system and bank loan. Each member has to save a minimum of Rs.20 per week. There is no maximum limit for the saving. Incentive is given to those SHGs who do excess savings. An incentive of Rs.15,000 and Rs.20,000 is given to those groups who have saved excess of Rs.75,000-Rs.1,00,000 and more than 1,00,000 respectively. So far 6,212 SHGs have been given 1054.40 lakh of incentive for their excess savings.
- Economic activities: Main objective of formation of SHG is to encourage economic activities so that women members can gain economically. To encourage the enterprise, Rs.5,000 is given to those SHGs who are doing income generating activity. Till June 2012, almost 19,601 SHGs have been disbursed an amount of Rs. 980.10 lakh.
- Subsidized loan: Those SHGs which take loan of Rs.1.00 lakh to do economic activity is given 6% of subsidized loan to encourage SHGs. Till June 2012, almost 5,763 SHGs have received 581.86 of subsidized loan.
- Block- level societies: To fortify SHG, 175 Block- level societies have been registered under the Karnataka Societies' Registration Act, 1960 in each taluks. These Block -level societies have been given Rs.30,000 of financial assistance to strengthen SHGs. An amount of Rs. 369.90 lakhs has been provided to 175 Block- level societies up to March 31, 2012.
- Training: Training is very important aspect to build courage and confidence among women. Various kinds of socio-economic trainings are provided by CDPO to SHG members to develop self-reliance and independence among members. The training involves sensitization with regards to gender issues, SHG management (book keeping, credit management), social issues (health issues, social evil eradication) and natural environment. An amount of Rs. 641.74 lakhs has been spent for the training of SHG members up to Mar 31, 2012.
- Marketing complex: SHGs are encouraged to do income generating activities. At the same time, SHGs are facing many marketing problems to sell their products in market due to various limitations like, transportation problem, involvement of intermediaries. To avoid it, the department has come up with constructing 183 buildings in different districts and taluks at a cost of Rs. 2651.94 lakhs. Many SHGs have occupied the shops which are given by the department at the reasonable rent.
- Exhibitions: Apart from marketing complex, another marketing support given by the department is to organize the exhibitions to sell SHGs products. District and taluk level exhibitions are conducted. Rs. 168.75 lakhs has been spent till June 2012 towards this goal. At least Rs. 75,000 has been released to organize exhibition in district level.
- Award for the best groups: Those SHGs which have done outstanding performance are offered 3 cash awards on the occasion of International Women's Day. It is state level award and all 30 districts and 175 taluks are considered for this award. First, second and third best SHGs get Rs. 50,000, Rs.30,000 and Rs.20,000, respectively. At the district and taluk level, Rs.5000 and Rs.2000 is given as cash award for the best groups.
- Award for the best Block- level societies: Under this category, 3 awards are given depending upon their revenue generation. First three revenue generating block- level societies gets cash award of



Rs.80,000, Rs. 70,000 and Rs.60,000 respectively. At the District level, the best Taluk Block Society is awarded Rs.10,000 in cash. Till June 30, 2012, 54.80 lakhs has been disbursed to give award for the best SHGs and best Block- level societies.

- Mobile van: Apart from marketing complex and exhibition, another facility provided to market products of SHG in the 2012-13 is mobile van facility. This help to timely transport products of SHGs to the destined areas of Karnataka. Karnataka government has spent Rs.48.00 lakh and 8 districts have been identified in Karnataka to implement this program. Those are Davangere, Tumkur, Mysore, Dakshina Kannada, Belgaum, Dharwad, Gulbarga and Bidar.

Table 2: Taluk-wise SHGs (Rural and Urban) in Davangere district under Stree Shakthi till 2010-11

Sl. No.	District /taluk	Number of SHGs (Rural)	Number of SHGs (Urban)
		2010-11	2010-11
1	Channagiri	851	10
2	Davangere	853	180
3	Harapanahalli	376	30
4	Harihara	686	30
5	Honnalli	759	10
6	Jagaluru	635	14
	Total	4160	274

Source: Survey data

Davangere District is having cumulatively 4,434 SHGs including rural and urban SHGs till 2010-11. Rural Davangere is having 4,160 SHGs and urban Davangere is having 274 SHGs. It has been observed that rural counterparts have taken more advantage of the program than their urban counterparts since; this program is mainly introduced to uplift rural women socio-economically.

Table 3: Taluk-wise total number of SHGs in Davangere District under Stree Shakthi till 2010-11

Sl.No.	District /taluk	Total number of SHGs
1	Channagiri	861
2	Davangere	1033
3	Harapanahalli	406
4	Harihara	716
5	Honnalli	769
6	Jagaluru	649
	Total	4434

Source: Survey data

Chart 1: Taluk wise total number of SHGs in Davangere district under  
Stree Shakthi between 2008-11

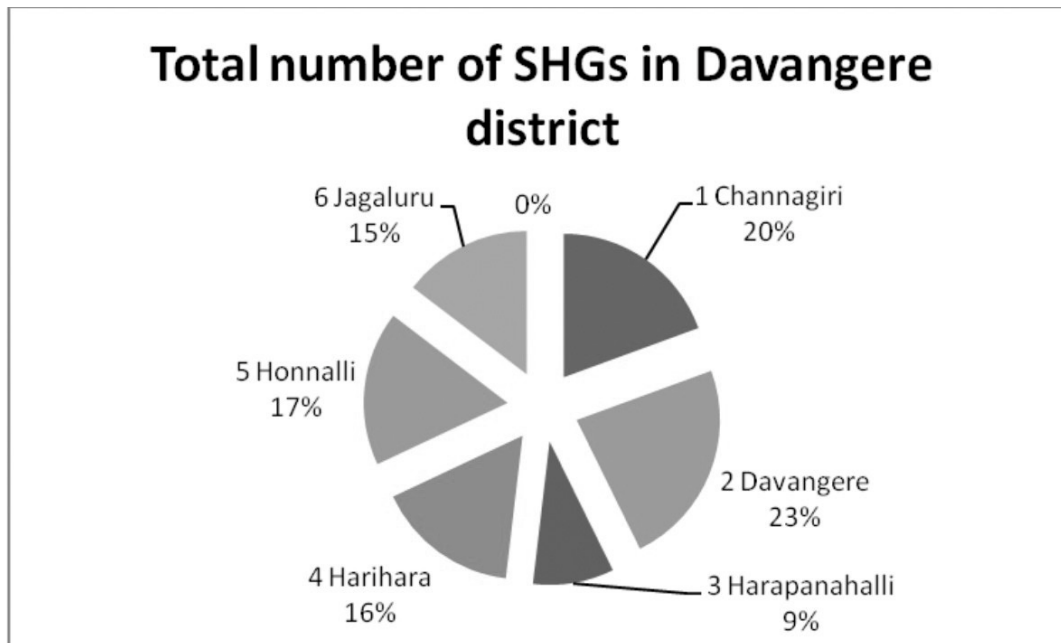


Chart 1 shows the composition of SHGs in Davangere district. Davangere has got maximum number of SHGs by having 23% of the chunk, Channagiri is having 20% of the total and Honnalli, Harihara, Jagaluru and Harpanhalli in declining order. The chart amply demonstrate that awareness level in Harapanahalli taluk is very low in comparison with other taluks of Davangere district.

Table 4: Taluk wise member of SHGs (Rural and urban) in Davangere district under  
Stree Shakthi between the year 2008-11

Sl.No.	District /taluk	No of members(Rural)			No of members (urban)		
		2008-09	2009-10	2010-11	2008-09	2009-10	2010-11
1	Channagiri	14467	14467	14467	150	167	188
2	Davangere	11114	12021	11695	3562	3022	2030
3	Harapanahalli	8325	8325	8325	389	340	389
4	Harihara	10718	10700	10718	580	580	567
5	Honnalli	11143	11189	11189	156	156	121
6	Jagaluru	6410	6410	6210	246	246	230
	Total	62177	63112	62604	5083	4511	3525

Source: Survey data

Member of SHG indicates strength of SHG penetration. For all financial proceeding (savings, internal lending, external lending) ,number of SHG is very crucial. To be considered as SHG, minimum number required should be 10 and maximum should not exceed 20. If a SHG gets good number, this deflects financial crisis in SHG since all SHG members are required to do minimum savings. This automatically entails higher group savings and further helps in lending and recovery. If the membership number comes down, remaining

members have to suffer for the same reason since liability of the group goes up. If any debt turns out to be bad, remaining people have to share huge burden on behalf of the defaulters.

Rural counterparts of SHG members have realized importance of SHG in comparison with their urban members. Above data clearly articulates there is a lot of reduction in urban counterpart of Davngere district. Especially in Davangere, 20% of reduction has taken place. In Honnalli, Harihara and Jagluru there is a fall of 22%, 3% and 6% respectively.

Above table explains about total number of SHG members in Davangere district. As a whole too much volatility can be seen in the Davangere district. In year of 2009-10 total number of members has gone up by 3% and in the year of 2010-11 it has come down by 6%. In the year of 2010 -11, numbers of members have come down drastically. When researcher tried to find out the reasons many reasons have cropped up.

These are as follow:

1. Recently Dharmastahala based NGO has started. This program started to gain lot of attention because of many SHG friendly features it has got which is not there in Stree Shakthi program like insurance facility, health care card facility, education loan and scholarship for the SHG members kids, etc. Many Stree Shakthi SHG members started to move from Stree Shakthi program to Dharmasthalal based NGO.
2. Poor management of SHG due to lack of coordination among the members. Due to this, many members leave SHG
3. Non-cooperation of the bankers to provide loan. To sanction the same collateral security is asked. Therefore members are hesitant to take and they feel there is no benefit out of it.

Table 4 clearly indicates that only in Channagiri taluk, there has been a positive growth between 1% and 3%, respectively in the year of 2009-10 & 2010-11 and in all other taluks, number of members is showing a declining trend.

Table 5: Taluk-wise Annual Savings of SHGs in Davangere district under Stree Shakthi between the year of 2008 - 2011.

(amount in lakhs)							
Sl.No	District /Taluk	Annual savings (Rural)			Annual savings (Urban)		
		2008-09	2009-10	2010-11	2008-09	2009-10	2010-11
1	Channagiri	81.17	82.12	79.12	0.75	0.31	0.13
2	Davangere	98.52	87.48	96.12	29.64	25.75	34.16
3	Harapanahalli	67.37	61.7	55.34	2.58	4.61	4.81
4	Harihara	60.86	70.73	72.34	2	2.76	3.63
5	Honnalli	125.05	126.64	127.55	1.6	1.36	1.39
6	Jagaluru	74.17	81.21	42.77	0.59	0.61	0.53
	Total	507.14	509.88	473.24	37.16	35.4	44.65

Source: Survey data

Savings is the main mantra of all SHG. This is the ground rule for smooth functioning of all SHGs. Financial capability of the SHG is measured through their savings. Higher accumulation of savings helps to disburse more and more internal loan at lowers cost and also avoids taking loan from outside lender.

Above table indicates about the SHG savings pattern of Davangere district. One can notice lot of variation in the savings of SHG in the year of 2008-09, 2009-2010 and 2010-11. In the rural part of Davangere, savings has gone up by 5% in the year of 2009-10 and again came down by 7% in the following year of 2010-11. At the same time, in the urban area, there is a decline of 5% in the year of 2009-10 followed by tremendous increase of 20% in savings for the year of 2010-11. This also outlines lack of stability in the growth. As per the records, Honnalli taluk has done a tremendous savings. Though, it is in the third place in the form of number of SHGs, only Harihara has done a good savings with consistent growth. Other taluks are having variation in their savings with a swinging pattern.

Above Table reveals year-wise total savings status of SHGs including rural and urban part. Overall savings is not up to the mark. There is no fixed pattern. In the year 2009-10, saving has gone up by 0.18% and again fluctuated back by 5% in the year of 2010-11. It indicates SHG members soon started to lose their interest in creating savings.

#### Internal loan and repayment

Internal loan is disbursed from recycling of whatever savings is done by SHGs. This is the main source of fund for all SHG members to avail loan. It helps SHG members to get liberal loan with the hassle-free repayment scheme. Tables below indicates status of internal loan and repayment in Davngere district.

Table 6: Taluk-wise Internal Lending and Repayment of Rural SHGs in Davangere District under Stree Shakthi program between the year 2008 - 2011.

Sl. No	District / taluk	(Amounts in lakhs)					
		Internal lending and repayment details of SHGs ( Rural)					
		2008-09 (lending)	2008-09 (Repayment)	2009-2010 (lending)	2009-2010 (Repayment)	2010-11 (lending)	2010-11 (Repayment)
1	Channagiri	7.5	3.9	7.8	4.1	8.26	4.73
2	Davangere	280.8	199.2	188.4	130.8	206.4	158.4
3	Harapanahalli	49.9	41.75	57.84	40.59	51.9	53.15
4	Harihara	NA	NA	149.81	69.75	186.92	82.83
5	Honnalli	168.48	157.56	156.88	165.85	107.59	122.43
6	Jagaluru	73.76	71.12	63.38	61.99	89.87	72.99
	Total	580.44	473.53	624.11	473.08	650.94	494.53

Source: Survey data

In Harihara, internal lending has gone up by 24% and repayment has come down by 2% in the year 2010-11. Channagiri's lending has gone up by 4% and 10%, respectively during the same time. Repayment also went up by 2% and 7%, respectively in the year 2009-10 and 2010-11. All other taluks' internal lending and repayment status is not up to mark and consistency is not maintained.

Rural SHG internal lending has gone up by 8% and 12% in the year of 2009-10 and 2010-11. Repayment also is at substantial level with 82%, 76% and 85% respectively in 2008-09, 2009-10 and 2010-11. If repayment strength increases year by year, it is a good sign. But it has come down drastically by 6% and indicates how SHG is losing its credence and effectiveness in all the way.

Table 7: Taluk- wise internal Lending and repayment of Urban SHGs in Davangere district under Stree Shakti between the year 2008 - 2011

(Amounts in lakhs)							
Sl.No	District /taluk	Internal lending and Repayment details of SHGs ( Urban)					
		2008-09 (lending)	2008-09 (Repayment)	2009-2010 (lending)	2009-2010 (Repayment)	2010-11 (lending)	2010-11 (Repayment)
1	Channagiri	4.07	3.17	4.5	3.9	4.95	4.19
2	Davangere	74.93	58.57	59.41	46.02	32.05	27.23
3	Harapanahalli	11.63	12.07	1.08	0.81	5.92	2.06
4	Harihara	NA	NA	10.54	9.72	9.49	13.69
5	Honnalli	1.61	1.51	1.37	1.36	1.37	1.36
6	Jagaluru	6.86	6.49	15.02	10.28	17.56	17.04
	Total	99.1	81.81	91.92	72.09	71.34	65.57

Source: Survey data

In the urban part, Channagiri's internal loan has gone up by 10% and 21% with the repayment level of 77%, 86% and 85% during 2008-09 to 2010-11. Even Jagaluru has performed well in internal loan with growth of 118% and 155%, respectively in the year 2009-10 and 2010-11. Repayment has been good with 95%, 68% and 97%, respectively in the year 2008-01; 2009-10 and 2010-11. In all other taluks, growth and repayment remain unstable.

Table 7 above explains about internal loan disbursement and repayment structure of urban counterpart. In the year 2008-09, SHGs have repaid 82% of the loan but in the year 2009-10, the same figure has reduced to 78% and in the year 2010-11, jumped up to 91%. Loan disbursement has come down by 7% and 28%, respectively in the year 2009-10 and 2010-11. It is due to two reasons:

1. SHGs started to take more and more loan from banks to avail subsidized loans.
2. Many SHGs started to move to Dharmasthala based SHGs to reap more benefits.

Table 8: Taluk-wise Total Internal lending and repayment of SHGs in Davangere district under Stree Shakthi program between 2008-11

Taluks	Total internal lending and repayment of SHG				Amount in Lakhs	
	Lending (2008-09)	Repayment (2008-09)	Lending (2009-10)	Repayment (2009-10)	Lending (2010-11)	Repayment (2010-11)
Channagiri	11.57	7.07	12.3	8	13.21	8.92
Davangere	655.73	457.77	647.81	476.82	768.45	635.63
Harapanahalli	61.53	53.82	58.92	41.4	57.82	55.21
Harihara	NA	NA	160.35	79.47	196.41	96.52
Honnalli	170.09	159.07	158.25	167.21	108.96	123.79
Jagaluru	80.62	77.61	78.4	72.27	107.43	90.03
Total	979.54	755.34	1116.03	845.17	1252.28	1010.1

Source: Survey data

With the available information, it can be perceived that disbursement of loan amount has gone up between 2009-10 and 2010-11 in all taluks except Harpanahalli and Honnalli taluk. At the same time, repayment is also satisfactory with all taluks and specially Honalli has made very good repayment in the year 2009-10 and 2010-11.

Table 9: Year-wise Total internal Lending and Repayment of SHG in Davangere district under Stree Shakthi from the year of 2008-11

Year	Total Lending	Total Repayment	% of Repayment
2008-09	980	755	77
2009-10	1116	845	76
2010-11	1252	1010	81

Source: Survey data

As a whole, internal lending has gone up by 13% and 27% in the year 2009-10 and 2010-11. At the same time, repayment is also satisfactory with 77%, 76% and 81%, respectively. It can be noticed that in the year 2010-11, repayment has gone beyond 80%. This is a positive sign. Average repayment percentage for the three year is satisfactorily at 78%.

#### External lending (Bank loan) and Repayment

Micro finance scheme was introduced by NABARD and it comes under priority sector. Under this scheme, all banks have to give certain portion of loan to priority sector under RBI instruction. SHG is one among them. Nowadays even banks are coming forward to provide loan for SHGs due to less NPA (Non- performing assets) compared to other loans. Banks in Karnataka have given sufficient fund in the form of more and more loan to SHG for their economic activities.

Table 10: Taluk wise external Lending and repayment of Rural SHGs in Davangere district under Stree Shakthi between the year of 2008 – 2011

(Amounts in lakhs)							
Sl. No.	District /taluk	External Lending and Repayment details of SHGs ( Rural)					
		2008-09 (lending)	2008-09 (Repayment)	2009-2010 (lending)	2009-2010 (Repayment)	2010-11 (lending)	2010-11 (Repayment)
1	Channagiri	63.5	20	74	32	97	39
2	Davangere	158.76	146.05	132.27	158.41	145.76	143.87
3	Harapanahalli	17	15.75	23	21.35	18.25	13.5
4	Harihara	NA	NA	NA	NA	106.14	71.23
5	Honnalli	132.46	39.55	138.47	42.44	145.95	48.65
6	Jagaluru	46.27	45.34	141.48	132.87	18.29	18.11
	Total	417.99	266.69	509.22	387.07	531.39	334.36

Source: Survey data

In the year 2009-10 and 2010-11, loan amount has gone up by 22% and 27%, respectively. Repayment is also satisfactory with 64%, 76% and 63% respectively. Channagiri, Honnalli, and Jagaluru taluks have got good bank loan with the growth compared to other taluks of Davangere district. Channagiri has got 17% and 53% higher bank loan compared to 2008-09. Followed by Channagiri, Honnalli and Jagaluru have got growth of 4% 10% and 205%, 39%, respectively. Jagaluru has done remarkable repayment of 97%, 94% and 99% in the year 2008-09, 2009-10 and 2010-11.

Table 11: Taluk- wise external Lending and Repayment of Urban SHGs in Davangere district under Stree Shakthi between the year 2008 – 2011

External Lending and Repayment details of SHGs (Urban)					(Amounts in lakhs)	
District/taluk	2008-09 (lending)	2008-09 (Repayment)	2009-2010 (lending)	2009-2010 (Repayment)	2010-11 (lending)	2010-11 (Repayment)
Channagiri	2	0.6	NA	1.1	NA	NA
Davangere	75.02	32.14	94.02	55.57	112.87	124.97
Harapanahalli	18.75	11.46	19.38	18.7	21.08	24
Harihara	NA	NA	7.56	5.04	15.8	3.57
Honnalli	0.5	0.5	2.7	2.7	NA	NA
Jagaluru	0.88	0.88	4	1.278	4.15	3.82
Total	97.15	45.58	127.66	84.388	153.9	156.36

Source: Survey data

In the urban SHG, external lending and repayment is worth noticing. Here external lending has gone up by 31% and 58% respectively in the year 2009-10 and 2010-11. At the same time, repayment is also moderate with 47%, 66% and 101% in the year 2008-09, 2009-10 and 2010-11, respectively.

In all taluks, external lending has gone up year by year compared to the base year of 2008-09. In the Jagaluru, SHGs received enormous bank loan with the growth of 454% and 471% compared to the base year. In repayment, all taluks are placed in better position. Especially Davangere, Harihara, Honnalli, and Jagaluru have excellent repayment figure.

Table 12: Taluk wise total external Lending and repayment of SHGs in Davangere district under Stree Shakthi from the year 2008 – 2011

Sl.No	District /taluk	Total external lending and repayment of SHGs						(Amounts in lakhs)	
		Lending (2008-09)	Repayment (2008-09)	Lending (2009-10)	Repayment (2009-10)	Lending (2010-11)	Repayment (2010-11)		
1	Channagiri	65.5	20.6	NA	33.1	NA	NA		
2	Davangere	233.78	178.19	226.29	213.98	258.63	268.84		
3	Harapanahalli	35.75	27.21	42.38	40.05	39.33	37.5		
4	Harihara	NA	NA	NA	NA	121.94	74.8		
5	Honnalli	132.96	40.05	141.17	45.14	NA	NA		
6	Jagaluru	47.15	46.22	145.48	134.149	22.44	21.93		
	Total	515.14	312.27	636.88	471.459	685.29	490.72		

Source: Survey data

It can be noticed from above table, most of the information of external lending is not available. So, it is difficult to arrive any conclusion. But with the available information, it can be ascertained that repayment is good in all taluks except Honnalli taluk.

Table 13: Yearly wise total external Lending and repayment of SHGs in Davangere district under Stree Shakti from the year of 2008 – 2011

Years	Total Lending (Rural+Urban)	Total Repayment (Rural+Urban)	% of Repayment
2008-09	515	312	61
2009-10	637	471	74
2010-11	685	491	72

Source: Survey data

On the whole, external lending and repayment is satisfactory. External lending has gone up by 23% and 33% respectively, in the year 2009-10 and 2010-11. Repayment is also satisfactory with 61%, 74% and 72% in the three years. Average repayment for these 3 years is 69%.

Table 14: Comparison between Internal and External recovery of SHG in Davangere district under Stree Shakthi program from 2008-11

Years	Internal Recovery	External Recovery
2008-09	77	61
2009-10	76	74
2010-11	81	72
Average	78	69

Source: Survey data

Table 14 above reflect the figure of internal and external recovery of loan. It is observed that internal recovery is better than external recovery. Thus, it can be presumed that SHGs are good in recovering their money from their members as compared to banks. Average internal recovery in Davangere was 78% and external recovery at 69%.

Table 15: Taluk wise Revolving fund availed by SHGs in Davangere district under Stree Shakthi from the year of 2008 - 2011

(Amounts in lakhs)

Sl.No	District /taluk	Revolving amount (Rural)	Revolving amount (Urban)
1	Channagiri	42.55	0.5
2	Davangere	42.65	9
3	Harapanahalli	31.8	1.5
4	Harihara	34.3	1.5
5	Honnalli	38.45	0.5
6	Jagaluru	31.75	0.7
	Total	221.5	13.7

Source: Survey data



Revolving fund is given to SHG in the form of initial fund. Those SHGs which completed successful operation of six months with ample savings and without default is eligible to get revolving fund of Rs.5,000. In Davangere district, all SHGs have got revolving fund of Rs.5,000. Rural and urban part of SHGs got Rs.221.5 lakh and Rs.13.7 lakhs respectively.

Table 16: Taluk-wise Total quantum of Revolving Fund availed by SHGs in Davangere district under Stree Shakthi from the year of 2008 – 2011

(Amounts in lakhs)

Sl.No	District /taluk	Total amount of Revolving amount
1	Channagiri	43.05
2	Davangere	51.65
3	Harapanahalli	33.3
4	Harihara	35.8
5	Honnalli	38.95
6	Jagaluru	32.45
	Total	235.2

Source: Survey data

Total amount released for SHGs was Rs.235.2 lakhs in Davangere district. If SHGs stop working, revolving fund amount has to be given back to concerned authority. It is to be supervised by supervisors and anganwadi workers to ensure revolving amount is used for the purpose of economic development of members only.

Table 17: Talukwise Training availed by SHG members in Davangere district under Stree Shakthi from the year of 2008 – 2011

Sl. No	District /taluk	Training details of SHGs (Rural)		Training details of SHGs (Urban)	
		Number of members in SHGs	Members receiving training	Number of members in SHGs	Members receiving training
1	Channagiri	14467	2170	188	26
2	Davangere	11695	1706	2030	203
3	Harapanahalli	8325	1272	389	56
4	Harihara	10718	1496	567	58
5	Honnalli	11189	2125	121	51
6	Jagaluru	6210	1270	230	43
	Total	62604	10039	3525	437

Source: Survey data

CDPO has conducted many income generating activities and training sessions to various SHGs free of cost. This is intended to make SHGs start their economic activities without any hurdles. Such training are conducted

mainly at district or taluk places so that the SHG members can make best use of the opportunity Following trainings have been organized by CDPO officers in Davangere:.

- a) Soap powder manufacturing
- b) Candle manufacturing
- c) Papad preparation
- d) Roti preparation
- e) Chat items preparation
- f) Rearing of animals
- g) Preparation of wire bags
- h) Preparation of mosquito net
- i) Agricultural improvement
- j) Beauty parlor courses
- k) Pickle preparation
- l) Tailoring

Providing training for all members is not possible. Usually from each rural SHG, two members are called and from urban SHG, one member invited to avail training facility. Those who receive training can further impart training to other members of their group. 16% of rural and 12% of urban SHG members have taken training in Davangere district.

As a whole 16% of SHG members received training in Davangere district under CDPO- organized program. Trained SHG member are supposed to train remaining members. But it is saddening that the same is not the practice among most of the SHGs.

#### Grading of SHGs:

To provide grade some of the parameters have been used by the CDPO. These are:

- a) SHG-structure related: It involves criteria like number of SHG members, Operations of SHG (frequency of meeting, quantum of savings and credit disbursement and repayment), number of economic activities in the group and banking relation of SHG .
- b) Functions related: The criteria involved are homogeneity in membership, leadership responsibilities, decisions taken to provide loan, consistency in book keeping, financial audit production, marketing and manpower arrangements.
- c) Process related: The parameters incorporated are strengthening of group with shared responsibility, leadership development, decision making in financial disciplines, maintaining transparency and accountability for each activity with capacity building process.
- d) Performance related: This includes involvement of members in SHG activities, rotation in leadership, performance analysis between savings and velocity of loaning, impact on economic activity, analyzing rate of production and loan repayment rates, number of community projects conducted for the improvement of the society like awareness of literacy, health promotional campaign, social evil eradication, emergency preventions etc..
- e) Credit related: This includes parameters like making the portfolio of savings, loan disbursement,

outstanding of loan and repayment of loan, evaluation of composition of internal borrowing and borrowing from bank and the repayment for the same.

Table 18: Taluk wise Grading of SHGs in Davangere district under Stree Shakthi for the Period 2008 - 2011.

S. No	District /taluk	No of SHGs (Rural)	A	B	Total	No of SHGs (Urban)	A	B	Total
1	Channagiri	851	851	--	851	10	10	----	10
2	Davangere	853	518	335	853	180	149	31	180
3	Harapanahalli	636	630	6	636	30	25	5	30
4	Harihara	686	300	386	686	30	17	6	23
5	Honnalli	769	375	198	573	10	10		10
6	Jagaluru	635	395	40	435	14	13	1	14
	Total	4430	3069	965	4046	274	224	43	267

Source: Survey data

Grading is one of the important aspects for each SHG for their survival. Grade A indicates very well and grade B indicates normal. If SHG has got a good grading, it helps in taking quick loan, subsidized loan, incentives and awards meant for SHGs. In Davangere district, 69% of rural counterpart has received Grade A; 22% has received Grade B and 9% of the SHG has not been graded at all. It indicates these SHGs are not up to the mark. On the other hand, in the urban counterpart, 81% of SHGs have received Grade A and 16% SHGs, Grade B. Only 3% of the SHGs have not been graded. Urban SHG grading is better because higher Grade of A is more in the urban milieu and only 7 SHGs missed grading. In rural counterpart, Honnalli and Jagaluru are worst performer since 196 SHGs and 200 SHGs have missed grading, respectively. It is imperative for the Honnalli and Jagaluru Supervisors, anganwadi workers and SHG leaders to take necessary measures to improve the functioning of their SHGs.

Table 19: Taluk wise total grading of SHGs in Davangere district under Stree Shakthi from the year of 2008 - 2011

Sl.No	District / taluk	Grades	
		A	B
1	Channagiri	861	0
2	Davangere	667	366
3	Harapanahalli	655	11
4	Harihara	317	392
5	Honnalli	385	198
6	Jagaluru	408	41
	Total	3293	1008

Source: Survey data

Out of 4704 SHGs, 4301 SHGs have got grading. Thus, overall 91% of the SHGs have got grading. Only 9% of remaining SHGs have not got any grading. That indicates 9% of the SHGs are not up to the mark. In Davangere district, CDPO has to take necessary action to improve their grading.

### Major Findings of the Study

We have found some notable characteristics about the functioning of SHGs in Davangere district:

1. Regarding SHG numbers: From 2008-2011, numbers of SHGs are invariable. Since, CDPO has not been entrusted to register new SHGs, already existing SHGs continue to function. Moreover, numbers generally do not dwindle because even if any member leave SHG, other members join in and the SHG remain functional.
2. Regarding number of SHG members: There is much instability in the pattern. In the rural counterpart, number is varying and in the urban counterpart number has come down drastically. It indicates how in the urban side SHG is losing its credence. The CDPO ought to take necessary action for the same. Otherwise, many SHGs can wind up because if membership number comes down, the SHGs with less than 10 members can not continue to function as per structural criteria.
3. Regarding savings: Since number of members have come down drastically in the urban counterpart, savings has come down drastically as compared to rural counterpart.
4. Regarding internal lending and repayment: Internal loan has gone up subsequently in the rural and urban counterpart but corresponding repayment has not gone up. It is varying with swinging pattern. But as a whole in the Davangere district, internal loan disbursement and repayment is satisfactory.
5. Regarding External loan and repayment: The situation is similar as with internal loan. External loan has gone up in both rural and urban counterparts. But corresponding repayment is better only in the urban counterpart. As a whole, lending has gone up and repayment is varying as usual.
6. Internal recovery v/s external recovery: Internal recovery is better than external recovery. It shows SHG leaders are strict in recollecting debt fund.
7. Regarding Revolving fund: It is a financial support which comes free of cost. To help SHG, Karnataka government has given revolving fund of Rs.5,000 to all SHGs in Davangere district.
8. Regarding training: 16% of SHGs have got training to upgrade themselves. This can be further improved. CDPO can increase number of members to avail training from urban and rural counterpart so that it can be more effective.
9. Regarding Grading: As a whole, 91% of the SHGs have received grading. Only 9% missed out. CDPO has to take necessary action to improve the standard of those SHGs which are struggling to function. Otherwise, they cannot receive the benefit of subsidized loan, awards etc.

### CONCLUSION

As a whole financial aspect of SHGs in Davangere district is not satisfactory. Since, there is no synchronization between loan disbursement and repayment either in internal or in external sphere, SHG members have started to lose interest in participating in SHG activity. Moreover, they have started to compare feature of Stree Shakthi program and other NGO programs like Shri Kshethra Dharmasthala Rural Development project and when they find other SHG programs are functioning better than Stree Shakthi, they are getting disenchanted. SHG members have started to show least interest and also moving gradually from Stree Shakthi to other NGO-run SHG programs. In conclusion, it can be stated that the Government of Karnataka has to work and redesign the Stree Shakthi program with some more attractive financial features so that members can glue with Stree Shakthi. There is less emphasis on generating awareness of the program. Launching awareness program can help to stem the tide and vivify the Stree Shakthi programme.

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# EFFECT OF SELF HELP GROUP IN ECONOMIC EMPOWERMENT OF RURAL WOMEN IN HIMACHAL PRADESH

Dr. Yoginder Singh\*

## ABSTRACT

Women constitute fifty percent of the world population and receives hardly ten percent of the world income and owner of even less than one percent of world's property. They suffer many disadvantages as compared to men in terms of literacy rate, labour participation rates and earnings. The major strategies for women empowerment include social empowerment, political empowerment and gender justice along with demographical justice (rural and urban). For the rural women, economic empowerment can be harvested through the concept of Self-Help Groups (SHGs) based on group approach to rural development. SHGs are indeed a boon to the rural poor women who undertake viable economic activities on their own. SHGs are voluntary association of people formed to attain some common goals. In this paper, an attempt has been made to evaluate the nature of business and its performance carried out by women through SHGs and its impact on economic empowerment in rural areas.

Keywords: Constitution, empowerment, Panchayati Raj, Self -Help Groups (SHGs).

## INTRODUCTION

Women empowerment is the most important instrument for the socio-economic development of a nation. Bringing women into the mainstream is one of the major challenges for every government. Women empowerment has become a meme in the global governance network. In this context, Self -Help Groups (SHGs) have emerged as the tool that wield power to create a socio- economic revolution in the rural areas of our country. SHGs have not only produced tangible assets and improved living condition of members but also help in changing much of their outlook, worldview and attitude. Women in India are the victims of multiple socio-economic and cultural factors. Emancipation of women is a pre-requisite for nation's economic development and social upliftment.

A series of development programmes have been implemented for the development of economy in general ignoring women who constitute 50 percent of the total population. Role of women in development is an indispensable factor. Development programmes no longer can achieve their target without the participation and contribution of women. The role of women and need to empower them are central to human development programmes including poverty alleviation. In spite of safeguards provided in many of poverty alleviation programmes, it was observed that women in rural areas especially from poor families could not be benefited. All provisions of the Constitutions and the spate of legislation enacted to empower women in the post-independence India have not been adequate to set women free from their traditional bondages, liabilities and

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restrictions. Till recent times, women's participation in the decision making processes especially in rural areas have remained very marginal.

A whiff of change was caused by the 74<sup>th</sup> amendment to the Constitution of India, which has guaranteed women a substantial role in the local governance. Women empowerment is multifaceted concept that extend to the psychological, economic, social, cultural, political and institutional spheres of women's lives. SHGs are the tool for achieving social and economic empowerment through collective actions. It has led the women to understand their potentials, rights, entitlements and their responsibilities as mother at home, as labourer in different activities they engage with and as a citizen in the country. The SHG is a viable organized set-up to disburse microcredit to the rural women for the purpose of making them enterprising and encouraging them to enter into entrepreneurial activities. The formation of SHGs is not ultimately a micro credit project but an empowerment process.

Self-Help Groups are a small group of individual members who voluntarily come together and form an association for achieving a common objective. In most cases, SHGs are constituted by persons known to one another and coming from the same village community or neighborhood. SHGs are small in size with membership ranging from 10 to 20 and are homogeneous. SHGs have certain pre-groups binding factor. These groups start with saving and not with seeking credit from the group, then uses its savings to extend loans to SHG members to meet their emergency and other attendant needs. The members factor in many parameters to prioritize loans like savings per member, maximum size of loans, guarantee mechanisms in loan sanctions. The empowerment of women through SHGs would give benefits not only to individual woman but also for the family and community as a whole through collective action for the development.

The SHGs have the common perception of need and impulse towards collective action. Empowering women not for economic need alone, but also for more holistic social development. The SHGs empower women both socially and economically. They encourage women to participate in the decision making in the household, community local democratic sectors and prepare women to take leadership position.

