Chapter 2

Review of Literature
2.1 Literature dealing with Socio-Economic condition

Women's issues got greater attention only now. Enough attention has not been given to the problems of tribal women. Many efforts were made by Governments, academicians and researchers to identify problems of the tribal economy. These efforts have contributed to a better understanding of the socio-economic and living conditions of the tribals. They shed light on the various aspects of the tribal economy like its agro-forest base, periodic markets, exploitation, hierarchy in tribal society, production, income, occupational status etc. But they did not give any emphasis to highlight the incidence of poverty among the tribals, and the existence of institutional aspects of problem, has not been touched by earlier studies. The level of development of different tribes and the socio-cultural traits of different tribes have some influence on the economic conditions of the tribals and they have also not been touched in earlier studies. The issues of tribal women need much more attention. There is not enough literature on it. The issues relevant to their struggle for a better tomorrow need to be delineated. Some of these are:

1. How relevant programmes can be prepared for the benefit of tribal women?

2. What should be the process of doing it- the process of consultation, decision-making, and so forth?

3. How should development functionaries approach tribal women?

4. What should be the form of communication and organizational structure to achieve it?

5. To what extent the economic plight of the tribal women can be achieved?

Studies of this nature are listed here:

Anantha Krishna Iyer's (1974), study on the various caste and tribes of Travancore and Cochin published in four volumes titled 'Cochin Tribes and Castes' is the first of its kind and carries descriptions on tribes like Kadars, Malay
Arayans, Nayadis, Ulladans, Paniyans and other tribes with emphasis on their socio-economic, cultural and linguistic elements.

Krishna Iyer (1937), also did similar ethnographic work in Travancore and Cochin area. He concentrated his study on the hill tribes, who were fast dying out. His first volume, describes the Kanikkars, Malapandarams, Malakurbas, Mala Pulayas, Mala Arayans and Marasars. The Travancore tribe is in his second and third volumes.

Luiz (1962), has analyzed the tribes of Kerala. He made an exclusive account of all the forty eight tribes in Kerala. He has examined the changing pattern of various aspects of social life like occupation, mode of living, diet, religion, marriage, rituals and superstitions. It is basically a sociological study and much of their economic life has not been discussed.

Sharma (1974), discussed the problems of economic development of the resource rich, sparsely populated and extremely backward tribal region. Two stages are identified in the opening of such regions. The study describes that the tribal regions in India are generally associated with the sparseness of population, inaccessibility, unexploited forest and other natural resources. The tribal scene in the country, however presents a much more variegated picture. There are some extreme cases in western India. The tribal regions were natural resources got completely depleted. Some of these areas are drought prone. The dynamics of economic development of extremely backward tribal regions where resources are abundant are always in discussion. The conditions of a sizeable portion of the western Indian tribal regions are so different from this general picture that a special model and methodology for its economic development will have to be developed.

Mathur (1977), apart from providing being a descriptive study on the socio-linguistic evaluation of tribals in Kerala, provides valuable information on some of the major problems confronted by the tribals like land alienation, bonded labour, indebtedness and status of tribal women.

Chattopadhyaya (1978), made an attempt to interpret and depict the varied aspects of Indian tribal life such as the origin, traditional dress, social customs,
symbolism of their rites and ceremonies. He points out the fact that even though there are similarities in beliefs and life styles between tribals and non-tribals, they have not blurred the sense of social distinction nor have they eroded their distinct tribal features.

Binay Kumar Ray (1979), has studied the tribals in the context of their economy which is based on forest irrespective of their economic types. The problem of getting the basic facts of economic life in a small non-monetary or partially monetary economy of the tribal people is of specific nature. The nature and functioning of the economic system or the organisation of tribals will present a true picture of their economic life which has system of mutual dependence and the influence of social forces on their economic behaviour.

Kunhaman (1979), made a detailed study on the problems encountered in the development of the tribal economy with special reference to Attappady. He stated that there is total lack of economic rationality in decision making in the case of tribals. There is an obvious gap between the dwindling tribal sector and the fast expanding settler sector. There is a great disadvantage in the asymmetric growth of the two sectors. Immigrants are getting richer, while there is precipitous deterioration of cultivable land. The consequent polarization of the tribals has assumed alarming proportions.

Mahapatra (1979), describes that the cultural heritage of India is enriched by numerous tribal groups. Many steps have been taken since independence to preserve their culture and to bring them social and economic benefits. However, the author’s emphasis is on the crucial importance of recognizing the cultural pluralism of our tribes, and therefore, the extreme caution which should be exercised in any attempt to generalize them. Moreover the cultural linkage of ethnicity, politics and economics are crucial. There is a wide gap in tribal society between the power elite and the folk. The former seeks political power leading to economic benefits, while the folk seeks economic development to abolish exploitation and poverty. Traditional tribal cultures have been influenced by the socio-economic transformations, but there still exists an awareness of the “community” and an attempt to make the nation a community of communities. It is also necessary for
the tribes to search for universal aspects in their own particular cultures, in order to advance cultural growth. Finally it is heartening that in these search lie signs of an emerging spirit of counter aberration among the tribes. Thus the relationship between technology and the tribal culture is reciprocal. The former needs the cultural richness of the latter, while the latter needs the formal organization of the former.

Vyas and Menon (1980), in their study “Indian Tribes in Transition” state that in the broad matrix of Indian society, although numerically small, the representation of Indian tribes is culturally strong and effective. Caste traits and culture are inevitable for certain tribes. They are of the opinion that social changes are not brought about by a mere provision of education but with the help of public opinion and citizen’s awareness programmes. Also it is time for the countervailing factors like regulation of the credit and market to be properly channalised. Further peer groups among the tribals should come forward to mobilize public opinion through properly phased programmes.

Vora et.al (1981), who examined the introduction of shifting cultivation and the present condition of poverty in tribal areas, says that the environmental degradation has disrupted the close adaptive relationship between tribals and environment. The life in forest has enabled them to survive while leading an isolated life in a difficult environment. Deforestation leads to a subsistence agriculture that was characterized by primitive technology producing just enough quantity of food sufficient for the households. Due to this reason the sufficient subsistence economy of the tribals was disturbed. The new system of economy introduced by the non-tribal made disastrous impact on their life styles. The result was that tribals of the region lost control over their economic destiny.

