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Self-initiated forest protection system (SIFPS): Two case studies of forest conservation from Assam

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Abstract
Self-initiated effort for the protection and management of natural resources is a traditional practice among different tribal communities in India including the northeast region of India. Such practices were started long before the post-independence initiative of Joint Forest Management, watershed development, or other government programs. The self-Initiated Forest Protection System is fundamentally a decentralized grass root movement initiated largely by small villages to protect their immediate natural resource base to sustain their livelihood. Traditional local institutions play a major role in regulating the forest resources protected under this system through the customary role of stakeholders, their rights and responsibilities. It supports the villagers' material needs besides maintaining the locality's ecological sustainability. It is an approach to the survival of the eco-system people, which is very common among various tribal groups of northeast India, where they live in an isolated location, created by different geographical situations, which ultimately helps evolve a unique way of life. This paper highlights two different case studies representing two different facets of this unique practice among the Rabha, Karbi and Garo tribal communities of Goalpara and Karbi Anglong district. Population pressure due to inward migration and the resulting depletion of forest cover and forest biomass has been found to be the major causes of such initiative in the study area. The traditional mechanism of these tribal people has been the major driving force behind the successful conservation of forest resources.

Keywords: self-initiated forest protection system; joint forest management; watershed development; sacred grove; community participation; deforestation; inward migration

Introduction

Community forestry is broadly defined as any situation that intimately involves local people in forestry activities. In other words, it is the forest governance and ownership model in which the communities have a central role in planning, decision-making and managing forest resources (Gilmour 2016) [11]. Community-managed forests are estimated to be a critical source of subsistence and livelihood for more than half a billion people around the world (Baynes *et al*. 2015; Kalita *et al*. 2017) [3,]. It has now become a popular approach for landscape restoration, forest management, biodiversity conservation and as a support system for rural livelihood worldwide (Paudyal *et al*. 2017) [16]. The community forests may be self-initiated by the community itself or NGO driven or state-sponsored.

Until the end of the nineteenth century, at least 80 percent of India's natural resources were common property (Singh, 1986) [18]. The travelogues of the early nineteenth century and old gazetteers present a picture of a well-stocked country with pastures and forest resources, which were controlled and managed by the local village communities in the pre-British era (Ghate 2004) [8]. In fact, before the colonial powers extended their authority to the village level, the local communities were the careful custodians of the resources whether local forests or small irrigation reservoirs. But, after the colonial settlement by the British in India, resource management became an exclusive right of the British government. The forests were categorised into 'reserved', 'protected' and 'unclassed' with user rights varying from total absence in reserved forests to vary liberal in unclassed forests. With the indiscriminate exploitation of the natural resources, especially the forest resources of the country the forest areas in most parts of the country witnessed severe depletion. Also, there was a drastic fall in the quality of cover as dense forests had been reduced and open forests were increasing (Ray & Alam 2002; SHA 1991 & 2021) [17].

Participatory forest management based on collective action can be categorised into three: community-initiated (self-initiated), NGO-promoted and state-sponsored like Joint Forest Management (JFM) (Talwar and Ghate 2003; Mehra and Ghate 2003) [19, 9]. Out of these three, the Self (or community) Initiated Forest Protection System (SIFPS) is a unique phenomenon that started long before and achieved what was sought to be achieved through Joint Forest Management (JFM) and watershed management programmes. The uniqueness of the SIFP system lies in the fact that it is a spontaneous initiative by the villagers and not an imposition by any outer force. It is, thus, being managed by local institutions like the village council, Mahila Mandal, panchayat, tribal council, youth association, etc. Ghate mentions that many communities in India now have taken on themselves to protect forests that are within the village boundaries (though these forests may be legally within the jurisdiction of the Forest Department for management), by restricting use within the community (Ghate 2004) [8]. The practices such as Sacred Grove, Sacred Ponds, etc. also contributed to forest conservation in various parts of India (Gadgil and Guha 1992) [7]. While in some cases the rules of management are very informal, in others elaborate rules have been framed by the communities.

