

Task of Tribal Women in Pastoral Economy and Ecology of Eastern Himalayas: A Case Study on Bhutanese Brokpas.

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Abstract

The present paper studies the ecological mode of economic adaptation of women folk of Brokpas, one of the most spectacular semi-nomadic tribes of Eastern Himalayas in Bhutan. Surviving on transhumance, trade and herding, they represent the initial mode of human adjustment with nature. The ecology dependant micro-economic practices are designed by the women folk and executed by the male. This study reveals a primordial pragmatic model of risk spreading and risk coverage to combat with natural disasters and uncertainties in semi-nomadic pastoral socio-economy.

The matriarchal tribes of Brokpas have developed a symbiotic relationship with high pasturelands, which provide for them a perennial source of livelihood and sustenance. Their occupational patterns as yak herders and sellers of milk products, their social magnitude and their persistence as unique distinct entity in Bhutan are immensely significant. Interesting economic paradigm like Drukor, which is a trading relationship, is built on marital frames between Brokpas and their Sarchop hosts and friends called Napos to barter nature harvests through wise use of natural resources. Chazm is the practice of yet another tribal ritual for stocking non timber forest products through exchange and transfer among female folk in lean season that survives the crop failure or a lean harvest.

Still living in harmony with the organic and inorganic entities in nature and preserving the bio-cultural diversity the women folk of Brokpas are away from the evils of hierarchical lives of peasant based societies. Moving from one pasture to another with the change in seasonal micro-climate of high valleys and bartering with the settled villagers, Brokpas like all other indigenous tribes in the world are now getting trapped in the web of modernization and development leading to serious ethnic conflict.

Perusal of few case studies from Merak Sakteng in Eastern Bhutan reveals that the survival of Brokpas as a semi nomadic matriarchal community now poses a serious question of survival of pristine economic adaptability in particular and bio-cultural diversity of the mighty Himalayas as a whole. This paper would search the resilience of this community in the present economic context and the changing ecology of their habitat.

Introduction

According to the last official census in Bhutan, the Brokpas – a semi nomadic tribal community of highlanders live in the Merak and Sakteng gewogs (blocks) of Trashigang Dzongkhag (districts) in Eastern Bhutan, occupying eleven villages in Sakteng gewog with 327 households and 2119 population count and four villages in Merak gewog with 213 households and 1918 population count. They belong to the primitive pastoral society and administratively fall under the Sakteng Dungkhang extending from 27° 3'N to 27° 28'N latitude and 91° 42'E to 92° 8'E longitude with an area of 910.9 km². The Dungkhang shares border with Arunachal Pradesh of India in the north and in the east.

Collectivism and cooperative living is the sole character of the Brokpa matriarchal society and they maintain a homogeneous socio-cultural category. Animal rearing has all along been the primary occupation of the Brokpas. Weaving of woolen goods and bartering of milk products by the women folk with lower valley inhabitants are a part of their livestock economy. Herding and trading together account for 66.17 percent of the total work force. About 67.30 percent Brokpa families practice transhumance with a maximum of 91 percent families in Merak.

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Drukor - a barter trade link between Brokpas and their Sharchop *nepos* (village hosts in Eastern Bhutan) is their integral economic practice followed for centuries. Products such as fruits, herbs, cheese, butter, homespun blankets and floor mats are bartered by Brokpas for rice, barley, chilies and other edible items. Agriculture adds to their normal husbandry activities. A summer crop of buckwheat and mustard in the upper valleys, and maize, wheat and barley are cultivated in the lower Brokpa villages. *Chazm* is the practice of yet another tribal ritual for stocking non timber forest products like honey, dry fruits and herbs, pickled mushroom and herbs through exchange and transfer among female folk in lean season that survives the crop failure or a lean harvest.

The formal education is just beginning. Only 16.59 percent population is literate including formal and monastic education. So far fourteen persons have entered into government jobs. Occupational change is very minimal for the Brokpas being recorded only 5.5 percent. Merak has witnessed just 1.82 percent change in the occupation and for the Brokpas cattle rearing seem to be still perceived and favored as the best occupation.

In the above context, the present paper is an attempt to unfold Brokpa's matriarchal community life and livelihood especially the women folk, as fashioned by nature.

