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MOBILE PASTORALISTS OF JAMMU & KASHMIR: A PRELIMINARY REPORT

by

Aparna Rao and Michael J. Casimir

Although it has long been known that at least some communities « ... who are primarily dependent on livestock ... and who choose as their basic strategy for providing year-round food for their herds the movement of livestock to pasturage rather than bringing fodder to herds.» (Dyson-Hudson and Dyson-Hudson, 1980: 18) exist in the Himalayan region, little research has as yet been carried out among them. This fits in also with the general paucity of field studies regarding pastoral groups in India, as mentioned by Leshnik (1975: ix). In August-September, 1980, we therefore spent approximately three weeks in the Indian states of Jammu and Kashmir trying to get a general picture of itinerant pastoral groups in the area. The following represents the main results of our very preliminary survey on some mobile pastoral groups in this region. It also presents the scope and aims of our field-work which is to begin in summer 1981. The study will be carried out over a period of several years in the zone of alpine pastures and in the semi-arid belt of the Himalayas, in the state of Jammu and Kashmir and eventually, in the adjoining areas of other Indian states. The communities falling within the scope of the study are primarily the Bakrwal, the Gojar and the occupational group of the Chōpan (see Table I).¹ These communities, their interrelationships and their relationships with the sedentary and non-pastoral communities in the area will be considered as a whole. Categorization into transhumant, nomadic, etc., will not form the basis of our study; special emphasis will, however, be laid on patterns of spatial exploitation and particular attention will be paid to the Bakrwal who have the maximum mobility.

The first major theoretical question which arises at the outset is: how does one ascertain and explain whether or not a given community is primarily dependent on livestock. In order to answer this question, « ... an analysis of ... actual (as opposed to ideological) commitment of a particular group to pastoralism ...» (Dyson-Hudson and Dyson-Hudson, 1980: 19) would be required. This will be attempted by gathering data on the «... proportions of food energy derived from grain they raise themselves, from grain they barter, from wild foods, and from livestock; of how these proportions vary within and between age and sex categories; and of how they vary throughout the year and from year to year.» (Dyson-Hudson and Dyson-Hudson, 1980: 19). At this stage we can only state that many of the Gojar and Bakrwal have at least some agricultural land, the Gojar having the larger holdings.

In the proposed study two further theoretical problems are faced:

- those of ethnic classification and ethnicity;
- that of the types of ownership of the pastoral means of production.

The problem of ethnic classification and ethnicity arise, first of all, because of the use of the term Gojar, not only in Kashmir, but in an area

stretching from even beyond Nuristan in the north-west to Northern Karnataka in the south. The emic and etic concepts of ethnic categorization will have to be carefully analysed with the help of field data, as well as historical source materials. The political changes that have taken place in the area for several centuries - and more particularly in the last forty years - have had their impact on these problems. The creation in 1947 of the independent nations of Pakistan and India, the ensuing conflicts over Kashmir and finally, the declaration in independent India, as part of the Indian Constitution, of Articles 341 and 342 granting special socio-economic opportunities and benefits to those declared as Scheduled Tribes or Scheduled Castes, have been some of the events with major impact.

