

**Trends in tenure arrangements for forest
and their implications for sustainable forest
management: the need for a more unified regime**

Case study from Meghalaya, India

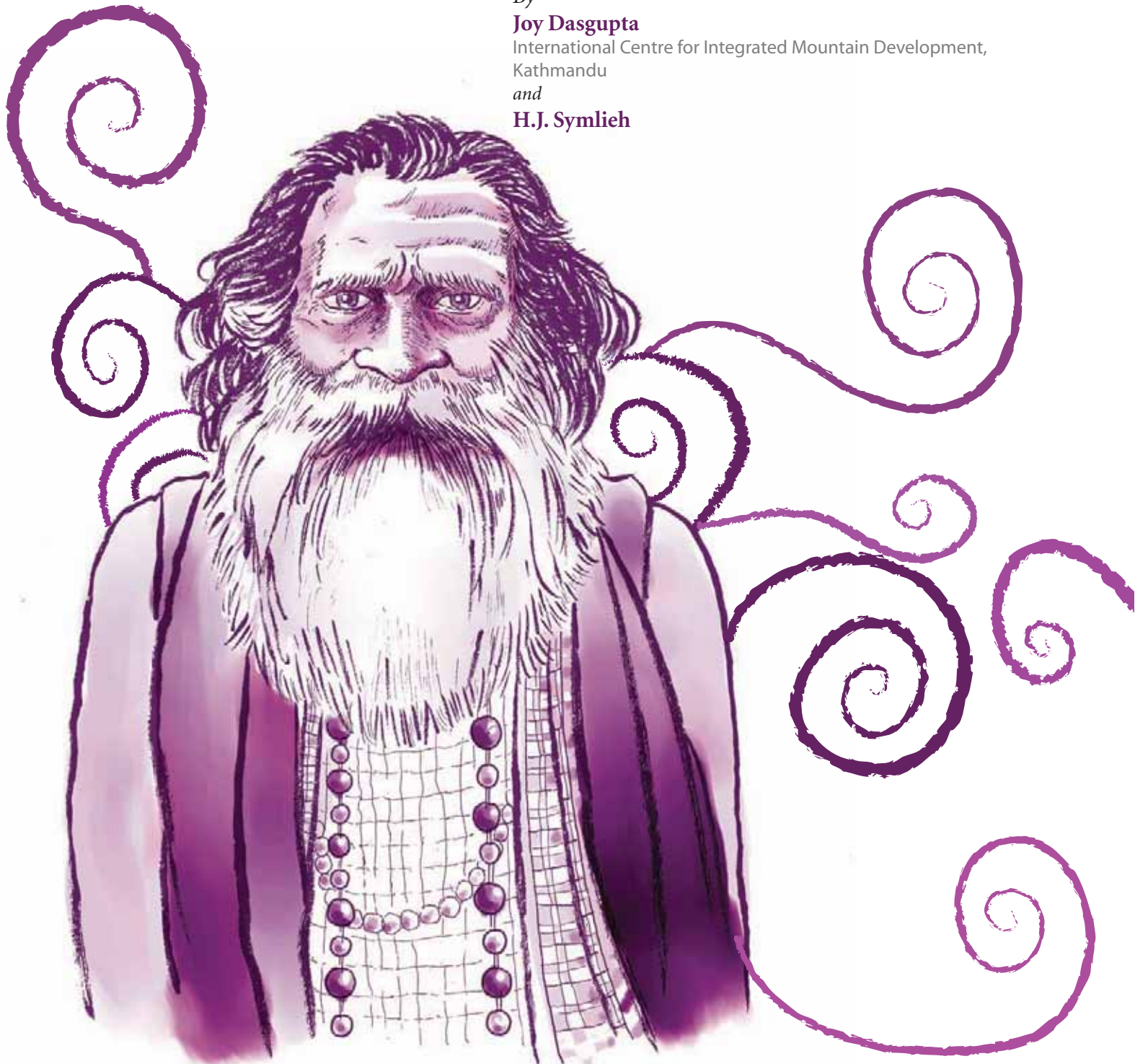
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Summary

India has a long and varied history of forest management dating back to the third century BC. For nearly 2 000 years, forest management systems succeeded in balancing State and community needs in terms of access and management practices. This all changed with the arrival of the United Kingdom colonizers, when the State became the absolute owners and community rights were converted into “concessions”. The scenario of conflict that emerged from this situation has been well documented for much of mainland India, but not for the northeastern region, which in many ways is the cultural and geographic bridge between South and Southeast Asia. This paper explores forest management in one of the seven states in this overlooked region, Meghalaya.

Meghalaya had a long history of community forest management throughout the pre-colonial period, and although some of its best forest lands were annexed by the colonists, a substantial part of its forest estate remained in the hands of different communities. The process of changing forest management and tenure started after Indian independence, when tribal communities’ calls for independence led to the creation of autonomous district councils and the codification of customary forest laws. For all practical purposes, community-controlled forest land started to be managed by the autonomous district councils.

Meghalaya became a state in 1972, and contains three autonomous district councils for Khasi hills, Jaintia hills and Garo hills. The State Forest Department is strong, but its management strategies and priorities diverge from those of the district councils. The last 30 years have seen widespread deforestation, because district councils’ main concern has been revenue generation, and in most community-controlled areas timber extraction has been a major source of revenue. However, this scenario changed in 1996, when the Indian Supreme Court banned all forms of timber extraction that did not have approved working plans.

This paper argues that the emergence of multilayered management structures does not always lead to improved forest management, particularly when the focus is on revenue generation rather than conservation. It also argues that the emerging market economy is eroding the concept of community-managed forest, as resources are increasingly privatized and managed to meet short-term needs. The paper recommends that a more unified management scenario be adopted, in which management takes account of such issues as biodiversity conservation and ecosystem services. The main need is for a minimal number of institutions with strong and meaningful participation from local communities and a mandate to evolve more long-term and diversified forest management scenarios.

Introduction

India has a long and varied history of forest tenure and management systems, dating back to the second century BC. Tenure arrangements have varied from rigid State control to forms of community-controlled forest land, the nature of control being dictated by the needs of the State; for example, small-scale farmers and pastoralists were completely excluded from the elephant forests of the Mauryas. This situation of diversity continued until the arrival of the United Kingdom colonists (Gadgil and Guha, 1992), whose strongly utilitarian and mercantile philosophy had no place for the tenure rights of local communities. Overriding the claims of local communities, the colonizers proceeded to annex much of India’s forest land through a series of legal measures that were introduced between 1865 and 1878 (Gadgil and Guha, 1992). During annexation, forest land was neither defined nor categorized (Rosencranz and Diwan 2001) – it all became State-owned forest land.