Ecological Setting

Brokpas are yak herders. Both male and female members of the family equally share the task as extreme altitude and harsh climate make it hard to grow agriculture crops. Therefore their rigorous lives and their very survival depend on these animals. The abode of Brokpas stretches from 1423 to 4516 m in the Greater Himalayan ranges. The Sakteng sector exposes an early Paleozoic succession of Tethyan sequence with high-grade migmatitic gneisses, garnet, schist, limestone and thin quartz veins. Nyakchungla range (4140 m) separates the valleys of Merak and Sakteng. Sakteng is a glaciated valley above 3000 m along Saktengchhu extending 6 km by 2 km. It has more open and glacially sculptured landscape with braided streams and river islands. The flatter and fertile alluvial fans are used by the Brokpas for buckwheat cultivation. The agroenvironmental activities in the valley are exclusively done by the women folk, while male members still hunt for non timber forest products during monsoon. Saktengchhu originates from Zangpin Sum (3980 m) near the Arunachal border, while Bangpachhu, the second important tributary of Gamrichhu takes origin from Dangzong (4465 m).

Merak is an upland valley more or less like a plateau approximately 4 km long and 1 km wide and is endowed with alpine vegetation and pastures. Nyeramachhu flows near Merak village and Gengu, and descends from Jomokumkhar (4492 m) joining glaciated stream from Sherphu. Jomokumkhar range separates Merak valley from Jomori valley wherein lies the villages of Kharshithang and Khilphu of Merak gewog. The mixed broadleaved forest of lower valleys merges into forests of oaks; rhododendron, birch, fir, juniper, spruce, and mountain cane. The timberline is found at 3980m. Beyond this lies the vast expanse of the alpine meadows. The landscape provides places of raw natural beauty of high alpine grasslands, rolling hills and towering crags with only small patches of habitation

with very little deforestation. The pristine mountain environment has yet not succumbed to developmental pressures of modernization in Bhutan. In brief, the land and people here had existed in harmony over the centuries.

Pastoral Economy and the Women Kinfolk

Brokpas are mainly pastoralists belonging to the same band of highland nomads that are strewn across Central Asia. The predominantly mountainous environment and a characteristic cold climate afford but very few opportunities for the cultivation of crops or exploitation of other resources for economic betterment of the community. The abundance of high altitude alpine pastures for summer grazing, forest meadows and bamboo grasslands in lower altitudes for autumn and winter grazing gives rise to full -scale pastoral activity. The wealth of these pastoralists originates from the yak herds. The maintenance and breeding of the yak herds are planned and decided by the women folk while the males execute it. Thus, the Brokpa economy revolves around the yaks, and so we can say this animal is the soul and the very backbone of the Brokpa economy. Thus trying to separate the Brokpas from their yaks would tantamount to putting their lives and destiny in great peril. Brokpas also keep sheep, horses and cattle. Merak has completely a pastoral economy whereas partial dependence on summer crops like buckwheat and mustard supplement the livestock economy in Sakteng. In the lower Brokpa regions, maize, wheat, barley and mustard are cultivated. Many Brokpa families in Sakteng own farmlands in the lower regions.

Brokpa community considers those who do not own cattle as poor. The poor Brokpas work as carpenters, blacksmiths and farm laborers or as yak herders for the rich families. The male members of poor families are always the second choice as a groom for the elite women of Brokpa community. Blacksmiths are mainly Tibetan migrants settled in Sakteng. Many such blacksmith families have also settled in Radhi and Phongmey. Shifting their camps all the year round in many villages of Trashigang Dzongkhag, they make copper ladles, spoons, kettles, pots and pans, and in turn gather rice, maize etc. from the villagers. In general, Brokpas have practiced transhumance and established trade contact with lower regions of eastern Bhutan and Tawang region of Arunachal Pradesh. During winter and spring they barter their yak products mainly cheese and butter with the food grains. Today with increasing exposure to the markets, the barter trade is slowly getting replaced by the cash based economy.

Role of Women in Livestock Management

The livestock description requires first the introduction of crossbreeds of yak. The term '*yak*' is applied only to the male and female of the species- *bos grunnius*, locally known as '*chuk*' or '*di*'. The animals cross-bred with yak bulls are described quite differently. The cross between '*golung*' - a good quality Tibetan yak bull and the '*chuk*' is called '*dzo*' (male) and '*dzomo*' (female). The cross between the *dzomo* and a yak bull is called the '*koi*' (both male and female). Breeding, inbreeding and outbreeding techniques are known to the male members but the planning for breeding and raring the animal stock is the responsibility of the women in the community. On their decision the exchange and breed sharing between tribal communities are unanimously accepted.

The mean cattle per household is 53.19 for the Merak gewog. Merak and Gengue have the highest average in terms of cattle per household i.e. 60.58 and 46.48 respectively. On the other hand, Khilphu and Kharshithang villages have the lowest average - as low as 19.38 and 17.42 cattle per household respectively. The milk yield is highest from the cross breed *dzomos*. In general, the crossbreeds are hardier, able to bear patiently the warmer climate of the lower valleys and carry heavier loads. Pure breeds have difficulty carrying heavier loads and are susceptible to malarial infection while descending the lower valleys.