Anon (1982), in examining the extent of relationship which women experience with the environment argued that deforestation seems to have symbolized the situation of the over exploitation of the natural resources. Today even in the face of mounting disasters resulting from the assaults on nature, the exploitation of the people particularly the tribal women has increased. At the present pace of degradation it is estimated that within ten years the task would have
been completed in these countries. The destruction of nature leads to the deterioration of human beings especially those belonging to the weaker section of the society who depend more on nature than the others.

Gosh and Das (1982), in their study entitled “The Forest and Tribals-their inter relationships” reveal that a traditional balance mechanism had established between tribals and the forest. Gosh’s study among the Lapphos of Darjeeling district and West Bengal, observed that the use of plant resources were absolutely governed by the Ethno-ecological understanding of the people. Most of the structural materials were derived from the endemic species. At the same time it was found that in a very limited and rational way, controlled consumption of wood was practised by the tribals. The author recorded a total number of 112 species of plants used by tribals to fulfil all the needs of the community.

Roy Burman (1982), in examining the extent of development and poverty among tribals says that in the early 19th century the colonial rulers adopted a policy of massive exploitation of forest resources in the interest of state sponsored capitalists enterprises like railways, shipping and others. This reduced the area on which the forest dwellers could depend for their livelihood. At the same time hardly any investment was made to augment production of housing materials, fuel wood, fodder and so on. Inflow of industrial goods also hits tribal artisans. The policy shifted the land, which was not under current economic use by the individual tribal households.

Swaminathan (1982), who examined the growing poverty of the tribal people in the context of forest policy, says that the greatest problems facing the tribals are the lack of productive employment, famine and poverty. Famine in one sense is not famines of food but famines of work. Deforestation has reduced many employment opportunities. The enormous potential of forest for contributing to the enlistment of the rural economy should be viewed in the context of finding poverty and the country’s dual society with the top ten getting benefit of development.

Tiwari (1982), in his book “Development Strategy for Forest Tribals and Environment” deals with the continuing degradation of the forest which has led to environmental hazards in the form of floods, soil erosion, desertification, silt
damages, drought and weather destruction. Since tribal economy and forest are closely related, if forest environment is destroyed, the tribal life too perishes. Forest environment plays an important role in the social and cultural life of the tribals and the tie between the two can be strengthened, according to him by adopting appropriate technology in shifting cultivation and Integrated Rural Development Programme (IRDP) programme. Tiwari maintains that the country severely faces dual crisis of forest degradation and poverty.

Ramachandhran Guha (1983), while analyzing the British and post British forest policies in India, concentrates on the process by which the traditionally held rights of the forest communities have been progressively curtailed through the development of the forest policies, management and legislation. A feature common to the different types of forest exploitation is that whatever the end use of the product, was the exclusion of these communities in to whose territory such policies intruded. The author highlights the fact that while before independence forest was exploited for strategic raw-materials for imperial interests, in the post independence era, it was the commercial and industrial interests which dominated. In both these situations the forest communities were discriminated against.

Kattakayam (1983), has made a detailed study of the social structure of the Uralis, a primitive tribal group in Kerala. The author analyses in detail the failure of various welfare programmes, agricultural programmes, social and cultural programmes. He examined the causes of these failures. One of the major causes identified is the exploitation of the tribals by the non tribals. Being naive and innocent, they have fallen easy victims of perjuries and forgeries of the so called civilized. The study is mainly based on the Participant Observation Method aimed at examining the social structure and social process among the tribal communities to find out how they contribute to acceleration of changes in the tribal communities.

Alaxander et.al (1984), have analyzed the man-forest relation by asserting the fact that, the level of economic development and the distribution of population of any region depend on the relationship between man and forest around him, different elements which are used for different requirements. Man's knowledge of
various characteristics of ecology helped him to search food and other requirements useful for different habitats and seasons leading to the exploitation of natural resources. In the process it was forgotten that there has to be an equilibrium between the depletion of natural resources and their replenishment between the transformation of natural habitat and the preservation of those elements in it which are needed for man's wellbeing. This has led to a conflicting situation between man's interest and preservation of nature. The author concludes that the over exploitation of natural resources has made irreparable damages to the environment.

Ramachandran Guha (1985), says that the depletion of natural resource base leads to poverty. Tribal people, who were driven to hilltop by the in-migrants, denied their customary access to the forest. This alienation sometimes forced the people to degrade the surroundings he once lived in symbiosis with. So the result is an accelerated exploitation of the land and other natural resources by various out migrants.

Murali Manohar and Janardhan Rao (1985), have analyzed the hardships caused by tribal women due to deforestation. Land and forest are the twin major sources of living of the tribals and they have become so close a part of their life. Large scale tree felling and deforestation in the tribal areas apart from all its attendant effects such as imbalances in the eco system, denudation, desertification of the land and so on, had led to severe stress and strain on the life of tribal woman. Environmental degradation has also thrown up new problems to the women. She has to spend twice her energy for domestic labour, as she has to spend nearly six to nine hours in household work as fetching water, collecting firewood and fodder from the forest. The author says that change in their environment and traditional ways create not only a psychological disenchantment, but also render them physically helpless. This situation is extended to more severe situation by poverty, helplessness, prolonged indebtedness. Tribal women are more exploited under these situations.

Das B. Kumar (1986), in an article related to tribal upliftment and entitlement stressed two main points for the development of tribal economy. These are (a) the need for decentralized planning for economic and social development
and (b) diversification of activities of tribals need for establishing forest base industries. This article points out that the market mechanism in the complex town is beyond the comprehension of tribals. The tribal producers do not get a fair deal. The market is entirely controlled by marwadis and dominated by middlemen. With the increasing tempo of modern economic activities the area of exploitation has also widened. Mostly tribal settlements are isolated, dispersed and inaccessible. Socio-economic conditions and resource potentials vastly differ from region to region in the tribal economy. This diversity necessitates a special type of planning at the micro level for the redressal of the tribal poverty.