At present, according to the state forest departments, India has 76.52 million ha of forest area, constituting 23.28 percent of the country’s total area. Forest area has been classified into reserved (54.44 percent of the total), protected (29.18 percent) and unclassified (16.38 percent) forest. Forest ownership is mainly with the government, but clans and communities own significant areas of unclassified forest in the northeastern states. Details of the forest area of each state are provided in Annex 1.

The seven northeastern states of Meghalaya, Mizoram, Nagaland, Tripura, Arunachal Pradesh, Manipur and Assam have the largest areas of unclassified forest in India, and these are controlled by

local communities with very little State control. Although the United Kingdom colonizers tried to introduce greater State control to this region in the nineteenth century, the combination of remoteness and resistance from the local people thwarted their attempts. Forest rebellions in the late nineteenth and early twentieth centuries halted the spread of reserved forests and the government annexation of clan lands, a situation that continues today.

THE MEGHALAYA CONTEXT

This study outlines the evolution of forest tenure practices in Meghalaya, with particular reference to the colonial and post-colonial situations. It also reflects on the implications of changing tenure patterns on forest management practices in the state.

Meghalaya covers an area of 2.24 million ha between latitudes 25°02' and 26°07' N and longitudes 89°49' and 92°50' E (see Annex 4 for location map). The state is mainly plateau except for narrow strips in the north, west and south. Elevation ranges from 150 m to 1 950 m above sea level. Major rivers of the state include the Simsang, Manda and Ganol in the Garo hills and the Umiam, Umtrew and Kupli in the Khasi and Jaintia hills. The western part of Meghalaya is warm, with mean temperature ranges of 12 to 33 °C, while the central upland is relatively cooler, with a mean minimum temperature of 2 °C and a mean maximum of 24 °C. Average annual rainfall varies from 4 000 to 11 436 mm, and Cherrapunjee and Mawsynram – which have the highest rainfall in the world – are located in Meghalaya. The state is hilly, the undulating hills in the north contrasting with the steep and abrupt slopes of the southern fault zone. This area is part of the Meghalaya plateau, which is the source of many rivers flowing into the Brahmaputra and Barak systems. The highest elevation in this area is Shillong Peak (1 961 m).

Forest resources

Meghalaya's forest land covers 0.95 million ha, accounting for 42.34 percent of the state's total area. Of total forests, reserved forests account for 10.33 percent, protected forests for 0.13 percent and unclassified forests for 89.54 percent. The control of most unclassified forests rests with the autonomous district councils of Khasi hills, Jaintia hills and Garo hills.

The forests of Meghalaya are rich in biodiversity and endowed with rare species of orchids and medicinal plants. Major forest types found in the state are subtropical pines, tropical wet evergreens, tropical semi-evergreens and tropical moist deciduous. Sacred groves, mostly located in the Khasi and Jaintia hills, represent particularly highly valued vegetation in the area. Based on satellite data from December 1998, forest cover is 15 633 km², or 69.7 percent of the state's total area. Dense forest covers 5 925 km² and open forest 9 708 km². The discrepancy between forest area according to land records and forest cover reported by satellite data is a major issue, and is probably mainly the result of land regeneration and fallowing during the process of shifting cultivation.

Classification of forests

The State Forest Department has classified the forests of Meghalaya into the following six categories (Tiwari *et al.*, 1999):

- Reserved forests (including government forests, national parks and sanctuaries) cover 993.0 km² and are owned and controlled by the State Forest Department. These forests are among the best in the state, and local communities have very few rights over them.
- Unclassified forests, which cover 7 146.5 km², are forests where local communities have all the rights and *de facto* control. Most of these forests are used for shifting cultivation.
- Private forests cover 384.0 km² and belong to individuals, who use them primarily for personal consumption.
- Protected forests cover 129.0 km² and are used by local communities, primarily for personal consumption. Local communities have rights to these forests, but they are controlled by the State Forest Department, which considers the status of protected forest as an interim measure; the department intends to convert these forests into reserved forests.

- Village forests, which cover 25.9 km², were demarcated and registered by the village community under the United Khasi–Jaintia Management of Forests Act 1958. Most of these forests are used for subsistence purposes.
- Community (Raij) forests, which cover 768.0 km², are large community forests (Raij means commune) that are managed by the Raij or commune head under the local administrative head.

These different types of forest have different impacts on people's livelihoods. Reserved and protected forests have very little direct influence on livelihoods, as they are managed almost entirely by the State Forest Department and local people cannot legally extract anything from them – especially not from reserved forests. Unclassified forests provide the backbone for livelihood generation, as these are the areas where most shifting cultivation takes place. Village, community and private forests are used mainly for meeting the subsistence needs of communities in terms of fodder and fuelwood.

Land tenure

Tenure arrangements are linked to the traditions of a society. The case of the Khasi and Jaintia hills is well documented; there are three major categories of landownership system in this area (Simon, 1996): community-owned areas; privately owned lands; and state-owned reserve forests.

COMMUNITY-OWNED AREAS

Community lands, including forest areas, have a number of uses, which are reflected in their names. In the Khasi and Jaintia hills, the functions and purposes of most forests are based on village administration and religious perceptions. Community forests are known as Law Kyntang, Law Adong, Law Lyngdoh, Law Shnong, Law Raij, Law Sumar, Law Kur, etc., denoting the usages to which they are supposed to be put (H.J. Symlieh, personal communication). Land tenure was not disturbed by the colonial presence in these areas, as only a few areas were acquired outright by the United Kingdom colonizers, while most of the smaller territories were treated as though they were beyond the borders of colonial India (Simon, 1996). After independence, the prevailing land tenure and practices were recognized and maintained in the district council legislation. The United Khasi–Jaintia Management of Forests Act of 1958, recognized Law Kyntang, Law Lyngdoh and Law Niam as areas managed and controlled by the Lyngdoh (religious head) or by the person or people responsible for carrying out local or village religious ceremonies. Law Shnong and Law Adong were defined as village forests for conserving water etc.; they are used by the villagers and managed by the Sirdar or head with the help of the village durbar.