Brokpas have devised their own ways of maintaining animal health. This is also a responsibility for the women to remind health care planning for the yak herds. In winter, starting from the 25th day of the 10th month of the Bhutanese calendar, the people of Merak and Sakteng do not milk their yields. After 12 days of birth, the calf is separated from its mother and is set free all day after milking in the morning. To support livestock activity in the Brokpa region, the Royal Government of Bhutan has introduced breed improvement, sterilization of scrub bull to reduce population of unproductive cattle and health service delivery programs. Interestingly the women are trained on these programmes.

Animal Products

Animal Products are the factors for economic sustainability and is entirely managed by the women folk. A typical Brokpa hut in a summer pasture is full of yak milk stored in bamboo canes. Yak milk is churned into butter, which keeps a Brokpa woman busy all day and night. It is difficult to churn stored milk into butter and empty the bamboo canes to use them for the next milking session. After churning, the cheese is kept in bags made of yak hide over the fireplace for six months. This fermented cheese known as '*yitpa*' by Sharchops is a delicacy for the Brokpas. The Brokpas here do not make '*chugos*', a hardened cheese produced in western and central Bhutan. However, the livestock extension centers in Merak and Sakteng have conducted training for Brkpa women in making *chugos*.

Yak meat is a luxurious food for many and people generally do not kill productive yaks. It is only old yaks and sheep that are slaughtered for meat and skin. This decision lies with the lady of the family. Yak hair and sheep wool provide important raw materials for Brokpa clothes, caps, blankets, bags, ropes and their dress. Regrettably woolen manufacturing has still not acquired a central place in the Brokpa economy. Clothes from wool are woven by the women are mainly for their own domestic usage.

Major Land use and Important Pastures

A case study of Sakteng gewog is presented here to describe landuse features. More than 30 pastures had been identified and mapped. Four major categories of land use are dominated by forests, which share 59 percent of the total recorded land area. Coniferous forests comprised of 27 percent of fir and the remaining 18 percent are mixed conifers. Broadleaved forests cover 14 percent of the total area. Pasturelands come next to the forest having 36.9 percent share in the total land recorded area. Most of the pastures are now registered (34.2%) with 2.7% described as natural or non-registered. Agriculture occupies a very insignificant proportion (2%) of the land use feature. Area under settlement is 4.4 ha. i.e. only 0.001

percent of the total area. Other categories include 2.1% of the total land with a major share of 1.6% under rocks and crops. Besides the open pasture areas in the alpine zones, the forested areas especially the oaks, rhododendrons, sub-alpine fir and juniper forests provide important grazing lands for high altitude livestock in this part of the Brokpa region. Pastures here are mainly forest meadows. The main grazing lands of the Brokpas are, of course, the vast expanse of the alpine meadows.

Pasture Ecology

Pastures are the main domains of the Brokpas. Three main areas as dictated by seasonal control make up their domains: summer, autumn and winter pastures. Brokpas have, therefore, a defined seasonal cycle of movement within these three pasture regimes located between 2500 to 4500 m and categorized by a harsh climate with snow in winter and abundant rain in summer. Summer pastures through the upper reaches of the region and Brokpas move to these pastures in April and stay till the end of June, that is, as long as the green pastures last. The herders drop lower and lower in pursuit of the fast 'disappearing grasses and reach the autumn pastures which are normally located on the mid mountain slopes and their stay here last till the end of August. As cold weather sets in the upper reaches, they slowly move towards the winter pastures that they use from September through December. Winter pastures are located on snow free areas where grasses are available in cold season. May and October constitute the peak months of their summer and winter migration when most of the households set out to move. The yak herders live in stone houses and in thatched huts in winter and in summer they camp in the pastures.

The pasture coverage of Merak and Sakteng is shown in table 3. Sakteng has pasture coverage of about 106441.02 acres. The maximum pasture area belongs to the winter pastures (79114.90) acres followed by summer pastures (20783.46) acres. Minimum area is under autumn pastures and accounts for 6452.76 acres. On the contrary in Merak gewog, out of a total of 23769.94 acres of pastures a maximum of 15203.63 acres is under summer pastures followed by 5346.10 acres under winter pastures and a minimum of 3220.21 acres under autumn pastures. The autumn pastures act as transit camps between winter and summer pastures and are spread over a distance of five to ten day's walk.

