

Environment Change and Development: A Perspective on the Role of Women in India with Special reference to nyishi women of Arunachal Pradesh

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ABSTRACT: *In most of the rural economies of India, women continue to play a significant role in the economic sustenance of their families. Besides her traditional assignments of collecting fuel, fodder, water and other items pertaining to daily needs, women constitute more than half of agricultural labour force as the economy is still largely dependent on the rural base of subsistence nature, more dependent on labour, than that of machine and large entrepreneurship. Their role hence inevitably leads to an intricate interrelationship with the surrounding nature /space providing the basic sustenance. The bond of women and nature in the form of interdependence gets more deeply rooted in the hilly and the tribal areas as most of the tribal societies still largely depend upon the forest for their survival. The material environment that is the forest occupies a central position in tribal culture and economy, as their way of life is very much dictated by the surrounding environment and continues to be intricately linked with it for their day to day existence. These links form the basis for self dependent survival strategies within the heterogeneous locations. However the emerging challenges of rapidly changing environment, both at the physical, social and economic levels though on one hand poses the pictures development, it brings in the threat of misbalancing the ecosystem striking at the very root of the survival of the tribal people particularly in the interior rural area on the other. The brunt of such change is more strongly felt by the tribal women who like her counterpart in any rural society continues to be responsible for fuel, fodder, food and water as she faces the hardship of the emerging situation in the given context of changes. Within this back ground the present study is an attempt to understand and correlate the role of women in the hilly and heterogeneous state of North east India, taking the Nyishi tribal women of Arunachal Pradesh as an example*

KEYWORDS: *VAN-DEVI, Chipco Movement, embodiment of the femininity, biosphere, socio- spatial, subsistence level, heterogeneous .*

I. INTRODUCTION

Women in India are viewed as an intimate part of nature, both in imagination and in practice. At one level nature is symbolised as the embodiment of femininity, while on the other she is nurtured by feminine principle to procreate lives and provide for their sustenance. With the violation of nature, therefore, is linked the violation and marginalisation of women especially in the third world countries Women produce and reproduce life not merely biologically, but through their social role in providing sustenance. (Shiva-1997)¹. In the words of Maria Miles “women not only collected and consumed what grew in nature but they made things grow” (Maria Miles -1986.)² This organic process of growth in which women and nature work in partnership with each other has created a special relationship. The need is therefore, to understand women’s role and her status in the social and economic space as it forms one of the key components the process of transformation and development in any society. The nature of work done by women becomes more inevitable for women than for men, as the responsibility for social reproduction is largely relegated upon women in most societies and is governed by the intricate complexities of the changing social system.

In most of the rural economies of India, women have been playing and continue to play a significant role in the economic sustenance of the families besides her traditional assignments of collecting fuel, fodder and other items pertaining to daily needs. women constitute more than half of agricultural labour force as the country’s economy is still largely dependent on the rural base, which is mostly of subsistence nature, due to social and economic factors, it is more dependent on human labour, than that of machine and large entrepreneurship In such circumstances, women contribute the larger share of the labour, though economically unrecognised and socially invisible women continue to carry on such responsibilities with unbroken regularities. Their role inevitably leads to an intricate interrelationship with the surrounding nature /space providing the basic sustenance. No wonder that from the ancient time the popular belief in India sees women as the guardian of nature and is often referred as mentor of the ecosystem, even symbolically worshiped as Goddess of nature or VAN-DEVI.

The bond of women and nature in the form of interdependence gets more deeply rooted in the hilly and the tribal areas as most of the tribal societies still largely depend upon the forest for their survival. The material environment that is the forest occupies a central position in tribal culture and economy even today. The tribal way of life is very much dictated by the surrounding environment and continues to be intricately linked with it for their day to day existence forming the basis for self dependent survival strategies within the heterogeneous locations.

Being at the subsistence level of agriculture and getting exposed recently as inroads of change in the form of development in to these areas were ushered in as a part of the Government policies, these societies are at the cross roads of change facing the challenge of rapidly changing environment, at the physical, social and economic levels. These changes at one hand definitely pictures the phases of development but on the other hand poses the threat of misbalancing the ecosystem striking at the very root of the survival of the tribal people particularly in the interior rural areas. The brunt of such change is more strongly felt by the tribal women who like her counterpart in any rural society continues to be responsible for fuel, fodder, food and water as she faces the hardship of the emerging situation in the given context of changes that is occurring in and around her surroundings.

