UNIT 6 NOMADIC PASTORALISM

Structure

6.0 INTRODUCTION

As we examine the history of the patterns of human settlement on the Indian subcontinent we are struck by an early stage among the human groups which directly relates with the nomadic ways of living. Since this stage is associated with the practice of pastoralism we generally call it nomadic pastoralism. The origins of this type of living, like the other early stages of human social formations, are covered with haze. We have to depend on the tools of archaeology and anthropology to be able to reconstruct the early phase of nomadic pastoralism, though the gaps in information are wide and the available evidence is mostly reticent.

The nomadism among these human groups was primarily determined by the pastoral requirements of wandering in search of suitable forage. Similarly the pastoralism among them was guided by the urge to have a regular supply of food – the animal meat undisturbed by the vagaries of weather. This conjuncture gave rise to nomadic pastoralism as a definitive stage in human societies coexisting with other social groups since their emergence. It is our attempt to piece-together available evidence, both archaeological and anthropological, pertaining to nomadic pastoral communities and present a coherent account of the interchange that worked between these communities and the environments in which they survived and became functional. This account, perforce, will be a sketchy narrative but that is the constraint which we cannot overcome at the present state of our knowledge about these communities.

6.1 EMERGENCE OF PASTORALISM

The early evidence on human groups and their habitats suggests that the animals found in the vicinity were hunted for food assisted by stone tools and implements employed in butchering and skinning besides of - course in hunting. Whenever the animal population in the area depleted, the group was obliged to move to locations which provided sufficient supply of animals again. The species of animals so hunted for food are not very clear. The fossil remains found from the Narmada region

indicate six varieties viz. *Sus namadicus, Bos namadicus, Elephas hysudricus*, *Equus namadicus*, *Hexa-protodon namadicus*, and *Stegodon insignis-ganesa*. All of these species lived from the Middle Pleistocene age (about one million years before the present). Similarly fossil find at Pravara river (a tributary of Godavari) yields evidence on *Bos namadicus*, *Equus namadicus* and *Elephas namadicus*. These species can be roughly equated with varieties of wild ox, horse and elephant which later became the domesticated species. The hunting human groups often got their animals from the same herd where the concentrated mostly on larger members of the herd. In this process sometimes the young members of the herd were captured alive and kept in cages. This practice seemed to have germinated the idea of taming animals and from here would have originated the practice of pastoralism.

Definitive and direct evidence on the origins of pastoralism is not available. We can only be speculative and reconstruct the situation based on reasoned imagination. It seems the hunting-gathering communities had begun to focus or some species of large animals for diet fairly early and in this process wild sheep and goats were intensively hunted. In this act younger members and female members in the reproductive category were spared so that this source of food would not dry up. The chance capture of a few younger animals and the experience gained in taming them suggested a completely new way of leading life - through assured supply of animal food. This would also have given rise to an increased element of dependence – in fact mutual dependence between humans and animals.

It has been suggested that three main factors in the life style of hunter-gatherers would have helped domestication of animals to begin as a regular practice. These were:

- the movement of the animal populations becoming constrained/ restricted due to several environmental factors, thus increasing the possibility of their capture and confinement by human groups;

- possibilities of breeding the animals under conditions of captivity, thus helping human groups maintain some optimum population for use for dietary purposes regularly;

- control of the feeding of the animals in captivity to improve their breeding and stock. (Cf. Richard H. Meadows, 'Osteological Evidence for the Process of animal Domestication' in *The Walking Larder*, ed. Juliet Clutton-Brock, London, 1989 as used by Brian M. Fagan, *People of the Earth, An Introduction to World Prehistory*, First Indian Reprint, 2004, p.226).

