

Cultural Management of the Natural Resources in a Changing Perspective: A Study among the Choukhtia Bhunjia Tribe in Gariaband District, Chhattisgarh

AKANKASHA DANDVEKAR[†] & NILAKANTHA PANIGRAHI[‡]

*Department of Anthropology and Tribal Development,
Guru Ghasidas Vishwavidyalaya, Bilaspur 495009, Chhattisgarh
E-mail: akku40444@gmail.com*

KEYWORDS: Ecology. Habitat. Cultural Resources. Internal and External Interventions.

ABSTRACT: The concept of culture as understood in anthropology is concerned with both material and non-material aspects of human society. It acts as the centripetal force to influence the life and living of the people. The dynamic aspects of a culture are influenced by both internal changes in the command over resource base of the community and external interventions made by outside forces. In this process the pattern of continuity and change is largely influenced by the use and control over the management of various core values of a culture and natural resources base of a community. Keeping this in mind, an attempt is made to document the cultural management of natural resources in a changing perspective among the Choukhtia Bhunjia Tribe of Gariaband district of Chhattisgarh State. The paper is based on long field work in eight Choukhtia Bhunjia dominated villages, has attempted to understand the symbiotic relations maintained between the ecology and habitat with cultural resources of the community. The paper justifies that the ecology influences the habitat of the Choukhtia Bhunjias and their cultural resources in spite of various development interventions carried out by outside agencies in the region.

INTRODUCTION

Anthropology is the scientific study of human being from multiple perspective. Man as biological and social entity is determined by cultural dimensions (Shalins, 1960). Kroeber in his book 'Cultural and Natural Areas of Native North American' (1939) established the fact that some aspects of culture can be better understood by reference to environment. Darwin (1821) and Hooton (1931) also believed that biological differences are not purely due to natural selection and could be ascribed to the role of culture in modifying the somatic development. Boas (1911) in

his book 'The Mind of Primitive Man' emphasized both extreme 'Environmental determinism' and 'Hereditary determinism' as the scientific philosophies behind the origin and growth of human being. Kroeber in his book 'An Anthropologist Look at history' (1966) stated that "No Religion, no tool, no idea was ever produced by heredity". Several British anthropologists notably Childe (1936), Forde (1954), Richards (1939) investigated the interaction of the environment with human culture. Steward (1955) talked about the contribution of physical ecology, social ecology and cultural ecology in the development of human being.

The concept of culture as understood in anthropology in common parlance includes various

[†]Research Scholar, corresponding author

[‡]Professor

activities concerned with both material and non-material aspects of human society. It plays as the centripetal force to influence the life and living of the community. The dynamic aspects of a culture are influenced by both internal changes in the resource base of a community and external interventions made by various organizations. In this process the pattern of continuity and change of culture is largely influenced by the management of its core values and natural resource base of a community. Keeping this in mind, an attempt is made to document the cultural management of natural resources in a changing perspective among the Choukhutia Bhunjia Tribe of Gariaband district of Chhattisgarh State one of the 5th scheduled area of India. The paper based on long field work carried out in Eight Choukhutia Bhunjia dominated villages of Gariaband development Block has attempted to understand the symbiotic relations maintained between the ecology and habitat in one side and with cultural resources on the other side in the context of both internal and external interventions. The paper justifies that the ecology still influences the habitat of Choukhutia tribe, therefore the cultural resources are sustainable in spite of various development interventions carried out by outside agencies in the region.

Theoretical Interpretation

Anthropology studies man-environment relationships from a holistic perspective. Ecological anthropology a branch of anthropology aims at studying the interaction between culture and environment, consisting of behaviour components of human group's in relation to the land, water and forest resources. The development of man-nature relationships has been viewed in theories like cultural ecology, neo-evolutionism and neo-functionalism and finally processual ecological anthropology. These debates originated mainly from two broad views such as 'determinism' which emphasizes on the interaction between the environment and culture of a society and 'possibilism' (Ratzel, 1909), to study the interaction between man and his surroundings as an anthropo-geographic concept and supported the concept of 'environmental determinism'. Huntington (1915) used environmental determinism as a guiding principle, and argued that climatic conditions have

been the dominant force in the development of great civilizations all over the world. In a later period, Evans-Pritchard (1940) and Barth (1956) had illustrated the deterministic perspective, in which they established the role of ecological factors in shaping the culture, social structure and facilitated the interaction with one another. Another school of thought highlighted that the environment has a limiting factor to the development of cultural characteristics popularly known as 'Possibilism' (Kroeber, *ibid*). The work of Forde (*ibid*) was critical of large-scale culture area studies of possibility. The experimental studies of Honigman (1976) tried to bridge the gap between these two approaches through an adaptation perspective and argued that society must adopt to both cultural as well as natural influences.