## REVIEW OF LITERATURE

In order to analyze the role of SHGs in women empowerment, a brief review of literature has been made. According to Mohanan (1998), the Self-Help scheme to benefit the poorest of the poor must be at the heart of the new strategy to combat poverty. To him, the SHG route is one of the cost effective methods of delivery of credit to the poor for whom modern capital is inaccessible. Manimekali and Rajeshwari (2000) have explained the role of SHGs in empowering women. The encouragement given by the SHGs help the organizers to form a group namely SEVAI. They have suggested giving training, which is linked with some kind of credit delivery mechanism whether formal or informal. Soni (2001) defines "empowerment as an active multidimensional process, which should enable women to realize their full identity and power in all spheres of life." Soundari and Sudhir (2001) reveals that the SHGs engage not only in productive economic activities but also in social empowerment and capacity building of rural dalit women. Reddy (2002) has pointed out that for bridging gaps in gender inequality, women should be empowered by making them as active partners in decision-making, implementation and evaluation of all interventions initiated for energizing, organizing and sustaining their livelihood. According to him, empowerment is an ongoing process and not an end by itself. The processes involved in empowering are (i) growth in people's awareness and confidence; (ii) Ability to articulate problems; (iii) Gaining access to resources and public facilities; (iv) Negotiating over relations between different social groups. Seibel and Kumar (2002) revealed that SHGs in Karnataka paved the way for empowerment of women who are increasingly involved in community development programs and local politics. SHGs have potential to prevent social evils such as child marriage, child labour, and dowry and prevent harassment of

women. Dwarakanath (2003) highlighted the pioneering steps taken by the Andhra Pradesh government to involve rural women in the organization and monitoring the SHG action plan. These steps helped in bringing others institutions like commercial banks, NGOs and other microfinance organization for the uplift of rural women. Pazhani (2004) has analyzed the socio-economic conditions of women participating in Panchayati Raj Institutions (PRIs) and the factors responsible for active participation of women in PRIs. He suggested that the NGOs may be used in a better way to create social awareness among the rural population, especially women regarding PRIs and also other things relating to their environment. Perumal (2005) observed that women who join SHGs are strengthened in many ways apart from becoming economically empowered. They gain a say in family matters and their social status is enhanced. Kour (2008) suggested that the state agencies should formulate SHGs and finance them on strict criteria of income generation and poverty alleviation and overall rural development. Sivachithappa (2008) pin-pointed that SHG- based micro-finance and bank linkage programme has better outreach and positive impact on poverty. Olekar (2011) observed that SHG has attracted tremendous attention in recent years. Microcredit is an alternative source of credit for the poor. This system provides credits for the development of the poor sections of the society. SHG programme is the right participatory approach for eradication of rural poverty and paradigm of rural development. From the aforementioned discussion, it is evident that SHGs are playing a vital role in the process of women empowerment.

### OBJECTIVES AND METHODOLOGY

The objectives of the present study is to study the pre- and post- SHGs status of SHGs members and to evaluate the impact of SHGs in empowering women. The present study is undertaken in Mandi district of Himachal Pradesh. Primary and secondary data have been used for the present study. Stratified random sampling method has been used for the selection of 150 beneficiaries from the SHGs of Mandi districts. In order to study the impact of SHG on the beneficiaries, the occupation of the respondents in pre- and post- SHG stage has been analyzed. Similarly the income of the respondents in pre and post SHGs stage has been taken for analysis and others socio-economic parameters have been assessed to study the impact on beneficiaries.

### IMPACT OF SELF-HELP GROUPS

One of the major objectives in initiating SHGs for women, especially the poor women is to help them take up and manage their own productive activities. This could supplement their household income leading to improved living standards. Such income generating activities are also expected to serve as instruments which could bring about economic awareness and empowerment among the women members. The impact of SHGs are analyzed on the basis of occupation of the respondents in Pre-SHG and Post -SHG stage, income of the respondents in Pre-SHG and Post- SHG stage, benefits under SHGs and empowerment through SHGs.

Table 1 : Occupation of the Respondents in Pre-SHG and Post- SHG Stage

Occupation	Pre-SHG Stage	Post- SHG stage
No occupation	48 (32)	12 (08)
Rearing Cattle	24 (16)	09 (06)
Weaving	18 ( 12)	06 (04)
Handicrafts	09 ( 06)	33 (22)
Agricultural- labourer	39 (26)	27(18)
Other income generating activities	12 ( 08)	63(42)
Total	150 (100)	150(100)

Source: Primary Data, Note: Figures in the brackets denote percentage



## OCCUPATION OF THE RESPONDENTS IN PRE-SHG AND POST SHG STAGE

The occupation of the respondents in Pre-SHG and Post-SHG stage is analyzed in the above Table 1. It is evident that 32% of the respondents have no occupation in Pre-SHG stage whereas in Post- SHG stage, only 8% of the respondents are without occupation. The occupation chosen by SHG members depends upon the availability of skill, demand for the product in the market and the availability of resources.

Table 2 : Income of the Respondents in Pre-SHG and Post SHG Stage

Monthly income (Rs)	Pre-SHG Stage	Post- SHG stage
No income	48(32)	-----
Up to Rs.1000	18(12)	27(18)
Rs1000-2000	66(44)	39(26)
RS 2000-4000	18(12)	81(54)
Above Rs4000	-----	03(02)
Total	150(100)	150(100)

Source: Primary Data, Note : Figures in the brackets denote percentage.

## INCOME OF THE RESPONDENTS IN PRE -SHGS AND POST- SHGS STAGE:

The SHG members get involved in activities which yield better income to them. The income of the respondents in Pre-SHG and Post SHG stage is analyzed in the Table 2. It is evident that before joining in Self-Help Groups, 32 percent of the respondents had no income and none of the respondents had income above Rs.4,000. After joining SHG, three percent of the respondents have income above Rs.4,000 per month. In post- SHG, none of the single beneficiary is coming under no income group. Before joining SHG, majority of the women were not able to contribute towards their family income as they do not have the skills or opportunities for employment. After joining SHG, though the returns from income generating activity taken up remain irregular and many cases unstable, they would make a lot of difference to the lives of poor. The increased income has helped to supplement the incomes to reduce the level of the poverty to a great extent in several families.

Table 3 : Benefits Received by the Self-Help Group Members

Benefits Received	Opinion			Total
	Agree	No opinion	Disagree	
Development of saving habit	126(84)	24(16)	----	150(100)
Increased income	114(76)	27(18)	9(6)	150(100)
Access to large quantum of resources	81(54)	24(16)	45(30)	150(100)
Window for better technology	96(64)	18(12)	36(24)	150(100)
Better status and decision making power	120(80)	12(8)	18(12)	150(100)
Access to various promotional assistance	105(70)	15(10)	30(12)	150(100)
Organized and collective voicing of grievance	120(80)	9(6)	21(14)	150(100)

Source: Primary Data, Note: Figures in the brackets denote percentage.

## BENEFITS UNDER SELF- HELP GROUPS

Membership in Self-Help Group accrue certain benefits to its members. SHG member's opinion about benefits received by them is analyzed with the help of Table 3. The data shows how development of the savings habit is the major benefit received by the SHG members, followed by learning to organize and voice grievance collectively, increased income, better status and decision making power, accesses to various promotional assistance, access to larger quantum of recourses and window for better technology.

Table 4 : Empowerment of Self -Help Group Women

Indicators of empowerment	Opinion			Total
	Agree	Disagree	No opinion	
Able to contribute towards family income	144(96)	-	6(4)	150(100)
Skill upgradation	69(46)	54(36)	27(18)	150(100)
Understand the banking operation	108(72)	24(16)	18(12)	150(100)
Improve the standard of living	78(52)	42(28)	45(30)	150(100)
Better leadership and communication skill	90(60)	24(16)	21(40)	150(100)
Awareness in health education	93(62)	12(8)	45(30)	150(100)
Take decision in community, village and in household	78(52)	30(20)	42(28)	150(100)

Source: Primary Data

Note: Figures in the brackets denote percentage.

## EMPOWERMENT OF SELF -HELP GROUP WOMEN

The SHG program mainly focuses on empowerment of rural women and making them financially socially and politically capable. The above table analyses the empowerment of SHG women in the study area. Table 4 reveals the opinion of the respondents regarding the women empowerment through SHGs. The respondents were able to contribute towards their family income and also counted other benefits like skill upgradation, better understanding, banking operations, better leadership and communication skills. They gain first hand experience of how to take decisions in community, village, and in households. Most important is that there is palpable improvement in standard of living.

## SUMMARY OF FINDINGS, CONCLUSION AND SUGGESTIONS

On the basis of the study the following findings have been drawn.

1. 32% of the respondents have no occupation in Pre-SHG stage where as in Post -SHG stage, only 8% of the respondents are without occupation.
2. In Pre –SHGs stage, 26 percent of the respondents were engaged as agricultural labourer, but in post –SHGs stage, the figure declined to 18 percent.
3. In Pre-SHG stage, 8 percent of the respondents are engaged in other income generating activities which increased to 42 percent in post-SHG stage.
4. Before joining in Self-Help Groups, 32 percent of the respondents had no income and none of the

respondents had income above Rs.4,000 per month. After joining SHG, 3 percent of the respondents have income above Rs.4,000 per month. In post -SHG stage, not a single beneficiary is coming under no income group.

5. In pre-SHG stage, majority of respondents i.e. 44 percent are having income ranging between Rs.1,000-2,000 per month but after joining SHGs, 54 percent of respondents mentioned that their income have increased to Rs.2,000-4,000 per month.
6. 84 percent of respondents are of the opinion that they have developed the saving habit after joining SHGs. Whereas 76 percent of respondents revealed that their income level had increased significantly after joining SHGs.
7. 54 percent of respondents reveal that after joining SHGs, they are able to access large quantum of the resource where as 30 percent of respondents have expressed their dissatisfaction.
8. 64 percent of respondents have opined that SHGs proved useful window for better technology whereas majority of respondents i.e. 80 percent of respondents have expressed their satisfaction that SHG have helped them to live better life and their involvement in decisions making power.
9. 70 percent of respondents reveal that SHGs have provided them access to various promotional assistance and 80 percent of the respondents expressed that SHGs have been able to organize voice their grievance together.
10. 96 percent of respondents have opined that through SHGs, they are able contribute towards their family income, 46 percent of respondents have expressed that SHGs have helped them for skills upgradation, 72 percent of respondents are able to understand banking operation after joining SHGs, 52 percent of respondents have opined that their standard of living have improved after joining SHGs, whereas 60 percent of the respondents have opined that SHGs have improved their better leadership and communication skill and 52 percent of respondents stated that after joining SHGs ,they are able to take decision in community, village and household activities. SHGs have a power to create a socio economic revolution in the rural areas of our country.

## CONCLUSION

SHG is a powerful instrument for poverty eradication in the new economic era. As women are the most vulnerable section of the society the quick progress of SHG is an upward vehicle for women empowerment. SHGs have not only produced tangible assets and improved living condition of members but also helped in changing much of their outlook and attitude. In the present study, it has been found that SHGs have served the cause of women empowerment, social-solidarity and socio-economic betterment of poor rural women. SHG serves as a democratic tool for grassroot development for women. SHG promotes self reliance by generating its own funds. It breaks the vicious cycle of debts. It is an effective agent for change and serves as a solid platform for women empowerment.

## SUGGESTIONS

On the basis of the study, following suggestions are offered:

1. Periodical training at regular interval to group members on self management aspect may be imparted with the help of experienced resource persons.
2. SHG services can be utilized to fight against social evils like child labour, dowry system, to promote

small family norms, infrastructure development and in other useful social works.

3. Instead of officials or village leaders, motivating the women to form into group to serve its members, people should come together on their own volition.
4. Attendance at meeting should be made mandatory to inculcate the group cohesiveness among all the members.
5. NGOs and Government should take necessary steps for marketing the goods produced by SHGs.

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# RADIO FREQUENCY MICRO ELECTRIC MECHANICAL SYSTEM (RF MEMS) AND ITS CLASSIFICATION

Pawandeep Kaur Gujral\*

## ABSTRACT

The term RF MEMS refers to the design and fabrication of MEMS for RF integrated circuits. It should not be interpreted as traditional MEMS devices operating at RF frequencies. MEMS devices in RF MEMS are used for actuation or adjustment of a separate RF device or component, such as variable capacitors, switches, and filters. Traditional MEMS can be divided into two classes: MEMS actuators and MEMS sensors. The first one is a kind of moving mechanism activated by an electrical signal like Micro motor. Micro sensors are currently available for a large number of applications. Historically, owing to their ease of fabrication, these were the earliest Microsystems. Another reason for the actuators not becoming popular is that the amount of energy generated by such tiny systems does not cause much impact in the associated systems. However, it can be seen later, for microwave and millimetre wave systems, these forces are sufficient to change the properties of overall systems. Passive devices include bulk micro machined transmission lines, filters and couplers. Active MEMS devices include switches, tuners and variable capacitors.

Keywords: Dendrimer, Electronic Design Automation (EDA), fullerene, micro electro-mechanical systems (MEMS), nano-particles

## INTRODUCTION

The micro electro-mechanical systems (MEMS) technology is attracting researchers towards the development of MEMS devices for radio frequency (RF) applications. RF MEMS devices have a broad range of potential applications in wireless communication, navigation and sensor systems. These are used in switches, phase shifters, signal routings, impedance matching networks, exciters, transmitters, filters, and IF/RF receivers. Compared with the common electronic solid state switches (FET's and PIN diodes), RF MEMS based switches are characterized by very low insertion loss, low power consumption, high isolation (up to 100 GHz), low fabrication cost, and very low inter modulation. The literature shows more than 32 different types of RF MEMS with a variety of actuation mechanisms (electrostatic, magneto static, piezoelectric or thermal), contact modes (capacitive or metal-to-metal), and circuit implementation. The current paper focuses on the design and fabrication of RF MEMS switch using Shape Memory Alloys (SMA) based actuator.(El-Khoury & Mohammad A. Hotait,2004)

The paper provides a scheme to improve the performance of SMA actuation of the RF switch by allowing rapid heating and fast cooling of the SMA beam. Applying high currents results in rapid heating but requires temperature monitoring in order to avoid overheating of the SMA layer. A thermo diode temperature sensor

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with a feedback control is used to monitor the temperature of the SMA wire. As for rapid cooling, different methods are available, including water immersion, heat sinking and forced air cooling. Heat sinking is herein used to improve the cooling rate and thus provide faster switching time.(El-Khoury & Mohammad A. Hotait, 2004)

## CLASSIFICATION OF RF MEMS

RF MEMS development can be classified into the following categories based on whether one takes an RF or MEMS view point:

### 1. RF extrinsic

RF extrinsic is the category, in which the MEMS structure is located outside the RF circuit and actuates or controls other devices in the RF circuit. In this class, one would consider the example of a tuneable micro strip transmission line and associated phased shifters and arrays. Micro strip lines are extensively used to interconnect high-speed circuits and components, because they can be fabricated by easy automated techniques.

### 2. RF intrinsic

RF intrinsic is the category, in which the MEMS structure is located inside the RF circuit and has both the actuation and RF-circuit function. In this class, one could consider traditional cantilever and diaphragm type MEMS which can be used as electrostatic micro switch and comb-type capacitors. With the invention of electro active polymers (EAPs), multifunctional smart polymers and micro stereo lithography, these types of RF MEMS can be easily conceived with polymer-based systems. They are also flexible, stable and long lasting. Moreover, they can be integrated with the organic thin film transistor.

### 3. RF reactive

RF reactive is that category, in which the MEMS structure is located inside, where it has an RF function that is coupled to the attenuation. In this class, capacitive coupled tuneable filters and resonators provide the necessary RF function in the circuit. Microwave and millimetre wave planar filters on thin dielectric membrane show low loss, and are suitable for low-cost, compact, high-performance mm-wave one-chip integrated circuits.

### 4. Silicon based RF MEMS

One of the earliest reported applications of silicon-based RF MEMS technology for microwave applications is in the area of surface micro machined actuators for the realization of microwave switches. These possess very high linearity, low dc standby power and low insertion loss. These switches are based on electrostatic attraction counterbalanced by suitable mechanical forces on the beam to pull the switch into the right position. This switch can be designed to present nearly  $50\ \Omega$  impedance across a broad range of frequencies when closed and nearly an open circuit when there is no connection. This property makes this an attractive choice for microwave applications. Several new switch architectures have also been reported, including the air-bridge structure. This structure utilizes very high capacitance variation to achieve the switching action. This scheme, however, suffers from relatively high switching voltage requirements.

MEMs technology is also used for RF applications in the area of variable capacitors, as a replacement for varactor diodes as tuners. Here, either a lateral or a parallel plate capacitance variation can be obtained with suitable fabrication approaches. The capacitance variation in the parallel plate version is over 3:1 making them attractive for wide-band tuning of monolithic voltage-controlled oscillators (VCOs). However their range is often limited by the low-frequency mechanical resonance of the structure.

The researchers are forging marriage of nanotechnology to develop next generation RF MEMS . Recently a nanoparticle lubricant (NPL) technology was developed which was capable of improving noble metal Ohmic

contact RF MEMS switching circuit power handling and lifetime ratings to meet tactical radio requirements. RF MEMS switches are expected to be a cutting edge technology for many microwave and wireless applications. But the reliability is still a challenge and the lifetime of these switches is strongly influenced by dielectric charging. By bringing in nanotechnology, the lifetime of RF MEMS can be prolonged. The future of RF MEMS is inextricably linked with the development of nanotechnology.

## INTRODUCTION TO NANOTECHNOLOGY APPLICATIONS

Nanotechnology is defined as the study and use of structures between 1 nanometre and 100 nanometers in size. Nanowerk.com is a leading nanotechnology and nanosciences portal, which provides useful, and cutting-edge information from all things nano. The following applications of the nanotechnology has been discussed on this site:

The ability to see nano-sized materials has opened up a world of possibilities in a variety of industries and scientific endeavours. Because nanotechnology is essentially a set of techniques that allow manipulation of properties at a very small scale, it can have many applications, such as:

### a. Drug delivery

Today, most harmful side effects of treatments such as chemotherapy are a result of drug delivery methods that don't pinpoint their intended target cells accurately. Researchers at Harvard and MIT have been able to attach special RNA strands, measuring about 10 nm in diameter, to nano-particles and fill the nano-particles with a chemotherapy drug. These RNA strands are attracted to cancer cells. When the nano-particle encounters a cancer cell it adheres to it and releases the drug into the cancer cell. This directed method of drug delivery has great potential for treating cancer patients while producing less side harmful effects than those produced by conventional chemotherapy.

### b. Fabrics

The properties of familiar materials are being changed by manufacturers who are adding nano-sized components to conventional materials to improve performance. For example, some clothing manufacturers are making water and stain repellent clothing using nanosized whiskers in the fabric that cause water to bead up on the surface.

### c. Reactivity of Materials

The properties of many conventional materials change when formed as nano-sized particles (nano-particles). This is generally because nano-particles have a greater surface area per weight than larger particles; they are therefore more reactive to some other molecules. For example studies have shown that nano-particles of iron can be effective in the cleanup of chemicals in groundwater because they react more efficiently to those chemicals than larger iron particles.

### d. Strength of Materials

Nano-sized particles of carbon (for example nano-tubes and bucky balls) are extremely strong. Nano-tubes and bucky balls are composed of only carbon and their strength comes from special characteristics of the bonds between carbon atoms. One proposed application that illustrates the strength of nano-sized particles of carbon is the manufacture of t-shirt weight bullet proof vests made out of carbon nano-tubes.

### e. Micro/Nano Electro-Mechanical Systems

The ability to create gears, mirrors, sensor elements, as well as electronic circuitry in silicon surfaces allows the manufacture of miniature sensors such as those used to activate the airbags in a car. This technique is called MEMS (MicroElectro-Mechanical Systems). The MEMS technique results in close integration of the



mechanical mechanism with the necessary electronic circuit on a single silicon chip, similar to the method used to produce computer chips. Using MEMS to produce a device reduces both the cost and size of the product, compared to similar devices made with conventional methods. MEMS is a stepping stone to NEMS or Nano-Electro-Mechanical Systems. NEMS products are being made by a few companies, and will take over as the standard once manufacturers make the investment in the equipment needed to produce nano-sized features.

f. Molecular Manufacturing

Researchers are working on developing a method called molecular manufacturing that may someday make the Star Trek replicator a reality. The gadget these folks envision is called a molecular fabricator; this device would use tiny manipulators to position atoms and molecules to build an object as complex as a desktop computer. Researchers believe that raw materials can be used to reproduce almost any inanimate object using this method.

g. The significance of nanoscale

A nano-metre (nm) is one thousand millionth of a metre. For comparison, a red blood cell is approximately 7,000 nm wide and a water molecule is almost 0.3 nm across. People are interested in the nano-scale [which we define to be from 100 nm down to the size of atoms (approximately 0.2nm)] because it is at this scale that the properties of materials can be very different from those at a larger scale.

This can be due to two main reasons. First, nano-materials have a relatively larger surface area when compared to the same mass of material produced in a larger form. This can make materials more chemically reactive (in some cases materials that are inert in their larger form are reactive when produced in their nano-scale form), and affect their strength or electrical properties. Second, quantum effects can begin to dominate the behaviour of matter at the nano-scale—particularly at the lower end—affecting the optical, electrical and magnetic behaviour of materials. Materials can be produced that are nano-scale in one dimension (for example, very thin surface coatings), in two dimensions (for example, nano-wires and nano-tubes) or in all three dimensions (for example, nano-particles).

## NANO-MATERIALS

Much of nano-science and many nanotechnologies are concerned with producing new or enhanced materials. It has been 25 years since the scanning tunneling microscope (STM) was invented, followed four years later by the atomic force microscope, and this boosted nano-science and nanotechnology. Scanning probe techniques have become the workhorse of nano-science and nanotechnology research.

Current applications of nano-scale materials include very thin coatings used, for example, in electronics and active surfaces. In most applications the nano-scale components will be fixed or embedded but in some, such as those used in cosmetics and in some pilot environmental remediation applications, free nano-particles are used. The ability to machine materials to very high precision and accuracy (better than 100 nm) is leading to considerable benefits in a wide range of industrial sectors, for example in the production of components for the information and communication technology, automotive and aerospace industries.

## NANO-MATERIAL SCIENCE

Nano-materials are miniaturization of materials. Some examples of nano-materials and the range of nano-science that is aimed at understanding their properties is outlined below:

### NANOSCALE IN ONE DIMENSION

One-dimensional nano-materials, such as thin films and engineered surfaces, have been developed and used for decades in fields such as electronic device manufacture, chemistry and engineering. In the silicon

integrated-circuit industry, for example, many devices rely on thin films for their operation, and control of film thicknesses approaching the atomic level is routine. Mono-layers (layers that are one atom or molecule deep) are also routinely made and used in chemistry.

Engineered surfaces with tailored properties such as large surface area or specific reactivity are used routinely in a range of applications such as in fuel cells and catalysts. The large surface area provided by nano-particles, together with their ability to self assemble on a support surface, could be of use in all of these applications. It can be put to use on the small-scale, on-site production of high value chemicals such as pharmaceuticals.

## NANOSCALE IN TWO DIMENSIONS

Two dimensional nanomaterials such as tubes and wires have generated considerable interest among the scientific community in recent years. In particular, their novel electrical and mechanical properties are the subject of intense research.

### a) Carbon Nanotubes

Carbon nanotubes (CNTs) were first observed by Sumio Iijima in 1991. CNTs are extended tubes of rolled graphene sheets. CNTs have assumed an important role in the context of nanomaterials, because of their novel chemical and physical properties. They are mechanically as strong as diamond, flexible and can conduct electricity well. All of these remarkable properties give CNTs a range of potential applications: for example, in reinforced composites, sensors, nanoelectronics and display devices.

### b) Inorganic Nanotubes

Inorganic nanotubes and inorganic fullerene-like materials based on layered compounds such as molybdenum disulphide were discovered shortly after CNTs. They have excellent tribological (lubricating) properties, resistance to shockwave impact, catalytic reactivity, and high capacity for hydrogen and lithium storage, which suggest a range of promising applications.

### c) Nanowires

Nanowires are ultrafine wires or linear arrays of dots, formed by self-assembly. They can be made from a wide range of materials. Semiconductor nanowires made of silicon, gallium nitride and indium phosphide have demonstrated remarkable optical, electronic and magnetic characteristics. Nanowires have potential applications in high-density data storage, either as magnetic read heads or as patterned storage media and electronic and opto-electronic nanodevices, for metallic interconnects of quantum devices and nanodevices.

### d) Biopolymers

The variability and site recognition of biopolymers, such as DNA molecules, offer a wide range of opportunities for the self-organization of wire nanostructures into much more complex patterns. The DNA backbones may then, for example, be coated in metal. They also offer opportunities to link nano- and biotechnology in, for example, biocompatible sensors and small, simple motors. Such self-assembly of organic backbone nanostructures is often controlled by weak interactions, such as hydrogen bonds, hydrophobic, or van der Waals interactions (generally in aqueous environments) and hence requires quite different synthesis strategies to CNTs, for example.

## NANOSCALE IN THREE DIMENSIONS

### a) Nanoparticles

Nanoparticles are often defined as particles of less than 100 nm in diameter. Nanoparticles exist widely in the natural world; for example as the products of photochemical and volcanic activity, and created by plants

and algae. They have also been created for thousands of years as products of combustion and food cooking, and more recently from vehicle exhausts. Deliberately manufactured nanoparticles, such as metal oxides, are by comparison in the minority.

Nanoparticles are of interest because of the new properties (such as chemical reactivity and optical behaviour) that they exhibit compared with larger particles of the same materials. For example, titanium dioxide and zinc oxide become transparent at the nanoscale, however, are able to absorb and reflect UV light, and have found application in sunscreens. Nanoparticles have a range of potential applications: in the short-term in new cosmetics, textiles and paints; in the longer term, in methods of targeted drug delivery where they could be used to deliver drugs to a specific site in the body. Nanoparticles can also be arranged into layers on surfaces, providing a large surface area and hence enhanced activity, relevant to a range of potential applications such as catalysts.

Manufactured nanoparticles are typically not products in their own right, but generally serve as raw materials, ingredients or additives in existing products. Nanoparticles are currently in a small number of consumer products such as cosmetics and their enhanced or novel properties may have implications for their toxicity. For most applications, nanoparticles will be fixed (for example, attached to a surface or within a composite) although in others they will be free or suspended in fluid.

#### b) Fullerenes (carbon 60)

In the mid-1980s a new class of carbon material was discovered called carbon 60 (C<sub>60</sub>). Harry Kroto and Richard Smalley, the experimental chemists, who discovered C<sub>60</sub> named it “buckminsterfullerene”, in recognition of the architect Buckminster Fuller, who was well-known for building geodesic domes. In 1990, a technique to produce larger quantities of C<sub>60</sub> was developed by resistively heating graphite rods in a helium atmosphere. Several applications are envisaged for fullerenes, such as miniature ‘ball bearings’ to lubricate surfaces, drug delivery vehicles and in electronic circuits.

#### c) Dendrimers

Dendrimers are spherical polymeric molecules, formed through a nanoscale hierarchical self-assembly process. There are many types of dendrimer; the smallest is several nanometres in size. Dendrimers are used in conventional applications such as coatings and inks, but they also have a range of interesting properties which could lead to useful applications. For example, dendrimers can act as nanoscale carrier molecules and as such could be used in drug delivery. Environmental clean-up could be assisted by dendrimers as they can trap metal ions, which could then be filtered out of water with ultra-filtration techniques.

#### d) Quantum dots

Nanoparticles of semiconductors (quantum dots) were theorized in the 1970s and initially created in the early 1980s. If semiconductor particles are made small enough, quantum effects come into play, which limit the energies at which electrons and holes (the absence of an electron) can exist in the particles. As energy is related to wavelength (or colour), this means that the optical properties of the particle can be finely tuned depending on its size. Thus, particles can be made to emit or absorb specific wavelengths (colours) of light merely by controlling their size. Recently, quantum dots have found applications in composites, solar cells (Gratzel cells) and fluorescent biological labels (for example to trace a biological molecule) which use both the small particle size and tuneable energy levels.

## CONCLUSION

MEMS technology has strong ties to semiconductor processes and Electronic Design Automation (EDA) tools, such that there is a strong effort to integrate MEMS technology with IC development. This is especially

true in RF MEMS design. By developing MEMS industry material property methodology, we may borrow much of the processing methodology from the IC world. Design and simulation tools are already at a highly sophisticated level. In order to complete MEMS standardization, the industry must design test structures that measure specific material properties and processing effects, derive models in suitable formats, adapt the structures to specific process flows, develop test methods for test equipment and arrange these elements in widely distributed standards. The proof of design and reliability will come as more and more wireless product designers incorporate RF MEMS within their designs and demand reliability and fabrication standards. The benefit will be both to wireless product designers in high-quality, cost-effective components and affordable functionality to the end-user.

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# STUDY AND ANALYSIS OF SMART ANTENNA IN WIRELESS COMMUNICATION APPLICATION

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## ABSTRACT

In the recent years, advancement in telecommunication technologies and the increasing demand of data rate has motivated the optimized use of frequency spectrum. One technique for the efficient usage of frequency is Smart Antenna system. They provide a smart solution to the problem of communication traffic overload i.e. they increase the traffic capacity. Smart Antenna technologies will change the economics of 3G radio networks. They provide either a major data capacity gain or a significant reduction in the number of base stations required to achieve a base level of service. This paper is an overview of Smart Antenna technology, their benefits, how they work and how they can be deployed to the best advantage. The research is focused on determining the feasibility of smart transmit and receive handset antennas. The goals are to show reduced power consumption, improved capacity and better link reliability. Finally, a new wideband compact Smart antenna (SMA) has been proposed. Preliminary work is presented along with numerical and experimental results for various environments such as free space, plastic casing, and the proximity of a hand.

Keywords: Antenna Arrays, Adaptive Algorithms, Beam forming, Interference, Signal Nulling, Smart antenna.

## INTRODUCTION

### General

The 2G systems have been designed for both indoor and vehicular environments with an emphasis on voice communication. While great effort in current 2G wireless communication systems has been directed towards the development of modulation, coding and protocols, antenna related technology has received significantly less attention up to now. However, it has to be noted that the manner in which radio energy is distributed into and collected from space has a profound influence on the efficient use of spectrum.

### Background

In recent years, the demand for compact and held communication devices has a significant growth including the devices with size smaller than the palm size cheaply available in the market. The antenna size is measure factor that limits miniaturization of device. There are wide variety of methods used in studies to deal with the deficiencies of the common monopole, many of these methods being based on microstrip antenna design such as SMA, a distant derivative of the monopole antenna where SMA utilizes a modify inverted low profile structure which is frequently used for aerospace application.

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## Problem Statement

The challenge of next generation wireless communication systems comes from the fact that they will have to offer data rates in the hundreds of megabits per second. This requirement translates into the demand for wide frequency bands.

## Purpose of the Study

The dual purpose of a smart antenna system is to augment the signal quality of the radio-based system through more focused transmission of radio signals while enhancing capacity through increased frequency reuse.

## What is a Smart Antenna ?

A smart antenna is defined as an array of antennas with a digital signal processing unit that can change its pattern dynamically to adjust to noise, interference and multi paths. Smart antennas have promised to provide significant increases in system capacity and performance in wireless communication systems.

## LITERATURE REVIEW

### General

This paper provides a general overview of smart antennas and their role in Wireless communication systems. The literature survey covers topics that form the basis of the work in this paper. Following topics are considered for discussion:

1. Study and understanding the antenna theory and characteristics;
2. With a good understanding of SMA, design a new antenna to perform to the requirements listed in the criteria;
3. Simulations were being done to obtain the results on the performance of the antenna with different dielectric material;
4. Beam forming algorithms for smart antennas;
5. Investigate on the characteristics of the new antenna and compare the results with the theory.

Each of these topics is addressed in detail below. The first aim of this paper is to understand different smart antenna approaches, more importantly to have a thorough understanding of a fully adaptive beam forming approach based on smart antennas.

### Implementation of a smart antenna system

#### Smart Antenna Technology

Possible reasons for this may be that their forecast benefits are unobtainable, that the technology for their implementation is not mature, or that they cannot currently be implemented economically. These lead to the overall objectives of the project, namely, to assess and demonstrate the potential of smart antennas for enhancing spectrum efficiency in wireless systems. In general, the term “Smart Antenna” may be used to describe any antenna system that incorporates some degree of adaptation to the environment to improve performance. There are a number of alternative approaches to incorporating this adaptation

#### Principle of working

The smart antenna works in following ways. Each antenna element “sees” each propagation path differently, enabling the collection of elements to distinguish individual paths within a certain resolution. As a consequence, smart antenna transmitters can encode independent streams of data onto different paths or linear combinations of paths, thereby increasing the data rate, or they can encode data redundantly onto paths that

fade independently to protect the receiver from catastrophic signal fades, thereby providing diversity gain. A smart antenna receiver can decode the data from a smart antenna transmitter this is the highest-performing configuration or it can simply provide array gain or diversity gain to the desired signals transmitted from conventional transmitters and suppress the interference.

#### Need for smart antennas

Wireless communication systems, as opposed to their wire line counterparts, pose some unique challenges. The limited allocated spectrum results in a limit on capacity of the radio propagation environment and the mobility of users give rise to signal fading and spreading in time, space and frequency. The limited battery life at the mobile device poses power constraints. In addition, cellular wireless communication systems have to cope with interference due to frequency reuse. Research efforts to investigate effective technologies to mitigate such effects have been going on for the past twenty five years, as wireless communications are experiencing rapid growth. Among these methods are multiple access schemes, channel coding and equalization and smart antenna employment.

### MULTI- ANTENNA ALGORITHMS

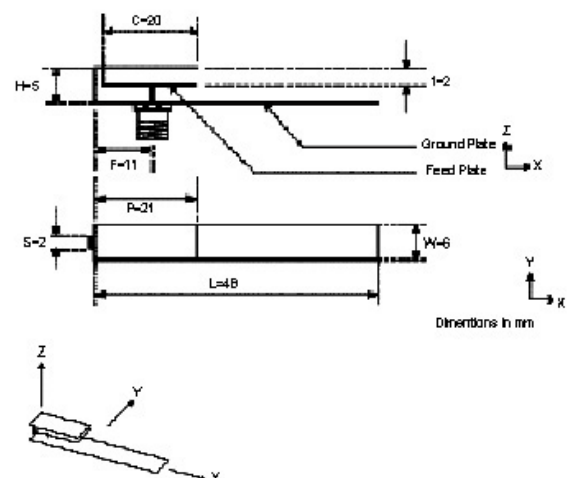
#### How Genetic Algorithms Work

Genetic algorithms are implemented as a computer simulation in which a population of abstract representations (called chromosomes or the genotype or the genome) of candidate solutions (called individuals, creatures, or phenotypes) to an optimization problem evolves toward better solutions. Traditionally, solutions are represented in binary as strings of 0s and 1s, but other encoding are also possible. The evolution usually starts from a population of randomly generated individuals and happens in generations. In each generation, the fitness of every individual in the population is evaluated, multiple individuals are stochastically selected from the current population (based on their fitness), and modified (recombined and possibly randomly mutated) to form a new population. The new population is then used in the next iteration of the algorithm. Commonly, the algorithm terminates when either a maximum number of generations has been produced, or a satisfactory fitness level has been reached for the population. If the algorithm has terminated due to a maximum number of generations, a satisfactory solution may or may not have been reached. A typical genetic algorithm requires two things to be defined:

- a genetic representation of the solution domain.
- a fitness function to evaluate the solution domain.

