LESSONS FROM SELF-INITIATED FOREST PROTECTION SYSTEMS IN INDIA – AN EYE-OPENER TO CPR STUDIES

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Introduction

It is long since Garrett Hardin came out with his 'Tragedy of Commons'. Hardin may not have been proved entirely correct in his conclusions, but it did spark off a major academic debate that led more and more researchers to take a look at the question of the commons. Hardin concluded that 'freedom in the commons brings ruin to all' (Hardin 1968) and therefore to avoid tragedy, concluded that the commons could be privatised or kept as public property to which rights to entry and use could be allocated (Hardin 1968). He specifically recognised two general solutions and presumably no others: private enterprise and socialism i.e. control by governments (Hardin 1978). What Hardin overlooked at that point in time was the subtle yet concrete difference between the various resource regimes in existence. What he had mentioned in the arena of common property regimes was a case of open access regime. The Hardin argument overlooked the important role of institutional arrangement that provide for exclusion and regulation of use as well as the cultural factors (Feeny 1988b; Charles 1988).

Since Hardins' pioneering observations, a lot of studies have been carried out on common property resources in many parts of the world providing ample evidences of collective actions at their best. Basic characteristics of CPR's are excludability and substractibility. Almost by definition, management of common property resources implies that a degree of coordination between users was necessary, in order to create rules of use and exclusion and to enforce them. This is achieved by means of institutions, which perform the function of reducing the uncertainty of users by defining and stabilising their expectations. Breakdown of common property regimes is usually due to the breakdown of the ensuing institutions. Therefore, study of common property management focus primarily upon how users organise themselves to make its best rational use.

Time and again institutions have been found to be the bottomlines of successful natural resource management strategies the world over. And this has lead to research being carried out to understand the dynamics of institutions. The basic strategy is to identify those aspects of the physical, cultural and institutional setting that are likely to affect the determination of who are to be involved in situations, the actions they can take and the costs of those actions, the outcomes that can be achieved, how actions are linked to outcomes, what information is to be available, how much control individuals can exercise, and what payoffs are to be assigned to particular combination of actions and outcomes.

Common property regimes, used by communities to manage forests and other resources for long-term benefits, were once widespread around the globe. Some may have disappeared naturally as communities opted for other arrangements, particularly in the face of technological and economic change but in most instances common property regimes seem to have been legislated out of existence. Ostrom mentioned a list

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of certain basic design principles exhibited and illustrated by long enduring CPR institutions- clearly defined boundaries, congruence between appropriation and provision rules and local conditions, collective choice arrangements, monitoring, graduated sanctions, conflict resolution mechanisms, minimum recognition of rights to organise and finally nested enterprise.

In much of South Asia, Africa and elsewhere, poorly defined state property in conjunction with population pressures, has lead to widespread poaching of government forest and other resources. Forests in India are state property. State ownership is seldom associated with successful management in less–developed countries. The professional resource management infrastructure of these states is usually poorly developed and enforcement of legislation's problematic. In India, for e.g., communally held forests were nationalised before the state had developed the capacity for management. Local communities are, however, starting to reassert their cultural traditions of conservation. (Gadgil 1985, 1987, Gadgil and Iyer 1989). Among many justifications advanced for eliminating community ownership of forests was the argument that individual or public ownership would offer enhanced efficiency in resource use and greater long term protection of the resource but in many instances it is apparent that the arrangements that emerged to replace common property regimes have been ineffective in promoting sustainable resource management. Concurrently traditional methods of access, control, usufruct allocation and conflict resolutions have widely become ineffective or have disappeared, undermined by political, economic and social changes within the village and nation. Increasing population pressure and immigration of outsiders, greater commercialisation of the products of the resources, and technological change that encourage alternative use of land, have all contributed to increased differentiation within communities that reduces communal cohesion and uniformity of interest.

Under the present regime it makes sense for the state to continue to play a role in resource conservation and allocating them among communities of users. Private use of such land by individual who lack the resources to operate it sustainably can lead to even greater overuse and degradation. Nor is the state necessarily effective in controlling managing or preventing degradation of a resource it has expropriated (Berkes et all 1989), as has been seen repeatedly with the case of forest resources.

Interventions to strengthen or establish contemporary systems of collective local management of forest resources have to date had only limited success. When local institutions have broken down under the pressures of change, it is not to be expected that new communal institutions capable of controlling resource allocation and use can be created easily. Recent interventions to strengthen local management or to create new collective management systems have so far met with limited success. The conditions for the successful management of forests as common property regimes consists of the following recommendations -

1. User groups need the right to organize their activities, or at least a guarantee of no interference.
2. The boundaries of the resource must be clear.
3. The criteria for membership in the group of eligible users of the resource must be clear.
4. Users must have the right to modify their use rules over time.
5. Use rules must correspond to what the system can tolerate and should be environmentally conservative to a margin for error.
6. Use needs to be clear and easily enforceable.
7. Infraction of the rules must be monitored and punished.
8. Distribution of decision – making rights and use rights to co-owners of the commons need not be egalitarian but must be viewed as fair.
9. Inexpensive and rapid methods of resolving minor conflicts need to be devised.