Anthropology deals with ecology from adaptive and exploitative perspectives of a human population and their habitat, in which the socio-cultural life, demography and technology plays a major role (Duncan, 1959). In the history of anthropology evolutionist like Tylor (1871) and Morgan (1877) emphasized on the technological advancement which influences the cultural development. Mason (1895) emphasized on the contribution of habitat in resulting cultural diversities and distributions. In subsequent period Wissler's (1923) 'cultural area' concept emphasized the importance of environment in making food areas and thus cultural areas while Forde (*ibid*) and Kroeber (*ibid*) concept of 'cultural and natural area', Childe (*ibid*) concept of 'efficiency in food procurement' is based upon which population density and elaboration of social organization is built. Later on the ecological studies adopted similar concepts even in Archaeology (Meighan, *et.al.*, 1958). Archaeological studies considered habitat as a stimulus deterrent to technological innovation and socio-cultural development and also act as the limiting factor for cultural development (Megger, 1954). Steward (*ibid*) talked about the concept of 'Cultural ecology' refers to the adaptive processes which affect the nature of the society and acts as the basic processes of adjustment to a given environment. Therefore, in any cultural group the constellation of features are closely related to subsistence activities, economic arrangements, commands primary attention to the 'Culture core' (Steward, *ibid*).

The Human Ecology approach of Duncan and Schnore (1959) reveals the nature of ecological links to formal organization, technology and economy. The contemporary debates on natural resource management by Hardin (1968) reveals that common resources are subjected to over exploitation and emphasized the role of the State in natural resources management in the line of local communities. Olson (1965) has stressed the collective action and cooperation as the means of effective management of common property resources. Therefore, the ecological approaches are synonymously asked as 'System approach' in anthropology and its utility is expressed in terms of resolving the qualities of resource management. The Marxian anthropologist Kessing (1973) stressed on material and technological factors over the role of social organizations, rituals and belief system to understand the relationship between man and culture and out rightly rejected the cultural adaptation. Ecological theory-oriented researches in anthropology contributed by western scholars have influenced the understanding of man-environment interaction concept.

Review of Literature

Cultural ecology is the umbrella approach deals with the management of human environment interaction processes (Zimmerer, 2004). Since 1960 a range of sub-fields under this has developed. There are viz: cultural historical ecology, human ecology, system ecology and adaptive dynamics ecology. Apart from cultural ecology, the man-environment interactions have been tapped through various theories like neo-evolutionism, neo-functionalism and processed ecological anthropology.

It is commonly observed among the scheduled tribes in general and Particularly Vulnerable Tribal Groups (PVTGs) of India in particular, that their customary rights over commons are still relevant. These rights manifest in their functioning of social institutions and cultural practices. The symbiotic relationships between their customary practices and the local ecological system are unique. The local communities and their cultural ecology often encounter with alien cultural processes leading to either breeding or bleeding. With such processes, however, there emerged the production of the specific

culture as a dialectical process of dominant and dominated modes of production (Markovitz, 1977). The legitimacy of past-colonial policies of indirect rule and the post-colonial 'direct' rule by the new State, represented by dominant class and caste communities, has shaped the cultural responses despite protective constitutional provisions. Thus, customary rights and legal rights on land and forest are not free from hegemony of the people in power and the State. Although tribal economy is multi-sourced and seasonal based, most of the social scientists, policymakers and development planners consider land and land-based resources as key to economic development of the tribe. During colonial era, the National Forest Policy of 1894 regulated the rights and restrictions on the privileges previously enjoyed by tribal people (Chandra, 1970). The Indian Forest Act of 1927, and the Government of India Act of 1935 consolidated the power of the government over forest, emphasized more on revenue aspects and resource requirement for industries, commerce and military sectors. Uncontrolled and unplanned exploitation of forest resources during the period from 1854 to 1894 resulted in economic insecurities for the forest dwellers.