#### Artificial Immune System (AIS)

Different aspects of the immune system (IS) have been modeled for solving different problems including anomaly detection, clustering, and function optimization. Since the interest is on the computational model, the use of biological terms is limited and simplified in the Anomaly Detection. The obvious feature of the IS is its ability to protect an organism from harmful agents known as pathogens, such as bacteria and virus. The concept is simple: find the pathogen, identify it as harmful, and destroy it. The cell responsible for this is the lymphocyte. Assuming the pathogen has already been found, the distinction between harmful and harmless is

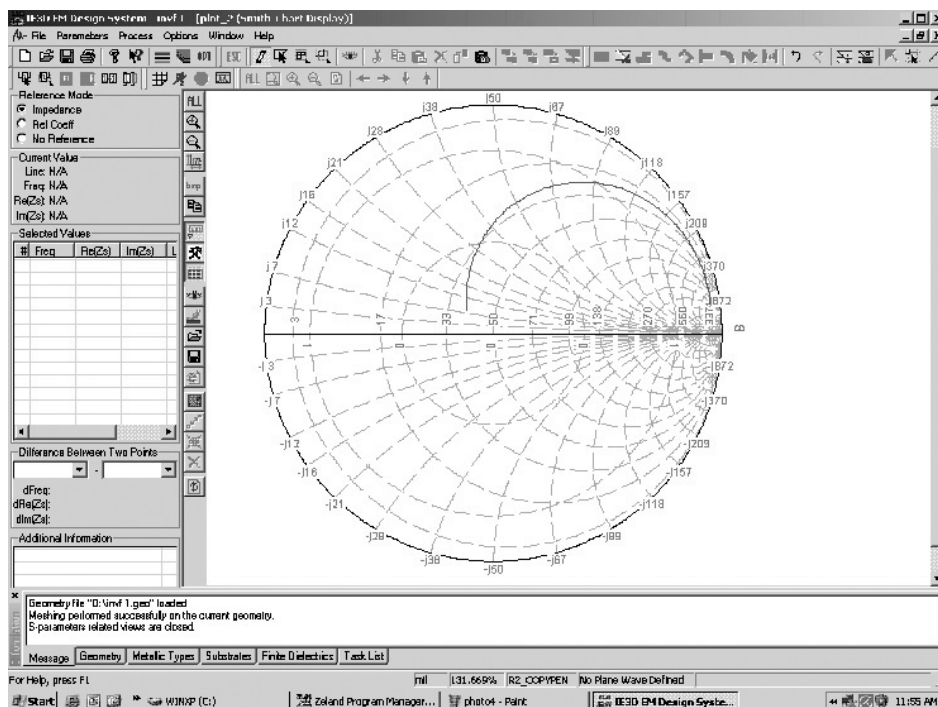


the focus of our attention, and the destruction of harmful pathogens is replaced through implementation by a context-appropriate response. The objective of AIS in anomaly detection is to minimize damage while maximizing usability. But being completely usable, the system would have no protection, being completely safe the system would not be usable. Once again it is a matter of balancing requirements. Although the optimal classification of pathogens is either as harmful or harmless, the IS works slightly different. Normally the lymphocytes do not know what a harmful pathogen looks like, because this information is not encoded into the organism, it only knows what itself looks like.

## SIMULATION OF THE ANTENNA SYSTEM

Based on these results, discussions will be made on the performance of the antenna. In this paper, the accomplished results such as return loss curves and radiation patterns will be discussed. In addition, the directivity of the antenna and analysis of the results of the quad band SMA will be made to find out if it fulfils the basic criteria for operation in the proposed wireless communication networks or systems.

Figure 1



## RESULTS AND DISCUSSIONS

The antenna to be simulated using ZELAND IE3D V 14:

Before getting to the analysis of the result we need to understand the definition for the return loss and the far field radiation pattern.

Investigation of the Smart Antenna System Performance in an Existing Wireless Communication

To investigate the strategic deployment of this smart antenna system into Wireless Communication to the optimum techno-economic advantage of mobile network providers, i.e. to identify the best locations for smart antennas in the radio network in the most cost-effective deployment, there is a need for a radio network planning and optimization tool.



The study reveals that the 10 dB matching bandwidth of the SMA decreases as  $\epsilon_r$  increases. As the value of the substrate  $\epsilon_r$  rises, the antenna gives higher Q. With  $\epsilon_r = 1$ , the antenna provides a maximum matching bandwidth.

Figure 2

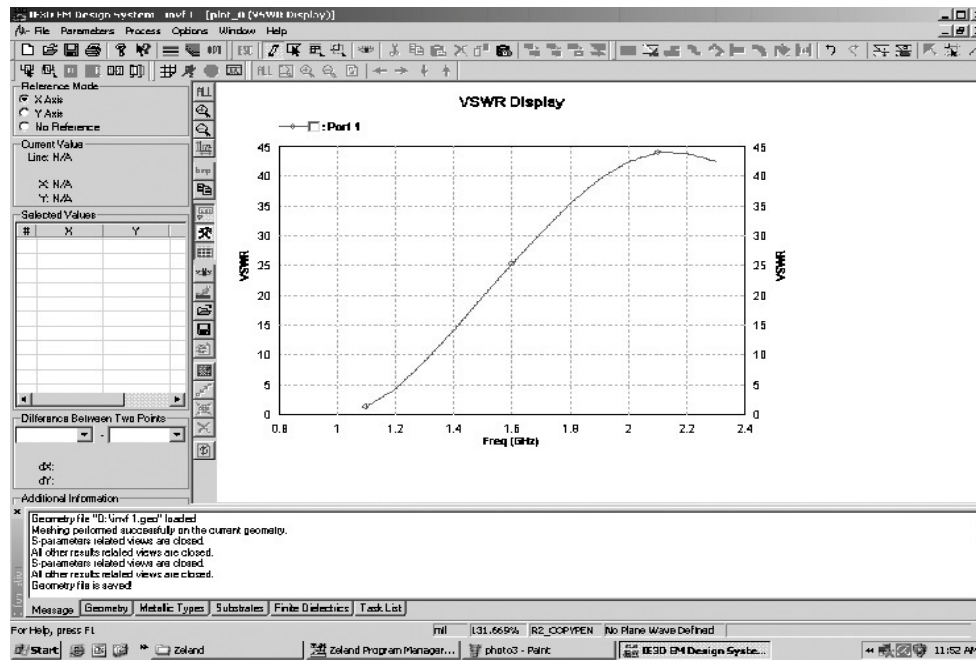


Table 1

SL. No.	Material	Permittivity	Loss Tangent	Gain vs Frequency graph analysis	Directivity vs Frequency graph analysis	Polar plot radiation pattern
1	Duroid	2.2	0	Decrease	Increase	Bi directional
2	FR4	4.4	0.02	Increase	Decrease	Uni directional
3	Mica	5.7	0	Increase	Increase	Uni directional
4	Alumina	9.4	0.01	Decrease	Increase	Bi directional
5	Silicon	10.4	0	Decrease	Decrease	Bi directional
6	GaAs	12.4	0	Increase	Decrease	Uni directional

Table 1 discussed the fundamental limit on antenna size and bandwidth. It is interesting to see where the SMA is located on the fundamental limit curve. Compared with the other antennas shown in the figure, the SMA is the best antenna in terms of its size-bandwidth performance. An important point should be made relative to calculation of antenna size - or radius of the sphere enclosing the antenna. The sphere radius  $a$  should enclose the antenna and its image if the antenna is on a large ground plane. However, since the size of the wideband SMA ground plane is small, the structure of the antenna, including its ground plane, is contained in the sphere. Thus, the entire volume of the wideband SMA is included in the enclosing volume, whereas the conventional SMA volume excludes its average ground plane. In this paper, we have discussed the accomplished results such as gain, smith chart radiation pattern for 3GHZ frequency band.

## CONCLUSIONS

In recent years, advancement in telecommunication technologies and the increasing demand of data rate has motivated the optimized use of frequency spectrum. One technique for the efficient usage of frequency is Smart Antenna system. Smart Antennas are though developed using different algorithms, but the urge was felt for improving the technique to increase their efficiency. Therefore, we humbly tried to present a new technique which tried to fulfill all the issues of smart antenna. This paper has examined adaptive array smart antenna systems and the effects that multipath components had on their performance. The results confirmed the great interest in smart antenna systems as they proved that smart antenna systems could steer beams for reception in the direction of desired incoming signals. Furthermore, they can also place nulls in the direction of interfering signals. It was also found that signals from multiple users might as well be multipath components from the one signal arriving at different times. This is because both are uncorrelated with the desired transmitted signal. Both multipath arriving at the smart antenna at different times and at the same time were investigated. When investigating multipath arriving at the same time, it was found that only one set of weights is needed no matter how many multipath are arriving at the same time. The major finding of the paper was that a set of weights is not only able to steer a beam in a desired direction, but also able to steer multiple beams in multiple desired directions. In theory, the inclusion of appropriate time delay filters at the output of the smart antenna system would facilitate the constructive summation of the output signal, therefore resulting in an increased signal power, meaning an increase in SNR and therefore performance is achieved. Once again, these results confirm why smart antennas have gained such popularity and increased attention and that they will be the future of mobile communications.

## RECOMMENDATION

We would definitely like someone to extend this project for the case of planar arrays and also doing RF end designing. This technique may also be incorporated in Radar scanning. The analysis of the adaptive array smart antenna system can be expanded in many ways. The theory of the time delay filters at the output of the smart antenna system could be investigated to prove that this can in fact be done. Only the reception of signals has been investigated, which logically leads to an investigation of transmission and then combining the two together. Perhaps other future work may look at applying smart antennas into a CDMA system. Particularly, incorporating certain types of receivers into the system may enhance the system by receiving only the strongest multipath instead of all the multipath arriving at the antenna simultaneously.

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# A NUMERICAL METHOD TO STUDY THE HEAT TRANSFER IN ROCKET NOZZLE THROAT BY INVERSE HEAT CONDUCTION TECHNIQUE

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## ABSTRACT

This paper is study of one dimensional heat conduction with thermo-physical properties  $K$ ,  $\rho$ ,  $C_p$  of a material varying with temperature. The physical problem is characterized by a slab of infinite length and thickness  $L$ , imposed with a net heat flux at  $x=0$ , with the other end being insulated. The problem is solved by using Inverse Heat Conduction Technique (IHCP).

Keywords: Duhamel's theorem, Heat Conduction, Sensitivity Coefficient, Taylor series, tridiagonal system.

## LITERATURE SURVEY

### Function Estimation verses Parameter estimation

The word function estimation is used in connection with heat flux. Heat flux is found to be an arbitrary, single valued function of time. Heat flux can be positive, negative, constant or abruptly changing periodic or not and so on. It may be influenced by human decisions. For example, a pilot of a shuttle can change the reentry trajectory. In IHCP problem, the surface heat flux is a function of time and may require hundreds of individually estimated heat flux components,  $q$ , to define it adequately. Related estimation problems are called parameter estimation problems which are inverse problems but with emphasis on the estimation of certain parameters or constants or physical properties. In the context of heat conduction, one might be interested in determining the thermal conductivity of a body based upon internal temperature histories and the surface heat flux and other boundary conditions. The thermal conductivity of iron near room temperature, for example, could be a parameter. It is not a function and does not require hundreds of values of  $K$  to describe it. The parameter estimation and function estimation problems start to merge if estimates are made of the thermal conductivity,  $K$  as a function of temperature. However,  $K(T)$  function is not arbitrary and is not adjustable by humans.

### Measurements

In the IHCP problem, there are a number of measured quantities in addition to temperature such as time, sensor location and specimen thickness. Each is assumed to be accurately known except the temperature. If this is not true, then it may be necessary, for example to simultaneously estimate sensor location and the surface heat flux. The latter problem would involve both inverse heat conduction and parameter estimation problem.

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If the thermal properties are not accurately known, they should be determined as accurately as possible using parameter estimation technique. The temperature measurements are assumed to contain the major sources of error or uncertainty. Any known systematic effective due to calibration errors, presence of sensors, conduction or convection losses or whatever is assumed to be removed to the extent that the remaining errors may be considered at random. These random errors can statistically be described.

#### Why is IHCP Difficult?

The IHCP is difficult because it is extremely sensitive to measurement errors. The difficulties are pronounced as one tries to obtain maximum amount of information from the data. For the one dimensional IHCP, when discrete values of  $q$  curve are estimated, maximizing the amount of information implies small time steps between  $q$  values.

However, uses of small time steps frequently introduces instability in the solution of the IHCP unless restrictions are employed. The conditions of small time steps have the opposite effects in the IHCP compared to the numerical solution of the heat conduction equation. In the latter, the stability problems often can be corrected by reducing the size of time steps.

#### Damping and lagging effects

The transient temperature response of an internal point in an opaque heat conducting body is quite different from that of a point at the surface. The internal temperature excursions are much diminished internally compared to the surface changes. This is a damping effect. A large time delay or lag in the internal response can also be noted. These lagging and damping effects for the direct problem are important because they provide engineering insight into the difficulties encountered in the inverse problem.

#### Classification of methods

The methods for solving the inverse conduction problem can be classified in several ways, some of which are discussed in this section. One classification relates to the ability of a method to treat linear as well as non-linear IHCPs. The two basic procedures given herein are the function specification and regularization methods. If the heat flux is varying with time, the method of solving IHCP is by function specification. The regularization method is a procedure which modifies the least square approach by adding factors that are intended to reduce excursions in the unknown function, such as the surface heat flux.

The method of solution of the heat conduction equation is another way to classify the IHCP. Methods of solution include the use of Duhamel's theorem, Finite elements and Finite control volumes. The use of Duhamel's theorem restricts the IHCP algorithm to a linear case; where as other two procedures can treat the non-linear case also.

The domain used in IHCP can also be used to classify the method of solution. Three time domains have been proposed (1) only the present time (2) to the present time plus few time steps and (3) the complete time domain. The last classification to be mentioned is related to the dimensionality of IHCP. If a single heat flux history is to be determined, the IHCP is considered as one dimensional. In the use of Duhamel's theorem, the physical dimensions are not of concern i.e. the same procedure is used for physically one, two or three dimension bodies provided a single heat flux history is to be estimated. If two or more heat flux histories are estimated and Duhamel's theorem is used, the problem is multidimensional. When the Finite difference or other methods are used for non-linear, the dimensionality of the problem depends on the number of space coordinates needed to describe a heat conducting body, one coordinate would give one dimension problem and so on.

#### Sensitivity Coefficients

In function estimation as in parameter estimation, a detailed examination of sensitivity coefficients can provide considerable insight into the estimation problem. These coefficients can show the possible

areas of difficulty and also lead to experimental design. The sensitivity coefficients are defined as first derivative of the dependent variable such as a heat flux component. If the sensitivity coefficients are either small or correlated to one another, the estimation problem is difficult and very sensitive to estimation errors.

For the IHCP problem, the sensitivity coefficients of interest are those of the first derivatives of temperature  $T$ , at location  $x$  and time  $t$ , with respect to a heat flux component  $q$ , and are defined by

$$X_{j_m}(x_j, t_i) = \partial(x_j, t_i) / \partial q_m$$

For  $j = 1, 2, 3, \dots, n$ , and  $m = 1, 2, 3, \dots, n$

Note that the number of times  $t$ , equals the number of heat flux components. If there is only one interior location, that is,  $j=1$ , the sensitivity coefficient is simply given by:

$$X_m(t_i) = \partial(T_i) / \partial q_m$$

For the transient problems considered in the IHCP, the sensitivity coefficients are zero for  $m > i$ . In other words, the temperature at  $t$  is independent of yet to occur future heat flux component of  $q_m$ ,  $m > i$ . On the way to determine the linearity of an estimation problem, one need to inspect the sensitivity coefficients. If the sensitivity coefficients are not functions of the parameters, then the estimation problem is linear. If they are, then the problem is non-linear. For example, consider the equation

$\partial T(\theta, t) / \partial q_c = (L/K) \cdot 2 \cdot (\alpha T / \Pi L^2)^{1/2}$ ,  $T < +0.3$  which is independent of  $q_c$ . Thus, it can be considered to be linear.

Sensitivity Coefficient approach for exactly matching data from a single sensor

A single temperature sensor is considered to be located at a depth  $x$ , below the active surface. If the heat flux  $q_m$  is constant over the time interval  $t_{m-1} < t < t_m$ , the value of  $q_m$  that forces a matching of computed temperature at  $x$  with the measured temperature can be calculated.

The temperature field  $T(x, t)$  depends in a continuous manner on the unknown heat flux  $q_m$ . This dependence is written as  $T(x, t, t_{m-1}, q_{m-1}, q_m)$  where  $q_{m-1}$  is the vector of all previous heat values and  $t$  indicates the time that the heat flux step begins. Because the temperature field is continuous in  $q_m$ , it can be extended in Taylor series about an arbitrary but known value of  $q^*$ .

For linear problems, only the first derivative is non zero, thus the following is an exact result for location  $x$  at time  $t$

$T(x, t, t_{m-1}, q_{m-1}, q_m) = T(x, t, t_{m-1}, q_{m-1}, q^*) + (q_m - q^*) X(x, t, t_{m-1}, q_{m-1})$  where the sensitivity Coefficient is defined by

$$X(x, t, t_{m-1}, q_{m-1}) = \partial T(x, t, t_{m-1}, q_{m-1}, q_m) / \partial q_m$$

For the IHCP in which sensors are matched exactly, the left hand side of the equation is replaced by the experimental temperature.

$$\text{Hence } Y_m = T_k + (q_m - q^*) X_{k,1}$$

$$\text{On solving } q_m = q^* + (Y_m - T_k) / X_{k,1}$$

Where  $T_k$  is the temperature at time  $t$ , for the sensor node  $k$  with  $q = q^*$  over  $t_{m-1} < t < t_m$ . The calculation procedure is to assume an arbitrary value of  $q$ , calculate the temperature field  $T$  and knowing the sensitivity coefficient  $X$ , calculate the heat flux that exactly matches the temperature data  $Y_m$ . Once  $q_m$  is known, the complete field can be calculated.

The algorithm for exactly matching the temperature data from the single sensor can be summarized as follows.

- 1) Assume an arbitrary value of  $q^*$  and calculate the entire temperature field.
- 2) Using the same matrix coefficients  $a_n, b_n, c_n, d_n$  as were used for  $T$  calculation of step 1, calculate sensitivity coefficients.
- 3) Calculate the heat flux that exactly matches the experimental temperature data by using Taylor series expansion

$$Q_m = q^* + (Y_m - T_k) / X_{k,1}$$

- 4) Calculate the temperature field from Taylor series expansion

$$T_j = T_j + (q_m - q^*) X_{j,1}.$$

### 1.7 Relevant work:

References [1-13] give an insight into non linear Inverse Heat Conduction problems in 1-d & 2D environment.

## METHODOLOGY OF WORK

Numerical solution of a non linear Inverse heat conduction problem of a slab with an insulated boundary condition:

Here we consider one dimensional heat conduction with thermo physical properties  $K, \rho, C_p$  of a material varying with temperature. The physical problem is that of a slab of infinite length and thickness  $L$ , imposed with a net heat flux at  $x=0$ , with the other end being insulated.

Consider the slab which is divided into  $n-1$  parts. For every control volume, energy gaining per unit time = energy leaving the control volume - energy entering the control volume.

For the first grid point

$$K/\delta x (T_2^{n+1} - T_1^{n+1}) + Q = \rho C_p \delta x / 2 * \delta t (T_1^{n+1} - T_1^n)$$

$$T_1^{n+1} (\rho C_p \delta x / 2 * \delta t) + T_2^{n+1} (-K / \delta x) = T_1^{n+1} (\rho C_p \delta x / 2 * \delta t) + Q$$

$$A(1) = \rho C_p \delta x / 2 * \delta t$$

$$B(1) = -K / \delta x$$

$$D(1) = \rho C_p \delta x / 2 * \delta t + Q$$

For the second to  $n-1$  grid points

$$T_i^{n+1} (\rho C_p \delta x / \delta t + K / \delta x) + T_{i+1}^{n+1} (-K / \delta x) + T_{i-1}^{n+1} (-K / \delta x) = T_i^n (\rho C_p \delta x / \delta t)$$

$$A(i) = \rho C_p \delta x / \delta t + K / \delta x$$

$$B(i) = -K / \delta x$$

$$C(i) = -K / \delta x$$

$$D(i) = T_i^n (\rho C_p \delta x / \delta t)$$

For the  $n$ th point

$$-K / \delta x (T_n^{n+1} - T_{n-1}^{n+1}) = \rho C_p \delta x / 2 * \delta t (T_n^{n+1} - T_n^n)$$

$$T_n^{n+1} (\rho C_p \delta x / 2 * \delta t + K / \delta x) + T_{n-1}^{n+1} (-K / \delta x) = \rho C_p \delta x / 2 * \delta t * T_n^n$$

$$A(n) = \rho C_p \delta x / 2 * \delta t + K / \delta x$$

$$C(n) = -K / \delta x$$

$$D(n) = \rho C_p \delta x / 2 * \delta t * T_n^n$$

## ITERATIVE SCHEMES

The tridiagonal system for equations above is solved using algorithm. But in the above equations,  $Q$  is an unknown parameter, thus the solution of complete problem from  $x=0$  to  $x=L$ , cannot be obtained readily because the boundary condition is not known at  $x=0$ , but rather an interior temperature history is given. In estimating, one minimizes

$$F(Q) = (T_c(x,t) - T_m(x,t))$$

Where  $T_c$  &  $T_m$  are respectively, calculated and measured thermocouple temperatures at  $(x,t)$ .

The calculated temperature is in general a non-linear function of  $Q$ , but it can be solved by using iteration with a linear approximation. Then for the iteration the Taylor series approximation :

$T^{n+1}(Q) = T^n(Q) + (Q^{n+1} - Q^n) \partial T / \partial Q$ , is used. The subscript is an index related to the number of iteration. The partial derivative in the above equation can be calculated using

$$\partial T / \partial Q = (T(Q(1+e)) - T(Q)) / e \cdot Q$$

Where  $e$  is made equal to 10 % of  $Q$ ,  $\partial T / \partial Q$  is approximated accurately. The temperature on the right hand side of the equation is calculated. The above tridiagonal equations twice with  $Q$  &  $Q(1+e)$ . Using  $(\partial F / \partial Q)$ , a correction in  $Q$  is given by

$$Q = -F(Q) / \partial T / \partial Q.$$

The iteration procedure begins with the estimated value of  $Q$  and continues until  $F$  is less than say  $10^{-3}$ .

## RESULTS

The slab condition and material properties taken are

$$L=0.018$$

$$C_p=1750 \text{ W sec/Kg. K}$$

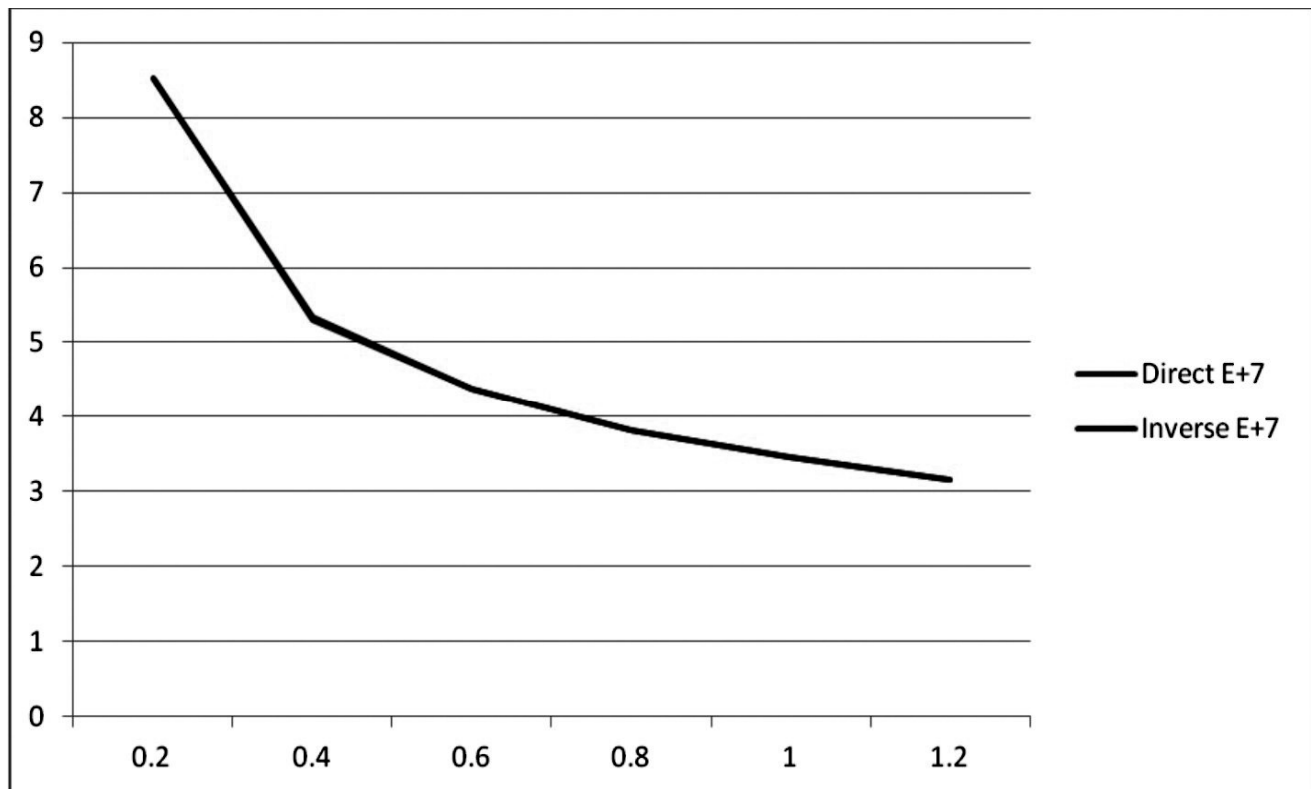
$$\rho=1900 \text{ Kg/m}^3, \quad T=300.$$

Table 1

Time in seconds	Q w/m2 (Direct)	Q w/m2(Inverse)
0.2	8.52 E +007	8.52 E +007
0.4	5.3 E +007	5.33 E +007
0.6	4.37 E +007	4.37 E +007
0.8	3.82 E +007	3.82 E +007
1.0	3.45 E +007	3.45 E +007
1.2	3.16 E +007	3.16 E +007
1.4	2.94 E +007	2.94E +007
1.6	2.76E +007	2.76 E +007
1.8	2.6 E +007	2.6 E +007
2.0	2.46 E +007	2.46 E +007



Figure 1



## CONCLUSION & FUTURE WORK

A finite control volume method has been evolved to calculate temperature distribution & heat transfer in a slab of infinite thickness and finite length. An IHCP method was evolved to calculate heat transfer in the slab which is considered as part of rocket nozzle throat. Single temperature sensor, Sensitivity coefficient method has been used to estimate heat transfer in rocket nozzle throat. By assuming some surface heat transfer, the temperature at certain depth below the actual surface had been calculated. This temperature is compared with the measured temperature from a thermo couple, placed at certain depth, and the incremental heat transfer has been calculated. This incremental heat transfer was added to the surface heat transfer. The process was repeated until the measured temperature and calculated temperature at the same depth were equal. In estimating the IHCP problem, past and present time steps had been used.

In the present work, a slab of infinite length and finite thickness is used. The work can be extended to Rocket nozzle throat which is a hollow cylindrical piece with finite thickness, whose outer surface is insulated, with a net heat flux at inner radius. Study of errors in estimation of heat transfer process can also be done.

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# THE SPIRAL OF VIOLENCE: A STUDY OF TIBETAN REFUGEES' AGGRESSION EXPRESSION IN NEPAL

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## ABSTRACT

This study delves into the spiral of violence by Tibetan refugees as a model of opinion expression in a minority community through an examination of news coverage of Tibetan refugees by the Nepalese press and their aggression expression pattern. The methodology adopted is based on content analysis and survey. The findings of the study, however, reveal that the Nepalese media concentrates heavily on the coverage of Tibetan refugees' aggressive activities worldwide. Further, the paper posits that due to fear of isolation, Tibetan refugees remain almost silent, and such a behavior compels them to express their voices through different modes of aggression, which create a spiral of violence over time, affecting media, society and refugees themselves.

Keywords: Aggression, communication theory, Expression, mass media, Refugee, Spiral of Violence.

## INTRODUCTION

Nepal's role as a bridge between China and India for Tibetan refugees highlights the country's strategic location between its two giant neighbors. The political and security situation within Nepal cannot be understood without reference to the relationship between India and China. There is an oft-quoted metaphor attributed to an 18<sup>th</sup> Century Nepali king that describes Nepal as "a delicate yam between two boulders". This aptly describes the country's potentially vulnerable position between the two great regional, and increasingly global, powers of India and China (Campbell: 2012, p.4)

After the revival of democracy in 1990, there was a quantum growth in media in Nepal (Dahal and Timsina: 2007, p.78). This has played a decisive role in promoting and strengthening news coverage practice of press for all, including minorities like Tibetan refugees. The Freedom of Press was assured by the Constitution, and the National Communication Policy of 1992 had promised greater autonomy to the government-controlled broadcast media and privatization of electronic media industry through the issuing of license. However, in reality, writing that was perceived as undermining the monarchy, national security and public order was broadly suppressed by both the constitution and press and publication Act. The country's main television and radio station was owned and operated by the government and favors the ruling party (Dahal and Timsina: 2007, p. 33).

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With the restoration of multiparty democracy in 1990, the media environment in Nepal took a dramatic turn (Kharel: 2006, p.154). The issue of freedom of speech and expression first found specific recognition in the country's first Constitution in 1948 but it was never implemented. All subsequent four constitutions in 1951, 1958, 1963 and 1990 made similar recognition with varied wordings and provisions. The acts that followed were of different nature and pattern however (Kharel: 2006, p.159). The interim Constitution of 2006 has followed the same earlier pattern (Aryal: 2012b, p.150).

The refugee problem has existed since the emergence of Nepal as a nation-state. War, famine and political oppression contributes to population displacement.

From a theoretical perspective, there are six broad causal factors responsible for refugee creation namely (i) anti-colonial wars and self-determination movements; (ii) international conflicts; (iii) revolutions, coups and regime changes; (iv) ethnic, communal and religious conflicts; (v) creation and restructuring of state boundaries, and (vi) population transfers (Noilot, 1987). However, Muni and Baral identify three broad categories of refugee-generating factors in South Asia (Muni, S.D. and Baral, Lok Raj, 1996) which obviously applies to Nepal as well.

In the last few decades, Nepal has experienced a steady tension of Tibetan refugees as a major problem. According to the United Nations High Commissioner for Refugees (UNHCR) Global Appeal 2010-11, there are 20,000 Tibetan refugees living in Nepal, with an additional 1,500 Tibetans living in "refugee like situations," although the real number is likely to be far higher. Since 2006, when slightly less than 2,600 Tibetans made the crossing, the number of Tibetans making the perilous journey into exile had declined. Between January 1 and December 31, 2009, only 838 Tibetans were recorded by the Tibetan Refugee Reception Center (TRRC) as having made the dangerous crossing from Tibet to Nepal. Estimates suggest between 2,500 and 3,000 Tibetans escape Tibet and enter Nepal each year after a perilous journey over the Himalayas on their way to Dharamsala (Aryal: 2012b, p.5).

## THE ORIGIN AND EVOLUTION OF THE SPIRAL OF SILENCE THEORY

The concept of the 'Spiral of silence' derives from a larger body of theory of popular opinion that was developed and tested by Noelle-Neumann (1974;1984;1991) over a number of years. The relevant theory concerns the interplay among four elements: Mass media, interpersonal communication and social relations, individual expression of opinion, and the perceptions which individuals make about the surrounding 'climate of opinion' in their own social environment. The main assumptions of the theory (Noelle-Neumann, 1991) are as follows:

1. Society threatens deviant individuals with isolation.
2. Individuals experience fear of isolation continuously.
3. This fear of isolation causes individuals to try to assess the climate of opinion all at times.
4. The result of this estimate affects their behavior in public, especially their willingness or not to express opinions openly.

People tend to conceal their views if they feel they are in a minority and are more willing to express them if they think they are dominant. As a result, the views perceived to be dominant gain more traction, and alternative viewpoints retreat into oblivion. This creates the spiraling effect.

Introduced in 1974, the 'spiral of silence' theory is one that explores hypotheses to determine why some groups remain silent while others are more vocal in forums of public discourse. The theory contends that the silence displayed by certain groups is due to the unpopularity of their opinions in the public sphere. While the majority groups are supported by and consequently have the willingness to speak out on their issues, the minority groups remain silent due to a fear of isolation (Neill:2009, p.5).

The spiral of silence is a mass communication theory introduced by Elizabeth Noelle-Neumann (1974) to describe the process of public opinion formation. Noelle-Neumann defines the “spiral of silence” as the process an individual experiences when “he may find that the views he holds are losing ground; the more this appears to be so, the more uncertain he will be of himself, and the less he will be inclined to express his opinion”. The lack of self-certainty that the author speaks of, is fueled by how an individual perceives his social environment. Noelle-Neumann calls this the “quasi-statistical picture of the distribution of opinions.” The author also says that how an individual’s views about his social environment is strongly influenced by mass media. If the individual observes spread of the more prevalent opinion (not his own), he becomes less inclined to voice his own opinion publicly. As Noelle-Neumann puts it, the tendency of the one to speak up and the other to be silent starts off a spiraling process which increasingly establishes one’s opinion as the prevailing one. Thereby, public opinion is identified, by the silenced individual as the opinion that is generally acceptable by the public and can be voiced openly with no fear (Neill: 2009, p.7).

The role of reference groups has also evolved as a source of criticism over the years. Some researchers say that reference groups provide an individual with bias in terms of how he/she views the actual social climate. For example, Moy, Domke & Stamm (2001), state that when asked to assess the broader climate of opinion, individuals may project from their experiences in reference groups to the world around them. Recent adaptation of the role of reference groups finds that they are the primary threat to the individual experiencing fear because the opinions of the reference group can become more important than that of the societal climate of opinion. This particular theory regarding reference groups was successfully tested using the topic of affirmative action (Neill: 2009, p. 17).

Frances Bowen and Kate Blackmon (2003) used the spiral of silence theory to support their writing on the dynamics of gays and lesbians choice to speak out or remain silent within workplace organizations. The authors address the willingness to speak- out dynamic by positing that there is a second spiral of silence that exists on a “micro level within the workgroup and organization”. This sub- spiral comes from an existing “negative climate of opinion” in the work environment that renders the gay or lesbian individual to hide their sexual orientation. The authors call such phenomena as “organizational silence”. The opposite of organizational silence is organizational voice, which the authors describe as a voluntary and open disclosure of personal views in order to affect change within and organization (Neill: 2009, p. 17).

The aim of this research was to establish the spiral of violence theory by studying Tibetan refugee’s aggression expression pattern after the spiral of silence in reference to Nepalese press coverage before and after restoration of democracy in 1990. The study identified such effects by examining the response of Tibetan refugees and Nepalese media’s coverage since they were directly concerned with the media and its coverage. Moreover, current knowledge on various areas of Tibetan refugee and Nepalese media in Nepal was studied by examining the related and latest literature from Nepal and other countries. The study was based on quantitative methods, but it also applied qualitative methods to cross check the findings received from the quantitative methods. Thus the study helped in expanding the current body of knowledge on refugee study, media study, human rights study, international relation study, political study etc. Based on the conceptual framework and its purpose, the following research questions were addressed by this study: What do the Tibetans speak in Nepalese press? If not, why? What are the reasons behind it? Is it spiraling of silence? Is there any factor for such a spiral of silence? If yes, what it is? Is spiral of a silence the end? Or, there is something more after? If there is more than what it will be? Why minority like Tibetans express their expression violently? Where does it affect after all? Is there any model which represents the entire phenomena?

## METHODOLOGY

Two methods such as survey with questionnaires and content analysis were used in this research. The respondents were Tibetan refugees (n=700). Analyzed contents were news and views published in newspapers (n=779). Total 778 questionnaires had been distributed on selected refugee camps of Kathmandu on January, February, March and April 2013. A total of 700 samples were randomly collected from three refugee camps namely, Jawalakhel, Boudha, and Swyambhu representing the entire refugee for their aggression expression pattern analysis.

### CONTENT ANALYSIS: METHODOLOGY I

According to Berelson (1952), content analysis is a research technique for the objective systematic description of manifest content of communication. Similarly, Kerlinger (2000) defines content analysis as a method of studying and analyzing communication in a systematic, objective and quantitative manner for the purpose of measuring variables cited in Wimmer and Dominick (2009). Therefore, content analysis was used in this study as a tool to extract data from the content of the selected newspapers of respective years.