Krishnan Nair (1986), in his article suggests two measures for tribal development

1. The regulation of the government and the forest policies of the state should be in accordance with the economic system of tribes, and

2. The institutional arrangements for the tribal development, and provide training to the newly created institutions for making arrangements for tribal development.

Takur (1986), in his study highlights the socio-economic conditions of scheduled tribes inhabiting in different parts of India and looks in to the impact of development programmes on their socio-economic conditions in general and different tribes in particular. Tribal interests were neglected even after the departure of colonial rulers. Independent India’s need for revenue from the forest and raw-material for industries continues to deprive the tribals.

Blaikie and Brookfield (1987), have examined the poverty and environmental linkages. They hold the view that poverty, insecurity of tenure, public policies and inaccessibility to other resources have frequently cited as the prime factor for the indiscriminate exploitation of natural resources. Poverty and land degradation are often associated.

Buddhadeb Chaudhuri (1987), has analyzed the relationship between forests and tribals. He says that environment plays an important role in the health and nutrition of the tribal people especially the tribal women. It has been reported in
various studies that, the tribals who are living in remote areas have a better health status and more balanced food than those living in less remote and depleted forest areas. It has been possible for the tribal community to subsist for generation with a reasonable standard of health because forest provided them the food such as fruits, tubers, leafy vegetables, honey, juices, grass, fish etc. Medicinal plants and herbs which they have been using for the treatment of diseases and maintenance of health are today the sources of modern medicine. It has been argued that the various roots, tubers available in the forest or small animals they can hunt supplied to them a more balanced nutritional status to the tribals, but due to the deforestation most of these are not available to them in many areas. It leads to unbalanced eco-system in nature and stand as a block in the supply of sufficient food to the people who depend on it. He concludes that any type of degradation in environment is likely to affect the balance and thereby adversely affecting the concerned population.

Geeta Menon and Walter Fernandez (1987), have made an in-depth study on the environmental degradation, exploitation and status change of the tribal by degrading them. Here poverty is the greatest polluter. There is some evidence to show that poor are more depending upon natural resources, but not enough evidence to show that they over exploit or neglect their use. They argued that there is some evidence which shows that degrading environment hurts the poor class much. This is particularly so in the case of women. Their study points out those forest dwellers are the worst affected victims of environmental degradation. Women are deeply affected because of the role assigned to them in the sex-based division of labour. The destruction of the environment has resulted in their indebtedness, land alienation and bondage.

Joshi (1987), studied the causes and consequences of deforestation in Kerala. The author highlights the sharp reduction in forest areas in terms of low land-man ratio. Increasing population and the consequent increase in demand for agricultural land, fuel wood, fodder and timber led to the encroachments to the forest land and illegal forest clearance. The development programmes started by the Central and State Governments have also caused deforestation to a great extent. Deforestation is thus an outcome of the integration between the factors governing
agricultural expansion and forest land use on one hand and the nature and extent of forest resource management and utilization on the other.

Walter Fernandes and Geeta Menon (1987), who have examined women’s relationship with nature, say that the adverse effect of environmental degradation was felt in particular by woman since their links with the environment were closer than those of men. The general feeling entirely rests upon the tribal economy as a whole. But not the hardships of the tribal women are mostly ignored in present times.

Paul (1988), has made an in-depth study to examine and to compare the extent of inter and intra communal variations at in the levels of the socio-economic conditions of the hill tribes and to understand the possible reasons for such variations. An effort is made to investigate the impact of the planned economic development programmes of the state government on the hill tribes with a special aim to see if there are any spatial or communal variations in the agrarian structure and the transformations in the context of the changes in production forces and production relationships. It showed wide fluctuations in land holding or land leases among different tribal communities in Wayanad. A dichotomy exists in the wage structure between the tribals and the non-tribals. The system of bonded-labour underwent relative changes and it transformed in to similar pattern of attached labour, in order to fulfil the needs of the labour class. The author offers an explanation for the existence of spatial disparity in the adjustment process of the tribes in response to the progress of development programmes.

Rucha Ghate (1988), in her thesis examined the economic impact of forest policy on tribals. The study pointed out that the dwindling forest cover has severely affected the tribal dependence on forest and adversely affected their standard of living. Insufficient employment and low opportunities of self employment have forced the tribals to indulge in illegal activities of encroaching forest and illicit felling. At the same time, the revenue oriented forest policy of the Government by its single minded pursuit of commercial plantations has grossly neglected the needs of the tribals. Many forest officials are aware of the tribal problems. The privileges and concessions enjoyed by the tribals are considered to be a burden to the forest.
Maheswari (1990), highlights that tribals are the repository of vast knowledge on the uses of biological materials which is often kept secret and is passed on by tradition only. As the tribal scene in the tropics is fast changing due to deforestation, there is an urgent need to prepare ethno-biological inventories and to evolve strategies for conservation of ethno-biologically important species and overall protection of the forests. The author points out that tribals form an important part of the forest eco-system and therefore any activity in the name of biosphere reserve should begin with a genuine understanding of the life styles and the problems of the concerned tribal population.

Raj Raja Varma (1990), in one of his studies points out that tribals form an integral part of the forest eco-systems. What is needed is that any activity in the name of bio-sphere reserve should begin with a genuine understanding of the lifestyles and problems of the tribal people in the concerned area. He stressed that the most important measure to ensure tribal welfare is providing them uninterrupted employment.

Repetto (1990), in examining the failure of the Local Government policies leading to the destruction of environment concludes that the inefficient commercial logging operations and the conversion of forest areas into cattle ranching and agriculture leading to current rapid deforestation rates are largely the result of failure of Government policy. The forest degradation is largely due to the result of poor stewardship, inappropriate policies, and neglect of significant social and economic problems, where true focus is outside the forest sector. He distinguishes between resources degradation as a consequence of market failure which Government is unable or unwilling to correct, and policy induced market distortions.

Cheryl Simon et al (1991), in analyzing the health and income correlation of tribal women say that deforestation affects women for gathering firewood for fuel and fodder for animals. The trees are felled tremendously, with less wood available, women the traditional fuel gatherers, have no option but to collect cow dung which once would have fertilized the soil, for cooking fuel.
Govind Kelker Nath (1991), who examined the increasing burden of tribal women due to the destruction of natural environment, says that, it affects tribal women who use and manage the produce of nature and trees. The decision of cutting down the trees taken by individual families, whether women or men, there is no way in which the various individual decisions can be reconciled in such a way that the total cutting does not exceed the ecologically sound limit.