The implication of such changes can be understood by the beginning and continuation of various movements in series mostly by the women in the hilly and heterogeneous areas whose livelihood largely depended on the surrounding environment. These movements were not merely local stir, but were deep rooted with the social and political arena in the country, though varying in degrees in the different socio- spatial context. In India, in recent years, much concern has been expressed over the alarming rate at which deforestation has occurred. As per the NRSA survey data though 22.8 percent of the total geographical area stands as classified forests in the country, However only a little over 10 percent of the total land area has a good forest cover (NRSA 2001)³. This has resulted in depletion of forest cover, escalation of soil erosion, fall in ground water level, causing largescale environmental degradation, the impact of which is more adversely felt in the rural areas as more than 70% of the rural masses are largely dependent on the agriculture and are more oriented to small scale farming based on natural fertilisers and the rains for their fields. Such situations are more deeply felt in the heterogeneous hilly areas inhabited by the indigenous groups mainly because of the intricate interdependence with their natural environment. This is further compounded by rising population growth and development exerting pressure on the natural resources leading to over exploitation like mining and large scale deforestation. Open cast mining has been another factor causing concern as re-vegetation in the mined area becomes difficult due to unbalanced soils (Ramakrishnan 1990)⁴.

Environmental degradation is related not only to the biosphere alone, but to the social sphere as well. In the context of India traditionally women have been responsible for subsistence and survival-economies and the environmental destruction lead to deprivation of traditional means of livelihood escalating women's problems to very large extent. To site some of these conditions at present according to the census report (census of India 2001)⁵

- 1) About 2 to 3 million people in the tribal belts of India earn their livelihood by head loading; of these 90% are women. They walk long distance to collect and sale these loads of wood or other forest produce particularly TEAK (locally called SHAL) leaves and edible ferns, which often is the prime source of earnings for them.⁶
- 2) Almost 6% of India's population is pastoral and nomadic. Provision of fodder and taking care of livestock has traditionally being women's responsibility and, with pasture land being degraded, the condition of landless pastoral women is worsening.⁷
- 3) Water carrying is the sole responsibility of the women as perceived in any rural social setup, a regular continuous and strenuous activity done by them where mostly they have to walk long distances, spend long hours and go far to collect water for the family involving often the younger female child as further helping hand and consequently making the beginning of head loading right from the childhood.

However India in the recent times, witnessed some conscious effort by women towards environmental conservation in the early eighties. Starting from the hills, where women work becomes harder and requires strenuous activities, some of the movements for environmental conservation gained wide recognition.

Most prominent environment conservation movement, which inspired 'Eco Feminism' in India and to some extent throughout the world finally leading to declaration of Forest Conservation Act. (F. C. A.) in India in the 1980s to check the widespread felling of trees particularly at the areas marked as the development sites.. Community initiatives in states like Gujarat, Madhya Pradesh, Orissa, Bihar, and JFM (Joint Forest Management) in West Bengal are some instances of conscious efforts of the communities towards environmental conservation But in the aftermath of most of these movements overlooked the basic problems faced the of the women of such condition of lack of fuel, fodder, water and a receding forest cover as in most cases the forest were declared as reserved and under government jurisdiction and the entry to these were banned for any kind of collection or cutting ,gathering making it a punishable offence .

Hence it is noteworthy that most of the environmental conservation movement which were initiated mainly by women and can be perhaps termed as organised women movements were more for economic sustenance than for conservation. But the conservation process and the laws made for these in its turn reduced access to most of the forest products to women which traditionally provided them with extra income, valuable nutrition and even medical support bringing in a drastic change in their daily work routine for the worse. This often leads to large scale migration of the families in to the nearby upcoming townships in search of an imagined, better livelihood which actually turns out to be moving in to a cycle of perpetual poverty and deprivations.

Roy and Tisdell (1995)⁸ in their study of slums of west Bengal have brought out the linkages between the role of women in economic sustenance of their families and the environmental conditions. They quote “The role and importance of female member in rural society lies in acquiring of non market goods which are used partly for domestic consumption and partly to supplement exchange income as it is the major source of sustenance for most of the rural families, and non-availability of such goods reduce the consumption pattern as well as the income of the family.

