

The evolution of forest-related institutions in Bhutan

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Bhutan, the land of the thunder dragon, is a small country in the central Himalayas that has a rich history, substantial forests, and a national government that is striving to pursue rational, equitable, and sustainable development. Although Bhutan was only officially opened to foreigners in the 1970s, a well-documented political history stretches back to the 1600s and exhibits a close link with its abundant natural resources.

Forests cover more than 70% of Bhutan. Forest resource use is part of the mixed subsistence farming system that closely links agricultural land with forests from which they derive products and services. All rural villages in Bhutan depend on their forest for timber, fuel wood, fodder, leaf litter and water. Many forests are utilized for cattle grazing. In some rural areas, people hunt wild animals such as deer to supplement their protein needs. Non-timber forest products such as mushrooms and edible ferns not only supplement vegetables, but also provide the people with some form of alternative income. Leaf litter is collected for animal bedding and for generation of organic manure, which is a crucial resource for the farming system. Moreover, water is a very important forest product. The role of forests in maintaining constant flow of water is very much within the knowledge of the

local people and they regard water not just as an important resource but consider it a forest product (Dorji 2003).

With the opening of Bhutan to the outside world in the 1970s, a process of development was initiated that must be addressed by policymakers. Still, about 79% of the population of Bhutan is forest-dependent. The importance of forests to all of Bhutanese society implies that policy should be formulated to both conserve forest resources while providing people with rights to extract forest products. The history and present status can lead to predictions about the future of local management regimes, and supply a foundation for both local (Bhutan) and regional (Asia) policy initiatives.

The purpose of this chapter is to discuss the links between the political history of Bhutan and the forest-related institutions in rural communities. Understanding how communities can or cannot adapt to emerging forest policies is an important component of long-term governance of natural resources.

Study sites and methodology

The data for this chapter come from one year of field work in twelve villages in the inner Himalayas of Bhutan (Figure 1). The array of villages selected for this study were dispersed across the country in order to sample a spatially heterogeneous set of villages, and to construct a composite history of forest institutions for Bhutan. All sites were located between 1000 and 2500 m asl, which is within the montane evergreen broadleaf forest as defined by Ohsawa (1991). The other two sites were located in temperate coniferous forest.

Six of the sites were established as long-term research sites, in which the complete IFRI methodology was applied. In six other sites, a less intensive but complementary data collection methodology was utilized. In all twelve sites, additional survey methods were utilized to collect historical transect and conflict resolution data.

A religio-political history of Bhutan

According to the Bhutanese chronicle 'Lhoyi Chhoejung', Bhutan was prehistorically (500

B.C. – 600 A.D.) an extremely isolated place where there was no trade, communication or education. Each village was separated from one another by mountains and rivers, and as a result had its own dialect, customs, and culture. There was neither a formal religion nor any government. Therefore taxation, law, revenue collection, and other aspects of a centralized government were absent. Population was very low and people lived in clustered villages with apparently little inter-village communication. However, at some early point in prehistoric times, the Bon religion (Bonism) from Tibet spread into the central and southern parts of Bhutan (Hasrat 1980). Bonism is characterized by mixed superstitious practices in which people worship deities representing manifestations of nature (such as the sun, moon, hills, mountains, trees, rivers, lakes, etc.). Witchcraft and magic played a predominant role in the rituals of Bonism. Local deities called Gyap and Tsen were worshipped in individual households, community monasteries and temples. Protectors of land and rocks known as Lu Sadag and evil spirits known as Dhue were constantly appeased. Sacrificial offerings of ox, sheep and poultry performed to worship local deities are still prevalent in many rural communities.

Tibetan Buddhism was introduced to Bhutan with the visit of the Guru Padmasambhava in 747 A.D. (Hasrat 1980, Sinha 1991). Historical records suggest that by then, some form of government existed with Sindhu Gyap serving as the King of Bumthang and Debs (petty kings) ruling different parts of eastern Bhutan independently. In western and central Bhutan, the influx of Tibetan Lamas (saints) in the 9th century continued for two centuries until in the 11th century, when Tibetan Buddhism and culture rose to dominance (Hasrat 1980: 26, Sinha 1991).

Yet the area that now comprises Bhutan remained a clan-based tribal organization until the beginning of the 17th century, until 1616 when Zhabdrung Ngawang Namgyel (1594-1651) arrived in Bhutan and emerged as a consolidating religiopolitical ruler (Sinha 1991). It was during the rule of Zhabdrung that many dzongs¹ were built and a dual system of government emerged. This dual system recognized two rulers over Bhutanese affairs: a Druk Desi, who headed the “temporal rule”, and the Je Khenpo, who presided over the “spiritual matters of the region” (Dorji 1995). The Druk Desi was recognized as the political ruler, and was appointed by a four-member cabinet. During the dual system

¹ Dzong: a fortress that serves as both the administrative center and as residence of the monks for a district.

era of governance (1651-1906), 54 people served as Druk Desi, and 49 served as Je Khenpo (Dorji 1995).