All persons we spoke to during our short survey were agreed upon the fact that the Bakrwāl are not originally from the area at present included in the state of Kashmir. According to Madan «There is a fourth category of immigrant Muslims who entered the Valley late in the nineteenth century. They are called Gujar ('cowherd') and Bakarwal ('goatherd') and constitute two somewhat distinctive groups. They are the Muslims who ... speak a non-Kashmiri dialect among themselves.» (Madan, 1981: 25). Similarly, Uhlig states «... daß sie sich dem von der britischindischen Regierung seit 1861 mit der Festlegung der Reserved Forests und zur Verbesserung der Kontrolle über die gefährdeten North-Western Frontier Province ausgeübten Druck zur Sesshaftmachung widersetzen und es vorzogen, stattdessen nach Kaschmir auszuweichen. Dort gewährte ihnen der Maharadscha in der Hoffnung auf Steuererträge von den Ziegen Zugang.» (Uhlig, 1973: 163). Most of the Bakrwāl we could question mentioned either Swat or Kāgān as their ancestral homeland. One informant gave the following detail: «The Bakrwāl are divided into two sections, the Ilahiwāl and the Kunārī; the former are so called because they hail from Alai in Pakhtunistan,² and the latter from Kunar in Zila Kāgān, Hazarā.»³ Some informants also said that although they themselves did not speak Pashto, their ancestors did. The very first reference to Bakrwāl in the Census of India appears in 1921 (Census of India, Vol. XXII, Kashmir, Part I: 130, §109) where it is stated that the Gojar, the Bakrwāl, the Gaddi, etc., «... tribes are settled permanently in the State ...». A second reference to the Bakrwāl appears in the Census of India 1931 (Vol. XXXIV: 100-101): «The castes that are comparatively more migratory are the Gujjars, Gaddis and Bakerwals who follow pastoral professions.» All this seems to indicate that the Bakrwāl and the Gojar were then regarded - and perhaps also regarded themselves - as two distinct communities. How is it then that in the Census of India 1941 one reads (p.9) that «The Bakarwals are a nomadic element of the Gujjar tribe; they keep large herds of sheep and goats and a certain number of buffaloes and cattle.»? (Census of India, 1941, Report on Kashmir, Part I: 9-11). Seventeen years later, it was however stated that the Bakrwāl «... should be treated as distinct to the Gujjars.» (Report of The Sub-Committee Of The Central Advisory Board For Tribal Welfare: 120-124). Another eighteen years thereafter, Khatana spoke of «Gujar Bakarwals» (Khatana, 1976). The uses and connotations of the terms Bakrwāl and Gojar are obviously problematic and need careful study and analysis. The Gojar we encountered appeared, on the whole, to speak derisively about the Bakrwāl. Those Gojar who occupy important social or political positions in the state structure, claimed that the Bakrwāl are only a poorer section of the big Gojar community, with no cultural identity of their own. One such informant mentioned that the Rajput and the Gojar

are basically the same community, a view commonly held by the Gojar of Panjab and discussed by several authors writing about northern India.⁴ Other Gojar informants spoke, however, of three distinct communities. Those of Tangmarg, Nurābād and Chatti Bāndi villages but it thus: there are the Gojar, the Banihārā and the Bakrwāl; whereas there is intermarriage between the first two groups, the Bakrwāl are endogamous, a point corroborated by all Bakrwāl informants also. The Gojar are agriculturalists and cow and buffalo-owning animal husbanders, the Banihārā are itinerant cattle and buffalo herders and the Bakrwāl are itinerant and traditionally goat and now also sheep herders. The information concerning the types of animals herded is also somewhat different from that obtained from the literature on the subject. Thus, Swinburne considered the Gojar as being « ... a member of the semi-nomad tribes which graze buffalo and goats upon the hills ...» (Swinburne, 1970: 89). According to the Census of India 1931 (p. 322), however, the Gojar are nomadic cattle owners, in the « ... highlands separating Gilgit from ... Tangir and Darel.» Writing about Swat, Barth states that among the Gojar there, one finds both transhumants and true nomads.: «While the transhumant Gujars place their main emphasis on the water buffalo, the nomads specialize in the more mobile sheep and goats ... The true nomads never engage in agricultural pursuits; they may keep cattle, but are not encumbered with water buffalo.» (Barth, 1956: 1085).

Whatever the differences between the Bakrwāl and the Gojar, it appears that the social structure of the two groups is somewhat similar. Thus for example, all the Bakrwāl questioned said that their group is split up into various zāt or gotra, each belonging to either the Ilahiwal or Kunari sections and each having a chief (mukaddam). Now the names of these zāt/gotra coincide, to a great extent, with the names of some Gojar zāt/gotra given to us by Gojar informants in the villages of Arhābal and Chatti Bāndi. Khatana (1976), who translates «gotra» by «clan», does not mention the use of the term zāt. The exact local connotations in anthropological terms of the words zāt and gotra will have to be ascertained during this study. The social structure and organization of these communities will have to be considered against the background of Islam, this in turn, being viewed against the background of Hindu environment and its most ubiquitous feature, the caste system. The Bakrwāl and Gojar of Jammu and Kashmir are Muslims; according to Khatana (1976: 85) « ... some are inclined to regard the Gujars as Shi'a.» A further point to be investigated is the language spoken by the Bakrwāl and the Gojar. A Bakrwāl informant said that both communities spoke Gojri; while agreeing in principle, with this, a Gojar informant said that there is some difference in vocabulary between their Gojri and that spoken by the Bakrwāl and the Banihārā. According to Swinburne, the Gojar speak Parimu or Hindki. Madan calls this « ... a non-Kashmiri dialect called Paryum (literally, 'foreign', 'alien').» (Madan, 1981:24). The Census of India 1931 mentions Gojri as being a dialect of Rajasthani. Finally, Khatana writes that «The Illahiwal Gujar Bakarwals speak Gujarati with an accent which seems to have been influenced by Pushto speech ...» (Khatana, 1976: 87). Our preliminary information suggests that the language spoken by both the Bakrwāl and the Gojar is closely related to Panjabi.