Law Raij are looked after by the heads of the Raij or commune under the management of the local administrative head (Government of Assam, 1958). Law Ri Sumar belong to individual clans, while private forests belong to the individual or clan who established or has inherited them (Ri Kynti).

Most land in the Garo hills is forested and belongs to specific clans. These lands are known as A'king lands and are theoretically controlled by the community through the Nokma. However, the Nokma is a woman, and actual control of A'king land falls to her husband (Dutta, 2001).

In the Khasi and Jaintia hills, the presence of sacred groves and village forest is an integral part of tribal belief and culture, which gives divine connotations to the forests and groves where the village's spirit and god protectors (U RyngkewUBasa) reside. Recent tenure and management systems recognize the sanctity and status of such forests.

In the Garo hills, A'king lands are owned by the clans and managed by the clan heads. There are no sacred forests in the Garo hills, but the people believe that the spirits of the dead reside in thick forests. Garo forests are used for slash-and-burn agriculture with adequate return cycles, and other traditions are still followed, in spite of the many changes that have taken place (Dutta, 2001). All 7 146 km² of unclassified state forests is controlled by communities.

PRIVATE AND CLAN FORESTS

The establishment of private and clan forests is an age-old practice throughout Meghalaya, and is becoming more common in many areas as the drive to privatize resources gains momentum. Although private and clan forests cover a comparatively small area, when taken together with community forests they account for more than 88 percent of the state's total forest area.

According to the Forest Management Systems in Meghalaya project (Meghalaya Department of Forests and Environment, 2001), "sacred groves (Law Lyngdoh/Law Kyntang) with a total area of about 10 511.7 ha, are found scattered in different places of the Khasi and Jaintia Hills and are generally found below the hill ridges. These groves are considered to be the storehouse of a variety of plant genetic resources".

These groves range from 0.01 to 900 ha in area, and sometimes a stand of five to eight trees is given the status of a sacred grove (Tiwari, 1999). These patches of forest belong to the clan/community or individuals and are under the direct control of the clan council or local village durbar (Syiemships, Dolloiships, Nokmaships). They represent the unique forest ecosystem of the region and are very rich in flora and fauna, testifying to the efficacy of traditional forest management systems in the state (Meghalaya Department of Forests and Environment, 2001).

STATE-OWNED FOREST LAND

Although state-owned forest land is the smallest tenure system in terms of the land area managed, it is also the best funded and best managed owing to its strongly coercive management approach. State-owned forest land accounts for 12 percent of total forest area, but contains some of the best forests (see Annex 4 for forest map). State-owned forest land also benefits from central government funding, and given that most of these forests were acquired in the nineteenth century, there is a reasonably well staffed state bureaucracy to manage them.

The implication of these tenure systems is that there are multiple-stakeholders at the individual, clan, village and regional levels, with the state at the apex. This creates a very complex system with overlapping sets of responsibilities. Table 1 simplifies the categories of forest land, by including Raji land in the other categories, for example.

TABLE 1
Tenure arrangements in Meghalaya

Community forests	Sacred groves	Reserved forests	Protected forests	Private and village forests
7 916.0 km ²	105.0 km ²	993.0 km ²	129.0 km ²	409.9 km ²

Institutions involved in forest management

Three major institutions are responsible for forest management in Meghalaya: the State Forest and Environment Department; the Autonomous District Councils of Garo, Khasi and Jaintia; and the community.

Formal forest administration seems to have arrived in the areas that now make up the state of Meghalaya sometimes in the 1870s. According to available records, the first reserve was Saipung Reserved Forest in the Jaintia hills, which was created with an area of 150 km² by Notification No. 26 of 25 July 1876. The most recent reserve to be created was Riat Laban Reserved Forest in the east Khasi hills, which was created with an area of 0.2 km² by Notification No. For. 179/80/187 of 28 March 1988. At present, there are 24 reserved forests within the state: three in the Jaintia hills; nine in the east Garo hills; seven in the west Garo hills; and five in the east Khasi hills. The total reserved forest area comes to 713 km², while the state's five protected forests cover a total area of 12 km² (Meghalaya Department of Forests and Environment, 2001). The reserved forests created by the Indian Forest Act of 1927 provide the most protection; all the community rights in these areas are restricted, and all entry and use are allowed only on payment of fees, which are deemed to provide concessions rather than rights (Gadgil and Guha, 1992). Protected forests are far more accessible to local communities, whose rights continue to be exercised in protected forests. The best forests were designated as reserved forests, and less valuable ones as protected forests.

The Forest Department of Meghalaya started to function independently in 1970 with two divisions: the United Khasi–Jaintia Hills Division and the Garo Hills Division. The department now has 17 divisions, with three more likely to be established in the near future. The main focus of the department is on ecosystem restoration, public awareness raising, afforestation programmes and the preservation of catchment areas. It has a total staff of approximately 450 people and a total annual budget of about US\$15 million.

Of Meghalaya's estimated total forest area of 9 496 km², only 993 km² is under the control of the State Forest Department. About 1 127 km² is managed by the district councils of Khasi hills, Jaintia hills and Garo hills as per provisions in the Sixth Schedule to the Constitution of India. The remaining forest cover is under community, clan and private landownership (Meghalaya Department of Forests and Environment, 2001).

TABLE 2
Meghalaya forest area

Total area of state	Reserved forest	Protected forest	Unclassified forest	Total forest	Percentage of total land area
22 429 km ²	981 km ²	12 km ²	8 503 km ²	9 496 km ²	42.3%

Reserved forests are managed according to five-year working plans, which are prepared by the state government; protected forests are managed mainly for the preservation of catchments areas. The State Forest Department collects royalties on all minor forest products and minerals from reserve forests and other forests that are controlled by the district councils; the department shares the revenues with the district council concerned in a ratio of 40:60 (Meghalaya Department of Forests and Environment, 2001).

STATE FOREST DEPARTMENT

The organizational set-up of the State Forest Department is as follows (see Annex 2 for an organization tree):

- Principal Chief Conservator of Forests and Chief Wildlife Warden;

- Chief Conservator of Forests (Social Forestry and Environment) and Chief Conservator of Forests (General and Wildlife), followed by Conservator (Social Forestry and Environment) and District Forest Officers for each district, and Conservators of Forests;
- four District Forest Officers for Wildlife and four for Research and Training;
- 250 subordinate service staff members, such as Forest Rangers, Deputy Rangers, Foresters, Forest Guards and ministerial staff of the Directorate of Forests.