Although Zhabdrung apparently did succeed in establishing the first true political system over what is now Bhutan, those who followed Zhabdrung as Druk Desi generally could not function effectively. This led to widespread conflict among factions vying for power (Das 1974), culminating in several battles and eventually the emergence of Gongsu Ugyen Wangchuck, a leader who was unanimously elected the first hereditary king in 1907 (Planning Commission, RGOB 2002). The hereditary monarchy has been in place since 1907, with later policies emanating from both the king's office and that of the elected governmental bodies.

While the combined religious and commercial interactions of the Bhutanese with Tibet, Assam and Bihar dates back as far as the 12th century (Pommaret 2000), the country essentially remained in self-imposed isolation until the second half of the 20th century. It was not until the reign of the third king Jigme Dorji Wangchuk that the country began to open up to the outside world (Hasrat 1980, Planning Commission, RGOB 2002).

Although the consolidation of the country and establishment of monarchy in 1907 provided the basis for increasing political stability, it was not until after 1950 under His Majesty Jigme Dorji Wangchuck that the government embarked on the concept of modern economic development with major economic, political, and social reforms (Education Department, RGOB 1997). The National Assembly was established in 1953 comprised of 105 elected representatives of the public, 10 elected representatives of the clergy and 35 representatives of the government. The Royal Advisory Council, consisting of representatives of citizenry and clergy, was established in 1965 to advise the King on matters of national importance, to act as a bridge between the king and the people and to ensure that the laws and decisions of the National Assembly were implemented. In 1968, the High court, district and sub-district courts were established; the judiciary was separated from the executive and legislative branches; and the cabinet was established (Planning Commission, RGOB 2002).

Politics, taxes and forest institutions before 1950s

There is a link between the religio-political history and the human-forest interface in Bhutan, and the origins of this linkage are with a taxation system originating with the government established by Zhabdrung in the 1600s. Not surprisingly, the establishment of a taxation system in Bhutan was driven by the local religio-political regimes and ruling individuals, whose objective was to assume and maintain power. Although no specific writings exist on the subject, taxation probably evolved concurrently with the expansion of Buddhism in the eighth century through the rule of Zhabdrung, his reincarnations and desids who promulgated Buddhism. After Zhabdrung, the desids continued to promote Buddhism through construction of monasteries, dzongs, stupas and religious institutions (Hasrat 1980). These structures provided a physical framework for the centralization of power in Bhutan, which may have lent support to the imposition of a formalized taxation system. Through interviews as well as other literature (Ura 1995, Sinha 2001), it was revealed that local people's oral history traces the origin of taxes to Zhabdrung.

The seeds of the taxation system appear to have been sown early in the history of Bhutan, when the religious respect given by citizens to the elites was later converted into an obligatory tax. People offered their expressions of loyalty to the Zhabdrung and other religious entities such as monasteries and monk bodies during the spread of Buddhism. These offerings were often in the form of agricultural products to gain blessings from the leaders. The religio-political elite not only accepted these offerings, but also subsequently enforced these in-kind offerings as a tax upon the populace. Thus, the religio-political elite turned an offering into a tax, a trend not uncommon for the world's ruling elites throughout history.

There was a diversification in the way in which taxes could be paid. The first type of tax was called wangyon. Wangyon was an in-kind tax stemming from the earliest tributes to Zhabdrung, his various incarnations, and the dzongs. The offerings of grains and farm products from the peasants were probably recorded and subsequently enforced as wangyon. Pain and Pema (2002) found that the logistics of the taxation system in the 17th century were described in contracts drawn between Zhabdrung and those who provided offerings. While some people paid annual wangyon in the form of farm and forest products, some devotees offered property such as land to monasteries and monk

bodies. Second, thojob was a form of land tax that was based on the agricultural land holdings of a household, which had to be registered in the dzong. In other words, this was a wealth tax. Tax items differed from one place to another depending on the availability of resources in different places, and included grain, butter, oxen, animal skins, and forest-based materials (shingles, bark, etc). Essentially, all necessary items required by the ruling regimes were garnered from local people in the form of tax.

The third form of taxation was labor. Labor activities included porterage, construction / repair and resource gathering. For porterage activities, each tax paying household was required to assist in transporting government consignments from one point to another, as arranged through the village. Ironically, the consignments often consisted of materials collected as taxes from communities (e.g., thojob). Construction / repair and maintenance activities included renovation of fortresses and the dzong, construction of roads and trails, and other activities as and when commanded. Finally, households were required to provide labor for resource acquisition, such as tilling of agricultural land belonging to monasteries and local authorities, rice husking, cooking, herding etc. (Ura 1995). However, “the privileged families, families of the higher incarnate lamas and the state officials were exempted” from the above taxes and obligations (Sinha 2001:61).