The SIFPS evolved in response to continuous degradation and large-scale depletion of forests, grazing lands, water and other natural resources. There were instances triggered by

several factors that communities came forward for protecting the forests in and around their habitat. The rising global concern over widespread deforestation triggered such initiatives of community forest conservation in different countries of the world (Munro 2020; Paudel *et al*. 2022) [13, 15]. In fact, community-initiated forests or community forests have become a popular participatory forest management approach in many countries including Nepal (Acharya *et al*. 2022) [1]. Understanding the value of forest in the day-to-day life of the people and strengthening the age-old village's traditional institutions are among the primary factors leading local communities to come forward for the protection of the resources. Some studies prove that community participation in forest management has reversed the trend of deforestation in various countries of the world (Bluffstone 2015; Poudel *et al*. 2015; K C *et al*. 2018) [5]. The self-initiated groups evolve a system of management with rights and obligations that the members approve and usually observe.

The scenario in India

The self-initiated forestry practices in India are very old practices common as community forestry among the tribal mass and also as common as temple & monastery forestry in different parts of the country. The works of Bhattacharya and Mitra (2001) [4] document the SIFPS (Table 1) being practiced in the state like Haryana, Himachal Pradesh, Orissa, Karnataka, Gujrat, J&K, Tamilnadu, Uttar Pradesh and West Bengal are functioning well.

Table 1: SIFPS in different states of India

State	No of organisation	Area projected (in ha)	Forest types under the protection	Membership
Haryana	45 registered as societies	15,000	Reserved & projected forests	A man & woman from all households
Himachal Pradesh	2000 unregistered	23,556	Panchayat, community & un-demarcated	One man from each household
Orissa	5622 informal	74000	Reserve & Kasra forests	All household
Karnataka	23 informal	665	Reserve and projected forests	All household
Gujrat	200 recognised by FD	10000	Reserve & projected forests	All household
J & K	101 recognised	5434	Demarcated forests	All households
Tamilnadu	100 informal	5550	Reserve & revenue forests	SC, landless
UP	4058 recognised by the state government	2,20,00	Panchayat forests	
West Bengal	1684 recognised	2,00,000	Reserve & protected forests	All households

Though there is no authentic documentation regarding the SIFPS in Assam notwithstanding there are practices of self-initiated forest and other resource conservation among various tribal communities in Assam. Such practices are very much community-centric and entwined with traditional institutions. The paper, thus, aims at analyzing such self-initiated forestry conservation systems present among the tribal communities residing in two districts (two case studies) of Assam in North East India.

Objectives

This study was conducted with the following broad objectives in mind:

- Analyse the genesis of the *SIFPs* in Assam.
- Evaluate the management regime of the *SIFPs* in Assam.

Materials and methods

The study is basically an evaluation of two specific case studies of forest conservation and is based both on secondary and primary methods. Secondary data were obtained from various journals, research reports and papers, etc. However, the secondary sources were not sufficient for obtaining desired data for analysing the self-initiated forestry practices prevalent among the tribes. Therefore, participatory rural appraisal tools such as focus group discussion, participatory direct observation, random interviews and transect walk along the protected areas are administered to obtain the desired data for understanding the conservation practices in the field areas.

A two-stage sampling technique is followed for selecting the sites. In the first stage, districts were selected in consultation with the officials of Assam Mahila Samata Society, the state wing of Mahila Samkhya Yojna of the Department of Education, Government of India besides consulting other Non-governmental organisations working in various districts. In the second phase the areas, where the self-initiated forestry conservation practices are prevalent, are selected in consultation with the District Implementation Units of the Assam Mahila Samata Society. Thus, two districts, namely, Goalpara, and Karbi Anglong have been selected in the first phase and four villages of Goalpara and two villages in Karbi Anglong are selected for detailed investigation.

Results and discussion

1. Case study 1: Community forestry at Goalpara district

Background of the district

The district is situated in the southwestern part of Assam between 25° 53´N to 26° 30´ N latitudes and 90° 07´ E and 91° 05´E longitudes. It occupies an area of 1, 91,100 hectares, which accounts for 2.44% area of the state. The topography of the district is characterized by an almost flat plain except for a few hills. The main hills are Rakhsasini, Pancharatna, Sri Surya, Tukreswari, Mangla, and Paglatek, with elevations ranging from 100 to 500 meters. The river Brahmaputra flows along the northern part of the district besides two other important rivers, i.e., Dudhnai and Jinjiram. A number of wetlands locally known as Beel exist in the district. The district is under deciduous forest cover and is limited to small patches in a few reserve forests.

Factors behind the initiatives

The field study in Goalpara district was limited to four villages, i.e., Bodohapur, Rongsai, Uportola and Rambukdara Garo villages under three panchayats and three development blocks (Table 2).