The main responsibility of the State Forest Department is to manage reserved forests and the sanctuaries that have recently been set up for wildlife conservation. Until recently, the department followed a protectionist management approach that sought to keep people out of such areas, but recently it has started to constitute joint forest management and ecodevelopment committees. It receives grants from the central government to improve forest management, and is currently upgrading its infrastructure framework.

DISTRICT COUNCILS

The Sixth Schedule to the Constitution of India

Since colonial times, certain parts of northeastern India have been demarcated as excluded or partially excluded areas. These areas were inhabited almost entirely by tribal populations with their own indigenous and autonomous administrative and legal structures. The United Kingdom colonizers made separate legal provisions for these areas because they were reluctant to interfere in tribal matters.

After independence, the makers of the constitution also acknowledged the special status of the people in these excluded regions, who had not been included in the mainstream and were therefore behind in terms of development. The Sixth Schedule to the Constitution of India was promulgated in response to this recognition.

The Sixth Schedule is a very elaborate piece of legislation, which has undergone many changes through constitutional amendments, parliamentary legislation, presidential orders and central government notifications since it was first enacted. Put in simple terms, the Sixth Schedule gives excluded and partially excluded areas special status by granting them greater autonomy than other areas in the same state. The main motive for this special treatment is to protect the people in these areas from dangers, including the risk of losing their land to more sophisticated people from the plains, such as moneylenders (Hidayatullah, 1979).

Each district council has its own forest wing with personnel responsible for forest management. The State Forest Department arranges training in various aspects of forestry for the personnel of district councils, and sometimes deposes senior state forest officers to the district councils. At present, the forest wings of the district councils are each constituted by a Chief Forest Officer, an Assistant Forest Officer, 16 foresters, 32 assistant foresters, and 64 forest guards.

In response to sections 3 (a) and (b) of the Sixth Schedule, the state government transferred the administration, management and control of all forests other than reserve forests to the district councils in January 1956 (H.J. Symblich, personal communication). About 8 500 km² of forest came under the jurisdiction of district councils in this way. However, although the autonomous district councils are supposed to control most of the forest land in Meghalaya, they have very few human resources for doing so. In addition, most of the land they manage is plantation, so although the councils have developed forest bureaucracies, they have not really been following the notions of “scientific” forest management. In addition, they do not receive much funding from the state government.

In practice, these forest lands function as community land or private property (Ri Kynti), and are managed according to the customary rights and traditions of the local political set-up. The district councils have *de jure* ownership over the erstwhile colonial areas, such as the Sirdarship and B–Mahal areas, although these too tend to fall into local community control. In addition, a total of about 7.8 km² of Raij forest scattered throughout the Khasi and Jaintia hills is controlled by local communities (Meghalaya Department of Forests and Environment, 2001).

With the exception of reserve forest, the district councils collect 50 percent royalties from all their forests, but most of these forests are subject to hazards such as fire, cattle grazing and unscientific and random tree felling. Even since the Supreme Court's timber ban in 1996, sporadic felling of trees, bamboo, etc. continues in the forest areas managed by district councils. This may be owing to a lack of sustained effort, effective planning and well-thought-out protection for these forests on the part of the district councils (Dutta, 2001).

There are two sources of conflict in this complex managerial scenario. The State Forest Department has started to create ecodevelopment and joint forest management committees for sanctuaries and reserve forests, respectively. These are supposed to be participatory forest management units and have funding support for activities that include the establishment of plantations and medicinal plant nurseries, among other income-generating activities. The first source of conflict lies in the fact that the district councils have not introduced similar schemes to their forestry areas, so poverty alleviation receives very little attention in overall forestry planning throughout the state. The State Forest Department's innovations have remained out of reach for most people in Meghalaya.

The second source of conflict lies in the fact that the current legal regime grants district council control over much of the forest estate, but in reality the land is owned by local communities and people, who see forests as a resource to be mined for economic benefits. Local communities do not receive economic returns for forest preservation from the district councils, and so they have little interest in sustainable forest management. District councils have also tended to rely too much on revenues from timber and transit fees, while paying insufficient attention to the long-term implications of such forest exploitation. Thus, forestry provides income, but in a way that is not sustainable for the long term.

The United Khasi–Jaintia Management of Forests Act

Forest management in the Khasi and Jaintia hills provides an example of a system in which formal and non-formal management structures have been integrated. If properly implemented, such systems have tremendous potential for sustainable management.

The forests to which the United Khasi–Jaintia Hills Autonomous District (Management and Control of Forests) Act 1958 applies are classified into the following categories:

- *Private forests:* These belong to individual or joint clans and are situated on recognized inherited private lands (Ri Kynti).
- *Law Ri Sumar:* These belong to individual or joint clans and are situated on inherited, village or common Raij lands.
- *Law Lyngdoh, Law Kyntang, Law Niam (sacred groves):* These are set aside for religious purposes and are managed by Lyngdohs (religious heads) or other people with responsibility for carrying out the religious ceremonies of a particular locality.
- *Law Adong and Law Shnong:* These are reserved for the village and managed by the Sirdar and head with the help of the village durbar.
- *Protected forests:* These are areas for the growth of trees and forests that benefit the local inhabitants. They are managed and owned by the local village.
- *Green block:* These are forests belonging to an individual, a family, a clan or a joint clan. They are situated on Raij land that the government has declared "green block" for the provision of aesthetic beauty and water supply for Shillong town and its suburbs.
- *Raij forests:* These are looked after by the heads of the Raij and are under the management of the local administrative head.
- *District council reserved forests:* These have been declared as such by the Executive Committee.
- *Unclassified forests:* These were known as unclassified state forests before the Constitution of India. They are directly managed and controlled by the government and include forest(s) not falling within any of the other classifications.

The 1958 act can be considered a pioneer act for forest administration within the district council areas of northeastern India. Most district councils continue to apply it today, with minor modifications. In 1960, the United Khasi–Jaintia Hills Autonomous District Rules were added, according to which all the private forests – including sacred groves (Law Lyngdoh, Law Kyntang and Law Niam) – in the areas of district councils are to be registered (Chapter I section 2) with the Chief Forest Officer, giving the home addresses of all the people owning forest, together with the forest boundaries and other particulars.

