Dr. Pragya Sharma
Assistant ProfessorSelection Grade
IIS deemed to be
University, Jaipur

Ethnographic Exploration of Ecology and Tribes: Raika Community Revisited

Abstract

Raikas are the semi nomadic groups of India whose main livelihood is pastoralism. They move about in search of pastures The present paper is an attempt to study the relationship between environment and tribal community. Fieldwork has been done in two villages majorly inhabitated by Raikas, Raika Ki Dhani and Manpur Bakdi in Pali Sirohi Belt.

Key Words: Raikas, Environment, Nomads, Pastoralists

Background

Raikas are major pastoralist community of Rajasthan. The Raikas are divided into two large endogamous groups, the Maru Raika and Godwar Raika. Of course, which group occupies a high ritual status is a matter of controversy. Traditionally, the Godwars are reputed to have bred only camels, whereas Maru group breeds sheep. At present, however, both groups keep sheep as well as camel, and less frequently other cattle. Marus inhabit Bikaner, Jaisalmer and Marwar regions. Godwars are, mainly concentrated in Godwar, through their hamlets are also found in Marwar. There is an another group of Raikas called Kutchi. They inhabit region of Kutch, and are distinct from others in their dress and hairstyle. This group, too, is thought to have migrated from western Rajasthan. Broadly, the Raikas are found distributed in the districts of Nagaur, Jodhpur, Barmar, Pali, Sirohi and Jalore in Rajasthan.

Rationale of the Study

Ecological oriented research leads to the understanding of the basic elements of pastoral resource like, pasture, water and animals. Pastures are an artifact and a product of human directed activity i.e. grazing. If there would be no grazing, there would be no need for pastures. Ecological studies also show the relationship between grazing pressure and the maintenance of certain type of environment. The processes of social regulation involved in the use of all water resources including natural ones (lakes, ponds, rivers) as well as the more apparently physically constructed water sources (well, tanks and so on). Water provides an obvious and, on the face of it, straightforward target for intervention1.

Greater part of Rajasthan is arid and semi arid and thus its environment lead to the emergence and persistence of migratory pastoralism in Rajasthan. The ancient Aravalli hills begin near Delhi and run south and next towards the borders of Gujrat marking the southern and eastern border of this dry region. To the west, the desert crosses the Indo-Pakistan border. Desert exists in the western most part alone, while the rest of the region is semi arid where rainfall is low and variable. Natural vegetation cover is xerophytic, and mainly comprises of shrub and grasses, which fluctuates with change in seasons2.

Methodology

This paper attempts to study the relationship of Ecology and Raikas during their sedentary as well as migratory part of life. For the purpose of study ten migratory flocks of Raikas and 45 sedentary families have been studied through ethnographic research approach. Tools of the study are unstructured interviews, observations and case studies.

Analysis and Discussion

During the course of migration of pastoral people different varieties of grass and vegetation come on their route. Detailed information on the variety of grasses encountered en-route has been taken. Quality of these grasses, suitability of the different grasses as fodder, changes in the type of grazing available in the course of migration are also studied. An attempt has also been made to know about the problems flocks face in adapting to different types of grasses:

One migration cycle was studied in detail. Migration cycle started from Manpur of Pali district. In the early phase of migration, there was enormous variety of edible grasses, shrubs and creepers available for grazing. Dominant variety changed from one micro niche to another, but the overall variety remained the same. Grazing on variety of different plants in a poor state is preferred to grazing on only one species. Thus, continued grazing on one species, for example a shrub named Booi, would lead to illness of many animals specially lambs.But, switching the animals to another type of grazing can mitigate this risk, like a shrub called Besuni or a creeper like grass called Ganthiya.

