© Kamla-Raj 2005

Ecocultural Adaptation of the Kadars of Kerala

M.S. Mahendrakumar

Department of Anthropology, Kannur University, Thalassery Campus, P.O. Palayad, Kannur Dt., Kerala, India Telephone: 0490-2346153 (Dept.); 0490-2346270 (Office) E-mail: ms mahendrakumar@yahoo.co.in

KEYWORDS Tribal isolation, Hunting, Gathering, Adaptation, Environmentalism, Possibilism.

ABSTRACT This article focuses on the ecocultural adaptation and socio-cultural status of a traditional hill dwelling tribe, Kadars, of Kerala. Subsistence activities and sustenance have become the major problems of the Kadars, when their traditional habitat became a Wildlife Sanctuary. The food gathering tribe was forced to change their subsistence activities without an alternative, which resulted in a complex situation wherein the Kadars resist to changes on one hand and on the other hand they face problems in finding out stable support for life and culture. From the etic point of view, the partial isolation is a major hurdle for adequate level of change of subsistence activities whereas from the emic view, the necessity for reinforcement of their traditional rights on forest and way for easy accessibility to the mainstream population for finding out current vocational opportunities are the primary concern of the Kadars.

INTRODUCTION

Ecocultural adaptation is an important process of survival mechanism of every human population, and the levels of adaptive interaction are of different nature depending upon the geographical and cultural diversity. The manenvironment relationship within a forest habitat entails a different level of interaction compared to the people living in the plains. The Kadars are a forest dwelling tribe, and their man-environment interaction has been transforming through an unavoidable time, which needs to be analysed under the specialisations such as Development Anthropology and Ecological Anthropology. This article is based on a fieldwork conducted among the Kadars of Kerala.

ETHNOGRAPHY

The Kadars, a traditional food gathering tribe inhabiting Parambikulam Wildlife Sanctuary, are virtually circumscribed by the boundaries of forest and wildlife. The Malayalam word *Kadan* or *Kadar* means the dweller in a forest, and they obviously got the name because of their exclusive life in the forest habitat. Their habitat, the trijunction of the Coimbatore district of Tamil Nadu and the Palakkad and Thrissur districts of Kerala, has an elevation of 700 metres above the MSL (Fig. 1) Karimalagopuram, the highest peak situated in the region, has an elevation of 1440 meters above the M.S.L. For the Kadars, their gods are residing in the Karimalagopuram though

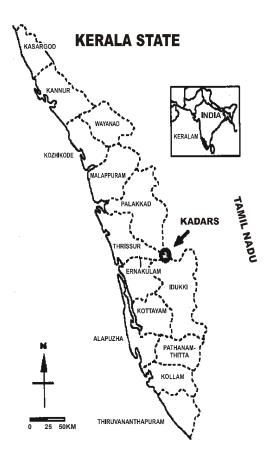


Fig. 1. Location of Kadars

they worship other gods and goddesses, namely, Bhagavathi or Aattuvaacherryamman and the Lord Ayyappa.

The Kadars constitute a minor proportion of the population of Kerala. They are categorised as one of the five "primitive tribes" of Kerala. Earlier, not long ago, the Kadars were food gatherers (Thurston, 1975; Iyer, 1981; Singh, 1998; Mathur, 1997; Luiz, 1996). "The Kadar may be considered as the best representative of the integrated food-gathering tribes of South India" (Mathur, 1997: 76).

In Parambikulam, there are three colonies of the Kadars, namely, Parambikulam Kadar colony, Kuriarkutty Kadar colony and the Earth Dam colony. In Parambikulam Kadar colony, there are 190 persons living in 48 households. In Kuriarkutty Kadar colony, there are 264 persons in 50 families. The Earth Dam colony is also an exclusive colony of the Kadars, where there are 170 persons in 35 families. The tribes themselves use the word "colony" for their settlements. Intercolony relationships also exist.

The Malamalasar, referred to as Mahamalasar, the Muthuvan, and the Malayan are the other tribes inhabiting the Wildlife Sanctuary. The Malamalasar inhabits the Fifth colony. The Muthuvans inhabit the Pooppara colony. The Malayans are in the Sangom colony, which is about 50 KMs. away from Parambikulam. All these tribal groups are now bilingual. The Kadars speak Malayalam and Tamil and also a dialect of an intermixture of both. This may be the traditional tongue of the inhabitants of the forest area.

