

Relation between Nature and Tribal Culture in Tripura

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Dr. Surojit Sen Gupta



Tribal Research and Cultural Institute Government of Tripura Agartala Relation between Nature and Tribal Culture in Tripura Dr. Surojit Sen Gupta

Published by:

Tribal Research and Cultural Institute
Government of Tripura, Agartala

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First Edition: 28, February, 2020

Cover Design: Pushpal Deb

Type Settings: Shabdachitra, Agartala

Printed by: Kalika Press Pvt. Ltd., Kolkata

ISBN: 978-93-86707-27-7

Price : ₹ 133.00

Dedicated to my mother Smt. Bani Sen Gupta

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Acknowledgement

The author expresses his thanks to the Tribal Research and Cultural Institute, Government of Tripura, Agartala, for a generous grant to undertake this project. Without their financial help and encouragement, this study would not have been materialized.

My acknowledgement will remain incomplete if I do not thank Sri. Sunil Debbarma, Director, Sri. Prafulla Reang, Deputy Director and Sri. Bidyut Kanti Dhar, Research Assistant of Tribal Research and Cultural Institute, Government of Tripura, Agartala, for carving out my budding ideas into tangible result. It was their advice and encouragement that inspired me to take up this project work as an independent researcher.

My special thanks goes to Dr. Dilip Sarkar, Principal, Maharaja Bir Bikram College, Agartala, and Smt. Manidipa Debbarma, Principal, Women's College, Agartala for their valuable help and co-operation from time to time. I am also thankful to Sri. Prasenjit Nath Choudhury, Deputy Director, Directorate of Census Operation Tripura, Government of India, Dr. Jayanta Choudhury, Assistant Professor, (Rural Management and Development) Centre for Rural Studies, Tripura Central University, Agartala, Sri. Sukanta Pal, Senior Research Officer, Department of Tribal Welfare, Government of Tripura, Agartala, Sri. Naresh Chandra Dev Varma, Eminent Writer, Nijerbandhu Molsom, Instructor, Department of Computer and Engineering Science, Tripura Institute of Technology, Agartala and Sri. Nitai Acharjee, Eminent Writer for their valuable help and co-operation in completing this project work.

I owe an intellectual debt to Dr. Bhushan Chandra Das, Associate Professor and Head, Department of Commerce, Dr. Arpita Acharya, Associate Professor and Head, Department of Psychology, Smt. Lalmalswami Sailo, Assistant Professor, Department of Sociology, Sri. James Dev Verma, Assistant Professor, Department of Geography, Smt. Maria Debbarma, Assistant Professor, Department of Environmental Science, Smt. Pusparwng Hrangkhawl, Assistant Professor, Department of Computer Science, Smt. Dina Hrangkhwal, Assistant Professor, Department of Hindi, Dr. Mary Jamatia, Post Graduate Teacher, Department of Hindi, Ms. Seuli Das, Post Graduate Teacher, Department of Sociology, Ms. Tracy L. Darlong, Assistant Professor, Department of Sociology and Ms. Priti Lata Debbarma, Guest Faculty, Department of Kokborok, of Maharaja Bir Bikram College, Agartala, for their valuable advice and suggestions from time to time for completion of this work.

I will be falling in my duty if I do not thank all my well wishers for their moral support and sustained encouragement. I am very much thankful to my friends and relatives, who always acted as a force behind the completion of this work.

Thanks are also recorded to all the respondents who positively responded to my interview schedule – too many to be named. Without their cooperation, this work might not have been completed. My indebtedness lies also to the staff of various libraries for providing me the access to the research materials therein.

I do not have enough words to express my love and gratitude to my mother Smt. Bani Sen Gupta –whose support and inspiration always made me to move further in my academic as well as personal life in an uninterrupted way. I must mention here the encouragement and support given by my brothers – Subhajit and Sayan and my only sister – Falguni and my uncles and aunts Sri. Amalendu Sen Gupta and Smt. Maya Sen Gupta from Shillong home and Sri. Rathindra Bhowmik and Smt. Sati Bhowmik from Agartala home.

Last but not the least, I would also like to extend my sincere thanks to Sri. Animesh Deb Roy for his excellent computer work and who without hesitation and within a very short period of time amidst his busy schedules was able to type this project report to the best of his ability.

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Foreword

The ecological conditions where the tribal people live are normally characterised by the hilly and forested environment. Their mode of livelihood has led them to develop a symbiotic relationship with their environment and also evolve culture, customs, practices and social control mechanism meant to ensure their sustainable use. Thus, for the tribal, it is universally accepted that nurturing mother earth is not a commodity to be brought or sold. The attitude of the tribal vis-a-vis Nature ensures that everything in Nature is treated as an end in itself and not as a means to petty material gains.

Keeping this view, the book Relation between Nature and Tribal Culture in Tripura is a research project prepared by Dr. Surojit Sen Gupta and is sponsored by the Tribal Research and Cultural Institute (TR & CI), Government of Tripura, Agartala. In this study, Dr. Sen Gupta, has carefully propped the theme on Relation between Nature and Tribal Culture in Tripura and has recommended some of the pertinent findings in a lucid way.

I wish the book reaches the attention of the policy makers, planners and administrators which will be of immense help in this field. My congratulation to Dr. Surojit Sen Gupta, Assistant Professor, Department of Sociology, Maharaja Bir Bikram College, Agartala, Tripura, for his painstaking efforts and dynamism as an author of this book. He has carried out the work so brilliantly or else this venture might not have seen the light of the day.

28.02/2020

(D Debbarma)

Dated, Agartala 28th February, 2020

Director,
Tribal Research and Cultural Institute
Government of Tripura

Agartala

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Chapter-1

Introduction

he development of environmental philosophy was inspired by the widespread perception of an environmental crisis which prevailed during the 1960s. A sense of crisis and doom pervaded during the time reflecting fears of a civilization malaise. The threat of nuclear annihilation, global warming, pollution, species extinction, the loss of natural areas and wilderness, resource depletion and a general decline in environmental quality has given way to concerns arising from. diverse quarters: naturalists, scientists, academics, journalists, and politicians. This malaise led to emergence of intellectual and theoretical concerns to understand the environmental crisis. This furthered the formation of environmental organizations that based their ideology on the intellectual and theoretical approaches towards the environmental crisis (Khyriem, 2014). However, the anthropocentric or human-centred approach focus mainly on the negative effects that environmental degradation has on human beings and their interests, including their interests in health, recreation, and quality of life. It is often characterized by a mechanistic approach to nonhuman Nature in which individual creatures and species have only an instrumental value for humans.

The defining feature of anthropocentrism is that it considers the moral obligations humans have to the environment to derive from obligations that humans have to each other-and, less crucially, to future generations of humans-rather than from any obligation to other living things or to the environment as a whole. Human obligations to the environment are thus indirect. Lynn White Jr. (1967) in the "Historical Roots of Our Ecologic Crisis"

says that, what humans do in and to the natural environment depends on what they think about it. So in order to change what they do in and to the natural environment, they must first change what they think about, concerning the nature of Nature, human nature, and the relationship between humans and Nature. As Callicott rightly said, White thus implicitly-set the agenda for a future environmental philosophy.

On the hypothesis that Nature has intrinsic value-which, it must be said, has been developed in many and varied waysnatural objects either have a value independent of human valuers or at least are valued for their own sakes rather than for their usefulness, their instrumental value. This in turn leads to the question, do humans have duties and obligations towards the natural environment? Non-Anthropocentric philosophers like Richard Routley who argued that a narrow focus on humans as the only morally valuable things on earth was a kind of unjustifiable discrimination-"human chauvinism" (Routley 1973). Holmes Rolston Ill explored the implications of this view by looking for ways in which to make sense of the idea that humans have duties not only to individual humans and animals but also to larger wholes - species and ecosystems. According to nonanthropocentrism, Nature has an intrinsic moral worth that does not depend on its usefulness to human beings, and it is this intrinsic worth that gives rise directly to obligations to the environment.

Deep Ecologist, Arne Naess holds that Nature has intrinsic value, namely, value apart from its usefulness to human beings, and that all life forms should be allowed to flourish and fulfill their evolutionary destinies. The principle, biocentric egalitarianism holds that biota have equal intrinsic value; it denies differential valuation of organisms. In the words of Naess, "the equal right to live and blossom is an intuitively clear and obvious value axiom" (1973). Naess claim that humans need to regain a "spiritual" relationship with nonhuman Nature and extend such reverence for mountains to all of Nature, emphasizing the interconnectedness of each thing in larger webs of value. This principle is metaphysical holism.

One can apprehend ontological interconnectedness through enlightenment or self-realization. The method of self-realization is identification. By recognizing the intrinsic worth of other living beings, one recognizes the solidarity of all life forms. Extended self-concern obliges humans not only to connect with and care about the other people who have made them what they are but also to care for the multifarious systems and beings on which continued human existence depends. By understanding the interconnectedness of all organismsincluding humans - in the ecosphere and by empathizing with nonhuman nature, humans would develop an ecological consciousness and a sense of ecological solidarity. Once ontological boundaries between living beings are recognized as illusory, one realizes that biospherical interests are one's own. So the guest of environmental philosophy in the west is to include non-humans within its fold and to seek a holistic view of the Man-Nature relationship.

The development of environmental philosophy in contemporary times is the emergence of a comparative environmental philosophy. The main quest of contemporary environmental philosophy is to re-conceive the fundamental beliefs concerning Nature, human nature, and the proper relationship between humans and Nature and this has made the west turn to non-European traditions for insight into these perennial themes in all human thought. While this thought of including non-humans within the fold of environmental ethics is a new development in the West. There are some tribal communities in North East India which regards and recognizes the significance of Nature and which hold a comprehensive view about human-Nature relationship and these thoughts are embodied in their culture and beliefs. Tribal thought and practice are founded on the sacred grounding of all creatures- human and non-human; and, while all tribal thought is localized-bound to the land, as it were - the basis of this localized efflorescence is what might be called mundane- entirely non-esoteric spirituality. which is common to all tribal culture (Miri, 2001). As Lynn White Jr. (1967) said, what humans do in and to the natural environment depends on what they think about it. This is so true with the tribal communities.

Nature and Tribal Life

From time immemorial the relationship between man and Nature has been on a give and take basis. But with the advancement of science and technology, man has become less sensitive towards Nature (Mawre, 2000). It is for this reason the environmentalist speak of wilderness as a 'world heritage'. Environmental ethics have become a subject of discussion in every social and political forum. There is a general awareness among people regarding environment. Environmental ethics is an attempt to impose some restrictions and limitations on the freedom of human action towards Nature. However, in many indigenous cultures Nature is considered as the creation of god an object of reverence and respect and for this reason a caring attitude towards Nature is projected. The tribal have a very kind, caring, respectful and humane attitude towards Nature, because Nature is given to us, that is to say we have not created Nature and hence we have no right to destroy it (Nongsiej, 2014).

The tribals believe that god is a creator of everything. The creation of God in its fundamental nature is equal. The sense of this 'Equality' is based on the understanding that we all share the same status of being creatures. This equality refers to the fact that a tribe is in close communion with all the creations of God. There is a close relationship between him and other creatures and Nature. There is an inter dependence between them. There is a conviction that God is present in their Natural Environment. This is manifested in their religious beliefs and practices. To a tribe-man can never be over and above Nature as he considers himself as being only a custodian of the Nature. There are much folklore, folktales which depicts the relationship between man, animal and the physical environment. The tribals have a very close relationship with Nature -a tribe lives with Nature and the Nature lives with them. Infact to a tribe Nature is like a book that teaches them and influences their thoughts in their day to day life.

The relationship between man and environment is permeated by mutual respect and the spirit of interdependence. The natural world is part and parcel of social as well as religious life. The natural surroundings are of intrinsic values for the simple fact that all are created equal and are of equal importance. Some tribal communities speaks of an era in history when man and animals lived together and spoke the same language and could understand one another-this signify that all creatures are equal, there is equal respect for all the creations of god. And hence there is a need to develop and establish a proper relation with Nature. In everything a tribe does, he cannot and does not exceed the limits set by moral and ethical code of conduct. Religion goes hand in hand with every sphere of their lives (Nongsiej, 2014).

To a tribal community Nature is regarded as a mother a provider, which signifies that Nature is a mother who nurtures and provides, who cares for all the creatures created by 'God'. Nature provides them with food, water and material for their homes. The tribal believes in spirits who resides in Nature like the (spirits of mountains), (spirits of rivers), (spirits of village). These spirits influence human life and their behaviour.

The traditional ecological knowledge of the tribal communities has greatly contributed towards the restricted utilization, management of forests etc. The traditional management practice not only ensures its sustainable use but also help in conserving the natural resources for the benefit of all. Possessing traditional ecological knowledge of the resources can be served as an effective means to educate, sensitize so that transformation can take place by exercise restraint in using the resources that Nature provides.

The practice of forest management of the tribal people to conserve forest is commendable. The tribal communities nurture forest in the vicinity of their habitations. The forest conservation practices can been seen in sacred groves, village restricted forests, clan forests and other traditionally managed forests. These forests are protected and managed by the people themselves through institutional arrangements developed to benefit the community

as a whole. Natural environment is an important source of food, fresh water, construction materials for human dwellings, and fiber for clothing. In short for every need a tribal depends on natural environment, and perhaps for this reason tribal regards Nature with reverence and respect. For these reasons tribal communities dwelling in or near a forest have in the past ensured that rich and diverse forest areas are preserved and protected. This has also enabled them to develop an understanding and the need to conserve as well as a restricted or sustainable use of the natural environment. The conservation of different types of forests is a part of community conservation practices which evolved over centuries and passes down from generation to generation. The community forests are managed and controlled by the traditional institutions, clans or private individuals.

Nature-Culture Interface

It has long been established that ecology plays a vital role in conditioning the culture of a given area and that the geographical situation of a locale goes a long way in shaping the needs, customs, behaviour and thoughts of the people. The interaction between man and Nature is a two-way process. Both affected and alter each other, the degree of impact depending upon the technological advancement of the people concerned. The greater the technological achievement of the people the lesser the impact of Nature and vice-versa.

So, in different ecological settings, different types of cultures developed and flourished, each with its own distinct economy, social organization, materials artifacts, religious beliefs, ethos and world-view. Considerable emphasis has been given on this aspect by a host of anthropologists, who view it in two ways-determinism and possibilism. The former view is that Nature determines the culture while the latter view is that it only conditions or limits the culture. Nobody however denies that it has a great impact on life and culture.

Anthropologists of all hues and complexions, right from Ratzel through Graebena, Wissler, Kroeber, Redfield, Steward and Vidyarthi have emphasized this point, and all are influenced by the same view-point: Nature-Man. It is now realized that the true

relationship between man and his environment that of mutual interaction, which has led to a sub-discipline of cultural ecology.

Both Wissler (1917) and Kroeber (1939) have explained the relationship between man and his ecology in terms of culture area and human and environmental traits. Steward (1955) proposed three fundamental procedures of cultural ecology: (1) The relation between environment and exploitative or productive technology; (2) the behaviour patterns involved in the exploitation of a particular area by means of a particular technology; (3) the extent to which the behaviour patterns entailed in exploiting the environment affect other aspects of culture. Steward used these procedures to examine the cultures of the hunting stage to modern civilization. Redfield (1955) reviews the studies to bring out the ecological basis of culture and comes up with the view that "both man and nature are the twin-agents of the perennial revolution that shapes and reshapes the face of the earth". On the same topic an international symposium was organized by the Wenner Gren Foundation (1956) also.

Researches on these lines in the Indian context were unknown until the publication of Vidyarthi's paper (1958) and his book (1963). This was a pioneering work and a landmark on cultural ecological researches in India. In his paper "Cultural Types in Tribal Bihar" (1958), Vidyarthi described the cultural types and levels of socio-cultural integration of the tribal societies on the basis of their ecological settings and resultant economy. He made out four cultural types: (a) Hunters and gatherers, (b) Shifting cultivators, (c) Settled agriculturists (d) Simple artisans.

But the most monumental piece of work in this direction "The Maler: A Study in Nature-Man-Spirit Complex" (1963), in which Vidyarthi describes the culture of a hill tribe-the Maler-in terms of Nature-Man-Spirit Complex, where the three ingredients of the complex are interdependent and mutually complementary. This was a useful theoretical and methodological model, which was later on used successfully to study different tribes in different natural environments. The studies of Korwa (Sandhwar, A. N., 1978), Parhaiya (Prasad, R. K., 1978), Pando (Sinha, R. K., 1977),

Nicobarese (Sahay, V.S., 1979) and Soliga (Morab, S. G., 1980), clearly establish that this concept of Nature-Man-Spirit Complex is an important and useful tool in studying not only the preliterate, but also the peasant and modern societies.

To explore man, his society and cultures, anthropologists have suggested a variety of approaches as part of their research methodology. Among the more important of these; in the twentieth century, can be included 'pure functionalism' (Bronislaw; Malinowski), 'structure functionalism' (Radcliffe-Brown), 'structuralism' (Claude Levi-Strauss), 'ethnolinguistics' (F. C. Wallace; Strutevant), 'neo-evolutionism' (Leslie White) and 'cultural ecology' (Julian Steward). The anthropological ideas grew more forcefully in the second and third quarters of the twentieth century.

Looking to the Indian tribal situation, the world of spirits is also found to have a very close interaction with man, his social structure and the natural environments. L. P. Vidyarthi's concept of 'Nature-Man-Spirit Complex', thus, provides a sharp tool in understanding and describing the cultural matrix of Indian tribes.

Cultural ecology, one of the important current theoretical strategies, subscribes to the view point that an intimate relationship exists between a culture and its surrounding environments. For Marshall Sahlins (1969) cultures are human adaptations. In most of its areas, latent as well as manifest, a culture assigns relevance to typical external conditions. And the arrangement helps survive the members of the group in terms of its practical requirements, and polity ideology. Human beings have sufficient capacity to adapt with the ecology for the sake of their existence. The cultural ecologists search for adaptation of societies to specific environments. It is done on the plea (Honigmann 1976) that natural features, whether cognitively or through physical means, lead to changes in cultural milieu, and this necessitates a new kind of adaptation. Julian Steward (1969) feels that cultural ecological adaptations are responsible for distinctive cultural traditions. Even the functioning of a culture is considered by the local environmental conditions. Julian H.

Steward, as the first exponent of cultural ecology, eliminates biological ecology from its orbit, though Andrew Vayda, Roy Rappaport, Robin-Fox (1970) spoke for an important place for biological ecology in the study of cultural ecology.

Some studies, at practical level, have supported Man-Nature interaction. The study of Evans-Pritchard on Nuers is an excellent example where his reasoning is strictly ecological. But the idea of natural interaction between culture and environment is comparatively of late origin; Redfield (1955), Vidyarthi (1963), Laura Thompson (1961). In addition to Julian H. Steward the method of cultural ecology also influenced Sidney Mintz (1956), Eric Wolf (1957) and Morton Fried (1952). Some of their works prove that cultural ecology links emic phenomena with the etic conditions of Nature. The group structure and ideology are responsive to material conditions provided by ecology. Rather, there is a causal connection between culture and environment. The cultural determinism of Marvin Harris (1968) also involves technology, economy and natural environment.

Since the 1930s Julian Steward stressed that the element of adaptation formed the central concept in ecological studies. Such an adaptation is dynamic because the organism and environment do not remain constant. And it is through adaptation that culture change is reflected. For Steward (1955), the study of cultural ecology should take note of interrelationship between behaviour pattern and productive technology. And a very closely related aspect of it is to see how behaviour patterns affect other sectors of culture. Hence, there is dialectic interplay between culture and environment. A still broader purview of cultural ecology is provided by Anderson (1973). He thinks cultural change as part of adaptation. The origin of particular cultural features/structures could also be known by analyzing socio-cultural environmental adaptations. Culture and environment could also be divided into relevant and irrelevant parts. And it is the functional relationship of relevant environmental factors that cause organizational relationships. Anderson even went to the extent of saying that 'creative cultural core-environmental nexus' is little affected by historical factors and inter-societal relationships. The equilibrium

of socio-cultural-environmental systems is long lasting. The hypothesis of adaptation of man to environmental conditions through socio-cultural institutions and behaviour has been widely employed, (Cohen 1968; Fortier 1957; Frake, 1956; Gerlick, 1965; M. Harris, 1966; R. Harris, 1962; Howard 1966; Sahlins, 1962, 1964; Steward, 1965; Strehlow, 1965 and Tindale, 1959), with interesting interpretations.