Muraleedharan and Sankar (1991), interpreted human ecology and socio-economic interaction between tribals and other communities of Attappady. Based on primary data the study has revealed that the socio-economic conditions of the tribals have been adversely affected as a result of land use changes. Land degradation and land marginalization are the major problems in the study area.

Basha (1992), in his study “Impact of Forest Policies on Tribal Life” explains the various Forest Acts and policies of India. The tribals once enjoyed absolute freedom in the forest and used the natural resources prudently. They were the worst affected during the various periods of development and as a result they are still lowest in the economic ladder. The author states that the forest policies and the forest laws of the British colonial period did not help to better their lot economically and socially.

Dashora (1992), considers that tribals are losing their identity because of the rapid development of trade, transportation and communication, provision of reservation, educational services and equal political status. The author further quotes certain examples of dilution of tribal culture. The study concludes that the horizontal distances are shrinking by leaps and bounds. Tribals who are driven to an inhospitable environment that comes near to the mainstream society are growing conscious of their civic, economic and social rights. It has brought about a great change in the tribal life.

Dhabriyass (1992), in analyzing the growing unemployment and poverty among tribals says that the growing destruction of the environment with its reckless effect upon tribals and its families are now facing the problem of unemployment, they have been deprived of their many benefits from the forest areas. He suggests therefore that tribal families should be provided work near their places of living by
allotting land out of the forest blank areas, for the plantation and horticultural purposes. To begin with they have to be provided with infrastructural facilities for undertaking the plantation programmes successfully. The labour-intensive schemes for the tribals should give priority to persuade them to leave shifting cultivation.

Sharma Rowe (1992), in examining the deforestation leading to the market failure says that Government is the principal holder of forest property rights and traditional system of providing access to forest and allocating common property resources to poor people have broken down. He argues that a Government disregard of traditional rights of the people makes environment more vulnerable to open access problem. In many instances government lacks the capacity to manage the environment effectively and control access to land under public ownership. Public policies could help to compensate for this failure.

Andrea Singh and Neera Bura (1993), have analyzed the relationship between women and forest and point out the linkages between women and natural resources, and domestic economies of the poor rural households in India. Many studies including the seven state study noted earlier have documented that poor households are more dependent on free bio-mass goods and common property resources than better off households. Women are the primary gatherers and managers of bio-mass goods in poor rural households. Women perform key roles not only in gathering but also in the processing, storing utilization and marketing of free bio-mass goods. Women's roles and responsibilities are pivotal not only in the management of natural resources but also in the management of domestic economy. Recent studies have shown that women work longer hours than men, pool more of their income to household budget, manage day today consumption and cash-flow needs (often in the absence of men who migrate for better employment opportunities).

Mink (1993), has examined the relationship between poverty and environment. He argues that women, poverty and environment are inter related. Women's reliance on natural resources for their families' substances is far greater than that of men. Poverty drives women to over exploit natural resources which contribute to the degradation of the environment which in turn depresses poor
women’s income by diverting more time to routine household tasks such as collection of fuel wood, fodder and water by increasing the productivity of the natural resources from which the rural poor are most likely to obtain a living.

Vinit Shanna and Anuraghi Sharma (1993), while interpreting the status of tribal women say that, the status of tribal women in many parts of rural India is very low. The situation is worse even among the primitive tribal communities, which constitute approximately 7.5 per cent of the total population of the country. In such societies, led to an isolated existence, far removed from the modern way of life, a wife is primarily regarded as an investment for the production of labour and a child bearing housekeeper. In such societies male dominance is a rule, and preference for a male child, is a traditional compulsion. Women are considered too inferior in status to voice their views and concerns even in matters which have a direct bearing on their own health and well-being. Family elders and caste leaders reign supreme in the decision making processes where pre-historic practices and primitive rituals and customs are still prevalent. Consequently, such societies are typically characterized by uncontrolled fertility and very high maternal and infant mortality rates. The concept of inter relationship, the social status of women and fertility though well established by deductive reasoning, have aroused considerable scientific debate and controversy in the past, for the mere reason that research workers had not attempted to quantify the status of women in numerical terms. Moreover a number of vital medical parameters with social status and consequences have been omitted in such computations. In the present study, an attempt has been made to develop a comprehensive socio-medical scale to measure the social status of tribal women and to study fertility behaviour and family planning practices among tribal communities.

Devendra Nath Takur, (1994), in analyzing the technological upgradation through the destruction of the environment conclude that, with increased destruction of nature the forest dwelling tribals have experienced a progressive loss of control over their habitat. This deprivation has manifested in a series of movements. While there were intermittent uprisings in the fifties and sixties, at the present time we find unrest in most forested areas. The economic enlistment of tribals can be integrated with maintenance and development of their natural habitat.
Shiva (1994), has examined the linkages between gender environment and development. She argued that the natural resources base is closely linked to the livelihood and well being of the poor households. Shiva argues that ‘Economy and Ecology’ are not opposed but coverage in the survival economies of the third world poor however in the context of market oriented development have been rendered contradictory.

Bernard Den Auden (1995), who has studied poverty and human rights and consequences of deforestation, clarified that access to good food producing land and appropriate means potentially provide individuals and families with some degree of independence and autonomy. He puts forward that civil rights and fundamental human rights are necessary requirements for any process that seeks to assist the poorest of the poor in creating conditions for even the rudiments of human dignity and resemblance of freedom. He suggested that unless the right to land and its products are protected, technology couldn’t alleviate human sufferings. Thus unless their rights are protected they will easily become the victims of deforestation.

Hal (1995), has examined the correlation between health and poverty of the tribal women. He argues that the degradation of the environment has severely affected the nutritious diet of the tribal women. The food obtained from gathering, hunting and fishing provide them lot of nutritious diet. But they may be now suffering from nutritional deficiencies because the energy spent in gathering, hunting and fishing may have required more nutrition that is usually obtained from the food obtained, the ancestors of the contemporary communities might have had a better nutritional diet than what these people are now getting from their gathering and hunting activities. But the overall situation in this regard appears, to quote Truswell, “as the diet of hunters, gatherers, seems in general to be associated with little nutritional deficiency and no evidence of nutritional excess”.