The traditional huts of the Kadars are known as pathi. "Pathies (huts) are on slightly raised mud or stone foundations and covered on all sides with flattened bamboo and grass. Usually they consist of one room, a corner of which is used as the kitchen. Some huts have a projection on one side for use by women in pollution. Their primitive huts were very temporary structures, and so low that one had to crawl to enter" (Luiz, 1996: 374). Even today, they have isolation huts, and the women must occupy them during menstruation. Traditional huts also exist along with the advanced types of houses. Most of the houses are very traditional in nature. Bamboo, reed, grass, etc., are the common materials used for the construction of houses or huts. This is due to lack of money and lack of awareness about modern technological advancements. At present, the Government is constructing new houses for

them. Apart from this, some solar lights have also been fixed in the remote tribal colonies. The Sungom colony is the only electrified tribal colony.

SOCIO-ECONOMIC CHANGE

The men were hunters and collectors of minor forest produce. They hunt animals with the help of dogs. Even today, they have dogs in their settlements and occasionally they capture rabbits and mongoose. The honey-collecting season starts in January and ends by May. Honey collected is sold to the Girijan Co-operative Society, Thekkadi. They also collect tubers (*noota kizhangu*) from the forest just to complement their appetite. The women, in earlier times, used to collect ginger, turmeric, medicinal roots (*amalpori veru, naruneedi kizhangu*), etc., and sell them to the lowlanders.

After the establishment of Parambikulam Wildlife Sanctuary, in 1973, the Kadars and other tribal communities inhabiting the forest lost their traditional rights on the forest. Hunting, trapping and fishing were prohibited. The office of the Assistant Wildlife Warden is situated near their settlements. Government offices, namely, Post Office, Police Station, PWD Office and a Health Centre are also there in Parambikulam.

Though there are restrictions, the Kadars catch fish from the reservoir of Parambikulam dam. They use a particular kind of canoe called *pondi*, which is made of bamboo poles. Three or four bamboo poles are tied together to form a flat structure, to make a *pondi*. Two persons can sit on a *pondi*. They also use fishing nets. The same *pondi* is used for crossing the reservoir to collect fuel wood from the nearby forest. The paddle of the canoe is made of teakwood. They themselves make the canoe and the paddle.

In recent years they have taken to various other vocations. At present, the Forest Department is providing wage labour to the tribes. A few of them are employed as watchmen in the Lodges of the Forest Department. The Forest Department also gives training to the youth as forest guides. Licences and two pairs of uniforms are also given to them. Employment is given only for three months a year, particularly during the preparation of fire line, cutting wood, planting trees, etc. The male members are paid Rs. 72 and the women get Rs. 62 as wages. According to the people, three-month's labour is insufficient for their livelihood and therefore, they go to the forest

Table 1: Traditional subsistence activities and modern subsistence activities

Traditional subsistence activities	Present subsistence activities and jobs
Primary Activity Hunters (small animals) Gatherers (fruits, tubers and Medicinal plants) Trapping (small animals) Fishing (from the Reservoir)	Primary OccupationsRearing cows for selling milkWage labourWatchmen (Lodges of Forest Dept.)Forest guidesFire line preparationCutting woodPlanting treesTeacher (Primary School)Secondary ActivityGathering (fruits and tubers)Trapping (small animals)Fishing (from the Reservoir)

for gathering tubers and do fishing in the reservoir in spite of restrictions. Some of them have started rearing cows and selling milk to small hotels at Parambikulam. The rearing of cows is also posing problems due to tigers and other wild animals.

Table 1 gives a comparative account of the traditional subsistence activities and modern subsistence activities of the Kadars. Earlier, they completely engaged in traditional subsistence activities and they were the primary activities. At present, their traditional subsistence activities became secondary subsistence activities when they are provided with modern occupations. Virtually, a considerable number of people follow their traditional subsistence activities, as a secondary source of living, along with the primary occupations or modern occupations due to the major reason that neither all of them got modern jobs nor it is sufficient for their livelihood. This is a phase of transformation of their subsistence activities.