According to the Principal Act (Act I of 1989), Law Lyngdoh, Law Kyntang and Law Niam are to be managed by the Lyngdoh or person(s) to whom the religious ceremonies for the particular locality or village(s) are entrusted, in accordance with customary practice and subject to the rules that may be framed by the Executive Committee from time to time (section 4 (b)). The Lyngdoh is a religious and not an administrative head.

No timber or forest products from Law Lyngdoh, Law Kyntang and Law Niam can be removed for sale, trade or business. To remove any timber or forest product required for religious purposes, the Lyngdoh can apply through the Local Administrative Head for a free permit from the Chief Forest Officer or any forest officer authorized by the Executive Committee to act on the chief's behalf (Rule 31 [9] of the 1960 rules). Although this makes it seem as though the state controls the use of timber and other products from these forests, this system has hardly ever operated, and permission is seldom sought. The reasons for this failure to function include a lack of coordination among different managers, resulting in the creation of extra bureaucratic layers of decision-makers, which in effect have converted local village decision-making bodies into recommendatory bodies.

The permits issued by the Chief Forest Officer or the authorized forest officer of the district council specify the quantities of timber and other forest products that can be removed, provided that no trees are felled unless they have been marked by an officer of the district council or sanctioned by the Lyngdoh for religious functions or ceremonies.

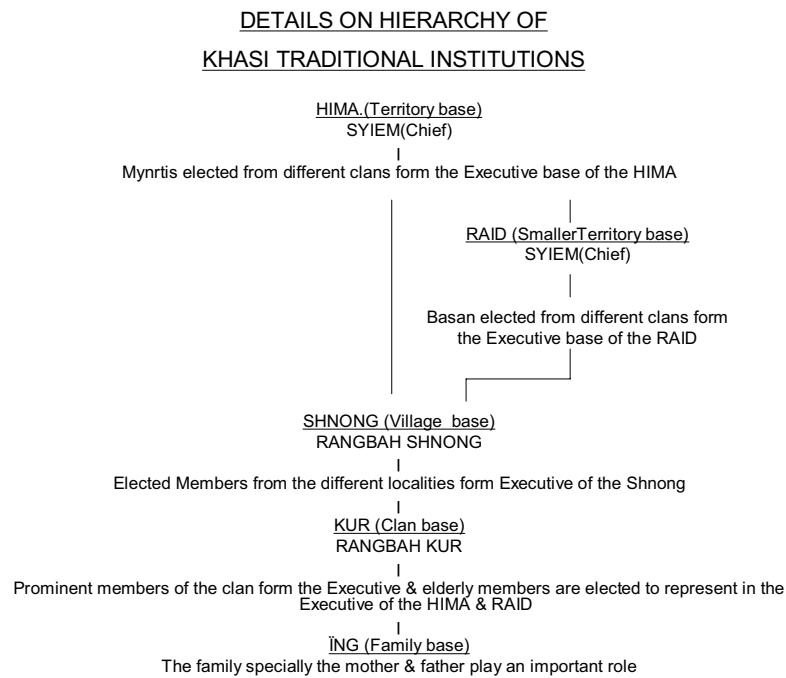
TRADITIONAL INSTITUTIONS IN THE KHASI–JAINTIA HILLS IN THE POST-COLONIAL ERA

Local government institutions are one of the pillars of the Indian administrative system, particularly in the frontier areas. The practice of self-governance is centuries old, even in the Khasi hills, and predates much of the modern terminology now used to describe it. Khasis have been managing their own social, economic and political affairs through Syiems (chiefs) on the basis of freely given popular consent for many generations (H.J Symblich, personal communication).

Khasi politics are state- rather than village-based, and there are 25 Khasi states, 16 of which are Syiemships, while one is a Wahadadarship (Wahadadar means civil official), three are Lyngdohships (sacrificer or priestly king) and six are Sirdarships (village chief or elder). The non-states (which were called British areas in the colonial administration) comprise 32 villages, which are divided up into Doloiships (deriving from the Tibetan for a religious shrine) and Wahadadarships with jurisdictions over groups of villages. Sirdars and Dolois have similar powers to those of Laskars.

The Syiem is the head of the state and runs day-to-day administration with a cabinet, which administers markets, collects fines, etc. The Syiem and cabinet also act as the judge and jury in judicial cases, according to the functions assigned to them by the district council. In the past, the Syiem also determined foreign policy. Syiems are hereditary positions with limited powers; they are maintained by market levies, which are sometimes shared with the cabinet members. Syiems have no power to make laws and their authority over the departments assigned to them is clearly defined. Owing to the matrilineal inheritance tradition, Syiems are succeeded by their nephews or brothers. This rule subsists in appointments to all offices in the state. Women are not entitled to succeed as Syiems, unless there is no male heir. Women are however the custodians of ancestral property, and the Syiem-sad – the mother, maternal aunt or sister of a Syiem – is regarded as the custodian of state ceremonies and the titleholder of crown lands. A system of dual Syiemship has been set up in some states, where two Syiem families administer the state together. The state is known as the Hima, implying that it has organic and ethical unity. The Ki khun–ki hajar, or indigenous population, is exempt from taxes, but other residents are not.

FIGURE 1
Traditional Khasi institutions



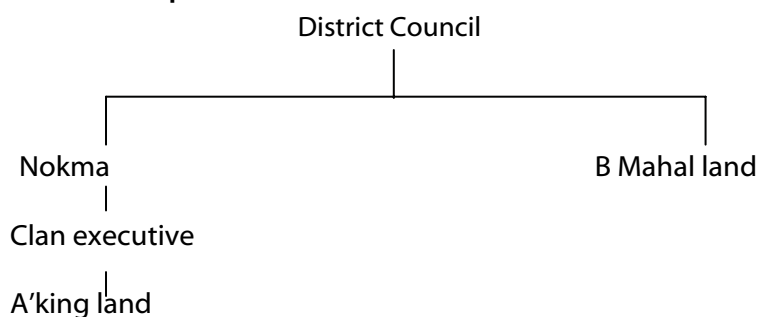
With the onset of the Sixth Schedule and the establishment of the district councils, continuation of the political, social and economic roles of traditional chiefs has created contradictions and conflicts, even though the Sixth Schedule was set up to safeguard customs and traditions. District councils function more as custodians than administrators because they lack the long-established relationship with the people – which includes belief in the divine agency of traditional rulers – that forms the foundation of traditional government in the Khasi–Jaintia hills. This has lessened the democratic spirit of government in these areas (H.J. Symlieh, personal communication).