Ratna Reddy (1995), has studied the poverty and environment linkages and points out that it is often argued that poor depend more on natural resources and hence they tend to protect it better. Others argue that in order to meet immediate livelihood needs poor tend to discount the future at a much higher rate. The author
says that in both cases their requirements from nature are more due to the limited alternative sources of livelihood and larger family size. They obviously look from the household perspective rather than from the perspective of resources. The study indicates that, the poor do not seem to have higher discount rate for future. This may not be due to the lack of access to resources like water, credit and other institutional mechanisms.

Raj Rani (1997), has analyzed the relationship between the tribal women and forest. The author says that traditionally women have been responsible for subsistence and survival economies and the culturally accepted division of labor. Within the family they have to collect fuel, fodder and water for household needs. As these become increasingly difficult to obtain due to deforestation tribal women have to spend more and more time searching for them.

Edward Barbier (1998) in analysing lack of development arising from the struggle of poverty leading to deforestation problem holds that, one of the consequences of deforestation and the depletion of fuel wood supplies is that it forces poor households to divert dung for use as fuel rather than for fertilizer, the present value of dung as fuel is higher than the value as soil nutrients, but the context is one where there is no choice anyway since there are neither fuel nor fertilizer substitutes to which households can gain access. The result however, is certainly a decline in soil fertility, low levels of productivity and loss of future economic welfare of the marginalized section of the population.

Jodha (1998), who studied about poverty and deforestation, says that, poverty is the prime mover of deforestation. The over exploitation of resources is the only and preferred means of substances the poor people know. The poor are ignorant of both the limitation of their environmental resource and consequences of their extractive usage practices. The poor have little stake in health and productivity of their natural resources.

Lipi Mukhopadhyay (1998), who identified the status of tribal women and the impact of deforestation, says that the study of tribal women and their struggle for recognition of rights to land and movable property is a disputed problem. In traditional tribal economies the role of tribal women was substantial and crucial. As
a result their opinion had more value in decision making process. Many of the
taboos that existed in non-tribal society are absent in tribal economy. Tribal women
play a crucial role in development due to their direct and greater participation in
tribal economy. Their interaction with the forest and the traditional ways in which
they manage natural resources and harvesting significant amounts without
depleting the natural resources, makes their role in sustainable development more
prominent than that of tribal men folk. As the tribal life gets disturbed more and
more by economic development, the problems of tribal women are increased.
Gathering of edible items, fetching drinking water and collecting fodder and
firewood from the forest are becoming increasingly difficult. The distance the tribal
woman has to travel for all this is growing. In many tribal pockets in the country
tribal women have come forward to adopt certain innovations. However they are
yet to be more effectively mobilized to promote the cause of a change at a higher
level. He concludes by saying that the immense potential of tribal women and
taking stock of the wider arena of their participation and contribution to tribal life
and culture, they could be of great use and help in the induction, implementation
and adoption of different kinds of innovations proposed in programmes of
development.

Nath and Mukherjee (1993), have studied the relationship between forest
ecology and tribal development. In every society people have their own conception
on the relationship of man with his physical and natural environment. Similar is
the case with the tribal societies where people have a close affinity with nature.
Environment and poverty are strongly related to the tribal societies. Degradation of
environment affects the infrastructural facilities of the area. Besides agriculture,
forest products are a major source of income in tribal areas. Initially tribals in
general and women folk in particular were getting the forest products and firewood
at a stone throw distance or even less than that. Thus deforestation has led the tribal
women to extra work load which badly affects their life, health, nutrition, income
and self sufficient living conditions.

Mohan Rao (1999), has examined the empowerment of tribal women. He
described that women in tribal societies are more industrious than men, as well as
their counter parts in non tribal communities inhabiting in rural and urban

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communities. A tribal woman is considered to be an economic asset. The environment, through which they maintained their culture, has severely affected their life style and led to poverty. They are responsible for doing household work in addition to regular work of fetching water from distant streams, fuel from forest, grinding, cooking, and collection of minor forest produce along with the large matters of grown up children. The degradation of environment increased their workload. Position of women and the role-played in mythologies, epics and folklore generally determine their status and role of contemporary women. They are invisible potential workers.

Roy *et al* (1999) in analyzing human resources, gender and environment in development say that apart from poverty of the tribals, ignorance and institutional failure including market failure and Government are the main factors in the degradation of forest. In developing countries the absence of ownership and customary rights to land reduce the incentives of cultivators to increase investment on land. Since environment is a common property, market for environment does not exist. Policy failures apart from institutional failure have to take a great deal of responsibility for the degradation of environment. They concluded their study by saying that four fundamental requirements are required for achieving sustainable growth and for development. viz,

a) Human resources,

b) Removal of poverty,

c) Women,

d) Environment

Rene Veron (2000), examined the environmental sustainability leading to the development of marginalized section. He says that environmental sustainability is important for development, because human beings are ineradicably bound up with nature. Thus environment is important for our survival, health and social life. In order to become sustainable economic and social development should retain the ecological and resource potential to support the future generations. He concluded it by saying that many of the problems might actually originate from the lack of development that means poverty might be a primary cause of degradation of forest.
And environmental degradation reinforces poverty. His main suggestion is to conserve the environment

Siby Tharakan (2000), has examined the impact of displacement and resettlement through environmental degradation. He says that the destruction of common property resources of the ecosystem has meant instant deprivation of their source of livelihood, and therefore of their survival. The problem leads them to impoverishment and marginalization inducing mass poverty, severely affecting their health and nutrition forcing the poor and moderately poor to the lowest level. Increase in morbidity level, social disarticulation and number of homelessness and landlessness of the people forces masses into joblessness. Apart from these problems, directly imposed on the people there are some problems, affecting the community like aggravation of the problem of food insecurity, increases in flood, major decreases in rainfall, ecological imbalances, and loss of wild life.