Nature-Man-Sprit Complex in Tribal Society-A Brief Sketch

Within the broader purview of cultural ecology, as enunciated in the above paragraphs in terms of its attributes of interrelatedness, adaptation and interaction between sociocultural phenomena and environment, the present exercise on "Nature-Man-Spirit Complex in Tribal Society" has been made. However, an added dimension of this work is the analysis of spirits and other religious attributes, in their relationship to man and his culture on the one hand and Nature on the other. As products of man, numerous elements, events, rituals, institutions and practices of culture have been explored in terms of their relationship and interaction with Nature and spirits. Whether the ingredients of the latter determine the former, or it is an equation of more adaptations is also made clear. One gathers an impression, through certain presentations included herewith, that ecology has a lot of say even in the religious complex, as also vice versa. Since the religious format can broadly be taken as part of culture, it may not be out of place to say that this work presents an exhaustive account of socio-cultural-environmental phenomena in the case of Indian tribes where ecological variation, as broad as sea, forest, hills, plains, high altitudes etc. mark the Indian tribal scene, with deep rooted religious organization, the method of "cultural ecology" is of quite a significance in exploring the tribal cultural nexus.

The Maler – "A Study in Nature-Man-Spirit Complex of a Hill Tribe in Bihar", Julian Steward (1981) presents his observations on L. P. Vidyarthi's book The Maler: A Study in Nature-Man-Spirit Complex. Social structure elements like family, lineage and village community, the variety of super-natural attributes and the basic drives and anxieties, including those connected with

survival of a people, are analyzed in interrelatedness and interdependence. Adaptation of social arrangement for survival is, as part of the cultural ecology, well explained. Steward argues that the study makes it obvious that the little traditions perpetuate in spite of certain links with the larger society. Such persistence is attributed to the ecological conditions and religion.

"Nature-Man-Spirit Complex of a Hill Tribe: A Restudy" wherein Pradip Singh (1981) analyses the social organization of the Maler in the context of ecology and religious structure with special reference to changing situations. He restudied the same Maler villages after a period of over two decades, which L. P. Vidyarthi did in the fifties. Highlighting "determinism" and "possibilism" phenomena of ecology, he boils down to a mutual interaction purview of cultural ecology. Under the latter, Singh observes that certain elements of culture have been susceptible to change; the reasons being; Hinduisation, Christianization, industrialization, welfare agencies, political parties, etc. Now a little indifferent attitude to slash and burn cultivation has developed among the Maler. Hunting is on the decline. Likewise, some religious performances and worship are done more as a tradition and less as devotion though pig and fowl sacrifice is still made. There is a growing favourable attitude to paddy cultivation, formal education and medical care. The Maler are now comparatively more conscious of these provisions. This is reflected through the formation of the Parahaiya Uthan Samiti. To some extent the traditional panchayats (councils) have been influenced by the formal and legal system of social control. But these new trends, in general, have to assume a viable practical shape. These are, so far, reported in case of scanty population and that too with very little force. The major areas of Maler life and culture have continued to be intact because the ecology and supernatural world continue largely to remain the same. Nature and spirit still determine the Maler life.

Das Gupta (1981) "A Study in Nature-Man-Spirit Complex", has again concentrated on the study of interaction of man with spirit and Nature with reference to the Ho tribe of Kolhan. Ecology has limited Ho rice cultivation to three types of

agricultural plots. The Ho system of therapeutics and pharmacopia depends on the forest. Rituals, festivals and even love making are adjusted with the cycle of Nature. The village community seeks protection from spirits, against epidemics, drought, crop-failure etc. The tribe collectively maintains social discipline for fear of annoyance of spirits. The totemic base of Ho clans is again sought in religion. Both Nature and spirit interact while contracting a marriage. The prescribed code of conduct is adhered to for fear of the Creator, village god and ancestral spirits. Construction of a hut is related to both ecology as well as the supernatural dimensions. The belief system and philosophy of life are governed by the spirits. Village rituals are held only with the invoking of spirits. The latter are believed to cause rain, control epidemics and look after livestock and human life.

R. K. Prasad (1981) "The Parahaiyas: A Study in Nature-Man-Spirit Complex" outlines three different ecological settings (hill, valley and plain) which determine Parahaiyas economic activities, social organization and their relationship with the world of spirits. The gathering economy of the Parahaiyas is forest-based, and is the chief means of subsistence for hill and forest dwellers. Economic earnings and expenditure also vary as per the environmental categorization. A every interesting feature of Parahaiya social organization is that it is territory based. This holds true for all the three sections of Parahaiyas, that is, plain, hill and forest. The dimensions of social groupings go as per the territorially defined limits. The village community, descent groups like family and lineage have a defined leadership pattern which is not uniform among the three settlement categories. In major elements of the Parahaiya life style, environmental variations have quite a deep say.

"A Note on the Nature-Man-Spirit Complex of a Tribe Pando" R. K. Sinha (1981) has adopted the approach of studying the complex of Nature, Man and Spirit on the lines similar to the one adopted by L.P. Vidyarthi in the case of the Maler. Interactions and interconnections between Nature, Man and Spirit have thus been explored. Sinha also makes use of

K. N. Sahay's model of interpreting change in the three cornered complex, in the light of forces of change around. The Pando are living in Surguja district of Madhya Pradesh. Their economy of food-gathering, hunting and basket-making is dependent on the forest around. Some families change their village very often because of the gathering economy. As made clear in his explanations, Pando life and culture have developed and flourished in the lap of Nature. A Pando retaliates if he/she is asked to leave the forest because it is the latter which provides him food material, drinks, oils, medicine, shelter and raw material for basketry. Formation of hunting groups is again related to the forest. Some fibrous material, obtained from the trees, is used to ward off evil spirits, and as an antidote to snake bite. A variety of material equipment, including nets, traps etc. are obtained from the forest.

"Cultural Ecological Approach to the Study of the Bhil" wherein R.S. Mann (1981) starts with the search of the theoretical frontiers of society, culture and ecological inter-relatedness and adjustment in tribal India. The social and cultural life has a strong bearing on the external ecology. As a specific case Mann explores the cultural milieu of the Bhil of South Rajasthan in terms of its association to the environmental conditions. This relates to the areas of dispersed village settlement, Pal organization and separation of son from father immediately after his marriage, uniclan hamlets, clan names, social divisions of Palia and Kalia Bhils and certain aspects of marriage. The Bhil gods, goddesses, spirits, ghosts etc., marking their supernatural world, have close relationship with physical environments, especially the hills, forest, water source and agriculture fields.

Reciprocity and cooperation as part of economic relations in agriculture and irrigation are ecology based. Otherwise, where ecological condition is not pressing, individualism marks Bhil society. However, interaction of culture and ecology has been influenced through acculturation. But the relationship is reframed rather than being broken. However, like the Maler and Pando tribes the traditional persistence of the culture-ecology relationship is still leading over change.

And man-to-man interaction, in many instances, continues to be intervened by environmental conditions. And, therefore, the knowledge of environmental features is helpful in describing certain elements of the cultural matrix. Even to explain changes in the socio-economic framework, ecological shake, if any, might prove of relevance. Thus, cultural ecological approach further adds to the deeper exploration of the cultural nexus, and is a welcome addition to the other existing approaches.

"The Soliga: A Study in Ecology, Society and Religion of a Hill Tribe in South India", S.G. Morab (1981) has examined L. P. Vidyarthi's concept of Nature-Man-Spirit Complex in Soliga tribe of Biligiri Ramgana Hills, Mysore District, Karnataka. The stress of the study is on the analysis of ecological system, social system, religious aspects and economic organization. Soliga are explained to have complete harmony with their physical environment. They depend on shifting cultivation and collection of forest produce. The forest provides them food, drink, shelter, fuel and raw material of various other kinds used in Soliga technology. Socialization of Soliga children depends on forest ecology. Divisions of labour in family and Swidden cultivation have an intimate relationship with ecology. Formation of 'local community' is ecology-based. Some Soliga rituals are connected to their movements in the forest, and to the selection of settlement sites. Various operations of shifting cultivation are taken care of by the priest through worship. Sacredness of Swidden fields is maintained. Deities are propitiated prior to honey collection. Agriculture yield depends on the blessings of gods and spirits. Part of good yield is first offered to the deity. Birth and death are attributed as the creations of God. In general, the rites of passage are related to Nature, man and supernaturals. As a matter of fact the world of spirits prevails in selecting a new patch for shifting cultivation, in setting up a hut, in lifecycle ceremonies and in the tribal council. In many instances the abode of spirits is the forest, and they cause harm to human beings. The beliefs and practices regarding the supernatural world express the devotion and anxiety of the people at the socio-cultural interaction level too.

"Animism, Economy, Ecology and Change among Negrito Hunters and Gatherers" R.S. Mann (1981) has explained, the intimate relationship and interaction between ecology, religion, social life and economy of the Onge tribe of Little Andaman Island. The tassel, worn by an Onge woman, is an outcome of forests product. With this tassel are connected certain rituals and superstitions. The clay obtained for painting the body is again an ecological product. In addition to other functions (like mourning, decoration, display of affection for the husband) of clay painting, it also protects the Onge from ticks and mosquitoes which are in abundance in the island climate. The clay, while being put on the body, is mixed with turtle fat obtained from the sea. In addition to ochre, clay, turtle fat, ficus bark is also used to get rid of certain diseases. Pulmonary and skin diseases are attributed to excessive rains, forest and sea conditions. Certain birds are recognized as totems and, thus, their killing and eating are taboo. Clan-like groupings among the Onge are based on totemic objects. Accepting a new-born as a member of the Onge tribe is done through a ritual involving passing fish, obtained from sea or creek, from father to Kuvera (religious person) and back to father.

The spirits, malevolent and benevolent, recognized by the Onge have a bearing on the surrounding ecology. Tomonje spirit survives on pork obtained from wild boar. Likewise, Gay Boratekada spirit is believed to reside in the interior of the forest, and survives on crocodile flesh. Any sudden death in the forest is attributed to this spirit. The abode of Tejawala Lange spirit is the sky. A woman conceives only when blessed by Tejawala Lange. Hunting, gathering and fishing form the chief economy of the Onge. With this is connected their nomadism. Division of Onge into bands and their mobility are governed by the weather conditions to which the Onge have adapted. Turtle hunting and creek hunting are also adjusted as per weather conditions. Spirits are appeased for the safe return of hunters. A large influx of non-Onge immigrants to Little Andaman has reacted adversely to Onge forest ecology and their economy. Some impact of new inductees, and their activities, has also been left on Onge band

organization and on some of their psychological attitudes. The groups and their respective territorial sanctity have also been affected. Now, in the social organization of the Onge, one finds instances of adaptation and interaction with ecological conditions, as also with the changes that have taken place thereof. Within the framework of the prevalent ecology, nomadic living and gathering economy, the domestication of plants and animals is not being taken up by the Onge. But a form of indirect trading has been initiated.

"The Nicobarese: A Study in Nature-Man-Spirit Complex", V.S. Sahay (1981) explains the complex of Nature, Man and Spirit as prevalent among the Nicobarese of Nicobar Islands. The main focus of Sahay's study remains on horticulture (Nicobarese grow coconut, arecanut and some fruits and vegetables), forested and sea ecology vis-a-vis their interaction and relationship with social organization and religion. The hut is constructed near the garden which a Nicobarese raises. Spirits are believed to reside in forests. When someone dies of falling from a tree, they observe taboo and do not visit the forest for three days. Sacrifices are offered to appease the garden and forest spirits. Forest is the source of livelihood and provides material for making canoe, mat, basket, hut etc. Herbs of medicinal value are also obtained from the forest. A coconut occupies an important place in rituals connected with birth, death, decision-making, marriage, canoe race, witchcraft etc. The witch doctor suggests the place for raising a coconut garden.

"Ecology and Religion of the Kinner: Mountain Dwellers of North-Western Himalayas" Ramesh Chandra (1981) initiates with the argument that culture has a great bearing on ecology, specially through adaptation. He picks up religion as major ingredient of culture and argues that religion, both as a dogma and as a way of life helps maintaining a well adjusted place with the ecology; thus satisfying people to fulfill their requirements in terms of (1) deriving remedial treatment to their problems, and (2) achieving psychological satisfaction. Chandra's study has been tested among the Kinner (who include Kanet, Badhi, Lohar, Koli and Nagaloo), a polyandrous community of North-Western

Himalayas. In three distinct divisions of his study, Chandra starts with the ecological context, goes on to the description of people and finally lands into religious attributes vis-a-vis their reciprocity to ecological setting. Harder ecological conditions contribute to strong religious faith. Temples are built of locally available material provided by the ecology- it differs in the higher and lower altitudes of Kinnaur. The two elevations are even otherwise marked by Buddhism and Hinduism. Sacrifice of goat to the deity is interpreted in terms of ecological environment. Ecological hazards pose for Kimshoo worship. Shirgal deity presides over domestication of sheep and goat. Likewise, Bansheer deity protects the forest. Concepts of purity and pollution and the pattern of worship have strong interaction with ecological setting. Reciprocity between religion and ecology is also observed in lifecycle ceremonies.

The above explanations make it obvious that in tribal India there is an intimate relationship and interaction between social organization/social systems on the one hand and religious complex and ecological conditions on the other. In certain instances it appears that the Nature and spirits condition some of the social ways and practices; while in others it sounds as a case of adjustment for a smooth living. At times the relationship appears unavoidable; its avoidance would cause hardship to the people. But at other places the shift in some of the life-styles has been reported leading thereby to the easing of severity traditionally defined in Nature, Man, Spirit complex. The changes, mainly because of the alien influence, are of minor form. In major areas of socio-cultural life of some tribes (Maler, Parahaiya, Pando, Bhil, Soliga, Nicobarese, Kinner, Onge and Ho) studied there is a strong network of linkages, between social structure, elements and those provided by religious attributes and environmental conditions.

Both economic necessity and socio-psychological protection have directed man to keep the closest possible liaison with the forces of Nature, environmental and supernatural. For the above considerations, man is submissive to and is sometimes dominated by the apparent

as well as non-apparent forces of the natural and supernatural worlds. Among the tribes no alternatives seem to have been provided or exist to these two requirements. And if some viable substitutes are provided, people's old links with their centuries old beliefs will take time to assume any new form. And there, too, the triangular links, that is, between Nature, Man and Spirit, might assume new forms, correspondingly reformulating the concerned socio-economic and cultural network. Thus, within the perspective of Nature-Man-Spirit Complex does certify that one can certainly have deeper insights in tribal life and culture with the help of cultural ecological methodology.

Need and Importance of the Study

The 'cordiality between man and Nature' is a unique feature of tribal communities. The culture of a tribesman is developed in association with Nature. A cohesive cultural unit like tribe also shares both a conceptual system and also a world view (Varghese, 2014). The traditional religion of the tribes of north east India reflects their culture. Many thinkers have treated the indigenous religion as animistic as they attribute a soul to each natural phenomenon. Animism may be described as "belief that within every object dwells an individual spirit or force that governs its existence. It has been said that upon this concept rests the historic structure of religions. Since primitive men did not distinguish between animate and inanimate objects or between physical and mental process and everything in the world was thought to have its own individuality. Man, animals, plants, stones as well as emotions, dreams, and ideas alike, were recognized as indwelling spirits. The social aspect of the religion can be noticed in a tribesman's association with the other members, the observance of religious ceremonies etc. also in his association with the natural phenomena like forest, river, hill etc. The tribals understanding of Nature can be known in the light of the traditional thought as it appeared in various legends, mythologies, folktales, practices etc. which are handed down from generation to generation.

The tribals have a great reverence for Nature because it is an instrument of the manifestation of God. This aspect is clear from the fact of personification of Nature in various mythological stories and folktales. The response to various elements of environment is done righteously. The ethical aspect of tribal societies in dealing with the environment can be noticed in this manner of treatment meted out to the Nature. To many scholars 'Nature for a tribe is like a book. The teaching and wisdom he derives from it, he makes use of that in his daily life. He examines meticulously, and with great care the objects around him. He cares for and treasures all that he sees and observes so that they could be of help to him in all his needs. Nature is also like a big hospital on whose threshold all types of medicines are to be found which can heal all bodily ailments. Medicines and reason complement one another and a tribe is thus not helpless. He lives peacefully in his own land and enjoys the embrace of Nature.' Thus, there is an element of religiosity attached to a tribesman's association with Nature. Nature forms the very being of the tribesman. It is impossible to conceive of a tribal culture without making reference to Nature. Hence, it is useful and appropriate to focus on the relation between Nature and tribal culture in one of the North Eastern States of India i.e., Tripura, which is the home land of nineteen different tribal communities.

Objectives of the Study

The tribals believe in the unity and mutual dependence of all things. Since all things originate from the same source and subject to the same laws ordained by God, this not only renders all beings equal but also close relationship and interdependence between them. In the tribal conception all beings are part of one cosmic body, hence humans cannot have a monopoly over Nature. On the other hand, humans have a responsibility towards the preservation of Nature, as the survival of the universe and their very own survival depend upon their ability to adhere to the ecological principle that demands amicable coexistence of all beings and judicious use of its resources. In other words, as humans are endowed with greater intellect than other beings, it

is imperative that they act as the custodian of the environment to ensure that the bounties of Nature are not abused or misused (Debbarma, 2014).

Among the tribals custodianship does not confer superior claim on the holder (s) over the things under their custody, rather it imposes a responsibility upon them to ensure distributive justice and equality of access to all the stake holders, which includes both human and non-human users. The cultural customs and rituals in many ways teach them to perform such functions as would protect and nurture Nature and respect every aspect of Nature, treating them as sacred, be it rivers, earth, mountains or forests.

Thus, the tribal traditions are inseparably based on respect for religious and cultural veneration of the natural world. They accept a principle of holistic unity and believe that all things (animate and inanimate) have an intrinsic life force which explains their close relationship with Nature. The close association and balance between man and Nature in the tribal traditions appears being insisted.

On the context of the above background the present study is felt imperative to investigate empirically the relationship between Nature and tribal culture in Tripura. Thus, it is proposed to study the following aspects of relation between Nature and tribal culture in Tripura.

- 1. To understand the relation between Nature and tribal culture.
 - 2. To examine the influence of Nature on tribal culture.
 - 3. To assess the impact of tribal culture on Nature.

Delimitation of the Study

The study was conducted only on four tribal dominated villages of Tripura viz., Makhuchhara Village at Gomati District, Dhanchara Village at Dhalai District, Kamthing Bari Village at West Tripura District and Dakshin Maharani Village at South Tripura District. The study could cover a wider area, but owing to paucity of time and for the sake of convenience, the study was conducted only to a limited area. Nevertheless, despite the limitation it is optimistic of the fact that the findings of the study

would yield, would provide a platform from where inferences could be made and conclusions would be drawn on the larger content.

Methodology

The methodology of the present study includes household interview and qualitative methods. The qualitative methods used in the study includes Focus Group Discussion (FGD), in-depth interview and participant observation. The qualitative methods offer flexibility and are much appropriate for traditional societies like the tribals. The qualitative methods seek patterns of responses across individuals to "speak for themselves" (Dryzek and Berejikian, 1993) rather than use pre-specified measures. The qualitative methods thus, generate the transcriptions of the discussions, which reveal much more about the attitude as they are expressed in the normal social context. The reasons for using qualitative methods in this study is to examine empirically the close and intimate relation between Nature and tribal culture. Thus, the methods used in the study include (a) Household interview, (b) Focus Group Discussion and (c) In-depth interview.

