# Environmental Anthropological Analysis of the Kurichiyan Tribes of Kannavam Forest in Kerala

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**ABSTRACT** The present paper is an attempt to study the man-environment interaction among the Kurichiyan tribes of Kannavam Reserve Forest of Kannur District in Kerala. The Kurichiyas are living in the forests from the time immemorial. The Kurichiyas are one of the Scheduled Tribes of Kerala. They were living with subsistence economy and finding resources from the forests earlier. They used to collect fruits and tubers from the forest and also collected Non Wood Forest Products (NWFP). At present, they have stopped many of their traditional subsistence activities and are engaged in various new economic activities. Most of them have turned into agricultural labourers and/or wage labourers today. The changes in their economic activities also reflected in the life and culture of the Kurichiyas and it has altered their man-environment interactions. This paper tries to analyse the major changes in their interaction with their surrounding habitat and the environment within the Kannavam Reserve Forest.

### **INTRODUCTION**

Environmental Anthropology is a redesigned as well as a modified version of Ecological Anthropology with an augmented coverage of interest in its purview of studies. The term Ecological Anthropology was coined by Roy A. Rappaport in 1968. Then, Kottak (1999) provided a fresh thinking and introduced the New Ecological Anthropology. While introducing the New Ecological Anthropology, Kottak has used the term "Environmental Anthropology" for the first time but he was not consistent in using the very term "Environmental Anthropology" and he was emphasising on the usage of "New Ecological Anthropology". Kottak (1999) says that "the new ecological anthropology, or environmental anthropology blends theory with political awareness and policy concerns. It attempts to understand and devise culturally informed solutions to such problems/issues as environmental degradation, environmen-

Address for correspondence: Dr. M.S. Mahendrakumar Associate Professor Department of Anthropology Kannur University Thalassery Campus Palayad P.O., Kannur Dt. PIN 670 661 Kerala State, India Mobile: 9447380663 Email: dr.m.s.mahendrakumar@gmail.com tal racism, and the role of the media, NGOs, and environmental hazards in stimulating ecological awareness and action. While recognising that local and regional systems are permeable, the new ecological anthropology must be careful not to remove humans and their specific social and cultural forms from the analytic framework."

The very inconsistency in the use of ecological anthropology and environmental anthropology continued almost into the first decade of the 21<sup>st</sup> century. The very discipline was later called, commonly, as Environmental Anthropology. Kopnina and Shoreman-Ouimet (2013) pointed out that the environmental anthropology "studies current and historic human-environment interactions." The synchronic analysis of ecological anthropology persisted for a long time since 1968 with its functional interpretations and finally when it comes to environmental anthropology, which provides a diachronic analysis to the present version. With this perspective, the present study analyses the man-environment interaction of the Kurichiyan tribes living in the Kannavam Reserve Forest for centuries. Crate and Nuttall (2016) have pointed out that the anthropologists have always seen climate [environment] as fundamental to understanding human-environmental relations.

The Kurichiyas are one of the Scheduled Tribes of Kerala and they are the second largest tribes in the state. In the official list of Sched-

uled Tribes of Kerala (2003), the name of the tribe is given as "Kurichchan (Kurichiyan)". The Kurichiyas were shifting cultivators and hunters. Thurston (1906) has pointed out that in 1906 "they subsist mostly by punam (shifting) cultivation". The Kurichiyas have conducted shifting cultivation up to 1950s. At present, they are settled cultivators and also engaged in various other economic activities. The Kurichiyas of the Kannavam Reserve Forest were not engaged in agricultural activities, as it was not possible to cultivate agricultural products such as paddy and millets in the forest. However, they are engaged in the cultivation of some of the horticultural products and vegetables in their homesteads. The man-environment relationship among the forest dwelling tribal groups is different from the tribes living outside the forests.

Studies on Indian tribes in relation to the manenvironment interaction show significant differences with its idiographic and nomothetic representations. The environmental determinism, possibilism, cultural adaptation and ecological perspectives have been the focus of ecological anthropology. However, the studies with environmental anthropological perspective are very limited as it emerged recently. In the Indian context, some studies have analysed the tribal culture in different ecological settings.