As the migration cycle moves westwards, the variety of vegetation begins to decrease. At the same time, the types of grasses also begin to change. There is a gradual decrease in the presence of the desert grasses, such as Sewan and Ganthiya. Shrubs, such as Bhurut, Booi and Besuni also decrease and thus their importance in grazing also becomes less. But on the other hand, new variety of grass makes their appearance, like Binjli and to a lesser extend Dob. Dob also gradually becomes important grass available for grazing. In the region of western Jodhpur and most of Nagaur, stubble of Bajra, Guar and Til

become important grazing sources that are more commonly present. Unlike other natural grass, the grazing resource is found and said to be more susceptible to the climate.

As the migration cycle moves towards north and west, the transition goes from natural grass to crop residues. In the irrigated two crop areas of Haryana, vegetation reaches its extreme. After the crops have been harvested i.e. after March-April there is a shift in the type of grazing available. Stubble and residues of crops such as wheat, Sarsoon, Taramira and gram are found here in abundance. The grazing on two crops irrigated area is rich and the animals can easily thrive on it. With the onset of monsoon, return journey of flocks starts.

Problems associated with grazing on the return journey are different from what preceded. The only grazing available since fields have been ploughed and sown. The only grazing available is grass, such as Dob and Kanti along the narrow roadsides. These difficulties last until the flocks reach the dry and relatively uncultivated zone of Western Bikaner, Jodhpur and Pokran. Now, the grasses again change. Desert grasses such as Ganthiya and Sewan make reappearance. These are available in much better state than they were in winter.

Lopping forms an important component of the grazing system and its importance depends on the broader environmental complex of the regions where flocks migrate. Thus, in the early phase of migration, the importance of loppings is negligible, because of relative paucity of trees in the Pokran and Jaisalmer region. On the midway to Jodhpur, lopping acquire significant place, with the appearance of Khejri tree. Its presence continues to be in Jodhpur and Nagaur and way to Sikar, from where its appearance ceases. This tree does not occur generally in common or waste lands and is largely found in fields. Thus, its use by migrating animals is restricted and depends mainly on reciprocal exchange between Raikas and farmers. Thus, they can use Khejri tree only when flocks spend night in the field and deposit manure. Lopping is not permitted occasionally but dusting off the leaves may be allowed. The value of tree lopping for the flock increases for young lambs, especially in conditions where grazing is poor. Apart from Khejri, the other tree, which is sometimes lopped for the flocks, is Oranjia. This is found chiefly in the regions of eastern Nagaur, northern Ajmer and Sikar. A problem with this tree is that its fruit (pods) are a deadly poison, the consumption of which even leads to death of an animal. For this reason, the tree is of negligible utility. The movement into Haryana changes the available source of lopping completely. The only source of lopping is the widely spread Desi Babool tree. Animals eat its fruit or phali (pod) with great interest. Thus, the vegetation coming en-route of migration can be broadly classified as follows:

Sewan and Ganthiya: These are perennial grasses and can be eaten in a dry state as well as in a green one. Both are considered to be very good and nutritious for animals. Camels do not eat Ganthiya, but other animals like sheep and goats do eat it.

Luna: It is a kind of shrub. It is eaten green as well as in its dry state. But it does not prove to be a good fodder.

Khair: It is spiny, cactus like shrub and is eaten by sheep and camel.

Akda: It is a kind of cactus and is almost present everywhere. Sheep and goat eat its big leaves, but for them it is not considered nutritious and for camelitis even considered as toxic.

Ber : Its leaves are considered to be highly nutritious. They are eaten dry. It is considered to be a high quality fodder.

Vilayati Babool : It is planted by the government on road sides. It is said that it has no fodder value and infact, is considered as toxic.

Desi Babool: It is a good fodder and is available generously along with route of migration.

Sarson : It is eaten with great interest by sheep, goat and camel.

Thor: Its green leaves and flowers, both provide a good fodder. Leaves are eaten by goats and flowers by sheep.

Googlan and Murali: They are eaten in a green state by sheep, goats and camels.

Booi: It is a kind of a shrub, which makes its

appearance after rain but can be eaten by flocks when dry. If eaten green, it causes constipation and even death, especially among lambs. It is thus not considered as a good or a nutritious fodder.