Within this back ground the present study is an attempt to understand and correlate the role of women in the hilly and heterogeneous state of North east India, taking the Nyishi tribal women of Arunachal Pradesh as an example where they play a very significant role in the sustenance of their families largely depending upon the surrounding environment, that exhibits not only one of the unique diversity of physical and social existence but at the same time reflects the human endeavour of adjustment with in such condition towards the creation of a distinct culture, broadly identified as “Tribal culture”. Characterised by a self dependent economic mode of survival, though non- profitable and largely egalitarian in nature devoid of capitalist trends and pattern of ownership and development these cultural bonds continue to be the basis of social cohesiveness among them. As one tries to understand these facets, it becomes more and more obvious that the central pivot of these societies is sustained by women through their role in sustenance of the economy by contributing their labour and skill which is traditionally preserved as indigenous knowledge system through a process of sustainable practice, and is passed on from one generation to another.

II. THE STUDY AREA

The study was carried out in the Papumpare district area of Arunachal Pradesh which nestles the capital township of Itanagar. The Township is surrounded by a number of villages and has community as well as privately owned land and forest (plates 1&2). The main tribe of the district are the Nyishis. Racially the Nyishis are traced to the branch of the Indo-Mongoloid group and the bulk of this community is located in the Lower Subansiri District. The study area The Papumpare district is surrounded by the districts of East Kameng in the west and Lower subansiri in the North and east (fig no 1,2) while the state of Assam marks its boundary in the southern portion. Initially the present district formed the part within the lower subansiri district, covering an area of 10,135 Sq.km and having the international border with China in the north and Upper Subansiri District, on the South. The district of Papumpare was separately carved out in 2010 and today has been further bifurcated with the creation of capital district as the separate unit therein. The district of PapumPare forms the border District of Arunachal Pradesh with the neighbouring Assam(fig3). The altitude of district is about 500 meters above MSL.