Table 2: Areas selected in Goalpara district

Development block	Panchayat	Name of the villages	Communities residing
Balijana	Bokapubapur	Bodohapur and Rong Sai	Rabha
Matia	Matia	Uportola	Nath, Bodo, Koch
Dudhnoi	Mowamari	Rambukdara Garo Gaon	Garo

The villages are resided by the Rabhas, Bodos, Kochs, Naths and Garos. The residents of these villages are dependent on the forests for various products and services and have been thereby protecting the forests for years through their traditional institutions as the organised structure evolved much later. The SIFPS have become so popular that Rambukdara Garo Gaon has initiated such practice as a demonstration effect.

The timeline and the organisational structure have been presented in Table 3.

Table 3: Timeline and organizational structure of SIFPS

Villages	Community	Timeline of the practice	Organizational structure
Bodohapur	Rabha	Traditional practice was there since time immemorial, the present organized structure evolved during 1983-1986.	Organized Forest protection committee, known as "Ban Surakha Samiti".
Rongsai	Rabha	Traditional practice was there since time immemorial, the present organized structure evolved during 1983-1986.	Organized Forest protection committee, known as "Gaon Ban Samiti".
Rambukdara	Garo	Traditional practice was there since time immemorial, the present organized structure evolved 1998-2000.	Organized Forest protection committee, known as "Gaon Ban Samiti".
Uportola	Bodo	Traditional practice was there since time immemorial, the present organized structure evolved 1970-1975.	Organized Forest protection committee, known as "Uportola Ban Sanrankhan Samiti".

Source: Focus Group Discussion

It became apparent during the Focus Group Discussion (FGD) that the local communities observed a serious threat of inward migration during the seventies and eighties of the last century. The migrants came from different places and settled down near the forests and sometimes inside the forests by clearing the existing forest patches. The situation was further aggravated since a handful of corrupt forest officials, in order to satisfy their craving for more money, helped the immigrants settle down there by clearing forests. Consequently, the forest biomass witnessed a severe depletion and the people slowly started realizing the importance of forests in their lives and thus came out strongly for the conservation of the forest resources in these villages.

The village elders of Uportola village assembled and formed a forest conservation committee under the name of *Uportola Ban Sanrankhan Samiti* in the year 1972. Similarly, the people of Bodohapur and Rangsai also came out to withstand the pressure of inward migration and came up with the conservation of forests nearby their villages. They formed their forest protection committee i.e., *Ban Suraksha Samiti* and *Gaon Ban Samiti* respectively during the years 1983-86. However, the protection and conservation of forests in Rambukdara Garogaon evolved as a demonstration effect. The people of this village were motivated by the positive impact exerted by the other forest conservation practices of surrounding villages. They have also formed *Gaon Ban Samiti* to look after their community forest. Thus, the traditional dependency of the people on the forest and the threat of inward migration have been found to be the major causes behind such noble initiatives.

Existing management structure

Unlike Rambukdara and Uportola, both Bodohapur and Rangsai have one executive committee of 13 and 16 members respectively, to look after if the rules and regulations, laid down by the committee, are violated and take quick decisions regarding various issues. The term of the executive committee is one year. The office bearers are elected democratically from among the villagers, where the age is always taken care of. The responsibilities of the committee are the protection, and maintenance of the forest areas besides monitoring and allocating resources to the members.

The management of the SIFPS is quite unique in nature. The member household can collect fuel wood from the forest however collection by outsiders is absolutely prohibited. It is also to be worth noting that one cannot cut trees but can lop the branches for fuel wood. The tree can be cut only if somebody needs it for construction purposes. But the person concerned has to give an application addressing the President and Secretary of the forest protection committee, where he has to mention how many timbers, he/she needs. Upon receiving the application, the committee decides if the request can be considered. The timber is given free in Bodohapur however, in the case of other villages the committee asks the person to pay a meager Rs. 50-60/- per pole. The committees have a strong surveillance system and the person cannot cut more timbers than he mentions in his application. Moreover, the committee members visit the forest, once a year, to see if illegal felling has taken place. Violation of rules framed by the committee invites imposition of fines ranging from Rs.105/- to Rs. 500/-. Cutting and thinning works are carried out per the committee's decision. The fine and sale proceeds are deposited in a corpus fund which is utilized as a cushion to fall back upon during financial hardship faced by the members. The money so borrowed is used to procure food, medicine, books for the children, etc. The annual interest rate ranges between 12 to 20 percent.

