

Monpa, the early settlers of Bhutan in Jigme Singye Wangchuck National Park and conservation strategy

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Abstract

Monpas are aboriginal Bhutanese who inhabited the forests around Black Mountains in Bhutan. They lived their lives gathering food and materials from the forests, however, their livelihood activities are now shifting towards modern economy with the coming of new settlements. A semi-structured questionnaire was administered for three Monpa villages within the administrative boundary of the Jigme Singye Wangchuck National Park in Bhutan. Modern education came very recently to the communities of Monpa and they still depend widely on agriculture; arts and crafts; and on livestock farming. Such a practice of livelihood activities forms a perfect platform for conflict between the conservationists and the communities. Recognizing the importance of communities in conservation efforts, Royal Government of Bhutan prioritized developmental initiatives for Monpas. Many Integrated Conservation Development Programs were initiated by the park to address some of the social issues and to garner support from communities for conservation. With the initiation of many conservation activities centered on the Monpas, they seem to have high regards to conservation; however they expect the park authorities to help them set-up electric fences around their fields to reduce conflicts with wild-life. We put on record that biodiversity conservation shall only be achieved if the conservation and developmental philosophies co-exists, thus understanding the drivers effecting biodiversity conservation forms the vital ingredients for any conservation efforts to be successful.

Keywords: Bhutan; Conservation; Livelihood; Protected Areas

Introduction

Bhutan is a small himalayan kingdom bestowed with good diversity of endemic flora and fauna (Wangchuk, 2007) that blends with yet another diversity of anthropogenic races and cultures (Sinha, 2001). Considering the importance of natural and cultural heritages of the country, Royal Government of Bhutan initiated the gazettelement of protected area systems with an objective of integrating the communities and natural environment (MoA, 1994) since 1966 (DoFPS, 2011). Today, almost half of the country is set aside as the protected area management systems comprising of 10 protected areas, one botanical park and 8 biological corridors (DoFPS, 2013).

Protected areas in Bhutan; besides serving as the prime habitat for key species of conservation importance, also have settlements of the ethnic communities. The ethnic communities, which are within the protected areas of Bhutan are Layaps in Jigme Dorji National Park (Thinley, Tharchen, & Dorji, 2015); Bjobs in Wangchuck Centennial National Park); Brokpas in Sakteng Wildlife Sanctuary (WWF & SWS, 2011); and Monpas in Jigme Singye Wangchuck National Park

(JSWNP) (Chand, 2006). These ethnic communities co-existed with their natural environment since time immemorial (Chand, 2009).

Monpa: probably mean southern or western mountain dwellings, non-Indian and or non-Tibetan barbarians (Aris, 1982). Monpas are settled in certain corners of Trongsa, Zhemgang, Sarpang and Wangdue districts of Bhutan. Monpas are believed to be the aboriginal inhabitants of the country and they live in Jangbi, Wangling and Phrumzur villages in Trongsa district (Chand, 2009). Bhutanese generally perceive Monpas as the practitioners of Bonism that had considerable influence in the Himalayas before the immigrants from Tibet and other races settled in Bhutan. Monpas speak a unique dialect called Monkha: an archaic language (Giri, 2004). It is believed that Monkha is a close linguistic relative of the languages spoken in central and north-eastern part of Bhutan and Tawang in Arunachal Pradesh, India (Driem, 2004). However, with the current trend of development and intra-cultural exchanges, Monkha is at risk of becoming the dialect spoken in the past as only a handful of Monpas are comfortable communicating in it these days (Tshering, Namgyal, & Rinzin, 2013).

JSWNP, with an area of 1730 km² is Bhutan's third largest National Park (DoFPS, 2013) gazetted in 1995 (MoA, 1994). The national park, together with its biological corridor serves as a vital link between the Jigme Dorji National Park and Wangchuck Centennial National Park in the north and Royal Manas National Park in the south (Figure 1). The park also provides an important migratory corridor for altitudinal migratory birds and animals (JSWNP, 2014) and the park is home to some of the most charismatic species like tiger, golden langur, musk deer and red panda.