Susan Backingham Haffield (2000), in one of his article points out the linkages between women and environment. The author says that women’s work is often linked to the environment through subsistence agriculture, domestic chores and hired work such as sowing and weeding. Much of this work is made harder through environmental degradation. In the extent of relationship between these, there arises discontinuity between the amount of work women do on the one hand and their lack of ownership on the land on the other hand. A woman suffers due to her social role as the main unpaid domestic worker in each household which brings her closer to an awareness of environmental hazards. The author put forward the idea that since poverty is the major determinant of ill health and of exposure to many environmental problems, women are most likely to suffer. Such income and occupation imbalance seems too resilient to geographical location and to industrial progress, it implies that society must be structured in such away as not to perpetuate these inequalities.

Gopal Kadakodi (2001), has examined the relationship between poverty and environment. He asserts that the linkages between poverty and environment are too complex. The supporting argument is that poor people have a tendency to overexploit the resources like land, water and forest and in such societies the people
depend upon common property resources. The question of linkages between poverty and environment is influenced by population pressure as well. Population growth may not affect environment directly but through poverty. He empirically proves the assumption that environmental degradation really hurts the poor people.

Papia Lahri (2001), in one of his articles argued for the empowerment of tribal women in the context of forest degradation. He says that the empowerment of women needs ultimately, the intrinsic inherent and innate strength of the mind, character and convictions and the strength to act according to one’s conscience. A woman suffers largely due to the environmental problems. The unrestricted exploitation of natural resources, unsound agricultural practices have had devastating effect on the environment and as a result on people’s health and quality of life. In such situation women have few choices about the kind of life style. Some studies shows that women compared to man are likely to prefer a lower standard of living with fewer health risks to a high standard of living with more health risks.

Das and Manoj Misra (2002), in their study point out that, forests are an important source of income and raw-material. The method and intensity of forest use varies from region to region. On large stretches of land, however destructive exploitation still progresses at an alarming rate. Only a small part of our forest is managed in a form that merits the attribute sustainable, in which achieving sustainability is a stated goal. Therefore involvement of people in its management was proposed at different levels and this was accepted by the Government. Joint Forest Management was replaced by total Government’s management and ownership. Local people are more dependent on forest, especially the tribal women who were the worst sufferers due to the degradation of forest. For the tribal economy forest is the major source of livelihood. Forest is not only providing their food, fodder medicine and fuel but also their each and every cultural and religious life is involved in such an inseparable way with the forest that without the forest tribal life would become charm less and unthinkable to them.

Upadhyay and Gaya Pandy (2003), who studied about the relationship between tribals and forest show that whenever the term tribe is used, an image of forest dwellers comes to the mind. The forest has maintained the existence of the
tribals since centuries. Even today, tribals are found living in and around the forest. They are utilizing the forest for various kinds of needs. So long as the forest was in the possession of the tribals there was no decrease in the forest areas. But as soon as tribals were made forest labourers from the forest lord, decrease in the forest area started taking place. Tribal culture and forest have been inseparable entities. The forest has played a significant role in shaping the social, economical, religious, political and cultural systems of the tribal societies. In their societies clan is named after trees, plants, birds, animals and insects etc, found in the forest, and with whom tribals trace mythical relations, generally known as totemic objects. The clan organization takes place on the basis of totemic relation. Forest has been the centre of social activities of the tribals. The tribes of the same village or different neighbouring villages assemble in the forest at the time of collection of Minor Forest Produce (MFP).

Prafulla Kumar Das and Alekha Kumar Gadhai (2004), in their study made a detailed description of the relationship between the tribal women and environment. They hold the view that the key to man's health lies largely in his environment. The purpose of environmental health lies largely in his environment. The purpose of environmental health is to create and maintain ecological conditions that will promote health and thus prevent diseases. Tribal women are directly dependent on forest for their subsistence, while for others it provides food and livelihood through crucial inputs to agriculture through water and soil conservation and supplies of fodder and manure. The relationship between tribal women and environment attains significance because they are perceived as victims of environmental degradation.

The World Commission on Environment and Development states that "Women folk are associated with the unmediated, the small, the micro levels of life activity, they represent the most powerful protective force of the environment, having thorough knowledge of the micro-level process and monitor the resource position. Forest project should aim to foster local community development for reducing rural poverty by establishing a balance between women and forest resources. Women marginalization is a symptom of style of development that tends to neglect both human and environmental consideration. Thus women are both
users and the dependents of nature. Since women have a special relationship with the nature, they are found to be the greatest victims of environmental degradation.

The impact of environmental degradation on women's livelihood and workload include the collection of fuel, fodder, water and minor forest products. The link between poverty and environmental degradation has been articulated by the world commission on environment and development. It says that the poor and hungry will often destroy the environment for survival and will cut the forest and over use the marginal lands, resulting in degradation and reduction in land productivity.

2.2. Literature dealing with institutions

Hall (1986), as a historical study employs a relatively broad conception of institutions including “formal rules, compliance procedure and standard operating practices that structure the relationship of people in various units of polity and economy. His concept is intended to be broader than simply focusing on the formal constitution and structures of the state but more restricted than that deals with the effect of wider cultural norms. His approach encompasses regulative, normative and cognitive process.

Mohan Das (1986) has studied the impact of development projects in the Western Ghat region on the forest dependent population with special reference to the tribes in Wayanad district. He says that most of the adverse ecological consequences of development projects have been in terms of income, employment, land holdings and frequency of food intake. Impact of forest dependence was done in terms of changes in the principal sources of income and employment derived from the forest.

North (1990) says that the alternative institutional arrangement requires a high transaction cost. These institutional structures will differ with respect to resource allocation, the cost of institutional establishments and maintenance. A new institutional structure will be of benefit to the society, where the reduction in transaction costs of allocation decision exceeds the cost of establishing and
maintaining these institutions. In order to accommodate these deficiencies in the basic model of institutional structure two premises are adopted

1. Institutions are the creation of human beings and hence a theory of institutional change must begin with the individuals

2. Incremental institutional change comes from the perception of the entrepreneurs in political and economic organizations that they could do better by altering the existing institutional framework at some margin.

He says that institutions exist to reduce uncertainties in human interactions. Thus he concludes that the major role of institutions in society is to uncertainty by establishing a stable structure to human interactions.