The porterage tax was revealed as a key factor in the formation of the most ancient forest institution, boundaries between village forest lands. Given the highly rural and remote settings of most villages, a series of villages would be involved before consignments reached the final destination. The places where consignment were dropped off by one village and received by the next village evolved into landmark boundaries between villages and the forests owned by the villages. Additionally, individuals representing local government authorities or aristocratic families often visited villages for purposes related to tax collection and / or to fulfill tasks assigned by their superiors. During such visits, it was also obligatory for villagers or their representatives to ensure proper reception at certain places, render hospitality and care during their stay in the village and escort them to see off at a place or point from where the representatives of the adjacent village would receive and continue to render similar services. The process would go on until the official reached the final destination. Such reception and see off points also served as boundary references between villages.

These required reference points for boundary demarcations between villages, and they were supplemented with physical features such as streams or rivers, gullies, ridges, cliffs, and footpaths to clarify the boundaries off the main roads. As a result, the forested areas of Bhutan have been delineated through locally crafted institutional arrangements linked with the taxation system imposed by the religiopolitical elite.

The boundary institution became more important as the resources in the forest became more relevant for the payment of taxes (e.g. wangyon), and therefore the evolution of these boundaries served to define rights – however loosely – among village communities over the forest resources. Because these taxes included a wide range of edible and non-edible products, the source of much of the materials was both the farm and the forest. In-kind taxes pertaining to products such as timber, shingles, fuel wood, and bark from shrubs (e.g. *Daphne* sp.) had their sources in the forests.

Local people also referred to the history or traditional use of resources within certain boundaries in which they emphasize past prolonged usage as a basis for contemporary forest boundaries. Often implied in such claims is that they have nurtured and rendered care of the resources within the boundary. This does not imply a scarcity of the resource or the direct relevance of a limited resource for livelihood, but rather recognition of costs justifying use and exclusion rights.

We therefore argue that the formation of forest boundaries in rural Bhutan was initiated by the imposition of the taxation system by the ruling elite of ancient Bhutan. This may or may not have been coupled with a change in communities' perceptions of possible scarcity (or future scarcity) of forest resources and ability to both fulfill subsistence requirements and pay hefty taxes to the dzong. In either case, we surmise that the emergence of ancient forest boundaries was at least in part the result of government policy, and can therefore be seen as an adaptation of the community to a changing policy regime. This is not to say that boundaries were monitored and protected; indeed the boundary institution was a loose arrangement because of the abundance of forest in Bhutan. However, our interpretation is that local communities responded to the changing governance system by crafting institutions that – necessary or not at the time – established a framework of ownership and exclusion to some degree.

Forest management institutions before 1950 not related to tax

While village boundaries were important in terms of political, administrative and tax purposes, there is no direct evidence to suggest that boundaries evolved with a forest management objective (e.g. protection or regulated withdrawal). Yet, the Planning Commission of Bhutan (2002) noted that “even before the advent of modernization in 1961, the country consisted of self reliant and self subsistent communities, possessing well defined community based rules and institutions to facilitate the use of common resources.” Based on our field studies, we concluded the same: forest management institutions do exist in rural Bhutan, and did so long before the rise of the modern Bhutanese state (Dorji 2003, Dorji and Webb 2003). Therefore, an important apparent discrepancy arises: although the government imposed no regulations on the use of forest resources, and the resources themselves were abundant in the nearby forests, many local forest institutions existed and continue today. Why would institutions arise in a situation where resources were salient, but not overtly scarce (*cf.* Gibson 1999)? The purpose of this section is to provide a justification for the evolution of forest management institutions in rural Bhutan, and then to describe the most relevant ones.

We argue that the emergence of forest related institutions occurred in part because forest resources, though available in plenty, required significant amounts of time and effort to acquire. Any person who has walked in the forests of Bhutan (or the Himalayas in general) will recognize the enormous amount of effort required to obtain enough fuelwood, leaf litter, and other subsistence forest products. Hence, the collection strategy observed in rural Bhutan is similar to the strategy seen in Nepal by Schweik (2000): collection occurs more frequently near villages. Thus, even though resources are highly abundant throughout Bhutan’s forests, local collection efforts would reduce the abundance of easily accessible products over time. Community collection near villages could increase the possibility of resource conflict, demanding an institutional remedy. Reciprocating behavior, i.e. sharing and collective management, would be an efficient proactive institutional response. We speculate that these linkages, although only based on logic and not possible to prove historically, are a likely pathway for emerging forest institutions in a situation where resources are highly abundant but

resource acquisition is localized.

Today we witness several ancient institutions that are related to sharing and helping each other within the context of forest resource allocation. Many communities have arrangements for water sharing during the cropping season; coordinated mechanisms exist to accomplish tasks such as house construction, cultivation, and harvest; collective solutions exist in dealing with misfortunes such as a death in a family; participatory mechanisms are followed for hosting religious ceremonies and festivals that are strongly believed to be related to community welfare; and conflict resolutions processes are familiar to village members.