The problem of the role of ownership of pastoral means of production arises primarily in the case of the Chopān who are professional Kashmiri herders hired in summer by totally sedentary Kashmiri agriculturalists in

the lower regions of the Valley or in the plains of Jammu with relatively small herds. In winter, these herds are stall-fed. The Chopān collect herds from several such agriculturists and shift them between May and September to altitudes up to about 2000 metres. During this period of five months, the entire livestock management is in their hands. Back in their own villages, the Chopān themselves have very limited land-holdings and in winter their men and women migrate to the Panjab plains to work as day-labourers. Their main source of income is this form of herd management. They therefore depend primarily on herds which are not their property, but in whose management they have a great say. In other words, the Chopān, unlike for example, the shepherds employed by the Komachi of Iran⁵, have access to the means of production and control their reproduction (and therefore, eventually, the surplus value); they do not, however, own these means of production. They are paid for their services in kind; according to Uhlig (1973), they are paid in rice, wool and meat, and since they milk the sheep in summer pastures, they may keep part of the butter made from this milk. Not only the relations of production in such a system, but also the differences in types of herd management resulting from such a system - as compared to the Bakrwāl and the Gojar - have to be analyzed in detail. Thus, for example, it was learnt from officials of the Sheep Husbandry Department of the Kashmir Government, that these Chopān have little interest in the welfare of the herds under their care; that they do not feed the rams enough or by hand, and that they wean the lambs too early - at circa 3 instead of the recommended 6 months.

A further phenomenon to be investigated in detail - eventually along the lines suggested by, for example, Vicenze (1980) - is that of agro-pastoralism, with special reference to the Gojar, many of whom are peasant animal husbanders.

The three groups to be covered by this study - namely, the Bakrwāl, the Gojar and the Chopān - compete with one another for pasture resources whose total area is approximately 125000 hectares (figure obtained from Department of Sheep Husbandry, Government of Jammu & Kashmir). The territorial organization of this resource management will be another major focus of our study. At least two preliminary questions arise here:

- how far is pastoral production suited to the exploitation of this specific natural environment?
- what is the social relationship in the area between pastoral production and agricultural production, e.g. does the division into two types of production correspond to ethnic, religious or hierarchical divisions?

The answers will be sought from historical as well as contemporary sources. How is it, for example, that the Gojar who have arable land in the Kashmir Valley, plant maize instead of rice as do all their non-Gojar neighbours? Is this perhaps because when the Gojar first arrived in the Valley, all land suitable for rice cultivation was already in the hands of the Kashmiris? Or is it because the Kashmiris forbade the Gojar to cultivate rice, or again, could it be that the Gojar originally came from a maize-growing area and thus really prefer maize to rice?

Territorial organization of pasture resources in this study will be viewed under two broad headings:

- in the context of interaction between the several communities competing for this basic resource;
- within each of the communities to be studied.

As has already been stated, in a total area of 125000 ha. three main groups compete for pasture and water for their herds. Since the Bakrwāl and the Chopān herd the same type of animals, namely sheep and goats, the competition between them is the greatest. Preliminary information received from both these communities indicates that competition is maximum between approximately 2000 metres and 3000 metres which is a coniferous, forested area with four main tree species, *Cedrus deodara*, *Picea smithiana*, *Abies pindrow*, and *Pinus roxburghii*. The Bakrwāl apparently, usually gain the upper hand. Above this pasture area the highland pastures begin and are used exclusively by the Bakrwāl. Pastures below about 2000 metres in the Kashmir Valley are used primarily by the Chopān. Figure 1 broadly indicates the most important migration routes used by the Bakrwāl on their way to and from summer pastures⁶.