Impact of Education is very less among them. Some of them have studied up to Pre-Degree level, but most of them have failed in Pre-Degree Examinations. A boy has passed Teachers Training Course, and he is working as a teacher in a Primary School. Majority of them do not have proper job for their existence. Their children are studying in the Primary School of the Tamil Nadu Government at Parambikulam, where the medium of instruction is Tamil instead of Malayalam. An Anganvadi is also there at Parambikulam. The Kerala Government's L.P. School (residential), under the Tribal Welfare Department is situated at Sungom, where the medium of instruction is Malayalam. However, this school is about 15KMs away from Parambikulam, and it is on the way to Anappadi and Pollachi.

After the primary education, children go to

Pattencherry in Muthalamada Panchayat in Palakkad district for further studies. Nevertheless, there is no direct road from their home place to Palakkad town. Chalakudi town in Thrissur district is somewhat nearer. However, there is no proper way or bus route from Parambikulam.

There is a Panchayat member from the Kadars. The influence of Marxist Party has also reached the tribal colonies at Parambikulam. From the emic point of view, "even though they made some attempts to tell their need for a road to Chalakudi from Parambikulam, the reply was discouraging; moreover some activists denied their request by telling that if we construct a road to Parambikulam, we will lose forest and it will lead to the imbalance of ecology". The ultimate result is that if they want to go to Palakkad, they have to go to Tamil Nadu (Pollachi) and return to Palakkad. The children from the fifth standard onwards, are in the residential school at Palakkad. The distance between Thrissur town and Parambikulam is 146 KMs and the distance from Palakkad to Parambikulam is 97 KMs. Parambikulam is about 60 KMs away from Pollachi.

The Kadars show interest in all developmental activities. Now, they are very much bothered about their health and sanitation. The efforts of the doctors in the health centre and also the awareness programmes of the NGOs have helped them improve a lot. The Palakkad District Health & Family Welfare Co-operative Hospital Society, a NGO, had implemented two projects, namely, RCH (Reproductive Child Health) and PSH (Project of Sexual Health) for the welfare of the tribes. But some suffer from diseases like tuberculosis.

The Kadars are very friendly and very receptive to all development activities. The Forest Department and the Tribal Development

Department are providing facilities to them. But, the three months job or a cow is insufficient for them. The Kadars face a lot of problems due to partial isolation. The tribes should be provided with some new strategies to generate substantial income for their livelihood.

They want to do agriculture, but they have no land except the congested area with 35 to 50 houses. The paddy fields are about 36 KMs away from their settlement, and it they want to go there or neighbouring places for labour, there is not enough bus service from Parambikulam. The first bus from Parambikulam to Pollachi is at nine o' clock in the morning and the second and the last bus comes to Parambikulam at 5.30 pm and returns from Parambikulam at 6 o' clock. Therefore, it is impossible to depend on bus service for seeking jobs in the midland.

DISCUSSION

Fundamental ecocultural adaptations of man emerged in reciprocal relationships with technology and social organisation. Conspicuously, the particular environmental setting, population and their subsistence activities, cultural practices, opportunities for cultural interactions with other people are some of the important variables for the comprehensive understanding of ecocultural adaptation. How a particular environment exists and why certain cultural traits developed and sustained due to the influence of environment? This is a question having extreme significance. Environment plays a greater role in the formation and development of cultures, particularly in the case of tribes. Environmentalism and possibilism (Hardesty, 1977; Anderson, 1997), and ecocultural adaptation are still applicable in the study and analysis of people living in forest habitat. Anderson argues that "environmentalism and possibilism tend to separate man's culture from his environment and behaviour from biology, and in fact they tend to treat them as opposing entities. At one extreme of the continuum culture is viewed as passive and the environment as an active force moulding culture to its pattern. At the other extreme, culture is viewed as the active force reshaping the passive environment" (Anderson, 1997: 185). According to Steward (1955) (quoted in Anderson 1997), "Cultural Ecology" emphasis in the interactional analysis of environmental-cultural relationships. According to my analysis, cultural