Dorji (2003) reviewed the forest-related institutions that exist today and before 1950. He concluded that most forest institutions related only to the part of the forest frequently accessed by villagers, a result which agrees well with optimal foraging theory. Forests far from the village were generally unregulated by village institutions. In those areas, no formal regulations pertaining to access, appropriation or management existed or exist today (see also Dorji *et al.* in review). In general, the reason for the lack of institutions regarding these forests is that they are rarely accessed, and this remoteness precluded any need for regulation, and hence no formal or informal institutions to be crafted. Nevertheless, despite the lack of formal and consistently applied institutional arrangements, those forests could still be governed by the tenets of Bonism, which state that guardian deities reside in the elements of nature and must be respected. Informal local religious practices that exist today are reported to be significant in conserving forests in rural areas (Allison 2002).

On the other hand, forests close to villages were regulated by both formal and informal institutional arrangements. Rural livelihoods that were based on subsistence agriculture required a number of products that were obtained from the local forest. Not only were products necessary for subsistence agriculture, but also taxation increased the importance of having readily available forest products. Typically, households would extract products such as timber, fuelwood and non-timber forest products such as mushrooms, medicinal plants and fodder through forest grazing of livestock.

Research has uncovered several long-standing institutions that were present before 1950. These include reesup, meesup, chusup and sokshings. The institution of reesup is a customary practice

whereby the community gives legitimacy to one individual (the reesup) to regulate forest products by ensuring equal and easy access to forest products based on community requirements. This institution is supported by the threat of social sanctions. Both customary rights and written agreements defined the terms, conditions and powers of the reesup, who was paid in kind and exempted from obligatory services to the community and the government after its emergence (Wangchuk 2001). Meesup is the 'forest fire watcher', who would mobilize the community to fight forest fires. (Wangchuk 2001). Further, it was also his / her responsibility to find the culprit and report to the dzong. Chusup was the 'water caretaker'. The chusup's responsibility was to ensure that households respected the traditional right of way for drinking water and to ensure proper distribution of water for irrigation among landowners.

The most widespread forest management institution in Bhutan is the sokshing. Sokshings are plots of forest specifically managed for the production of leaf litter and minor amounts of fuelwood (Wangchuk 2001, Dorji 2003, Dorji *et al* 2003). Most sokshings are small plots usually around 1 ha in area (Wangchuk 2001), located adjacent to the village, and heavily managed to maximize leaf litter production and fuelwood (Dorji *et al* 2003). Leaf litter from sokshings is mixed with cattle manure and used to fertilize crops. Given the major importance of agriculture output for subsistence practices of rural villages, sokshing are keystone elements in the livelihood systems of rural Bhutanese, and consistent management practices and strong institutional arrangements have evolved for their governance.

Traditionally, a sokshing is owned by a household. Before 1950, the rights of ownership for an individual were complete (*sensu* Schlager and Ostrom 1992), with the household given all rights of access, withdrawal, management, exclusion, and alienation (Dorji *et al.* in review). The ownership rights allowed households to manage the forest in the way best for their livelihoods, while adhering to the local religious and social customs that prohibited clearcutting or unjustifiable cutting. Therefore, a consistent management system evolved whereby individuals managed the sokshing to contain only those tree species most valuable for composting: usually *Quercus* spp. in the broadleaf zone. Moreover, silvicultural practices such as pruning encouraged leaf production by the trees. As a result,

sokshings are highly productive leaf-litter producing plots under the complete and mutually recognized ownership of one household or one community.

Institutions to resolve sokshing-related conflicts, although loose and informal, generally rested on the principal of face-to-face confrontation, with resolution based on utilization of strong social networks (Dorji 2003, Dorji *et al.* 2003). Because most households had a sokshing, we never encountered an individual who remembered or had heard of a sokshing conflict occurring, so in fact conflict-resolution institutions as reported to us may have included an element of *ad hoc* logic on the part of the respondents. Nevertheless, ownership rights were clearly recognized and respected by all members of the community.

Community sokshings, although less prevalent than individual sokshings, exhibit a wide array of institutions. Some villages have collective sokshings without any specified rules or norms, so people simply go and collect leaf litter from the sokshing just as they would from non-sokshing natural forests. However, in most cases, sokshing rules are well defined, long-standing and passed down through generations as customary norms. For example, institutions can define the time and amount of litter to be collected by the community. Such is the case when a village celebrates 'ri tangni', which means 'releasing or opening the forest'. Ri tangni happens every year on a date determined by the villagers, and is the only time in the year when all villagers have access to the forest. Access during ri tangni is unrestricted, so each household hires as many laborers as possible to maximize the leaf litter collection.