#### Sample size

In the context of this study, there is no doubt it is an impossible task to study all daily newspapers of 54 years after the influx of Tibetan refugee in Nepal. Considering the time frame, constraint and most especially unavailability of some of the members of the population to the researcher is another reason. Therefore, only three newspapers were purposefully selected for the study of each year. These are namely:

Table 1: Sample Size, Years and Press

S. No.	Years and Press					
	1969	1974	1989	2004	2008	2012
1	Samaj = 39	Naya Samaj= 7	Samaj= 29	THT= 83	THT= 141	THT=107
2	TheCommoner= 10	Gorkhapatra=37	Dainik Siddhartha=10	TRN= 2	TRN= 35	TRN= 9
3	Motherland= 14	Hamro Des= 7	Gorkhapatra= 12	TKP= 29	TKP= 178	TKP= 30
Total	63	51	51	114	354	146

(Note: THT= The Kathmandu Post, TRN= The Rising Nepal and THT= The Himalayan Times)

Source: Content Survey, 2012

### UNIT OF MEASUREMENT/ANALYSIS

To get answer of the previously raised question as independent variables; news tone/frame/angle (anti-China, one-China and unspecified), Perception (news with a quote of TR, quotes of Dalai Lama and Government –in-exile representative, quotes of general TR and news without a quote of TR), news source (agency and non-agency), total news item, total space (cm<sup>2</sup>), pre-democracy and post-democracy coverage are searched and answered as dependent variables in respect of news and views content. The content was coded, verified and validated according to both quantitative and qualitative variables.

### SURVEY: METHODOLOGY II

The sampling population for this study was comprised of Tibetan refugee community of different camps. Total Population of the Tibetan refugee living in Nepal as per Tibetan Demography survey in exile done in the year 2009 (TDS) is 13,514 consisting of total male 6,543 and female 6,971. But certain media and organization says that Tibetan population in Nepal is around 20000. Total population of the

demography survey done in the year 1998 is 12,224 with male population 6,319 and female population 5,905. According to the Demography survey 2009, there are altogether 3,265 Tibetan household in Nepal, number of normal household is 3,083 and 182 household consist of institutional household like (school, monastery, institution, elders home etc)(Aryal: 2012).

### ESTIMATION OF SAMPLE SIZE

The required sample size for each domain was estimated using the following expressions: Yamane (1967:886) provides a simplified formula to calculate sample sizes. This formula was used to calculate the sample sizes shown below. A 95% confidence level and  $P = .5$  is assumed with following Equation:

$$n = \frac{N}{1 + N(e)^2}$$

where  $n$  is the sample size,  $N$  is the population size, and  $e$  is the level of precision. Under these assumptions, the total number of required samples turns out to be 389 and judging this figure with pretest recommends making double the sample, which becomes 778. During the pretest time, response rate was 50 % after caring pretest and its response rate. Thus, altogether 778 samples were drawn from three refugee camps. So that proper result will be carried out to get generalization. This number was allocated to different camps and locations with different volume.

### LIMITATIONS OF THE STUDY

This study had several limitations. First, perceptions of Tibetan refugees on news coverage by Nepalese press as well as perception of their status and effects of 1990's democracy on news coverage of Tibetan refugee by Nepalese press may not equate actual situation of the specific media coverage as well as Tibetan refugee's condition. Second, data were collected on a specific group of people and belonging to a specific work environment. Third, because of the legal procedure (foreign policy of Nepal is One-China) during the survey period, data were collected from Kathmandu and three refugee settlements only by using volunteer researcher. Lastly, the scope of this study is also limited in terms of budget and time available for this kind of study. Therefore work was focused only in the content analysis of 3 newspapers of 6 years' time frame before and after restoration of democracy. The research has several other limitations. The study includes only content analysis of three broadsheet daily English newspaper from Kathmandu. As compared to the total number of the potential print, the sample size is small. The survey study includes participants from three Tibetan refugee camps of capital city Kathmandu (Boudha, Swyambhu and Jawalakhel). As compared to the total number of the potential respondents, the sample size is small. The study gives more focus to the quantitative study than qualitative study. It focuses only on News coverage by Nepalese print media before and after 1990's restoration of democracy and aggression expression pattern on it by Tibetan refugee living now in Nepal.

### FINDINGS AND DISCUSSIONS

This study examined statistically significant differences that exist in the effects of 1990's democracy in news coverage of Tibetan refugee and their aggression expression pattern especially before and after restoration of democracy in 1990. The study explored how and to what extent 1990's democracy had impacted Tibetan refugee news coverage and what sort of factors they perceived important for it. It also examined whether the suggested criteria were relevant for the Nepalese context or not. The research focused on four issues (a) before 1990's news coverage of Tibetan refugee (b) after 1990's news coverage of Tibetan refugee by Nepalese press (c) 1990's democracy effects on News coverage and (d) aggression expression pattern of Tibetan refugee. This research is based primarily on quantitative methods but qualitative methods were also used to crosscheck the findings.

## WHAT DO TIBETANS SPEAK IN PRESS?

The media gives voice to various sections of society through one channel or another. They attract public attention, persuade people, influence their behavior and help define many issues. Access to media is an important factor for enhancing media access to readers, listeners and viewers (Kharel: 2006; p. 89). Table 2 reveals about Tibetan refugee's perception both in Nepalese press in authoritarian era and in democracy .

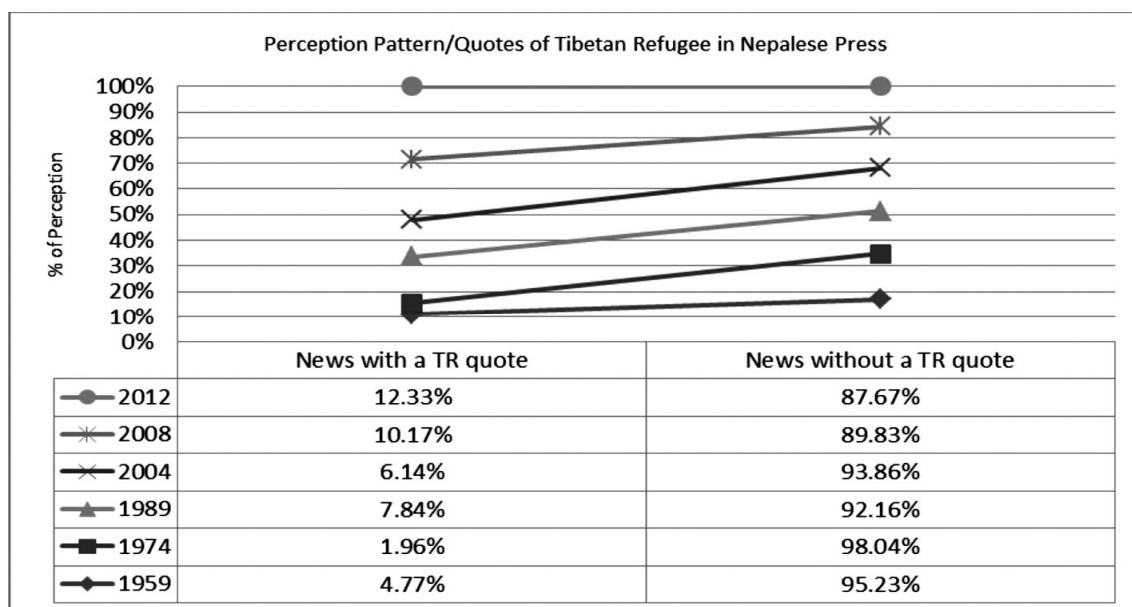
Table 2: Perception Pattern/ Quotes of Tibetan Refugee (TR) in Press

Year	Perception Pattern / Quotes of Tibetan Refugee(TR) in Press		
	Total news with a quotes on TR		Total news without TR quotes
	Quotes of General TR	Quotes of Dalai Lama and Exile Govt. representative	
1959	0	3	60
1974	0	1	50
1989	0	4	47
2004	1	6	107
2008	6	30	318
2012	2	16	128
Total	9	60	710

Source: Content Survey, 2012

The available data proves that Tibetan refugee community in Nepal is not speaking in front of Nepalese press. Nepalese press quote except Tibetan refugee while dealing with Tibetan refugee news. The following quote pattern results definitely raises questions.

Figure 1

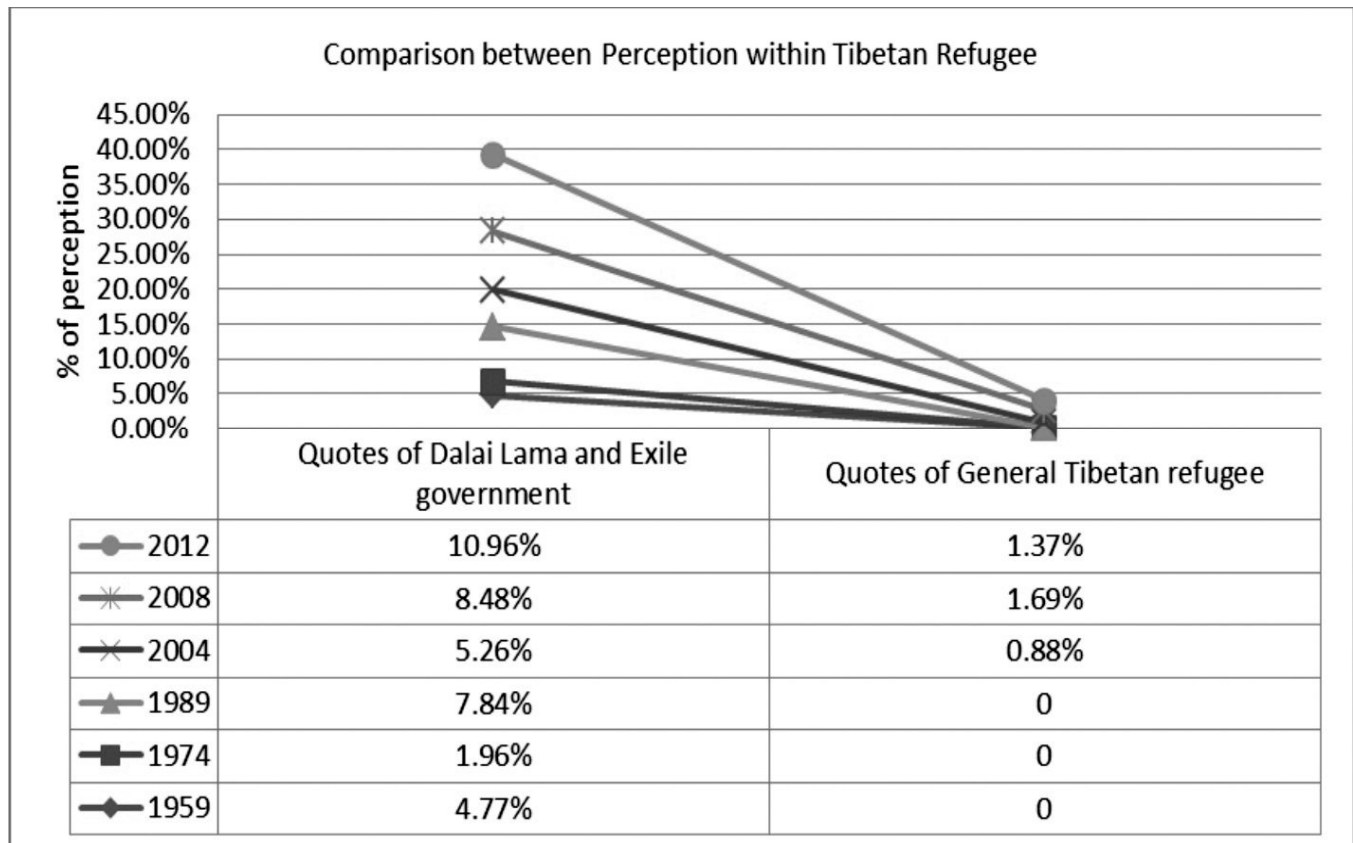


Source: Content Survey, 2012



Using quotes is a very widely accepted practice among journalist. Without quotes, news stories are generally not complete. They add life to a news item (Kharel: 2006, p.80). In case of Tibetan refugee, such reporting does not apply. Another surprising result about the perception representation of Tibetan refugee in Nepalese press is as follow:

Figure 2



Source: Content Survey, 2012

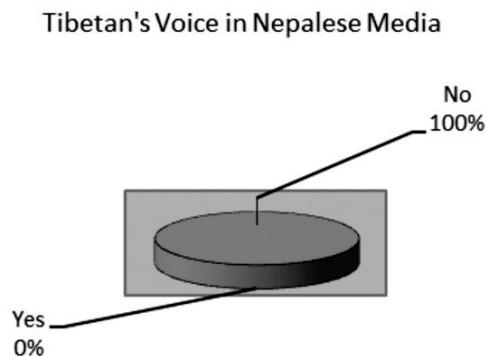
Prajapati (2011, p. 46) shows that the Rising Nepal, has used nil quote of Tibetan refugee in the year 2008. From the above data, it is amply clear that very few voices from the Tibetan refugees are being covered in the press. Most of them belong to either the head of the Government-in-exile, Dalai Lama, or their representatives. But, what about other general refugees who are in great number? Following section covers these issues.

### TEST

Has restoration of democracy in 1990 been useful for Tibetan refugees in terms of enabling them to express their opinion in Nepalese press? On the basis of available data for quotes, the expected frequency corresponding to the number time period and types of news quotes would be 14.615. The  $\chi^2$  analysis of news with Tibetan refugee quotes before and after restoration of democracy in 1990 results into  $\sum (O_{ij} - E_{ij})^2 / E_{ij} = 4.164$ . This calculation is based upon 69 news with a TR quote, and 710 news items without a TR quote with total 779 quotes examined. Here in this case, degree of freedom is  $(c-1)(r-1) = 1$ ; and the table value of  $\chi^2$  for 1 degree of freedom at 5% level of significance is 3.841.

## Survey Test: Voice of Tibetan refugee in Nepalese media.

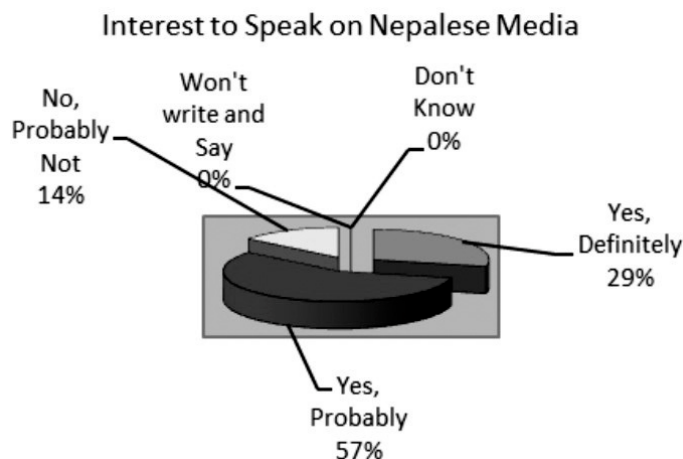
Figure 3



Have your voice ever been taken on Nepalese media as part of coverage because of your beliefs and expressions? The question was asked during survey. Most of the refugees answered in the negative. Hundred percent respondents said they have never spoken to Nepalese media. No refugee till now got a chance to express themselves in Nepalese press. It means no Nepalese media came to them to provide enough space and time. Moreover, Nepalese media never come to cover their voice as opinion.

## Survey Test: Tibetan refugees' interest to express their opinion

Figure 4



Do you have any plan to write and say something about your problems in the Nepalese press in future? When this question was asked, 57 % said 'yes', 29 % said yes definitely and just 14 % said no, probably not. It reveals how most of the Tibetan refugees are in dilemma to express their perception through Nepalese press at any given time.

**WHY TIBETANS DO NOT SPEAK?**

The restoration of democracy in 1990 is useful (effective) in terms of Tibetan refugees expressing their

opinion in Nepalese press as coverage. But, still they are speaking less and quoted rarely in the Nepalese press. This stems from the theory of spiral of silence.

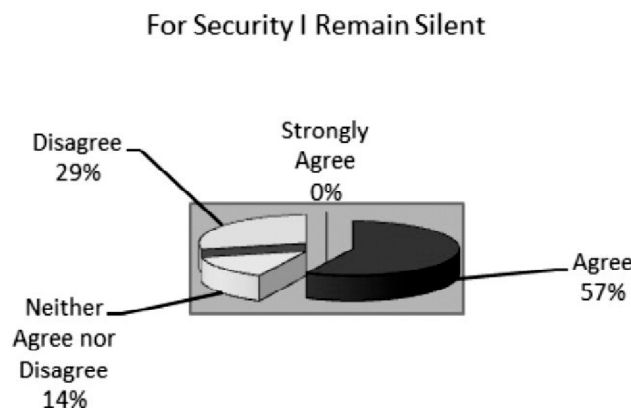
### CORE ASSUMPTIONS AND STATEMENTS

The phrase “spiral of silence” actually refers to how people tend to remain silent when they feel that their views are in the minority. The model is based on three premises: 1) people have a “quasi-statistical organ,” a sixth-sense if you will, which allows them to know the prevailing public opinion, even without access to polls, 2) people have a fear of isolation and know what behaviors will increase their likelihood of being socially isolated, and 3) people are reticent to express their minority views, primarily out of fear of being isolated.

The closer a person believes the opinion held is similar to the prevailing public opinion, the more they are willing to openly disclose that opinion in public. If public sentiment changes, the person will recognize that the opinion is less in favor and will be less willing to express that opinion publicly. As the perceived distance between public opinion and a person’s personal opinion grows, the more unlikely the person is to express their opinion.

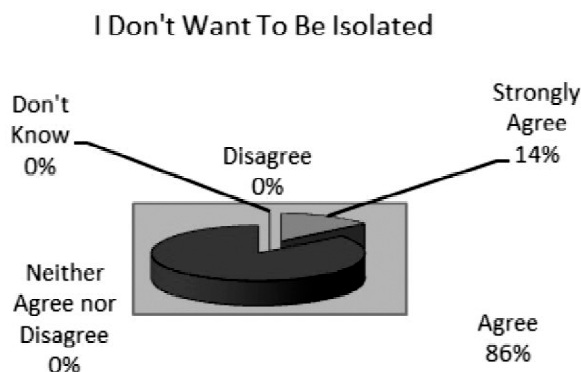
Survey Test: Fear of Isolation.

Figure 5 :Fear of Isolation test



There are 57 % Tibetan refugee who said they agree on such a situation for security purpose. Another 29 % said they disagree on it or to remain silent is unjust. Rest of the 14 % neither agreed nor disagreed on it. They donot have anything to do with security and protest strategy.

Figure 6



Whatever the condition is, 86 % Tibetan refugees agree that they don't want to be isolated from the existing community. It means they do not want to remain in isolation from Nepalese community in the name of freedom. They want to participate in freedom movement harmonizing their struggle with the majority Nepalese community's struggle for authentic democracy. Another 15% strongly agreed on it. Tibetan refugees do not want to go away by leaving everything in Nepal at any cost and the community far behind.

Survey Test: Living in Nepal.

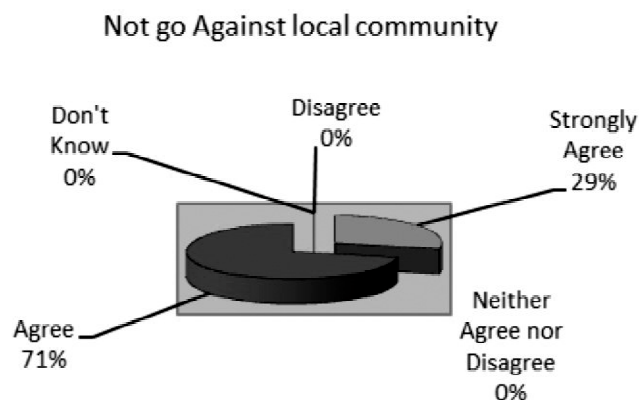
Figure 7



Some people say that they are living now in Nepal in fear, and they say we don't want to leave and say goodbye to Nepal, because everything of ours is here, so want to live here with full of respect, please tell me what you think? Upon such question, 29 % said they are strongly agree. 43 % said they are agreed. 14 % said they are neither agreed nor disagreed. And rest of the 14 % strongly disagreed on it.

Survey Test: Not go against Local Community.

Figure 8



There are 29 % Tibetan refugee who said they are strongly agreed to remain safe in Kathmandu and should not go against local community and people. But in such case, 71 % are agreed. This clearly indicates that Tibetan refugee living now in Nepal does not want to go against local people and want to remain in Nepal in friendly atmosphere. In fact, they are aware about the impact of isolation which generates spiral of silence.

## NEWS SOURCE AS A FACTOR

Sources are one of the most influencing factor on determining news value (Bhandari: 2008, p. 295). Let us look at the pattern of source used on Tibetan refugee news:

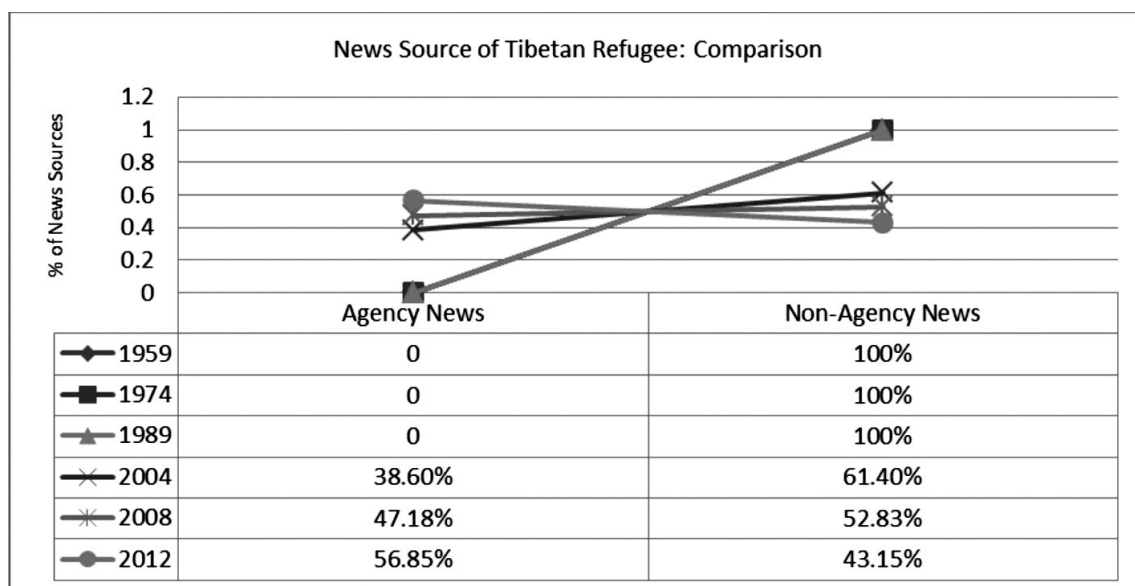
Table 3: News Sources of Tibetan Refugee (TR) in Press

Year	News Sources	
	Agency News	Non-Agency News
1959	0	63
1974	0	51
1989	0	51
2004	44	70
2008	167	187
2012	83	63
Total	294	485

Source: Content Survey, 2012

From the Table 3, it is clear that before restoration of democracy in 1990, Nepalese press was hardly using agency news while reporting on Tibetan refugee. When we compared it with the quotes of Tibetan refugees available in the Nepalese press, we found that whenever the use of agency news grow, the use of Tibetan refugee quotes also grows. But, it is not the general Tibetan refugees who are speaking. The quotes are from the higher ups of the community. This indicates that growth in use of agency as news source spread the effect of Dalai Lama and government-in exile's perception, but not that of general Tibetan refugee who are staying in Nepal. Figure 9 reflects the conditions.

Figure 9



Source: Content Survey, 2012

The result indicates that agency news source has no effect on minority's perception coverage.

#### FOREIGN POLICY AS A FACTOR

Nepal's foreign policy towards China is by and large respected by the Nepalese press (Prajapati: 2011, p. 18). The influence of the foreign policy of the country on Nepalese media is high when the issue of Tibet is reported. It is highly unlikely that news media can avoid the sensitivity of the country's foreign relationship with its immediate neighbors and Nepal's geopolitical situation (Prajapati: 2011, p. 79). But the result data is surprising us again, let us look.

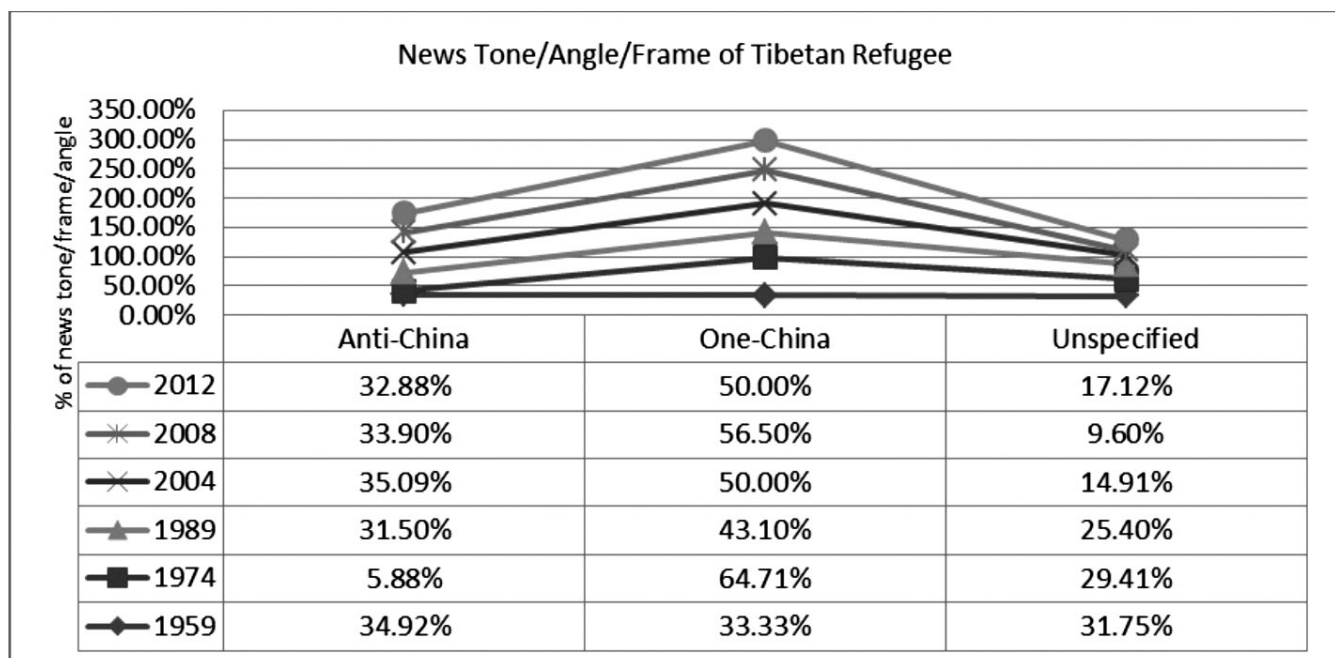
Table 4: Angle/Frame/Tone of Tibetan Refugee News

Year	Angle/Frame/Tone of News		
	Anti-China	One-China	Unspecified
1959	22	21	20
1974	3	33	15
1989	16	22	13
2004	40	57	17
2008	120	200	34
2012	48	73	25
Total	249	406	124

Source: Content Survey, 2012

Table 4 reveals how anti-China reporting in Nepalese press has no difference during pre-1990 and post-1990 period. In other words, there is no effect of foreign policy on Nepalese press for covering Tibetan refugees with anti-China perspective. et us compare:

Figure 10



Source: Content Survey, 2012

## TEST

Whether restoration of democracy in 1990 is effective in controlling anti-China news (content) coverage by the Nepalese press? The answer has to be based upon following assumptions: The  $\chi^2$  analysis of One-China and Anti-China news before and after restoration of democracy in 1990 results into the figure of  $\sum (O_{ij} - E_{ij})^2 / E_{ij} = 1.47$  considering 117 One-China news, 249 Anti-China news out of total 655 news items having been examined. In this case, degree of freedom is  $(c-1)(r-1) = 1$ ; and the table value of  $\chi^2$  for 1 degree of freedom at 5% level of significance is 3.841. The calculated value of  $\chi^2$  is much lower than this table value and hence the result of the experiment does support the  $H_0$  hypothesis. We can thus conclude and accept  $H_0$ : Restoration of democracy in 1990 is not effective in controlling the anti-China news (content) coverage by Nepalese press ( $H_0 = \mu =$  which is equivalent to test  $H_0 = D = 0$ ).

## TEST BY EXPERT'S VIEW

Even party affiliated journalists mention that news on Nepal's policy towards Tibetan protest is their newspaper policy; however, the political parties play a dominant role in developing a policy towards presentation. In case of China, Manarishi Dhital, editor of Janadesh weekly said that party line is used in defining their understanding of Nepal-China affairs. "We have concerns about the problems and challenges that China is facing and if there are any anti-China activities, we write to discourage such activities, it is our basic understanding" (Prajapati: 2011, p. 70).

Sudheer Sharma, editor of Kantipur daily points out that Nepalese press handling Tibetan issue is covered in three ways:

"First, when there is simple protest, which becomes news. Second, Tibetan community has lived in Nepal for a long period of time and is linked with Nepali culture. Third, separatist movement in Nepal, though we don't much highlight, as our state's policy is not to accept any sort of separatist movement from Nepal so being a part of state, we should follow it. But we do cover under humanitarian approach and democratic movement, their genuine concern, which they raise coming into the street. As we cover the issue of other community, we also provide space to Tibetan cause. As Tibetan issue is a concern inside Nepal and also internationally, it falls under our priority" (Prajapati: 2011, p. 71).

However, one of the journalists even argued that there should not be policy as such in handling reporting of China or foreign policy in general but should have independent and professional approach. Kanakmani Dixit points out that the issue must be treated case by case:

"One should go as much as professional independence spirit, and in that sense with India of course there is absolutely no bar. Coverage of China is limited by the diffident of Nepali intelligentsia. Nepali intelligentsia feels at ease criticizing India, but it does not feel at ease critiquing China. There are two reasons for that- one reason is that overall, Nepali national world-view is so overwhelmed by India, that we have to make China very important in our life as a balance, as a counter-weight. And we even exaggerate the importance of China like a geo-political tool, to balance India's overwhelming presence. As a result..., Kathmandu intelligentsia and media have evolved therefore, in giving China a very privileged place, where it is not critiqued" (Prajapati: 2011, p.71).

However, there are journalists who defend that state policy does not have much influence on media coverage. Ameet Dhakal terms how it is merely the decision of the inner conscience of the covering journalist. His argument is as follow:

"In an authoritarian state, they may say not to write this story, but in our case no minister or PM has said us not to publish such news of Tibetan issue. If that is said, then it means that state policy has dictated and

has coerced it. But, when we have decided that our national stake is more with China and we have decided not to write about it, it is decision of our conscience. As in the past when China was less assertive, there was loose policy, as China is now more assertive, I think state and political parties, and the media, believe that in handling issue of Tibet, China's sensitivity should be addressed and seen as a unanimity. That's why I don't think that state policy has influenced us" (Prajapati: 2011, p. 72).

Kanamani Dixit points out two reasons for having less coverage about the issue of Tibet. One of the reasons is that there is too much happening in Nepal and another is the influence from the Nepalese intelligentsia in how they perceive China and also avoiding the ways that might make China unhappy. But he explains that media is not directed by the government not to write about Tibetan protest:

"It is not that media have not been able to write but they do not. The point is nobody is stopping them, we have not reached such a level of lack of freedom of press, that if anybody wrote about with this angle, then the Nepali government will stop it. "No". It is more that the media being influenced by weak intelligentsia feels that it is the duty not to challenge the Chinese too much. So, it is more of a philosophical mindset of various individuals in a media, rather than our government telling our media don't. It is a kind of self-censorship, it is not there all the time, you find it coming up so often, media don't write about" (Prajapati: 2011, p. 73).

#### COVERAGE COMPARISON: PRE-1990 AND POST-1990

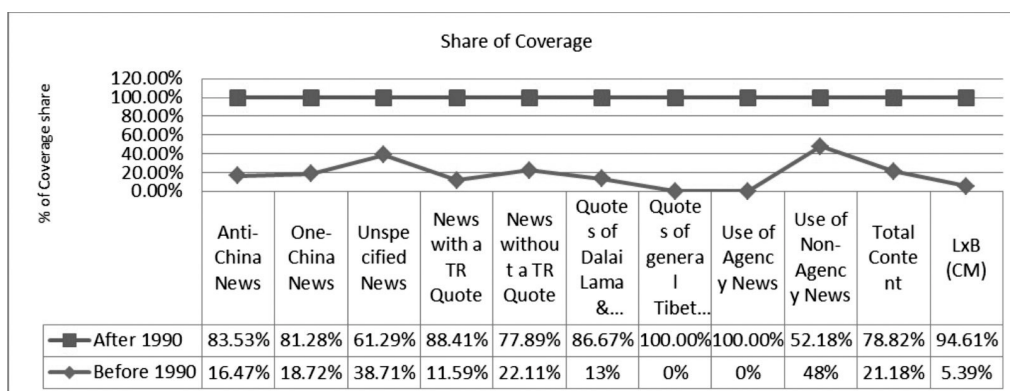
To search answer of previously raised question, a glance at the coverage pattern of Nepalese press before and after restoration of democracy in 1990, is necessary. Table 5 shows total coverage pattern:

Table 5: News Coverage in CM

Year	News Coverage (cm <sup>2</sup> )
1959	516 X 727 cm <sup>2</sup>
1974	623 X 811 cm <sup>2</sup>
1989	687 X 829 cm <sup>2</sup>
2004	1,310 X 1,431 cm <sup>2</sup>
2008	4,517 X 4,638 cm <sup>2</sup>
2012	1,711 X 1,541 cm <sup>2</sup>
Total	9,364 X 9,971 cm <sup>2</sup>

Source: Content Survey, 2012

Figure 11



Source: Content Survey, 2012



## TEST

Whether restoration of Democracy in 1990 have any effect on news coverage pattern of Tibetan refugee by Nepalese press? The data brings out the complexities of the situation. Because of the matched pairs, the researcher has used t-test and worked out the test statistic of all categorized data. To find the value of t, mean and standard deviation was calculated.  $D_{\sim}$  has been found = -169.33. The calculated value of  $\sigma_{diff.} = 172.46$ . The t- analysis of news coverage of all aspects in the table data for the period before and after restoration of democracy in 1990 results  $t = -2.405$  after examining total 779 news items. Here in this case, degree of freedom is  $(n-1) = 6-1 = 5$ . As  $H_1$  is one sided, we shall apply a one-tailed test (in the left tailed because  $H_1$  is of less than type) for determining the rejection region at 5% level of significance which covers as under, using table of t-distribution for 5 degrees of freedom R:  $t < -2.015$ . The observed value of t is -2.405 which falls in the rejection region and thus, we reject  $H_0$  at 5% level and conclude that  $H_1$ : Restoration of Democracy in 1990 does have effect on news coverage pattern of Tibetan refugee by Nepalese press ( $H_1 = \mu < \mu_2$ ) has been accepted. We can conduct A-test for same condition again. Since  $H_1$  in the condition is one sided, we shall apply a one-tailed test. Accordingly, at 5% level of significance the table of A-statistic (n-1) or  $(6-1) = 5$  d.f. in the given case is 0.372. Where the computed value of A from the same data table as used in t-test above  $\sum D_i^2 / (D_i)^2 = 0.31$ , is less than this table value and as such A-statistic is significant. This means we should reject  $H_0$  (Alternatively we should accept  $H_1$ ) and should infer that  $H_1$ : Restoration of Democracy in 1990 does have effect on news coverage pattern of Tibetan refugee by Nepalese press ( $H_1 = \mu < \mu_2$ ) has been accepted.

## FINDINGS FROM MEDIA CONTENT ANALYSIS

The study's findings suggest that there were indeed differences in the way the Tibetan refugee problem of Nepal was covered by Nepalese press in between pre- democracy versus post-democracy. Additionally, there were differences in how the story was portrayed in the press before and after democracy. This section will highlight some of these findings.

## TEST

Is there any differences in Tibetan refugee's news coverage before and after Democracy of 1990 by Nepalese press? The answer to this question has been found like this: The  $\chi^2$  analysis of news tone/frame/angle table data of before and after restoration of democracy in 1990 results  $\sum (O_{ij} - E_{ij})^2 / E_{ij} = 27.61$ . The sample had 406 One-China news, 249 Anti-China news and 124 not specified news with total 779 news items examined. In this case, degree of freedom is  $(c-1)(r-1) = 2$ ; and the table value for 2 degree of freedom at 5% level of significance is 5.991. So, the calculated value of  $\chi^2$  is much higher than this table value which means that the calculated value cannot be said to have arisen just because of chance. It is significant. Hence, the hypothesis doesn't hold good. This means that the news coverage patterns of Nepalese press between and after restoration of democracy differ and are not similar in volume too. The news coverage volume of one phase must be higher in quantity and space than that of the other. The  $H_1$ : There are differences in Tibetan refugee's news coverage before and after restoration of democracy in 1990 by Nepalese press ( $H_1 = \mu < \mu_2$ ) has been accepted.