Sampling Design and Field Strategy

We have made use of the sampling technique for collection of primary data. The universe of this study comprised of four villages of four different districts of the state of Tripura dominated by different tribal communities with a view to provide adequate representation of the relation between Nature and tribal culture in Tripura.

The respondents for the study were the adult head members of the households from these four villages. By using random sampling method 212 adult heads were selected, that is 53 respondents from each village, where the data was collected through (a) Household Interview, (b) Focus Group Discussion and (c) In-depth personal interaction with individual.

The selection of sample villages was purposive. However, certain criterion was taken care of so that the selected micro-level studies established the overall relation between Nature and tribal culture in Tripura. The purposive criteria for the sample villages were:

Relation between Nature and Tribal Culture in Tripura

- 1. The village dominated by different tribal communities
- 2. The village near to the forest

The above criteria were necessary in order to examine the relation between Nature and tribal culture in Tripura. One important aspect to be considered is the topographic situation of the region, which play an important role in determining the tribal culture in relation to the ecology. This led us to identify four villages namely (a) Makhuchhara (b) Dhanchara (c) Kamthing Bari and (d) Dakshin Maharani for collecting primary data.

For secondary sources, the collection of information was based on the review of relevant literature, journals and magazines, newspapers, research works, books etc. Thus, both primary and secondary sources of data were used to understand the relation between Nature and tribal culture in one of the North-Eastern state, i.e., Tripura.

Chapter-2

Review of Literature

t is worthwhile for an investigator to make a comprehensive survey of what has already been done on the problem and its related aspects. Mouly (1964) therefore says, "survey of related literature avoids the risk of duplication, provides theories, ideas, explanations or hypotheses valuable in formulating the problem and contributes to the general scholarship of the investigators." The importance of related literature cannot be denied in any research because it is an important aspect of the research project.

Many of the traditional societies live in harmony with the surrounding natural resources and environment (Ramakrishnan, 1999). They obtain a variety of resources from the forest. They are also involved with a wide range of land use activities, mainly sedentary terraced cultivation and shifting cultivation for household production and consumption. All these agro-economic systems have closely inter-corrected with natural forest ecosystem and with complex village ecology.

The traditional society livelihood manifests the intrinsic nexus of population, culture and surrounding environment. Also, how people and their culture affect the environment and how the physical environment affects culture and people. Guha (1994) points out that the ecological infrastructure (soil, water, forest, etc) powerfully conditions the evolution and direction of human economic life, political relation and social structure. At the same time, human intervention itself reshapes the natural environment in its own image.

Vadya and Rappaport (1965) states that relevance of ecological studies lies on how reasonably regard people's cognition in

respect to environmental phenomena as part of the mechanism producing the actual physical perspective in anthropological studies which could be resolved by involving the relationship of environment, technology, population and other sectors of social and cultural life. Vidya (1973) also feels that the practices are not as the exotic expressions of essentially inexplicable cultural values or interests but rather as systematic components in the culture-carriers relations with the environment from which they draw the energy and materials upon which their lives and culture depends.

Chandra (1981) understand the given ecological situation moulds the way of life for any society living in a particular condition. That is, environmental phenomena are responsible for the origin and development of the social and cultural behaviour of the society. The relation of environment and cultural treasures of any society could be understood in two distinct ways. Firstly, the culture itself works as "environment" within the larger framework of culture functions as part of the whole environmental system. Secondly, the environment has its deterministic value in shaping cultural behaviour.

The tribal socio-cultural life is intimately connected with forest ecology. Forest is an inseparable part of tribal life. Directly or indirectly in the tribal mind, forest symbolizes life in its manifold manifestations, that is, home, worship, food, employment, income and entire gamut. Tribals can, in fact, be regarded as children of the forest (Roy Burman, 1982).

Pradip Chattopadhyay (2016) deals with the relationship between Nature and culture among the santal tribes in central India by exploring various perceptions in the past. Santals, lived amid Nature, surrounded by hills, forests, rivers and other natural manifestations. These elements provided them their sources of sustenance and also constituted an integral part of their culture. He argues that all the past symbols of Santals identity like gods and goddesses, totem and tattoos, fairs and festivals, including numerous other beliefs and practices, were related to Nature. So Nature not only provided the context but also acted as an important variable for the formation of Santal identity.

Resenmenta Longchar (2016) examines the different gods (tsungrems) associated with the environments of the Ao-Nagas and sees the ritual process of a major ceremony among Lijabamong observed by the people in order to balance Nature from disequilibrium. It also shows how the Ao-Nagas in particular till date retain their traditional beliefs and practices, at least symbolically to endure their cultural continuities and thus establish the past-present-future continuum of their societal values and norms.

According to A.C. Bhagawati (2004) tribal religions of the North-East India in particular and rest of India in general have an undying faith and commitment towards Nature, they value Nature or the environment around so much that they sometimes fail to identify themselves in absence of it (Nature). Nature, they believe to be their identity. They view man, god, Nature as complimentary to one another.

The Adi tribe of Arunachal Pradesh lives amid natural environment. They understand and give meaning to each and everything naturally present in the environment the landscape, mountains and peaks, hill ranges, green forest, rivers, wild animals, birds, the blue sky, planets, stars, air, rain etc. They themselves also constitute a part of Nature. They learn so much from Nature and they believe each object of Nature to be their educator (B.P. Tripathi, 2014).

Tree worship or dendolatry is a fairly widespread phenomenon the world over. According to E. B. Tylor, tree worship can be traced to the earliest forms of religion among man reflecting an aspect of animism (Tylor, 1913). B.C. Sinha writes, "Sacred trees appear in the earliest mythologies, which have been recorded this far. There is no part of the world in which, trees have not been regarded with special reverence. According to Evelyn, paradise itself was a kind of sacred grove, planted by God and given to man. He further suggests that the groves which the patriarchs had planted in different parts of Palestine, may have been memorials of that first tree shaded paradise from which Adam was expelled". Sinha also writes, "All the Eastern region is full with stories told of and under the sacred fig tree. Under its

holy shade, gods, goddesses, man and animal talk with each other on sacred themes. From holy trees gods and holy men ascend to heaven. In Chinese mythology, the 'World Tree' that supports the universe is peach tree, whose fruit is partaken by gods and men. In Japanese stories the 'Tree of Life' is mentioned as the Hoari mountain" (Sinha, 1979).

S. Sengupta (1965) states that tree worship was widely prevalent in the Arab world, "The Egyptains considered that the big tree to be divine and animated with goddesses who were pleased to be manifest themselves so that their heads and even their whole bodies would emerge from the trunk of the tree, then re-enter it, becoming re-absorbed or, according to the Egyptian expression, the trunk ate them again. These tree goddesses, known as Hathor, Nuit, Salhit and Nit were believed to provide nourishment for the devotees on earth.

B.C. Sinha (1979) similarly writes, "In India the tree worship became quite common in the third or fourth millennium B.C. when there was a highly evolved Harappan culture Among the seals of Mohanjodaro one is depicted a stylized pipal tree with two heads of unicorn emerging from its stem. Another seal is engraved with the likeness of weeping willow tree with hanging branches". He also writes that in the Indian tradition different trees like the fig, papal etc. acquired a sacred character.

R.N. Chaudhuri and D.C. Pal (1991) "Plants have profoundly influenced the culture and civilization of man in many countries. In India, traditional myths, tales and events in the epics, are also innumerable religious practices of worship in the household and in the temples, in festivals, are all replete with references to plants. These associations can be traced from the pre-historic to modern times in virtually unbroken line. Chaudhuri and Pal also name a number of trees and plants, which are considered sacred in the Hindu tradition; they are such as *Bel* (Aegle marmelos), *Vata* (Ficus bengalensis), *Kela* (Musa paradisiaca), *Haldi* (Curcuma domestica), *Darbha* (Cyndon doctylon), *Am* (Langifera indica), *Tulsi* (Ocimum sanctum), *Dhan* (Oryza sative), *Narial* (Cocos nucifera).

S.C. Schwalbe observes that 'navapatrika is invariably associated with every Durga image. Navapatrika- a symbol of nine plants symbolizes the goddess herself. "This plant figure consists of nine different plants or fruits, to which, apart from the basic nutrients of rice, banana, barley and millet, wild plants and fruits are added so that it presents the natural elements of existence provided by cultivation of soil and the gathering of its fruits" (1993).

Nhamjahao Kipgen (2016) examines the relationship between the natural resources management and ritual practices of the traditional Kukis in history and explored the social and ecological world of the Kukis through their folklore, rituals and stories about their use of forests and agricultural practices. The study also draws insights from agricultural rituals relating to Kuki women and seek to demonstrate the links between Nature and culture and argues that women are close to Nature and they can nurture and conserve the resources better.

M. Daniel (2014) for centuries the people of Mao lived secure in the knowledge that their homeland, the place they called Mao in Manipur state was an unlimited natural environment. Living in true harmony with Nature, their lives followed a seasonal regularity of plantation, harvest, rest, renewal and abundance.

Where there are forests, there are native people and where there are native people, there are forests (Hadson, 1984). Many tribals are indigenous people, both hunters and gatherers, as well as traditional agricultural societies have a strong sense of stewardship or responsibility to manage and care for a particular place. As custodians of resources, they see their proper role as working together with human and nonhuman forces to sustain life. Humility and reverence are essential in this worldview, where humans are seen as partners in natural processes rather than masters – not outside of Nature but part of it (Cunningham and Saigo, 1999).

For the Aos Nagas all of Nature is invested with the mystical, religious quality. All elements in Nature, the animals, plants, rivers, mountains have religious significance and must therefore be treated with respect. This was a holistic worldview which

made no distinction between the sacred and the secular, the physical and the spiritual. In fact, for the traditional Aos meaning in life was derived through unity. The unity between man and Nature, between the religious and the secular and for them ethics and morality were concerned with maintaining this unity (Bendanginla, 2014).

Ao Naga traditional orientation toward environmental ethic is based on this notion that man is never alone but he is just a part of the world, where everything exists in a series of interrelationships. The Ao man considered Nature as something to be in harmony with; the preservation and conservation of which meant life for himself and his community. Primal religious build a close relationship between Nature and community. It stems from the belief that Nature embodies living spiritual qualities or beings that carry the seeds of community survival (Super and Turley).

Nature to the Khasis is *Ka Mei – Ramew*, environment is *Ka Mariang* and the world is *Ka Pyrthei* (Khyrem, 2014). The Khasis like any tribal community, have a very close affinity to Nature. The Khasis call Nature *Ka Mei-Ram-ew Mei* meaning mother and *ram-ew* meaning earth. They consider her *Ka Meirilung – Risan*, which means the mother who nourishes, cares and gives growth to all living creatures. Barnes Mawrie (2001) in the Khasis and their natural environment, brings out the intimate relation of man with Nature by citing the poem, *Ka Meirilung*.

Almost all the tribes of Arunachal Pradesh like Adis, Galos, Pangchenpa, Mishmis, Tagins, etc., are lovers of Nature. They do not see themselves anywhere apart from Nature. The Nature is godly, divine. Environment around them, they believe not to be destroyed or unnecessarily damaged without any purpose. They believe that they are only one of the constituents of the natural environment; other objects of the Nature are also of equal importance and value "the ecological approach lead to an understanding of the fundamental unity of humanity and Nature - it, instead of seeing Nature as separate from humanity, we see humanity and Nature as one matrix, then it is clear that we are part of Nature. From the ecological perspective, it follows that

conceptualizing humanity as outside of or apart from Nature is an error" (Langhlin, 1985).

B.C. Sinha writes that one of the most important myths linked to tree worship in India is that of Kalpavriksha, "One of the earliest representations of the tree worship is the Kalpavriksha of Vidisha, which has been assigned to third century B.C. In the ancient time, Vidisha was a junction of two great trade routes and was the home of Devi, the wife of Ashoka. Kalpavriksha represents the mythical wish fulfilling tree which produces food, drinks, ornaments and beautiful maidens" (1979).

According to Tribhuwan and Gaikwad (1993) plants symbolize cultural value in the Indian society. "Plants or plant parts used in rituals and ceremonies stand for reality or mean something within a given cultural context. Interpretation of plant symbols may vary from one society to another. Even within the same society a plant symbol may have different meanings in different contexts. For instance when a male child is born among the Thakurs, coconut with water is broken and its wet pieces are distributed to the well wishers and relatives However, when a girl child is born, dry coconut pieces are distributed". Apart from Hinduism, in India even the Buddhists have a close link with the trees as Sengupta (1965) writes, "In India each Buddha was associated with his own Bodhi tree of wisdom. The trumpet flower, the sal tree, the acacia, the pipal, the banyan – all belonged to different Buddhas and are so depicted on the stupa of Bharhut.

Sahay (1965) writes that among all the tribes of Chotanagpur tree worship is linked to the phenomenon of totemism. This apart they also rever other scared trees. The Desauli which is the most important and beneficent god of the Hos, coming only next to the Sing Bonga – the supreme creator, is generally believed to reside under a tree and is usually represented by a flat stone. The tree is a taboo for the Ho and nobody is allowed to collect it's branches or pluck leaves and flowers. This deity is considered to protect the Hos from ravages of disases and epidemics and from those evil spirits, which are foreign to them. According to Rajeev Sinha (1995) *Mahua* tree (Basin litifolia) is strongly venerated by

many of the tribal communities of Bihar like, Santals and Mudas. *Kadamba* (Anthroociphalaus cadamba) is the other sacred tree for them. The Bhuiyas and Gonds of Madhya Pradesh similarly venerate trees like *Palash* (Butia monosperma). The Bhils and Garasias of Rajasthan on the other hand worship the *Khejri* tree (Prosopis cinararia). Gadgil and Vartak (1988) have also mentioned about the integral role of the plants in the life of the tribals and that their knowledge could be used for economic gains.

Gadgil and Vartak (1981) write that the preservation of the entire vegetation in association with a deity is quite a distinct phenomenon from preservation of isolated specimens of sacred tree species such as *pipal* (Ficus religiosa) or *umber* (Ficus glomerata) which are often preserved and worshipped even without any association with a deity. Sacred groves are basically patches of forests, which are dedicated to deities. The deities may or may not be placed within or by the side of the sacred groves. Very often cremating grounds or burial grounds are associated with the groves. Usually felling of trees and branches or twigs from these groves is strictly prohibited. Often lifting of leaf litter too is not allowed. Quite often shoes are not permitted within the sacred groves. Even entry to women is strictly restricted, particularly when mensing.

D.D. Kosmabi (1962) states that sacred groves institution in India is very ancient and most likely date back to the pre-agrarian stage. Henry Skolmowski (1991) similarly states that the sacred groves in India are as ancient as the civilization itself. Patil (1982) states that the sacred groves first appeared when men were still in the stage of living as tribal bands. It continued even in the vedic period when every village and town had a sacred grove. The groves were basically associated with mother goddesses. Going by the cults associated with the sacred groves, Gadgil and Vartak (1973) also conclude that the institution must have originated prior to the practice of settled cultivation. Gadgil (1989) feels sanguine about this particularly keeping in view of the early literatures, which mention about the tree as a mythical object or about people's veneration of it. Buddha himself is supposed to have been born inside a sacred grove; which was dedicated to

goddess Lumbini. Buddha's association with trees is in fact very strong. He is believed to have gained enlightenment under a banyan tree where he undertook a long meditation.

Gadgil and Guha (1993) state that sacred groves are based on thumb rules—which were arbitrary and were implemented on the basis of magico-religious sanctions and social conventions. This is, however, contentious since the human populations though apparently seem to be highly religious in reality they are also quite pragmatic in life. Also since sacred groves represent a very old institution and even if people are not overtly aware of environmental significance, the institution is product of a definite method. Magico religious aspects attached to it are a part of the cognitive whole and not arbitrary in Nature.

Claus Bachman (1992) is of the opinion that ecological reason and religious myth form a useful alliance throughout Asia and Africa. In East and West Africa the aura of holiness has kept botanically rich groves from falling to lumber companies; in Yunan, a southern province in China, the inhabitants did not dare to touch the native mountain forest because of their fear of the wrath of god; in Thailand, Japan and Ethiopia temples or cloisters hide in the sacred groves. These areas impressively demonstrate the abundance and variety of vegetation that originally covered the whole region.

Castro (1990) writes that sacred groves are abundantly found among Nolia and Gichugu Kikuyu tribes of Kiriniyaga district of Kenya. The Kikuya customarily used selective groves, scattered throughout the countryside, as places of neighbourhood worship and sacrifice. Little and Brokensha (1987) state that there are at least 100 sacred groves between a quarter of a hectare to three hectares in size, where the cutting of any tree is forbidden and which were used for ritual sacrifice. These groves have trees, which were extremely rare and often not to be found in the vicinity. Wilson (1993) writes that along the coastal districts of Kilifi and Kwale there are about 30 sacred groves among the Mijikenda people and are locally known as Kayas.

In Maharashtra, where the sacred groves are concentrated mainly in the tribal areas of Vidarbha and along the mountainous

passes leading from the seacoast (Konkan region) to the Sahyadris, they are locally known as deorai. While Gadgil and Vartak (1981) in an inventory indicated 250 sacred groves, Paranjpye states that there are around 400 groves in the state. It is, however, felt that the number is many times more considering the fact that every village in the Western Ghats and Konkan region has at least 2-8 sacred groves, apart from the ones in the tribal areas. In size the groves vary from a clump of trees to 60 hectares though the majority being fairly small, the medium being only 1.5 hectares.

Sacred groves are widely prevalent in the tribal societies almost all over the country. Sahay has observed the prevalence of sacred groves among most of the tribal communities in Bihar. He writes, "A number of Dravidian and Mundari speaking tribes of Bihar like the Oraon, Munda, Kharia and the Ho Have a 'sacred grove' consisting of generally *Sal* (Shorea robusta) trees located outside the village. It is one of the principal sacred centres of the village where some important tribal deities and spirits are believed to reside and require periodical offerings and sacrifices for the peace and prosperity of the villages" (1965).

Balakrishnan (1981), Joseph and Kharkongar (1991) have mentioned about the existence of sacred groves in Meghalaya, which are locally known as *Law Kyntang*. P. S. Ramakrishnan (1983) writes that in Meghalaya (inhabited by the Khasi, Jayantia and Garo tribesmen) sacred groves are to be found in each and every village. The groves are not touched by the people out of reverence and fear of the sylvan deities. But Ramakrishnan and Khiewtam (1989) also write that the sacred groves are the places from where firewood is collected for self-consumption by the people. K.B. Singh (1965) writes that the Meiteis of Manipur too have the tradition of sacred groves. The sacred groves are locally called *'Umang Lai'*, meaning deity of the wood. According to Chakravarti (1991) the tribes of south-western districts of West Bengal - Midnapur, Purulia and Bankura are known to have sacred groves in each and every settlement.

Sankhala writes about the way the *Khejri* trees widely prevalent in the Orans (sacred groves) of Jodhpur region of Rajasthan. A

deciduous species, *Khejri* has a tremendous capacity to withstand severe lopping and throws out vigorous coppice shoots every spring. The tiny leaves provide excellent fodder; the branches make good fencing material and firewood for cooking and its pods are nutritive for cattle as well as human beings. Normally, shade from a tree in cropland hampers production. But in the desert, soils are light and sandy, needing cover for conservation of soil moisture. Fallen trees improve soil texture and the roots of leguminous species help to fix nitrogen and enrich the soil. Crops under the shade of *Khejri*, therefore, far better than they could in the open (1993). Paranjpye also highlights the ecological importance of the groves in similar vein Deorais (sacred groves) are usually located at the origins of fresh water springs in the catchment areas of river basins. This means that functional relationship between the forest cover, rainfall, water percolation, and soil conservation, in other words, the basic variable of hydrological cycle may have been known to these communities (1989).