As a result of widely recognized tenurial institutions combined with highly evolved management systems, sokshings are keystones to the subsistence livelihoods of rural Bhutanese. When the appropriate indicators of management 'success' are used, sokshings exhibit clear signs of being well managed and appropriate for the purposes they are intended (Dorji 2003).

Thus, forest related institutions in Bhutan evolved in two manners. First, the institution of village forest boundaries evolved as a result of the external stress applied by the rising religiopolitical elite, which turned offerings of respect into a tax that exploited the farm-forest linkage. Boundaries evolved as an adaptation of local communities to more efficiently fulfill their imposed obligations to

the rising state structure. Secondly, the forest management institutions evolved in response to the need for collective efforts to maintain and protect local forests for subsistence. We suggest that in the face of optimal foraging, ancient institutions such as reesup, meesup, chusup, and sokshings may have evolved within the context of the ancient, pre-Zhabdrung agrarian society where local institutions would provide a framework for local forest use. Nevertheless, it should be noted that some of the forest-related institutions are based on religious values and do not hold major significance for the conservation or appropriation of products from the forest.

In both boundary and forest management institutional setups, we are confident in concluding that the evolution and maintenance of these institutional arrangements was greatly facilitated by the high levels of social capital exhibited by the close-knit communities of rural Bhutan (Dorji 2003, Dorji *et al.* 2003). Agreements across communities about boundaries, and agreements within communities about sokshings, have evolved over time in rural areas as a result of long-term negotiations, understanding and networking.

Socio-political development and forest institutions after 1950

Bhutan's central government views forest as an important source of revenue as well as a national, cultural and environmental heritage. In pursuit of both utilization and conservation (a concept that is now called the 'Middle Path' of development), a forestry unit was created in 1952 under the Ministry of Trade and Industry. It was later upgraded to a Department in 1961. With the start of the government's five-year development plan in 1961, the planning process for national-level forest management in Bhutan also began. The initial placement of forest department under the Ministry of Trade and Industry seemed to suggest that it was established with a commercial objective. However, a social forestry program was initiated simultaneously with the logging program, suggesting a balanced approach to forestry from the start. Logging activities were commercialized in 1984 under the Bhutan Logging Corporation (now Forest Development Corporation) of the Ministry of Agriculture.

Later, the forestry department was transferred to the Ministry of Agriculture under which the Department grew into its present form. Currently known as the Department of Forestry Services

(DOFS), the primary goal of the department is the conservation of the environment and sustainable utilization of forestry resources. The principle objective is to ensure conservation of the environment, and secondly to focus on the derivation of economic benefits from the forest through sustainable management. The DOFS with its line agencies achieve this through protection, extension / outreach, management activities, and *in-situ* conservation activities².

Several other governmental and non-governmental agencies were formed since the 1950s, which have influence on forest-related policies. The principle policy-forming agency is the Ministry of Agriculture within which the Department of Forestry resides. Other governmental, non-governmental, and international agencies have a significant influence on policy, either through policy formulation or conservation programs that aim to inform policy. Ultimately, however, the Ministry of Agriculture is the umbrella organization responsible for forestry policy and the Department of Forestry Services under this ministry is the main implementing agency.

Three main policy trends were enacted since the 1950s that have influenced the people-forest interactions in Bhutan: 1) nationalization of forests; 2) formal definition of forests and the requirement of sokshing registration; 3) land grant (*kidu*) formalization.

Nationalization of forests occurred in 1969 through the Bhutan Forest Act of 1969. This Act, much like Nepal's Forest Nationalization Act of 1957, expressly designated all forests outside of private tenure to be 'government reserve' forest, and under the purview and management authority of the central government. Thus, all forests – including sokshings – immediately became *de jure* government forests, and villagers no longer enjoyed unfettered and unregulated access to those resources (Dorji *et al.* in review). However, as will be discussed below, certain use rights were given over registered sokshings.

The Forest and Nature Conservation Act (1995) further delineated users' rights and

² Protection: Protection against encroachment and illegal felling, protection against fire hazards, effective surveillance and preventive measures against insect and disease epidemics. Extension: activities to create awareness about fire hazards; afforestation programs; protection from encroachment in sokshing and *tsamdrog*; management of community and private forests; allocation of dry wood and sanctioning of subsidized timber for rural house construction. Management: to conserve and manage forestry resources on a sustainable basis for local as well as commercial consumption by harvesting based on the principle of scientific management. *In-situ* conservation: establishment of protected areas to conserve the unique biodiversity and ecosystem of the various eco-zones in the country.

requirements to government reserve forests. This Act requires local people to obtain a permit from the Forest Department to extract products from the forest. In recognition of the dependence of rural communities on forest products, the rules under this act provides certain leverage to the rural populations in appropriating non timber resources for subsistence needs (Ministry of Agriculture, 2000). However, fuelwood or timber requirements are strictly regulated through the District Forestry Extension Officer and the territorial divisions of the Forest Department. In addition to requiring a permit to be secured for extraction of some forest products, the national government also levied a fee for these permits. Although this fee began as a nominal amount, it was revised upward according to the Forest and Nature Conservation rules of 2000. This represents a high cost of compliance with new government policy, and it has been shown that such high cost resulted in substantial user non-compliance in non-sokshing forests (Dorji *et al.* in review). Moreover, the imposition of heavy regulations and high costs served as a disincentive for the promotion or formation of local institutions.