Another aspect of interaction between the different communities is witnessed between those Gojar who are part agriculturalists and part animal husbanders and Banihārā (Gojar) who are entirely pastoral. In late spring (around April) both groups take their herds of cows and buffalo to mountain pastures (bahak); in autumn (around September), when the Banihārā return with their own herds to the plains (kachāriā) the Gojar of certain specific villages entrust to specific Banihārā families their buffalo and their non-milch cows (phandar), which the Banihārā tend for them during the winter (sarmā) months and then bring back in late spring on their way to summer pastures. During winter the Gojar keep their milch cows with them and feed them with straw and dried willow leaves. The role of individual decision making in the context of this particular form of interaction between the Gojar and the Banihārā (Gojar) has to be investigated; so also the result of this interaction on longterm ties of friendship and marriage.

The organization of pasture resources within each community implies the spatial distribution of annual Gross Primary Productivity (GPP), the animal intervening as a link, as primary consumer before man, the secondary consumer. The social organization of spatial exploitation involves, for its part the key notions of home range, territoriality, individual versus communal forms of property and access to and use of pasture and water. The following preliminary information has been obtained from the Departments of Agriculture and Animal Husbandry, Government of Jammu and Kashmir, regarding the summer pastures of the Bakrwāl. The principal plant species to be found are *Andropogon tristis*, *Calamagrostis epigejos*, *Poa pratensis*, *Poa alpina*, *Poa angustifolia* and *Stipa concinna*. The biomass was calculated by them at about 165 g (dry matter)/m² for the sub-alpine pastures and at between 200 and 250 g (dry matter)/m² for the alpine pastures.

The entire Himalayan zone is endangered by the direct or indirect consequences of a certain number of human activities. Deforestation and the abusive exploitation of pasture areas, both of which lead to erosion, are the main threats. The Government of Jammu & Kashmir are of the view that the migratory animal husbanders are partly responsible for these problems, especially in the forest areas. Unfortunately, very few in-depth studies have been made on this subject, and without data this view can neither be