10. Institutions for managing very large systems need to be layered, considerably authority devolve to small components.

Self-Initiated Forest Management in India

To meet the requirements from the forests, India has been experimenting with diverse management systems for protection, regeneration and biomass production in forest, village commons and degraded lands. Apart from the Forest Department (FD) managed systems, Joint Forest Management (JFM), industry promoted forestry, community forestry, and farm forestry has been promoted and practised. A large number of community initiated forest management systems have also evolved over the years in response to the continuous degradation of forest and grazing lands and biomass shortages. It is evident that the pressure on the forest due to anthropogenic activities is enormous, which has led to the evolvement of Participatory Forest Policies in India.

While this entire process of policy change at the national level took place, several **Self-Initiated Forest Protection Groups** (SIFPGs) in different parts of India were well on the way to showing what self-initiated forest protection was all about. **Self-Initiated Forest Protection is fundamentally a decentralised grassroots movement initiated largely by small villages to protect local natural forests from further degradation. It is the control over forest uses by a more or less well defined group of people claiming customary user rights** (Ascher 1995). Community forestry is based on the notion that appropriate involvement by local people in forest management enhances the likelihood of sustainable use of forest resources**. It is generally accepted that the existence of effective local organisation is essential to the success of community forestry programs**. Common features of all self-initiated forestry initiatives are that they support the control, management and use of forest and tree resources by local communities; they respect the social, economic and cultural relationships between people and forests; and they involve a decentralised and participatory approach to forest management, which assumes that the best stewards of the world's forests are the populations living in and around them. Effectively, protection activities are therefore usually co-ordinated through traditional and informal cultural institutions.

Self-initiated efforts at protection and conservation is an unique phenomena started long before and achieved what is sought to be done through various programs pursued all over the world like Joint Forest Management (JFM), watershed development and other government programmes. Self-initiated protection and management groups are an innovative institution, having being formed spontaneously by villagers, deeply concerned by the depletion of local natural resources. There have been many reasons ascribed to the emergence of such initiatives, some of which are the following - large-scale destruction of forest, water and other natural resources, revival of dormant traditional institutions, historical land tenure, an uprising against social and economic deprivation of the masses, perceived negligence of the government functionaries, trigger from other local successful efforts, social urge developed by the village leaders for the resource scarcity and search for alternative ways to resource development.

As in many other countries all over the world, in India too, local communities were managing the resources in their surroundings like land, water, vegetation and minerals through their own system of local institutions. The role of these local bodies was to control as well as to manage these resources. After the prolonged control of access to resources by the colonial regime, a new trend of improved access to the resource by the local people began in the era of participatory process. There are many popular local institutions in the country, which are doing commendable work and are well known. The presence of Van Panchayats in the

hills of Uttaranchal (since 1930s) and forest protection groups in Karnataka (since 1927) are the oldest such institutions. Others are temple councils in Tamilnadu and tribal councils in North Eastern parts of India in Garo-Khasi Hills, Sacred forest etc. Likewise in Tamilnadu, Andhra Pradesh and Karnataka, the local groups known as Tank Management Committees have managed minor irrigation. In Kashmir and Punjab, Shamilat land (Grazing land) is managed by local autonomous village institutions. In Bihar and Orissa, some village Forest Protection Committees (FPCs) have been functioning for over a 100 years.

After the colonial settlement by the British rulers the old institutions became weak. Decades of state monopoly in resource management, which mostly meant paper management of trees, herbs, shrubs, water and grasslands, were relegated to the secondary places and files came to be of prime concern. The state's influence and the spread of commercial activities brought far-reaching changes in the common or community ownership, occupancy and user rights. This also brought changes in the relationship of Government functionaries with the people.

Table 1: Self-Initiated Forest Management Systems in India

State	Number of Organisation and status	Area Protected (in Ha)	Forest Type Under Protection
Haryana	45, registered as Societies	15,000	Reserve and Protected forest
Himachal Pradesh	2000, Unregistered	23,556	Panchayat, Community and Undemarcated Forest
Orissa	5622, informal	74,000	Reserve and Keshra Forest
Karnataka	23, Informal	665	Revenue and Protected Forest
Gujarat	200, Recognised by FD	10,000	Reserve and Protected
Jammu & Kashmir	101, Recognised by FD	5,434	Demarcated Forest
Tamil Nadu	100, Informal	5,550	Reserve and Revenue Forest
Uttar Pradesh	4058 Recognised by State Government	2,20,000	Panchayat Forest
West Bengal	1684, Recognised by FD	2,00,000	Reserve and Protected

Source: - Adapted from Ravindranath N.H, Murali K.S. and Malhotra K.C., 2000.