Mishra et al. (1996) have made an analysis of psychological characteristics of the tribal people of Bihar, namely, Birhor, Asur and Oraon, in relation to their eco-cultural context and the experience of acculturation. The Birhor is a nomadic tribe, the Asur is a hunting gathering and agriculture tribe, and the Oraons are in between these two tribes.

Sarkar and Dasgupta (2000) have conducted a study on Indian tribes and attempted to analyse how natural environment plays an important role in the formation of tribal culture in different eco-settings. The conservation of biodiversity and the cognisance of their environment are portrayed in terms of the ethno-science of the tribal people of India. They studied the subsistence and economic activities of the tribes and their habitats. The study concluded that the ecology plays a very important role in shaping the tribal economic life.

Subba (2000) has made a study entitled "Man-Environment Relationship in a Hill Village", which deals with the Tanek village in Kalimpong subdivision of Darjeeling District in West Bengal. The study has pointed out the impact of felling of trees of a part of the forest on the village people and their cattle rearing. The forest was the most important source of fodder, which was destroyed with the felling of trees. The study has identified the cause-effect relationship of a human intervention in a forest.

Subramanyam and Veerabhadrudu (2013) have conducted a study of among the tribes of Eastern Ghats in Andhra Pradesh, which has analysed environment and sustainable development. The study has discussed issues like tribal ecology, livelihood, shifting cultivation and deforestation and their traditional knowledge about the protection and conservation of natural resources in the Eastern Ghats.

The above studies have been conducted from the perspective of ecological anthropology, ethno-ecology and environment and sustainable development. The environmental anthropological perspective emphasises on the studies of current and historic human-environment interactions. In this context, the following objectives are framed for the present study.

#### **Objectives of the Study**

- 1. To study the forest dwelling Kurichiyan tribes with regard to the man-environment relationship.
- 2. To analyse the past and present cultures of the Kurichiyan tribe living in the Kannavam Reserve Forest of Kerala.

#### METHODOLOGY

Anthropological research methods, namely, household survey, observation and interviews were conducted among the Kurichiyan of the Kannavam Reserve Forest to accomplish this study. The interviews have helped to know the earlier situation of the Kurichiya life and culture. Secondary data regarding the life and culture of the Kurichiyan tribes was also collected to understand the changes happened among the Kurichiyan tribes over the years.

#### RESULTS

The present study is conducted among the Kurichiyas of Kannavam Reserve Forest in Kannur District, one of the northern districts of Kerala state in India. The Kurichiyas inhabit the forest area and their settlements are 8 kilometres away from the Kolayad urban centre. Very limited facilities are available in the forest area and they have to go to Kolayad's urban centre for everything such as for the purchasing grocery items, stationary items and cloths. The tribal way of life within the forest environment is curtailed with the forest laws.

The area selected for the study is the Peruva region of the Kolayad Grama Panchayat in Kannur District. The Peruva region is the most tribal concentrated area within the Kannavam Reserve Forest. A survey was conducted among the Kurichiyan tribes of Peruva region in 2019 to study the current and historic human-environment interactions among them. With regard to the present topic, the major changes that have occurred among them is that they have developed a lot in terms of education, employment, housing, electrification of houses and more. At the same time, they are still maintaining many of their traditional means of living such as agriculture labour, wage labour and agriculture. The economic activities are considered a major parameter for analysing the man-environment relationship in the present study and the present status of economic activities and occupational status of the Kurichiyan tribes of Peruva region have been analysed here and the Table 1 provides its details.