Household level analysis to understand 'Man-Environment' relations is a distinctive feature of cultural ecology overlapping human dimensions within geographical premises. What Brookfield (1964) called for the analysis of resources use behaviors at local ecological setups which led to the study of household, communities and villages. Netting (1993) dealt with small holders, householders: farm families and the ecology of intensive sustainable agriculture. The household level data help to understand cultural ecology which focuses on human-environment interaction- such as forest-people, people-wildlife, people-food plant and people-soil interactions (Bassett and Zimmerer, 2004). Cultural ecology related research has emphasized the role of household in tropical deforestation and secondary forest transitions, changes in agricultural environments agro-biodiversity and migration (Turner, 2001) resulted in the use of mixed-method approach incorporating qualitative field techniques such as ethnography in ecology and physical geography. Cultural ecology related studies have also used the remote sensing

images (Turner, *ibid*) shows the methodological advances in cultural ecology related studies

Objectives: (1) To highlight the socio economic status of the Choukhtutia Bhunjia tribal households in the context of development interventions made over the time. (2) To find out the type of relationships maintained between the ecology and the habitat of the Choukhtutia Bhunjia community. (3) To document the content and context of management of cultural resources of the Choukhtutia Bhunjia tribal community. (4) To justify the fact that in spite of the development interventions the forest ecology still influences the habitat of the Choukhtutia Bhunjias which has made culture sustainable and appropriate to the needs of the hour.

MATERIAL & METHODS

Choukhtutia Bhunjia tribal community lives in three community development blocks (Vikaskhand) of Gariaband district of Chhattisgarh (Census of India, 2011). The study adopted exploratory research design and collected primary data from eight villages covering a total of 404 Choukhtutia Bhunjia households in 04 Gram panchayats in Gariaband community development Blocks of Gariaband District. The distance factor of the village to the block headquarter is taken into account while selecting the villages to assess the variations in the impact of development interventions made by the Vikaskhand. Appropriate tools of Ethno-methodology were adopted to collect data along with household benchmark survey. The study is purely based on primary data of both quantitative and qualitative type collected from different stakeholders of representing the study community. The findings are presented in the form of thick descriptions and also quantifying the responses by using simple statistics. Written consent were also taken from different Government Line departments related to the study and from the Choukhtutia Bhunjia households covered in the study.

CHOUKHTUTIA BHUNJIA HOUSEHOLD: A PROFILE STUDY

One category of Choukhtutia Bhunjias are popularly known as Chinda Bhunjia living in plane areas of Nuapada district of Odisha, and have come in contact with caste people who have influenced

their life and living (Sahoo and Dash, 2015) They are basically leaving in 'Sunabeda' Plateau of Nuapada district in Odisha and are also spread in the forest dominated regions of Gariaband block of Chhattisgarh, which is adjacent to Sunabeda plateau of Odisha. Choukhtutia Bhunjia tribe is divided into 21 clan groups who enjoy the socio-cultural and natural resources available in and around the village.

TABLE 1
Distribution of study universe

Name of the village	No of HHs	Location of the village
Kopekasa	20	Villages located near to
Piperchedi	51	Block Head Quarter
Raiama	46	
Sukhriddabri	20	
Sub Total	137	
Dumerbahara	30	Villages located Far
Kergaon	22	away from Block
Kodopali	57	Head quarter
Mahuabhatha	158	
Sub Total	267	
Grand Total	404	

The composition of study population consists of 704 (49.65%) males and 714 (50.53%) females. Majority of the 893 (62.98%) population are belonging to the age-group of 18 to 45 years, while the child population belonging to 0-6 year's share 6.70 per cent and 6-to-11-year population share 6.42 per cent. As regards the education status, around 12.02 per cent (159) are illiterate, with female illiteracy tunes to 16.00 percent. The land holding of the households show that not a single household is landless. Around 191 (47.28%) are medium farmer, possessing 5 to 10 acres of land, while 52.72 per cent are belonging to large farmer category having a land holding of above 10.00 acres. The average land holding of a household tune to 8.89 acres. The occupational distribution of the study household reflects that agriculture is the primary occupation of almost 402 (99.50%) households, while agriculture labour is the secondary occupation shared by 67.82 per cent, (92.03%) households who are collecting Non-Timber Forest produces (NTFPs). In spite of the good land holding, almost 397 (98.27%) households are belonging to Antyodaya category. All the 404 (100%) households are covered under Public Distribution System (PDS). Aadhar Cards possessed by all while Voter ID Card and 99.50 percent households have Jandhan bank account and only

66.09 per cent household have Kissan Credit Card (KCC), while 353 (87.38%) households are the women belonging to women self-help groups.