Pasture Holdings

Brokpas have their registered pasturelands locally known as '*tsamdrog*'. Some pastures are officially leased out to them near Khaling, Kangpara and other places. Pastures are allotted *thram* numbers. Two to six households share a patch of grazing land with a particular *thram* number, while each household pays an individual annual tax of Ngultrum100 (USD 2.00) to the Government. Only about 45 households (28.72%) own grazing lands individually in Merak. These holdings are made in the name of the male members as per the government orders. The pasture holding size was found varying from ten acres to a maximum of 810 acres for the summer pastures. It ranges from a minimum of eight acres to a maximum of 180 acres in autumn pastures and between 13 to 400 acres in the winter pastures. It is noteworthy that 63.96 percent of the total pasturelands in Merak is found to be located in the summer high altitude areas.

Out of total of 157 households in Merak, about 39.4 percent, 19.10 percent and 15.92 percent households have no pasturelands in autumn, winter and summer pastures respectively. Most of the households owing autumn and winter pastures have pasture holding less than 100 acres. Only 13.36 percent and 5.08 percent households own more than 100 acres in the above two categories of pastures. This differential distribution however does not cripple the community resilience as the women folk of each community plan the barter and share or exchange the resources that are crucial for survival.

Role of Women in Pastoral Economy:

Transhumance and Drukor

In the truest sense of the word, the Brokpas cannot be identified as nomads. It would be more correct to call them transhumant as they have a well-defined seasonal cycle of movements. This unique itinerary is designed by the women leader of the group in consideration of the economic and agricultural activities. The migratory pattern of their life is an economic necessity. The extreme climate of the place makes it hard to live there throughout the year. As the cold weather sets in entire families have to keep moving their herds across several passes, dropping lower and lower to the warmer regions for frost-free pastures. They move slowly over a period of four to six weeks along with their cattle down up to 2500 m in different directions.

While this migration is a climatic compulsion and an example of the ecological adaptation of the Brokpas it also provides them the opportunities to go for *drukor* during winters. '*Drukor*' or '*brukor*' roughly means moving around for grains to exchange with their dairy products. *Drukor* is thus a unique trading relationship based on marital frames that exists between Brokpas and their Sharchop hosts and friends. These strong social ties built by the women members bind together the highlanders and the valley dwellers underlying their economic necessities. While men and children tend the yaks in nearby pastures, female members of the family come down to the villages and barter their products.

Almost all the Brokpa families have '*nepos*' i.e. village hosts. These hosts are taken into care by the elderly women of the communities when in crisis. In summer months the Brokpas bring down butter and cheese and their *nepos* sell it for them in the village in exchange for rice, maize and chilies. The *drukor* practice starts by late October and continues for two or three months. They move from one village to other collecting grains that have been bartered for butter and cheese by their *nepos*. The village hosts also help in the Brokpas in gathering their grains from various families. It is imperative for a Brokpa to eat and lodge at his *nepo's* house during his stay in the village. The *nepo* in turn receives cheese and butter as gift. A single Brokpa family will have one or more *nepo* families. This tradition has been sustained through several generations. Though marriage is not an institution like any other tribal community, marital relations are strictly confined to the Brokpas only and it is not allowed with the *nepos*.

The Brokpas from Sakteng usually trade with Tawang and Bomdilla regions of Arunachal Pradesh in India. Brokpas still trade with their Monpa *nepos* across the border and visit as far as Udalguri in Assam to buy raw silk, cooking pots, salt, gumboots etc. The *Drukor* tradition and practice is still very much an

essential economic ingredient for the Brokpa society. This economic trade planning is exclusively done by the women of the community. Some Brokpas buy rice from government subsidized fare priced shops and prefer to sell butter and cheese in cash. The un-husked rice, which they receive from the villagers, is less profitable and demands more labor but as they need maize to feed the herds so they need to do the *drukor*. Increased access to market centers facilitates monetary transaction practices which can ease their problem. One dissatisfying factor to this effect has been that urban population does not seem to like the butter and cheese prepared by the Brokpas. *Drukor* too has lost its original significance and value that was once attached to it. Nevertheless, the *drukor* tradition is still essential to the Brokpas, at least as long as they continue with yak herding and occupy their original homes in the upper reaches of the mountains.

Rapid urbanization and shrinking pastoral lands in high hills has posed threats to these tribes more recently. Migration to lower altitude has been fatal in many cases as the communities are losing social integrity. The women domination results in an unsuitable social dynamics in migrating communities where survival of pristine economic adaptability is losing relevance. Further, in foothills these people are often subjected to ethnic conflicts and clan quarrels, which are affecting the status of women in the community. Habitat loss and transformation of yak herders to unskilled labors have told upon their self esteem. The resilience of this community in the present economic context and the changing ecology of their habitat is still sustaining a thin line of survival.

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