As per the data, 64.57 percent of the tribes are following their traditional economic activities whereas 26.53 percent have entered into new or modern economic activities. In spite of these, 8.9 percent of them have obtained various government jobs such as that of clerks, peon, lineman in KSEB, attender and assistant. Among the traditional economic activities, out of the 64.7 percent, the agricultural labourers constitute 56.0 percent and the wage labourers consist of 30.0 percent. The cumulative percentage show that the 86.0 percent of the Kurichiyas are either agricultural labourers or wage labourers and it is shown in the Table 2. Within the forest environment, they do not get such occupations and therefore they are going to other places for such occupations. In every year, some of the tribal members belonging to the category of wage labourers go for jobs under the forest department to prepare fire lines on both sides of the forest roads.

Table 2: Traditional economic activities of the tribes

S.	No. Economic activities	%	Cumulative %
1	Agriculture labourers	56	56
2	Wage labourers	30	86
3	Agriculturist	16	100
	Total	100	

Although, the 64.57 percent tribal members are following their traditional occupations, they have completely stopped the collection of NWFP from the forests, which was one of their economic activities of early days for income generation. Instead of that they have become agricultural and wage labourers. Earlier, they used to collect NWFP from the forests and sold it to the Tribal Co-operative Society at Nedumpoil town, which is 14 kilometres away from the tribal settlements. A general picture of the present economic activities and occupational status of the sample population and the categories of traditional economic activities are analysed in this paper.

As per the survey, only one household is rearing cattle and they find it difficult to rear cattle in the forest area, as they cannot send

Table 1: Economic activities and occupational status of the tribes

S. N	o. Economic activities and occupational status	Category	%
1	Agriculture labourers, wage labourers, agriculturist, cattle rearing	Traditional Economic Activities	64.57
2	Bakery worker, small petty business, carpentry, masonry, building construction workers, timber industry labourers, timber loading in forest dept., cleaner in buses, driver	Modern Economic Activities	26.53
3	Government employee Total	Government Jobs	8.9 100

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their cattle to the forest for grazing due to the restrictions in the forest and also due to the occasional attack of wild animals. In the case of agriculture, they find it difficult as porcupines and wild boars eat or destroy their vegetable cultivation. However, they construct fences to prevent their cultivation from wild boars and porcupines. These animals destroy the fences also. The collection of NWFP from the forest is also stopped as they find that agricultural labour or wage labour give immediate payment whenever they go for such jobs outside the forest. Therefore, a considerable portion of the tribal members is engaged as agricultural as well as wage labourers.

The developments of the mainstream population have made some impact among them due to culture contact. At present, the Kurichiyan tribes have started to enter into such modern economic activities. Most of the tribal members go outside from the forest areas to engage in such modern economic activities. There is only one member in each category, which shows the very beginning of changes of a society.

## DISCUSSION

Earlier, around 10 years ago, the Kurichiyan tribal people used to go to interior forests for collecting Non Wood Forest Products (NWFP) and such man-environment interactions have ended up with the mobility of the forest dwelling tribal people to modern economic activities as well as their search for daily wages.

The qualitative analysis on the houses of the tribal people show that all houses are either tiled or RCC types, which have been constructed through various housing schemes. Earlier, they were constructing huts with the materials available in the forests such as bamboo, grass, wood and soil. Now, they construct houses with laterite stones, sand, cement and steel, and all such materials are brought from outside the forest.

At present, the major area of man-environment interaction is taking place in the collection of firewood. The tribal people are still collecting firewood from the forest, for which they go to the forest in small groups. In the summer season, they go to the forest and collect as much firewood as possible for the whole year. In the case of the collection of firewood, the Kurichiyas are not disturbing the forest environment. The present finding is compatible with one of the findings of Subramanyam and Veerabhandu (2013) and they have studied the environment and sustainable development among the tribes of Eastern Ghats of Andhra Pradesh, which has pointed out that the tribes of Eastern Ghats have a lot of empirical knowledge on the basis of their experiences while dealing with the forest and its resources.

However, the patterns of man-environment relationship of the Kurichiyan tribes show the changes in their interaction patterns in many areas of their life and culture. The perspective of ecological anthropology with its synchronic analysis is inadequate to explain the historic or diachronic man-environment interactions. The environmental anthropological dimension is capable of providing the diachronic analysis on the past and present life of the Kurichiyan tribal community living in the forest environment.