The park operates with a mission to conserve and manage its natural biodiversity in harmony with people's values and aspirations. Thus, it is of utmost importance to understand the livelihoods of Monpas as they form the major human populace of the park who heavily depend on natural resources for their livelihoods. The four most important uses of the forests reported in JSWNP by communities living inside the park are grazing; shifting cultivation; collection of fuel wood; and leaf litter (Katel & Schmidt-Vogt, 2011).

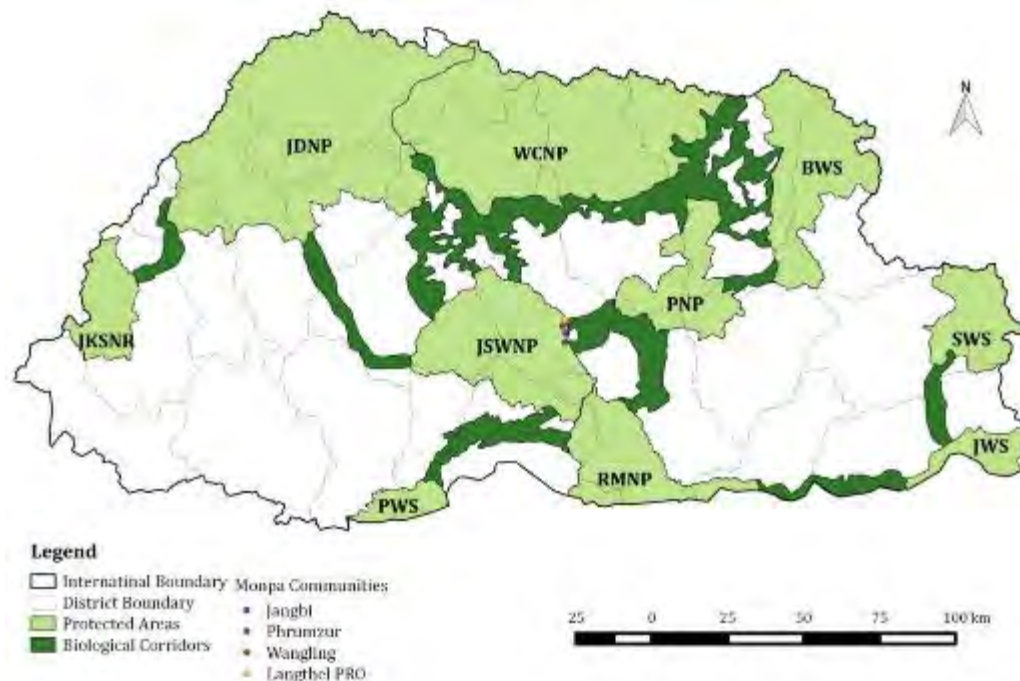


Figure 1: Protected area net-work of Bhutan

Methodology

A semi-structured questionnaire survey was developed and administered in three Monpa villages: Phrumzur, Jangbi and Wangling, all within the JSWNP. We visited all the households within our study sites to interview but have been able to interview only 9 households in Phrumzur and Jangbi each and 8 households in Wangling, as there was no one in some households during our visit. Thus, for this study we covered 57% of the total households in these three villages (46 households). Jangbi is about three hours walk from Langthel; the nearest motor-able road, while Phrumzur and Wangling are further one hour walk from Jangbi.

Results

We categorize the result section into four sub topics; i. Occupational status; ii. Monpa and their forests; iii. Forestry developments in the Monpa communities; and iv. Expectation of Monpas from the Park

Occupational Status

Awareness on importance of modern system of education reached Monpa villages only in 1994 with the establishment of community primary school. This probably explains why only half of the Monpas are literate (Table 1). We found that not a single person attained class 12, let alone going to colleges. However, Monpas now enjoy the facility of Non-Formal Education centers established in each community with a permanent instructor.