Rajeev Sinha states that, the sacred groves of ancient times have become the Biosphere reserves of today..... such virgin forests are usually located at the origins of freshwater springs in catchment areas of river basins, which are potential sources of hydropower.... This also means that the functional relationship between the forest cover, rainfall, water percolation and soil conservation, i.e., the basic variables hydrological cycles were well known to the aboriginal people and that must have been another reason why they protected these forests and forest patches by declaring them as sacred. Shengji (1991) writes that Dai people of Yunan province of China planted holy trees. The Holy hills with sacred trees which cover roughly 30-50,000 hectares are a major component of the traditional Dai agricultural ecosystem, contains paddy fields, home gardens, and cultivated fuel wood forests in addition to the vegetation of the Holy forests. He also explains that presence of exotic species in the Holy hills is related to the spread of Hinayana Buddhism among the Dai people within the last 1,400 years (1995).

Rodgers (1989) states that there is an intimate relationship between resource scarcity and the origin of sacred groves. In Meghalaya the sacred groves must have originated only within the last century or so when there was an acute pressure on the forest resources with the introduction of line making industry, which consumes a lot of firewood for burning the lime stones.

Ramakrishnan (1985), Guha and Gadgil (1992), Gadgil and Chandran (1992) have stated there is a close relationship between the practice of shifting cultivation and sacred groves. The sacred groves provided a buffer between the swidden fields and the village settlements and helped in stopping the flow of burning refugia into the villages. Gadgil and Chandran (1992) have also stressed that the sacred groves in the North-East help to restore the vegetal cover which otherwise gets depleted due to swidden cultivation.

Gadgil and Vartak have asserted about the bio-diversity potential of the sacred groves in many of their writings as well. As climax forests, the sacred groves are particularly diverse in species of trees and life forms dependent for their existence on trees, namely, climbers and epiphytes. With the felling of forests all around them the scared groves have become the last refuge of many plant species. Many of the plant species which depend for their very survival in the region on the sacred groves are of considerable value... The protection extended to the vegetation in the grove by the reigning deity is, or at least used to be quite absolute. Neither vegetable matter, nor even dead wood could be removed from the grove without incurring wrath of the gods. The only possible exception was fallen fruits which could be gathered (1978).

Mehr Homji (1986) refers to a unique shrine of Manjing at Puttupet near Pondicherry, which is located on the top of a termite mound. The mound is full of snake holes and this along with reverence towards the God protects the surrounding vegetation. Unnikrishnan (1990) after carrying out a survey of the sacred groves of Kerala states that many of the groves retain some very rare plant species. The Thvidisseri sacred grove, for instance, is a

veritable gene pool, which has a very rare legendary medicinal plant called Visalyakarani.

Rene Borges and Ulhas Rane (1992) after conducting a survey in the Bhimashanker Wild Life Sanctuary in Pune district state that the sacred groves there contains several evergreen species that (a) do not apparently occur elsewhere, (b) are generally either rare, occasional or locally abundant in only restricted localities within the Western Ghats.

B.D. Sharma and B.G. Kulkarni (1980) in a study of the sacred groves of Kolhapur remark that they are very important from phyto-geographic point of view as they harbour some endemic and rare species. Even the small groves comprise of some old and magnificent trees and climbing species like Mermecylon umbellatum Burma, Lager stroenis microcarpalet-which has no parallel example in other forests. Bachman (1992) has noted the vegetal diversity of a sacred grove near Bhimashanker and states that the fog, which assembles sustains lush green vegetation, moss, epiphytes, herbs, and lichen. Massive snake like climbers hanging from the trees and bushes block the way to the depths of the hely shrine. Hazra (1975) notes that the vegetation at Mawphlang sacred grove in Meghalaya, is markedly different from the surrounding forests predominated by Khasi pyne or Pinus kesia. In a study conducted in Kerala specifically to record the bio-diversity of the sacred groves, N.C. Choodan (1991) found 428 botanical species belonging to 155 families available in the groves. Jahgirdar (1994) has also mentioned about diverse vegetal composition of the sacred groves in Tamil Nadu.

Sinha (1995) writes many of the endangered flora and fauna in the sacred groves of the tribals help in maintaining the biodiversity. Shengji (1991) writes that 58 different plant species have been found in 22 temple groves among the Dai people. The plants can be classified as ritual trees, fruit trees and ornamental trees. Wilson (1993) writes that the kayas in Kenya are islands of biodiversity in a sea of agriculture, plantations and sleek tourist developments. One of the kayas studied by him includes endangered mbamba kofis and African ebonies much sought after by local wood-carvers; huge portly baobabs and enormous figs

with huge branches and whiskered aerial roots also abound the grove.

Paranjpye (1986) has mentioned that the sacred groves in the Bhimashanker area afford an excellent habitat for harvivores like the gaur, barking deer, sambhar and several carnivores like hyena, civet, cats and panthers. Another specially is shekru or Malabar giant squirrel. There are also a variety of birds, insects and butterflies, which make the grove a paradise of Nature lovers.

Bachnab (1992) has observed that the Pirang sacred forest in Gambia possesses 40 per cent of all bird species found in the entire West African country. Neela Mukherjee et al. (1995) too have mentioned about the presence of a number of birds, peacocks, pigeons and parrots and animals like antelope, rabbit etc.-which take shelter in a sacred grove called Khanpur-Bas in Alwar district of Rajasthan. Jay Samant (1990) has also done extensive study of the animal behaviour of the sacred groves of Kolhapur district. He observes that the wild animals have retreated from nearly three-fourth of the sacred preserves due to intense human interference.

Grammie (1903), Bor (1942), Gadgil and Vartak (1973), Sharma and Kulkarni (1990), Kulkarni (1993) appears to be quite substantial with regard to floristic wealth in the sacred groves. Important vegetal characterization of the sacred groves has been recorded by Upadhya et al. (1987), Vartak et al. (1987) and Kumbhojkar and Vartak (1998), Borges (1992), Nipunage et al. (1993) and Bor (1942) found that the sacred groves of Khasi Hills was predominated by evergreen species of tropical and subtropical variety. Gadgil and Vartak (1980) are also emphatic about climax vegetation in the sacred groves in Maharashtra.

S.C. Roy (1985) was perhaps the first ethnographer in India to have recorded the ritual significance of sacred groves among the tribes. The sacred groves are a must in every Oraon village, are known as 'sarna' or 'jaher' and is believed to be inhabited by Chala Pachcho (old lady of the grove). The main festival associated with the sarna is sahrul or khanddi (spring festival). The ceremonies are performed and sacrifices of food given under the neem sarna tree are offered to Chala Pachcho and other Oraon deities. The

main purpose of behind the worship of the sarna deities is to keep the village in general-its inhabitants, cattle, fields and crops from harms way.

Danda and Ekka (1984) observe that among the Nagesia of Samripat in Chattisgarh there are separate reigning deities in separate mouzas (revenue jurisdictions) of different villages, which are placed in the samas. These deities are propitiated so that all powers are kept away – no evil spirit will sneak inside or no wild animal will hurt anyone. Along with the tutelary deities there is also an association with a female deity. When the cattle fall sick this deity is usually propitiated. Animals are too sacrificed outside the village boundary.

Iyer (1992) writes that in Kerala the sacred groves, are abundantly to be found. There are many myths associated with such forests. Iyer writes, in Kerala among the Namboodris and Nayars, there is the practice of worshipping goddess 'Durga' and serpent 'Naga' as the household deities. Traditionally each family had set up a part of the land around homestead as the abode of Durga or Naga, or both. This place is called kavu. As Durga is supposed to be a forest goddess, a forest like abode has to be created in the place of her worship. The Naga-second most popular deity or worship also needed a grove to enable it to move around freely without any loss of life.

Vidyarthi and Rai (1977) too have observed the different tribes of Bihar celebrating their major festivals at the sacred groves. Troisi (1978) and P.C. Hembram (1988) have discussed about the ritual significance of sacred groves or 'Jaher' among the Santals of Chotanagpur.

Frazer (1915) writes that among the Mao-Kia people of southern and western China, trees in the groves are resided by the spirits of the departed ancestors. Similar attribution is found among the Maraves of southern Africa. According to Sontheimer (1989) forest gods associated with sacred groves were originally worshipped by the pastoral communities in Maharashtra.

P.S. Ramakrishnan (1983) has focused mainly on the dimension of community management associated with sacred groves in Meghalaya. He has also indicated the presence of sacred groves

in relation to the shifting cultivation practices. He later (1985) states that the value system of the Khasis is intimately linked with the sacred groves and that this teaches the young boys to respect the Nature and make prudent use of the same.

Rodgers (1989) states after studying the sacred groves in Meghalaya that the systems of management of the sacred groves at the village level were usually vested with the religious leaders to regulate the use of the grove. Groves are for village deities "*U ryngkew U basa*" and the sacred grove is the property of the entire village.

Kumbhojkar et al. (1994) writes that the sacred groves among the Mahadeo Kolis of Pune district play a very important role in their social life. This is reflected even during the marriage ceremonies. Twigs of mango, umber (fig) and jambul are brought from the sacred groves and placed on the roof of the marriage booth. Flowers of Paveta indica are used for deity oracle. For decoration purpose seeds of Oroxylum indicum and Butea monosperma are also used for performing the marriage rites. Sontheimer (1989) has tried to link the forest god of Western Ghats with the pastoral nomads, 'criminal tribes' and nomads broadly under this paradigm. Kosambi (1962) had tried to link the distribution of sacred groves along the ancient trade routes, but he did not elaborate any further.

B.K. Roy Burman (1961) has indicated the significance of sacred groves with relation to formation of settlements in the tribal communities. The sacred groves in the industrial township of Rourkela in Orissa as a part of the identity management process of the ousted and migrant tribesmen. He has also reiterated the belief citing the illustration of sacred groves in the industrial township of Asanasol in West Bengal.

B.K. Roy Burman (1993) mentions about incidence of sacred groves along the trade routes in Meghalaya where the moral authority of the priest-chiefs guided the free flow of commodity. Troisi (1978) too has highlighted this dimension though not so equivocally in the context of Santal settlements. According to him the association of a village within Jaherthan (sacred groves of Santals) expresses the ritual unity of the group.

Gadgil and Chandran (1992) have referred to Buchanan that when the colonial government had tried to take over the forests in Maharashtra, the people made their political and moral assertion over them by declaring them as sacred after placing some deities in them.

Castro indicated that the sacred groves in Kenya provided the very basis of the formation of the ethnic identity. Perhaps the most important aspect of the sacred groves was their role as a focal point for the shared concern of the local community – the loosely organized collection of families that were in daily interaction with one another. These people did not identify themselves as member of a 'tribe' per se, but as neighbours who possessed common values and problems (1990).

Ramakrishnan and Khiewtam (1983) report that in some of the Christian predominant villages of Meghalaya, eleders have taken steps to reinstall the old deities to add sacredness to the forests for conservation. J. J. Roy Burman (1992) has also indicated that some of the Khasi intelligentsia had taken similar decision to revive the sanctity of the sacred groves. Chandrakanth and Nagaraja (1994) report that the sacred groves in the Coorg district of Karnataka are presently helping the forest department to meet 60 percent of the annual target. The World Wide Fund for Nature, India report indicates that it has recently taken up a project to restore the sacred forests in Vrindavan – the holy pilgrimage center of the Hindus.

While defining forest communities, Guha (1983) stresses on the close sustainable relationship with the forest they inhabit. Citing the case of tribal India, Guha shows how the tribals have associated the identity of the forest with myths and legends. H.O. Mawrie (1981) focus on the role of Nature in Khasi life. His resounding declaration "A Khasi lives with Nature and Nature lives in him" summarizes the close affinity between the Khasi and Nature.

Shangpliang (2010) examines the role of the forest in the life of the tribal communities in India with particular focus on the Khasis. Tracing the origin and history of the Khasis, their ecological heritage, economy and parameters of forest usages in Khasi society, the author had covered the various aspects of the khasi life and their culture such as shelter, food, musical instruments, weaving and dying rituals and ceremonies with that of the forests.

K. Dhirendro Ramsiej (1992) brings out the intricate relationship between Nature and culture amongst the Khasis. A number of Khasi folktales and legends associated with Natureman relationship have been highlighted by the author which throws light on the part played by Nature in shaping the Khasi culture.

S. Khongsit (1999) has done extensive work on various types of forest products and their uses in Khasi Hills and gives a detailed account of where they are found, their seasonal blooming time and their uses. He gives evidences to the fact that bamboo is the most useful of all forest products as it fulfills the needs of the Khasi life. Stressing the importance of understanding the theology of a tribe (H.O. Mawrie, 1972) speaks about the role played by the environment in shaping the culture and belief of humanity. Man is already a part of Nature as Nature is a part of him.

Basing on extensive fieldwork conducted in two Khasi villages (Shangpliang, 2013) traces the role and parameters of forest usage in the socio-economic life of the Khasis and also throws light on the various National Forest policies and forest legislations passed by the Government of India in an attempt to assess the impact on the socio-economic condition of the people at grass root level whose livelihood basically depends on forest.

Daman Singh (1966) presents a true account of Mizoram forest resources and the people supported by some realistic data on forest as a mode of resource use. The author interprets the term forest in Mizoram in two ways: forest which includes the total area under tree or bamboo vegetation and the forest by use as Jhuming which excludes those areas used for non-forest purposes. With regard to Jhum cultivation, it is well –established system of Mizo custom which is known as 'tlawmngaihna' and it is practiced in accordance with the principle of collective use of land.

Forest constitutes an integral component of the environment, occupies the central place in the social and religious life of the

Khasi. The forest has always been a ubiquitous item in all activities of man and it will continue to remain so with added interest and opportunities. It is on the forest resource that ultimately their future economy can find sound footing (Mathew, 1980).

Agarwal (1986) said, the way the tribal exploit forests has pervasive effect on all other aspects of cultural and the socio-cultural milieu emerges as an interlocking system in which cause and effect are intertwined in a manner that when one element is significantly altered, it has direct and indirect repercussions on the other parts of the system.

UN (1973) mentioned that the tribals in general, derive either directly or indirectly a substantial amount of their livelihood from the forest. They subsist on edible leaves and roots, honey, wild game and fish. They build their homes with timber and bamboo and practice cottage crafts with the help of local raw materials. They use herbs and medicinal plants to cure their diseases and even their religions and folklore are woven around the spirit of the forests.

Ramakrishnan (1992) points out that resources management practices among the tribals of the Northeast India are deeply interwoven in their day-to-day lifestyle and forest related livelihood pursuits. It also observes that certain examples of environmental conservation through traditional ecological knowledge systems and practices of the Nagas. Such understanding of the environment is also reflected in the traditional philosophy, which embodies a host of their beliefs and acts as a cultural means of conservation.

According to Basu (1987) 93.8 percent of the total Adivasi population of India lives in and around the forests. Forefathers of these tribals settled themselves within the forest and had been surviving on forests and other available natural resources in the forest. As a result, their economic, social and cultural practices closely revolve round the forest life-cycle and they become the foster children of the forest.

To Deogaonkar (2004), the totality of the tribal culture revolves around the forest there has been an in-built concern

about Nature and its importance in the tribal customs and traditions. The tribals who live in or around the village depend for their basic needs on the forest environment. Besides agriculture they eat the seasonal fruits like *Mango, Kathal, Imli, Jamun* etc. The jungle serves the materials like bamboo, leaf etc., for construction of their houses and the wood for their fuel (Areeparampil, 1988). Moreover they procure honey from the flowers of some tree and timbers, mushroom etc. Forest also provides the fodder, water and shelter to their domesticated animals. Similarly it provides herbal medicine to the tribals (Fernandese, 1983).

Ramakrishnan (1999) emphasizes a system of close interaction with natural forest ecosystem and its complex village ecology. The Naga villages have nearly independent system and have "ecological efficiency" and self –sufficieny within the village system. The villagers pursue their economic activities within the given village and territory. Thus, the villagers are one of these ecological persons who mould a landscape such that there is harmony. As Gadgil and Guha (1995) called it, "ecosystem people" depend on the natural environments of their locality to meet most of their material needs.

Childyal (1982) says tribal look upon the forest as their natural environment and start depending on it. The forest ecology provides them the basic needs and derives its optimized uses. It maintains a balanced productive ecosystem; hunting wild life and eating roots and fruits as and when they may be available.

Shimray (2007) talked about the ecological conditions where the tribal people live are normally characterized by the hilly and forested environment. Tribal occupation and way of life are intrinsically linked with ecological situation of the area. Also, the ecological differences reflect different response to the economic pursuit for instance, shifting cultivation and terraced cultivation. Their basic mode of livelihood has led them to develop a symbiotic relationship with the environment and their social and cultural institution. Indeed, economic system has immense socio-cultural and ritual implications having strong harmony with the natural surroundings.

Therefore, it appears from the above review that almost all the different traditions, as viewed differently of the tribes in general and North-East in particular teach reverence to Nature only. The tribals understand that their physical environment around them is the very basis of their social environment. Any adverse change in physical environment would definitely give rise to adverse changes in social environment. The sanctity of the environment must be maintained and kept pure as per the commandments of the tradition, they believe. And thus, harmony between man and Nature can be ascertained.

Thus, the above mentioned review of literature on relation between Nature and tribal culture throws a light on different aspects of Nature, culture and tribal life and many other concerns about the relation between Nature and tribal culture. Ihough a vast array of papers and books have been produced in different aspects of Nature, culture and tribal life in India, but the numbers of studies relating to the North-Eastern region of India is not numerous. Besides, even little attention so far been paid on the different states of North-East India. Therefore, the present study makes an attempts to fill the gap in this area of research on relation between Nature and tribal culture in Tripura which is dominated by nineteen different tribal communities.

(Chapter-3)

Ecological Perspective-An Insight into Man-Nature Relationship of the Tribals

he interaction between Nature and culture is central to any discourse on environment. However, mankind's approach to perception about Nature has continued to evolve over the ages. In the past, natural phenomena have been regarded as divine in human society. Further if past myths and legends are to be believed, we get an idea that ancient society was regarded as the modifying agent in the natural world (Glacken, 1963). In Sumerian myths as well as in the writings of Greek and Roman thinkers references are copious to show how landscape shaped the character of people. In ancient Greece great scholars like Panetius Posidonius, Cicero and others have graphically sketched the changes produced by men in the environment. Their main focus, as revealed by Clarence J. Glacken was to show that man's mission on earth was to improve the order designed by God. The achievements in different fields, such as, irrigation, drainage, mining, agriculture and animal husbandry were seen as complements to divine order.

Notwithstanding this newly emerged concern for the protection of environment, the relationship between man and Nature and its celebration has been going on in human societies for ages. However, the pace with which human society has developed over the last few centuries has resulted in casting a shadow on the relationship between man and Nature that existed in the past. A faint glimpse of this relationship, may be discernible in the tribal societies in modern times as tribal people are reported to have retained many of their past beliefs and practices even today (Kosambi, 1992). Also the process of their evolution to modernity is believed to have been slow compared

to the caste society. Indeed, for generations the tribals had shunned external influence and remained content with their peripheral existence. Throughout the ancient and medieval periods tribals had virtually stayed marginalized from the mainstream and their exposure to the forces of modernization and change only began with the advent of the colonial rule. Thus, in many respects the tribal world view and perceptions of environment are not only distinct but also may be said to be the representative of the past notion of people about Nature and culture.

There existed in ancient India the ethos of worshipping mountains, rivers, forests and animals. The inhabitants of the Indus region worshipped gods in the form of trees, animals and human beings. Thus, Social scientists across disciplines have developed a number of analytical frameworks for defining the relationship between the tribals and their Natural environment. Tribals have been defined as an ethnic category sharing a distinct kind of relationship with Nature. Recent revisionist scholars have tended to rewrite tribal culture as somewhat inseparable from its ecological settings and have criticized the colonial discourse for overdrawing the separation between forested landscape and livelihood patterns including agricultural relations of the tribals (Agarwal and Suvaramkrishanan, 2001). Even today, tribal societies represent exemplary dependence on Nature for their culture and survival. It is said that the identity of the tribals is closely linked to the Natural resources and the environment amidst which they live. Land (jamin), forests (jungle) and water (jal) are the main components of their survival which are also synonymous of their identity. Environmental interests and aspects are believed to have a direct bearing on many of the socio-religious beliefs and practices in tribal societies. Their round- the-year engagements in agricultural works, in gathering fruits and other essentials from forests, hunting and healing practices including celebration of fairs and festivals bear testimony to their relationship with Nature. Besides, there are other issues which bear a direct reflection to the tribal notion of environment.