Figure 1

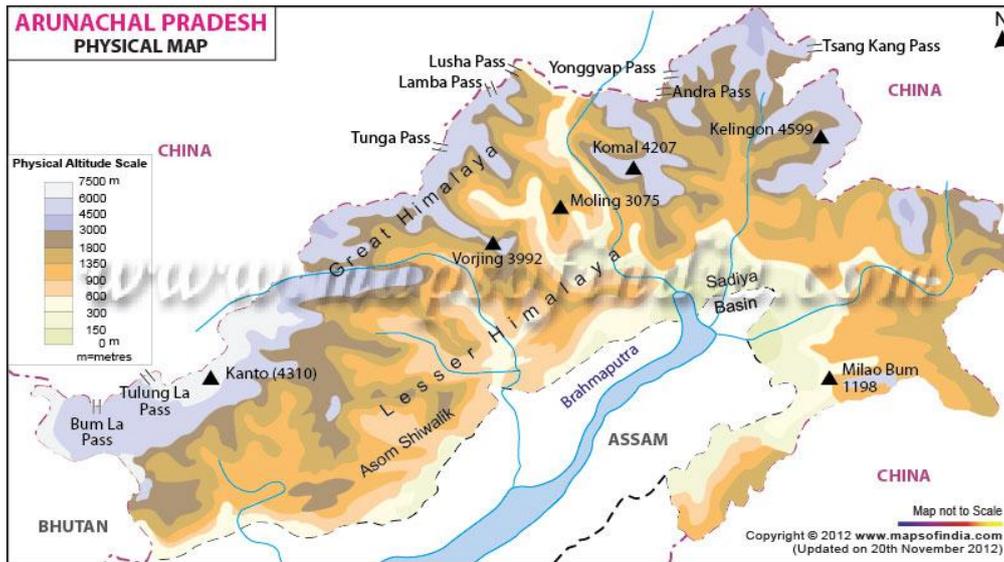


Fig.2 Physical map of Arunachal Pradesh

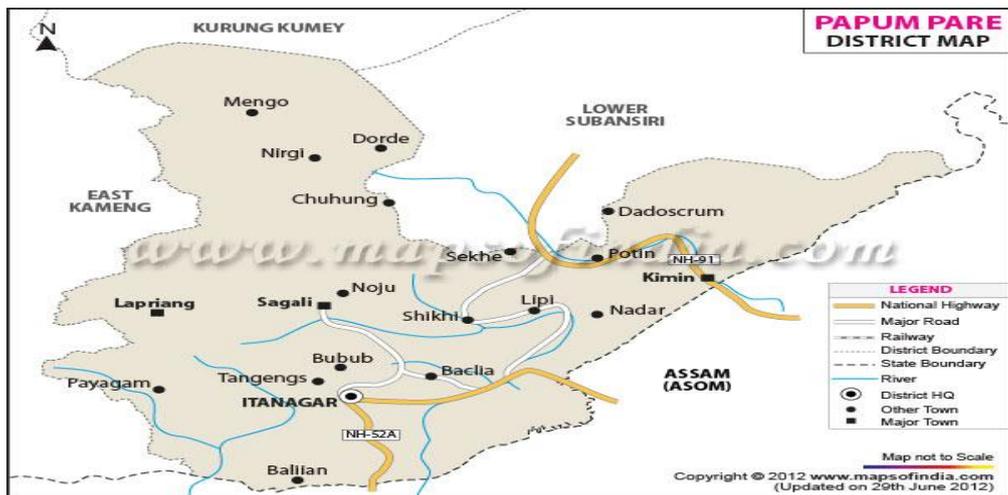


Fig.3 Map of Papumpare District

The villages of the Nyishi tribe of Arunachal Pradesh are never found in clusters.9(as becomes evident from the plates,fig-4&5) Though agriculture is a prime profession for them, due to lack of plain land they practice jhum(slash and burn) cultivation in the hilly slopes. Besides, fishing and hunting are two major professions of these tribes.9

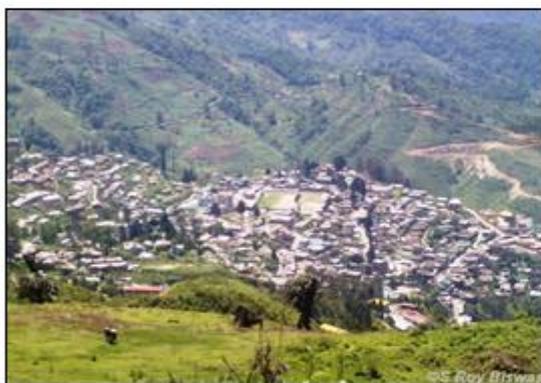


Fig. 4 View of a village near the capital



Fig. 5 A l Nyishi village house

The traditional practice of cane and bamboo crafting is also very popular among the Nyishi people. They make beautiful ornaments and household articles out of these crafted materials. Unlike other tribes, the Nyishi womenfolk are not experts in weaving though some of them practice this art and produce podu fibre and cotton made cloths, skirts and blankets. However with the changing time and impact of education, attitude change and exposure to different cultures such practices are not favoured and carried on by present generation, at the same time due to such condition even the rural women folk are compelled to find different livelihood for their sustenance.

In order to understand the impact of environmental change in these areas particularly on the role of women in the recent years, it is necessary to get an idea of the traditional linkage of the Nyishis with the surrounding environment.

The Nyishis of Papumpare district of Arunachal Pradesh like their tribal counterparts inhabit a hostile topography, characterised by dense forest and difficult terrain, unsuitable for settled cultivation. It is therefore natural that their link and dependence on forest is immense for their day-to-day survival. Though the Nyishis have been conserving their forest through traditional myths and beliefs, which restricts cutting down of certain valuable species and limits deforestation to large extent, in the present context it is almost becoming difficult and the bending social system is unable to withstand the impact of modern development, which has exerted tremendous pressure on these value systems. The urge of fast money and the changing living pattern and emergence of strong culture of consumerism oriented middle class, has led to the breaking down of traditional conservation processes, thereby exposing the fragile ecosystem to the severity of over exploitation of the natural resources endangering the very basis of tribal mode of existence. The environmental degradation is, therefore, becoming a threat, which needs attention. Some of the important situation can be cited as examples, which reflect the nature of change in the role of women affecting the traditional mode of subsistence.

Firstly, the consequent environmental changes have affected the traditional role of women the most as she faces maximum hardship for catering to her daily needs mainly because almost the entire process of agricultural practice right from clearing of the field to harvesting is singlehandedly done by women in the Nyishi social setup. The productivity of her hard labour becomes vulnerable as the large scale soil erosion due to deforestation makes the soil less fertile and consequently fails to support a better production. Such conditions leads to shortage of basic staple food grain for the entire period until the next crop is produced which is done in the annual cycle only. Lack of resources in the form of cash restrains further the buying capacity adding to greater dependence on forest resources like wild fruit, and vegetables as supplements.