Environmental anthropological perspective is applicable in analysing the man-environment interactions of the Kurichiyas during past and present. In the early phase of the life of the Kurichivas, the environmental determinism is applicable and now the environmental possibilism is applicable as they were completely depending on the forest environment in the past whereas the environment is passive in shaping cultures of the Kurichiyas up to a considerable extent at present. Their forest dependence was curtailed earlier with the forest laws but now they are accustomed to the social mobility at par with the mainstream population outside the forest habitat. The diachronic perspective, of course, can be one of the dimensions of analysis in environmental anthropology. The very sub-discipline, environmental anthropology, is getting emerged into a more conspicuous area within anthropology without discarding the virtues of ecological anthropology and its formative nomothetic endeavours.

## CONCLUSION

The present study has identified that the tribal people have a limited access to the Reserve Forest. However, they are living in the forest area demarcated for them within the Reserve Forest. The Kurichiyan tribal people are the tradi-

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tional inhabitants of the forest area from the time immemorial and they were completely dependent on the forest for their livelihood. But, at present, most of them are engaged as agricultural or wage labourers outside the forest area. Their interaction with the forest has declined considerably in the areas of finding out sustenance, subsistence, and also for economic activities. They cultivate vegetables in their own homesteads within the forest. At present, their main interaction with the forest is for collecting firewood whereas the

NWFP collection has totally been abandoned and such interaction with the forest has also come to an end. Every year, some of the tribal members work for the forest department for the preparation of fire lines on both sides of the forest roads in order to prevent forest fires. Nevertheless, the tribal people have ample indigenous knowledge about the forest and its environment and therefore they are not destroying their environment.

### RECOMMENDATIONS

The tribes living in the Reserve Forests for a long time or from the time immemorial may be given more freedom to collect NWFP and firewood from the forests. In the studied area, the Kurichiyan tribes were collecting NWFP from the forest and selling it to the Tribal Co-operative Society situated in Nedumpoil, which is 14 kilometres away from the tribal settlements and now they are not collecting it, as they have to apply for pass to collect NWFP. The true forest dwelling tribes may be given permission to collect the firewood and NWFP from the forest without damaging the forest environment and also without much strict rules.

### REFERENCES

- Crate Susan A, Nuttall Mark (Eds.) 2016. Anthropology and Climate Change – From Actions to Transformations. New York: Routlledge.
- Gazette of India 2003. List of Scheduled Tribes of Kerala. From <a href="https://tribal.nic.in/DivisionsFiles/clm/20">https://tribal.nic.in/DivisionsFiles/clm/20</a>. pdf > (Retrieved on 2 January 2020).
- Kopnina Helen, Shoreman-Quimet Eleanor 2013. Environmental Anthropology – Future Directions. New York: Routledge.
- Kottak P Conrad 1999. The New Ecological Anthropology. American Anthropologist, New Series, 101(1): 23-35.
- Mishra Ramesh Chandra, Sinha Durganand, Berry John Widdup 1996. Ecology, Acculturation and Psychological Adaptation – A Study of Adivasis in Bihar. New Delhi: Sage Publications.
- Sarkar Amitabha, Dasgupta Samira 2000. Ethno-ecology of Indian Tribes. Jaipur: Rawat Publications.
- Subba TB 2000. Man-environment relationship in a hill village. *Human Ecology*, Special Issue, 9: 73-78.
- Subramanyam V, Veerabhadrudu B 2013. Environment and Sustainable Development: A Study Among the Tribes of Eastern Ghats in Andhra Pradesh. From <a href="https://www.researchgate.net/publication/29321">https://www.researchgate.net/publication/29321</a> 4565\_Environment\_a nd\_sustainable\_ development\_ A\_study\_among\_ the\_tribes\_of\_ Eastern\_ Gh> (Retrieved on 31 December 2019).
- Thurston Edgar 1906. Castes and Tribes of Southern India. Delhi: Cosmo Publications.

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