TRADITIONAL INSTITUTIONS IN THE GARO HILLS

In the Garo hills, the land is not under the direct control of the district council, but instead belongs to the clan as A'king land. It is under the custody of its female head, the Nokma, whose husband acts on her behalf in all clan decision-making; the Nokma has no authority to take decisions on land and its use. Decisions are meant to be collective among representatives of the clan. These lands include large areas of thick forest.

Sacred groves are under the control of the Nokmas, whose jurisdiction covers 15 to 20 villages each. The beliefs attached to sacred groves in the Garo hills are similar to those in the Khasi and Jaintia hills; groves are protected and cannot be used for any purpose (Tiwari, 1999). Forest areas that are not used for cultivation are also left untouched, and trees cannot be felled in a radius of at least 10 m around springs and other sources of water. Other land, known as B Mahal, is under the direct control of the district council, which can use it according to its needs.

FIGURE 2
Traditional institutional set-up in the Garo hills



CHANGES IN LAND TENURE

Given the complexity of the different systems in force in Meghalaya, forest management is bound to be complicated. Although there was little visible change until the 1970s, attitudes have gradually been transforming, and less value is now attached to forests and sacred groves. As a result, tenure is also changing, but conflicts continue to arise. The move from traditional community (collective) systems to unknown private systems is unlikely to strengthen communities, and may create problems in the future. It is also important to note that changes in tenure are likely to lead to changes in society's value system.

Case studies

KHASI HILLS

In the Khasi hills, there are many sacred groves – their exact number is not known. Some of these forests have degraded, but others are standing the test of time. Locally, sacred groves are known as Law Kyntang, and they have been created since time immemorial. Overseeing and protecting the groves is the prime duty and responsibility of the local Lyngdoh. It was the Lyngdoh, along with the village head and elders, who originally consecrated the forest to sylvan and village deities, and the cutting of trees and removal of forest products are prohibited, except when they are used within the precincts of the forest.

Among the sacred groves that still exist is the one at Mawphlang. This was established about 500 years ago for revering and offering sacrifices to the god protectors of the village (Lyngdoh of Mawphlang, personal communication). Tyrna also has a surviving sacred grove, which was established some time after the 1897 earthquake.

Mawkhlam-Nongpyndeng in the west Khasi hills is an example of a sacred grove that has ceased to exist. Instead, the villagers have resolved to keep a large tract of land under forest, even buying more land from local people to add to it. In this area there are about 19 forest patches, which are for community use at various times. Management of these forests is solely by the community, and people can exploit the benefits of some forest patches, while the use of others is restricted.

JAIINTIA HILLS

Among the sacred groves in the Jaintia hills is Jowai, whose date of establishment is unknown, although it has existed for a very long time. This sacred grove is associated with the religious festival Beh Dien Khlam, and rituals are performed in it at the end of the festival when a rooster is sacrificed.

The sacred grove at Umsiang village in Ri Bhoi district is no longer used for religious rites and has recently been converted by its private owner (with traditional legal approval) for the planting of betel leaves. This village has a good forest conservation record, and stopped logging activities even before the 1996 ban on timber extraction was introduced (H.J. Symlieh, personal communication).

GARO HILLS

Some A'king lands have been transformed from forests to plantations, mainly of cashew, orange, tea, rubber, pepper and coffee. Such use of forest land is usurping the community's traditional land rights, which can be transferred permanently and claimed even after many generations (Nimesh Ved, personal communication).

Discussion

HISTORICAL SETTING

In Meghalaya, land tenure has been a significant issue for many generations. Most of the population depends on subsistence agriculture, but there is also a flourishing iron industry in the Khasi hills. Such products as iron implements, orange, betel leaves, areca nuts, cotton and herbs are sold in the plains, and food items are bought.

In general, the colonial period had little impact on land tenure, except in a few areas such as Shillong, where leasing was introduced. The post-independence period also saw few changes, because the local government (the United Khasi and Jaintia District Council and the Garo Hills District Council at that time) maintained existing land tenure conventions. The transition to a district council-based management system was in many ways the main change in forest management, but the emergence of the district councils as land managers brought problems to the forest areas (apart from government ones) over which they had control, because the councils' forest management was very poor and there was almost no control of tree felling.

The district councils owed their new importance to a combination of factors that enabled them to emerge as the owners of forests in Meghalaya. Among these factors was the fact that – compared with the rest of India – Meghalaya had made no real forest acquisitions (Dutta, 2001). In addition, the early twentieth-century uprisings based on forest grievances in the Garo hills had resulted in forest reservation being viewed as a last resort. These situations were aggravated by the passage of such laws as the United Khasi–Jaintia Management of Forests Act (1958) and the Garo Hills District Forest Act (1958).

The critical issues to emerge in the early post-independence era were that notions of management were very vague, the framers of the relevant legislation had not clearly defined what they meant by such terms as “looking after”, and there were no working plans or scientific guidelines for forest management. These omissions would come back to haunt forest administrators about 30 years later, but at the time the situation was considered adequate.

THE CURRENT ERA

The onset of a predominantly market economy changed the situation in Meghalaya in the 1970s and 1980s. Timber extraction suddenly became very lucrative because there was a substantial market for timber in the plains to the north. Timber extraction was supposed to be regulated by the district councils, but two factors hampered and discouraged their activities in this regard. First, although district councils had constitutional authority to manage forests, and the local chieftains were supposed to be under their authority, most traditional chiefs did not acknowledge the councils' authority. Second, the councils depended on transit fees and other cesses on timber exports, which in some cases contributed up to 70 percent of council revenues.