Women, who are also, are the prime food gatherers particularly from the forest an activity which is considered as part of their daily chores constitute a major food item as buying of vegetables was almost unknown to these societies, but these are also getting scarce as the forests are vanishing fast due to rapid deforestation and urban spread. Further the destruction of forest has led to disappearance of many herbs, and plants which use to cater to the daily food habit of the local people. Most often the shoots and roots which form a prominent food share are becoming difficult to get and women have to venture deep into the forest traversing long distance often on difficult terrain and inaccessible regions as some forest still remain there mainly because of their heterogeneous location, this has added further to the burden of their work.

Secondly, the spreading urban settlement has been pressurizing the forest, by cutting and clearing it on one hand, and by over exploiting the forest resources, (materials like bamboo, wood, for building purpose) on the other hand. This has affected the delicate eco-system in these areas, firstly, by making the raw material scare and, secondly, by affecting the micro climatic conditions leading to the extinction of many flora and fauna in this region due to large scale deforestation. The entire process has led to the depletion of fodder so naturally available before. Like her counterpart in other areas, Nyishi women are responsible for collection of fodder for domestic animals, retreating forest covers today make her task more strenuous and often consume 3 to 4 hours of her daily routine.

Third, Initially, the gap between the jhum cycle use to be of a span of 15 to 20 years, but due to population growth and spreading settlements, the Jhum land is being restricted to certain pockets. This has reduced the jhum cycle to three to five years only, thereby affecting the natural re-vegetation in the fallow land, leading to depletion of natural manure for the fields and wood and bamboos as fuel for the migrating community. As already stated most of agricultural activities among Nyishis are carried on by women. Infertile soil, lack of forest cover and lack of fodder for domestic animals make her overburdened routine more arduous.

A new dimension in this field is the declaration of certain forest products like bamboo and wood as government owned for the purpose of conservation. This has created further hardship as fine is imposed for cutting bamboo or wood for any purpose without prior permission. Occasionally, bamboo and wood are sold by the administrative agencies, a condition which was unknown to tribal women who do the primary gathering work being unaware. Such laws often end up by surrendering the collected wood or by paying fine. The gravity of situation is felt more devastatingly by the women in these societies as she remains intricately linked with the environment and strives hard to survive under such circumstances. The site of village women sitting in the daily

market with small amount of gathered products to sell which otherwise would have constituted the daily food item of her family is a common site in the township of Itanagar and even in other areas as well. Often these women carry their young children along with them and try managing both. Being illiterate further adds up to her chances of being exploited economically while running the risk of physical and mental insecurity as the market area remains a strongly male dominated field.



Fig. 6 village women sitting in the daily market with small amount of gathered products

Source: Field survey Feb 2012,

Thus while development is an important and unavoidable factor, its adverse impacts needs equal importance, understanding and prevention, for a balanced harmony between environment and economy particularly in the context of women who form a crucial link between the environment on one hand and acts as the bearer and protectors of societal cardinal values on the other .The movement of any society in the longer run therefore largely depends upon the role and position of women in the given context..

Therefore, for the sustenance of the available natural resource and for generation of eco-friendly methods, community empowerment in general and women empowerment is the need of the hour particularly in countries like India where like the many contrast that the long and a variegated history mirror, the image of the Indian woman is far from uniform, which varies with the changing environmental conditions particularly in the rural set ups where women are responsible for fuel, fodder and water as part of their day to day existence, and obviously then it is the women who suffer the most to sustain their basic needs as an impact of the any change that occurs in the environment. As they have to strive hard for fuel, fodder and water irrespective of the spatio temporal variations, needis to understand and incorporate the women themselves in the entire process of decision making by providing

- (1) An expanding support service to these women in the form of awareness about their right and capabilities To have a say in the decision making process whether for herself or for the family as a whole, so that they are free from their gender related shackles and get reorganisation of sharing or being the bread earner of the family,
- (2) provide them with additional channels of credit, training, employment, greater visibility and management skills, to be economically empowered, and
- (3) Access to knowledge, power and resources, to be persons in their own right, for any kind of community development policy so that the existing social setup recognises the long due position and an equal status in the true sense of the term.

III. CONCLUSION

The debate on women and development today stands at the international arena. No wonder then that the role of women in development like any other applied field not only crosses disciplinary boundaries but stands out as distinct goal and priority of any social system To site the United Nations conference on Environment and Development in RIO-De-Genero in 1992, where such issues were highlighted, while in the Nairobi Conference in 1994 on Status and Position of Women attention was focused on the link between environmental degradations and conditions of women.