Desahpande (1992), who has analyzed man-environmental relations, holds that man environmental relation has gone through many stages. It was always an endeavour of man to derive the best from the environment without affecting the main stay. This decision process was governed by the existing institutional structures. Over years the use rate determinants and institutional structures have undergone manifold changes. The resultant of these was reflected in environmental degradation. It is asserted that the policies concerning the environmental decision should be formed with the help of an institutional frame. In order to achieve sustainable development from the overall degrading environment it is clear that an institutional framework with people’s participation and community control over village commons is a pre-requisite for sustainable development.

Bjorn Johnson (1997), who has examined institutional learning and clean growth for forest protection, argues that the important role that institutions play in moulding the process of long run economic transformation, the possibility of economic growth without environmental destruction is to a large extent a question of institutional change, including design and redesign of institutions. It is a question not only of technical learning but also of institutional learning. Poverty can be much more reduced with economic growth, which implies increasing use of natural resources and thus pressure on environment.
Lee Alston (1996), analyzed the causes of institutional change as endogenous to the system, but exogenous to the individual demanders and suppliers. This is not seen as a choice of variables for any individuals to change. Put in another way, there is analogous to that of the individual consumer in competitive market. Some laws or rules are the result of a general consensus that is new law is the right thing.

Malcolm Ruther Ford (1996) argued that institution may serve only the sectional interest and may operate to the determinant of other groups of the society. Institutions are serving the interest of some groups at the interest of others. Institutions perform all types of social and economic functions which are indefinable. He put forward the idea that human beings are intentional actors, institutions are the indented or unintended outcomes of intended acts of individuals. Individual may design or modify institutions through some collective choice, with the intention of performing better functions for the betterment of their living conditions.

Robert E Goodwin (1996), in defining institutions in new institutional economics, examines the way in which collective action can be institutionally embodied and in that form shape and constrain subsequent to individual choice. It forwarded the following propositions

1. Individual agents and groups pressure their respective projects in a context that is collectively constrained.

2. Those constraints take the form of institutions-organized patterns of socially prescribed behaviours expected of occupants of those roles, which are created and re-created over line.

3. The same contextual factors that constrain individual and group actions also shape the desires, preferences and motives of those individual and group agents.

4. Those constraints characteristically have historical roots, as artificial residuals of past actions and choices.
Mushraq Khan (1997), who examined the state failure in weak states, says that “an institution is defined as the set of formal and informal rules which constrain and govern the interaction of agents subject to those institutions”. The formal institutional structure includes conventional property rights but also any other enforceable constraints. State regulation in general creates or attenuates property rights and is therefore part of the formal institutional structure. The state as an institution is responsible for the enforcement and protection of all formal property rights. Both formal institutions, informal and voluntary ones affect economic outcomes because they condition the opportunities and incentives of the agents. Institutional failure refers to some judgment about the potential improvement in performance, if institutions could be restructured.

Tiplut Nongbri (1997), who studied the gender issues in tribal society, says that tribal women are a distinct social category for whom specific programmes suitable to their needs are to be formulated. A tribal woman possesses greater economic independence and freedom of movement than her counterparts in non-tribal societies which cannot be disputed. It would be naive to equate these with superior social status. This feature is a compulsion of their subsistence level of production, is apparent from the widening gender gap which occurs with economic differentiation and modernization. Gender inequality is not alien to tribal societies but it is obscured by their poor economic conditions which forces men and women to co-operate and share in joint economic activities. Tribal customary laws which subsume the people’s beliefs, customs, social mores, precepts rights and usages practiced since time immemorial do not always conduce to the interest of tribal women.

Rose Ann Devlin and Quentin Crafton (1998), who analyzed the importance of institutions, say that any policy that is implemented in an unsuitable milieu is doomed to fail. To be successful, a policy must be implemented in an environment in which rules and codes of behaviour conducive to that policy exist. To see the importance of institutional framework, consider the problem associated with implementing of environmental policy. Indeed institutional failure may not only prevent the solution of environmental problems, but also is a major fact that inhibits economic development and contributes to poverty.
Louw (1999), in his article "Effective Institution", suggested a condition for sustainable development. He defines the role of institutions as patterns of behaviour within a context of values and norms, embedded in social relations and recognized and valued by society. He considers the fact that the idea of optimal individual satisfaction as primary indicator of social good forms part of the basic approach to achieve optimal social well being. This approach creates the impression of optimal freedom and choice. He asserts that institutions are very essential to mould the individual character, which satisfies human behaviour.

Sanat Joshi (1999), in examining the concept of land alienation says that many state Governments having Tribal Sub Plan areas have not made use of regulations making provisions under the fifth schedule due to institutional failure. This is clarified partly due to inadequate implementing machinery. Taking advantages of the loopholes in law, the forces of exploitation are able to circumvent the legislative provisions. The legal provisions have been inadequate in tackling the problem in all its dimensions and the implementation processes have been so weak to render them ineffective. The tribal poor are suffering from these institutional inadequacy and failure.

Ritembhara Hebber and Sarthiacharya (2003), studied about social institutions and development changes, they describe that modern institutions prevail over traditional one, and this is the classical position. The successful establishment and functioning of any institution critically depends upon the social, political and economic support it gets in its commencement. The choice of institutions primarily rested upon their importance in influencing the quality of life. The development process began with it and continues pausing central planning for economic development. At the same time local self-Government found root for social and political development. The co-existence of this seemingly polar process and the associated institutions is justified in the society.

2.3. Theoretical Framework

The collective action is an amalgamated institution to manage private, public and common property resources, based on a collective decision and implementation. Collective action (often referred to as participatory management)
is a group behaviour emerging as an alternative strategy to market, for managing rural, environmental and natural resources. Collective action is a process, which takes place in five stages- appreciation, influence, consummation, action, and evaluation. The appreciation phase involves listening, validating information, sharing perceptions and opinions, and collating lessons from the past. The influence phase is one in which consummation, persuasion, and exploration of options take place, leading to joint decisions or new relationship being established (between different sections of the people and stakeholders) in consummation stage. Consummation is also the stage in which the rules of responsibility and rewards are refined. The decision is acted in the action stage which is evaluated in the last stage with influence on future participation. Participatory management, therefore, implies sharing of information, mutual negotiations, collective decision making, and implementation.