## WHAT NEXT?

Why Tibetans are silent in press? After different evidence and tests, the answer is: it is spirals of silence. The paper will now elaborate the spirals of silence theory in the present context based upon the analysis of data to understand minority's perspective.

## PSYCHOLOGICAL TENDENCY OF SILENCED VOICES

In terms of psychological analogies, we could justify the stress with the reference of frustration and

Analysis Data (Coding Result) of Media Content															
Coverage Pattern SCT	1959 AD		T	1974 AD		T	1989 AD		T	2004 AD		T	2008 AD		T
	M.I..	N.S.		G.P.H.D.	S.		G.P.	T.H.T		T.K.P	T.H.T		T.K.P	T.H.T	
News frame/angle frame in Pr.	15	4	22	3	0	3	10	6	0	30	10	40	70	50	48
	10	6	21	3	5	33	10	2	10	40	15	57	60	50	73
	14	4	20	1	12	15	9	2	4	13	0	17	11	17	25
Reprint/ Quotes of TIR in news	2	0	3	0	1	1	2	2	0	4	0	6	18	14	16
	D.L. & P.G..	0	0	0	0	0	0	0	0	1	0	1	2	0	2
Sent news views	37	14	60	7	36	50	27	8	12	78	27	107	121	92	128
	0	0	0	0	0	0	0	0	0	30	14	44	93	70	83
	39	10	63	7	37	51	29	10	12	53	15	70	48	37	63
Total	39	10	63	7	37	51	29	10	12	83	29	117	141	107	146
Note: Short Form used in table means:															

conflict which are “unresolved” inside the mind. We must look at Tibetan refugees in Nepal with their stressful state of mind which result in different modes of conflict either in the form of resistance or with the desire of revolution. Aggression results in the mode of displacing the threatening and frustrating event. When we discuss about Tibetans aggressive behavior, we could identify their frustration on the context of social values as well.

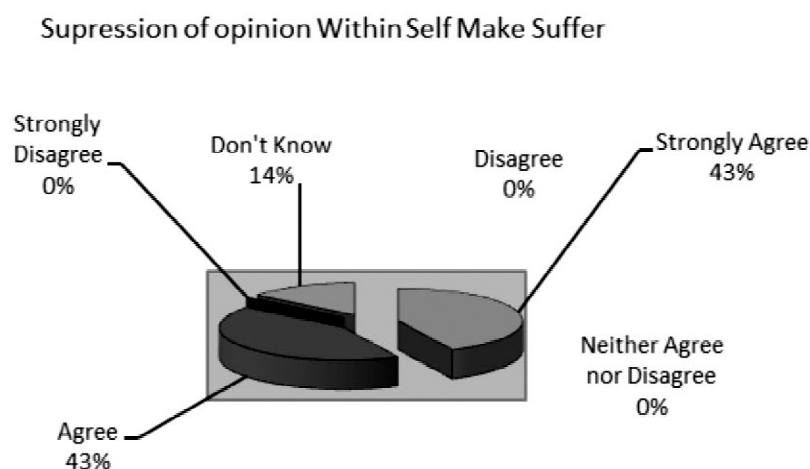
But, the question that seemingly arises pertains to the factor impacting silenced nature of those people who didn't come across public provocation, but protested with aggressive and repeated protests. In this case, we should understand the fact that voice is a great tool for psychoanalysis which deals the facts of unconscious mind. The factors related to voice are “manifestations of unconscious conflicts and tensions which it was the purpose of psychoanalysis to release.” (Alice Lagaay:2008, p. 54). Similarly, Lacan presents voice as “objets a”. It is essential to observe the categories made by Lacan as “needs (“besoins”), wishes (“demandes”) and desire (“désir”)” which refer different aspects of psychoanalysis such as “physical nature,” “symbolic realm of language” and the most “enigmatic” aspect of behavior respectively. Alice Lagaay explains that “according to Lacan's theory, voice belongs to the realm of desire,[...] the voice is actually devoid of phonic substance” (Lagaay:2008,p. 59). It means that the silenced behavior consists the voices of the unconscious mind which is ‘enigmatic’ part of human behaviors., Silence does not mean the total wordlessness. Silence has bigger and serious realm of expression that they kept inside all the time.

In this concept of violence, we could trace the psychological behavior of Tibetans' way of relaying the abrupt behavioral consequences of revolution.

To sum up psychoanalytical framing for the silenced but revolutionary behavioral factors, we need to notice the essence of voices in silence. There is the outburst of anxiety, the shadow images of pleasure principle and a different mode of violence. The following part of survey analysis supports the claim.

Survey Test: Suppression and Tibetan refugee.

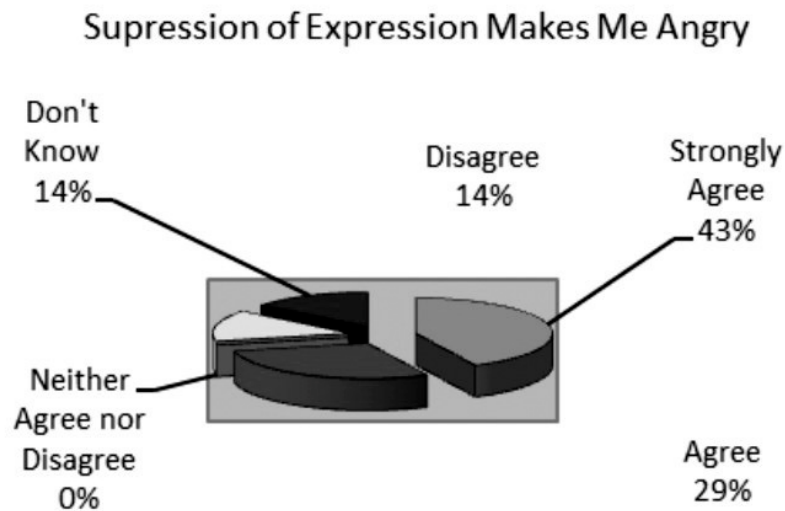
Figure 12



In an opinion- ‘Some expert says that when a person suppress their feelings and wish they suffer a lot. When a person suppress their opinion and remain silent also suffer a lot. What would you think?; 43 % Tibetan refugee said they are strongly agreed on it. Another 43 % refugee agreed on it and rest of the 14 % said they don't know about it.

Survey Test: Suppression of expression and Anger.

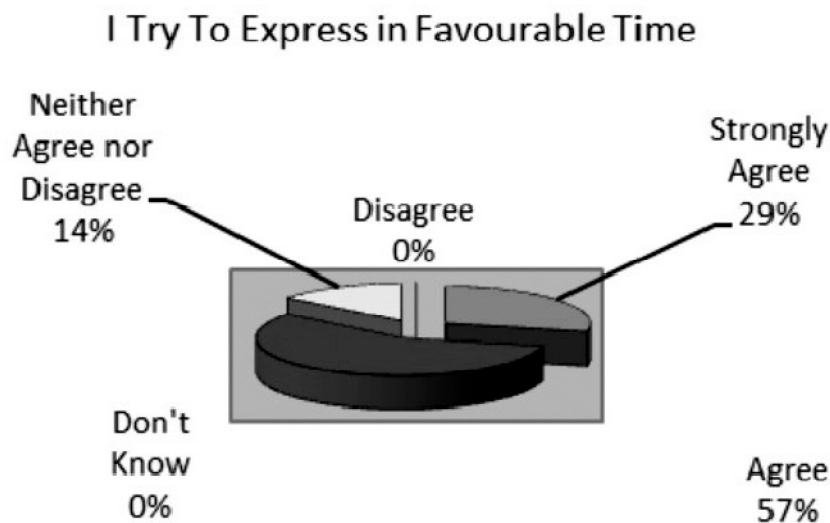
Figure 13



There are 43 % Tibetan refugee who strongly agreed that suppression of expression within self makes them angry day by day. Another 29 % agreed on it while 14 % said they disagree, and suppressions don't make them angry. Rest of the 14 % don't know about it.

Survey Test: Favourable time and expression.

Figure 14



Tibetan refugees who strongly agree on expressing opinion only in favorable time are 29 %. There are 57 % who said they agree on it. And rest of the 14 % neither agreed nor disagreed.

### WHAT IS COLLECTIVELY EXPRESSED AGGRESSION?

From the previous analysis of the Tibetan refugee's news coverage, it has been revealed that after remaining in silent mood for certain period, they would gradually start to speak, and though it is not covered by the press, the debate rages collectively within open society. Sometimes though, these has been being covered by the Nepalese press. Some of the major collectively expressed evidence found from content analysis in between pre- and post- restoration of democracy of 1990 can be outlined below:

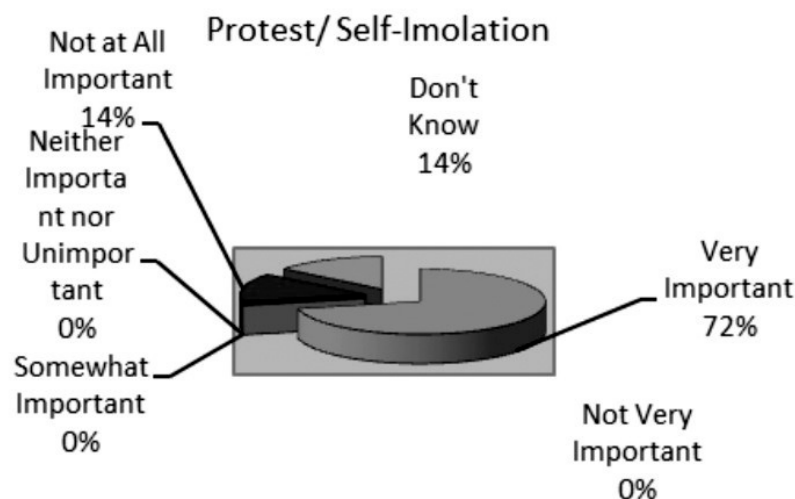
Table 7: Collectively expressed Aggression by Tibetan Refugee

S.No.	Year	Collective Perception
1.	1959	Tibet Uprising & plight for Exile
2.	1974	Khampa war, Mustang
3.	1989	Tibet Uprising-II & celebration of Nobel Peace Prize to Dalai Lama
4.	2004	Free Tibet Movement & protest in Kathmandu began
5.	2008	Beijing Olympic & Tibet Uprising
6.	2012	Self-Immolations

Source: Content Survey, 2012

Survey Test : Self immolation as protest.

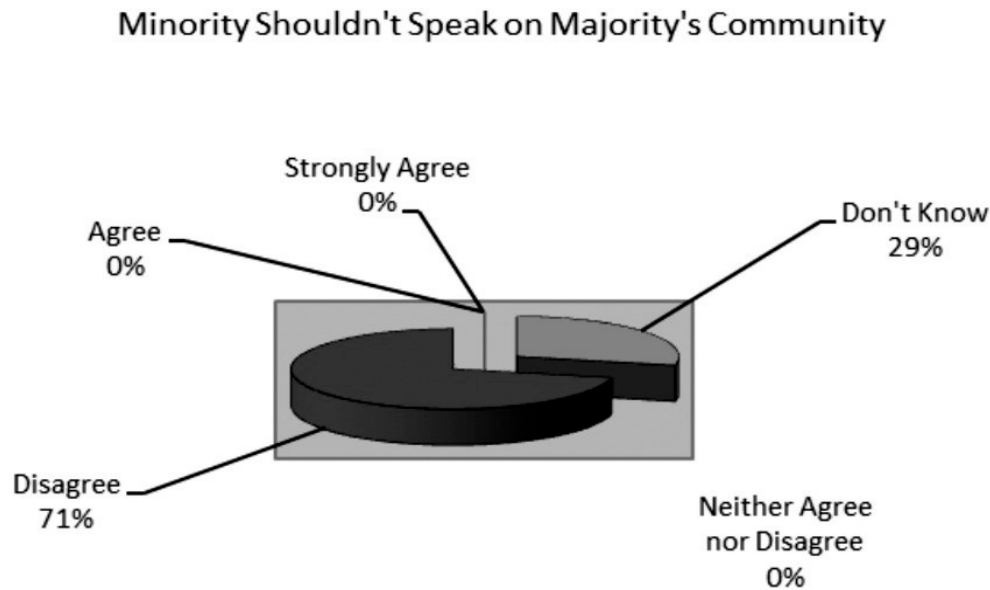
Figure 15



Self-immolation or protest is very important for Tibetan refugee. They frequently take recourse to this action to grab worldwide attention towards their plight. In the survey, 72 % refugee says it's important for them to conduct it. And 14 % says it is not at all important. Rest of the 14 % doesn't know about it.

## Survey Test: Majority minority Dialogue.

Figure 16



There are 71 % Tibetan refugee who disagreed on an opinion 'it is better that community with less population should never speak in press that is functioning in majority's community'. It means Tibetan refugee eagerly want to take part in media to raise their voice and to give some opinion through it. Rest of the 29 % said that they don't know about it.

The survey points to the fact that Tibetan refugees' individual perception find expression collectively after certain time frame, usually when they feel safe for the opinion climate. Most during the periods when Nepal is caused in the throes of serious internal crisis.

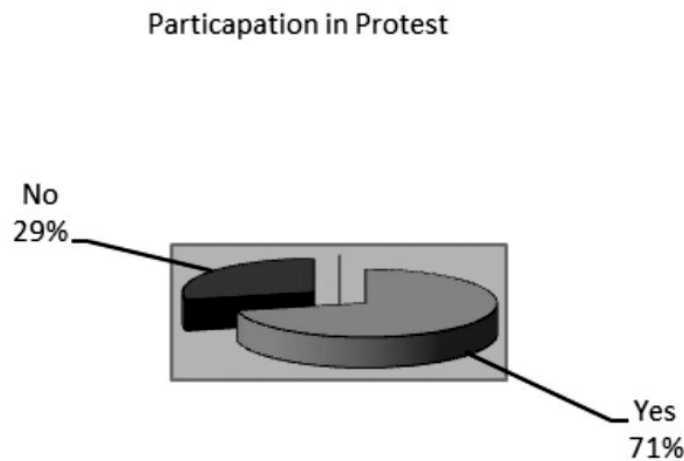
Table 8: Aggression by Tibetan Refugee, Linkage with Internal Crisis of Nepal

S.No.	Year	Internal crisis
1.	1959	King Mahendra vs. political parties for Panchayat
2.	1974	King vs. political Parties for Referendum
3.	1989	King Birendra vs. political parties for restoration of democracy
4.	2004	King Gynendra vs. political parties for Republic
5.	2008	CA election and new constitution
6.	2012	Failure of CA

Source: Content Survey, 2012

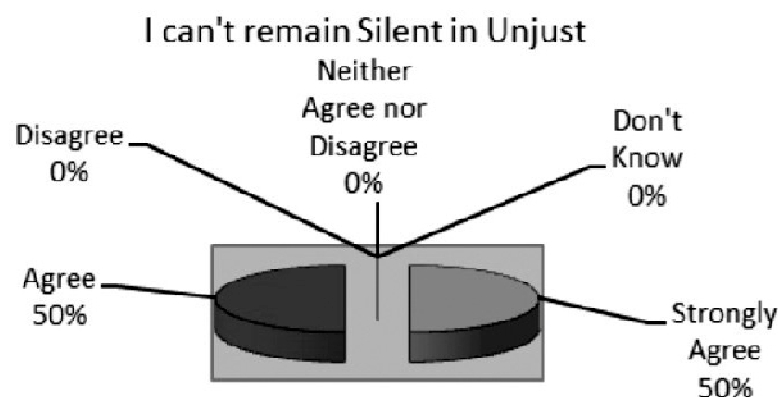
## Survey Tests: Participating in a protest

Figure 17



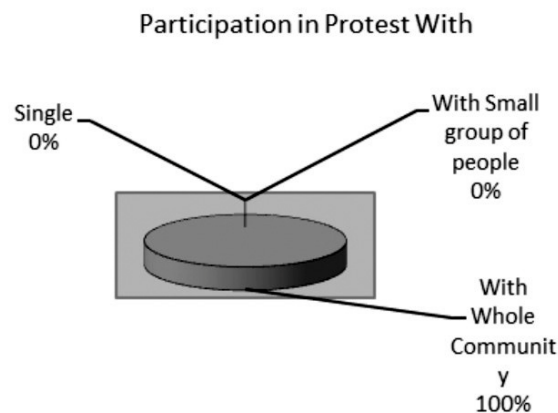
There are 71 % Tibetan refugee who said they took part in protest with 'Yes', while 29 % said 'No'. That means majority of Tibetan community take part in any kind of protest that they organize for freedom and free Tibet. During survey, most of the protest participant said they mostly took part in following protests : March 10, Tibetan Uprising Day, Beijing Olympic Protest for Human Rights of Tibetan refugee, 2008, Peace March at the end of August, 2008, Kathmandu; Free Tibet protest, March 10 & December 10, Pokhara, Kathmandu; candle light vigil, February 13, 2013, Jawalakhel.

Figure 18



The survey reveals that 43 % Tibetan refugee agreed that they tried to gather groups from Tibetan community to fight against injustice and to raise their voice. 29 % Tibetan refugee disagreed and rest 28 % mentioned they have nothing to do with it.

Figure 19

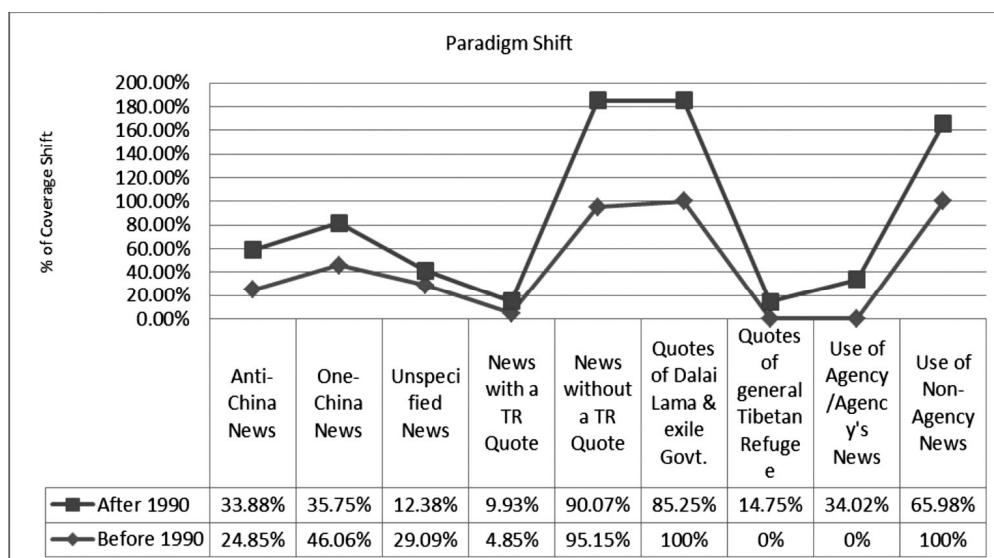


Hundred percent of the Tibetan refugees agreed that while taking part in protest for justice and human right they want to participate along with the whole community.

### CONCLUSION

The focus of this study was to test spiral of silence theory regarding Tibetan refugee living now in Nepal, as they are a minority community. Due to the fear of isolation, Tibetan refugees in Nepal, hardly speak even to the press whether the condition is favorable or unfavorable to them. Even when democracy has dawned in Nepal, they are afraid to speak to the press or express their opinion freely. Such behavior of Tibetan refugee create a silent community of Tibetans in Nepal unwilling to express their opinion freely in the press. The struggle happens within for not expressing the thoughts, opinions and feelings as perception compels them in situations of mass anger after a certain time frame; which releases as angry expression after certain time, through demonstrations, which many a times turn violent. Such phenomena create a spiral of violence in a long time frame, which affects the media and Tibetan community. To get this result, a survey questionnaire and content analysis were applied. The effects of news coverage and perception pattern were assessed using a Likert scale.

Figure 20



Source: Content Survey 2012



The figure indicates how the fear of isolation among Tibetan refugees act as a break against expression of their perception or opinion openly even to a free press on controversial issues. In fact, they conceal or suppress their voice within themselves. Such internalization turns into a negative reaction in a rapid way. After a certain period of suppression, it bursts collectively, which affects their isolation further creating a full spiral of silence.

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## DEMYSTIFYING A HIMALAYAN TRAGEDY: STUDY OF 2013 UTTARAKHAND DISASTER

Amit Kumar\*

### ABSTRACT

This paper aims to develop an in-depth perspective on what went wrong on the night of June 16, 2013 in the Himalayan state of Uttarakhand: whether it was the “fury of nature” or a “man-made disaster”. The paper will also provide insights into preventive measures that may help in preparing a roadmap towards sustainable development. It will unravel the reasons behind previous disasters and study the relationship between man-made obstacles and nature’s response to it. The paper will demonstrate mutually inclusive relationship between sustainability and development and the ways to integrate the improvement of the community and environment into core development strategies. Indian state machinery’s response and preparedness vis-a-vis such disasters have also been critically analyzed.

**Keywords:** Chardham Yatra, Disaster management, Geographic Information System, Gross Environment Product, Himalayan Tsunami, Kedarnath, Monetary relief, Uttarakhand.

### OBJECTIVE

The catastrophe that took place in the Indian state of Uttarakhand on June 16, 2013, in the wake of pre-monsoon rains, was a tragedy waiting to happen. The rainfall of 120 mm within a span of 24 hours caused the flash flood at Kedarnath. This in turn proved deadly for human lives and destruction of property. According to the government reports, a thousand died, more than four thousand went missing and scores of thousands remained stranded, waiting to be airlifted. Kedarnath, a centuries-old historic town, was reduced into a haunted place in no time.

This study is based on the conviction of a wider section of audience including victims, residents and policy makers of Uttarakhand that the systemic response to pre- and post-disaster could be improved by taking some measures that may also lead to sustainable growth. This paper aims to systematically analyze:

- Himalayan states’ proper developmental needs, developmental priorities and policies.
- Preservation of natural course of rivers, waterfalls and springs for a sustainable future.

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- Annual Pilgrimage of “Char Dham” and its growth in non-commercial manner.
- Timely warning and quick preventive measures
- “Gross Environment Product” (GEP) as the measure of the health of the states’ natural resources to be released alongside “Gross Domestic Product” (GDP) figure every year.

## METHODOLOGY

For the purpose of study, the paper has been divided into different segments. Methodology of the study is as follow:

- Extensive review of literature was done to collect information and get a fair understanding of the kind of research previously conducted on similar issues in order to understand the fragile nature of the world’s youngest mountain range, the Himalaya. For this, many libraries in the national capital region (Delhi-NCR) has been consulted and also national and international journals were reviewed which provided the exact feel of research problem.
- Content of the published material and opinion given by various eminent scholars, environmentalist and researchers have been observed and analyzed in order to understand the different aspects of the problem and its preclusion. Qualitative content analysis was conducted as per the need of the study. Content analysis is a methodology by which the researcher seeks to determine the content of written, spoken or published communication by systematic objective and quantitative analysis.
- To make deep understanding about the successful sustainable effort in different parts of the world, a qualitative case study approach has been chosen to provide an idea about the possible roadmap to marginalize the impact of such disasters. Qualitative case study methodology provides tools for researchers to study complex phenomena within their contexts.
- A focus group has been formed to add the audience perspective into the study. A focus group is a form of qualitative research in which a group of people are asked about their perceptions, opinions, beliefs, and attitudes towards a product, service, concept, advertisement, idea, or packaging. Questions were asked in an interactive group setting where participants were free to talk with other group members. A group of 20 people were selected on the basis of their knowledge and interest about the mountain ecology. These people include researchers, academicians, and industry experts within the age group of 30 to 50.

## INTRODUCTION

On June 16, 2013, many things went wrong with the Himalayan state of Uttarakhand. Heavy monsoon rains wreaked havoc in the hill states that triggered flash floods in the Ganga, Yamuna and their tributaries at most of the places, sweeping away a number of bridges, roads and buildings.

Dave Petley, Professor, Department of Geography at Durham University, United Kingdom, has reported in his blog about the Uttarakhand tragedy after analyzing the high resolution images (Figure 1) from ISRO’s Geographic Information System (GIS) platform, Bhuvan. According to Petley, “a massive landslide (in the north-east region of the Kedar valley) and heavy rainfall (in the north-west of the Kedar valley) occurred at the same time and formed a small lake. Under normal circumstances, water would have flowed away. But a block formed by debris led to the accumulation of water. When extreme pressure caused a breach in the boundary of

the lake, a large amount of water gushed out, forcing another rock to flow away. This created a new stream, in addition to the two streams that existed already. The amount of water, moraines and debris was high enough to increase the level of the biggest stream in the west, creating a new stream in between, and increased water level substantially in the eastern stream.

Figure 1



Source: ISRO GIS

The debris from the landslide and water from the lake travelled down the slope, channeled into the glacier, and came down to Kedarnath town. High resolution images show that the flow of the landslide eroded a large amount of material. The amount and flow of debris was so high, that the boulders did not stop at Kedarnath and were carried to Rambara village and beyond. This estimation was made on the basis of rough parameters using images of the landslide retrieved from the Google Earth. Indian Space Research Organization (ISRO) is yet to come up with a detailed analysis but agrees with this possibility.

#### HIMALAYAN TSUNAMI IN THE STATE OF UTTARAKHAND

“Tsunami” is a term that refers to a long high sea wave caused by an earthquake or other disturbance. The Himalayan state of Uttarakhand faced an unprecedented amount of natural disaster on the night of June 16, 2013, due to a combination of factors, namely early heavy rainfall, movement of southwest monsoon winds, and the formation of a temporary lake. A sudden gush of water engulfed the centuries-old Kedarnath temple, and washed away everything in its vicinity and nearby area in a matter of minutes. The Chief Minister of Uttarakhand, Vijay Bahuguna, mentioned in a press conference that “I would call this natural disaster the ‘Himalayan tsunami’”, such was the impact of nature’s fury.

In one of the largest rescue operations in the world, the Army deployed 10,000 soldiers and 11 helicopters, the Navy sent 45 naval divers, and the Air force deployed 43 aircraft including 36 helicopters in Uttarakhand's flood-hit districts of Rudrapur, Chamoli and Uttarakashi, to save and airlift the stranded pilgrims and local residents. Rescue operation ended on 2<sup>nd</sup> of July, 2013 after 17 days of enormous work with the evacuation of over 1,10,000 people.

The enormous task of rehabilitation has started in Uttarakhand. Under normal circumstances, people who have gone missing are declared dead only if they have not been heard of for seven years. But in case of Uttarakhand disaster, the government has taken a decision to quickly settle claims for compensation. The state government prepared the list of missing persons who would be presumed dead and labeled "missing" if they did not return home or call their relatives by July 15. The process of paying monetary relief of Rs 5 lakhs each to the kin of those dead and missing have commenced from 16<sup>th</sup> of July, after a month of flash flood.

The Chardham Yatra pilgrimage, covering Gangotri, Yamunotri, Kedarnath and Badrinath was cancelled for to repair damaged roads and infrastructure. The half of the annual batches of the "Kailash-Mansarovar" Yatra was also canceled after Uttarakhand disaster. Prime Minister of India undertook an aerial survey of the affected areas and announced ₹1,000 crore aid package for disaster relief efforts in the state.

Although the Kedarnath Temple itself has not been damaged, its base was flooded with water, mud and boulders from the landslide, damaging its perimeter. Many hotels, rest houses and shops around the temple in Kedarnath Township were destroyed, resulting in several casualties.

#### UTTARAKHAND DISASTER: NATURE'S WRATH

Water bodies have their own geomorphologic features – a typical shape and texture. In case of glacial lake outburst flood (GLOF), water leaves specific marks behind. These features are interpreted from satellite images of the area. The images clearly established that there was a lake. The traces of the temporary lake that was created at the decisive night in the Kedar valley was neither shown in recent images nor in the images as old as 2007. But the data shows the presence of the lake in the post-event scenario. Therefore it can be concluded that the lake was created during the heavy rain and the breach caused water to move down causing havoc.

#### BASIC PHYSICS OF THE MONSOON

The monsoon is a huge natural engine, driven by the temperature differences over sea and land. In summer, the air over the land grows hot. It expands and rises, and the cool sea air flow in to equalize the pressure. This differential heating sets up a massive aerial current from the Indian Ocean, south of the equator. It heads for India, and the evaporating water that it picks up from the oceans falls as rain, when it hits the land. This vapor condensation, though, releases latent energy which warms the air, pushing it upwards and allowing even more wet air to come in from the sea. But it also cools the land, and drive up heating through upward convection further into India. Thus, the monsoon is a travelling phenomenon, always moving along a path.

#### THE UNUSUAL MONSOON BEHAVIOR IN 2013 IN INDIAN SUB-CONTINENT

Uttarakhand received early rain this year. The monsoon winds arrived early in India and reached the state almost two weeks in advance. The glaciers melt faster when water falls on ice, and the massive run-off began to engorge the river that causes heavier flow in the rivers. These early rains coupled with other factors were responsible for the disaster. This year monsoon hit the entire nation early by one month.

The Himalayas are the world's youngest mountain range; they are prone to erosion, landslides and seismic activity and brutal rainstorms lash the region. Therefore, this region is vulnerable and fragile. There is a clear

link between climate change and changing rainfall patterns in the Himalayas. Scientists predict that rainfall in India will become more extreme. The Indian Institute of Tropical Meteorology in Pune, which has extensively studied the trends in monsoons in the country, finds that “moderate” rain events are on the decline and intense rain events are increasing. This is bad news for the Himalaya, as it means that there are higher possibilities of cloudbursts and “unprecedented” high rainfall over the region – as it happened on June 16 when in just 24 hours, over 240 mm rain lashed parts of Uttaranchal and Himachal Pradesh, another adjoining state.

#### UTTARAKHAND DISASTER: MAN MADE CALAMITY

Environmentalists blame unsustainable developmental activities in Uttarakhand state, undertaken in recent decades for the massive destruction by the rainfall, which contributed to high level of loss of property and lives. The three key reasons can be identified in the context of Uttarakhand disaster:

##### 1. Deforestation

Deforestation aggravated floods in Uttarakhand. The maximum forest area diverted for hydel projects, roads and transmission lines has been in districts like Chamoli, Rudrapur, Uttarkashi and Pithoragarh – the most badly affected by the floods. The forest eco-systems have been severely damaged due to large number of development projects. As per reports from the Union Ministry of Environment and Forests (MoEF), 44,868 ha of forest land have been diverted to non-forest use in Uttarakhand since 1980.

Such deforestation has aggravated the impact of floods in the state. Local environmentalists share their earthy wisdom and narrates wherever there has been intact forest, the damage from floods was much less than where it has been diverted to non-forest use. For instance, in Kedar Valley there have been very few landslides in comparison to the Valley of Flowers, Nanda Devi Biosphere Reserve and regions around Joshimath where the villages have been devastated by landslides along with the cloudburst, as the native oak forests of the region have great soil-binding capacity and water retention power.

##### 2. Haphazard construction work

The valleys of the Yamuna, the Ganga and the Alaknanda witness heavy traffic of tourists especially the pilgrims who visit the holy places in the state annually. According to the Uttarakhand Tourism Department reports, in the past decade, the number of tourists has risen by 155 %. The state's population is 14 million. However last year alone, 28.4 million tourists visited the state between May and November. A survey done by the Indian Council for Research on International Economic Relations in 2006 states that there is an average of 102.5 hotels per million tourists in the state. Shortage of dwelling units has led to mushrooming of illegal structures, some right on the riverbanks. For this, the new roads have been constructed and existing ones were widened without assessing the carrying capacity of the Himalaya. The state government's notification in the year 2000 to prohibit construction within 200 meters from the riverbanks was not adhered to. The mountains were cut to make roads haphazardly that rendered the mountains unstable. In 2005-06, nearly 83,000-odd vehicles were registered in the state. The figure rose to nearly 180,000 in 2012-13. It has been well established that there is a direct co-relation between tourism increase and higher incidence of landslides.

##### 3. The damming effect

Most of the dams in Uttarakhand are constructed without proper planning and paying heed to their environmental impact. Since long, these are considered as one of the reasons why floods turned so devastating in the state of Uttarakhand in 2009, 2010, 2012 and now in 2013. Experts advise urgent reassessment to the need of hydropower in the state and to make hydro-energy sustainable.

The existing Environment Impact Assessment (EIA) process does not necessarily conduct a cumulative impact study of the project. However, cumulative assessment is more important in case of hydropower projects

on a river system to understand the impact of the existing projects on the ecology and how feasible it is to build new projects in the same basin. According to “Uttarakhand Jal Vidyut Nigam Limited” (UJVNL) website, a total of 244 hydro-projects of different capacity developed by various state/private agencies are going on in the State. A research paper entitled “Potential Effects of Ongoing and Proposed Hydropower Development on Terrestrial Biological Diversity in the Indian Himalaya”, authored by Mahara Pandit and Edward Grumbine, highlight the colossal impacts of maniacal hydro power development in the Himalayas on terrestrial diversity, forest cover and rates of species extinctions. The shattering findings of the paper say that, “if 292 proposed and under construction dams in Himalayas are built, then Ganga basin would have the highest number of dams (1/18 km of river channel dammed) in the world, followed by the Brahmaputra (1/35 km) and the Indus (1/36 km)”.

The poorly planned construction of hydro power projects causes reduced ecological flow of rivers. Ecological flow is defined as the water that should be left in the river for ecosystem protection and livelihood purposes at all times. IMG recommended 30 % ecological flow in lean season (November to April) and 20 % ecological flow during Monsoon (May to October).

#### PAST DISASTER

Due to abovementioned series of mismanagement of hydrological resources and unimpeded haphazard construction, disasters have been hitting the state at an increasing frequency. Table 1 lists the disasters in last three decades.

Table 1: Disasters in UK till 2009 (Flood and Landslide)

Year	Disaster	Impact
1978	Bhagirathi flash floods	Devastating impact on the region
1980	Gyansu Nala landslide	Claimed 24 lives and destroyed several houses
1991	Uttarkashi Earthquake	Caused the loss of 653 human lives, injuries to about 6000 people and the death of 1300 head of livestock in addition to damage to buildings, other structures and the infrastructure
1998	Malpa landslide	Devastating impact on the region
2001	Phata landslide	Devastating impact on the region
24 Sept. 2003	Landslide triggered by a cloud burst in Varunawat Hills, Uttarkashi	Engulfed three 4-story hotels and damaged several buildings, roads and other infrastructure. The estimated damages were to the tune of about 50 million dollars
8 August, 2009	Landslide disaster on Kuity village on Berinag– Munsiyari Road, Pithoragarh District	Wiped out two villages namely Jhakhla and Lah, claiming 43 lives.

#### DISASTER 2010

The state recorded the cumulative rainfall of 1675 mm. as against the average annual rainfall of 1163mm. Floods, cloudbursts and landslides left behind a trail of wide spread devastation of human life, property and ecology. The Ganga flowed above the danger mark at Haridwar and Rishikesh and the entire Har-ki-Pauri

region was submerged in 3-4 feet of water. Char Dham Yatra had to be stopped as the roads from Rishikesh to Badrinath and other shrines sank at many places and there were heavy landslides. Due to heavy deposits of silt and water logging on the railway track, train services between Haridwar and Dehradun remained disrupted for many days.

Water level in the gigantic Tehri dam reached 831.5 meter mark, which was 1.5 meter above its capacity. The authorities were compelled to release 1000 cusecs water from the dam to maintain its level. Almora and Nainital districts faced the maximum impact of nature's fury, with floods and cloudbursts taking the toll of 42 lives in Almora alone. The power generation in the power stations in the state, including Pathri, Cheela, Koteswar, Maneri Bhal Phase-I and Phase-II, were badly hit.