Another result of forest nationalization was that it extended to sokshings, and therefore immediately changed the property rights regime over those important subsistence forest plots. Rather than full ownership, people with sokshings saw their property rights reduced to appropriation, *sensu* Schlager and Ostrom (1992) (Dorji *et al.* in review). This occurred because the right to alienation of that good (the sokshing) was denied to the appropriator by the government. While in practice this may be seen as a minor change since most people never relinquished their sokshing to another family, this change has resulted in contemporary changes in some people's behavior towards sokshing.

For example, people may modify their behavior towards sokshings if the government seeks to reclaim it from the household, which can legally occur under the 1969 nationalization act. This is a rather rare case, but it has occurred when the government has sought to expand existing government projects, or initiate a new project that will infringe on an existing sokshing. The government's reclamation of the sokshing has led in some cases to immediate short-term consumptive behaviors by appropriators. In one village, for example, the government reclaimed a sokshing in order to expand the boundaries of the village school. Confronted with the sudden loss of tenure, the sokshing appropriator immediately cut fourteen trees in an attempt to glean timber benefits before losing the

land. This behavioral change came largely from the lack of understanding about the governmental provisions; appropriators can in fact apply for a new sokshing if the current sokshing is reclaimed by the government. However, most of the village respondents were not aware of this provision.

The government countered the loss of alienation rights by passing legislation that formally recognized the existence of locally managed sokshings. With the formalization of land registration after the first National Assembly of 1953, sokshings were registered as part of household or community's legal land register, indicating the legal recognition of people's utilization of a sokshing within the government managed forest. However, the Bhutan Forest Act of 1969 and corresponding clauses in the Land Act of 1978 introduced changes to this recognition.

The Land Act of 1978 provided a definition of sokshing that established certain use rights that were buttressed by legal policy. The Land Act defined sokshing as "forest to be used as source of leaf litter and fodder, [whereas] the owner has no right over the standing trees and land over which the sokshing is established" (Land Act 1978 as quoted by Wangchuk 2001: 18). While the traditional local institutions defining boundaries of sokshing were therefore legally recognized by the government, the nationalization ultimately restricted individual liberties regarding tree cutting. This restrictive policy has been reiterated in subsequent policies. Since the Forest Act of 1969 was written, there has been long-standing conflict between local people and the government, where citizens have been continuously seeking the re-establishment of full management rights (Pain and Pema 2002).

The third major policy influencing people-forest relationships was the Land kidu policy. Land kidu is a land grant from the King of Bhutan to needy families who directly apply to him for agricultural land. Through the office of one of the secretaries to His Majesty the King, the family or individual approaches His Majesty with an application that states his / her need and justifications for the kidu. An investigation or verification process is dispatched to the district and relevant agencies through the secretary's office. Based on the reports, the person may be granted kidu. Because of the high priority of Bhutan's policy on forest conservation, the government is reluctant to allocate forest land as a kidu. However, under certain circumstances, forest lands (such as registered sokshings) are also granted.

Usually, the kidu allows a family to gain full ownership of a parcel of land, and subsequently convert that area into agriculture. However, over recent years some people in urban settings have begun to value sokshings for their potential future commercial value rather than their current subsistence value. In urban and semi-urban areas, land is becoming a premium commodity, so a new strategy has evolved to exploit the land kidu system. One strategy to acquire new land has been to seek a kidu to convert a registered sokshing to another private land use. If a sokshing has no trees or is highly degraded, then it is available for conversion to agriculture through the land kidu. Therefore, a person with new agricultural land needs may cease rendering care and protection to the sokshing if it is believed that the land could be used for an alternative use. In extreme cases, individuals may attempt to degrade the sokshing by way of setting fires or preventing regeneration, with the ultimate objective of seeking a kidu. The sokshing proprietor will not actively cut trees in a sokshing, which would be clearly illegal and easily enforceable. Rather, the proprietor may initiate management practices that may accelerate secondary processes of degradation. Hence, sokshings may in some cases be seen as a 'back-up' resource for the future endeavors, rather than for the original subsistence purpose.

The modification of peoples' behaviors towards sokshings as described above has come about as a result of a loss of property rights through forest nationalization policy, and increased economic opportunities for agricultural products or alternative land uses. However, the cases above are at present (year 2004) the exception rather than the rule. Very few instances of village-government conflict have been reported (although under-reporting may be occurring), and exploitation of land kidu loopholes seems to be restricted to the 'urbanized' areas near larger towns (e.g. Paro and Thimpu) where land pressure is higher and alternative land uses are more lucrative. Nevertheless, it is important to point out these potential negative adaptations to emerging policy so that solutions may be designed at both the policy and the implementation levels.