Table 1: Educational attainment of Monpas

Villages	Number					Total Population
	Illiterate	Non-Formal Education	Primary	Secondary	Monastic Education	
Jangbi	28	6	13	11	3	73
Phrumzor	42	6	14	1	4	137
Wangling	26	8	14	1	3	165

Illiterate: Includes children under aged to go to school
(Children above the age of 6 are admitted to schools in Bhutan)

Non-Formal Education: A system of education besides normal school education system

Primary: Educated till Class VI

Secondary: Educated till Class X

Monastic Education: Monks

Traditionally Monpas survived on weaving bamboo and cane products as their primary source of income besides shifting cultivation practices. However, with the advent of development and establishment of national park, livelihood activities of Monpas have changed. They now pursue livestock rearing; agricultural practices; harvesting forestry produce; eco-tourism and also earn as wage labourers too. We found that the percent contribution of cash income from rearing livestock to be minimal but on the contrary almost all the households in the Monpa communities rear livestock viz. cattle and poultry (Figure 2). Of the 26 households surveyed, we found that cattle holding are not even near to uniform (one household doesn't rear cattle and the maximum a household reports to have is 20 cattle). Every households rear poultry and 9 households surveyed rear horses too, and we found that Jangbi has the highest number of horses at 7, which might explain their reason for majority of the contribution for their income coming from eco-tourism activities as they use horses to ferry goods for tourists. However, for other two communities (Phrumzor and Wangling), major contribution of income is coming from the sale of Non-Wood Forests Produce (NWFP). These we

believe indicate the shift in the livelihood pattern with the advent of developmental activities as Jangbi is now connected with motor-able roads. Majority of the cattle and poultry products are for self-consumption so the cash income from sale of the products are meager.

Agriculture is now widely practiced by the Monpas and we found that about 69% of the respondents own land anywhere from 1-6 acres. Shifting cultivation, once prevalent is now no more practiced and this shift must have been triggered by the Royal Government of Bhutan's policy to phase out shifting cultivation by the end of 1997. While majority of the respondents claim to have left the practice of shifting cultivation after the enactment of Forest and Nature Conservation Act 1995, however about 40% of the respondents admitted of having abandoned the practice recently (less than a decade).