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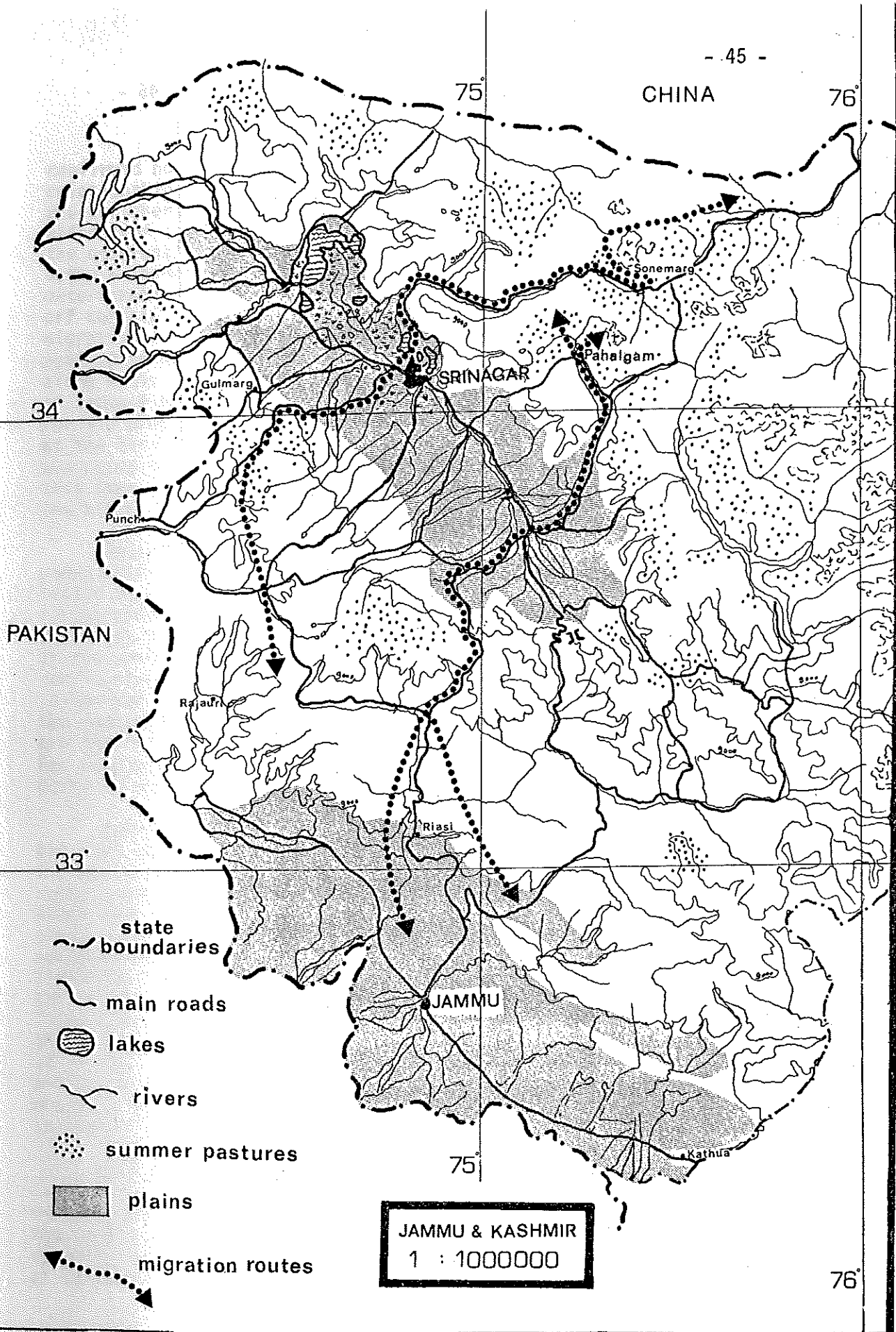


Figure 1 The principal summer pastures of the Bakrwāl and the migration routes of three of their migration units in spring and autumn 1980.

GROUP	AREA INHABITED		Herd Composition	Pastoral products (*products at least partly marketed)	AGRICULTURE	
	Summer	Winter			Region	Products
Bakrwal	Alpine pastures above 3000 m	Camps near Jammu and Rajauri	Goats, sheep	Milk, Butter, Ghee, Buttermilk, Meat*, Wool*	Mainly in winter area	Maize
Gojar	Pastures below 3000 m	Villages in the Kashmir Valley	Cows and some buffalo	Milk*, Butter, Ghee*, Buttermilk	Kashmir Valley	Maize, Apples
Banihara (Gojar)	Pastures below 3000 m	Village near Jammu and in Himachal Pradesh	Cows, Buffalo	Milk, Cheese*, Ghee	In winter area	Maize
Chopan	Pastures below 3000 m	Villages in Kashmir Valley	Sheep, Goats	Milk, Cheese	A few cases in Kashmir Valley	Vegetables

confirmed nor rejected. It is thus essential and urgent to study the relationship between the GPP, animal and man if we want to find out whether there is an overexploitation of pastures in the area, what the effects of trampling are in the forests and high pastures and whether the deforestation is caused by the herds. In any case, the Government of Jammu & Kashmir has already taken certain measures to prevent the further deterioration of the situation. Thus, the Forest Department has fenced off certain traditional pasture areas and has closed certain traditional migration routes. Many of the Bakrwāl and Banihārā we met complained bitterly against these measures; it is not apparently hard for them to find fodder along their spring and autumn migration routes. Although the Government of Jammu & Kashmir considers the migratory herders as being partly responsible for the problem of deforestation, Government policy is not entirely aimed at the total sedentarization of these communities. A certain tendency was noted towards the encouragement of sedentism, but it should be mentioned that some measures have been recommended by Government authorities towards the benefit of these communities within a migratory set-up.