CHOUKHUTIA BHUNJIA ECOLOGY

The natural dwelling of Choukhutia Bhunjia is surrounded by plateau, hills, vegetation and forest coverage. In olden days their living was fully depending on forest resources like edible plants and hunting games, but they believe that their supreme deity 'Sunadei' ordered them to do the cultivation on land. Their knowledge system handed over from generation to generations is guided by the surrounding natural environment consisting of land types like hills, mountains, streams and forest.

Hill Resources

Choukhutia Bhunjias considers that hills are considered as the living entities and abode places of human beings, plants, animals and spirits, who influence their entire eco-system of the region. Depending on the use and the resources available, the hills can be divided into forest hills, middle part of the hills and top hills. The foot hills are basically used for human habitation and agriculture purposes, while the middle portion of the hills are used both for agriculture and plantation of horticulture type, while the top of the hill is used for fuel wood cultivation. The hills are classified on the basis of their size, height, geological formations, vegetation, and types of animal living, water bodies available there in slopping and elevations. The religious belief system, skill and knowledge on the natural resources of the hill are the working social capital of the community. They believe that *Maa Sunadei* has created such natural resources for their living with the condition that they will maintain these natural resources for future generations that we call today as the sustainable development.

Forest Resources

Forest is the lifeline of the Choukhutia Bhunjias. It is the source of 'Food Bowl' for them who depends on forest resources for various purposes of living throughout the year. The forest concentration on the *Dongar* hills is very thin due to historical reasons like shifting cultivation and large scale cutting of trees

these forest consists of herbs, bushes, wood trees, climbers and grass. Their local knowledge system is based on the availability and use of the forest resources. The dominant type of vegetation available in the region determines the status of the forest. Forest can be classified as *Teak Jungle*, *Saal Jungle*, village mix jungle etc. In early days the availability of various types of animals in the forest were plenty in number. Depending on the availability of the animals the jungles are named as *hiran jungle*, *tekra jungle* etc. Choukhutia Bhunjias also believe that Jungle is the place where various types of gods and goddesses are living who are both benevolent and malevolent by nature. Depending on the use or benefits accrued from the jungle they believes with respect to the living of various gods and goddesses are known. Forests give shelters to various types of animals who are classified as birds, small animals, large animal's invertebrate types etc. The thickness of the plant species, forest in Choukhutia Bhunjia region can be classified as *Koll* i.e. thick tree coverage, *bhanta* having moderate tree coverage and *burra* dominated by bush varieties. As per the geographical area coverage of the forest this can be classified as *badkabaan* and *pilabaan*. Similarly, based on religious beliefs the forest can be classified as *deolaha* where god and goddesses live, *Dankur Burra* popularly inhabited by the people and *masaanghaat* where the evil spirits live since it is used as the place for the cremation of dead bodies of all categories of human beings. The data on the forest resources and dependency and their knowledge base shows that they maintain a symbiotic relationship with forest and forest resources. Forest also provides living in various forms like NTFPs Ethno-Medicines used in day-to-day life. The food value, economic value, medicinal value of the forest is immense to them which has also been quantified in the present study.

Plant Resources

Choukhutia Bhunjias addresses all plants as *rookh*, but based on the use value of various parts of the plants like leaves, stem, bark, juice, roots etc. the valuable nature of the plants is determined. However, plants can be classified as tree which has strong erect posture and bushes which spreads without timber and climbers which are normally spread on others

support. All these plant varieties as understood by the Choukhtutia Bhunjias varies as per their life span, growth pattern and propagation and use value either as wood, medicine, religious importance and many other purposes. Knowledge of the Choukhtutia Bhunjias on the plant species are very popular and skillful since they have regular interactions for economic and Socio-Cultural purposes. Few trees like *Ber*, Jack fruit, Mango etc have both market value and socio religious values for them, while certain trees like *bija*, *Sarai*, *mahua* etc have timber value use for household construction. However, the medicinal value of certain plants is known to very few who normally practice treatment of various diseases by using various parts of plant species. The food value of various parts of plants like leaves and fruits are commonly known to everybody and this knowledge is transferred from senior generations to young ones. The Non-Timber Forest Produces (NTFPs) in the form of leafs, fruits, roots, barks, juices etc. available, procured, and consumed and sold by the Choukhtutia Bhunjias in the market in different seasons are of great contribution in their life. Over the time the Choukhtutia Bhunjias developed a knowledge system on plant resources with respect to NTFPs and their use.