Conceptual Frame Work

The Encyclopedia Britannica (Volume10:152) defined *ecology* as the study of the relation of organisms or groups of organisms to their environment. Haeckel coined the term "*Oecology*" or "*Oecokology*" [derived from two Greek words, *Oikos* meaning house or dwelling as habitat and *Logos* meaning the study of] to understand the relationship between organism and their environment. Now the term is known as ecology. Ecology, however, developed as a distinct scientific discipline in which only a small number of biologists were interested. Darwin (1859) and Wallace (1876) primarily laid the foundation of modern concept of ecology. Darwin formulated his basic ideas as the "web of life" suggesting that organisms are related to one another in the web on the basis of struggle for existence. The three main branches of ecology are plant, animal and human being, which were developed at different time period.

In simple term, ecology is a science that studies the interdependence, mutually reactive and interconnected relationship between the organisms and the physical environment. Haeckel further explained ecology as a body of knowledge concerning the economy of Nature, highlighting its roots in economic and evolutionary theory. He defined ecology as the study of all those complex interrelations referred to by Darwin as the conditions of their "struggle for existence." According to Atlee (1949) ecology means the science of interrelation between living organisms and their environment, including both physical and the biotic environments emphasizing inter-species as well as intra-species relationships. Odum (1959). came out with the conventional definition of ecology on the ground that biotic and abiotic components of Nature are not only interrelated in reciprocal manner but also function as a definite system. McIntosh (1980) considered ecology in another perspective a complex interaction of natural history and physiology.

During the early twentieth century, ecological ideas permeated the social sciences, on the argument that most social science involved the study of man-environment relationship. Arguments were proposed for the study of human ecology. For geographers like Barrows (1923) focus was on the relationship between society and physical environment. For sociologists (like McKenzine), focus was on man-man inter-relationship. With the formal development of the new science of ecology there were several attempts to restate fundamentals of human activity in biotic terms. Stroddart (1965) opines that from the year 1910, "human ecology" was used for the study of man and environment, not in a deterministic sense, but for man's placed in a "web of 1ife" or the "economy of Nature".

The awareness of man's dependence upon Nature has a long ancestry; but a sense of man as the maker and unmaker of Nature has only more recently dawned upon us and with it an awesome sense of our own capacity for mischief and mayhem (Arnold and Guha, 1995). Hence the pure natural scientific approach to the ecological study of Nature as independent of human species may not be of much relevance for the socio-philosophical study. Yet its value lies in directing the attention from extreme anthropocentrism to the autonomous natural environment.

A second lexical sense of ecology focusing on the relationship between the distribution of human groups with reference to material resources and consequent social and cultural patterns (Webster's Dictionary, 1979) is perhaps more suited for the sociophilosophical context. This approach succeeds in shifting the attention from anthropocentrism to the human engagement over time with the physical environment as an important agent and influence in shaping human history. It takes into account ecological infrastructure viz. soil, water, animal, mineral and vegetative bases of society which plays a crucial role in deciding the socio-cultural patterns. Thus in the field of social sciences this approach brings to the centre stage the ecological context vis-a-vis human agency in ascertaining the course of civilization.

A philosophical intervention into the notion of ecology however may not be satisfied with strictly issue-oriented approaches to environmental crisis. In order to arrive at more general theory relating to greater environmental issues it may try to answer such questions as - what is Nature? What is the humanity's place in Nature? And more importantly, what is the relationship between society and the Natural world? However simple these questions may appear at the first sight, a little deliberation will make their complexities evident. Genuinely the answer would be it is that which encompasses everything around us - the trees, rocks, rivers animals and so on. But then we may ask, is not a garden carefully grown, Nature? Is not the house with all its furnishings a part of Nature? And for that matter, are the human beings and the society less part of Nature than animals? Such questions finally lead to the ethical import underlying environmental issues. If human beings are part of Nature they are not merely one among the many living forms. They are unique in the sense that they are moral agents having responsibilities towards the ecological infrastructure, which no other species is capable of sharing.

A philosophy of ecology thus addresses itself to an ecologyoriented ethical sensibility that may provide a standard for human conduct towards the Nature as a whole because human beings have duties to ecosystems. The environmental ethics, a comparatively new branch of philosophy, is in this sense the 'attempt to expand the moral framework to Nature and counter human chauvinism by showing that feathers, fur, species membership and even inorganic composition are not barriers to the range of ethical considerations (Honderich, 1995). The environmental ethicist Paul Taylor defends the adoption of a biocentric ethical attitude of respect to Nature. He grounds this attitude in the intelligibility of regarding each living entity as striving to realize its own good and as having the same inherent worth within a network of teleological centres of life. Thus, to act with an ecologically creative ethical sensibility is to act responsibly and morally towards the Nature at large.

Tracing the Relationship of Human Life and Nature

The prime consideration of any living organism is related to Nature, and there is no exception in case of man. Other than man, the relationship between organisms and Nature is neither conscious nor motivated. While in such relationship with man, the total and constituent relationships are never spontaneous.

Instead there is a good deal of induction and monitoring even with mechanism of change for the purpose of adaptation. What other animals do is the follow up action which is natural, but only man does as per his necessity and requirement. Naturally the relationship between man and Nature is specific, contrary to Nature and all other animals, except man. There are a number of models proposed by different scholars with a view to deciphering the role and relationship between man and Nature. In cases greater importance is laid either on man or Nature, depending on the specific interest of the concerned scholar. But on the whole there is a balanced mechanism, at times greater dependence on man and in cases on Nature. In realistic sense there is practically no way for proper determination, as constant. At times, there is greater pull on Nature and in cases the determination is based on the activities, i.e. culture of man.

The interaction between man and Nature has also drawn the attention of a number of scholars, and one such concept based idea states: ".... in view of their (the Maler) ecological setting and other cultural experience have developed a style of life, a type of Nature-Man-Spirit complex..." (Vidyarthi 1963). The author, noted above, has also echoed the concept of Evans - Pritchard (1940) on the Nature-Man approach in analyzing a primitive culture. The same concept, in furtherance has also been taken into consideration by Redfield (1955). Vidyarthi (1963) further writes: "... as I proceeded ahead from the level of observation to the level of cognition, it became more and more clear to me that this Nature-Man relationship was not only confined to the ecological or subsistent level alone. I noted an "environment of supernatural beliefs and rituals modifying and influencing the Nature-man interrelationship".

In the theoretical formulation there is no disagreement with Vidyarthi's proposition, especially when he indicates Nature-Man Relationship was not only confined to the ecological and subsistent level alone. He took three major dimensions namely, "Nature", "Man" and "Spirit". In this work special attention has been paid on Nature and man. The Marias, cannot control the

Nature. Rather, they undergo through adaptation and adjustment.

Man-Nature interaction has also been taken into consideration later by other scholars and one such conceptual scheme indicates, "The spatial distribution is characterized by a striking tendency of clustering and concentration in pockets which have suffered from isolation historically and are situated in areas where the environmental setting is by and large unsuited to sedentary agriculture. Constrained by a rigorous environment which has fostered physical and social isolation for ages, the tribal communities have developed their own traditional mode of living" (Raza and Ahmad, 1990).

In the process of coping with the prevalent conditions of Nature, the tribals have developed certain cultural strategies. Both Nature and culture have played their respective roles in the dynamics of adaptation. In such cases the balancing has been made, depending on Nature on the one hand and the need on the other.

Study on relationship between man and the total environment has been of interest to many social scientists for long. The early investigators were taken aback by the ways in which cultures adapted to the unique features of the local environment. Hence the concept of geographical determinism played a key role.

Thus, the physical features including the natural resources, climate, and geography were considered to be the determining factors of culture. Thereby determinism rejected tradition and history, social and economic factors and other aspects of culture as explanations of social development. Exclusion of such features brought down the theoretical premises of determinism. The onset of first hand field reports brought in convincing evidence of the variations in cultural patterns. In course of time, determinism paved the way for environmental possibilism. This is diametrically opposed to determinist theory. The possibilists held that habitat acts only to create possibilities from which man may choose. In its most extreme form possibilism rejected even environmental influence on the form that the choice took. Contemporary environmentalists recognize that physical

surroundings are only a part of a total environment with which the social and economic factors, cultural tradition and reciprocal influences between societies and their environments act in proper form.

A part from the possibilist theory, there emerged the notion of "Culture Circle" in Germany. In general, a culture circle is understood to be a culture complex which embraces all the essential categories of human life economic, social, political, aesthetic, ethical and religious aspects. This concept has further been developed both theoretically and practically on the basis of data, giving rise to clarity in understanding. "The term circle is used to indicate that it runs the whole gamut of human thought and activity and that like a circle returning into itself. It is sufficient unto itself and therefore has independent existence. It is not a disconnected and accidental whole, the various parts of which mutually influence each other" (Sieber and Mueller, 1950).

In order to classify the culture circles one needs to have a reasonably wide knowledge and proper understanding of the ethnological data from almost all over the world, atleast in representative forms. Then four criteria of comparison, viz; quality, quantity, continuity and degree of relationship, are to be applied. The fundamental principle here is that origin of any cultural element can only be explained by the ideas and circumstances of the sphere of culture to which it belongs. The categories of culture circle are:

- ♦ Primary culture circle of the primitive food gatherers
- ♦ Secondary culture circle of the early food producers
- Tertiary culture circle at the dawn of written history
- Quaternary culture circle of later period, i.e. post-tertiary culture circle.

However, no culture circles could be established as theoretically argued. The shortcomings of the theory are revealed both in its premises and methods. Although no explanations were given to account for the cause, but some insights were appended in the process of diffusion and migration. Arguments both in favour and against of this, the theoretical issue are still being continued. Fred Voget otherwise very critical of the culture

historians of the Viennese school, yet admits that the, "...Culture-historical produced some important insights into culture process, especially as these related to culture and environment, the rule of centres in the dissemination of culture, and processes involved in the invention, acceptance, modification and rejection of alien form" (Voget, 1965).

At present, probably, the anthropologists will not disagree that environment is an important conditioner of culture. The potentialities of a particular habitat can be seen to be reflected in the subsistence pattern, the material culture and by extension, in the social and religious aspects of the culture which are being utilized and exploited. In view of such circumstance environment and culture, even to the basic level of subsistence has been attempted to integrate. The primary point of interaction between a culture and its environment is in terms of subsistence and the most vital aspect of environment from the point of view of culture is its suitability for food production until the discovery of agriculture: this was relatively equal over the major portion of the earth's surface (Forde, 1934).

At one time man's relationship with Nature was determined by fear and awe, because of initial expositions and lack of experiences. Man felt himself weak and helpless in front of the mighty powers of Nature. With the process of hominization (Ghosh and Sen,1984) facilitated by consciousness, erect pose, bi-pedalism, freeing of hands, grip mechanics of fingers etc., made it possible to exploit the external energy sources of Nature. The development was followed in continuity with acceleration with the use of tools from simple stones to slings and in furtherance. with spears, bows and arrows and many other weapons etc. For the possession of language man stores experiences in memory and communicates them from generation to generation. As a result man can learn to modify his habitat to his advantage in many ways. Man could clear the forests, cultivate the land, plant the right types of crops man wanted, domesticate specific animals. Thus, change over in many sectors went on for a long time. The total product of development may be considered as the cumulative product.

The natural increase of human population multiplied the magnitude of man's impact on environment. His cultural development opened new vistas and accelerated the power of altering the environment. The expanding technologies have further speeded up and brought about substantial variations of the environment. With the apt combination of man and his culture, a matrix was developed in which adaptations and / or adjustments turned to be crucial issues. The total structure with its basic foundation and development thereof brought forth the concept and consideration of ecology or ecological studies. Perhaps for all major discoveries and even inventions, need of acute Nature, related to sustenance or survival, act as the prime factor. In coping with needs the mechanism of adjustment was developed. The needs are so intrinsic that they may be termed as crises which are only "mother of invention" but the very way to survive.

Prior to the emergence of ecological explanations, there were two prominent approaches to the question of relation between human societies and their environments. The first one was the environmental or geographical determinism. It arose as a reaction to Darwin's theory; eventually some anthropologists turned to environmental determinism as a mechanism for explanation. The earliest attempts at environmental determinism mapped cultural features of human populations according to environmental information; and thus correlations were drawn between natural features and human technologies. The roots of environmental determinism were in the theory of 'humours' proposed by Hippocrates. He held that physical qualities of a region like climate, topography, resources etc., are primarily, if not exclusively, responsible for a people's culture.

Among the environmental factors, climate was considered to be the cause for humours in many for the varying abilities of people, for strength and weakness of body and mind and for the development and persistence of socio-political institutions. The second approach to the question of human society and environment was termed possibilism. The possibilists held that environment may limit, but does not directly cause variation. Hence' different cultures can occur in the same environment

depending upon the possibilities and potentialities. The most important early anthropologists were Franz Boaz and Alfred Kroeber; they adopted an environmental possibilism position. Their contention was that the natural environment sets certain possibilities or options from which cultures, conditioned by their history and particular customs can choose. It is considered to be a compromise between cultural and environmental determinism. Environmental possibilism in many ways marks an important paradigm shift from a deterministic perspective to an interactive approach.

Understanding Ecology in Relation to Human Society

Although the term 'ecology' gained currency in 19th century onwards, the ecological ideas were deep-rooted in human history. The relationship between organism and environment was there in almost all human interactions. The beginning of "Ecology" in latent form did not continue. For its importance as a subject, as well as for the interest of the scholars, the particular concept of ecology attained the status of a discipline. Ecosystem tends toward maturity or stability and in doing so they pass from a less complex to a more complex state. This directional change is called succession. The major functional unit of the ecosystem is the population. It occupies certain functional niche, related to its role in energy flow and nutrient cycling. Both the environment and the amount of energy fixation in any given ecosystem are always or in most of the cases, limited. When a population reaches the limits imposed by the ecosystem its numbers must stabilize or failing this decline from disease, starvation, strife, low production or other behavioural and physiological reactions. Changes and fluctuations in the environment represent selective pressure upon the population to which it must adjust. The ecosystem is provided with historical aspects as the present is related to the past and the future to the present. Thus, ecosystem is the one concept that unifies plant and animal ecology, population dynamics, behaviour and evolution.

The concept of ecology in relation to human beings can be considered as an attempt of adaptation to environment. To distinguish it from other concepts of biological, human and social

ecology, the term cultural ecology is used. Cultural ecology supplements the usual historical approach to Anthropology in order to determine the creative processes involved in the adaptation of culture to its environment.

Then the principal meaning of ecology is "adaptation to environment". Since the time of Darwin, environment has been conceived as the total web of life wherein all plant and animal species interact with one another. This generally takes place in a particular unit of territory in which there are special geo-physical and climatic features. The biological meaning of ecology is the mutual relations between organism and their environment. Although initially employed with reference to biotic assemblages the concept of ecology has naturally been extended to include human beings since they are part of the web of life in most parts of the world. Man enters into the ecological network not merely as another organism which is related to other organisms in terms of his physical characteristics. He introduces the super-organic factor of culture which also affects and is being affected by the total scheme of life. What to do about this cultural factor in ecological studies has raised many methodological difficulties. There is not much clarity of the term. The interaction of physical, biological and cultural features within the locale or unit of territory is usually the ultimate objective of study. Human or social ecology may be considered as a sub-discipline or an operational tool to understand man as a purely biological species along with effect on culture for adaptation to environment.

The term "human ecology" is concerned with total human being, with the inclusion of biological and socio-cultural characteristics. In the context of human ecology, the interactions and interdependence between biological and socio-cultural considerations are provided with fundamental importance. "Cultural ecology" is only included in the perspective of man. But here too, the biological considerations cannot be totally neglected. Finally "Social ecology" deals with somewhat non-materialistic forms of behaviour. In connection with the same principles of social ecology govern the biological structure and functions.

Cultural ecology is an adaptive process that explains culture. Historical explanations of culture employ the concept of culture area. The culture area is a construct of behavioural uniformities which occur within an area of environmental uniformities. It is assumed that cultural and natural areas are generally coterminous because the culture represents an adjustment to the particular environment. In cultural-historical approach the emphasis is not on ecology; environment is relegated to a purely secondary and passive role. It is considered either prohibitive or permissive, but not creative. It allows man to carry on some kinds of activities and it prevents others. But the cultural-ecological adaptations constitute creative processes. When a new skill, technique or use is acquired, it alters the relations with organisms and changes man's position in the biotic community.

Steward proposed focusing on that part of culture as culture core which he saw as most immediately connected to the physical world that is the subsistence or productive strategies within a culture. Over time and history the culture core evolved largely. in response to the relevant parts of the particular or effective environment. Furthermore the cultural core, as a cultural trait might, in turn, shape other cultural features like the social organization. The idea of the culture core therefore stipulates an interactive role for both environment and culture in shaping culture change. Steward held that cultures interact with their environmental settings through a process of adaptation. Since the 1930s, Julian Steward has carried out a number of studies. His main theoretical explanation was about the clan organization of the South Western Society. He found that "the emergence of partrilineal clans of the Yuman tribes and the matrilineal clans of the Pueblo can entirely be understandable in ecological terms" (1937). Later, Steward called this phenomenon as 'cultural ecology' (Steward, 1955) and elaborated the scheme. Steward points out that "Cultural ecology is the study of the process by which a society adapts to its environment" (Steward, 1968). Cultural ecology focused attention not for the limits or simple determinants but on the environment as presenting adaptive problems and opportunities. It is the adaptive processes that shape cultures to achieve patterns that are best suited to a given environment. The effect of environment on culture depends on existing socio-cultural features that any particular human population brings with it. These innovations in cultural ecology have many important implications for understanding relationship between environment and socio-cultural variations.

Theoretical Orientations on the Study of Ecology

Orlove (1980) has reviewed the major attempts on Ecological Anthropology. He has classified the different approaches into a series of three stages. Each stage is a reaction to the previous one. The first stage is characterized by the works of Steward (1955) and White (1959). However, the emergence of Ecological Anthropology owes it to the cultural evolutionism associated with Tylor (1871), Morgan (1877) and others in the 19th century. All these writers held the view that all cultures could be placed in a small number of stages and that cultures tended to move through these stages in a relatively fixed sequence. Boas (1888) questioned the unilinearity of the evolutionary schemes and the assumption of progress inherent in evolution. The same school is termed as the Boasian school of historical particularism.

As an intellectual endeavour contemporary Ecological Anthropology can be clearly attributed to two individuals, Julian Steward and Leslie White. Steward developed the cultural ecology paradigm and introduced the idea of the culture core. He studied the Shoshone of the Great Basin and noted that they were hunter-gatherers heavily dependent on the pinon nut tree. Steward demonstrated that lower population densities exist in areas, where the tree is sparsely distributed, thus illustrating the direct relationship between resource base and population density. He was also interested in the expression of this relationship in regard to water availability and management. His ideas on cultural ecology were also influenced by studies of South American indigenous groups. Steward's (1955), "method of cultural ecology" demonstrates materialist emphasis. This method entails the study of the relation between certain features of the environment and certain traits of culture possessed by the sets of people living in that environment. Within the environment

Steward emphasized the quality, quantity and distribution of resources. The aspects of culture that he examined most closely were technology, economic arrangements, social organization and demography, although he included other, aspects as well. He stressed the fact that environment influenced only certain elements of a culture, which he termed the "culture core". He was interested in finding "regularities" or similarities between cultures that recur in historically separate or distinct areas or traditions and which may be explained as a result of similar environmental features. These regularities are analytically similar to individual lines of change which he examined in his approach to multilinear evolution. By introducing the concept of "level of socio-cultural integration", he began efforts to integrate the study of small scale tribal isolates with that of complex society and large socio-political units. Steward's theories are presently regarded as examples of specific evolution, where cross-cultural regularities exist due to the presence of similar environments. He was interested in the comparative method in order to discover—the laws of cultural phenomena (Barfield, 1997).