The archaeological evidence for early domestication of animals is both rare and fragmentary. Mostly it is not possible to clearly distinguish between the bones of wild and domesticated animals. The process of domestication was quite prolonged and the earliest evidence on domestication, relates to dog but that surely was not for food. By

general agreement it is now believed that sheep and goats were the early species that were domesticated for dietary purposes. An important factor that would have played a significant role in domesticating animals was the behaviour of the animals. As suggested by Andrew Smith (*Pastoralism in Africa, Johannesburg, 1992*) 'the first domesticated animals came from better-disciplined wild herds in arid environments, where it was easier to control the movements of animals' (Cf. Brian M. Fagan, *op.cit*, p.227). Some animals, because of their behavioural habits, were very difficult to domesticate. The sheep and goat are comparatively small animals and had good herd habits. It may therefore have been easy to keep them under captivity, the habits of living in herds helping the captured flocks take to conditions of captivity. Continued contact with humans who tended them in captivity also resulted, over a period of time, in the growth of a 'symbiotic relationship with people' as suggested by Brian M. Fagan (*op.cit*). Once breeding in captivity started it was easier to slaughter surplus males for food. This breeding in captivity also helped humans discover their utility for milk purposes and such by-products as skins for clothes and tents and leather for other purposes.

Availability of grasslands for herds to use as pastures has also been suggested as a factor of great significance in the emergence of pastoralism. The following detailed passages by W.A. Rodgers ('Environmental Change and the Evolution of Pastoralism in South Asia: A Discussion', *Studies in History*, Vol. 7, No.2, n.s., 1991, pp. 199-200) illustrate this point clearly: "Many of the species of pastoralist livestock originated in South Asia such as zebu and taurus cattle, buffalo, camel, sheep and goats. They would have been hunted for meat and other products (hides, bones) along with other species. Their typical diurnal and herding habits would have made hunting relatively easy. As most of these species prefer open, well-watered country, it is likely that they were a resource important enough to defend from other groups of people. This would have led to some form of territorial ownership.

Much has been said about India's lack of grasslands. There are climatic and edaphic grasslands, at extremes of cold and aridity or shallow soil or deep waterlogging. Basically any habitat which will not support trees or shrubs becomes a grassland. These grasslands have supported distinct large grazing herbivore communities, with several endemic species. But these are still a small proportion of India's land surface, most of which supports a wooded vegetation, forest woodland, or shrubland.

The presence of a tree layer does not eliminate grasses; there can still be a significant grass cover under the trees. Whilst traditionally one associates African pastoralism with grasslands, the Massai of East Africa being a prime example, not all pastoralist livestock populations browse as do sheep and cattle in Indian conditions.

The severe nine month dry season typical of the Deccan and Western Ghats in peninsular India cannot produce a grass cover of sufficient palatability to maintain medium size herbivores. Browse becomes an essential part of the diet. Browse consists of palatable herbs, often

legumes, shrubs such as ber (*Zizyphus* species), and fallen tree litter. These browse components, and grass standing crop, are more abundant in open wooded communities than under closed forest. The dense moist deciduous forests have little fodder at ground and shrub layer levels, and their carrying capacity for terrestrial mammals is low compared to open thorn bush and dry deciduous communities.

It is perfectly feasible, therefore, to imagine pastoralist people in India's forests. We see this today with the Jammuwalla buffalo herders in the once dense Shivalik and Himalaya forests, depending on lopping tree leaf; and in drier Aravalli and Saurashtra hill forests, with distinct Gujjar communities lopping trees and shrubs for mixed cattle and buffalo herds."

It has been suggested by Brian M. Fagan that the beginning of the practice of domestication had a far-reaching impact from the eco-environmental perspective. "Domestication implies a genetic selection emphasizing special features of continuing use to the domesticator. Wild sheep have no wool, wild cows produce milk only for their offspring, and undomesticated chickens do not lay surplus eggs. Changes in wool bearing, lactation or egg production could be achieved by isolating wild populations for selective breeding under human care. Isolating species from a larger gene pool produced domestic sheep with thick, woolly coats and domestic goats providing regular supplies of milk, which formed a staple in the diet of many human populations" (*op.cit*, pp.225-6).