Land (Khet) Resources

Choukhtutia Bhunjias consider land as the *Dharti Mata* which is the gift of God the Almighty since forest and hills are the abode of many god and goddesses. The land resources of the Choukhtutia Bhunjias depending on the use and types are classified as the forest land i.e *ban khet*, homestead i.e *tikra* land and agriculture land *chas khet*. Based on the natural irrigation facilities, surface quality, water retention capacity, productivity, types of crops the agriculture lands are classified as *berna*, *bahal*, *maal* and *guda* types. While the *berna* and *bahal* types of land are of good quality in soil structure, productivity and water retention capacity, the *maal* and *ant* types of lands are of low quality land. The *baari* land is attached with the homestead. Choukhtutia Bhujia families are basically patrilineal by nature, as a result of which the male dominance over the land is in practice since historical time which corroborates with various legends in their society. The clan distribution in the village controls the land ownership pattern.

The village head popularly known as the *Siyon* plays a vital role in the management of forest land and other community resources. Villagers honor the decision of the siyan because of the adherence to traditional governance in the community. *Siyans* decisions are normally made looking at household requirements and physical capacity to cultivate the land for crop production.

Based on the texture and color of the soil Choukhtutia Bhunjias are able to identify and name a particular soil and their use for various purposes. On the basis of texture the soil maybe mud soil (*khalia maati*), sandy soil, (*kudhari maati*), loamy soil (*khatu maati*), rocky soil (*darra maati*), wet soil (*sukhamaati*). On the basis of colour the soil (*maati*) maybe named as red soil (*laal maati*), deep red soil (*dha maati*), saffron soil (*pyuri maati*) and white soil (*chui maati*). Similarly based on the water content of the soil it may be classified as *paani maati* and *sukha maati*.

The data above shows that Choukhtutia Bhunjia as a community have very close relationship with the nature and natural resources, which are reflected in their day to day life and this helps them to transfer their knowledge from one generation to another. The changes in the intensity of practices of their environmental relations are due to the availability or non-availability of natural resources surrounding their habitat. The continuity in the practices and beliefs of the Choukhtutia Bhunjias are still reflected both at individual household level and community level, as a result of which, they have a constructive and preservative attitude towards the nature and natural resources. They strongly believe the spiritual representation of the god and goddesses in various natural resources and they never do any harm. The plant and animal species adopted as totem by the Choukhtutia Bhunjias are normally not killed by them. Certain plant species like mango, *ber*, Jack fruit, *salpi*, *mahua*, *jamun* which have religious importance in the life of the Choukhtutia Bhunjias are never cut by them. One can say that the principles of management of ecological resources among the Bhunjias are rooted in their belief system, religious life, tradition and quest for life. The biological greeds of the Choukhtutia Bhunjias are influenced by various customs and institutions developed over time to fulfill the needs.

The function of any practice is the role it played in satisfying these biological needs like food, sex and shelter etc. This principle guides Choukhutia Bhunjias as a result of which, the agriculture they do since time immemorial is based as subsistence to meet their biological requirements of food at both individual household and of the community. Availability of NTFPs in the region as a part of the ecological system meets the search for food and shelter requirements of the Choukhutia Bhunjias which also motivates and guides them not to bring any harm to the ecological resources available in and around the village which are also considered as the common property resources of the community.

Choukhutia Bhunjia Habitat

Habitat as the natural condition in which people live is popularly known as human settlements in the form of village, town and cities, which requires water, public space, food and shelter. The five major habitats include are forest, grasslands, deserts, mountains, polar region and aquatic habitat. Both internal and external forces guide the development of a human habitat which plays role central to cultural, social and behavioral sciences since the emergence of human society. The natural habitat is an ecological and environmental area where human lives along with their species. The present study is carried out in eight villages located in Gariaband block of Gariaband district of Chhattisgarh. The Gariaband block is located in the fringe geographical region of Sunnabeda Wildlife Sanctuary of Odisha which has influenced the physiography of the region and also the study villages in terms of similarities in ecological setup, flora, species and climatic condition etc. The administrative division under State formation in India though over imposed in the region, but could not surpass the ground realities based on natural factors. Which are reflected similarities among the Choukhutia Bhunjias of both the regions of Chhattisgarh and Odisha. Choukhutia Bhunjia is one of the PVTGs of Chhattisgarh spread over this region adjoining two newly formed States of Chhattisgarh and Jharkhand within sovereign India. The entire region in Gariaband is full of forest and hill ranges which can be classified as tropical dry deciduous forest, dry teak forest, and dry sal forest.