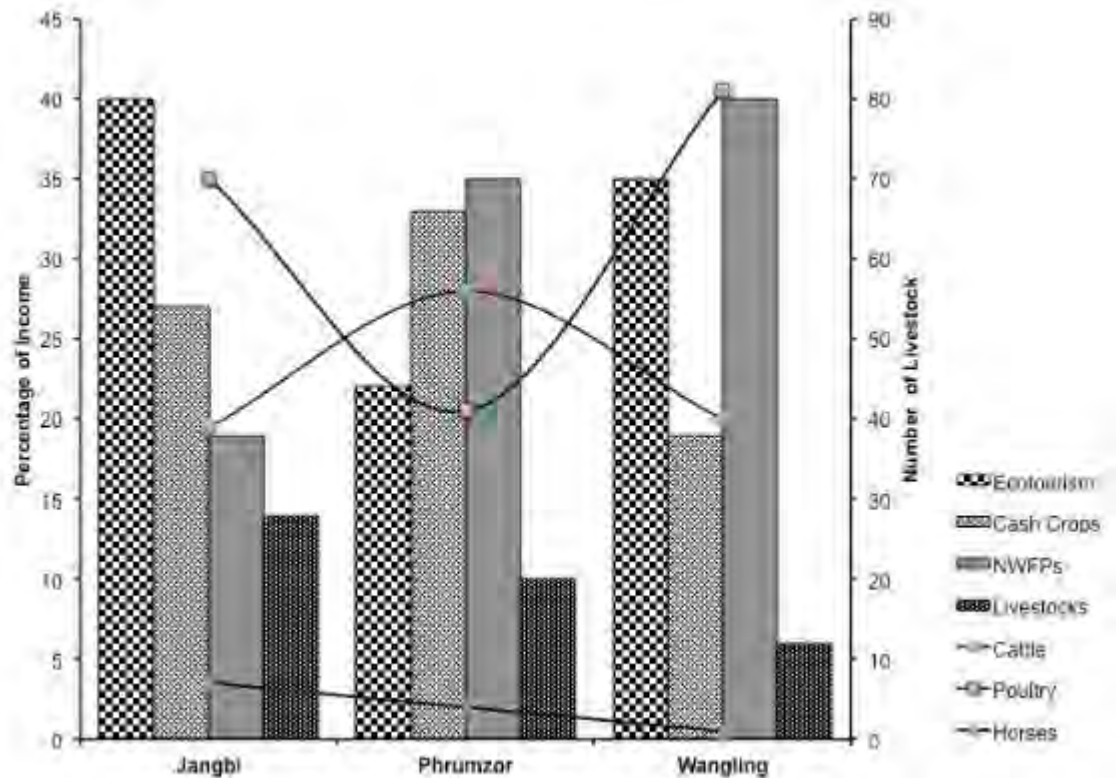


Figure 2: Income statement of Monpas

Monpa and Their Forests

Monpas have extensive knowledge on the use of plants and they use many species of plants while performing any form of their rituals. They reported of having experienced various changes with regards to the forests in their area. These changes according to them are: reduced felling of trees, less forest fire incidences and availability of quality timber. However, Monpas also reported of having seen increase in wildlife population (wild boar, bear, monkey, sambar and barking deer), which we believe is probably accounted to the increase in the incidences of crop depredation.

Monpas collect various forest produce as medicines, fodder, timber, vegetable, etc. and they are good craftsman. Monpas showed clear inclination of their major used forest produce to cane and bamboo, as both are used as raw materials for their craft work as well as consumed as vegetables. In the past, they practiced barter systems but now they sell their produce for extra income. Of the many NWFPs collected by Monpas, bamboo (*Dendrocalamus hamiltonii*) is the most preferred bamboo

species for consumption because of its characteristic sweet shoot. They also collect mushrooms, ferns, cane shoots (*Plectocomia himalayana*) and *Elatostema* sp.

Monpas have many traditional ways of managing their forests, which is a testimony of their harmonious co-existence with nature and natural resources. However with the shift in policies and establishment of the national park, forests are now managed through the formation of Community Based Natural Resource Management (CBNRM) groups. In the past, Monpas would appoint a Menyer (Village Forest Guard) responsible for ensuring that every households get adequate firewood and timber. Menyer were also tasked to prohibit certain activities in the forests during certain seasons. Monpas had a traditional form of sanctioning timber through the practice of Reedam (a practice were a household was allowed to harvest a maximum of ten number of cane shoot at one time).

The belief systems, which the Monpas followed probably led to the natural resources still intact. Monpas believe that certain large trees and rocks as the domain of local deities and consider sacred. Thus, everything that grows within the vicinity of such areas was protected. These local systems and beliefs were respected, which might have contributed to sustainable resource utilization and conservation.

Forestry Developments in the Monpa Communities

Though Monpas have always enjoyed the freedom of harvesting the forest produce, they always stressed on sustainability through the traditional forest management system that existed in their region. However, upon instituting the FNCA 1995, and with the establishment of JSWNP, their traditional way of managing forest resources had to be left out, since the national park took over the management and conservation activities of natural resources in their region.

However, realizing Monpas as the integral part of the conservation efforts, Monpa Selwai Yoezer Tshogpa project was established for the Monpas in April 2000 with funds from United Nations Development Program (UNDP). The group was set up with an objective to create awareness on natural resource management in their community, and to promote the age-old practice of cane and bamboo crafts. Through this project, the first activity was the establishments of cane and bamboo nursery, followed by the establishment of trial orchid garden. Both are established in Jangbi village for the benefit of all the three Monpa villages. JSWNP also initiated many Integrated Conservation Development Program (ICDP) activities for the Monpas. Some of the ICDP initiated by the park includes, livestock management training and providing cornflake manufacturing machine. One of the major initiatives of the park was the establishment of Nabji-Korphu Community Based Eco-tourism in 2006, the route of which passes through the Monpa communities of Jangbi and Phrumzur. All the respondents expressed satisfaction from the ecotourism activity wherein they serve as porters. The latest development is that, park through intensive training for the communities began piloting solar electric fencing in 2014 to help reduce human wildlife conflicts.

Expectation from Park

In Bhutan, the Forests and Nature Conservation Rule 2006 restricts the people in the park from harvesting excessive resources. However, this in no way means totally restricting communities from extracting forests produce. According to the rule, people are permissible for limited extraction of resources for their rural needs.