In India the most clear evidence on the domestication of animals comes from the site located at Adamgarh hill in the Narmada valley. The site is in fact a rock shelter that contains stone tools and other remains from the Mesolithic stage. A thick layer of black soil varying in depth from 50 to 150 centimetres contains microlithic tools, animal bones and pottery. "The animal bones found in the excavation include the domestic dog (*Canis familiaris)*, Indian humped cattle (*Bos indicus*), water buffalo (*Bubalus bubalis*), goat (*Capra hircus aegagrus*), domestic sheep (*Ovis orientalis vignei* Blyth race *domesticus*), pig (*Sus scrofa cristatus*). There are also remains of a number of species of wild animals. These are Sambar, Barasingha and Spotted deer, hare, porcupine and monitor lizard. Wild and domestic animals are represented in approximately equal proportions, and a few of the bones of cattle, pig and spotted deer are charred" (after R.V. Joshi as described by Bridget & Raymond Allchin, *The Birth of Indian Civilization,* Penguin, 1968, p.83).

Another very interesting evidence, that comes from the pictorial depictions made on rock shelters, relates to the use of domesticated horses for hauling wheeled vehicles. There are a group of rock shelters known as Morhana Pahar group located close to Mirzapur in Uttar Pradesh. The drawings on one of the walls show two spoke-wheel chariots. One chariot is shown as drawn by two horses and another by four horses. There is a group of men having bows and arrows and spears and trying to stop the chariots. The site has yielded microlithic tools.

6.2 PASTORALISM AND NOMADIC COMMUNITIES

We have discussed above the genesis of the practice of pastoralism at some length and have seen how animals were tamed and reared by some hunting-gathering communities. We shall now make an attempt to understand why certain human groups adopted pastoralism as their life-style and became nomads. This questions assumes greater significance in view of the fact that animal keeping was also a very common practice followed by settled agriculturists who had adopted a mode of living in which pastoralism was given an ancillary status.

A convenient starting point for understanding the factors that may have given rise to nomadism among pastoralists as against a properly settled mode of living among agriculturists is to draw a comparison between the two modes of sustenance. The pastoralists and the agriculturists depend on land and water resources for their sustenance. The agriculturists utilize the productivity of the land for raising crops periodically with the help of irrigating potential of nearby water sources. The pastoralists too utilize the productivity of the land but depend on nature to replenish the consumed resource. The herds of animals kept by them use the resources of land as pastures for grazing purposes but pastoralists do not resort to any adopted measures for rejuvenating the forage on fixed areas of land. In the like manner the water resources are directly used without any focused effort to manipulate them. Thus the sedentism required for manipulating land by the agriculturists is not needed in the case of pastoralists. The constant requirement of additional pasture land for the herds maintained by pastoralists makes it an imperative on them to be always moving, in search of new pasture areas from one place to another. This gives rise to nomadism and early pastoral practices tend to get associated with nomadic communities.

The nomadic pastoralists kept animal herds as their resource base and depending upon the size of regularly available pasturage maintained the size of their herds. The pastoral economy was more individualistic than agricultural economy. The major community issue among nomadic pastoralists might have been the management of pastures invoking strict regulations about their use with respect to the periodicity of usage and seasonal rights of usage. The nomadic pastoralists, says Romila Thapar "generally had a fairly conventional organization, with marginal variations. The family formed the core and patrilineal descent was often traced from a common ancestor" (*Early India*, Allen Lane, 2002, p.58).

Ecological and seasonal factors seemed to have played a central role in the life of nomadic pastoralists of the early period. Unmanageable distances traversed in search of good pasturage and water sources would have had a destablising effect on the group. This would have given rise to some kind of territoriality, howsoever loosely delineated. Subsequently, interaction between different territorial groups may also have been possible as much as a conflict over territorial jurisdictions. In this context one may speculate on Morhana Pahar rock painting

showing the way-laying of two chariots by men equipped with bow and arrow and spears as perhaps indicative of territorial trespass.