Case study 2: Sacred Groves of Karbi Anglong

Background of the district

Karbi Anglong District is located in the central part of Assam. The district with dense tropical forest-covered hills and flat plains is located between 250 33' N to 26035' N Latitude and 92010' to 93050' E Longitude. The district has a total geographical area of 10,434 sq. Kms. representing 13.3% of the total geographical area of the State. 85 percent of the district is covered by hills. The plain areas consist of

valleys of the Jamuna, Kapili and Dhansiri rivers lying in its eastern part. Besides these three major rivers of the district, other minor streams include Kaliani, Barapani, Patradisa and Dikharu. The landscape ecological studies of forests of Karbi Anglong indicate a high amount of landscape heterogeneity promoting greater bio-diversity. The important forest types found in Karbi Anglong District are – Moist semi-evergreen forests, Moist Mixed Deciduous forests, Riverain Types, and Miscellaneous types with scattered pure or mixed patches of bamboo.

Main areas of observation

The study was carried out in two villages, i.e., Rongchek and Manjili, under the Chingthong Development Block under the Hamren subdivision of Karbi Anglong districts. The forest here is being conserved in the guise of sacred space and sacred grove. Sacred groves of India are forest fragments of varying sizes, which are communally protected, and which usually have a significant religious connotation for the protecting community. Hunting and logging are usually strictly prohibited within these patches (Gadgil & Vartak 1975). These sacred groves are repositories of rare flora and thus have immense conservation value. It is important to note that unlike most sacred groves in other parts of the country, the sacred groves of Assam are associated with some religious beliefs and social rituals. The timeline and the present structure of the conservation practice have been presented in Table 4.

Table 4: Timeline and present status of the conservation practice

Village	Communities	Timeline of the practice	Present organizational status
Rongchek	Karbi	Traditional practice was there since time immemorial.	Traditional. Managed under the leadership of village head and village priest.
Manjili	Karbi	Traditional practice was there since time immemorial.	Traditional. Managed under the leadership of village head and village priest.

Underlying principle

The focused group discussion reveals that the local community considered the sacred grove as a place where the spirit lives and the spirit control the resources like water, forest, soil quality, etc. Since these resources determine the availability of food, fuel, fodder and water etc. for the local villagers they are very much for the conservation of the forest on the sacred groves.

Organizational and management practices of sacred groves

The villagers offer pujas to the deity residing in the sacred groves on the occasion of various rituals celebrated periodically that is related to the agricultural cycle, i.e., before the clearing of land for jhum cultivation, first sowing of jhum, before tilling of land and harvesting for wet paddy. The village priest fixes the date and time of rituals and classifies and distributes the work to be performed by the villagers for the specific ritual. All the villagers, irrespective of gender, participate in the function.

There are rules which are to be strictly followed by each member of the community. For example, no one can enter the sacred grove area without taking bath. Besides, the collection of any material from the sacred grove area is strictly prohibited. However, it is worth mentioning that before organising any ritual some cleaning is always done by the community members and usable materials are collected and divided among all the villagers.

Significant outcome

The practice of sacred groves basically functions as the watershed protection cover in the area. As the sacred groves are located in the upslope area of the hill, it helps reduce soil erosion and enhances water percolation and surface flow which supply ample water along the slope enabling people to grow wet paddy in the downslope area. This perennial supply of water basically creates natural assets for the community, which provides livelihood security to a large extent.

Conclusion

The self-Initiated Forestry Protection System is fundamentally a decentralized, participatory, grassroots movement initiated largely by small villages to protect local natural forest and forest resources from further degradation. It is control over the forest use by a more or less well-defined group of people claiming customary user rights. Thus, SIFPS recognises the control, management and use of forest and tree resources by local communities. It also respects the social, economic and cultural relationship between people and forests. Protection activities are usually coordinated through traditional and informal cultural institutions of the village.

Thus, the traditional belief system of the people, its cultural interlinkages, protecting the forest from further degradation and a spontaneous urge to protect own community identity are found to be the major driving forces behind SIFPS in these cases. Large-scale community participation, a well-defined benefit-sharing mechanism and strict implementation of the rules and regulations framed by the traditional village institutions are the forces behind the success of SIFPS. Therefore, a holistic understanding of community belief systems and their traditional practices is key in designing new interventions.

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