Livestock depredation is a problem, which may likely be unavoidable as villages are located in forest periphery and the system of grazing practiced by Monpas is free ranging. The compensation scheme initiated by the Department of Forests and Park Services for livestock depredation seems to be working well with Monpas unlike elsewhere in the country. This could be because most of the animals lost by Monpas were to the tigers as the scheme is targeted towards

tiger kill. Records maintained with the park reveal that there were 8 incidences of tiger kill in the past three years from these three villages while there were no records of kill by other carnivores.

Monpas expect park to help them with the establishment of proper fencing for their fields to guard their crops. In-fact communities of Jangbi already approached the park management seeking help in fencing their field with stonewalls. However, when asked if they would reciprocate positively if provided with electric fencing alternatives, they were positive.

Strengthening eco-tourism activities is one program Monpas expect from the park management. This has been listed as priority by the Monpas, since eco-tourism plays an important role in their income generation. Monpas expressed of having huge faith in the park management, thus they seem have positive attitude towards the conservation works.

Discussion

Monpas still have strong desire and aspirations for better living and have many expectations from the park management. The park's mission to conserve and manage its natural biodiversity in harmony with people's values and aspiration provides an opportunity for park to include community development and management in their management plans. We believe that unless the socio-economic well-being of the park residents are improved, the park will have adverse impacts from illegal harvesting of forest resources, human-wildlife conflicts, poaching incidences etc. Therefore, integrated conservation development program should be planned for the park residents with much focus on the need of Monpas. According to Wang & Macdonald (2006), strict restrictions on farmers to use natural resources may have exacerbated human- wildlife conflicts in JSWNP and we believe that such a measure will also create huge conflicts between the conservationists and the communities. We report here that understanding the ground realities of residents and modifying policies for effective delivery through improved communication would help ensure a commendable goal of conserving nature in harmony with peoples' aspirations in the national park. Wang, Lassoie, & Curtis (2006) reported of people living in JSWNP expressing discontent with the restrictions imposed on access to the natural resources within the national park.

Including local communities and their histories is now a relatively new concept for protected area management in South Africa (Hughes, 2011) and we believe that for any conservation measures to be successful, communities residing within the protected areas must be included for any conservation and developmental activities. It has also been found in Thailand that forced resettlement of communities is no longer a legitimate option for protected area management (Buergin, 2011) and fortunately Bhutan has never practiced such in the process of establishing protected areas. According to (Katel & Schmidt-Vogt, 2011), most respondents from their study in JSWNP were found to have discontinued the practice of shifting cultivation after they received some form of incentives such as corrugated galvanized iron sheets and solar lightings from the national park. We also found that Monpas have huge expectations from JSWNP to bring in the developmental activities in their place. This may include but not restricted to providing incentives, such as linking with tourism industry to bring in more tourist in their areas; increasing market opportunities for the products of the communities etc.

Conclusion

The findings from our study confirm that forest resources are of vital importance for the Monpas, and their accessibility to resources and the incentives they receive has strong influence on how they perceive the existence of national park. Monpas have been depending on the use of resources for their daily livelihood activities since time immemorial and we believe that strictly restricting them on the use of natural resources will negatively affect the conservation efforts of the JSWNP and for that matter the whole protected area systems of the country.

While bringing in any form of conservation measures would help Bhutan, it becomes utmost importance to carefully study the expectations and issues that the communities within the protected areas have. We believe that, pursuing this as a standard practice during the process of establishing any protected areas shall mean garnering positive support from the communities. Conservationists should also focus on managing the Monpas or any settlement within the national park through the initiation of advocacy programs and by bringing in certain incentives. Such measure shall go a long way in ensuring the success of conservation by joining hands with the communities. We would like to stress here that, understanding the drivers effecting biodiversity conservation becomes vital for any conservation efforts to be successful.

We would like to state here that JSWNP is gearing to remain as one of the many success conservation stories from Bhutan as the park is working towards conserving both the floral and faunal biodiversity in line with one of the important anthropogenic diversity of the country.

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