ecology can be considered as a theory as well as a method. "Adaptation" to environment is the major "process" of cultural change or Steward's basic notion of adaptive interaction is the basis for his cultural ecology. Analysis of such change holds only the methodological variations. Besides this, the interpretation of functional interdependence among the parts of culture has already been discussed in the functional, and structural functional theory of Malinowski and Radcliffe-Brown respectively (Bohannan and Glazer, 1973). Therefore, the "cultural adaptation" is the only novel characteristic of the theory of cultural ecology. According to Harris (1968: 667) "Steward was not merely saying that a particular combination of technology and environment made it possible for man to create a particular type of social organization; the whole weight of his argument was in the direction of insisting that a similar techno-environmental relationship regularly caused a similar effect ... regardless of whether the people involved were "creatively inclined" or not". But, if cultural adaptation is the fundamental feature of cultural ecology, the conglomeration of culture and the social organization is the most important feature; because human can adopt modern technologies even without much creativity. Evolution as well as diffusion of culture traits or technology cannot be denied. Moreover, while analysing, the comprehensive meaning of the term "culture" will have to be re-examined. "Culture is the sum total of integrated learned behavior patterns which are characteristic of the members of a society" (Hoebel, 1958: 7). The integrated behaviour of a society is controlled by the environment, which is nothing but environmentalism. Of course, according to the peculiarities of an environment, a society must have to "adapt", without which one society cannot survive. Moreover, in times, the culture of a society may exert changes on environment, but the environment is always active too in extending its controls. In the case of tribes, particularly the "hunter-gatherers are

...[living] in a *natural state*" (Keesing, 1981:124) or they are the instances of "Natural State" of humankind. Generally, most of the tribes primarily depend on the environment for food resources and also for materials for the construction of houses, etc. The hunters and food gatherers completely rely on environment for sustenance (Bhanu, 1992; Vidyarthi, 1976). A diachronic analysis proves that diverse ecological conditions moulded varied cultures and that was one of the bases for the emergence of civilisations. Civilisations are nothing but cultures of a society, and people are the constituent elements of a society. In such a way, the existence of a traditional inhabitant, namely, the Kadars of Parambikulam Wildlife Sanctuary accentuate the significance in terms of the analysis of ecocultural adaptation and points out the necessity for imparting appropriate technological advancements for them; and this concern justifies the study and analysis of the Kadars of Parambikulam Wildlife Sanctuary.

The Kadars are considered to be the original inhabitants of forest (Thurston, 1975; Iyer, 1981; Singh, 1998; Mathur, 1997; Luiz, 1996; Mahendrakumar, 2000). The Kadars are obviously kept away from the busy world, and they have got preserved more or less in the similar miserable condition of earlier times. They live inside the Wildlife Sanctuary and they are suffering a lot due to partial isolation. Mathur (1997: 86) has rightly pointed out that "the strangest feature is the enforced secondary primitivization imposed by the strict preservation of their habitat as a Wildlife Sanctuary. This prevents them from adopting technologies consistent with their increased expectations".

The problem of tribal isolation had been discussed in length and breadth since Independence. However the geographical isolation and particular cultural milieu are persisting even after five decades in many tribal areas. In the case of the Kadars, they were forced to arrest their traditional subsistence activity with the establishment of the Wildlife Sanctuary and forest policies. The new jobs under the Forest Department are insufficient, because it provided them jobs only three months a year. In the highly transitional state of their subsistence activities, still they collect honey, gather tubers and roots, hunt small games, fish in the reservoir, collect fire wood from the forest, construct traditional huts, etc. At the same time a few families could construct tiled houses, and some have domesticated cows for sale of milk, and others do menial jobs in and around their settlements. These changes show the gradual shift of subsistence activities leading to socio-economic changes.

They have traditional huts as well as small tiled and/or RCC houses. They use bamboo, reed, grass and leaves for constructing huts, which is due to two basic reasons, firstly they are accustomed with their traditional huts, and secondly the attainment of modern houses are apparently lethargic. Food gathering is an ecologically viable subsistence activity as far the activities of the Kadars are concerned. Cattle rearing face a lot of problems, since tigers catch their cows occasionally. Cultivation is neither permitted nor cultivable land is available there. Therefore, the ecological setting is acting as a limiting factor for development. This is in agreement with Hardesty who argues that "the deterministic [environmental deterministic] view holding that environment actively shapes man ... and the possibilistic view assigning environment a limiting or selecting role" (Hardesty, 1977: 6-7).