Regarding the social organization of spatial exploitation it is proposed among others that the model developed by Dyson-Hudson and Smith (1978) be tested to ascertain whether or not «A geographically stable territorial system should develop only when resources are dense and predictable. With resources of high predictability but low density, a home range is more likely. If resources are of low predictability but high density, spatio-temporal territories with a high degree of information sharing are predicted ...» (Dyson-Hudson and Dyson-Hudson, 1980: 29-30). According to several Bakrwāl, the summer pastures are privately owned by individual nuclear families who are free to buy and sell them to others. The phenomenon of private ownership has seldom been noted among mobile pastoral peoples and will be a very important point in our investigation.

Data on the social organization of all the communities will be gathered and then compared with that available on other mobile pastoral groups. Thus, for example, a careful study will be made of the role and status of women among the Bakrwāl, the Gojar and the Chopān. The question of what contributions women make to their respective economies and to what degree they control the produce of their labour will be a major focus of this study. The widely accepted view - not supported however, by the case of the Boyr Ahmad⁷ - that livestock management is a predominantly male occupation, must be reexamined in the context of contemporary and historical data gathered about these Himalayan, Islamic groups. Research on women in India is not new. But the Report of the Committee on the Status of Women in India (1974) was the first major attempt at reviewing and evaluating data on various aspects of women's roles and status and the changes that have occurred (or are taking place) because of changing modes of production. In our project it is proposed to make an in-depth study in view of the Committee's findings.

Further, the role and status of servants and shepherds working for these communities will have to be examined in great detail. Data gathered may then be compared with that available say, on the Qashqa'i (cf. Beck, 1980) and the Komachi (cf. Bradburd, 1980) of Iran. According to several Bakrwāl for example, the impoverished families of their group tend systematically to work as servants (ajri) and shepherds (goāl) for the better off families of the

group. This appears to lead to a social stratification based almost entirely on wealth; this in turn, leads to a concentration of power in the hands of a few individuals (probably the leaders of the various 'kafila', or migration units) some of whom at least apparently play an important role in the political scene of Jammu & Kashmir. A similar situation exists among the Gojar too, where the jānā work as servants and herders.

Another important aspect on which stress will be laid - and which has been almost entirely neglected by studies up to date - is the role of children in a pastoral economy. The Bakrwāl men we briefly questioned on this point said that their children did no work and played all day long; but while talking about herd management some of the apparently well to do fathers said, «We want our children to go to school, instead of tending the animals. We can afford servants for that.» The role of children in the economy is not of purely academic interest; it has to be considered in the context of a developing society and efforts made by the Government towards schooling will have to be taken into account.

Finally, a detailed study will have to be undertaken of the market for the sale of livestock and livestock products in the context of the economies of the three communities, as well as in the wider context of local and regional development policies and plans of the Government, such as the establishment of cooperatives, etc.

In the last few years, there has been a growing awareness that a combination of the methods of social anthropology with those of human ecology could lead to a better understanding of the economy of pastoral societies. In our project, we propose to study the interconnections between human ecology (climatic factors, soil quality, vegetation analysis, annual productivity of pastures, the use of different plant species as fodder and their nutritional value),⁸ economy and social organization (within each group, between the different pastoral groups and between the pastoral groups and agriculturists). A systematic analysis of these interconnections will, eventually, enable us to construct a model of pastoral society in the Himalayan region. Moreover, faced with the threat of rapid environmental change in this part of the world, a careful analysis of anthropological and ecological data may help avert certain natural catastrophes and be of value in development projects as well.

FOOTNOTES

1. Other pastoral groups such as the Changpā and the Gaddi are also to be found in parts of Jammu & Kashmir; insofar as they interact with the Bakrwāl, the Gojar and the Chopān, they may be of interest for our study.
2. Barth (1956: 77) mentions that Gojar families in Swat Kohistan « ... came «long ago» from Alai, across the Indus.»
3. Cf. Ibbetson (1974: 91-92).
4. Cf. Crooke (1973), Encyclopaedia of Islam (1960: 1122), Ibbetson (1974), etc.

5. Cf. Bradburd (1979), (1980).

6. Generally speaking, these migration routes lead from the plains around Jammu through the Banihal and Pir Panjal passes to the pastures above Pahalgam and Sonamarg, or through the Pir Panjal pass to pastures above Gulmarg. For an accurate description of one of these routes, see Kango and Dhar (1981).