Dhamasa: It is of average nutritional value and is available throughout the year, but is preferably eaten dried.

Kheemp: It is eaten only by young camels and in a green state.

Khejri: It is a tree. Animals eat it with great interest. It is believed to be pious and villagers are restricted from lopping or cutting it. It enjoys the religious sentiments of various communities settled in villages of Rajasthan.

During the rainy season, the forest of Aravalli hills provides plants of good nutritional value in which the main forage trees are: Dhav (Anoguessus species), Kanter (Capparis sepiaria) and Kolvan (Dicrostacrys cinerea)

Two types of fields for grazing animals have been noticed during the study:

Oroan: This type of field is never cultivated and is open for grazing throughout the year.

Post monsoon fallow: This type of field is available only for seven to eight months for grazing, when they are not being cultivated. These village fallow lands are also called as gocher. (literally meaning 'land for grazing of cows').

There are certain patterns of grazing of animals among Raikas:

Radial grazing pattern: In this type of grazing pattern, Raikas leave with their animals in the morning and return to the village in the evening after grazing them.

Circular grazing pattern: Raikas move from one pasture to another for a specified period and return home after several months3.

Another pattern of grazing has also been observed. In this type, a Raika hires an agricultural field (after it has been harvested) together with the Khejri trees (Prosopis cineraria) standing on it. The owner may demand payment either in cash or part cash payment together with bare branches of the tree. Raikas cut off all the small leafy branches

of the Khejri tree and thus the trees are reduced to stumps. The residual branches serve as fuel or are used in making fences. Owners often complain that Raikas cut off all small leafy branches of the Khejri tree and thus the trees are damaged beyond recoupment. If a Raika has given total payment in cash, he will keep all the branches for himself, but if he gives payment for piling he will pile them up in a corner of the field of the owner to collect them. Once the contract is complete and executed, Raikas shift their flocks to the fields, start living in a thatched hut till its vegetation is exhausted. After that, they move to other agricultural fields. In their local dialect, they call it berey pe rahna (to live on the field). Such arrangements if deemed necessary are made prior to start of migration.

Different animals have also different habits of grazing. Thus, the herdsmen have to graze animals in a manner, which suits their habit. Like sheep graze by roaming here and there and camels have the habit of grazing separately. Thus camels are not grazed by their individual owner. There are certain specific families of camel herdsman, who graze the camels of all Raikas. For sheep and goats, herdsmen disperse at different points. During the day, when they get tired, they offen sit together on a raised plateau and keep an eye on the entire herd. Like the grazing pattern, there also exists fodder pattern as enumerated below:

Green vegetation: It includes green creepers, leafy shrubs etc.

Dry fodder: It includes plants, which are dried up and are given to animals mainly during summers, when pastures in become scarce jungles.

Seeds: Wet and dry cereals.

Though many type of herb, shrub and trees come on the route during migration but the major vegetation which the herds of Raikas eat are:

Jungle Kerela (Momordica dioica): These are creepers and are found mainly in villages and semi-arid region during rainy season. Round shaped spiny fruits are found on it. Animals, especially camels eat it with great interest. Its local name is Mornordica dioica.

Indrayan (Citrullus colocynthis) : It is mainly found in desert and semi-desert area in rains. Its

leaves are small. Its fruit are of small ball-shape, which is green. They are very bitter in taste. It is believed that, it is good for digestion.

Shakarkandhi (Solanum indicum) : It is eaten exclusively by camel. Therefore, it is also called unta katari. It is mainly seen during rainy and autumn season.

Some other plants of interest to Raikas as fodder to their herds are: Ker (Capparis aphylla), Ber (Zizyphus rotundifolia), Ber (Zizyphus jujuba), Katha (Acasia arabica), Katha (Accaia catechu), Babool (Acacia Senegal), Neem (Melia azadirachta), Babool (Ficus religiosa), Gulmohar (Dalbergia sissoo), and Aam (Mangifera indica).