On the other hand, the clear recognition of sokshings by the government as a legal and legitimate indigenous land use strategy in several policies since 1953 has measurably strengthened this form of property and allowed for local solutions to conflicts. For example, most sokshing conflict

resolutions begin informally at the local level, and rely on local elders and leaders who work towards negotiation as a conflict resolution approach. Traditional information and skills are employed to recognize proprietary rights over sokshing. Formal processes may become inevitable at times, but when that happens the courts rely on local information. The district-level judicial court, which is the arena for formalized conflict resolution, recognizes and places a high level of importance on local institutional arrangements over sokshing. During conflicts regarding sokshing, the district courts seek local information by referring to internal agreements or by seeking explanations on village norms, traditions and culture. This usually forms the basis of formalized judicial decisions. Therefore, rural villagers can enjoy predictable and secure rights over leaf litter and fuelwood through sokshing management with the support of the local government. This serves to countermand at least some of the tenure insecurity created by nationalization policy.

Hence, communities have not had to make significant adaptations to the policy initiatives of the government since 1950. Although we have shown that indeed rural Bhutanese communities are flexible and adaptive when stresses are placed on existing institutional arrangements or the community in general (if no institutional arrangements exist), our analysis suggests that the policies of Bhutan's national government have succeeded in some fashion at maintaining institutional arrangements of rural Bhutanese society.

Discussion and Conclusions

This chapter has explored the relationship between the religiopolitical history of Bhutan, the policy initiatives of the centralized governments, and the people-forest relationship over time. Through this analysis, we have illustrated how ancient local, community-based institutional arrangements evolved in one instance as a result of government's rise and early taxation policy (forest boundaries), but in all other cases as a result of internal arrangements that ensure equitable distribution of benefits in managed forests near villages. In recent times, only minor modifications of people's behaviors – not local institutions – have been documented as a result of the continuing development of Bhutan's central government. We have provided evidence that the low incidence of behavioral shift is due to

the national government's clear recognition of the keystone role that sokshings play in the daily lives of rural Bhutanese society in spite of a) policy that nationalizes forests and rescinds some traditional property rights, and b) land kidu policy that exposes sokshings to neglect as alternative land uses become more 'profitable' in urban and semi-urban areas. The recognition by the government has allowed local solutions to be implemented within the larger policy umbrella of the national government.

But what about the future? Will it be possible to maintain the close and strong linkages between people and forests as Bhutan develops both politically and economically? Given the fact that the vast majority of people in Bhutan live in rural areas and are strongly dependent upon forest products for their livelihoods, our analysis must suggest how these institutions can be supported by the central government. Moreover, given the fact that the array of forest-related institutions is small, adaptations to future policy would require the emergence of new institutions, rather than the modification of existing ones. Thus, policymakers should protect the inherent factors that maintain the potential for community-level collective action in the future.

The government of Bhutan has declared its intention to develop according to the 'Middle Path' approach. This development philosophy rests on the idea that development should proceed in a controlled fashion that allows for maximum benefits to society while minimizing negative impacts. Lessaiz-faire development, while potentially bringing rapid economic growth, would likely be highly detrimental to the Bhutanese religion, culture, society, and livelihoods of farming communities. Remaining closed to the outside world is also untenable, as it would not allow for the society to take advantages of many beneficial opportunities offered internationally; moreover, technologies are already entering into Bhutanese society so directed development seems to be the most appropriate response. Therefore, the Middle Path of development in Bhutan is an attempt to develop many sectors of society while maintaining key linkages with traditional lifestyles exhibited by the majority of society. When the Middle Path approach is viewed in conjunction with the 1995 policy that requires at least 60% of Bhutan to remain forested in perpetuity, it is clear that the maintenance of a strong people-forest relationship, which implicitly requires national support of local institutional

arrangements, should be of primary importance to the policymaking body of Bhutan.

With this in mind, we present three central conclusions designed to facilitate proactive and mitigatory thinking on the part of policymakers, academics, and development agencies.

1. Maintaining social capital in rural Bhutan is a fulcrum of institutional strength and flexibility.

Local communities have shown an ability to adapt to early efforts to centralize power by the religio-political elite and craft relevant forest-related institutions apart from those efforts. Our thesis is that the institutional flexibility exhibited by communities is the result of low transaction costs derived from a high degree of social capital. Rural Bhutanese communities evolving and developing in relative isolation supported a high degree of familiarity, reciprocal trust, and collective action within village members, a characteristic that persists to the present day.