## DISASTER 2012

Table 2: Disasters in UK till 2009 (Cloud burst and flood)

Year	Disaster	Impact
August 3 <sup>rd</sup> & 4 <sup>th</sup>	Cloudbursts occurred in Bhatwari and Dunda in Uttarkashi districts	The flood disaster caused bridges to collapse; homes, shops, village paths, electricity and water facilities were damaged, landline and mobile connectivity was also completely down and hundreds of hectares of agriculture land got destroyed. The 60 Kilometers of National highway from Uttarkashi to Gangotri was completely blocked. The bridge connecting Uttarkashi town and Bhatwari block at Gangotri village collapsed and almost 80 villages got totally cut-off. 1700 families were affected from Gangori to Uttarkashi. Around a population of 80000 is affected by this disaster. Government assessed a loss of Rs. 600 crores in the area where they have been able to receive damage information.
Sep 13 <sup>th</sup>	Flood in Kedarnath	The upslope end of the Kedarnath temple was buried in debris. Many of the surrounding buildings had been entirely destroyed.
Sep 13 <sup>th</sup>	Cloud bursts in Rudraprayag	A series of cloud bursts washed the road network (at each 50 m roughly) upto Kund (a small station at National Highway), and after that up to Okhimath.
Sep 16 <sup>th</sup>	Cloud burst in Rudraprayag	Cloud burst lead to death of 73 people

Source: Table 1 and Table 2 are based on the report "Disaster : Nature Fury : A Preliminary Report on Uttarakhand Disaster" prepared by Dehradun-based NGO, HESCO

## PREVENTIVE MEASURES

### National Disaster Management Authority

The Government of India (GOI) has realized the importance of Disaster Management as a national priority, and set up a High-Powered Committee (HPC) in August 1999 and later a national committee after the Gujarat earthquake, for making recommendations on the preparedness of Disaster Management plans and suggestion for effective mitigation mechanisms. On 23 December 2005, the Government of India enacted the Disaster Management Act, which envisaged the creation of the National Disaster Management Authority (NDMA), headed by the Prime Minister, and State Disaster Management Authorities (SDMAs) headed by the respective Chief Ministers, to spearhead and implement a holistic and integrated approach to Disaster Management in India.



However, in practice no major project taken by NDMA so far had seen completion. Two month before the Uttarakhand disaster, the Comptroller and Auditor General of India (CAG) has pointed out the massive holes in the country's disaster alert system, in its audit report.

International news agency Reuters specifies in its report on 25<sup>th</sup> April, 2013 titled "Disaster management authority not ready for calamities – CAG"; that "India's disaster relief agency suffers from "critical gaps" in its preparedness for calamities, making it largely ineffective when responding to the numerous disasters the country faces such as floods and earthquakes".<sup>1</sup>

Hindi news and current affairs magazine, India Today, pointed out in its report that NDMA's National Executive Committee did not meet at all between 2008 and 2012. Seven years after it came into being, the authority doesn't even have a working plan.

Under NDMA guidelines, every State has to frame its own Disaster Management Act and State Disaster Management Authority (SDMA) keeping local conditions and dangers in mind. The SDMA was formed in 2007 in Uttarakhand. But six years later, it is yet to frame a disaster management plan. Since there is no such Act, District Magistrates do not know the standard operating procedure.

#### Gross Environment Product (GEP)

Gross Environmental Product (GEP) is an index of economic growth with the environmental consequences of that growth factored into a country's conventional GDP. In past few decades, natural resources especially forest, soil and air have observed sharp decline in quality due to poor management and over exploitation. Therefore it becomes imperative that the status of our natural resources and their growth must be reviewed periodically for us to understand what we have lost and what we gain every year, for an appropriate mechanism for the periodic review of the economic growth in the true sense. This will only be possible when we also measure the quality of soil, water, forest and air, through some indices, holistically. Annual gross environmental product of natural resources can only serve such a purpose.

In a favorable step towards sustainable development, the term "Gross National Happiness" was first coined in 1972 by Bhutan's fourth King, Jigme Singye Wangchuck. The assessment of Gross National Happiness (GNH) was designed to define an indicator that measures quality of life or social progress in more holistic and psychological terms than only the economic indicator of Gross Domestic Product (GDP). The king used this phrase to signal his commitment to building an economy that would serve Bhutan's unique culture based on Buddhist spiritual values.

The Centre for Bhutan Studies, under the leadership of Karma Ura, set out to develop a survey instrument to measure the Bhutanese people's general sense of well-being. Ura collaborated with Canadian health epidemiologist Michael Pennock to develop Gross National Happiness (GNH) measures across nine domains: time use, living standards, good governance, psychological well-being, community vitality, culture, health, education, and ecology. Bhutan's efforts to boost GNH have led to the banning of plastic bags and re-introduction of meditation into schools, as well as a "go-slow" approach toward the standard development path of big loans and costly infrastructure projects.

On Jun 18, 2011, the High Court, Nainital accepted a Public Interest Litigation filed by Dr. Anil P Joshi, seeking that the state government be directed to make provision for measurement and periodical review of the Gross Environmental Productivity within the state of Uttarakhand just like the Gross Domestic Product. The court considered GEP on the lines of the GDP, as a vital tool for judging the overall development status, especially in the environmentally sensitive, fragile and significant Himalayan states like Uttarakhand, Jammu and Kashmir, Himachal Pradesh and the northeastern states.

After Uttarakhand's flash flood disaster, Chief Minister Vijay Bahuguna on July 5, 2013 directed his officials to begin work on formulation of the new green measure which would give out yearly updates on the status of the state's glaciers, forests, rivers, air quality, soil etc.. Uttarakhand has thus become the first state in the country to start tabulating a 'gross environment product' (GEP), a measure of the health of the state's natural resources which would be released alongside GDP figures every year.

#### Eco Tourism

To meet the twin objectives of ecological sustainability by conserving biological diversity and ensuring needs of the forest dependent communities through sustainable harvesting of natural resources it is important to strengthen the existing egalitarian and traditional resource use practices among the local communities. Ecotourism and particularly Community-based tourism have the potential to be more suitable livelihood option and to make substantial positive contribution to management and conservation of forest and wildlife.

For Instance, to promote conservation incentive and suitable livelihood option, Community Based Tourism (CBT) is promoted across the villages in Arunachal Pradesh. Arunachal Pradesh situated in the Eastern Himalaya is one of the global biodiversity hotspot, endowed with great diversity in climate, landforms, ethnicity and resource availability. There is no formal land tenure system in Arunachal Pradesh. People exercise customary rights on land for jhuming, hunting, fishing, etc. They tend to exercise customary rights even in Unclassified State Forests (USF).

#### THE CASE STUDIES OF SUSTAINABLE DEVELOPMENT

##### Mine Rehabilitation and the Community: a case study from Sudbury, Ontario, Canada

In 1883, rich ore deposits were discovered in the Sudbury region of Canada. Since that time, logging, prospecting, and emissions from processing operations have combined to greatly degrade environmental conditions. Sulfur dioxide emissions from smelting processes carried metals such as copper, nickel and aluminum into the air and caused the soil and water of the area to become highly acidic. As a result, about 40 square miles of the Sudbury area became completely denuded and another 140 square miles were significantly impacted by the early 1970s. Due to the loss of vegetation, soil erosion greatly increased throughout the entire area, leading to a loss of nutrients.

The primary restoration efforts started in 1969 when "Laurentian University" and the "Ontario Department of Lands and Forests" began to investigate strategies to re-vegetate the barren land. In 1973, a multi-disciplinary technical advisory committee was constituted to organize and direct reclamation efforts. Volunteers have also played a significant role in the reclamation efforts. The two major mining companies in the area, "Inco Incorporated" and "Falconbridge Limited" have also played a significant role in the reclamation efforts. The two companies have spent over a billion dollars on emission-control technologies and environmental-improvements in the region.

The cooperative work of these groups has resulted in the development of innovative techniques and successful reclamation efforts. A great deal of experimentation and time has been required to produce the re-vegetation. Monitoring has also played a vital role in determining the success of various techniques, providing direction for future experiments.

##### Kitakyushu: The World Capital of Sustainable Development

During 1960s, Japan achieved rapid economic progress, in which Kitakyushu developed into one of the four largest industrial zones in Japan. However, air and water were polluted; and Dokai Bay was highly contaminated by industrial and domestic wastewater. The environmental pollution was progressing to such

an extent that the bay was called the 'Sea of Death'. However residents, enterprises, research institutes and governmental agencies were united in the task of overcoming the pollution.

In 1971, the city of Kitakyushu founded the Environmental Pollution Control Bureau that established 'The City of Kitakyushu Pollution Control Ordinance,' which was more stringent than the national laws and enforced a series of effective measures against major companies in the city, including the execution of agreements to prevent pollution.

These measures to prevent pollution and to preserve the environment, together with residents' environmental protection efforts, yielded good results and considerably improved Kitakyushu's environment. The tremendous increase in wastes due to mass production, heavy consumption and mass disposal has become a worldwide problem. In view of this situation, the city of Kitakyushu has drawn up the 'Kitakyushu Eco-town Plan,' to 'use all waste as material for other industries, reduce waste as much as possible (Zero Emission) and foster a resource recycling society.' The Kitakyushu Eco-town Program implements specific projects such as the recycling of electric appliances, automobiles, plastic bottles and other recyclable wastes, mainly in the Hibikinada Area in northwestern Kitakyushu.

The Organization for Economic Co-operation and Development (OECD) introduced Kitakyushu's improved environment to the world as the example of city transformed from a 'Gray city' to a 'Green city'.

#### Analysis, Results & Conclusion

India's planning process has laid emphasis on measures to ensure sustainability not only in economic terms, but also in terms of social and environmental well being. "Poverty alleviation", "economic and social development" and "environmental protection" are dominant sustainable development goals and priorities of India.

#### Sustainable Management of Himalayan Ecosystem - 12<sup>th</sup> Five Year Plan (2012-17)

The 12<sup>th</sup> Five Year Plan (2012-17) elaborates the strategy for the Hill Area region is tollaring wards: "The Hill Area Development Program (HADP) need to be continued in the Twelfth Plan with renewed vigor so that natural resources of these fragile areas can be preserved and used in a more sustainable manner. These programs also need to be continued because most of the hill areas lack infrastructure, particularly roads, power, educational institutions and health care centers. These areas deserve high priority under the flagship Programs, particularly Sarva Shiksha Abhiyan (SSA) and the National Health Mission (NHM). It has also been observed that many nationwide Programs are not suitable for hilly areas, for example, wages should be higher than the wages prescribed under wage employment programs. This also holds true for the norms set out for some other programs, as settlements are often small hamlets, which do not qualify for coverage or are too expensive to cover. Local solutions and people's participation in decision-making need to be encouraged. The ecological and biodiversity issues should be dealt with on high priority. The Program should therefore have a twofold objective of preserving ecological balance and creating sustainable livelihood opportunities for the local communities".

The 12<sup>th</sup> Five Year Plan (2012-17) outlines environment and related livelihoods issues in the policy document. However, the actual state of things is far from achieving the desired results which requires integrating environment, economy, and livelihoods, to meet India's obligations to its people, to nature, and to international agreements. Growth figures as an indicator of human welfare are increasingly discarded, not only because economic growth does not necessarily lead people to being happier, more well-fed, and more satisfied, but because in certain conditions it may actually worsen crucial aspects of human life. A little step towards a long sustainable future can be taken by beginning to learn how to respect nature and stop irreversible disruption of surrounding ecology.

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## PARTICIPATION: A MAJOR BUILDING BRICK OF STRONG TQM

Shalini Misra\*

### ABSTRACT

A successful TQM program may change the structure of an organization through conversion to a more team-oriented, worker-empowered approach; it changes the culture as the commitment to quality is institutionalized and organization members at all level ponder about quality in new ways. It also changes operations through improved processes, clarified instructions, modeling of behavior by top management, and training in new ways to accomplish work. The responsibility for improving quality is given to everyone from workers on the factory floor to senior executives. While quality control departments typically measure quality through inspections at the end of the manufacturing process, Total Quality Management requires that workers incorporate attention to quality at every step in the manufacturing process and that managers seek out root causes of variations. Employee participation goes hand-in-hand for the correct application of the TQM techniques.

Keywords: Employee Empowerment, Natural work teams (NWTs), Problem solving teams (PSTs), Quality Circles, Quality improvement teams or excellence teams (QITs), TQM, TQM model.

### INTRODUCTION

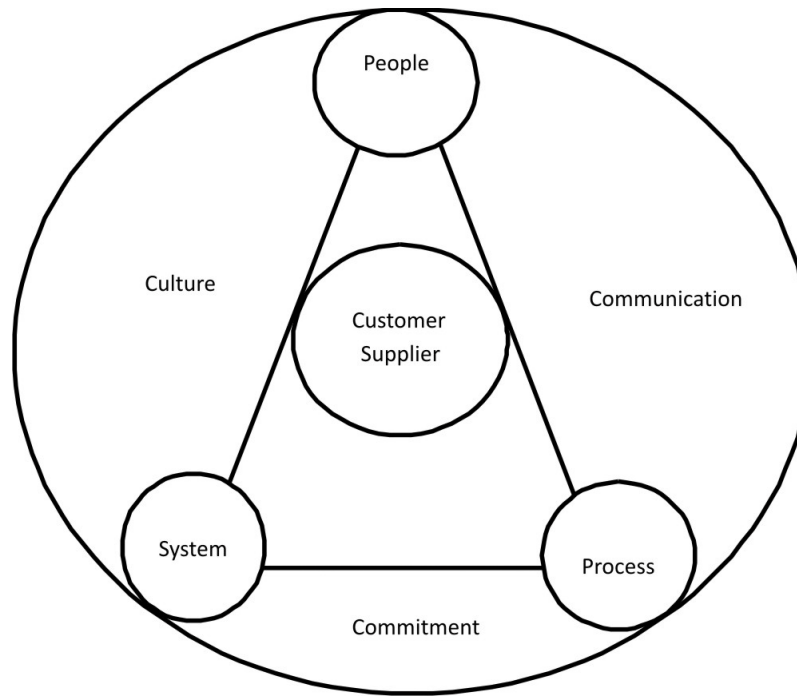
Total Quality Management (TQM) is a management approach that originated in the 1950s and has steadily become more popular since the early 1980s. Total quality is a description of the culture, attitude and organization of a company that strives to provide customers with products and services that satisfy their needs. The culture requires quality in all aspects of the company's operations, with processes being done right the first time and defects and waste eradicated from operations.

TQM is an organisational cultural commitment to satisfy customers through the use of an integrated system of tools, techniques, and training. TQM involves the continuous improvement of organisational processes, resulting in high-quality products and services. TQM is the way of managing for the future, and is far wider in its application than just assuring product or service quality – it is a way of managing people and business processes to ensure complete customer satisfaction at every stage, internally and externally. TQM, combined with effective leadership, results in an organisation doing the right things right, first time.

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Figure. 1



Source : [www.dti.gov.uk/quality/tqm](http://www.dti.gov.uk/quality/tqm)

Effective leadership, results in an organisation doing the right things right, first time.

The core of TQM is the customer-supplier interfaces, both externally and internally, and at each interface lie a number of processes. This core must be surrounded by commitment to quality, communication of the quality message, and recognition of the need to change the culture of the organisation to create total quality. These are the foundations of TQM, and they are supported by the key management functions of people, processes and systems in the organisation. The figure above explains this concept well.

In a TQM effort, all members of an organization participate in improving processes, products, services, and the culture in which they work. The methods for implementing this approach come from the teachings of such quality leaders as Philip B. Crosby, W. Edwards Deming, Armand V. Feigenbaum, Kaoru Ishikawa, and Joseph M. Juran

Quality Circles are the work group that meets to discuss ways to improve quality and solve production problems to accomplish TQM. Kaoru Ishikawa of Japan is recognized for contributing to the emergence of quality circles, where workers meet to discuss suggestions for improvements. His idea of quality circle promotes cooperative approach to quality. Many American companies initiated quality circles with hopes of emulating Japanese manufacturing success; they failed to understand, however, that much of the Japanese success with quality circles occurred because managers learned over a time to take the workers' suggestions seriously and to allow them to be implemented.

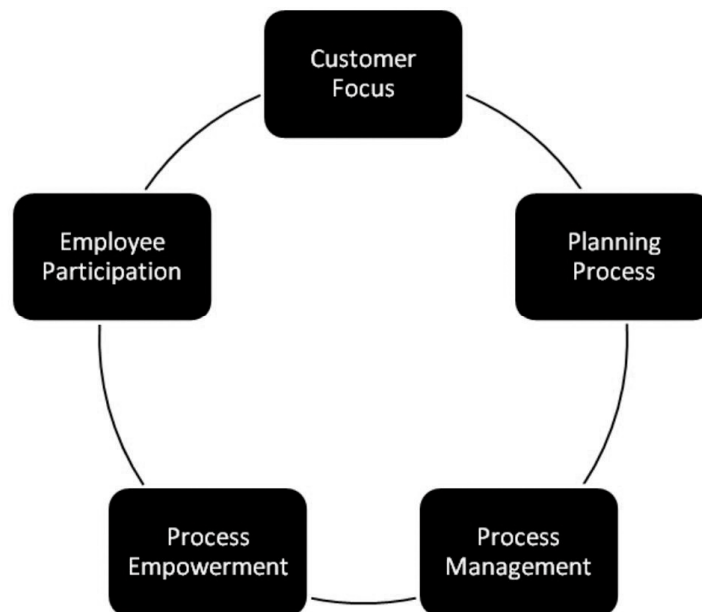
#### THE TQM MODEL

The simplest model of TQM is shown in this TQM Diagram 1. The model begins with understanding customer needs. TQM organizations have processes that continuously collect, analyze, and act on customer information. Activities are often extended to understanding competitor's customers. Developing an intimate

understanding of customer needs allows TQM organizations to predict future customer behavior. TQM organizations integrate customer knowledge with other information and use the planning process to orchestrate action throughout the organization to manage day to day activities and achieve future goals. Plans are reviewed at periodic intervals and adjusted as necessary. The planning process is the glue that holds together all TQM activity.

The final element of the TQM model is total participation. TQM organizations understand that all work is performed through people. This begins with leadership. In TQM organizations, top management takes personal responsibility for implementing, nurturing, and refining all TQM activities. They make sure people are properly trained, capable, and actively participate in achieving organizational success. Management and employees work together to create an empowered environment where people are valued.

Diagram 1



## PARTICIPATION AND TQM

- Having the support of attention of senior management remains a necessary condition for making TQM work in an organization, but without empowered employees it won't go very far. Employee Empowerment stands for a substantial change that businesses are implementing. It means letting employees make decisions at all levels of an organization without asking for approval from managers. The idea is quite simple: people, who actually do a job, whether it is running a complex machine or providing a simple service, are in the best position to learn how to do that job the best way. Therefore, when there is a chance to improve the job or the systems of which a job is apart, people should make those improvements without asking for permission. All employees participate in working toward common goals. Total employee commitment can only be obtained after fear has been driven from the workplace, when empowerment has occurred, and management has provided the proper environment. High-performance work systems integrate continuous improvement efforts with normal business operations. Self-managed work teams are one form of empowerment. This is how participation does a great job towards TQM.

- Main elements of TQM are communication, recognition, participation, integrity and ethics of which participation is one of the most important elements of TQM. It is said to be the major building brick of an effective TQM. Employee participation includes training, teamwork and leadership.

- Training – Training is very important for employees to be highly productive. Supervisors are solely responsible for implementing TQM within their departments, and teaching their employees the philosophies of TQM. Training that employees require are interpersonal skills, the ability to function within teams, problem solving, decision making, job management performance analysis and improvement, business economics and technical skills. During the creation and formation of TQM, employees are trained so that they can become effective employees for the company.
- Teamwork – To become successful in business, teamwork is also a key element of TQM. With the use of teams, the business will receive quicker and better solutions to problems. Teams also provide more permanent improvements in processes and operations. In teams, people feel more comfortable bringing up problems that may occur, and can get help from other workers to find a solution and put into place. There are three types of teams that TQM organizations adopt:

A. Quality Improvement Teams or Excellence Teams (QITs) – These are temporary teams with the purpose of dealing with specific problems that often recur. These teams are set up for period of three to twelve months.

B. Problem Solving Teams (PSTs) – These are temporary teams to solve certain problems and also to identify and overcome causes of problems. These generally last from one week to three months.

C. Natural Work Teams (NWTs) – These teams consist of small groups of skilled workers who share tasks and responsibilities. These teams use concepts such as employee involvement teams, self-managing teams and quality circles. These teams generally work for one to two hours a week.

Leadership – It is possibly the most important element in TQM. It appears everywhere in organization. Leadership in TQM requires the manager to provide an inspiring vision, make strategic directions that are understood by all and to instill values that guide subordinates. For TQM to be successful in the business, the supervisor must be committed in leading his employees. A supervisor must understand TQM, believe in it and then demonstrate their belief and commitment through their daily practices of TQM. The supervisor makes sure that strategies, philosophies, values and goals are transmitted down throughout the organization to provide focus, clarity and direction. A key point is that TQM has to be introduced and led by top management. Commitment and personal involvement is required from top management in creating and deploying clear quality values and goals consistent with the objectives of the company and in creating and deploying well defined systems, methods and performance measures for achieving those goals.

## BARRIERS OF TQM

To be able to become a total quality organisation, some of the bad practices must be recognised and corrected. These may include:

- Leaders not giving clear direction
- Not understanding, or ignoring competitive positioning
- Each department working only for itself
- Trying to control people through systems
- Confusing quality with grade
- Accepting that a level of defects or errors is inevitable
- Fire fighting, reactive behaviour
- “It’s not my problem” shirking attitude



## CONCLUSION

Total quality management can be summarized as a management system for a customer-focused organization that involves all employees in continual improvement. It uses strategy, data, and effective communications to integrate the quality discipline into the culture and activities of the organization. We should appreciate the fact that these elements are key in ensuring the success of TQM in an organization and that the supervisor is a huge part in developing these elements in the work place. Without these elements, the business entities cannot be successful TQM implementers. It is very clear from the above discussion that TQM without involving integrity, ethics and trust would be a great remiss, and in fact it would be incomplete. Training is the key by which the organization creates a TQM environment. Leadership and teamwork go hand in hand. Lack of communication between departments, supervisors and employees create a burden on the whole TQM process. One must encourage employees through granting due recognition for their contribution in the overall completion of given task.

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# MOTIVATION AS A TOOL FOR EFFECTIVE STAFF PRODUCTIVITY IN THE PUBLIC & PRIVATE ORGANIZATION

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## ABSTRACT

This paper aims to find out the relationship between motivation and productivity in an organization. The paper studies the theory presented by the researchers in the field of motivation and productivity. Our finding suggest that positive relationship occurs between motivation and higher productivity. However, the data and research is usually based on secondary source of data. The paper recommends that for creating good job opportunities, job redesign and congenial atmosphere along with financial rewards enhance productivity. Therefore, the null hypothesis (Ho) is accepted and alternative hypothesis (Ha) is rejected.

Keywords: Incentive, Motivation, Needs Hierarchy Theory, Organization, Productivity, skill, Work environment.

## INTRODUCTION

Motivation is a kind of force which energizes people to achieve some common goals. Every organization either public or private is goal oriented and all efforts are geared towards the successful attainment of their goals and objectives. It has been argued that unless individual employees are motivated to make efficient use of the potentials found among them during the employment process, they may not achieve the level of performance that is desired from them (Rothberg, 2005).

For an employee to be motivated, he or she perceives that their want are being met. Thus, the satisfaction of the employee represents an indispensable dimension of the motivational process. A satisfied individual would certainly contribute positively to the realization of organizational goals and objectives, while a dissatisfied employee may not only contribute but can even act in such a way that the realization of such goals and objectives could be completely destroyed. This underlines the importance of employees' satisfaction to the organization (Anka, 1988).

Use of the theories has enabled us to understand the link between motivation and job satisfaction. productivity, leadership styles and personal characteristics. There is a general believe that man has the natural tendency to be lazy with regards to work and he is being forced by circumstances to work. Low productivity is a problem that thrives in many societies particularly in the developing countries irrespective of constant efforts. A lot of money, energy and time are wasted, which if properly utilized will yield higher productivity

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and as such greater wealth for the societies involved. In all productive activities, the basic elements and factors include land, capital, labour and the entrepreneur. The laborers and the entrepreneurs are human and as such very important in any productive enterprise. They utilize the other factors for the realization for the goal of the enterprise. It can then be adduced that human beings play a very important role within any system and in particular industrial organizations. For this reason, they should be given a high consideration so that they can contribute effectively and efficiently during productive activities.

## OBJECTIVES

The objectives of this paper are:

- To identify what motivates people in an organization.
- To examine the relationship between motivation and productivity.
- To recommend ways and techniques through which organization could motivate its staff.

## HYPOTHESIS

Ho: If efficiency and non-productivity are on increase in any organization, than motivation would not achieve the desired results.

Ha: If efficiency and productivity can be achieved by applying motivational techniques, than the motivation would achieve the desired results.

## REVIEW OF LITERATURE

Shah and Pathan (2009) explores the changes in productivity with major supposition of quantifying the relationships in terms of changes in the production caused by motivation among workers in maintaining secrecy, and security of confidential data. The study concludes that changes in productivity as gains in profitability are significantly related to motivation levels at all three tiers of organization structures.

Anka L. M. (2006) examines the essential skills needed by managers to work efficiently and effectively in an organization. At lower level, the major need is for technical and human skills and at higher level manager's effectiveness depends largely on human and conceptual skills. At top level, conceptual skill becomes important for successful administration. These three skills play an important role in enhancing efficiency of employees.

Campbell and Pitchard (1976) state how motivation has to do with a set of independent, viable relationship that explains the direction of skill and understanding of the task and constraints operating in the environment. Glueck (1980) defines motivation as the process or factors (motives) that influence people to act. He went further to state that psychologists view motivation as the process, and channeling behavior into a specific course. Ajibola (1976) defines motivation as a process of stimulating people to achieve organizational task as well as a process of stimulating oneself to action to gratify a felt need. Maduaburn (1988) state that motivation is an inner state that energizes, activates, moves, directs or channel behaviors toward achieving a desired goal. To him, motivation is a general class that drives desires, needs wishes and related factors which mobilize behavior towards their realization or satisfaction.

## THEORY OF MOTIVATION

Psychologists have been exploring how to motivate employees since the last century and a lot of work on human motivation has been developed and widely applied. It should be noted that job satisfaction is closely associated with motivation and some important motivational theories are described below:

1. Roethlisberger and Dickson's Classic Study on Worker Performance (1939): The unusual level of attention from managers and researchers motivated workers to high performance because it fulfilled the workers' previously unmet social needs. He concluded that performance feedback and pay-for-performance

were the specific conditions that increased and maintained the high levels of performance. The fulfillment of social needs is not needed to explain the performance changes.

2. Maslow's Needs Hierarchy Theory (1954): To formulate a positive theory of motivation, humans have innate hierarchical needs; lower-order needs (e.g., air, water, food and shelter) that dominate human behavior until they get satisfied. Unmet needs create psychological tension that energizes and motivates behavior that will fill those needs. No practical tools predict and control behavior. People don't inherently dislike work. People exercise self-direction and self-control. Human beings learn to accept and seek responsibility. Management's methods of organization and control need to recheck role of motivation in higher productivity.

3. Skinner's Behavior Analysis (1953): To predict and control behavior, person's history and current environment is to be studied. Behavior is a function of environmental contingencies of reinforcement, establishing operations such as deprivation or satiation. Establishing operations and past consequences determine the direction, effort, and persistence of behavior. Vroom Expectancy Theory (1964) explains work behavior. Person must believe that there is a relation between performance and valued outcomes (Instrumentality). People must see a relationship between how hard they try and quality of performance (Expectancy). The perceived outcomes, valence, instrumentality and expectancy generate a force to exert different levels of effort in performance. It is necessary to establish a contingent relationship between performance and desired consequences.

4. Adam's Equity Theory (1965): This predict affect, motivation, and behavior based on exchange processes and social control. Explanation of dissatisfaction and low morale, internal perceptions of work environment causes people to form beliefs and attitudes. These cognitions, in turn, instigate and direct various work related behaviors (Pinder, 1998). Motivation is a function of how a person sees self in comparison to other people. Feelings of inequity cause tension. The greater the inequity, the greater the tension and the greater the motivation to reduce it. How hard a person is willing to work is a function of comparisons to the effort of others. Based on the result of the comparison, a person may either work harder, or less hard, or maintain performance.

5. Locke and Latham's Theory of Goal Setting and Task Performance (1990): This explains why some people work harder than others or perform better than others independently of their ability and knowledge. Human action is directed by conscious goals and intentions. Goals influence people's choice of task and task performance. Goals are the basis for motivation and direct behavior, provide guidelines. Two conditions must be met before goals can positively influence performance: First, person must be aware of goal and know what must be accomplished. Second, individual must accept the goal as something worth willing to work. Goals should be difficult and specific. Goal setting and feedback of tough goals lead to greater effort and persistence than easy goals, assuming that goals are accepted.

6. Ford's Motivational Systems Theory (1992): Motivation plays a major role in producing variability and change in behavior patterns. Motivation is a function of goals, emotions, and personal agency, beliefs. Motivation initiates and maintains activity until the goal directing the episode is attained. Principles for motivating humans that can alter problematic motivational patterns and promote the development should be used in more adaptive pattern.

## MOTIVATIONAL FACTORS INFLUENCING PRODUCTIVITY

1. Intrinsic/Extrinsic Motivation: A recent study explores how intrinsic motivation strengthened the relationship between pro-social motivation and employee outcomes such as persistence, productivity and performance. Employees experience pro-social motivation as more autonomous when intrinsic motivation is high; because intrinsically motivated employees feel that performing well is beneficial to their own self-selected goals, as they enjoy their work and value the outcome of helping others.

2. Cognition: Cognitive theories of motivation, on the other hand, suggest that our experiences generate internal cognitions such as desires and beliefs. These cognitions, in turn, determine current performance (Clark, 1998; Ford, 1992; Maslow, 1954; Vroom, 1964). Cognitions are nothing more than our ability to describe particular reinforcement contingencies of our own behavior based on our own past experiences (Mawhinney & Mawhinney, 1982).

3. Environment: Recent models of work motivation are addressing the role of the environment as one determinant of behavior. For example, Keller's (1999) performance factors model includes antecedents and consequences as influences on performance. Locke and Latham's (1990) goal setting theory centers on goals as antecedents and feedback as consequences of performance. Furthermore, when behavior or performance does not meet societal or work standards, we tend to assume that something is wrong with the person, rather than looking for deficits in the person's environment.

## MOTIVATION AND PRODUCTIVITY

It is a truism that employees are an organization's most valuable assets. This highlights the importance of understanding the theory and application of motivation to manage human resources (Amar, 2004). One wonders about the basic prerequisites of workers' productivity. Although this question cannot be answered with a definite statement, but among other factors, motivation is important for enhancing level of job commitment of workers, which invariably leads to a higher productivity of the workers.

It is necessary for motivation of the workers in organization to be enhanced in order to increase productivity. Productivity literally means the rate of power to produce, but productivity from the management or economic point of view is the ratio of what is produced to what is required to produce it. Usually, this ratio is in the form of an average; expressing the total output of some category of goods divided by the total input of, say labour or raw material. In principle, any input can be used as the denominator of the productivity ratio. One can speak of the productivity of land, labour, capital or sub-categories of any of these factors of production. Simply put, productivity is the act of producing or bringing into being commodities of great value or adding to the wealth of the world. It can be used to measure the index of growth, efficiency, economic standard etc.

On the other hand, motivation is a word that is rather cumbersome to define in a meaningful manner. Adams and Jacobson (1964) suggest that motivation deals with all the conditions that are responsible for variation in the intensity, quality and direction of behavior. From an organization point of view, motivation deals with everything that a manager knows or can use to influence the direction and rate of individual's behavior towards commitment. An overwhelming amount of energy is expended in trying to get people to do what we want them to do.

We all have a task to motivate ourselves to do what we think we should do. It is widely believed that when a worker is highly motivated, this goes a long way in improving organizational productivity, effectiveness and efficiency. Against this background, it is necessary to look for a way through which the morale of workers can be improved which will, at the end, enhance job commitment with an improvement on the standard of living of people, and increase in wealth of individuals and development of the society. This study is therefore designed to find out the link between the extents to which various motivation strategies encourage the workers to improve their job commitment and increase their productive capacity.

The relationship between motivation and productivity is more substantial than simply a psychological connection like:

(A) Gender Differences: It is found in research that women were mainly motivated by other factors in the workplace not by job role itself and had fewer primary needs met at work. Women were also more dissatisfied in their job than men.

(B) Age Differences: The research indicated that the older generation was more productive than their younger colleagues. However, research in other fields has suggested that research productivity declines with age (Over, 1982; Over, 1988), and that there is a negative association between age and scientific productivity and creativity (Cole, 1979).

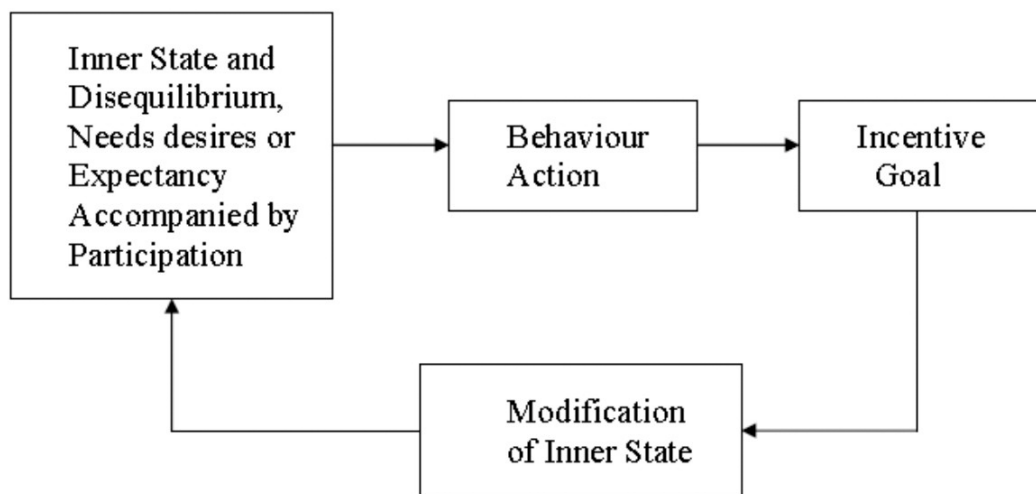
(C) Caring Responsibilities: It is investigated in those with no dependants spending more hours on work, and consequently had higher counts than their colleagues with caring responsibilities. Those with dependants were far less interested in work for their own sake, had less satisfaction from working as output was less important and felt less need of work in order to succeed.

(D) Hours Spent on Work: The results of researches clearly indicate that employees who spent more hours on work were mostly those who were motivated by their job role, and had greater job satisfaction than those spending less time on work (either because they were not motivated by their job role or because their job role did not permit it).

(E) Sources of Motivation: It is indicated in research that the majority of workers are primarily motivated by their job role rather than workplace or extra- workplace factors. Interestingly, employees who were motivated by factors external to the workplace had lower job satisfaction. Perhaps not surprisingly, employees who were primarily motivated by the job role had a higher output than those with other sources of motivation. Research also showed that having one's primary needs met at work was a key to job satisfaction and the higher the job satisfaction level, the higher the output.

Steers and Porter (1979) presents a model of the process of motivation as follows:

Figure 1. Model of process of motivation



Source: Steers and Porter( 1976),p.103

This model implies that individuals have desired needs within themselves that leads to the development of aspired behavior aimed at meeting to achieve their goals or needs. A feedback is necessary in order to assess whether behavior is producing the desired goals or if there is any need for modification in the inner state of an individual.

According to Decenzo and Robbins (2007), motivation is a multifaceted process with individual managerial and organizational implication. Motivation is not what the employer exhibit but a collection of environmental issues surrounding the job. Zubair (2005) identifies factors that motivate employees in Pakistani organizations. Twenty eight key motivational factors were identified, and about 1,230 respondents were asked to rank their top ten motivators in their respective organizations. The results of the study revealed that top four motivators in Pakistani organizations were image, job security, compensation, good relationship and teamwork.