An example illustrates this situation. According to the Garo Hills Forest Act of 1958, a levy (called an A'will fee) could be paid by anyone, including outsiders, who wanted to extract forest products from A'king lands. The money raised from these fees was divided between the Nokma and the council in the ratio of 25 to 75 percent, resulting in uncontrolled depletion of forest cover on a massive scale. By the beginning of the 1990s, it was clear that most forests outside the reserve forests were seriously depleted and degraded. At that time, the State Forest Department was questioning the district councils' technical competence to manage their forests and was seeking greater control of state forests in response to the risk of widespread deforestation (T.T.C Marak, personal communication). Forest management was seen to contribute little to local sources of livelihood because most chiefs or district councils made few efforts to redistribute the income from A'will fees or to use it for value addition of products or livelihood generation. In addition, many landowners were using their timber resources to accumulate income rapidly, without paying any heed to

sustainability issues. Timber extraction itself had little impact on livelihoods as it was monopolistic (H.J. Symlieh, personal communication).

The stage was set for a major confrontation as reports of widespread deforestation in northeast India emerged from the forest survey of India and other agencies. In 1996, the bubble burst, when the Supreme Court of India intervened to preserve the forests of northeast India in response to reports of illegal timber felling and the Forest Conservation Case, which had been filed in February 1995 (Rosencranz and Diwan, 2001). Relying on evidence from satellite images, the court concluded that extensive deforestation had taken place and ordered a total ban on timber extraction throughout northeast India, irrespective of forest ownership. Forests in the autonomous district councils were clearly included in this ban. In a stroke, all timber operations in the region were deemed illegal. This came as a deathblow for the timber industry, but in many ways it led to the development of real forest management. In 1998, the court permitted the resumption of logging for operators whose working plans had been approved by the central government. The court's main intention was to systematize and regulate the forest management scenario of India's forested areas, thereby filling the gap left by the United Khasi–Jaintia Management of Forests Act, which codified customary notions of usage and management, but made only very cursory reference to sustainable and systematic management. Through a series of orders, the court clearly outlined the organizational process of forest management and proposed some best practices for forest management in the northeastern region (Rosencranz and Diwan, 2001).

In Meghalaya, the illegitimization of the timber trade meant that many landowners had to return to previous sources of income (H. Karbih, personal communication), local-level functionaries lost their main source of income and the district councils lost a substantial part of their revenue base, although the exact sums concerned are difficult to establish. (Annex 3 outlines the revenue loss for state forest corporations.) On a more positive note, steps have since been taken to convert a *laissez-faire* regime into a more regulated one. All three district councils have drawn up work plans and submitted them to the central government, but the plans have yet to be cleared (Deputy Chief District Forest Officer, Khasi Hills Autonomous District Council, personal communications). The State Forest Department persists in its belief that the district councils lack the technical competence to make viable and sustainable work plans, which are undoubtedly complicated by the ruggedness of the terrain and the multiplicity of landowners involved.

NEEDS AND LESSONS LEARNED FOR THE FUTURE

At present, the main need is the will to continue the process of regulation; a combination of approaches may be the best option, and it might not be possible to initiate all of these simultaneously. The legal system also needs to be reformed to take into account the management of forests for ecosystem services and biological diversity, rather than continuing with the old mindset of "forests are for timber only". The capacity of district councils needs to be upgraded and their land management role emphasized, in contrast to their current role as the collectors of revenue. Landowners need to be compensated and provided with financial incentives to change their land-use practices. The orders of the Supreme Court are pointers in this regard, as they direct the central government to provide monetary and non-monetary incentives for forest-rich states. The Government of Meghalaya can definitely benefit from this and help to improve forest management in the state.

No full land survey has been carried out in Meghalaya, so it is difficult to assess the success of forest management throughout the state (D. Wahlong, personal communication). However, it seems that nearly all examples of successfully managed community forests are sacred groves, most of which have been managed for a very long time, and there are very few examples of new forest conservation initiatives. This probably has more to do with specific conditions in Meghalaya than with any intrinsic flaw in the concept of using district councils for forest management. In other parts of the northeastern region, district councils seem to be better managed. In Mizoram, for example, they have their own reserve forests and demarcated village reserves, and much of the original biodiversity has been preserved (Singh, 1996). Another significant development in some areas is the emergence of youth organizations, such as the Young Mizo Association (YMA) and similar student organizations in Nagaland. These have started to discuss conservation and are making efforts to convince their local communities to set aside land for conservation; village student organizations act as watchdogs for YMA reserves in Mizoram and village wildlife reserves in Nagaland for example.

Such initiatives need to be encouraged in Meghalaya if the state's forest areas are to survive. The district councils in Meghalaya need to develop greater commitment to the principles of good governance, rather than viewing themselves as the providers of bureaucratic jobs. The three district councils in Mizoram offer good examples in this regard.

CONCLUSION

While traditional institutions in the colonial and pre-colonial periods were reasonably successful forest managers, changes and conflict arose when district councils were introduced as the managers, when in reality they were just the overseers. The situation was exacerbated by the emergence of a lucrative timber market, which encouraged landowners to extract timber rather than manage their forests. In spite of the subsequent Supreme Court orders that sought to establish scientific management, problems persist because none of the actors are properly equipped to carry out the new responsibilities thrust upon them.

The main need now is to build district councils' capacity to work with local communities in promoting better notions of forestry. Although the councils may be the *de jure* owners, it is the local leadership that controls forests, and policy prescriptions need to take this into account by creating incentive systems for different stakeholders to encourage them to think beyond timber. The Supreme Court Order regarding biodiversity fees to be disbursed to biodiversity-rich states offers a good starting point in this. Today's forest ownership and institutional framework need to adopt more of a stewardship paradigm that takes a more long-term view of the returns from forestry and forest management.

RECOMMENDATIONS FOR SUSTAINABLE MANAGEMENT IN MEGHALAYA

The following recommendations can be made for sustainable forest management in Meghalaya:

- The State Forest Department should be developed as a service provider for landholders, encouraging them to concentrate on non-timber forest products.
- The district councils need to think less about earning revenue and more about management.
- The state should provide non-monetary and monetary incentives to communities that are successfully protecting their forests as ancient sacred groves or modern biodiversity reserves.