6.3 NOMADIC PASTORALISM AND SETTLED COMMUNITIES

Hunter-gatherers slowly evolving into a pastoral culture and agricultural sedementism have been simultaneous processes. How did the pastoralists adopt a nomadic mode of living has been discussed in the preceding section. It is evident that the nomadic pastoralists did not live in isolation of other communities and would have maintained a relationship with them. It is suggested by Romila Thapar that some "pastoralists were nomadic…while others were semi-sedentary, occasionally practicing a minimal agriculture as well. Most pastoralsits were part of a system of exchange that brought them into contact with cultivators and others" (*op.cit.* p.57). The archaeological sites yielding evidence on domesticated animals suggest that the size of the herd maintained by pastoralsits was not unduly large, was within manageable limits and therefore prone to developing "active symbiotic relations with neighbouring groups producing cereals" (D.K. Bhattacharya and Deepra Bhattacharya, 'Agro-Pastoralism in contemporary Ethnography: Its Relevance in Explanation of Archaeological Material in India' in *Archaeology and Interactive Disciplines*, ed. S. Settar and Ravi Korisettar, New Delhi, 2002, p.164).

The relationship between pastoralists and cultivators was of advantage to both. The cereal requirements of the pastoralists were fulfilled by the farming communities. The additional labour intensive work of growing food-crops was therefore conveniently avoided by the pastoralists. They could give most of their time to keeping the animal herds in order. In return the agriculturalists received a regular supply of meat, wool and hide. Over a period of time there would take place a multiplication: in the variety of animals partially in response to a demand created by the agriculturists. The herd was also encouraged to visit the post-harvest fields so that the stubs left behind the harvesting operation would be cleaned and the droppings of animals would serve the purpose of manure. The periodic visit of nomadic pastoralists to the agricultural settlements would have resulted into the nomads taking up grazing services for the livestock maintained by the cultivating groups. The agricultural fodder was perhaps an item of exchange for this service in addition to a few other commodities.

It is interesting to note that a different environmental situation obtaining in peninsular India gave rise to a different kind of development. Though the area is generally rugged the drainage pattern of the main rivers has been such (from west to east) that pasture land in patches but in excellent condition has been available all over. The settlements in this region exhibited a high imperative of maintaining a large population of cattle right from their inception. Livestock maintaining was in fact not as much a problem as depending entirely on farming. As suggested by Bhattacharyas "Cattle pen and ashmounds found in some of these sites can indicate that animals kept were large enough in number to require

circular grazing (leaving the area of dwelling for a year round search for pasture). Such periodic migrations bring the pastorals in contact with settlements of higher culture through which products of craftsmen find their way in them" (*op.cit.*, p.166).

6.4 SUMMARY

In summary we are giving some of the generalizations, in reworded form, proposed by Bhattacharyas for pastoral communities (*op.cit*, p.162). The communities adopting pastoralism as a mode of living generally looked for large pastures around their habitat. They would even migrate to new habitats in search of good pastures resulting into nomadic habits finding a place among pastoralists. The demographic status of pastoral communities was such that agriculture was not generally attempted. Rainfall therefore had only a minor role to play against being a key feature for the settled agriculturists The maintenance of large animal herds was labour intensive but was manipulated with the help of the elastic nature of resource. When needed the herd was reduced in size through gifts or repayments to agriculturists. The size would soon be restored through reproduction. A kinship network based on lineage seems to have guided the pastoral communities.

6.5 EXERCISES

1) Discuss the factors giving rise to pastoralism in early history.

2) Write a note explaining the emergence of nomadism among pastoralists.

3) Examine the nature of relationship between nomadic pastoralists and settled agriculturists in early history.

6.6 SUGGESTED READING

Bridget and Raymond Allchin, *The Birth of Indian Civilization, India and Pakistan before 500 B.C.*, 1968.

Bridget and Raymond Allchin, *The Rise of Civilzation in India and Pakistan*, Great Britain, 1982.

Romila Thapar, *Early India, From the Origins to AD 1300*, Allen Lane, 2002.

S. Settar & Ravi Korisettar, eds, *Archaeology and Interactive Disciplines*, Vol.III of *Indian Archaeology in Retrospect*, New Delhi, 2002.

Brian M. Fagan, *People of the Earth, An Introduction to World Prehistory* First Indian Reprint, 2004.

Peter Rigby, *Persistent Pastoralists, Nomadic Societies in Transition*, London, 1985.