Table 1: Perception about Motivation

Motivation	Number	Percentage
Job Security	20	30.3%
In-service Training	16	24.2%
Improved Salary	12	18.1%
Promotion	18	27.2
Total	66	100

Source: RMRDC, 2011

In a specific study of RMRDC, it has been found that perception of respondents in relation to what actually motivate respondents is to put in their best to enhance productivity, the results in Table 1 revealed that 20 among 66 respondents (30.3%) prefer job security, 16 (24.2%) accepted in-service training while 12 (18.1%) and 18 (27.2%) prefer improved salary and promotion as factors that motivate employees to perform their duties. The above findings proved that there are different things that could motivate employees. Management of all organizations must identify what could motivate their employees from time to time.

## CONCLUSION

Few current studies related to motivation and productivity is mentioned here. Uwe and Hartwig (2000) have examined the effects of a psychologically based management system on work motivation and productivity. It is concluded that PPM (Participative Productivity Management) helps to increase productivity mainly by increasing task and goal clarity, and that increases in productivity can only be reached reliably when no competing system of performance appraisal exists besides PPM. Wright (2002) has examined the role of work context in work motivation.

Miao and Evans (2007) studied the impact of sales person motivation on role perceptions and job performance. Empirical results from a survey of sales people indicate that, compared to the global motivation constructs, the cognitive and affective representation of I/E (intrinsic and extrinsic) motivation provides a more robust description of the salesperson motivation.

From this study, it is obvious that most workers in the industry are not satisfied and motivated in their jobs, especially those in the junior cadre. Significant relationship was found between motivation and job commitment on one hand, and satisfaction with job and job commitment on the other hand. It is found that individuals are motivated to perform well when the work is meaningful and individuals believe they have responsibility for the outcomes of their assigned tasks.

Finally, through this study we find there is a positive relationship between motivation and productivity of employees.

## RECOMMENDATIONS

Pay-for-performance incentives are often utilized in the private sector to encourage competition among and within team, but such a model may not be directly applicable to the public sector, as resources are often tighter, and money may not be the primary source of motivation for those with an ethos of public service. Research suggests that individuals are motivated to perform well when the work is meaningful and individuals believe they have responsibility for the outcomes of their assigned tasks. Following recommendation are offered:

1. **Promote Challenges and Accomplishments:** Specific and challenging goals can lead to higher levels of performance, productivity, and creativity which in turn is linked with an overall stronger commitment to the organization (Perry, Mesch, & Paarlberg, 2006). We propose developing challenging goals and timelines together with employees. By setting goals, employees obtain a clear strategy for their own professional development, which creates greater satisfaction and motivation (Ambrose & Kulik, 1999). Accomplishing goals that challenge employee creativity and problem-solving skills can improve performance, enhance employee self-confidence, and improve job satisfaction which can outweigh a one-time monetary award (Perry, Mesch, & Paarlberg, 2006). Goal setting should be followed by regular and thorough feedback given by supervisors on employee's goal achievements.

2. **Create Organizational Learning Opportunities:** Goal setting should be challenging and achievable, goals can also promote learning opportunities. Organizations can integrate learning opportunities through setting goals that allow employees to engage in problem-solving and knowledge acquisition.

3. **Utilize Group Incentives as Well as Individual Incentives:** Organizational learning and employee's personal growth are impacted by the incentives offered in the work environment. It is recommended to implement a variety of awards such as team awards, individual recognition based on extraordinary performance, and rewards for all employees for achieving their goals. In order to strengthen teamwork, appreciating employees for performance that benefits the team is required. Awarding only a few people with rewards might be counterproductive. According to Bob Behn, some hard working employees might feel treated unfairly and lose their work spirit or develop resentments to other employees and the team (Behn, 2000).

4. **Rethink Job Design:** Incentives are just one method used to promote motivation in the work environment, another method is job design. It is advised to implement a job design in an organization in which employees rotate job positions, gain more responsibility over their work and resources, and engage in trainings and organizational learning opportunities. Jobs designed with a sense of challenge and task significance can facilitate a sense of meaningfulness, leading to better work performance and personal growth in the work setting (Perry, Mesch, & Paarlberg, 2006).

5. **Promote a Healthy Work Environment:** Organizational practices that motivate employees and improve performance may be ineffective if little attention is paid to the working environment. It is recommended to eliminate dissatisfactory work conditions. There should be proper setting up of an environment in which employees feel fair treatment and safe future. The employer can also install motivators such as acknowledgment, responsibility, and learning opportunity to improve the employees' performance. There are two elements crucial for motivated workers: the absence of dissatisfaction about the work environment and salary, which creates a neutral attitude towards work, followed by motivators to generate extrinsic and intrinsic motivation.

Contingent upon above suggestions, success requires a comprehensive strategy implemented thoughtfully. The synergy is to be established to build a highly motivated and empowered team of talented, top-performing professionals



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## CREDIT RISK MANAGEMENT IN INDIAN AIRLINES

Supreet Kaur Gaba\*

### ABSTRACT

Implementation of globalization policy and the abolishment of License Raj has led to the opening up of Indian Markets to the world. This in turn has brought a new wave of industrial growth in the Indian domestic sector. Airline Sector is one such sector which has hugely gained from the new liberal spirit over the past three decades. The figure of annual domestic passenger at an estimated 6 crores in 2000 is a record growth from mere 2.6 crores in the year 2006. This trend augured well. However, with new Airline companies coming into the market and the lack of finances in the execution, created blunder after blunder in the aviation sector. This paper is an attempt to bring out the reasons for the collapse of Kingfisher Airline and highlight the general need and adequacy of Credit Risk Management in Indian Airline Industry.

**Keywords:** Automated Online Risk (AOR), Credit Policy and Management, Credit Risk Management, Customer Service Platforms (CSP), Debt Recovery Tribunal (DRT), External Commercial Borrowing (ECB), Indian Airline, Kingfisher, Reserve Bank of India (RBI), Debt Recovery Tribunal.

### INTRODUCTION

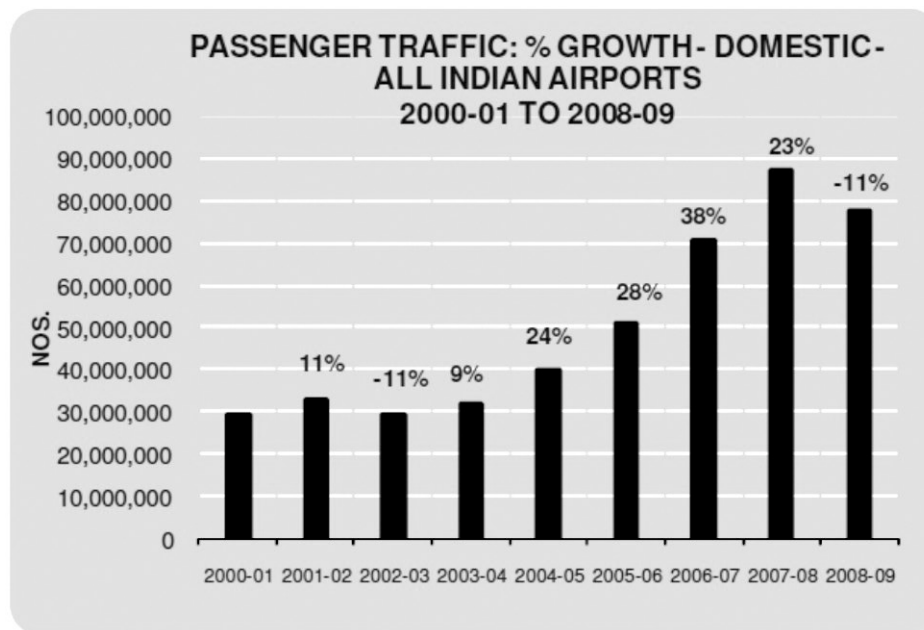
Credit Risk Management is a collective action to recognize, classify, determine, tag and scrutinize various threats that could lead the financial obligation of the business to either underachieve or not achieve the target at all. Lack of fulfillment of these financial obligations has social, economical and political effects on the masses while posing deep psychological blow over individuals.

Financial crisis in an organization emphasizes the need to strengthen the Risk Management with risk-based vision globally, so that the banks can more efficiently deal with the increased complexity at hand. These complexities arise from both financial product novelty and increased inter-connectedness between financial Bodies. Hence, Credit Risk management becomes an important component to maintain the viability of the business. The crisis that has afflicted the Kingfisher Airline has been accumulating through a series of event that led to severe disturbance within the Airlines Management. Economic analysts across the world believe that the mammoth fall of the world economy leading to the subsequent recession of 2008 was contributed largely by the management executives. Indian contribution to such a disaster came from the India's epitome of fashion and luxury Airline, the "Kingfisher". In Indian Airline Industry, despite the surge in the domestic passengers' traffic, there have been larger challenges that the government, the Airlines and the investors had to grapple with.

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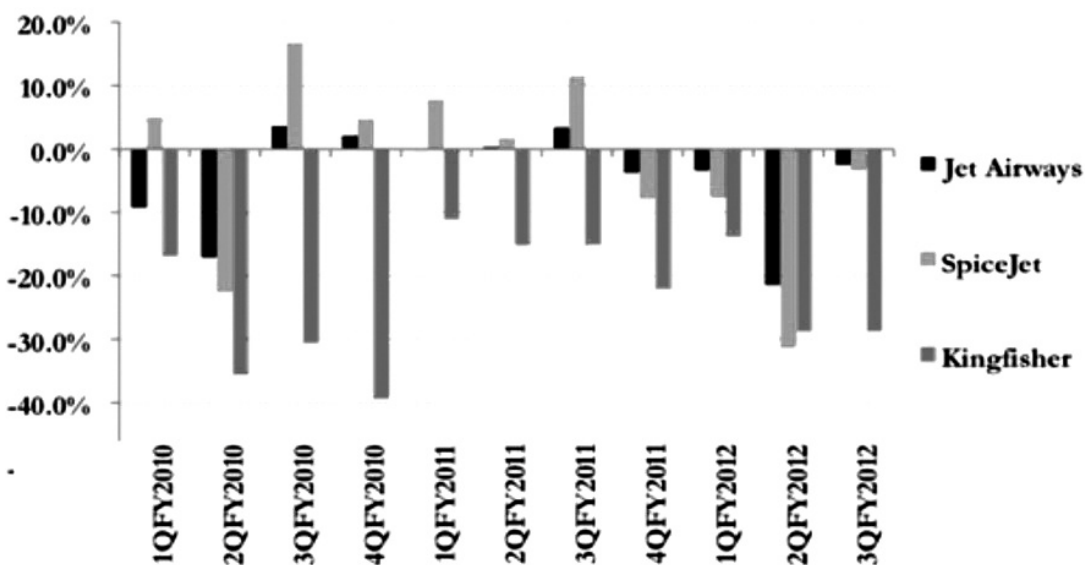
Figure 1: Domestic Passenger Traffic Trend



Source: ACEXC Newsletter vol.(12)

For example, there had been several reasons for the much touted financial downfall of Kingfisher Airline which was foreseen by many experts on the Board of Kingfisher itself. Ever since the Airlines commenced its operation in 2005, it has been continuously reporting losses. After acquiring Air Deccan, Kingfisher underwent a loss of Rs 1000 crores for the next three years. By the start of 2012, the Airlines amassed huge cumulative financial losses of over 6500 crores with more than half of its fleet not flying.

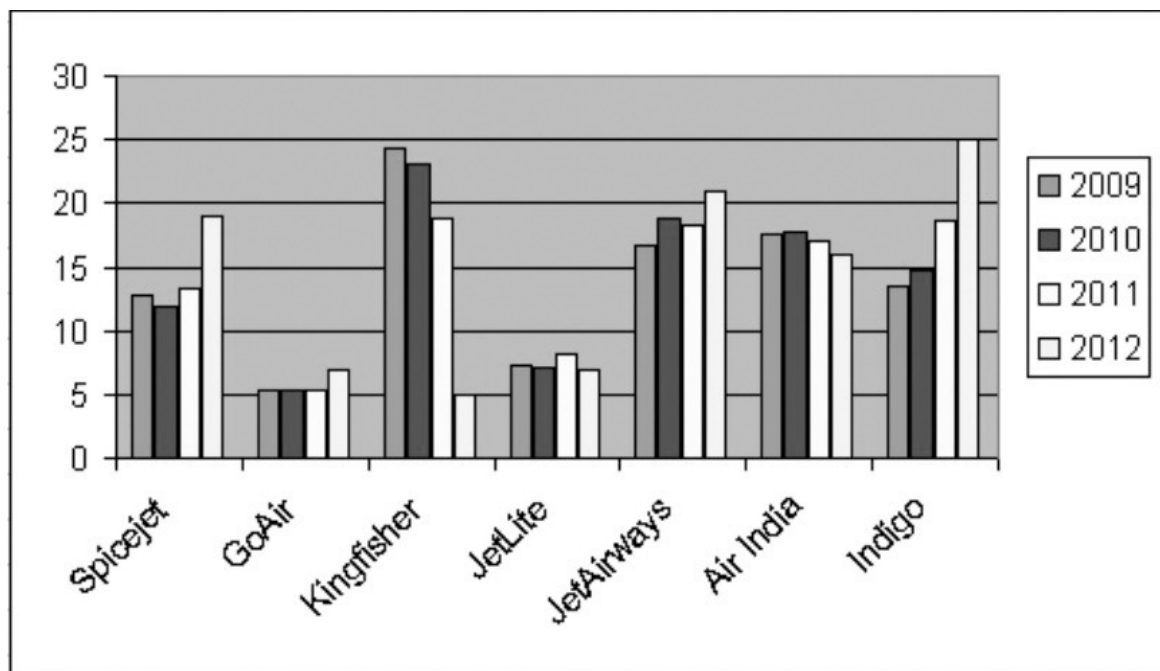
Figure 2: Revenue Share of 3 major Private Indian Airline from 2010-2012 (%)



Source: CAPA – Centre for Aviation &amp; Company Reports

BK Ramadhayani & Co, the auditor for the Kingfisher Airline raised concern over “its ability to remain a “going concern”, stating it would need to inject more funds to remain in such a position.” The report further added that the financial statements being prepared on a going concern basis, notwithstanding the fact that the company’s net worth is eroded. The appropriateness of the said basis is inter-alia dependent on the company’s ability to infuse the requisite funds for meeting its obligations.

Figure 3:Market Share trend (%) of few major Indian Airlines from 2009-2012

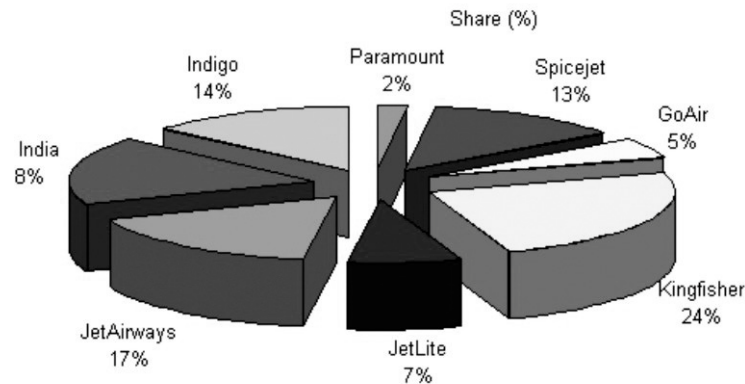


Flight Name	2009	2010	2011	2012
Spicejet	12.8	11.9	13.4	19
GoAir	5.4	5.3	5.3	7
Kingfisher	24.4	23	18.8	5
JetLite	7.3	7.1	8.1	7
JetAirways	16.6	18.9	18.2	21
Air India	17.5	17.8	17	16
Indigo	13.5	14.7	18.7	25

Source: Centre for Asia Pacific Aviation

The auditor’s remarks clearly reflect how badly the market value of the company had plunged. Kingfisher which ranked among top Indian Airline by virtue of sheer market valuation suddenly slipped to the last position because of the financial crisis.

Figure 4: Market Share of scheduled carriers in India ( Domestic in 2009)



There had been plethora of reasons for such a steep downfall. To begin with, Mallya's inability to exercise and place his dream Airline on the Airline map of India and the world, along with completely different nature of his other business including that of his liquor business could not save "Kingfisher".

Due to overindulgence in the management decisions making process, which was partly due to his inability to trust other executives for taking right decision for the business, Mallya took the business off track. Kingfisher's effective President and CEO, Alex Wilcox quit in 2005. There was a lot of rumor about the tussle between the Executive and the owner, Vijay Mallya. Nigel Harwood, who joined as CEO subsequently, also resigned following disagreement on how to run Airlines.

Secondly, Mallya's inability to identify the opportunities versus challenges and ignoring the basis rules of business, led to loss of huge prospects to his airline growth. He focused hugely on elite and the business executive.

Figure 5: Profit &amp; Loss of Major Indian Airlines

F/Y	Jet Airways	SpiceJet	Kingfisher Airlines	Jagson Airlines
07-08	-654	-134	-188	-6.2
08-09	-961	-	-1609	-7.1
09-10	-420	61	-1,647	-5.7
10-11	-86	101	-1,027	-7.8

**Note:**

- Profit / Loss is reported only for airlines listed on BSE
- All figures are in INR Crore

Thirdly, his neglect of the newly acquired Air Deccan's USPs, led to the collapse of Kingfisher. Had he taken into consideration the core proficiency of Air Deccan and balanced International flight slots, the sick airline could have been saved. The issue therefore underscores insufficient Credit Risk Management covering the complete process from lack of proper Risk Measurement & Assessment.

The review of management practices & techniques for identifying, measuring and monitoring risk would have synchronized and improved the constant changes and would have worked in support of investors, banks and Airlines.

Due to low passenger traffic and Mallya's inefficiency to handle such situation, things were going out of his hands. Increase in the fuel prices left him with no option but to cut employee salaries. There was an outrage among the employee which burst out in the form of misconduct and maltreatment of passengers finally snapping the hospitable ties between the airline and its loyal customer base.

Figure 6: Airline Revenue Sheet

Carrier Name	Revenue (Difference from last year) (%)	Operating Costs(Fuel) (Million)	Profit/Loss (Million)
Kingfisher	-5%	149.9	-90
Jet Airways	13.6%	349.3	-20.2
SpiceJet	42%	120	-8
Air India	**	**	**

Source: Center for Aviation, Data collected as on Dec -2011; \*\* not available

Mallya continued to work upon high dream to fly the airlines and he kept pumping more and more money into providing luxuries to his customers rather than providing essentials to his own staff. By mindlessly negating the fundamental human need to survive, Mallya created enemies within. Services ranging from lavish food menu, to in-flight entertainment, DTH services, in-seat massagers, USB accessories, and such luxuries offered to the business class added to the extravaganza. With pilots of the airline being offered double of the existing salaries, extravagant calendar model shoots in exotic locations and highly paid crew and expensive airline supplies, the monies involved in the airlines business were decanalized.

His overindulgence in luxuries and wasting huge monies in glamorous activities like “The Calendar Shoot”, or investing huge sums in the “Indian Premier League from his core business caused a drain on the finances of the airlines.

Diverting this fund in organizational changes and restructuring could have been a rewarding exercise for the airline. The Government of India analyzed the complete situation and took the decision to not to provide any monetary relief to bail out the Airline as Kingfisher.

Figure 7: Revenue Loss per year (in INR Crore)

Total revenues	1,441	5,239	5,068	6,233
Operating expenses	1,810	(5,860)	(4,867)	(5,371)
EBITDA	(724)	(1,806)	(893)	(122)
Interest	(50)	(778)	(1,102)	(1,313)
Depreciation	(18)	(133)	163	(203)
Net debt to equity (ratio)	0.60	12.20	17.10	2.80
Secured/Unsecured loans	934	5,665	7,923	7,057
Shareholder's funds	1,166	451	451	2,397

Source: Kingfisher Airline Annual Report

However, another question begs our attention as to how the banks provided loans to such poorly managed Airline. What was the relation of banks with the airlines that led to this symbiosis between a creditor and extravagant debtor. Similarly, one can compare another scenario of crisis in Indian Airlines which happened due to its merger with Air India. In 1994, India's Air Corporation Act of 1953 was repealed giving private airlines the chance to schedule serviced flights. Following this repeal, a multitude of new airlines came into picture to take advantage of the increasing demand for aviation.

India is considerably under- penetrated in the civil aviation sector. At present , an estimated 0.52 departures per 1,000 people is recorded. Of this, less than 2% of Indians actually travel by air each year. India is having a population of about 1.2 billion people, it is needless to say that the market is big and so is the opportunity.

There had been many reasons behind malfunctioning of Indian air industry. Some of those are as follow:

In case of merger of Air India and Indian Airline

- The Government did not fulfill its' promise of equal pay. There have been different pay organization, training schedule, working hours, career headway and all these leave HR issues remain unsolved for five years even after the merger of two airlines.
- Air India still lives in pre-merger period.
- Ego issues amidst the two airlines remains.
- The pilots were on strike since May 7, 2012. While this was the 6<sup>th</sup> strike in Air India by employee, it was 4<sup>th</sup> by its pilots.
- Air India pilots pushed for restricted access and right on the Dream liners Boeing 787 and they also wanted other aircraft which they are flying like the 777s or the 747s be under restricted access.
- They further demanded that they be allotted first class confirmed seats. These seats would cost a price that is comparable to the remuneration of the flight captain.
- Air India pilots want co-pilots to be promoted the rank of captains in 6years, and not in 10 years.
- Air India is in a disarray and the government is continuously pouring in money to save this national carrier.
- The first assistance was given in 2009 by the government to Air India to a tune of Rs.5500 crores to keep the airline flying.
- In February 2010, the government funded approximately 2000 crores
- In August 2011, the government gave an additional 1200 crores to facilitate Air India meet up its cash requirements.
- In 2012, it has approved an additional 30,000 crores of which 6,750 crores will be given without delay.
- Ever since the merger, the airline is incurring losses even after the unremitting aid given by the government at different point of time.

The aviation sector has seen increasing stress with Kingfisher Airlines, and AI is facing streamlining of debt due to various operational issues. Companies including Jet Airways faced problems related to tax payments. Later, banks assured credit to Kingfisher Airlines. AI loans have been recasted following government's involvement to smoothen the process.

In case of the Kingfisher, astonishingly 17 banks and three other lenders who were not the part of the consortium are bearing the brunt of the poor "Credit Risk Management" policy.



Figure 8: Consortium of Banks in case of “Kingfisher Airline bailout”

Bank Name	Amount (Crore)
SBI	1457
IDBI	719
PnB	702
Bank of India	552
Bank of Baroda	532
ICICI	430
UNITED BANK	395
Central Bank of India	360
CORPORATION BANK	305
UCO BANK	287
STATE BANK OF MYSORE	139
IOB	122
FEDRAL BANK	100
OBC	56
PUNJAB & SIND	51
AXIS BANK	46
INDUSIND	6

These banks include SBI, Punjab National Bank, IDBI Bank, Bank of India, Bank of Baroda, United Bank of India, Central Bank of India, UCO Bank, Corporation Bank, State Bank of Mysore, Indian Overseas Bank, Federal Bank Ltd, Punjab and Sind Bank and Axis Bank Ltd. The cumulative capital totalling around 6300 crores has been infused. The propping up of Air India, at the expense of the Indian taxpayer, enables it to continue its voracious pricing initiative. The net result of the government back support was the undermining of the Indian Airline Industry as a whole and the loss of confidence by the prospective investors.

Jet Airways, India's another premier airline, is the first airline in India to execute an Automated Online Risk (AOR) (fraud) Management Solution. Cyber Source Ltd., a completely owned auxiliary of Cyber Source Corporation (NASDAQ: CYBS), is providing its Decision Manager Solution to Jet Airways to help streamline online risk management processes and trim down fraud. Historically, Jet Air has relied upon in-house software solution and review mechanism for managing online payments. In keeping with its philosophy of inventive solutions, Jet Airways was quick to recognize the need to upgrade its operational procedure along with automated mechanisms for Risk Management Solution that is modified as per the Indian market.

Decision Manager automatically evaluates communication in real-time, and based on a grouping of rules determined by Jet Airways, the airline is able to calculate the approximation of whether the online ticket buying should be accepted, rejected or reviewed. All this happens within few seconds. The rules can be updated at any time through an easy-to-use business interface. This greatly helps companies to continually customize Fraud Screening approach while meeting the market demand.

Let us look at the larger picture. The Reserve Bank of India introduced specific guidelines for airlines. RBI has issued the details allowing Airline companies to tap External Commercial Borrowing (ECB) for working capital needs. The then Finance Minister Pranab Mukherjee's budget speech clearly narrated how Indian carriers would be allowed to borrow for working capital from foreign banks. Airlines welcomed the progress, as it could get loans available at lesser rate of interest. RBI has mandated that a company should raise this foreign debt within 12 months. The minimum standard maturity can be three years. Also, ECB has permitted the Airline companies based on cash flow, foreign exchange earnings and its potential to service the debt. Companies may refinance its lending from domestic banks. As a matter of fact, Air India has floated an



invite of offer for receiving funds through ECB. It is in quest to raise this fund for at least a year at either a fixed or floating rate, in accordance to the offer document.

In the case of Kingfisher Airlines, the lending process was based more on the face value of the business man, rather than on the business model. While banks looked into the past performance at some level and the political closeness of an individual for accessing the repayment capability, seldom was there any effort to understand the metrics of complete business execution plan and the ratio of Service Level Orientation verses Service Quality Adequacy.

If banks and regulators have had their say in the decision process, disaster like this would have been absorbed. Loans at arm length could have been the policy in lending, however the closeness with the big and the powerful led to unrestricted extraction of credits at a very high risk.

Debt Recovery Tribunal (DRT) has a vital role to play in such cases. However, the process is lengthy and reactive in nature. Specialized Mediation process should be designed to deal such cases on fast track basis. This in turn will ensure that re- lending is regulated and optimized, taking into consideration the complete picture of the microeconomics involved. In case of the Kingfisher, there is absolutely no clear suggestion as to why lending was happening and what formed the basis for recognizing any such collateral for the purpose.

Many of the private carriers show off better performance metrics, and have expanded speedily at the expense of Air India. In order to play hard, companies including the Air India would lower the ticket prices even below the break even rates. However, Air India has hugely relied upon the Government for reorganization on the fact that it is an offshoot of the Indian Government, to restructure its obligations on more encouraging terms.

Credit Risk Management(CRM) has proved itself as the epitome in the process of lending. Not only at the highest level of corporate ladder, but even at the lowest level of decision making process, the reference to Risk Management Process is very crucial. At the same time, an absence of CRM actually has led to the wide scale misappropriation of funds, making banks and the investors taking a direct hit of financial burden and eventually leading to the suffering of employees and the customers. Had the Process of lending taken into account the factors of Credit Risk Management in true sense, Airlines like Kingfisher could have been saved, while thousands would have been rescued from the financial crisis .

However, the commonality shared between the banks and the Airline, is their embrace in extravaganza. Such crony-alliances do not happen just by chance. Public interest is what really suffers the blow.

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## KEY HUMAN RIGHTS AT THREAT UNDER THE INTELLECTUAL PROPERTY RIGHTS

Shashirekha Malgi\*

### ABSTRACT

Human rights and intellectual property rights are two distinct fields that have co-evolved separately. Their relationship needs to be re-examined for a number of reasons. Firstly, the impact of intellectual property rights on the realization of human rights such as the right to health, food etc, have become much more visible following the adoption of the TRIPS Agreement. Secondly, the increasing importance of intellectual property rights has led to the need for clarifying the scope of human rights provisions, protecting individual contributions to knowledge. Thirdly, a number of new challenges need to be addressed concerning contributions to knowledge, which cannot effectively be protected under existing intellectual property rights regimes. Intellectual property rights also have direct and indirect impact on the realization of human rights. Finally, human rights treaties recognize certain rights pertaining to science and technology. The present paper focuses on how intellectual property rights affect human rights adversely, and the need to create awareness among the masses.

Keywords: Agriculture products, food, patenting of food, pharmaceuticals, Right to Health.

“Due to the spectacular advances of molecular genetics, more and more of what we are ‘by nature’ is coming within the reach of biotechnological intervention. From the perspective of experimental science, this technological control of human nature is but another manifestation of our tendency to extend continuously the range of what we can control within our natural environment. From a life-world perspective, however, our attitude changes as soon as this extension of our technological control crosses the line between ‘outer’ and ‘inner’ nature.”

– Jürgen Habermas(2003). Die Zukunft der menschlichen Natur

### INTRODUCTION

India has a rich tradition of protecting and promoting the basic rights of human beings. Having been a great civilization with glorious history and culture of its own, India is well known for the protection and promotion of human rights. Starting from the inception of sanatana dharma in ancient times down up to the establishment of the Constitution in the middle of the twentieth century, one can trace the golden line of human rights jurisprudence occupying the prime position in the Indian Jurisprudence and the legal system. In view of the growing importance of the human rights jurisprudence in the 20<sup>th</sup> century, there has been a new shift in

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the global thinking upon issues pertaining to human rights. But because of rapid development in the field of science and technology, a new kind of property too has cropped into existence. The unique and fragile natures of these rights have been violative of the human rights. Intellectual property rights and human rights remained strangers for a long time. What was the reason for this isolation of human rights and intellectual property rights? WTO's WIPO regime of Intellectual property rights seeks to balance the moral and economic rights of creators and inventors with the wider interests and needs of the society.

## DEFINITIONS

Human Right has been defined under Section 2(d) of the Human Rights Act, 1993. Human Right means the rights relating to life, liberty, equality and dignity of the individual guaranteed by the Constitution or embodied in International Covenants and which are enforceable by courts in India.

Thus, the Act gives a very narrow definition of 'human rights' and does not even include all the fundamental rights guaranteed by the Constitution. It simply includes the fundamental rights relating to the life, liberty, equalities and dignity guaranteed in the constitution or embodied in International covenants on human rights. As regards the words "embodied in the International covenants and enforceable by the courts in India", these certainly widen the scope of "Human Rights" enforceable by courts in India.<sup>1</sup>

## INTELLECTUAL PROPERTY RIGHTS

As per World Intellectual Property Organisation [WIPO] definition, intellectual property refers to creation of the mind ,inventions, literary and artistic works, symbols, names, images and designs used in commerce.<sup>2</sup>

Intellectual property is all about human creativity. Intellectual property rights are considered as reward for creative and skilful work in execution of ideas. In fact, it is more than a reward for conceiving and executing ideas, in the sense intellectual property rights are a recognition given to novel intellectual work.<sup>3</sup>

## NEED FOR HUMAN RIGHTS

Human rights are essential for all-round development of the personality of the individuals in the society, be necessarily protected and be made available to all the individuals. These must be preserved, cherished and defended if peace and prosperity are to be achieved. Human rights are the very essence of a meaningful life, and to maintain human dignity is the ultimate purpose of government. There are several States where fundamental standards of human behaviour are not observed. It has been realized that the functions of all the laws whether they are the rules of municipal law or that of international law should be to protect them in the interest of the humanity.

## RATIONALE OF INTELLECTUAL PROPERTY RIGHTS PROTECTION

Human Rights instruments consider IPRs as Human Rights, but no direct reference to IPRs is made. Rationale of intellectual property rights protection is to provide statutory expression to the moral and economic rights of creators in their creations and such rights of public in access to those creations. To promote creativity and dissemination and application of its results and to encourage fair trading which would contribute to the economic and social development are some of the basic requirements . Society benefits greatly from technological innovations, but this should not curtail basic human rights.

Table 1: Characteristics of Human Rights and Intellectual Property Rights

Human Rights	IPRs
Inherent, inalienable, Universal. Immaterial interest, Unlimited term, Non assignable, exploitable	Statutory Rights, Territorial, Material interest, Limited term, Assignable, exploitable.

## HUMAN RIGHTS

Human Rights are inherent in the sense that these are the very birth right of all human beings and people enjoy these simply by virtue of human existence and as such, these do not have to be granted by any superior or sovereign authority. Inalienability stems from the sense that people cannot agree to give these up or have these taken away from them. Human rights are also universal. Human rights are called by different names such as birth rights, basic rights, minimum rights, natural rights, inalienable rights and fundamental rights. In the broader context, both human rights and fundamental rights connote the same thing. But in the Indian context, particularly with respect to the Indian Constitution, fundamental rights are only those rights which are included in the Part III of the Constitution but not other human rights which are not included. In the international context, fundamental rights include all basic rights (human rights) which are necessary to lead a normal life.

## IPRs

IPR are statutory rights granted by state which are temporary, can be traded and whose enjoyment can be curtailed. These are territorial in application and rights do not exist on physical object resulting from the idea, but instead to the intellectual creation as such. Rights granted are essentially negative.<sup>5</sup>

## HUMAN RIGHTS INSTRUMENTS WITH REFERENCE TO IPRs

There are large number of international covenants that are signed by nation- states accepting the protection of human rights, the major ones being Universal Declaration of Human Rights, the International covenants on Economic, Social and Cultural Rights, Protection of Plant Variety and Farmers Rights Act, Biological Diversity Act, etc. These covenants and treaties are formulated to protect human rights as well as to try to strike a balance between the Human Rights and IPRs.

The gist of some of these international covenants is as follow:

### 1.Universal Declaration of Human Rights. Art 27(1) and (2)

(1) Everyone has the right to participate freely in the cultural life of the community, to enjoy the arts and to share in scientific advancement and its benefits.<sup>6</sup>

(2) Everyone has the right to the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author.<sup>7</sup>

Through above articles, it can be inferred that the Declaration seeks to protect the moral and material interest of any person of which he is the creator. At the same time it also seeks to protect the interest of the creator. At the same time it seeks the free enjoyment of the result of such creation.<sup>8</sup>

### 2.International covenant on Economic, social and Cultural Rights (ICESCR) Article 15

#### 1. The States Parties to the present covenant recognise the right of everyone:

(a) To take part in Cultural life,

(b) To enjoy the benefits of scientific progress and its application;

(c) To benefit from the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author.

It is seen how Art 15 (1) (c) binds every state, which is a party to the convention to recognise the right of every individuals to the protection of his interest in the material of his creation. It may be scientific, literary or artistic production. In other words the provision seeks the protection of human rights in the intellectual property in the light of Art 25 of the UDHR.

### 3. Convention on Biological Diversity (CBD) Art. 8(J)

Subject to its national legislation, respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices and encourage the equitable sharing of the benefits arising from the utilization of such knowledge, innovations and practices.<sup>9</sup>

Art. 8(j) of the convention on Biological Diversity provides for respecting, protecting and rewarding the knowledge, innovations and practices of local community. Traditional knowledge has to be shared with people, and if benefits arise from commercial use of traditional knowledge, those too have to be shared with the people responsible for creating, refining and using.

### 4. Protection of Plant Varieties and Farmer's Rights Act, 2001

Indian Plant Varieties Protection and Farmer's Rights Act, 2001 provide for protection of the intellectual property rights and human rights of indigenous people. Objectives of Indian Plant Varieties Protection and Farmer's Rights Act, 2001 are "to provide for the establishment of an effective system for protection of plant varieties, the rights of farmers and plant breeders and to encourage the development of new varieties of plants". It makes provisions for benefit-sharing and compensation for traditional, rural and tribal communities.

### 5. TRIPs

TRIPS regime provide adequate freedom to the national governments to introduce limitation and exceptions on the enjoyment of the patent rights to safeguard the public interest considering the social-economic and industrial development of the nation. Exercising this freedom many developing countries in the world has exempted areas affecting the basic needs of the people like food and medicine from the area of patenting.<sup>10</sup>

### MINIMIZING INTELLECTUAL PROPERTY RIGHT'S NEGATIVE IMPACT ON HUMAN RIGHTS

The concept of intellectual property rights and patenting of food, agriculture products, and pharmaceuticals is not totally acceptable in socialist or communist countries and even countries, which follow mixed political systems like India. Patent system prioritizes private property over community property or public property which is against the principles of socialism and communism. In particular, necessities like food articles (agriculture products or substance or articles which are used to produce food products) and pharmaceuticals were kept away from patent monopoly. However, the present trends in the patent system warrant granting of patents on necessities. Intellectual property laws are violating the human rights i.e. 'right to food' and 'right to health' of the citizens by patenting of seeds, plants, food grains (some notable cases like Yellow bean patenting, Basmati rice patenting) and other biological substances. This entails increase in the price of the food items. Thus, Intellectual Property Rights Regime violates the right to food – a human right of every individual. By patenting of medicinal drugs and treatment processes, human right to life is violated. Patenting causes hike in prices of every commodity and makes it inaccessible to the marginalized population thereby impinging upon their human rights.