Certain plants are poisonous to animals herded by Raikas. Though Raikas have some knowledge about these plants and their effects; yet cases of accident do occur due to poisoning. It is therefore, necessary to make a mention of these plants:

Jwar (Sorghum): After, the rain sorghum standing in the fields remains short. At that time it contains a kind of poison called hydrocyanic acid. This poison gets washed away during rains but when rains stop it is retained. Animals became victims of poison if they graze on such plants. It even leads to death.

Dhatura (Stromonium or Horn Apple Poisoning): During rains this plant grows by itself in north India. It is quite small. Its fruit are small and ball shaped. Spines are found on these fruits. Hindus offer these fruits to Shivji. Generally, animals do not eat it, but sometimes if by mistake they eat it, they faint and even die.

Akda (Calotropis procera): This plant is mainly found in desert area where salt is in abundance. When its leaf is plucked, white fluid comes out of the stem. Animals generally don't eat it. Often, goats eat its dry leaves and remain unaffected. But sometimes, along with other plants, camels and sheep eat them and as a result poison spread in them.

Adaptation of the Tribe

Due to migration, there is a constant shift in grazing resources and the flocks have to face certain adaptive problems. Process of adaptation is a learning process i.e. a process involving habituation and familiarity with the changing habitat. Often a considerable amount of control has to be exercised by Raikas and also a degree of habituation is necessary before the flocks graze on new grasses. Moreover, considerable attention has to be paid to restrict animals, specially lambs, from eating unsuitable and at times poisonous plants. As has been said earlier, constant grazing on Booi often leads to constipation, subsequent diarrhea and ultimately, death. In this instance, the role of Raikas is important, because the consumption of a limited amount of this plant is not harmful. It is only unrestricted grazing on this plant that does the damage. Similarly, flocks do not naturally refrain from eating Oranjia, Vilayati Babool and also sometimes Akda, all seriously toxic for these animals, which have to be carefully restricted.

Two important criticisms labeled against the pastoral nomads are overgrazing and soil erosion. But, it has been observed that the rate or speed at which flocks move ensure that a pasture or field or fallow is not seriously damaged after a flock has grazed on it. Raikas move very rapidly, making their flocks graze on the upper portion of the crop. About the soil erosion also it has been observed; that the passage of sheep can lead to erosion through the raising of dust, though at the same time the nature of the soil also proves an important contributing factor. Thus, grazing on hard soil of harvested and fallows fields or on the oroans do not appear to lead to soil erosion. It is observed only in freshly ploughed fields or soft soils or sandy areas.

To conclude it can be summarised that: Raikas face the problem of lack of pasture land. There are several reasons for the decrease in pasturelands. Increase in population has led to rapid colonization of marginal land. This land, at one time, was available for grazing. Again, as said by Agarwal, "An expansion of crop lands on grazing sites has made grazing areas less and still lesser. This in turn has led to the overstocking of grazing lands, destroying their productivity and impoverishing the graziers in the process".4Mankad has described the problem of Raikas of Khathiawad in the following words: "The forests are being cut down. The pasture lands are gradually getting smaller and narrower, the rainfall in the province is gradually becoming In these circumstances Raikas find it extremely difficult to rear a number of animals. So, they are slowly giving up their original occupation and have thought it proper to settle down and take to agriculture. They take to cultivate for others as servants and get a settled sum of money for their work. Then, the purchasers of camel are very few and these too are decreasing fast. The reason being that the necessity of camel was very great about seventy five years ago when there were no trains and motors. The art of war has also undergone a great change. So now no one requires a camel, except for show or for sundry state business. Raikas are thus losing a great deal and have to find new sources of maintenance".5