The region is full of water bodies in the form of drains, waterfalls, narrow water channels, ponds etc., which help in agriculture and horticulture adopted by the Choukhutia Bhunjias. The geographical surface in the region is mostly flat with high moderate slipiness in the land slopes. The region experiences a very hot climate during the period from March to May with the temperature ranging from 42 to 43 degrees Celsius, and the monsoon starts from June to September and winter felt from October to February. The average rainfall in the region takes to 885 mm per annum. The flora and fauna available in the region is very rich and diversified suitable to the preservation of ecological resources. The region is accessible by *pucca* road from the Gariaband district headquarter, but many villages are located in interior pockets surrounded by hills and forests which are yet to be accessible in all seasons. This has helped to preserve the rich habitat in the region filled with natural resources and resource based knowledge with the Choukhutia Bhunjias.

Habitat Based Livelihood Resources

The livelihood basket of the Choukhutia Bhunjia is contributed by natural resources available in various sources. Forest based resources in the form of Non-Timber Forest Produces (NTFPs) and also Timber contributes a lot in all seasons with variations. The cultural taxonomy of the Choukhutia Bhunjias as documented reflects the rich diversity, availability of accessibility to and utilization of forest produces in the past by the Choukhutia Bhunjias. The survey in study villages on NTFPs shows the potentiality, procurement, consumption and value addition of NTFPs being done by the Choukhutia Bhunjias. The forest based knowledge system of almost all the Choukhutia Bhunjia households are experienced and enriched along with the NTFP resources which are available and processed as per market needs and also in the adoption of value addition techniques. As the data shows during the summer season Choukhutia Bhunjias collect 16 varieties of NTFPs both for sale and consumption while in rainy season they collect seven varieties of green leaves, bamboo shoots, custard apple, *jamun* and *jamun* seeds, five varieties of mushrooms, while in winter season they collect six varieties of seeds of NTFPs purely used for sale. A

look into the dependency on NTFPs of the Choukhtutia Bhunjias shows that over the time one finds a lot of changes in the availability and procurement of NTFPs still NTFPs has viability and contributes to the livelihood basket of the Choukhtutia Bhunjia households. The catchment area and intensity of NTFPs in the region has changed over time covering a large area for collection even beyond 20kms for certain NTFPs. The price of few NTFPs like *nagar kanda*, root, *bahada*, *harida*, *amla*, *charota* seed, *van* cumin seeds, custard apple seeds, root varieties of mushrooms have high price which are extinguishing day-by-day. The quantity available in few NTFPs items has also reduced due to commercial exploration, deforestation and high demand. As per the senior generations in the study villages compared to the older days the NTFPs availability and procurement have reduced substantially due to deforestation. Secondly, there is a competition among the agencies collecting NTFPs, where the role of government agencies seems to be insignificant.

Cultural Management of Natural Resources

Culture is universal across time and has been acting as the centripetal force binding all individuals and the community, but it is very specific to space. The changes in the cultural practices of the tribal communities are observed in their material culture, however, it is very marginal when one observes the continuity and changes in the material culture of the Choukhtutia Bhunjias. This is at one level establishes the fact that the core aspects of a culture rarely change in tribal society, while brings only peripheral changes in the culture may be due to temporary inducements by external agencies in the community. Therefore, it is necessary to adopt a cultural approach to understand people, habitat and their relationships with natural resource base, which determines nature of access to development and utilization of development resources by the people. Many say that in this context, development can only be described through a cultural matrix and its transformation (Mangaraj, 2000). For them the cultural framework of development should embraces all the psycho-sociological components like economical, technological and scientific factors which help the material and intellectual life of the people. In case of Choukhtutia