Despite such steps and the increasing level of attention diverted to the issues of gender discriminations and problems from the last decade of 19th century, women continue to be in the marginal level of employment and low level of skills, their contribution being largely 'invisible'. The prevailing social construction of gender largely relegates women to the 'inside sphere'. Reproduction and responsibilities and deprivation characterize the status of women in any agro-economic societies in countries like India which like its physical heterogeneity reflects the social diversities, largely value loaded and inherited in a strong patriarchal system meant to be

continued without being questioned. What makes the situation more complex is a general societal inability to be able to discard these conditions. Many women themselves are often conditioned to unquestioned submission to biasness and discrimination, which they end up viewing as socially ordered and irrevocable. The country Report on Fourth World Conference on Women in Beijing, 1995 noted that women while comprising half of humanity, contributing 2/3rd of world's work force, earns only 1/3rd of total income and owns only 1/10th of the world resources.

Beyond these situations, one cannot but accept that in any given scenario. Women were and are the strongest of the social forces. Their role in both indoor and outdoor activities are so intricately linked that a conscious effort striking at their base is bound to bring in a change in the society for good. Over the ages, women have been ably gearing and maintaining their own houses and there are much more efficient to accept, learn and suggest the ways towards a better development perspective. The need is to create awareness and provide opportunities for creating new generation of men and women working together. Working with women as partners, recognizing their wealth of knowledge and experience, and accepting the significant role they play in environmental management is perhaps the only alternative route to relieve the persistent ecological pressures, threatening the modern world of today.

IV. NOTES

- [1] The word 'tribe' is generally used for a "socially cohesive unit, associated with a territory, the members of which regard them as politically autonomous" (Mitchell, 1979: 232). Often a tribe possesses a distinct dialect and distinct cultural traits. The tribal population of India stands at (84 million) i.e. around 8.2 percent of the total population.
- [2] The general reaction to the "Forest Conservation Act (FCA) in the U.P. Hill region was a series of protests which took prominent shape in 1989 as in the name of 'pariyavaran' the developmental work was totally halted (like construction of roads, buildings, etc.)
- [3] To quote Gayatri Devi- President, Mahila Mangal Dal of Doongri Village, Garhwal, who received Vriksha Mitra Award in 1989: "Ham ere Haque Cheen Liya Gaya Hain, Hum Logo Ko Jangal Mein Jane Nahin Dete" (our rights have been snatched away, we are not allowed to go in the jungle). In South Bihar, as Lomnath Prajapat, Secretary Van Samiti, Hazaribag district, say; "Hum Mahilaon Ko To Jungle Mein Ghusne Nahin Dete, Who To Sab P Kat Dalengi" (they don't let the women enter the forest, they will cut down all trees).
- [4] protecting sal trees results in leaves getting out of reach. This affects the collection and the sale of sal-leaf plates, which is a common source of income, primarily for women in many parts of West Bengal, Orissa and Bihar. Similarly tendu leaves which is also an important source of seasonal ash-income for women, tends to decline in a regenerating forest for the simple reason that the tendu bushes get shaded out by the growing trees.

REFERENCES

- [1] Vandana Shiva, (1988) *Staying Alive: Women Ecology, and Survival*, Zed Books, London, pp 39
- [2] Maria Mies, (1996) *Patriarchy and Accumulation on a World Scale*, London, Zed Books, pp.16-17
- [3] NRSA (1983): *Mapping of Forest Cover in India from Satellite Imagery 1972-77 and 1980-82*, Summary Report, NRSA, Hyderabad.
- [4] Ramakrishnan, P.S. (1990): *Biological Concepts for Reclamation of Mined Areas*; *Internat. J. Ecol. Environment*, Vol. 16.
- [5] *Census of India (2001)* Vol
- [6] Boserup, Ester (1970) *Women's Role in Economic Development*, New York. St. Martin's Press London: Allen and Unwin
- [7] Gadgil, Madhav & Guha, R (1993): *This Fissured Land, Ecological History of India*, Oxford University Press, New Delhi.
- [8] Roy, C. Kartik & Tisdell, C. A. (1995): *Economic Development and Environment: A case study of India*, Oxford University Press, Calcutta.
- [9] Sinha, A. C. (1991): *Vanishing Community Forest and Challenge of its Preservation in N. E. Region of India* (paper presented in North Bengal-University in Seminar Soc. Env. & Development in the Himalayan Region. (Unpublished).