‘Development’ of Bhutanese society can be seen as both a benefit to households as well as a potential threat to traditional village characteristics, particularly people-people and people-forest relationships. In terms of social capital and institutional flexibility, policy and development agencies should recognize that initiatives leading to a decline in social capital and/or an increase in transaction costs in rural areas could be highly detrimental to the historical flexibility exhibited in Bhutanese villages. There are several ways in which social capital may decrease, leading to a concomitant increase in transaction costs and loss of institutional flexibility. These include rural-to-urban migration, a reduction in the dependency of community members on collective or cooperative management, a reduction of community dependence on forests and agriculture for livelihoods, and an increase in social conflict within villages (or, similarly, a reduction in reciprocal trust). Social conflict could arise as a result of many factors, but in particular we realize that a further reduction of tenure over forests and forest products could lead to an increase in social tensions among households trying to secure limited resources for livelihoods.

While we are not arguing for a reduction in the development process, the objective of this conclusion is to bring to the forefront a possible outcome of urbanization and loss of traditional

village social networks. It is therefore recommended to duly consider the linkage between social capital and the ability to maintain robust and flexible forest related institutions.

Provide forest management rights to communities: establish and strengthen incentives for long-term sustainable forest management and protection and maintain social interactions and social capital. Promote the exercising of the community forestry rights as provided in the 1995 Forest and Nature Conservation Act, and 2003 Forest and Nature Conservation Rules.

Provide basic services to rural communities as a mechanism to reduce rural-urban migration rates. Determining what services rural communities want or need is a challenging task, and requires a significant bottom-up extension effort.

2. Nationalization of non-sokshing forests is leading to non-compliant behavior.

Much of this chapter discussed the importance of sokshing forests as locally managed through institutions that have been recognized by the state policy. However, the vast majority of Bhutan's forest is outside of sokshings. In this chapter, as well as in other papers (e.g. Dorji *et al.* in review) that the contemporary nationalization policy imposed restrictions that are costly to comply with. Therefore, non-compliant behavior in non-sokshing forest is common in the form of 'illegally' felled trees. The challenge is therefore not to try and prevent people from cutting trees, which is allowed even today with a (costly) permit, but to craft policy that allows local institutions to be built so that protection and responsible management is promoted by the users, rather than a generally absent forest department.

One option for non-sokshing forest conservation is to implement a formalized Community Based Forest Management (CBFM) strategy, through which local needs such as timber and non-timber forest products could be met through community institutions and mechanisms of enforcing access, withdrawal, management, exclusion, and alienation rights. In Nepal, the government learned through bitter experience that the central government was not capable of maintaining all forests (Gautam *et al.* in press). People dependent on the resource must be incorporated into forest management and conservation strategies, even if the forest is 'state' forest. Moreover, relinquishing

management rights of at least part of the of non-sokshing forests to communities would strengthen their responsibility and long term interests of communities towards sustainable forest management and conservation, possibly leading to improved management.

3. Sokshings need further protection.

We have shown that although the nationalization policy produced a disincentive towards long-term sustainable forest governance by communities, the government also crafted a policy that allowed households to hold proprietary rights over traditional sokshings. Moreover, the judicial system and dzongkhag administrations informally (i.e., non-formally) recognize and respect local arrangements over sokshings in their deliberations. Thus, the local recognition of traditional sokshing arrangements, as well as a progressive national policy maintaining most use rights has been a crucial element of maintaining institutional and management stability towards forests.

However, there is no policy that requires local governments to incorporate local institutions in judicial decisions or conflict resolution. This arrangement by the local judicial system is a courteous measure afforded to the local communities by the local administration. The fact that deferring to local community arrangements increases the fairness and acceptance of decisions by local people does not guarantee that this informal institution between local government and rural communities will continue.

Therefore, it would be advisable for policymakers in Bhutan to consider drafting policy that fully recognizes local institutional arrangements that can be incorporated into the local governance structures of the national government. Such a measure would legitimize the existence of local institutional arrangements in terms of their capacity to manage forests and resolve conflicts. Moreover, it would provide greater security to rural communities through the explicit recognition of local institutions.

Moreover, as long as the sokshings remain relevant to the agricultural livelihoods of farmers, the present policy supports long-term local management. Maintaining the relevance of sokshings can be accomplished by encouraging organic farming system and discouraging use of fertilizers and

pesticides.

However, in developing areas where alternative land uses of sokshings may lead to negligent behavior towards sokshings and attempts to exploit land kidu loopholes, protection over the forest in sokshings must be strengthened. This can be done by (1) initiating policy reforms under which a sokshing forest should be reverted to non-sokshing forest if the sokshing is degraded to the extent of not being able to fulfill local leaf litter needs, (2) mapping the boundaries of sokshing in the national or local register, and (3) increasing the rigor with which land kidu grants are evaluated, ensuring that the land under application is not a sokshing.

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Figure 1. Map of Bhutan indicating the twelve villages of this study. The six villages marked with a square were those in which a full IFRI study was conducted; in the other six a less-intensive, IFRI-compatible study was initiated.