7. Cf. Fazel (1977)

8. In a recent study on pastoral nomads in Afghanistan, Casimir, Winter and Glatzer (1980) demonstrated how effectively the methods of ecological analysis can be applied to the analysis of data on pastoral production.

REFERENCES

- Barth, Frederik
1956 Indus and Swat Kohistan - An Ethnographic Survey, Oslo: Universitets Etnografiska Museum, Vol. II.
- Beck, Lois
1980 «Herd Owners and Hired Shepherds: The Qashqa'i of Iran.» Ethnology, Vol. XIX, No. 3, pp. 327-351.
- Bradburd, Daniel A.
1979 Kinship and Contract: The Social Organization of the Komachi of Kerman, Iran. Ph.D. Dissertation, Department of Anthropology, CUNY.
1980 «Never Give a Shepherd An Even Break: Class and Labour Among the Komachi» American Ethnologist, Vol. 7, No. 4, pp. 603-620.
- Casimir, Michael J., R.P. Winter and Bernt Glatzer
1980 «Nomadism and Remote Sensing: Animal Husbandry And the Sagebrush Community In A Nomad Winter Area in Western Afghanistan.» Journal of Arid Environments, Vol. 3, pp. 231-254.
- Census of India 1921
1923 Vol. XXII, Part I. Lahore: Government Printing Press.
- Census of India 1931
1933 Vol. XXIV, Part I. Jammu: Government Printing Press.
- Census of India 1941
1942 Part I. New Delhi: Government Printing Press.
- Crooke, William
1973 (reprinted) Races of Northern India. Delhi: Cosmo Publications.
- Dyson-Hudson, Rada and Neville Dyson-Hudson
1980 «Nomadic Pastoralism.» Annual Review of Anthropology, Vol. 9, pp. 15-61.
- Dyson-Hudson, Rada and E.A. Smith
1978 «Human Territoriality: An Ecological Reassessment.» American Anthropologist, Vol. 80, pp. 21-41.
- Encyclopaedia of Islam
1960 Gudjar, pp. 1122-1123. Leiden: Brill.
- Fazel, G.R.
1977 «Social and Political Status of Women Among Pastoral Nomads: The Boyr Ahmad of Southwest Iran.» Anthropological Quarterly, Vol. 50, No. 2, pp. 77-89.
- Ibbetson, Denzil
1974 (reprinted) Punjab Castes. Delhi: B.R. Publishing Corporation.

- Kango, G.H. and Bansil Dhar
1981 «Nomadic Routes in Jammu and Kashmir.» Studies in Transhumant Pastoralism in North West Himalayas. Srinagar: Directorate of Soil Conservation.
- Khatana, R.P.
1976 «Marriage and Kinship Among the Gujar Bakerwals of Jammu and Kashmir.» I. Ahmad (ed.), Family, Kinship and Marriage Among Muslims in India. Delhi: Manohar, pp. 83-126.
- Leshnik, Lawrence S. and Günther-Dietz Sontheimer (eds.)
1975 Pastoralists and Nomads in South Asia. Wiesbaden: Otto Harrassowitz.
- Madan, T.N.
1973 «Religious Ideology in a Plural Society: The Muslims and Hindus of Kashmir.» Contributions to Indian Sociology, New Series, No. VI, pp. 106-141.
- Report of the Committee On the Status of Women in India. Towards Equality.
1974 New Delhi: Government of India.
- Report of the Sub-Committee Of the Central Advisory Board for Tribal Welfare
1958 New Delhi: Government of India.
- Swinburne, Thomas Robert (reprinted)
1970 A Holiday in the Happy Valley With Pen and Pencil. New Delhi: Sagar Publications.
- Uhlig, Harald
1973 «Wanderhirten im westlichen Himalaya: Chopans, Gujars, Bakerwals, Gaddi.» In C. Rathjens, C. Troll and H. Uhlig (eds.), Vergleichende Kulturgeographie der Hochgebirge des südlichen Asien. Wiesbaden:
- Vicenze, Lajos
1980 «Peasant Animal Husbandry: A Dialectic Model of Techno-Environmental Integration in Agro-Pastoral Societies.» Ethnology, Vol. XIX, No. 4, pp. 387-403.

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