The concept of collective action as a convergent institutional arrangement to manage common (and possibly also private) resources is pursued further. The basic social philosophy of collective action is participatory development as against the individual development. "Participation is a process of initiating and continuation of an active process by which beneficiary/client groups influence the direction and execution of a development activity with a view to enhancing their well-being in terms of personal income growth, self-reliance or the values they cherish including equity.

There are a number of alternative definitions and views about the nature and content of participation:

1. Participation as contribution by people in public project,

2. Participation as organization with new rules, regulations and institutions and

3. Participation as empowering people in decision making, project implementation and sharing benefits.

Collective action as a theory to manage common property resources has many aspects. Collective action is about the people being able to influence the
direction and outcome of activities, and participating in the action by themselves. There cannot be participatory approaches without room for learning over generations. Communities need to learn and so do organizations implementing programmes and schemes. Participatory approaches cannot be effective until there are changes in attitude which are best brought about through a history of learning. Learning entails a continuous process of discovery wherein people can examine why they are not able to do what they want to do, identify ways of improving their action by questioning the fundamental approach to their work, and adopting more promising actions. Participatory forest management based on collective action theory has two important approaches

1. Game Theoretic approach
2. Evolutionary model approach

Participatory institutions seem to follow any one of the above two routes.

How to initiate collective action strategy is an important question. This is a question on which a large number of practitioners and theoreticians have a variety of suggestions. A practitioner such as NGOs finds it easy if there is some internal leadership in the community. At least some degree of societal homogeneity among the people is minimal concern for the commons. In case the leadership does not emerge from within, then the NGOs do provide this to some extent from outside. What the communities do not like about this external leadership is when it becomes a ‘master, ignoring local knowledge, customs, and habits. In theoretical terms, evolution of cooperation requires certain pre-conditions.

In the context of common property resources, there can be a number of stakeholders (and agents) with different preferences. These different stakeholders are forest department, local communities, women, tourists, and scientists. These different sections have different aims and motives to satisfy. Then each of them may prefer different strategies. Any strategy by one agent will have some pay-off to itself, and different pay-offs to others. It may even happen that a positive pay off
to one agent may install a negative pay off to others. As stake holders all of them are allowed to opt for their own strategy (without compulsion or enforcement).

2.3.1. The Evolutionary Model

The theory of natural selection and inheritance is a clue to survival and the acceptance of successful strategies in social behaviour. There are two distinct aspects of evolutionary model, namely, the evolution of social norms and the evolution of participatory institutions to protect the natural resources against the degradation. The latter, however depends on the forest. Evolving social norms of behaviour-away from the pursuit of self interest is a long drawn-out-process. It depends upon the level of understanding about the outcomes of collective action, obligations required, responsibilities to be delegated, and restrictions on individual behaviour. Furthermore as argued by Ostrom (2000), they are more stable if and when evolved internally than when imposed externally.

A related question about the evolution of social norms is the preference ordering of different perspectives, expectations about the outcomes, responsibilities, restrictions about common property resources. For instance, is there a preference ordering between economic relevance versus social relevance, as a case for survival of the Common Property Resource (CPR) institution. This is a question about the strategy of an evolutionary process. Economic relevance would prompt gains from the CPR management in terms of what the community gets in monetary terms or resource gains. Social relevance is attributed to concerns such as harmony, unity, mutual dependency, cultural and religious customs, and social security. The growth of participatory institutions itself can be evolutionary.

The evolution of institutions in India can be examined with the help of some evidence. One can trace at least three broad strains of thought through which institutions to manage CPRs have evolved. First, traditional societies in India have evolved systems to manage them through a process of conflicts, earnings, and mechanisms to resolve them. Basically, local convention has prevailed to guide the use pattern of such resources. The tribals of India have always dealt with this issue in this evolutionary manner. The institution of shifting cultivation in north-eastern part of India is another example to cite. Second, there is a process of customary
laws recognized by the Government, empowering the tribal communities to enjoy several CPRs. For instance, the Indian National Forest Policy document of 1988 clearly recognizes the rights and concessions to the tribals and locals regarding grazing lands, collection of Non Timber Forest Produce, etc.

The third strain of CPRs institutions emerges whenever the market mechanism fails to manage and maintain, or failure on the part of the state to ‘police’ public resources. One good example is the emergence of the village protection committees under JFM institutions (The National Forest Policy, 1998) which envisages people’s involvement in the development and protection of forests. The requirement of fuel wood, fodder and small-timber such as house-building material of the tribals and other villagers living in and near the forests, are to be treated as first charge on forest produce. The policy document envisages it as one of the essentials of the forest management that the forest communities should be motivated to identify themselves with the development and protection of forest from which they derive benefits.

Following the theoretical support and the legal procedure as stated in Indian forests laws, all state forest have to be managed on the basis of forest management plans usually covering a period of ten years. Currently about eighty percent of all state forest areas in India are covered by forest management plans. The management of forests will need to incorporate the management of people and their livestock. On 16 January 1998, the Government of Kerala issued through the Forest and Wildlife Department Participatory Forest Management Guidelines (No.8/98). A village forest committee is to be established which will prepare a micro plan through a process of Participatory Rural Appraisal (PRA) involving all stakeholders and will include many forest specific aspects, including

1. Prescription for the management of forests under the control of the Village Forest Committee,

2. Production of fuel wood, timber, fodder and other forest produce including annual harvesting quantities,
3. Prescriptions of measures for the control of excessive biotic pressure on forest,

4. Provision of sustainable management prescriptions for the area by detailing harvesting practices including area allotted for harvesting and the calculated timber yield,

5. Preparation of a distribution plan for all forest benefits,

6. Specification of the activities to be supported by the Forest Department including a detailed strategy for those activities where funding will be needed from other sources,

7. Elaboration on specific aspects of resource management such as forest protection, (i.e., silvicultural practices, regeneration, rehabilitation, soil and water conservation), NTFP development (i.e., planting and maintenance of fuel, fodder, medicinal plants, pasture, green manure and other activities promoting the sustainable harvesting and improved marketing of NTFP by value addition.)