Bhunjias the study findings show that the agricultural activities are mostly non-capital intensive and non-external input oriented which meets the local requirements through local adaptations, as observed by Cernea (2005). The agriculture and animal husbandry economy of the Choukhtutia Bhunjias operates as per their ecological resources, potentiality, cultural values and management of skills which are based on holistic perspective. With respect to the land holding of the Choukhtutia Bhunjias both legal as well as the usufruct rights are operational which are also guided by the social institutional like kinship and marriage pattern in the community. It is a common practice that the family of procreation of the newly married children enjoys the use rights over parent's landholding with socio- cultural support which is divided among sons after their death through patrilineal descent principle. A look into the cropping pattern being practiced by the Choukhtutia Bhunjias shows the influence and impact of the ecological setups in the region like soil type, soil quality, water availability, adaptations of crop variety, indigenous knowledge system, availability, of local technologies and their food patterns. The shifting cultivation practices on *bewar* land popularly known as *dehi* is no more practiced by the Choukhtutia Bhunjias but development of shifting patches through usufruct rights over land use have been transferred to permanent agricultural land, where the traditional crops varieties of millets, pulses, green leaf's, vegetables are produced in an age old manner basically emphasizing mixed cropping pattern. The labour intensive agriculture practices of the Choukhtutia Bhunjias are based on the principle of exchange of labour among the clan members basically on payment of food and sometimes also liquor. Introduction of cash as a form of wage labour is yet to replace such as culturally guided practice of the community. This helps the Choukhtutia Bhunjias to maintain the belongingness and ethnicity within the community.

The traditional skills and knowledge in agricultural practices like ploughing, land development, crop selection, harvesting, use of insecticides, pesticides, crop preservation are transferred from generations to generation in spite of the modern interventions by outside agencies, which reflects the continuity of and enforcement of cultural

values and traditional practices in day-to-day life and living of the Choukhtia Bhunjias. Such values are transferred through various festivals and festive occasions practiced seasonally related to crop activities and to satisfy god and goddesses like *Dharti Mata*, *Sarna devi*, God *Bhim* and many other unforeseen powers living in and around their vicinity and believed by the community. The agricultural festivals like *Nuakhai*, first eating of fruits like *Tendu*, mango, *mahua* flower, bamboo shoots, varieties of mushrooms etc. are also the part of the cultural life of the Choukhtia Bhunjias, which reflects the relevance and practice of preservations of crops, seeds, dependency on natural resources and adherence to ecological resources, available within their habitats which are culturally managed by them.

CONCLUSION

The household study of Choukhtia Bhunjias with respect to their ecology, habitat and Cultural management of natural resources in spite of the changes which brought into the community by the exogenous forces, the community is able to maintain a sy-mbiotic relationship with their available natural resources, which determines their life and living. The core cultural elements of the Choukhtia Bhunjias like God and Goddess beliefs, customs and traditions are the cultural products which are influenced by their ecological resources and habitat and influences their management skills, used in day to day life and living. These management skills among the Choukhtia Bhunjias transferred from generation to generations are largely influenced and determined by certain operational guidelines built over are the product of their culture. The natural resources available and used in Choukhtia dominated region includes land, forest, agriculture, livestock etc. which influence the habitat of the Choukhtia Bhunjias in a natural manner, became a part of their institutional structure which have been built over many generations. Continuity of traditional agriculture helped them to cope with the local ecological setup, however the globalization and other change processes impacted on Choukhtia Bhunjia community could not altered the ecosystem-based livelihood basket which provides food security to them in all the time in a sustainable manner. In this context the relevance of United Nations Earth Summit

in Rio de Janeiro held in 1992 seems to have relevance in tribal dominated regions of India, where sustainability is the major focus of life and living. In subsequent period, the United Nations framework convention on Climate Change and the United Nations convention on Biological Diversity still have the opportunity to promote the indigenous natural life and livings based on holistic approach in the life of tribal communities to ensure a new era of Man-Environment relation based on human perspective.

REFERENCES CITED

- Baker, P.T. 1962. The application of ecological theory to anthropology. *American Anthropologists*, 64(1): 15-22.
- Barth, F. 1956. Ecologic relationship of ethnic groups in Swat-North Pakistan. *American Anthropologist*, 58(6):1079-1089.
- Bassett, T. and K. Zimmerer. 2004. Cultural ecology. In: G. Gaile and C. Willmott (eds.), (giving # between the 2 letters.) *Geography in America at the Dawn of the 21st Century*, pp.97-112, Oxford University Press: New York.
- Boas, F. 1911. *The Mind of Primitive Man*. Macmillan Co: New York.
- Brookfield, H. 1964. Questions on the human frontiers of geography. *Economic Geography*, 40:293-303.
- Census of India 2011. *Demography*, Part II Govt. of India.
- Cernea, M. 2005. Studying the culture of agriculture: The uphill battle for social research in CGIAR. *Culture and Agriculture*, 27(2): 73-87.
- Chandra, G. S. 1970. A review of land reforms in non-arable lands in India: With special reference to forest lands *Artha Vijnana. Gokhale Institute of Politics and Economics*. XII (1&2): 105-115.
- Childe, G. 1936. *Man Makes Himself*. Watts & Co: London.
- Darwin, C. 1821. *The Descent of Man and Selection in Relation to Sex*. John Murrey Albemarle Street: London.
- Duncan, O. D. and L. F. Schnore. 1959. Cultural, behavioural and ecological perspectives in the study of social organisation. *American Journal of Sociology*, 65:136-162.
- Duncan, O. D. 1959. *Human Ecology and Population Studies in the Study of Population*. University of Chicago Press: Chicago.
- Evans-Pritchard, E. E. 1940. *The Nuer: A Description of the Modes of Livelihood and, Political Institutions of a Neolithic People*. Oxford University Press: London.
- Forde, C. 1954. *Habitat, Economy and Society*. Methuen and Co. Ltd: London.
- Hardin, G. 1968. The tragedy of commons. *Science*, 162:1243-1248.
- Honingman, J. 1976. *Handbook of Social and Cultural*