Leslie White (1959) made a sharp break with the Boasians. White shared Steward's emphasis on culture as the unit of analysis and his interest in cultural evolution. White was more concerned with the broad details of evolution than with specific adaptations. His main concern was with the process of general evolution and he is best known for his strict materialist approach. He emphasized levels of energy use as the determinant of cultural evolution. He held that evolution of culture increases as does energy use per capita. Since hominid times, man has continued to harness more energy. This results in cultural evolution. White describes a process of universal evolution in which all cultures of the earth evolve along a certain course in the measure of energy expenditure per capita. In comparison, Steward only claims to see regularities cross-culturally. However, White's model of cultural evolution was unilinear and monocausal, whereas Steward admitted a number of different lines of cultural development and a number of different causal factors. The attempts to address the similarities and differences of Steward

and White mark the second stage of Ecological Anthropology. The neo-evolutionists established a series of evolutionary stages and used the notions of specific and general evolution to accommodate Steward's method of cultural ecology to White's work on unilinear evolution. General evolution, which tends to be unilinear included features from Steward's work (level of integration) as well as from White's energy use per capita per year. Service (1962) dedicated his Primitive Social Organization: An Evolutionary Approach to Steward and White. The formulation of evolutionary stages in Service also shows the influence of Polanyi's (1957) notion of three types of economics, based on reciprocity, redistribution and market exchange.

In contrast, the neo-functionalists see the social organization and culture of specific populations as functional adaptations which permit the populations to exploit their environments successfully without exceeding their carrying capacity. This approach differs from other functionalist approaches in the social sciences in that the unit which is maintained is a population rather than a social order. In general, neofunctionalists explain specific aspects of social organization and culture in terms of the functions which they serve in adapting local populations to their environments. They adopt local populations rather than cultures as their units of analysis. They examine the interactions between environment and populations rather than treating the environment as a passive background which shapes culture but is not influenced by it. Their methodology is more explicit, rigorous and quantitative than earlier writers; they are concerned to adopt concepts from biological ecology such as adaptation, niche and carrying capacity.

The neofunctionalists and neoevolutionists have examined the mechanisms which link social structures and culture to the environment. They follow biological ecologists in emphasizing survival and reproduction as the goals of organisms and they therefore, emphasis population pressure as one of the principal mechanisms of change. The neoevolutionists and neofunctionalists have strong systems oriented to an earlier materialism. The latter emphasized negative feedback mechanism

linking energy use, food production and population size while the neoevolutionists stressed positive feedback mechanisms among the same variables. They developed strong interpersonal and institutional links.

Early neofunctionalist analysis of the Northwest Coast groups showed that the apparently exotic customs of the potlatch served adaptive functions by encouraging the redistribution of food from groups with a temporary surplus to those with a temporary deficit (Orans, 1975; Harris, 1977; Langdon, 1979). The second such ethnographic riddle was the sacred cattle of India (Harris, 1965, 1966; Odend'hal, 1972) other examples have appeared, the most currently famous of which is Aztec cannibalism and its purported nutritional significance (Harner, 1977; Price, 1978; Hicks, 1979).

In contrast to the work of Steward and White and the neoevolutionary and neofunctionalist schools, a third set of approach in Ecological Anthropology has started emerging in recent years. It is the processual ecological anthropology. It is also true that prior to the emergence of neo-evolutionary and neo-functional schools, there was a good deal of necessary preparation for quite some time. The initial hypothesis gave rise to theory and that too was formulated on the basis of different works and their final results. However, at times discrepancies were met with. For the purpose of proper and meaningful understanding, special attention was paid to main problems. Such efforts and exercises have definitely modified the theory with the inclusion of a number of attributes and their variations. Thus, ecology has been viewed from different perspectives, thereby varied dimensions of the concept have been found out.

Ecological Anthropology has the general characters as the common attributes of ecology as a whole. At the same time there are some special features, because of anthropological contents which are perhaps more complex and complicated. Emergence of "processual" Ecological Anthropology refers to the importance of diachronic studies in Ecological Anthropology and to the need of examining mechanisms of change. The important trends are:

- ♦ The examination of the relation of demographic variables and production systems, stimulated in part by Boserup's work
 - ♦ The response of populations to environmental stress
- ♦ The formation and consideration of adaptive strategies which follow Barth's early work on the use of the concept of niche.
- New work in Marxism including the emerging interest of anthropologists in political economy and structural Marxism.

The studies are called processual because they seek to overcome the split in the second stage of Ecological Anthropology between short and long time scales. They examine shifts and changes in individual and group activities and they focus on the mechanisms by which behaviour and external constraints influence each other. These points indicate the importance of the incorporation of decision making models into Ecological Anthropology.

The role of ecology of man or in the other way, that is the impact of man on ecology, has broadened the dimension of ecology of man. In due course ecology sets in within the fold of man and thus ecology had its footing in Anthropology. This area is quite vast by now, with the subdivisions of human ecology, cultural ecology etc., However, ecology in specific terms has been incorporated in many anthropological works. At the same time, many ideas have been floated in the area of 'Ecological Anthropology'. Ecological anthropology focuses upon the complex relations between people and their environment. Human populations have ongoing contact with and impact upon the land, climate, plant and animal species in their vicinities and these elements of their environment have reciprocal impacts on humans (Salzman and Attwood 1996).

Ecological anthropology investigates the ways that a population shapes its environment and the subsequent manners in which these relations form the population's social, economic and political life. Ecological anthropology attempts to provide a materialist explanation of human society and culture as products of adaptation to given environmental conditions. Ecological anthropology inherently opposed the notion that ideas drive all

human activities and existence. Hence, there was a turn towards study of material conditions of the environment, which have the potential to affect ideas. Furthermore, Steward was disillusioned with historical particularism and culture area approaches and he subsequently emphasized environmental influences on culture and cultural evolution. Boas and others representing historical particularism argued that cultures were unique and must not be compared. In response, Steward's methodological approach to multilinear evolution calls for a detailed comparison of a small number of cultures that were at the same level of socio-cultural integration and in similar environments, yet vastly separated geographically.

Hardesty (1987) has given the four phases of Ecological Anthropology as Cultural Ecology, Population Ecology, Systems Ecology and Ethnoecology. He recognizes the most important contribution of Steward's method of cultural ecology as significant because environment and culture are not separate spheres but are involved in dialectic interplay or what is called feedback or reciprocal causality by various scholars. This feedback is not equal. Sometimes culture plays a more active role and at times the act of the environment is dominant. Steward believed that some sectors of culture are more prone to a strong environmental relationship than other sectors. Ecological analysis could be used to explain cross-cultural similarities only in this cultural core which consists of the economic sector of the society, those features that are most closely related to subsistence activities and economic arrangements.

Steward's culture core did not include many aspects of social structure and almost no ritual behaviour. Neither of these were considered to be significantly related to environment. Furthermore Steward excluded the study of biology from cultural ecology. However, cultural ecology retained the possibilist's interest in the study of specific cultural features. Steward's goal was to explain the origin of particular cultural features and patterns which characterize different areas. His method required that detailed studies of local groups in their environment be conducted as a prerequisite for making ecological generalizations.

This focus is responsible for the present florescence of ecological studies in Anthropology.

Vayda and Rappaport (1968) see the inadequacies of the Stewardian approach. Steward's approach is to show first how a cultural feature and an environmental feature co-vary in their functional interrelationship. The same relationship recurs in historically distinct areas. Secondly, Steward has treated the cultural core as if it included only technology. Several studies show that ritual and ideology also interact with Nature. Steward's selection of environmental features for study does not include other organisms nor does it include other human groups. However, more recent applications of cultural ecology have taken "social environment" into consideration. Finally, his approach does not include the study of interaction between culture and biology, while studies show that culture and biology go hand in hand (Ghosh, 1975) in several areas such as nutrition and that one cannot understand without the other.

The study of the environmental relations of particular human groups, introduced by Steward's cultural ecology, marked the beginning of Population Ecology in Anthropology. Population Ecology is the study of those processes that affect the distribution and abundance of ecological populations. External processes affect a population's relationship with food, water, weather and other organisms among other things. By contrast internal processes include such things as behavioural, physiological and genetic responses to population density.

Steward also was interested in the interrelationship between environment and the abundance of human population with a possibilistic bend. Thus in the Great Basin, he saw population density as "correlated with the fertility of the natural environment". The possibilistic view of population abundance was also expressed by Kroeber (1939) in Cultural and Natural Area of Native North America. He drew upon earlier population estimates of North American tribes and his own estimates to support a general correlation between natural areas and population density. He concluded that other things being equal, we can infer a denser population from a richer ecology, or among

agriculturalists, from a large area of more fertile soil (Kroeber, 1939). Birdsell (1953) chose a single variable, mean annual rainfall, to represent the relevant environment. Birdsell's reasoning was that mean annual rainfall determines plant available to humans either directly through plant foods or indirectly through animal foods. Barth's (1956) study on the Pathans, Kohistanis and Gujars indicates that the environment of any one ethnic group is not only defined by natural conditions, but also by the presence and activities of the other ethnic groups on which it depends.

The publication of Clifford Geertz's Agricultural Involution (1963) was another milestone in Ecological Anthropology. His perspective is based upon the concept of the system. A system is a set of objects together with relationships between the objects and between their attributes. Instead of focusing upon reciprocal causality between two objects or processes, the system focuses upon a complex network of mutual causality. The concept of ecosystem is the logical conclusion to the idea of constant interplay between culture, biology and environment. It is a dynamic set of relationships between living and non-living things through which energy flows and materials cycle, due to which other problems of survival are worked out. Rappaport's (1967) study is concerned with energy relationships between the Tsembaga Maring farmers and the ecological system in which they participate. But they fail to explain the deviations from the equilibrium.

The studies on ecology are generally "objective" that is they study man-environment relationships from the observer's point of view. The new attempt is to study ecological relationships from the participant's point of view. It reaches what Rappaport calls 'cognized' environment, the environment that is actually perceived by a human group. Folk classifications are made so as to get at the assumptions of the people and thereby to understand them closely. Thus, a true picture about the society as the insides see it can come out by the application of this method. Ethnoecology examines mainly through linguistics how different cultures conceptualize, classify and understand their "Natural" environment including traditional environmental knowledge.

Ethnoecology may be considered as a form of adaptive management of the specific human group. In such case, there is seldom any role and impact of other culture. This appears to be natural and realistic because a group of people, may be small or large is surviving within their own cultural niche. They are used to the local resources and so they are acquainted with the mode of utilization. At the same time, the groups of people are well informed with the conveniences and inconveniences of local situation and prevailing environment. In such an apt condition, the role of ethnoecology is found in proper form. It is also true that the same circumstance is undergoing changes due to the impact of other higher culture. Ethnoecological studies are most favoured among the tribal groups who are provided with relatively primitive form of economy.

In the perspective of cultural ecology in India the study sacred cattle by Harris (1966) has made a mark. He contended that the relationship between the human and bovine populations is symbiotic rather than competitive. Under existing technoenvironmental conditions, a relatively high ratio of cattle to humans is ecologically unavoidable. Away from this only a few studies have been undertaken in the field of ecology by the Indian anthropologists. Vidyarthi (1963) has analyzed the Nature-Man-Spirit complex of the Maler of Rajamahal hills of Bihar. This was followed by a few more studies in the same trend by Verma (1977), Prasad (1988), Sandhwar (1978), Morab (1977), Chandra (1981), Mann (1981) Malhotra (1983), Bhasin (1988), Bhowmick (1988), Gadgil and Guha (1992) have given an ecological history of India. Dasgupta (1994) has presented a cultural ecological perspective on the Birjia tribes living in the Chotanagpur plateau of Bihar.

Therefore, it may be noted that there is reciprocity and an ongoing dialogue between ecology and culture. Cohen (1968) goes to the extent of stating that culture is an adaptation. Adaptation to the environment has been termed as 'cultural ecology'. Thus, there is symbiosis of ecology and culture, forming as though a single unit of behavioural patterns. In fact, environment and culture of a specific population are

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functionally inseparable units which may, perhaps be analyzed but cannot be divided. In this context the present study may be considered as the first attempt in the ecological understanding of tribal population groups living in the geo-environmental situation in the state of Tripura with regard to relation between Nature and tribal culture.

Chapter-4

Nature, Culture And Tribal Life

hrough a long history of evolution, the human race has evolved on the Earth in the womb of Mother Nature. It is believed widely that human beings possess the highest intelligence and rationality among all living beings. In the beginning, human behaviour was, by and large, governed by inner instincts and the forces of Nature in the struggle for survival. In a way, both inner and outer Nature determined all aspects of human life, including its evolution. Inevitably, ancient people lived a life that was inextricably linked with natural objects and phenomena. It was human beings close relationship with Nature, both in terms and struggle against the vagaries of Nature and peaceful co-existence with Nature that has led, through a very long period of evolution to a period of human culture and civilization (Singh, 2000). These phenomena show the continuity of human cultural tradition. Some examples of these remnants of this cultural tradition are the worship of stone boulders, caves, trees, lakes, rivers, fire, snakes and cosmic bodies- all of which are held sacred by indigenous people throughout the world. Such reverence for natural elements and objects underpins a fundamental philosophical idea that links the past to the future, in terms of natural, cultural, religious and ethnic heritage. It has bound the human race with Nature in a symbolic and mutually sustaining relationship.

Environmental history is a kind of history about human interaction with the natural world or the interaction between culture and Nature (McNeill, 2003). The main goal is to study the interaction between humans and the environment in the past and the relationships between humans and the surrounding world.

Donald Worster's (1977) definition states that "Environmental history is the interaction between human cultures and the environment in the past." It is the history of the mutual relations between humankind and the rest of Nature". It investigates the interactions between society and its physical environment, on symbolic, material and organizational levels. It opens up new perspectives for deciphering contemporary issues related to modifications of landscape, for understanding reoccurring conflicts over the allocation and protection of natural resources, as well as for grasping the complexity and historicity of the social representations and uses of the environment.

The hitherto been describing the Nature-human interface in the context of human version to the limits determined through Nature. Till the advent of agriculture the connection flanked by man and Nature was highly tilted in favour of Nature, where man was mostly the recipient of the benevolence of Nature. Apparatus of the pre-historic ages – Paleolithic, Mesolithic, or Neolithic were basically instruments of facilitation towards the benevolence of Nature. Man had to manage with the survival offered through Nature and could do little to power the procedures or patterns of Nature.

Therefore, environmental history is always about human interaction with the natural world or, to put it in another way, it studies the interaction between culture and Nature. The principal goal of environmental history is to deepen the understanding of how humans have been affected by the natural environment in the past and also how they have affected that environment and with what results (Dhanaraju, 2016). Thus, tribals are accorded with due importance in the new environmental history showing them as doers, masters and shapers of environments rather than as their passive captives in need of external redemption. Earlier works on indigenous knowledge, Fairhead and Leach (1996) have linked traditional management practices to nuanced understanding of landscapes and narratives of environmental transformation. However, rigorous historical, ecological and anthropological research combined with detailed field investigation allowed to deconstruct the colonial narratives and

convey a different environmental history that also lent support to advocates of traditional environmental management.

In this context understanding tribal perception of Nature is thus significant to understand the approach of the past people to the natural environment. Indeed, it was this perception that had shaped their world-view, including ideas and attitudes to life. The distinctive element in it was the recognition that Nature was a domain of God, an area of God's manifestation in all its flora and fauna. Accordingly, dependence on Nature for survival and economic use of natural resources became an integral part of their religo-cultural ethos.

Over and above, it was felt necessary to understand the relation between Nature and tribal culture. All this needs to be empirically verified through systematic studies. Therefore, in this study we empirically attempt to understand and analyze the relation between Nature and tribal culture at Tripura.

Social Profile of the Sample

The social background of the respondents is an important aspect of any social research. It is with the help of the social background that we can better understand the opinion and the view points of the respondents because the view points, the opinions and the attitudes are to a great extend influenced by the social characteristics of the respondents. Therefore, the quality and reliability of the responses can to a large extent be assessed by the social characteristics of the respondents. Karl Mannheim (1936) in this connection has remarked that "the opinion, statements, proportions and systems of data are not taken at their face value but are interpreted in the light of the life situation of the one who express them". It is, thus clear that our thinking is conditioned by our social experiences. This view from famous sociologists amply shows the rationale for studying the social background of the respondents in an investigation.

The form of human life is determined by the environment where he lives. In relation to the environment, age has played a very virtual role for development of personality. An individual acquires experiences through the ages. The distribution of the respondents as per age group are shown in Table – 4.1 below and (Fig-4.1)

Table - 4.1: Age Group of the Respondents

Age Group	Frequency	Percentage
60-65	19	8.96
66-70	47	22.16
71-75	82	38.67
76-80	57	26.88
80 +	07	3.30
Total	212	99.97

Source: Field Survey

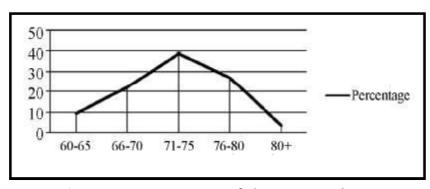


Fig. : 4.1 : Age Group of the Respondents

Out of the total 212 respondents, majority of the respondents 82, that is 38.67 percent fall in the age group between 71-75, 57 respondents, that is 26.88 percent fall in the age group 76-80. Another section of 47 respondents that is 22.16 percent fall in the age group 66-70 and 19 respondents that is 8.96 percent fall in the age group 60-65. A small section of 07 respondents, that is 3.30 percent fall in the age group 80 and above. Therefore, on the basis of the data it can be seen that majority of the respondents come from the age group between 71-75.

Table - 4.2 : Sex of the Respondents

Sex of the	Frequency	Percentage
Respondents		
Male	143	67.45
Female	69	32.54
Total	212	99.99

Regarding the sex composition of the respondents, out of the total 212 respondents, 143 that is 67.45 percent are males and 69 respondents that is 32.54 percent are females which can be seen from the Table 4.2 above and (Fig -4.2) below.

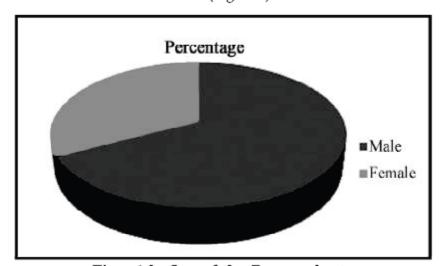


Fig. : 4.2 : Sex of the Respondents

About the marital status of the sample studied constituted that out of 212 respondents, majority of them were married which accounted for 61.32 percent. This was followed by 23.11 percent of the respondents who stated that they were widowed. And another segment that is 15.56 percent of the respondents claimed that they were separated which can be seen from the Table -4.3 and (Fig -4.3).

Table - 4.3 : Sex of the Respondents

Marital Status	Frequency	Percentage
Married	130	61.32
Widowed	49	23.11
Separated	33	15.56
Total	212	99.99

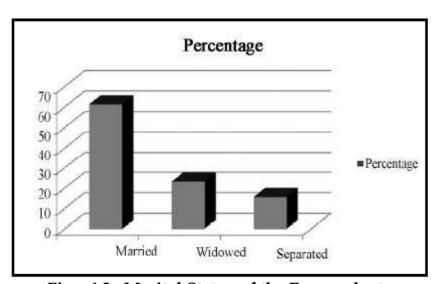


Fig.: 4.3: Marital Status of the Respondents

Regarding the religious background of the respondents, as the data in the Table 4.4 clearly reveals that majority of the respondents are Hindus, which accounted for 73.58 percent and the other segment are the followers of Christians which constituted for 26.41 percent of the respondents. This can also be seen from (Fig-4.4).