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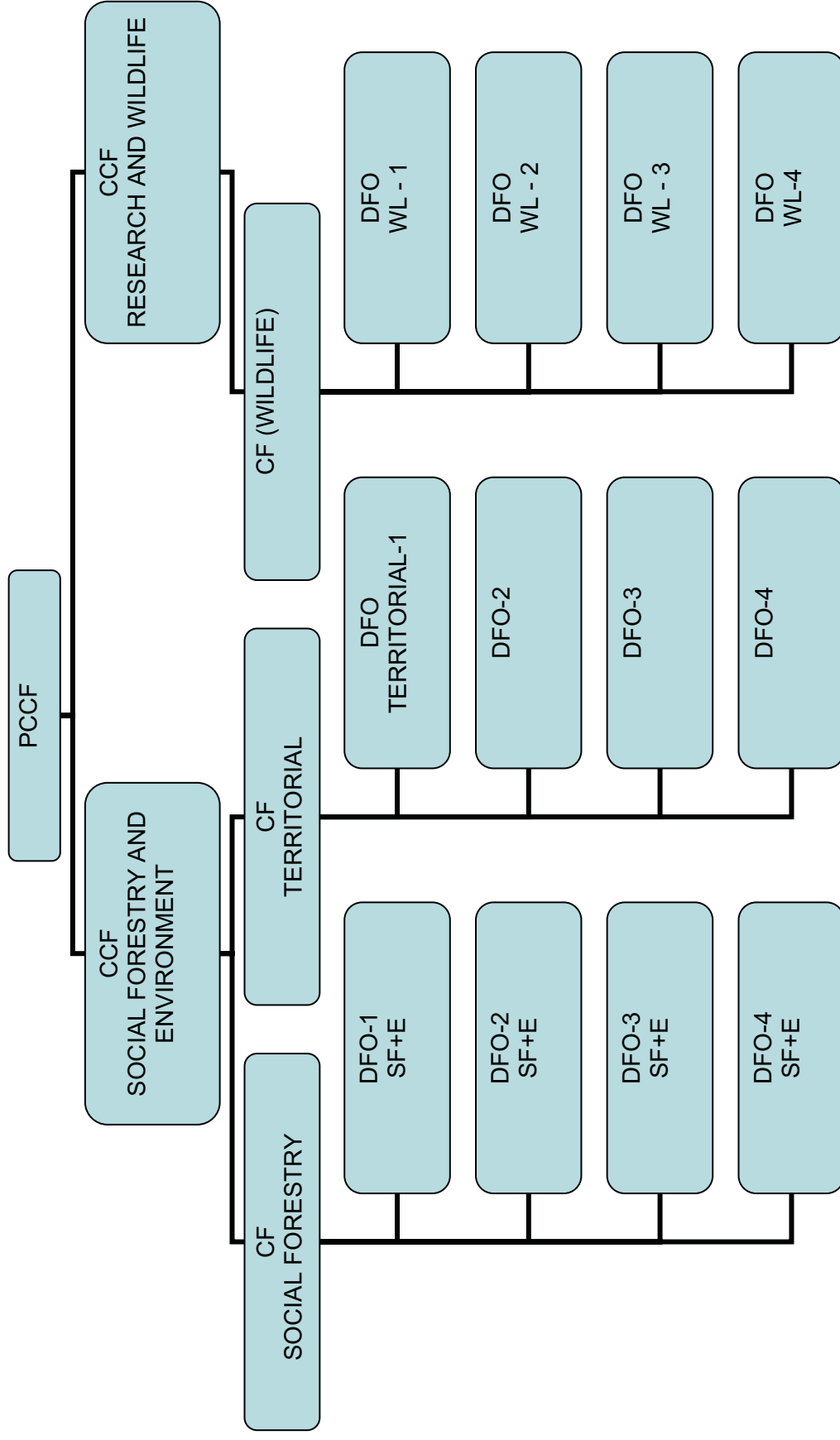
ANNEX I: DISTRIBUTION OF FOREST AREA IN INDIAN STATES (in km²)

State	Area	Reserved forest	Protected forest	Unclassified forest	Total forest	Percent of total area
Andhra Pradesh	275 068	50 479	12 365	970	63 814	23.20
Arunachal Pradesh	83 743	15 321	8	36 211	51 540	61.54
Assam	78 438	18 242	3 934	8 532	30 708	39.15
Bihar	173 877	5 051	24 168	7	29 226	16.81
Delhi	1 483	78	7	0	85	2.83
Goa	3 702	165	0	1 259	1 424	38.46
Gujarat	196 024	13 819	997	4 577	19 393	9.89
Haryana	44 212	247	1 104	322	1 673	3.78
Himachal Pradesh	55 673	1 896	31 473	2 038	35 407	63.60
Jammu and Kashmir	222 235	20 182	--	--	20 182	9.08
Karnataka	191 791	28 611	3 932	6 181	38 724	20.19
Kerala	38 863	11 038	183	--	11 221	28.87
Madhya Pradesh	443 446	82 700	66 678	5 119	154 497	34.84
Maharashtra	307 690	48 373	9 350	6 119	63 842	20.75
Manipur	22 327	1 463	4 171	9 520	15 154	67.87
Meghalaya	22 429	981	12	8 503	9 496	42.34
Mizoram	21 081	7 127	3 568	5 240	15 935	75.59
Nagaland	16 579	86	507	8 036	8 629	52.04
Orissa	155 707	27 087	30 080	17	57 184	36.73
Punjab	50 362	44	1 107	1 750	2 901	5.76
Rajasthan	342 239	11 585	16 837	3 278	31 700	9.26
Sikkim	7 096	2 261	285	104	2 650	37.34
Tamil Nadu	130 058	19 486	2 528	614	22 628	17.40
Tripura	10 486	3 588	509	2 196	6 293	60.01
Uttar Pradesh	294 411	36 425	1 499	13 739	51 663	17.54

West Bengal	88 752	7 054	3 772	1 053	11 879	13.38
A&N Islands	8 249	2 929	4 242	0	7 171	86.93
Chandigarh	114	31	0	0	31	27.19
Dadra and Nagar Haveli	491	198	5	0	203	41.34
Daman and Diu	112	0	0.7	0	0.7	0.62
Lakshdweep	32	0	0	0	0	0
Pondicherry	493	0	0	0	0	0
Total		416 547	223 321	125 385	765 253	23.28

Source: State forest departments.

ANNEX 2: ORGANIZATION TREE FOR MEGHALAYA STATE FOREST DEPARTMENT



ANNEX 3: DECLINES IN FOREST REVENUE FOLLOWING SUPREME COURT ORDERS



ANNEX 4: FOREST COVER IN MEGHALAYA