#### Detrimental impact on realizing the right to health

Health is a fundamental human right indispensable for the exercise of other human rights. As defined in the preamble of the WHO Constitution, health is a state of complete physical, mental, and social well-being, and not merely the absence of disease or infirmity. Every human being is entitled to the enjoyment of the highest attainable standard of health conducive to living a life in dignity and that governments have a responsibility for the health of their people, which can be fulfilled only through the provisions of adequate health and social measures. Access to pharmaceuticals is a human right and the right to health includes access to appropriate

health care. Patenting of pharma products plays a significant role in the growth of drug industry. With the onset of the TRIPS agreement and its implementation across the world, the patented pharma products have a great impact on the society and economy of the nation. The post -TRIPS era has given rise to a new horizon to the pharma sector in areas of research activities, investments, infrastructure, technology etc. Nations across the world has incorporated several provisions to regulate the pharma products due to the increase in demand for such products in the international and domestic markets. Several life saving drugs that are applied to treat various diseases such as Malaria, HIV/ AIDS, are required to save human lives. But the present intellectual property system reduces the availability of pharmaceuticals in a variety of ways. By increasing development costs, intellectual property protection may spur higher research and development of new drugs and technologies appropriate to smaller markets. Patents restrict access to essential medicines against HIV/AIDS especially in the poorer regions due to the high prices they engender. The price of medicine is an important factor in determining access.<sup>11</sup>

#### Detrimental impact on realising the right to food

Right to food as a human right may become affected through policy and legal restrictions and limitations imposed by the very nature of IP. Intellectual property regimes have threatened food security in several ways. The extension of very broad patents for specific plant varieties and biotechnology patenting is affecting food security. Intellectual property protections also hampers farmer's traditional practice of saving harvested crop for subsequent sowing.<sup>12</sup>

#### Impact on the Rights of Indigenous people and Traditional knowledge

Traditional Knowledge is essentially culturally oriented or culturally based, and it is integrated to the cultural identity of the social group in which it operates and is preserved. The definition of traditional knowledge used by the World Intellectual Property Office (WIPO) includes indigenous knowledge relating to categories such as agricultural knowledge, medicinal knowledge, biodiversity-related knowledge, and expressions of folklore in the form of music, dance, song, handicraft, design, stories and art work. Traditional knowledge relating to biological resources, agricultural practice, medicine, etc, is commonly referred as any useful information that is passed on by the members of the community from generation to generation. Protection of Indigenous people's right over their genetic resources and traditional knowledge is both dependent upon and crucial to the realization of other human rights to food, health, human dignity, culture, land, territories, resources. Traditional knowledge and indigenous resources have been with human beings for time immemorial, but they have not been protected yet. Now bio- piracy is the main reason for violation of human rights. Bio- piracy is the misappropriation of knowledge and /or biological material from traditional communities. It occurs when a company or person is granted an IPR on seeds, and genes or traditional knowledge are taken from a community. Bio -piracy and patenting of indigenous knowledge is a double theft because it allows theft of creativity and innovation and the exclusive rights is established by patents on stolen knowledge. Even it will steal economic options of everyday survival on the basis of our indigenous biodiversity and knowledge of indigenous people.<sup>13</sup> From an Intellectual Property perspective, traditional knowledge was treated as part of the public domain, either because it did not meet established subject matter criteria for protection, or because the indigenous community which created it did not endorse private ownership rules.

#### The impact on Farming communities

In the developing country like India, where agriculture plays a significant role in the national economy, the issues relating to plant patent and protection of farmers is very vital and crucial. Future development in this area will be of great significance. But intellectual property rights neglects the needs of the small farmers. There is a vast development of agricultural products and crops and there is a development of agricultural

equipments, pesticides, fertilizers as well as seeds. This causes burden on the farmers due to higher price of pesticide, fertilizers and developed seeds, which farmers are supposed to use. Farming companies rely on exclusive monopolistic rights granted for the development of seeds and plant varieties through modern forms of biotechnology and plant breeding. Such monopoly is in one or the other way affecting the farming communities. A strong regime of IPR is not suitable for non-developed states that are still seeking to increase their base of human capital. Governments of developing countries are afraid that the changes brought by the introduction of IPR in biotechnological invention would contribute to the loss of employment to their farmers.<sup>14</sup>

#### Impact on Environment

A clean environment is integral to all aspects of human development and is a precious public good. Over-consumption, modern industrialization, inventions (patents) and unchecked economic growth in the developed world have led to serious environmental degradation. Inventions like refrigerator will harm the ozone layer and it will contribute to climatic changes. Ultimately it will affect on Human beings. When genetic modification of species are prevailing, there will be negligence on the part of naturally rarely available plants. It will create ecological imbalance by genetic modification of micro-organisms. It will also affect productivity of agricultural land. Every citizen has the right to live in a healthy environment. In a country like India, economic progress is necessary but must not be detrimental to environment. At the core of this dilemma are two human rights: the right to realize basic needs and the right to a healthy environment. The conflict between these rights has to be addressed through 'sustainable development', which is defined as development that 'meets the needs of the present without compromising the ability of future generations to meet their own needs.'

#### Ethical Dilemma

Patenting of life form (micro-organism) raises host of ethical issues. These can be formulated as under:

- ☐ Is life a patentable commodity?
- ☐ Will patenting of life forms serve the animal and human welfare?
- ☐ Is majority of world population living in developing countries and least developed countries going to benefit by patent of biotechnology invention?
- ☐ Should invention leading to cruelty on animals, without bringing any advantage to human welfare, be patented?

It is not easy to find answer to the above raised ethical issues. Impact of human reproductive cloning on human health, dignity and human rights is still being examined. In this age of technology and commerce, the human values have been relegated in the underbelly of development. It is only through enlightened global debate and firm political stand that the damage likely to be caused to the interest of developing nations can be mitigated. Since biotechnology inventions involve patents on human genetic materials like DNA and RNA, living beings and their life, their patenting gives rise to monopoly over life or living beings or over living processes. The inventions of biotechnology were viewed as against the moral and ethical considerations of the society, as these inventions involve tinkering with life and as well as monopoly over life. Societal concerns state that life is not patentable and living beings should not become a subject of patent monopoly. However, with the emergence of biotechnology capable of producing non-natural living beings, patenting of living beings or life gained significance in the modern era. In fact, patenting of life was never considered as possible due to the presumption that life is a creation of God and human being could not get exclusive rights over it. Human cloning would violate fundamental, moral or human rights.<sup>15</sup>



## CONCLUSION

The relationship between intellectual property rights and human rights is complex. There is a strong current of fear among votaries of Human Right that intellectual property rights would deny them access to necessities. It is unfortunate that there is no serious attempt at the international as well as national level to protect the violation of the human rights by intellectual property rights. This ought to be studied further especially the effect of IP rules, regarding patents and copyright, such as the access to affordable medicines, access to adequate food, and access to educational materials. There is an obligation on the part of the government to guarantee the common man access to patented necessities at affordable prices. In order to safeguard the human rights of the largest sections of the society, we must introduce more provisions facilitating the national governments to take proper remedial measures to prevent the abuse of the monopoly on human rights.

There needs to be more stress on the health of the general public and in this regard the government has to take proper measures in order to ensure proper medical treatment and affordability of medicines. The governments ought to launch lot of awareness programmes highlighting socio-economic impact of IPRs on human rights.

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# AN OVERVIEW OF I.T. APPLICATION IN SPECIAL LIBRARIES AND INFORMATION CENTRES IN MODERN AGE

Kuldeep Kumar\*

## ABSTRACT

This paper provides an overview of emerging role and importance of various IT application in special libraries and information centers in modern age. These days, special libraries have taken the prominent place with their enhanced importance and utilities with an expanded scope. Special libraries are fast growing as an efficient service providers with the application of information technology and contributing significantly in multiplying creative research and quest for knowledge.

Keywords: Information Technology, Special Libraries, Information Centers.

## INTRODUCTION

In past few years, information and its multiple sources have developed rapidly. A new age has dawned popularly termed as a moniker, 'Information Technology Age'. But, with every innovation, new challenges arises. The data overload has brought in fresh challenges about ordering the data in meaningful ways. The problems related to collection, storage, bibliographical control and dissemination of information and knowledge due to explosion of information has seized the attention of information mangers. Today, the need for systematized information is felt in all fields and it plays a very important role in human society. One can compare information technology as being the meru with its impact felt widely in every field. It has been more easier to handle the information with information technology (I.T.). Information technology provides accessibility to information systematically. Application of Information technology in the field of library and information/documentation centers is very useful in handling various aspects concerning space problem in libraries, time management and in the processing of information by spending higher amounts of physical and mental capabilities. All information oriented activities can be handled with ease if information technology is properly applied. Now-a-days many libraries and information centers are applying information technology in various fields like in acquisition, in accessing, in circulation, in reference services and in retrieval of information. Information technology (I.T.) is becoming highly useful to libraries and information centers. Special libraries have taken the lead and emerged as a vector of transformation in the changing society. The special libraries get converted as a pluri-tasking service provider with IT application.

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## INFORMATION TECHNOLOGY

Information Technology(IT) has changed the world of information. All activities based on information have been developed strongly with the support of information technology. Today, current age is known as Information Technology (I.T.) age. Use of I.T. has been essential need in maximum fields and has been common term in society in the scientific age. Various aspects of information as collecting, processing and transmitting can be managed effectively. The world has become borderless and interconnected. More and more persons are getting connected with application of IT. In the fields of research and development, IT is playing key role and reducing some undesirable and unnecessary time taking activities. With IT as a weapon, the researchers feel very capable and comfortable. They can access all required information with pressing single button. All traditional parameters have been changed due to the presence of IT. It has become symbol of speed, accuracy, efficiency and capability in modern age. I.T. has emerged as the life blood of postmodern society.

## SPECIAL LIBRARIES AND INFORMATION CENTERS(SLIC)

A special library is a source of subjective and specific information. It facilitates to get needful information in view of requirement of its parent organization. It offers very comprehensive information with its kind of field. It also prepares useful documents like news letters, abstracts, bibliographic details and subject's reference etc. SLIC are playing a vital role in R&D activities in our society . The main functions can be summed up as follows:

- Collect, maintain, store and retrieve information according to the need of its parent organization.
- Provides very comprehensive and specific information.
- Provides solutions to the related doubts and queries.
- Provides various types of useful documents.
- Performs as a documentation center.
- Provides abstracts, indexes and useful subjective references.
- Prepares accession list, bulletins, news letters, summaries, hand books or manuals.

A list of frequent users are as follow:

- Local staff, researchers of various fields.
- Outside individual and institutional users.
- Users of different branches and departments.
- Students involved at doctoral level, whose research topic is related with their subject or area.

## IT IN SPECIAL LIBRARIES AND INFORMATION CENTERS ENVIRONMENT

Libraries & Information centers are like the soul of academic institutions and organizations. Today, the forms of information have been changed with the wide use of I.T. in libraries and information centers after introduction of computers. The medium of collecting the information have taken new forms in past few decades. In new age, the paper media is giving space to electronic media. Libraries have been more and more spacious due to change in the form of information storage media with audios, videos ,graphic and text. The technology of optical disc was introduced as a very popular information storage media. The media as CD-ROM has become more vital during 1990's for collecting and dissemination of information with the greater capacity of storage. Information Technology brought new responsibilities to library authorities in special libraries. They should adopt and use I.T. in their work culture . In recent years internet did change the role of I.T. Many libraries are making online their documents and making it available across the world. The fields of key concern of a special library is growing fast and the I.T. application is making growth positively and effectively.

## SPECIAL LIBRARIES/INFORMATION CENTERS

## AREAS OF IT APPLICATION

Management of acquisition  
process

- Acquisition/Accession  
/ reports generation /order  
processing



Processing of Technical works

(Cataloguing / Classification)

- Catalogue card/Barcodes generation
- Online catalogue



Management of Serials  
- Serials check in / out and  
claiming - Union / holding list



Management of AV materials

- AV acquisition / cataloguing
- AV inventory control etc.



Internal Management  
- Accounting /budgeting  
- Scheduling / planning  
- Word processing / mailing  
- Statistics / report

Information Storage / Retrieval

- Database construction
- Downloading / uploading
- Online database searching
- Indexing and abstracting
- Current awareness services (CAs)
- SDI services



Administrative works

References / Information Services

- Bibliography listings
- Public access / computer literacy
- Library instruction

Information technology is being used widely in special libraries. Some of the areas are as follows:

- Improving productivity and efficiency of library services effectively (i.e. acquisition, technical processing, storage, controlling circulation, retrieval and dissemination of information.
- Provision of quality information (e.g. CAS, SDI etc.)
- Saving the space using the electronic storage (e.g. CDs and CD ROMs and faster accessing of information.
- Provision of the extensive information and maintenance.
- Improving co-operation in sharing of resources (e.g. shared acquisition, share cataloging etc.)

## I.T. BASED INFORMATION/DOCUMENTATION CENTERS IN SPECIAL AREAS IN INDIA

In India, National Information System for Science and Technology (NISSAT) Programme envisages promotion and support to the development of a compatible set of information system on Science and Technology of various fields and interlinking these into a network. Today, all International and national information and documentation centers are adopting information technology. Subsequently, the utility of special libraries and information centers has been maximized in all dimensions.

## I.T. based Information and Research Centers developed by NISSAT

Subject area	Acronym	Concerned institution
Food technology	NICFOS	Central Food Research Institute, Mysore
Leather technology	NICLAI	Central Leather Research Institute, Chennai
Machine Tools and Production Engineering	NICMAP	Central Manufacturing Technology Institute, Bangalore
Drug and Pharmaceuticals	NICDAP	Central Drug Research Institute, Lucknow
Chemicals and Allied Industries	NICHEM	National Chemical Laboratory, Pune
Textiles and Allied Subjects	NICTTAS	Ahmedabad Textile Industry's Research Association, Ahmedabad
Advanced Ceramics	NICAC	Central Glass and Ceramics Research Institute, Kolkata
Bibliometrics	NCB	Indian National Scientific Documentation Centre, New Delhi
CD ROM	MICDRO	National Aerospace Laboratory, Bangalore
Crystallography	NICRYS	University of Madras
Management Science	NICMAN	Indian Institute of Management, Ahmedabad
Marine sciences	NICMAS	National Institute of Oceanography, Goa

## NISSAT Access Centres to International Database Services

Place	Concerned Institutions
Bangalore	National Aerospace Laboratory
Kolkata	Indian Association for Cultivation of Science
Chennai	Central Leather Research Institute
New Delhi	NISCAIR
Pune	National Chemical Laboratory
Ahmedabad	Ahmedabad Textile Industry's Research Association
Mumbai	Victoria Jubilee Technical Institute
Hyderabad	Centre for Cellular and Molecular Biology
Thiruvananthapuram	Kerala State Industrial Development Corporation

## I.T. based National Information and Documentation Centers in India

Subject Area	Acronym	Run Under
National Social Science Documentation Centre	NASSDOC	ICSSR
National Institute of Scientific Communication and Incorporation Resources	NISCAIR	CSIR
Defence Scientific Information and Documentation Centre	DESIDOC	DRDO

## I.T. based International Information system for different areas

Subject Area	Centre	Acronyms	Established by
Agriculture science	International Information System for Agriculture Science and Technology	AGRIS	FAO
Nuclear Energy	International Nuclear Information System	INIS	UNO
Medical Science	Medical Literature analysis and Retrieval System	MEDLARS	National Library of Medical USA

## CONCLUSION

Library and Information Centre is like the nervous system of any organization. It is responsible for exciting developments in society. Special libraries have been converted as a knowledge hub for particular subject or area of knowledge. Special libraries are providing good services to all type of users effectively with support of Information Technology. Use of IT in a special library environment has improve the overall library management activities and able to enhance the library services both qualitatively as well as quantitatively. Today, the Research and Development activities are being more regularized work with the IT based special libraries.

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## GOING DIGITAL! INFORMATION SERVICES IN THE PERSPECTIVE OF CURRENT PRACTICES

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### ABSTRACT

The paper discusses about the digital information services in the current scenario. It highlights the various activities going on in the few Indian libraries and Asian counterparts. The libraries in India are going through transition and on the way to embrace the emergent technologies to develop into sunshine libraries for other centres of storage of wisdom. The paper suggests improving the library manpower and the environment to cater information services with a digital touch.

Keywords: Digital libraries, Indian libraries, information technologies.

### INTRODUCTION

This paper will discuss basics of developing a digital library and the new concepts underlying the digital library development procedures based upon appropriating innovative technologies and managerial skills. With increased computerization, there is a heightened risk of computer viruses. Measures are needed to overcome the problems of computer viruses and also unauthorized use. Initial investment in digital libraries is high, as is maintenance; it is therefore essential to also explore the new sources of fund.<sup>1</sup>

### FEW EXAMPLES

The example of the policies and practices of development and management of e-resources in the select R & D libraries of Kolkata City can be cited here. They depict the current state of e-collection, policy statements, and management practices in vogue. They also examine various criteria for selection and evaluation of e-resources. Feasible recommendations have been put forth for the development of a balanced collection of electronic resources and its effective management.<sup>2</sup>

Another example is the status of current development of In-house digital repository initiated by the engineering college libraries of Odisha. The engineering college libraries have initiated a significant effort in the field of digitization so that a digital repository helps to manage and capture their intellectual assets of the institutions. Libraries have been preserving the intellectual assets i.e. study material, question paper, NPTEL web/ video courses, Back volume, thesis & dissertation, and books. For digitization, the libraries are using some open source software and commercial software. This helps the libraries disseminate the information on a finger tip. In addition to this, present study explore the area of the in-house digital repository initiation, the types and contents of the archive for in-house digital repository, recognition of the source of preservation and finally finding out the skills of the manpower engaged in the digital repository activity.<sup>3</sup>

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Munshi and Ahmed (2000) investigated the current status of automation in different types of libraries in Bangladesh and highlight the gradual development of using computers and telecommunication technologies in Bangladeshi libraries and information centres. Sixty five libraries and information centres have been selected as sample to collect information for the purpose of the study. They also attempt to identify the library operations by the use of computers and to determine the major problems with some effective solutions.<sup>4</sup>

#### DIGITAL LIBRARIES AND INFORMATION RETRIEVAL

Information technology has provided the means for compact storage, quick retrieval and speedy access to information. Developed countries have the resources and the technology to quickly adopt and absorb new methods of information handling in their work cultures. On the other hand, developing countries face several problems. There are some common problems of adoption and absorption of technology in developing countries with special reference to India. While focusing on the issues and concerns regarding implementation of information technology on a relatively moderate scale, they focus on the strengths of India's knowledge base. They bring out the areas of concern on which India has to focus in order to exploit its strengths and overcome its weaknesses.<sup>5</sup>

Information retrieval (IR) has traditionally been the domain of librarians and information professionals. IR systems have been used almost exclusively by such research experts for several reasons, such as the number of search systems available, cost, and the complexity of use requiring command language searching. However, with the rapid growth of the Internet, together with tools like World Wide Web (also known as WWW), there have been significant changes and improvements in online information retrieval environments. These include a broad and diverse existence of both IR systems and various user interface and functions. The developmental history of Web-based IR systems is available for library reference services.<sup>6</sup>

#### NETWORKING AND INFORMATION MANAGEMENT

Libraries are the important institutions for human development and progress. The advancement in knowledge and technology is a vital issue for increasing the patron demands and resources in the libraries. To safeguard these resources for posterity, libraries are adopting various security measures. Unfortunately even after introducing technology driven security solutions, the problem of library security is unresolved. The various dimensions of existing security measures and those which may be adopted in libraries must be analyzed. There should be few guidelines to handle this most sensitive but still important issue of library management.<sup>7</sup>

Nawarathne and Singh (2012)<sup>8</sup> explored the current practices of information literacy in Sabaragamuwa University of Sri Lanka. The study succinctly sketches a picture of all component of the availability and it gives explicit directions about information literacy activities. They explicated the attitudes of the students who attended the information literacy through reinforce feedback. It revealed that they admired value of the programme highly. This will help to motivate other university authorities to observe the current situation and its significance.

#### LIBRARY NETWORKING AND DIGITAL INFORMATION SERVICES

Khode and Dhar (2003) describe how information technology tools such as Internet, networking and electronic publishing are helpful in successful implementation of the Five Laws of Library Science. During the last 50 years, society in every developed country has become a society of institution. Every major task, whether economic performance or health care education or the protection of the environment, the pursuit of new knowledge or defence, is today being entrusted to big organization, design for perpetuity and managed by their own management. On the performance of these institution, performance of modern society if not, the survival of each individual increasingly depends.<sup>9</sup> The realization has dawned for the need for national information system in education in India.<sup>10</sup> The existing information centres in India should be at par with the international information services. There have been suggestions about the cost effective networks at international level.<sup>11</sup> The library



consortium has been a better solution. The Government of India initiatives such as INDEST, UGC-Infonet, CSIR Consortia, FORSA, IIM Library Consortia, IUC-DAEF Consortia-Based Subscription to Electronic Resources are briefly discussed and suggestions are made. These cause pruning of scholarly publications for subscription, which becomes a barrier to the flow of exploded information from generation to the end users.<sup>12</sup>

## CONCLUSION

Indian Higher Education System is one of the largest systems in the world, facing challenges due to globalization, increased academic population, knowledge explosion in different forms and a lot of research and development projects on one side and on the other side reduced budget, diversity of users' needs, reduction in staff, inflation, escalation in cost of scholarly publications. Libraries require upgradation according to changing information scenario and the library staff is required to constantly adopt the new technology, skill and practices to meet the demand of the end-users. A quantum jump is required to bridge the concepts like Web 2.0 and the Web 3.0.

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## TEACHING ATTITUDE OF HIGHER SECONDARY SCHOOLS' TEACHERS OF RAEBARELI

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### ABSTRACT

It is attitude that indicates that how effectively and successfully an individual can perform a task. Teachers are very responsible persons for development of society. If a teacher has positive attitude, he will enjoy his work and this will surely affect students' achievement. It is essential to create a condition in which teachers inculcate positive and healthy attitude for their profession. In the present study, we have undertaken survey of Hindi and English medium teachers of higher secondary schools in Raebareli district of U.P.. Teacher Attitude Inventory of Dr. SP Ahluwalia was given to randomly selected teachers. Findings indicate that teachers of both medium have almost similar and positive attitude for their profession.

Keywords: Attitude, Teacher, Teacher Attitude Inventory, Teaching Profession.

### INTRODUCTION

Attitude is a complex mental state involving beliefs and feelings and values and dispositions to act in certain ways. An attitude is a hypothetical construct that represents an individual's degree of like or dislike for something. Attitudes are generally positive or negative views of a person, place, thing, or event— this is often referred to as the attitude object. People can also have conflicting or ambivalent disposition toward an object, that is simultaneously possessing both positive and negative attitudes toward the item in question. Anastasi define attitude in following words, "An attitude is often defined as a tendency to react favourably towards a designated class of stimuli, such as a national or a racial group, custom or an institution."

According to Frank Freeman, "An attitude is a dispositional readiness to respond to certain institutions, persons or objects in a consistent manner which has been learned and has become one's typical mode of response. An attitude has a well-defined object of reference. For example, one's views regarding class of food or drink (such as fish and liquors), sports, maths or democracy are attitudes." Thurston states, "Attitude denotes the sum-total of a man's inclinations and feelings, prejudice or bias, pre-conceived notions, ideas, fears, threats about any specific topic. Thus, a man's attitude about pacifism means here all that he feels and thinks about peace and war. It is admittedly a subjective and personal affair."

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Attitude includes our ideas with emotional content, our important beliefs, prejudices, biases, appreciations, predispositions, and our state of readiness to act and react. A individual has an array of attitudes towards diverse objects such as music and art, games and sports, religions, caste, ethnic groups, political parties, governments etc. These attitudes are influenced by the individual's experiences both planned and random. Shaping healthy attitudes in students is one of the most important functions of the educational process in the school.

An attitude is a variable which directly observed, but it is inferred from overt behaviour both verbal and nonverbal responses. In more objective term, the concept of attitude may be said to connote response tendency with regard to certain categories of stimuli. In actual practice, the term 'attitude' has been most frequently associated with emotionally toned responses. The deep rooted feelings are the attitudes which cannot be changed easily.

Attitude as a concept is concerned with an individual way of thinking, acting and behaving. It has very serious implications for the learner, the teacher, the immediate social group with which the individual learner relates and the entire school system. Attitudes are formed as a result of some kind of learning experiences. These may also be learned simply by following the example or opinion of parent, teacher or friend. This is mimicry or imitation, which also has a part to play in the teaching and learning situation. In this respect, the learner draws from his teachers' disposition to form his own attitude, which may likely affect his learning outcomes.

## REVIEW OF RELATED LITERATURE

Erdem and Anılan (2000) investigated the attitudes of 196 pre-service teachers studying in Teacher Training Department of Pamukkale University, Faculty of Education, toward teaching profession in terms of several variables. It was determined that although a statistically significant difference was found favoring those who had preferred teaching profession in the top five, and no statistically significant difference was found in terms of gender and year of study. Panda B.B. (2001) conducted the study which revealed that the college teachers of Assam and Orissa do not differ significantly in their attitude towards teaching profession, irrespective of their sex, experience, location and status. Dodeen et al. (2003) found that female teachers have more positive attitude than male teachers. Celikoz and Cetin (2004) carried out a study to determine the factors affecting the attitudes of Anatolian Teacher Training High School students toward teaching profession. They investigated the effects of several variables such as grade, gender, teaching program. As a result, it was determined that all variables led to a significant change in the attitudes of these students toward teaching profession. Kaya and Büyükkasap (2005) investigated the attitudes and concerns of 36 senior pre-service teachers studying at Physics Education Department of Kazım Karabekir Faculty of Education in Atatürk University, Turkey regarding teaching profession in terms of several variables. At the end of the study, females were found to have more positive attitudes toward the profession than males, and they viewed it as an ideal profession and turned out to be more ambitious as a teacher.

Capri and Celikkaleli (2008) investigated the attitudes of 250 pre-service teachers studying at Faculty of Education, Mersin University toward teaching profession in terms of the variables of gender, program and faculty of study. It was determined as a result of the study that, the attitudes of pre-service teachers were significantly affected from gender, in other words females were found to have more positive attitudes. Akkaya (2009) determined that gender factor affects the pre-service teachers' attitude towards teaching profession. In her study, the female pre-service teachers who were in Turkish Education Department were more successful than male pre-service teachers with respect to their attitudes and academic success. In addition, according to type of program they graduated from, she found statistically significant differences between them.

Research evidences as above prove that the attitude of teacher towards their profession and their professional satisfaction improves their effectiveness and competencies as teacher. A favorable attitude makes the work not only easier but also more satisfying.

Problem: To Study the Teaching Attitude of Higher Secondary School teachers of Raebareli.

### OBJECTIVES

1. To study teaching attitude towards teaching profession of higher secondary Hindi medium school's teachers of Raebareli.
2. To study teaching attitude towards teaching profession of higher secondary English Medium school's teachers of Raebareli.
3. To compare teaching attitude towards teaching profession of higher secondary Hindi & English medium school's teachers of Raebareli.

### HYPOTHESIS

There is no significance difference between teaching attitude towards teaching profession of higher secondary Hindi & English medium school's teachers of Raebareli.

### METHOD AND PROCEDURE

#### Sample:

Sample consists of Hindi & English medium teachers of higher secondary schools of Raebareli. Teacher Attitude Inventory (TAI) of Ahluwalia was given to randomly selected teachers.

#### Tools:

The researcher used 'Teacher Attitude Inventory' (TAI) of Dr S. P. Ahluwalia to collect data from sample teachers of higher secondary schools of Raebareli. Teacher Attitude Inventory of Dr S. P. Ahluwalia is a Likert instrument consisting of 90 items of 6 sub scales. Each scale has 15 statements that pertain to a particular aspect of prospective and practicing teacher's professional attitudes. These aspects are –

1. Attitude towards teaching profession.
2. Attitude towards classroom teaching.
3. Attitude towards child centered practices.
4. Attitude towards educational process.
5. Attitude towards pupils.
6. Attitude towards teachers.

This TAI appears to have reasonably high reliability and validity. The contents of its item seem appropriate for the purpose of research with teachers.

#### Statistical Techniques:

The following statistical techniques were used by researcher :

1. Mean and S.D.
2. t-Test

Scoring of completely filled answer sheets were done and scores were used for statistical analysis. Mean is used to find out the average performance of Hindi & English medium teachers about their teaching attitude towards teaching profession. The standard deviation is used for comparing attitude towards teaching profession of Hindi & English medium teachers on different subscales of TAI. t-Test is used as the test of significance of the difference between means of Hindi & English medium teachers.

### Results and Discussions:

Scores obtained on different subscales of TAI, of Hindi & English medium sample teachers of higher secondary schools of Raebareli were tabulated in form of frequencies. In order to test the significant difference between attitude towards teaching profession of Hindi and English medium teachers mean, standard deviations, and t-ratios were calculated. For analyzing and comparing attitudes of Hindi & English medium teachers of higher secondary schools of Raebareli, results of statistical analysis were shown in Table 1.

Table 1

MEAN		STANDARD DEVIATION		SED	t-Test
Hindi Medium	English Medium	Hindi Medium	English Medium		
188.18	184.64	31.64	32.23	5.21	0.68

Result indicates that mean of Hindi medium teachers is higher than English medium teachers. It shows that comparatively Hindi medium teachers have more positive teaching attitude. There is less deviation of scores from mean in case of H/M teachers then that of E/M teachers.

For Df 199, Table value at 0.05 is 1.97 but calculated value is 0.68. This indicates that null hypothesis is accepted at this level. This indicates there is no significant difference between Hindi & English medium teachers of Raebareli.

### CONCLUSION

Both Hindi & English medium teachers have positive attitude towards teaching profession. But Hindi medium teachers have higher attitude towards teaching profession than English medium teachers. Teachers in both medium of instruction accept that student's personal, moral and cultural development can be done by educating them properly. They accept that teaching is the best profession for them and they feel proud to be a teacher. After joining teaching profession, both Hindi & English medium teachers felt that their level of self-confidence has highly increased. Both Hindi and English medium teachers appreciated and promoted innovative and interactive teaching. They also promoted child-centered education. All activities (curricular, co-curricular or extracurricular) done by students should be evaluated for proper assessment of any student. It is teaching through which good and progressive social environment can be created and improved.

It may be concluded that all teachers have positive and healthy attitude for their profession. There are indications that teacher's attitudes have a positive relation with success in teaching. The attitude of teachers towards teaching is significantly correlated with teaching success.

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## BOOK REVIEW

### KAFKA ON THE SHORE

AUTHOR:HARUKI MURAKAMI

RANDOM HOUSE, NEW YORK,2005 , PAGES: 512

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Review by Geetika Kaw Kher\*

Discovering Murakami has been one of the most enigmatic literary experiences I have had recently. Early in the year while browsing through my brother's books, I spotted a collection of short stories titled 'After the Quake' by the author. The appealing title and equally engaging description at the back of the book saw me reading it in no time. Two stories down, I realized that the narratives were not actually about the physical devastating earthquake but much more about the psychological tremors and emotional turbulences triggered by a natural calamity, stories giving an insight into the minds of people rather than in their lives.

Murakami weaves magic in his words, a magic which will not let you put down the book once you are seriously enmeshed into it and that is exactly what happened when I started reading his 'Kafka on the Shore'(2005)( Published in Japanese under the title Umibe no Kafuka in 2002). In narrating the mysterious stories of Kafka Tamura, a fifteen year old boy running away from an Oedipal curse and Nakata, an old man in his sixties who is mentioned to have lost his basic abilities to learn at a young age, the author has woven a surreal tapestry full of absurd and fantastic imageries with a tremendous appeal for our adventure hungry souls. At the core of this disturbing psychological novel lies the feeling that there is a thin line between our dreams and reality and when this line gets blurred our behavior and desires in the dream might get translated into reality. The book aptly described by Updike as an 'Insistently metaphysical mind bender' transports the reader into a world of dreams where every taboo, every prohibited action is subverted and questioned. The interesting play on the word "Kafka" reveals Murakami's literary genius. Besides being the name of one of the greatest authors ,Franz Kafka, it means 'Crow' in Czech language and right from the beginning of the book we have a character called Crow which seems to be the guiding and motivating force behind Kafka Tamura's decisions. The boy called Crow could be either Kafka's super-ego, alter ego or possibly his id, depending on how you would like to look at it.

The plot revolves around a fifteen year old runaway boy Kafka who finds refuge in a remote privately owned library on Shikoku island. Everyone whom he meets on the way seems to be leading him to his oedipal destiny which has given him sleepless nights and has been his reason to flee. Equally mysterious are the people at the library especially Miss Saeki with whom Kafka feels an inexplicable connection. Soon it is evident to Kafka that he cannot fight his destiny but has to fulfill it or might have fulfilled it without his knowing. And

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that is when Nakata the second protagonist, call him Kafka's half shadow, enters the scene. Having lost his sense of learning at a young age due to some supernatural event that he seems to have witnessed or been a part of, he comes across as a simpleton subsisting on government subsidy. But this old guy has an amazing gift. He can talk to cats and thus he helps people find their pet cats to earn some extra buck. It is during one of his cat finding expeditions and weird situations that follow that he decides furtively to leave Tokyo and ends up at Shikoku along with a young driver Hoshino whom he meets on the way. Interestingly, this Hoshino who follows Nakata to the end and help fulfill his bizarre secret calling could be any one of us who despite knowing and realizing the absurdity and incongruity of the novel are hopelessly in its grip. Being thrown in a weird incomprehensible situation leads one to a journey of self realization and in case of Hoshino who has hardly had time and inclination to delve deeper in life, it proves to be a catalyst which introduces him to finer nuances of life like the charm of western classical music and drama. The apt references to beautiful pieces by Haydn, Schubert and Mozart make one want to listen to them while reading those passages.

The characters keep moving in and out of their dreams and there are times when reader becomes confused between dream and reality. The idea of the 'living spirit' that the book is replete with, seems to have been taken from the 'The Tale of Genji', an 11<sup>th</sup> century Japanese classic by Lady Murasaki who was influenced by Shinto thought. The idea of 'Kami' which is difficult to translate literally, but whose nearest equivalent would be 'a supernatural aspect' is the key element in Shinto thought and is considered as manifestation of Musubi, the interconnecting energy of the universe towards which all human beings should strive. These Kamis interact at a level which is beyond our human understanding and it is at this level of Kami that we see Kafka and Nakata interacting and influencing each other, though they don't get to meet in reality. It is at this level too, that Kafka starts his affair with fifteen year old Miss Saeki who actually is in her fifties and maybe is his mother, though we never get to know for sure.

When Nakata reveals that he has come that far to find the 'entrance stone', incidentally the words featuring in Miss Saeki's only music record which she had written at the age of fifteen, the convoluted stories seem to intersect and appear as a whole. The bizarre incidents following the search for entrance stone and later its opening and closing which also opens homologously, a way to another world lead to final repose for Nakata and Miss Saeki and release for Kafka.

While on one hand, the novel deals with the abstract and metaphysical concepts of Shinto belief system; on the other it is a sarcastic and strong statement against capitalism and futility of war. Capitalist icon like Colonel Saunders of KFC fame is seen as a pimp who has the power to grant one's every worldly wish provided his work is done. The other important icon who has a crucial role as the face of the main villain of the piece is Jhonnie Walker, the walking figure we generally see on the bottle of Scottish whisky. These capitalist icons symbolize the never ending greed and desires which have commodified virtually everything under the sun including knowledge.

Like a true artist Murakami does not bind his creation with a singular meaning, leaving it open-ended and polysemic to the imagination of the reader. Various incidents remain completely unexplained till the end and especially the para-normal incident which turned young Nakata into a clean slate is left completely unexplored. To sum it up, the experience of reading this stunning innovative book is like taking a roller-coaster ride, going full speed and wanting nothing to stop the flow of words however incoherent or improbable they may seem to our rational minds.