Table - 4.4: Religious Affiliation of the Respondents

Responses	Frequency	Percentage
Hindu	156	73,58
Christian	56	26.41
Total	212	99.99

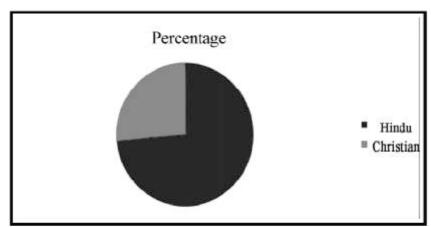


Fig.: 4.4: Religious Affiliation of the Respondents

The community background of the respondents is depicted in the Table 4.5 below and it can be seen that a considerable number of them were Tripuris which accounted for 16.03 percent. Next to them were the Jamatias who constituted 14.62 percent. This was followed by Hrangkhawl 13.67 percent, Molsom 12.73 percent and Reang 11.79 percent of the respondents. Respondents of Rupini community accounted for 9.90 percent, Kuki community 7.54 percent, Kalai community 6.60 percent, Garo community 4.24 percent and a small section of 2.83 percent of Karbong community respectively. This can also be seen from (Fig – 4.5).

Table-4.5: Community Background of the Respondents

Responses	Frequency	Percentage
Jamatia	31	14.62
Molsom	27	12.73
Hrangkhawl	29	13.67
Tripuri	34	16.03
Kalai	14	6.60
Garo	09	4.24
Kuki	16	7.54
Rupini	21	9.90
Karbong	06	2.83
Reang	25	11.79
Total	212	99.95

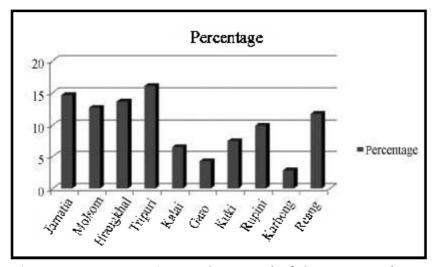


Fig.: 4.5: Community Background of the Respondents

Table 4.6 and (Fig - 4.6) below deals with the data in relation to respondents occupation. And it can be seen that 84.90 percent of the respondents reported that their occupation is Agriculture. This was followed by Government Services which accounted for 8.96 percent of the respondents. And a section of 6.13 percent of the respondents have reported as Labourers as their occupation.

Table 4.6: Occupation of the Respondents

Responses	Frequency	Percentage
Agriculture	180	84.90
Government	19	8.96
Services		
Labourers	13	6.13
Total	212	99,99

Source: Field Survey

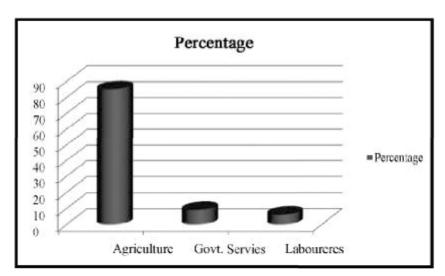


Fig. : 4.6 : Occupation of the Respondents

Tribal Life and Nature Culture Interaction - Field Situation

The ecological conditions where the tribal people live are normally characterized by the hilly and forested environment. Their mode of livelihood has led them to develop a symbiotic relationship with the environment and also evolve culture, customs, practices and social control mechanism meant to ensure their sustainable use (Walter, 2003). Therefore, tribals occupation, culture and way of life are intrinsically linked with the environment and ecological situation of the area.

Generally, tribal economic systems are focused on their traditional land use system, particularly agriculture and forestry. The economy is mainly associated with subsistence cultivation and household consumption. Their economic activities are immensely social, cultural and ritual. They live in harmony with their natural surrounding; obtaining a variety of resources from the forest, such as food, fodder, fuel wood, timber and other natural resources.

The tribal culture appears to have flourished in the lap of Nature surrounded by forest and hills. This ecological setting of the tribal habitat makes a deep impact on their life which gets adequately reflected in their economy as well as in their beliefs. The study reveals that the influence of forest is so deep-rooted in their life and culture that they cannot conceive of living away from the forest. It is because of this fact that they look to the forest as an amicable source of livelihood and the forest really helps them in every aspect of life.

The traditional tribal village was situated in the forest and on the foot-hills. All the households were made of mud-walls, wood, leaves, grass and bamboo constitute the traditional tribal villages in the state. All the raw materials for hut building were collected from the forest. In this situation the tribal life and culture seem to have originated, developed and flourished in the lap of Nature. They are dependent on the forest to such an extent that their whole life and economy revolves round the forest. The economic role of the forest in tribal life and culture may be appreciated from their following reply on one occasion that "they will not leave the forest at any cost as they felt more secure in the

surroundings of the forest because forest provides them with food, articles, shelters, drinks, raw materials for their hut-building and for such other vocations".

Tribal being basically agriculturists live in close proximity with Nature. It is during these economic pursuits that they come into close interaction with Nature. Tribals occupation and way of life are intrinsically linked with ecological situation of the area. Their basic mode of livelihood has led them to develop a symbiotic relationship with the Nature (Shimray, 2007). This study also reveals that different tribal communities obtain a variety of resources from the forest. They are also involved with a wide range of land use activities like shifting cultivation for household production and consumption. All these agro-economic systems have closely interconnected with natural forest ecosystem and with complex village ecology. A various types of land uses arising out of livelihood activities of the tribal communities under study are integral components of a landscape mosaic. The village ecology is the function of highly complex jhuming system. Therefore, the respondents revealed that livelihood manifests the intrinsic nexus of population, culture and surrounding environment and also, how people and their culture affect the environment and how the physical environment affects culture and people. Village forest has been the shelter and refuge providing the essential necessities to their livelihood. Also villages both within and on the periphery of the forest could easily avail of the forest products to meet the demand. Amongst the tribals forest is a resource for fulfilling their basic needs and derived its use as a balance productive ecosystem. Forest is a source as well as economic asset to them. Moreover, it is not merely in terms of fulfillment of basic needs, but also in terms of livelihood.

Thus, the economic activities of the tribals are closely interwoven with forest, and the economic utility of forest in their life is very important. Moving ahead it was also found that the tribals satisfy most of their requirements by exploiting the forest products. Food-gathering from the forest constitutes one of the major economic activities of the tribals in which both males and

females take part. The tribals exploit the forest and its produce to the maximum extent to meet at least their base necessities. In particular season, they devote all their time in the collection of the forest produce. From their experience, they have a very wide and through knowledge of the things available in the forest for their subsistence like edible roots, tubers, fruits, flowers, leaves, herbs, shrubs etc. Again it was also revealed by the respondents that, they have been very expert in the proper utilization of this forest produce, as they know well how these articles can easily and best be fetched and processed for human consumption. As some of the roots, tubers and leaves are bitter, sour or even poisonous (as revealed by some of the sample group) they take all precaution and care to process them before final consumption. In addition, the tribals also get a number of edible fungi (mushrooms) in rainy season and such fungi has different verities known by different tribal communities of which they call by name. Thus, fungi grow in the forest near to their habitat. In the rainy seasons at times when the food supply from the forest decreases very considerably, and at that time these fungi substitute as food and provide them some relief.

Forest not only supplies food and shelter to the tribals but forest is also a home for number of indigenous medicines. And with the help of these indigenous medicines, they keep themselves healthy and obtain cares for a number of diseases. The tribals are aware of number of roots, tubers, creepers, herbs and shrubs which are known to possess medicinal values. These are also collected by the tribals from the surrounding forests which are of great economic as well as of essential nature in their day to day life.

It was also interesting to know from the respondents that one more useful function of the forest is that, it helps as a source of personality development, as the socialization process of the tribal children depends upon the forest ecology in which they are placed. The tribal children know the various forest areas, the different ecological features, the flora and fauna and other local circumstances. They know the names and the uses of several trees, plants, creepers and herbs. The behaviour of wild animals is also

known to them. They can also climb trees of any size and height with alacrity. From this analysis it reveals that ecological base of forest life thus, moulds their personality and behaviour from childhood which helps them to adjust to different environs in the eco-system.

The study also reveals that in the past forest was a source of game by some of the respondents. Hunting has always been one of the important sources for meeting a part of their food requirement. In the past, they used to organize hunting expeditions, but now the scope of hunting has been lessened considerably due to scarcity of game and by the imposition of forest rules.

From cradle to grave the tribals are dependent on the forest for something or the other, as forest is indispensable in the life of the tribals as a source of material equipments. The utility of forest is also very immense in supplying raw materials for their craft and other things. The link between forest and the local economy is adequately reflected in their livelihood patterns. From the respondents it was revealed that among the tribals in Tripura, Non-timber forest products constitute a significant household economic component. Thatch and grass was mainly used for the roof. Creepers and climbers are good for making ropes. Other Non-timber forest products like wild plants, mushrooms, honey, herbs and shrubs are used for household consumption. The respondents also revealed earlier every household in the village uses firewood for cooking and the firewood was carried home from the forest in a bamboo-made basket by both women and children. Bamboo is widely utilized in different kinds of activities such as roofing, fencing and making basket and mats. Also, the bamboo-shoot is one of the delicacy amongst all the tribals at Tripura.

The utility of bamboo is also very immense in the life of the tribals and few respondents even revealed that bamboo, the forest resource are the friend of the tribal people. With bamboo they make different baskets which they need throughout their life. The Molsom respondents have mentioned baskets such as *Bam* to carry rice, paddy etc; *Tuikok* to carry pots; *Kaichaning* to carry

Jhum seeds; *Rebom* to keep hen and other bamboo made articles like *Lakhu* the rain shield, *Reloi* the bamboo plate for drying crops, *Wareng* the hammock, *Chalphu* the small conical basket used for preparing alkaline water, *Shei* the local Javelin, *Rhal Phel* the bow and arrow etc are all made of bamboo. Again the Tripuri respondents have also mentioned some of the different bamboo items that are used by them like *Khutruk* (one kind of big basket), *Choka* (one kind of fishtrap), *Takhuk* (cage for hens), *Kapai* (preventing Ox, cow from eating), *Bailing* (for winnowing paddy or rice), *Khwtwidula* (cotton basket), *Khum Khali* (flower basket), *Dapa* (hukka), *Yamphra* (small bamboo mat), *Hatrai* (pot seat), *Ri Thanti* (set of cloth weaving), *Bem*, *Samtisomna*, *Tuikok*, *Rabu-Rakol* etc.

Among the different tribal communities bamboo one of the forest products has got in one's life the significant rituals pertaining to three important stages, i.e., the birth, marriage and death. The following are some of the instances of the use of bamboo during the birth ceremony. Among the Hranghkhawl respondents the response was that after the child is born the umbilical cord is cut with a sharp sliced bamboo or ngaithim and then it is wrapped with banana leaf and thrown in the forest. A simple wedding ceremony of the tribal communities is that the marriage place is decorated with bamboo and the bride and bridegroom are made to sit on bamboo mat according to their custom. Thwibwl or a bamboo is used for serving Zu (rice beer) at the time of marriage said by the Hrangkhawl respondents. The instances of the use of bamboo is also very evident in the death ceremonies of the tribal communities under study where the use of bamboo mat is required. Bamboo is also used for carrying the dead body to the funeral pyre. Funeral pyre is again prepared with bamboo and wood.

Among the tribals, it is a traditional practice to reserve forests in the immediate surroundings of the village and such forests are never cleared for cultivation purposes but are used as a conveniently accessible source for the collection of materials for domestic requirements. A well-defined season and days for extraction of forest products like bamboo, timber, fruits and leaves

are maintained. Such traditional knowledge regulates the extraction of forest produce among the tribals. This made us to find out from our respondents that does change of seasons have any special significance with their culture. And in response we are putting fourth here by our Hrangkhwl respondents response about the above query.

Among the Hrangkhawls they name the seasons by the changing phenomenon in the forest. The six seasons are - *Phalbi-Spring, Sal* - Dry season, *Fur* - Summer, *Zar* - Harvest-onset, *Fucung* - Autumn, *Bolzoi* - Harvest - end. It was also interesting to know from the respondents when they narrated few instances by saying that - until the wild black berries start blooming they can still clear the forest for jhum cultivation, therefore, the black berry flower serves as an indicator for clearing of forest. Again when lots of mango flower blooms, the Hrangkhawl predict that there will be heavy storm/strong wind. When the trees bear a fruit it indicates that summer is here and so on.

Ramakrishnan (1992) who worked extensively in the northeast region pointed out that shifting cultivation constituted the earliest form of agriculture and provided the basic needs of man and placed him in harmony with 'Nature'. The practice of shifting cultivation or jhumming for the tribals is not merely a subsistence. agricultural activity, but is closely linked with social life, customs, the polity and religious practice. Studies of jhumming showed that the jhumias (shifting cultivators) are strongly influenced by their customary and cultural traditions (Saha, 1978). The tribals experience proves that for the past generations they have not only depended but also sustainably managed the biodiversity that contributes towards their subsistence livelihood needs. In this background we have tried to uncover the importance of shifting cultivations among our respondents which the different tribal communities practice by their own indigenous name like huk by the borok communities, Lwi by the Hrangkhawl community, Lau among the Molsom and so on. In this study the nature of jhum cultivation by the Molsom is detailed below to understand the tribe-Nature relationship.

Traditional method of agriculture of the Molsom namely shifting cultivation is done in the slopes of the hills. This system of cultivation in Molsom is known as *Lau* and is well known as *jhum* and the cultivator as *jhumia* in the state. After one season of cultivation a jhum field is to be left fellow for a successive period of nine to ten years especially in Tripura for regeneration of forests which ultimately help the land to regain productivity. This system is known as *jhum-cycle*. During jhum-cycle the jhumias shift to another place for new jhum land and hence the system is known as shifting cultivation. A shift in the jhum land results, in most cases, a shift of the homestead area too. Because, the jhum cultivation is highly land extensive. A small group of people have to cultivate a broad area for fulfilling their economic demand. To promote easy communication from homestead area to jhum field, the settlement area shifts along with shifting of jhum areas.

In jhum economy the land is primarily owned by the group as a whole and is kept under the control of the village chief. The possession of a group on a particular jhum land is mostly temporary in nature. The jhum area which is possessed by a particular group may be occupied by another after the jhum-cycle and the latter group may also be of another tribe.

The jhum cultivation of the Molsom consists of many phases such as site selection, jungle cutting, setting of fire, clearing of debris, seed sowing, weeding, watching, harvesting etc. Mainly three tools or equipments are used in jhum cultivation namely, hand chopper locally known as *chemlu* which consist of an iron blade with two sharp working end one at side and other at tip; for handling an wooden handle is attached to the blade. *Kaichaning* a small basket used for keeping seeds and sickles.

Generally during winter in November-December a broad area is selected by the village-chief accompanied by some old villagers. Preference is given to a place where plenty of hill slopes are there and which is nearer to the homestead area. A bamboo forest area is also preferred as, according to their experience, it is more fertile.

The area of each group is demarcated by natural marks like big tree, stream, river etc. After selecting a particular area many cross-mark made of bamboo splits known as *thorba* are put on the border line of the area which indicate the possession of some body on that area.

Site selection, both in group and individual level, is followed by some magico-religious tests. The test for the village level selection is done by the *Awchai* and that in household level is done by the household head. Two bamboo splits are dropped from above in favour of a particular site or plot of land.

The bushes, bamboos shrubs and other wild growth on the selected land are cut down by hand chopper. This jungle cutting is known as law out. The uprooted jungles are left on the field to dry up for about a month which is known as *pemphau*. Fire is set on the pithless jungles usually in the evening which is locally known as lau hal. The fire continues for two or three days and only males participate in the job. During jhum-fire some magical practices are observed. Mustard seed, ghila, a local seed and alkaline water (chaltui) are sprinkled on the field with a view to drive out the evil spirits. *Minuthappa* is worshipped as a protective measure against mishaps like injury from the quill of porcupine or the bite of reptile. At home women sprinkle water and place hand-fans on the courtyards with a view to relieve the mother earth from the burning sensation. Un-burnt debris are collected and set on fire which is known as sangrukhom. The ashes remain on the field and are used as manures.

In the first part of summer in April-May, after a few showers when the soil becomes loamy, the seed showing starts. If there is a continues spell of drought in the summer the *Tui Pathen* is worshiped for rain. After the seeds have germinated and the plants have grown to a certain length, the weeds are uprooted from the field. Weeding is done four times in a season.

When cornstalks grow, these are protected from birds and wild animals. A watch house known as *Kaireng* is built up on a tree or in the top of hillock within the jhum-field. A number of bamboo made small instrument for producing sound which is locally known as *role roki hem* are erected here and there on the field and are connected by a long rope with pillar of the watch house.

The crops are harvested as and when they ripen. Reaping of paddy, locally known as *song* at constitutes the major harvesting

activity. A rite locally known as *sakum phai* is observed before the start of harvesting activities. For *Sakum Phai* a paddy plant is uprooted from the jhum field and is taken to the village where it is worshiped by sacrificing a hen. Many bunches are made from the reaped paddy shoots and those are kept on the field for two or three days. After that threshing is done on a funnel shaped big basket locally known as *Jeo Bem*. The carrying of paddy from watch house to village is known as *Sang Rithak*. In the village paddy grains are stored in small granary known as *Dal* which are constructed separately for the respective households. In the past, paddy used to be stored in warehouse locally known as *Sapang*. Nowadays the use of *Sapang* is out of practice. Other crops are harvested as and when they ripen.

Both male and female members take part in harvesting. A ceremony known as *Sarbingor* is observed when new crops are cooked and eaten for the first time. In *Sarbingor* the *Minuthhapa* deity is worshipped after sun rise by sacrificing two hens. Boiled jhum rice is offered on the tip of a banana leaf. Some jhum rice kept in an earthern pot or bamboo pot and preserved in the house. This rice pot is locally known as *Sairibing* and is worshipped on every full moon day for producing better crops in jhum. This practice of keeping the rice pot is found also among the Tripuris and, they call it *Mailuma*.

In every sphere of jhum cultivation, the mutual exchange of labour locally known as *Ron* takes place as and when necessary. For all the tribal communities under this study have said that in the jhum field, the speed and unity of team work is maintained by humming or singing a rhythmic song. And two such songs mentioned by our Jamatia and Tripuri community respondents go in this way -

"OOOO- Hapengisa Kwtalo, chwng Mai Kaine phaio, Toksa Tolovilik chwngno Nogoi Pung W, Phaibaidi Bayarok, phai baidi chalairok, Chwng Mai Kailainai"

We came to saw seed in the new Jhum,

Birds chirp seeing us, Come friends, come friends We shall sow seed......

"Phaidi Phaidi haba thangnani Phaidi Phaidi hugu thanani O chini samung tangnairok Yago da borok twidi Chango Ri-Kwrak Khadi"

Come let's go in the harvesting field Come let's go in paddy field O dear villagers Take in the hands knife Wear dresses and get ready

Edward Taylor, opined that a major theory of the origins of religion is animism. It is a belief in the existence of a free, psychic and invisible soul in men, animals and trees and even in inanimate objects like rivers, mountains, etc and natural phenomena. Its origin and purposes, beliefs and rituals may differ from one religion to another, but the aim of religion is the same in all to satisfy psychological and social needs common to all people (Bhagawati, 2004).

This made us inquisitive to know from our respondents that does their religion have any connection with the Nature. In response we came to understand that they have an undying faith and commitment towards Nature. They value Nature or the environment around so much that they sometimes fail to identify themselves in absence of Nature. They view man, god, Nature as complimentary to one another. All these three, they believe, are of divine origin. In this connection, each and everything around them possesses both intrinsic and instrumental values and are of great importance.

Further it was also mentioned by the respondents that one of the most important features of their religion is that it does not conceive of any dichotomy between the sacred and the secular. Everything is considered as sacred as they are created by God and belong to God and they conceive of a perfect unity between god, human and Nature. Therefore, in response it came forward that they cannot conceive of any one of them separately. As a result human cannot be conceived as separated from Nature and thus Nature cannot be conceived as other to human. Human, animal, Nature, the earth, the sun, the moon and all belong to a continuum and form a natural- if cosmic - moral community and almost every activity is connected with rites, rituals or taking omen with their belief in the supernatural beings guidance and blessing in context with the natural world. Thus, the religious beliefs of the tribals exhibit their close link with Nature. They hold natural objects like forests, hills and rivers to be the best abode of gods and spirits. Hence, Nature is considered as sacred. Tribals of Tripura also have evolved the concept of sacred groves apparently due to religious beliefs, for fear and respect for god and ancestral spirits. It served as the place of worship and performance of religious rituals as well as socio-cultural and religious interaction. Thus, the tribal communities believed that God resides in Nature and it automatically becomes their bounded moral obligation and responsibility to see that groves and forests are not violated. As a result certain groves have always been considered sacred.