- Anthropology*. Rand Nally College Publishing Co: Chicago.
- Hooton, E. A. 1931. *Up from the Ape*. Macmillian Co. (Revised 1947): New York.
- Hutington, E. 1915. *Civilization and Climate*. CT Yale University Press: New Haven Conn.
- 1915. *Influence of Environment upon Human Industries or Arts*. Smithsonian Institution Annual Report, pp.639-65.
- Kessing, R.M.1973. Kwarae ethnoglotochronology: Procedures used by Malaita cannibals for determining percentages of shared cognates. *American Anthropology*, 75:1282-1289.
- Kroeber, A.L. 1939. *Cultural and Natural Areas of Native North America*. University of California Press: Berkeley.
- 1966. *An Anthropologist Looks at History*. University of California Press: Berkeley.
- Mangaraj, B. K. 2000. Cultural management for development programs and projects. *Man & Development*, 56:48-60.
- Markovitz, I. L. 1977. *Power and Class in Africa: An Introduction to Change and Conflict in African Politics*. Prentice-Hall Publishers: US.
- Mason, O. T. 1895. Similarities in culture. *American Anthropologist*, VIII (2): 1060-1075.
- Megger, B. 1954. Environmental limitations on the development of culture. *American Anthropologist*, LVI: 801-24.
- Meighan, C. and D. M. Pensergast and B.K. Swartzjr and M.D. Wissler. 1958. Ecological Interpretation in Archaeology: Part I, *American Antiquity*, And XXIV: 1-23, Part II, *American Antiquity*, XXIV: 131-50.
- Morgan, L. H. 1877. *Ancient Society*. Henry Holt & Co: New York.
- Netting, R. M. 1993. *Small Holders, Householders: Farm Families and the Ecology of Intensive, Sustainable Agriculture*. Stanford University Press: Stanford.
- Olson, M. 1965. *The Logic of Collective Action*. Harvard University Press: Cambridge.
- Ratzel, F. 1909. *The History of Mankind*. Macmillan Co: London.
- Richards, A. I. 1939. *Land, Labor and Diet in Northern Rhodesia- An Economic Study of the Bemba tribe*. Oxford University Press: New York.
- Sahlins, M. D. 1960. The origin of society. *Scientific American*, 203: 76-87.
- Sahoo, L. and J. Dash. 2015. Cognitive aspects of indigenous knowledge system: An anthropological study of the Bhunjias in Odisha. *Adivasi*, 55(2):1-14.
- Steward, J. H. 1955. *Theory of Culture Change*. University of Illinois Press: Urbana.
- Turner, B. L. 2001. Deforestation in Southern Yucatan Peninsula: An integrative approach. *forest ecology and management*, 54:355-70.
- Tylor, E. B. 1871. *Primitive Culture (3rd ed.)*, revised. John Murray: London.
- Wissler, C. 1923. *Man and Culture and his Relation of Nature to Man in Aboriginal North America*. Oxford University Press: New York.
- Zimmerer, K. S. 2004. *Cultural Ecology: Placing households in human-environment studies- The cases of tropical forest transitions and agro biodiversity change*. *Progress in Human Geography* 28(6):795-806.



This document was created with the Win2PDF "print to PDF" printer available at <http://www.win2pdf.com>

This version of Win2PDF 10 is for evaluation and non-commercial use only.

This page will not be added after purchasing Win2PDF.

<http://www.win2pdf.com/purchase/>