Another reason, is the starting of irrigation projects. Before the starting of major irrigation projects, villagers were dependent on one crop (ek fasal) which was fully harvested by Asvina Kartika Agrahayana (October, November) and then the fields used to be completely uncultivated. At that time, Raikas moving with their herds, were not only welcome by farmers, who provided them fields for rest and stay, but were often paid for this service, as the nomadic animals if allowed to rest for sometime in a field brought manure to it. But, with the start of irrigation projects, the symbiosis between farmers and herding castes has turned into open antagonism. One monsoon crop (that was the earlier trend) has changed to two crops and thus at no part of the year land is available for grazing. Animals cause considerable damage to the standing crops, and this creates tension among Raikas and settled cultivators. Nowadays new fertilizers are available in the market. This has again reduced the dependence of farmers on animal dumps. As a result, the settled farmers not only oppose the graziers, but also resort to violence, sometimes resulting in heavy casualities. Thus, some of the Raikas have started entering into forests for grazing their herds. But here also there are problems. In Gujrat and Rajasthan forests have almost disappeared, and thus the only state left with forest is M.P. But, as has been said in earlier chapters, the grazing tax in these forest areas is too high for them to pay. Moreover, foresters have started planting trees of eucalyptus, which is of no use from grazing point of view as well as from ecological point of view. Raikas have had a fall in their status, after the ruling houses (of Rajputs) disposed of their camel-herds. After India's independence the rulers of various states could not maintain the life style they led earlier and thus have to withdraw the patronage they earlier generously extended to their subordinates. As has been said earlier they were also the losers in 'Land Reform Act'. After independence several development programmes have also been in progress. 'Grow more food' rather than 'grow more wool', was India's slogan of development after independence. To add to the problems of Raikas, areas which were set-aside in villages for grazing such as gocher were also illegally encroached upon by the peasant classes and barbed wires were fenced round it. Raikas were restricted from grazing animals over there. Prasad has also documented many cases of conflict between pastoralists and agriculturists, between foresters and pastoralists, where settled population tried to stop the Rebaris from entering their areas. These conflicts even lead to blood shed.

Other reasons for scarcity of land for grazing has been given by Jodha, "Along with agriculture, other developments include increased availabity of tractors, shortening of the fallowing period, mining activities, creation of nature reserves."7 Again according to Centre for Science and Environment concurrent with human population growth, livestock populations have also risen and the stocking density has increased three times. There is a popular saying among Raikas, "Earlier there used to be a jungle here, now there is nothing". Moreover, central government has also closed the summer grazing grounds of Raikas in Aravali hills and alternative pastures are absent. To add more problem for Raikas, some of their traditional summer pastures in the Aravalli hills, (east of the desert), have been listed as nature reserves.

Thus, with the scarcity of grazing land, majority of Raika herds are now on the brink of starvation and their chronic hunger has ill affected their fertility. Raikas are pastoral nomads loaded with ethno knowledge of animals and plants ,which are on the verge of extinction. It is the need of an hour to draw a strategy so as to save this community.

References

- Kavoori, Purnendu, (1990). Pastoral Transhumance in Eastern Rajasthan: A Report on the Migratory System of Sheep, Mimeo, Jaipur, Rajasthan: Institute of Development Studies, 28-9.
- Dyson Hudson R. and J. T. McCabe, (1985). Water Resources and Livestock Movements in South Turkana, Kenya, Nomadic Peoples, no. 19 (September).
- Pallmieri, (1982). in Srivastava Vinay, (1997). Religious Renunciation of a Pastoral People, Delhi: Oxford University Press 30-31.
- Agarwal Arun, (1999). Greener Pastures: Politics, Markets and Community Among a Migrant Pastoral People, New Delhi: Oxford University Press, 101-103.
- Mankad, B. L. (1939). Rabaris of Kathiawad A Social Study, Journal of University of Bombay, (7), 31-79.
- Prasad, R.R., (1994). Pastoral Nomadism in Arid Zones of India: Socio Demographic and Ecological Aspects, New Delhi: Discovery.
- Jodha, Narpat, (1985). Population Growth and the Decline of Common Property Resources in Rajasthan, India, Population and Development Review, (11), 247-63.