Recorded history reveals that man has been living in harmony with Nature in order to manage his environment and improve his well being. Indigenous people who remain in traditional homelands still possess valuable ecological wisdom and remain the guardian of little disturbed habitats that are the refuge for rare and endangered species and undamaged ecosystems (Cunningham and Saigo, 1999). The tribal communities under study also expressed that they never exploited Nature or extracted too much from it. They never even considered Nature economically but only as the sustaining agent. In fact such a way of looking at Nature cannot be termed exploitation of Nature but more appropriately being sustained by Nature.

With such a focal vision ingrained with them that they never felt the need of separating themselves from the natural environment. Thus, for them there is an incessant effort to draw every meaning and every value from Nature and as a consequence a significant section of the respondents revealed that they cannot be considered as self-sufficient, if they is viewed apart from the Nature. If they have to know themselves, then they have to situate themselves in the larger perspective of Nature. Thus, in this context it could be said that the tribal communities has never viewed Nature as a system blind, mechanical against them but living spiritual and subjective experiences give meaning to their existence with the Nature.

Thus, it can be said here that as revealed by our respondents, traditionally they always hold Nature in great reverence by saying Nature is beautiful, kind and generous. They understood the importance of forests, as the forests play a fundamental role in social, cultural, economic and in maintaining its ecological balance. Forests are the resource base for nourishment of their population and a storehouse of all plants and animals and they were only using the natural resources for their sustenances and not for commercial purposes which they claim rightly by saying that they were the Nature worshippers.

Understanding tribal perception of Nature is thus significant to understand the approach of the tribals to the Natural environment. Indeed, it was this perception that had shaped their world-view, including ideas and attitudes to life which was revealed by the respondents in this study. The distinctive element in it was the recognition that Nature was a domain of God, an area of God's manifestation in all its flora and fauna. Accordingly, the dependence on Nature for survival and economic use of natural resources became an integral part of their religo-cultural ethos.

Thus, their fascination for hills, forests and soil as essential components for developing settlement. Infact, all the past symbols of the tribal identity like gods and goddesses, totem, fairs and festivals including numerous other beliefs and practices are related to Nature. So Nature not only provides the context but also act as an important variable for the formation of tribal identity.

The long association with forest and Nature at large includes tribals of Tripura to evolve an eco-centric belief system. Living in close proximity with Nature has made them feel to be part and parcel of it. Hence, the respondents have revealed that they have developed a bio-centric ethical attitude of respect for the natural objects - the mountains, rocks, streams, forest, plants and animals assuming that they have an equal inherent worth within the natural network. It was also revealed that, this is implied in their myths, religious ideas and rituals, festivals and social institutions.

The next query was on how Nature is related with their myths, and in response it was put forth that creation of myths among the tribals relate in a very clear manner how the earth, plants, man and animals are created by God, as well as how the symbiotic relation between the spirits, man and Nature at large is preserved. Some of the tribal myth also narrates some such story with a little variation in the order of creation. Symbolic in character as the myths are, their truth lies in the idea they seek to convey. The various myths expressed by the different tribal communities under study reveals that they belief human beings are the product of the same creative process as the other objects of the Nature are, and hence they are one among them, the part and parcel of the greater Nature. However, what is important is that these oral traditions bring to the fore the inherent beliefs of the tribal communities, that animals, plants are an inseparable part of the human community. All their activities are guided by this belief that maintaining harmonious relation with all these elements of Nature is crucial for the well being of the human community and of the environment as a whole.

Tribals growing up amidst Nature receive support and sustenance from it. The knowledge about Nature is, therefore, a must for the tribals to live in this world was revealed by the respondents. Nature is perceived as dynamic and every element is supposed to be bubbling and thriving with life. In their songs they can decipher a set of themes in which one is Nature itself and its environment. The description is made either objectively or symbolically. Every sound produced by

Nature adds upto the body of music in quality and values. Nature is the greatest teacher of mankind and the tribals, being a part and parcel of it, automatically learns and derives musical inspiration from it. The portrayal of Nature is usually made in relation to its quality, beauty, sacredness, economic value and social relationship.

As it was also revealed by many respondents that one of the major theme of their songs is based on the physical feature of Nature, that is the landscape and the place of their habitation. In these songs there is detailed description of hills and mountains, valleys, lakes, streams, rivers, rock and grassland etc. Another theme is derived from eco-environment, that is, from weather and climatic environment. Even in their songs the respondents have mentioned that some songs are also based on the floral environment and these songs express the joy, beauty and mood of an individual. Fauna or animal world is also another important themes of their songs as mentioned by some respondents, as wide reference is found in their songs on animals, birds, insects. Reference are also made of the cosmic world that is the sun, the moon and the stars in their songs.

From this above analysis it is very clear that the tribals love songs and music which revolves round the Nature. From time immemorial, the tribals have their own indigenous musical instruments also for their songs and musics. All the respondents have said that they make an extensive use of bamboo and wood in their indigenous musical instrument. To mention some of their musical instrument based on forest are – Khong, Dhakri, Chongpreng, Sarinda, Ditra, Sukmul, Tui thwi, Daangdul, Rosen, Thwikung etc.

The festivals of the tribals closely follow the natural and annual agricultural cycles which illustrate the cultural link of the tribals with Nature. Most of their festivals are observed either before the sawing season or after the harvesting is over. As mentioned by the respondents one such festival is *Goriya* Puja which is performed for good harvest. These festivals are observed to invoke the blessings of Gods and spirits to increase the fertility of the fields, to protect the crops from natural calamities and for

thanksgiving to the village and God for the well-being of the tribe. Here we would like to mention some of such festivals as mentioned by our Hrangkhawl respondents and the festivals are Khawser, Khawkhar and Kumvwi. In all these celebrations during these festivals, forest resources like bamboo and banana leaps are the main materials apart from other green leafs, snails, cotton, sesame etc. The other respondents from the other tribal communities have also responded in a similar manner. Therefore, the ceremonies and rituals illustrate that Nature, culture and production of life are inseparable domains among the tribal communities under the study. Tradition and wisdom which are the properties of the tribal communities and specific to their ecosystem, have evolved through human-Nature interaction was revealed by the respondents. Ecological sustainability over a period is also related to the interactions between the tribal communities and their habitat in a given ecosystem which is central to ecological sustainability. Thus, the ceremonies and rituals illustrate that Nature, culture and production of life are inseparable domains among the Tribals. Tradition and wisdom, which are properties of the communities' specific to their ecosystems, have evolved through human-Nature interactions. Ecological sustainability over a period is also related to the interactions between the human occupants and the habitat. The roles that men and women play in a given ecosystem are central to ecological sustainability.

As one looks into the world view of most of the tribal communities, one is aware that human, Nature and the rest of creature form a kind of unity and therefore are not separated from each other. Rather it is believed that humans, animals, the earth, Nature, the sun and the moon belong to a continuum of a moral community (Miri, 2001). This led us to enquiry from our respondents that whether they have any moral obligations which are associated with Nature and their culture. And in response it was revealed that human – Nature relation or respect for Nature forms part of the cultural practices and belief which is very much connected with their tradition, custom etc. Further it was also revealed by the respondents that they are

not that concerned with the development or environmental ethics as far as human relationship with the environment or Nature is concerned. They are rather more concerned with the sensibility and desire to live righteously and harmoniously with all other creatures and this become their ethical code as well.

For all the tribal communities under study, Nature is invested with a mystical, religious quality. All elements in Nature, the animals, plants, rivers, mountains have religious significance and must therefore be treated with respect. The tribal man considered Nature as something to be in harmony with, the preservation and conservation of which meant life for himself and his community. Primal religious build closed relationship between Nature and community. It stems from the belief that Nature embodies living spiritual qualities or beings that carry the seeds of community survival (John C. Super). This understanding gives the tribal man the responsibility to take care of the environment in which they lives. This lead to the enquiry from the respondents with that of taboo in relation with Nature and their culture. And to this it was found that the belief in taboos forms an integral part of the different tribal communities under the study. The taboos are not just social prohibitions but they also have religious import, because the sample group believe that if the taboos were violated, it will invite the worth of god and spirits in the form of calamities, misfortunes like disease etc., which will not only affect the individual but the whole community. Belief in certain avoidance rules like the taboos had moral implications on the tribal communities and how one is related to his/her surrounding environment. Again it was revealed by the segment of respondents that outwardly, some taboos appear as simple prohibitions but taboos were a way of inculcating desirable behaviour among the tribe men towards certain aspects of Nature, like taboos relating to animal life, taboos relating to water to mention some. Taboos thus, prevent the tribal communities from indulging in forbidden activities detrimental to their community and their environment.

The tribals, depend on forest for their existence. Though a vast majority of the tribals are agriculturists, the most interesting aspect of tribal economy is that they do not depend on cultivation exclusively. Most of them depend on other sources as well and forest is one of the most important sources. There is no doubt that the forest area is decreasing and the tribals are often held responsible for this. In this regard, it was felt necessary to enquire from the respondents that do they have any restrictive practices for conserving Nature. And the analysis of the data from the field shows that, the ecosystem was better preserved and deforestation was not so conspicuous when the forests were under the control of the tribals. But ever since the forests were exploited commercially, it has greatly disturbed the eco-system and resulted in gradual deforestation. It is for this reason that even though the tribals cut trees, their requirements were limited that it can adversely affect the forest ecology to any great extent. Besides it was also mentioned by a section of respondents that they have their own traditional customs and regulations for which they do not cut certain types of trees, try to preserve forest trees and again grow plants. Respondents are also of the view that the tribal communities here evolved some conservation measures promoted by their environmental experience, economic needs and religious beliefs. For instance among the Jamatia communities Diakong Belong or Asha Van is one such measures.

Thus, the study reveals that the tribals are intimately related to Nature. The unified point of view that the tribes had about themselves and Nature made them look at themselves as part of Nature, belonging to Nature rather than outside of it. For the tribals, they lives with Nature and Nature lives with them.

Chapter-5

Conclusion

he study of ecology rests on the awareness of the interdependence of the bio-physical and social-cultural domains. Also, the social Nature comprises elements like population, technological culture, and non-material culture like custom and belief in relation to natural resources of the habitat. Guha (1994) points out that the ecological infrastructure (soil, water, forest, etc.) powerfully conditions the evolution and direction of human economic life, political relations and social structure. At the same time, human intervention itself reshapes the natural environment in its own "image".

Ecological approach is essential to understand the economic system of the traditional societies. This perception has been drawn from various studies. Vadya and Rappaport (1965) state that relevance of ecological studies lies on how reasonably regard people's cognition in respect to environmental phenomena as part of the mechanism producing the actual physical perspective in anthropological studies which could be resolved by involving the relationship of environment, technology, population and other sectors of social and cultural life. Vadya (1973) also feels that the practices are not as the exotic expressions of essentially inexplicable cultural values or interests but rather as systematic components in the culture-carriers relations with the environment from which they draw the energy and materials upon which their lives and culture depends. Chandra (1987) understand the given ecological situation moulds the way of life for any society living in a particular condition. That is, environmental phenomena are responsible for the origin and development of the social and cultural behaviour of the society.

Often, the immediate surrounding ecology determines to a great deal the material culture of the society and also plays some role in framing the norms and the rules for various social systems. The relation of environment and cultural treasures of any society could be understood in two distinct ways. Firstly, the culture itself works as "environment" within the larger framework of culture physical environment that surrounds the people; or culture functions as part of the whole environmental system. Secondly, the environment has its deterministic value in shaping cultural behaviour (Shimray, 2007).

The essential parameter to be considered in understanding tribal ecological setting is village territory, land, forest and community. Ramakrishnan (1999) emphasizes a system of close interaction with natural forest ecosystem and its complex village ecology. The tribal villages have nearly independent system and have "ecological efficiency" and self-sufficiency within the village system. The villagers pursue their economic activities within the given village land and territory. Thus, the villagers are one of those ecological persons who mould a landscape such that there is harmony. As Gadgil and Guha (1995) called it, "ecosystem people" depend on the natural environments of their locality to meet most of their material needs.

The tribal livelihood has a strong dependence on the natural environment in which they live. To this dependence, they learned to interpret the signs of Nature evolving their social and cultural practices. No doubt, the erosion of knowledge systems directly leads to negative consequences on ecological settings and management. A change in one part can have a chain effect on others. Moreover, the erosion of local knowledge systems significantly disturbs the web of habitat ecosystem. To Kothari (1998) the introductions of market mechanisms, or government controlled institution, have affected the local traditional knowledge which in turn affected the way resources are managed. Further local community knowledge systems have been severely eroded by a variety of factors including the devaluation of traditional knowledge and practice by the modern scientific knowledge system. These changing phases in social and economic

activities among the tribals is in fact imposed a serious threat to the ecological relationships.

There is no doubt that pressure on forest has increased considerably in the recent past which has resulted into gradual decrease of forest area. A number of afforestation programmes have been taken in many areas for the development of the forests and new trees have been planted. There is no doubt that more attention is given to develop trees having great commercial value, as the importance of forests as revenue earner has increasingly been emphasized. It has been noted that most of the trees having great commercial value, which are planted under the various afforestation programmes are of little use to the tribals. In fact, such varieties of trees are planted which are often required for industries, mostly located far off from the forests. Thus, this type of development of forest cannot really help the tribals either in the context of using the forest produce or through generating new employment opportunities locally. The situation has become more acute and critical where new plants are systematically planted replacing the earlier varieties, which were required or utilized by the tribals in a number of ways to meet their various demands. Thus, the afforestation programmes have not only affected and disturbed the existing tribal economy; it could not even provide an alternative (Chaudhuri, 2003).

As the tribals are so intimately connected with the forest that they are quite aware about the utility and usefulness of various trees which should be planted under afforestation programines. Sometimes, this has developed through their close association with forest and keen observation of the forest ecology. But unfortunately, this traditional knowledge is never utilized at the time of afforestation programmes. The tribals, spend much time on collection of fuel from the forests. But often only a negligible portion of wood is left for this in the context of new afforestation programmes even though one of the objectives of the social forestry programmes is to supply fuel to the people, particularly the tribals, in the shortest possible time. There is no doubt that in this type of afforestation programme, the involvement of the people will be minimum. Thus, the afforestation programmes

have often failed to do justice to the goal of social forestry and even failed to bring the community to actively participate in the tree plantation programme. It was never realized that there are many people who need forests for their survival and worst affected were the tribals. Thus, the forest policy and afforestation programmes, if not properly made in a balanced way considering the various demands, it would not only affect the ecology, but may be a positive threat to the life and property of the persons living in and around forests.

Tribal are intimately connected with forest and various studies raveled 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. (Chaudhuri, 1986; Chaudhuri et.al.1989; Chaudhuri, 1991). In the Report of the Roy Burman Committee on Forest and Tribals, it has been noted, "It has been possible for the tribal community to subsist for generations with a reasonable standard of health because forest provided their food such as fruits, tubers, leafy vegetables, shoots, honey, flower juices, grass, game, fish, etc." Medicinal herbs and plants which they have been using for treatment of diseases and maintaining health are today the source of modern medicine. In two completed studies (Chaudhuri, 1991) related to tribal health, it has been noted the various roots and tubers available in the forest or small animals they can hunt supply a more balanced nutritional status to the tribals, but due to deforestation as most of the roots and tubers are not available in many area, the health and nutrition have been affected to the tribals. Again, in many cases, it has been noted that certain diseases may be common in certain areas but remained controlled due to certain food habits based on vegetation available locally. Forest helps to maintain a balanced ecosystem in Nature and supplied sufficient food to the people who depend on it. So any type of degradation in the forest environment is likely to affect the balance thereby adversely affecting the concerned population.

The tribals traditionally depend on forests for medicinal plants and also animal parts of which are used for the treatment of diseases. Due to environmental degradation and deforestation, many of these medicinal plants or animals are not available. Again, due to various restrictions imposed by the Forest Department on the use and exploitation of forest resources, collection of medical plants has become difficult. Besides, due to the afforestation programmes often promoted by the Forest Department and since more emphasis is given on commercial trees, medicinal plants have become difficult to get affecting the health of the tribals.

The tribals have been traditionally dependent upon the forest for their subsistence and have developed a belief system in harmony with their ecological setting. The inevitable co-relation between the Nature and the tribal people through the ages has made them an important component of the forest ecosystem, in which they maintain multipoint relationships within their habitat. The tribals are dependent on the Nature not only for their daily subsistence but more importantly they have a strong cultural and religious link with various elements of Nature. Tribals have also developed cultural traditions, religious myths, social control and taboos centering Nature in order to keep a harmony between man and Nature.

The tribals may be consider as the offspring of forests who depend on the forest for their subsistence and other economic activities. Traditionally, tribal communities were well informed about the natural resources on which they are closely dependent. There are instances from different parts of the world that the tribals apply traditional knowledge and new tools and techniques in forest management. Over the past few decades, the magnitude of tribal indigenous knowledge in managing natural resources and environment has gained increasing recognition and the present study is also no exception to this.

Forests have been inhabited by the tribal communities for hundred of thousand years and they hold the knowledge about the forest. Evidence of this is that for centuries they managed to live with the forest while fulfilling all material and spiritual requirements through adept management. And also the tribal communities are the ones more directly involved in the conservation because forests not only ensure their livelihoods but are an integral part of their ways of life, where respect for Nature is at the nucles of their culture.

With this felt need, this project work has attempted to bring out the relationship between Nature and tribal culture in Tripura. In a very short span of time, the researcher has made an honest attempt to investigate, analyze and interpret the data collected from the field. On the basis of this analysis and interpretation, the project had tried to draw out responses from the interview schedule and summarize the findings of the empirical data in an easy accessible manner.

On the basis of the empirical research undertaken, out of 212 respondents from four tribal dominated villages, most of the respondents responded, that like any other tribal group, the tribal communities here in Tripura have a very close affinity to Nature and therefore Nature is intricately linked with their life and culture. The study also disclosed that for the tribal communities in Tripura, the Nature is a well loved home and also an abode of worship all rolled into one around which their social, cultural and religious activities revolve. The study also shows that the tribal culture is filled with a rich splendour of Nature as every aspect of their culture is a mosaic of interaction with Nature. Hence, there is a close link between Nature and tribal culture and it is a matter of pride for the tribal communities under the study that till recently the moral order of mutually respecting and mutually sustaining relationship with Nature exist among them

However, at present the resourceful natural bounty of their habitat has been tremendously threatened by the ever-increasing onslaught of market forces, growing urbanization, technological marvels and with the implementation of Forest Right Act, which pose several restrictions on the tribals with the natural habitat, that is forests, as because forests are their cherished home through generations and which form a strong bond with the Nature and its surroundings. Any imbalance in the eco-system and the Nature affect the mindset of these people and therefore, any initiative for their development should not disturb this man-Nature relationship.

Thus, to conclude the present study, it can rightly be said that the ecological wisdom that the tribal communities have gathered is the result of their age-long symbiotic relations with environment and their keen observation of various forms of Nature with their culture. The tribal communities are dependent on Nature not only for their economic needs but more importantly they have a strong cultural link with the Nature. The numerous elements of natural environment in which they lived for ages molded their culture, customs and behaviours. The indelible mark that the forest had left on the tribal communities thought, belief and attitude can clearly be seen in their culture, faith and religion. Their concept of God and evil spirits, their myth, folktales and legends, their literature and poems, dance and music all centered around the Nature that is, forests, rivers, streams, rocks, hills and mountains. Nature still continues to be intimately connected to their life and has continued to play its multidimensional role in their life.

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