It is a general idea that,"the forest gives the tribals food and provides material to build a home and in fact, the tribal economy revolves round the forest in tribal India. The forest supplements even the agriculturist tribes by its produce such as fire-wood, leaves, fruits, honey, grasses, etc." (Vidyarthi and Rai, 1976: 440). But, the isolated life within the forest is a restricting factor for development in par with the mainstream population. A similar situation is existing among the Cholanaickans of Nilambur (Bhanu, 1992). The Cholanaickan are a small and steadily declining community of gatherers and hunters (ibid, 1992: 29).

Some of the early anthropological notions presumed that the tribals could lead a selfsufficient life within their traditional habitat, which is a myth in terms of the subsequent theories. The concept of environmentalism and possibilism are applicable since the forest acts as a limiting factor in shaping from their subsistence activity to their house types; and the concept, environmental possibilism holds the view that culture is active and environment is passive (Hardesty, 1977; Harris, 1968; Anderson, 1997). Due to restrictions and absence of opportunities the subsistence technologies remain unutilised and therefore are unable to develop in their own lines. Thus, culture seems to be passive in shaping culture. In spite of the fact that tribes are trying to "adapt" to their environment and limited resources, they could not find substantial means of livelihood. In this context Mathur's (1997) "enforced secondary primitivization" is convincing since the Kadars cannot "develop along the lines of their own genius" and also substantial effort "to train them" to stand abreast them with

the mainstream is not in attendance. This instance provides a compatible notion of "adaptive interaction" and "environmentalism and possibilism". Of course, "the analysis of sociocultural-environmental adaptations serves to uncover variables that explain the origin of particular cultural features or structures in similar environmental conditions" (Anderson, 1997: 187). When analysing the variables such as forest habitat, isolation from the mainstream population, traditional huts, subsistence activities, modern jobs, etc., the concepts determinism, possibilism, and adaptation are applicable. With the methodological benefits of cultural ecology, it can be suggested that the isolation from the mainstream of population, lack of technological advancements, lag on traditional subsistence activities and inadequate occupational opportunities are the major problems latent in the social structure of the Kadars of Kerala.

REFERENCES

- Anderson, James N. 1997. "Ecological Anthropology and Anthropological Ecology", in John J. Honigmann (ed.), Hand Book of Social and Cultural Anthropology. New Delhi: Rawat Publications.
- Bhanu, B. Ananda. 1992. "Boundaries, Obligations and Reciprocity: Levels of Territoriality among the Cholanaickan of South India", in Michael J. Casimir

M.S. MAHENDRAKUMAR

and Aparna Rao (eds.), *Mobility and Territoriality*. Oxford: Berg Publishers Limited.

- Bohannan, Paul and Mark Glazer. 1973. *High Points in Anthropology*. New York: Alfred A. Knopf.
- Hardestry, Donald L. 1977. *Ecological Anthropology*. New York: John Wiley & Sons.
- Hoebel, E. Adamson. 1958. *Man in the Primitive World-An Introduction to Anthropology.* New York: McGraw-Hill Book Company Inc.
- Iyer, L.K. Anantha Krishna. 1981 (Reprinted). *The Tribes* and Castes of Cochin. Vol. I. New Delhi: Cosmo Publications.
- Keesing, Roger M. 1981. *Cultural Anthropology A Contemporary Perspective*. New York: Holt, Rinehart and Winston.
- Luiz, A.A.D. 1996. "Kadars", in Sachchidananda and R.R. Prasad (eds.) *Encyclopaedic Profile of Indian Tribes*. New Delhi: Discovery Publishing House.
- New Delhi: Discovery Publishing House. Mahendrakumar, M.S. 2000. "The Kadars of Parambikulam Wildlife Sanctuary" In: *Kerala Calling*, Thiruvananthapuram: Department of Public Relations, Government of Kerala.
- Mathur, P.R.G. 1997. "Kadars", in T. Madhava Menon (ed.), *The Encyclopaedia of Dravidian Tribes*. Thiruvananthapuram: International School of Dravidian Linguistics.
- Singh, K.S. (Ed.) 1998. People of India. National Series, India's Communities N-Z. Delhi: Anthropological Survey of India & Oxford University Press.
- Thurston, Edgar. 1975 (Reprinted). Castes and Tribes of Southern India, Vol VI. New Delhi: Cosmo Publications.
- Vidyarthi, L.P. and B. K. Rai. 1976. The Tribal Culture of India. New Delhi: Concept Publishing Company.