Under SIFPGs, the largest number of such groups have been recognised in some states like Uttar Pradesh, West Bengal and Orissa. The largest area under community forest protection has been recorded in Uttar Pradesh and Orissa. The SIFPGs in some states have been recognised by the forest departments while in some other they own an informal existence. Among the oldest traditional forest management institutions existing in India are the VPs (*Van Panchayats*) operating in Kumaon, Uttarakhand (erstwhile part of the state of Uttar Pradesh) engaged in the protection and management of forests. Local communities in Orissa now manage large patches of forest, covering a total area of 74,000 hectares, through the efforts of innumerable "User Group Organisations" (UGO).

A great deal of work on community forestry has been going on in Nepal for quite some time now. An estimated 2,00,000 hectares of forests have been handed over to 4500 user groups throughout all parts of Nepal with thousands of other user groups who are already managing their forests, waiting for formal registration. A Federation of Community Forestry Users in Nepal (FECOFUN) has been established to inculcate self-reliance and increase independent decision making capacity of forest user groups.

India realised the importance of involving local communities in forest protection and management and gradually diverted its forest policies towards making them participatory. However, in spite of its rich experience in forest management through traditional initiatives, JFM, Social Forestry and farm Forestry, these systems are poorly understood. It is necessary to use this vast experience to formulate and implement

appropriate policies and institutions to promote sustainable and participatory forestry. This paper looks at two such cases on Self-initiated CFM systems from Jharkhand and attempts to bring out the inherent learning's from them in the context of globalisation.

The Case of Kudada in Jharkhand

In the early sixties, the forest in the Kudada region was lush green and often mentioned as good forest by any standards. By the early seventies, this once-forested hills of Kudada in Jharkhand had become covered with stones and scrub and were by and large a wasteland. During the monsoons, as soon as new shoots sprouted villagers would hack them for sale as firewood. Most villagers were actively involved in commercial fuelwood cutting. The main forest reserve, a 4000-hectare patch of forest surrounded by 32 villages was badly degraded. Any coppice or seedling growth in the lower slope Sal or mixed forests on the upper slope and ridge tops was quickly suppressed through hacking and grazing.

This case looks at the process of evolution of traditional forest management institutions in multiple stages – awareness development among a few village leaders, the mobilisation of community opinion to take forest management protection action, the process of FPC formation spreading to other communities in the area, inter-FPC Coordination and finally the emergence of an apex co-ordinating organisation.

Early Environmental Awareness

In the early 70s, villagers in the area began voicing their anxieties over the growing degradation of local forests. The nature of their anxieties was both economic and environmental. Tribal communities, heavily dependent on forest resources for housing, agricultural tools, medicines, food, fuel, and fodder recognised that depletion of the resources threatened their own livelihoods. Some initial attempts of the Balidih village, one of the firsts to discuss forest protection, began in the early 1960s, but eventually collapsed. By 1968, the forests had become extremely degraded, the situation being worsened by the droughts of 1964. Most standing trees had been felled and roots extracted for fuelwood, exposing a stony ground cover. Over several years, after numerous meetings among the villagers of Nandup, Talsa, Turamdih and Kudada a consensus emerged supporting closure of the forest hillsides to allow for its regeneration. While economic importance of the forest to tribal village is compelling and is an oft–cited reason for forest protection, local people assessed environmental impact in other ways and took a more holistic view of the entire scenario.

By the mid-1970, a cluster of communities north of the hills began discussing the need for forest protection. They had often met with villagers from Bhitar Dari, another village located a little further off and knew that they had made progress in controlling illegal felling in their area. In this process of voicing early concerns, the community elders in the area played a big role that later led to the formation of the FPCs.

Resistance to change - motivation building and the consequential attitudinal changes

Tribal cultures especially those of the Munda, Ho, Santhals and the Oraons are closely linked to nature. The religion of these tribals, Sarna, entails many aspects of nature worship. A large number of tree are naturally worshipped by the tribals that made motivating the local community easier.

Regenerating the natural forest required village leaders to mobilise enough support within their own and neighbouring communities to effectively close the area to use. Forest closure meant innumerable hardships

for the economically marginalised local population who found it very difficult to adhere to. The process of organising community forest protection was therefore full of conflict. Two such conflicts arose during this period but they were resolved through meetings with political representatives and village elders who were invited to help mediate.

Throughout the initial years of Kudada's forest protection movement, the communities received little support from the Bihar Forest Department in organising or resolving conflicts. Conflict resolution was done through intervillage meetings. Both informal leaders, as well as local panchayat representatives, played a role in mediating conflicts. The growing participation and formation of forest protection groups over time gradually established a consensus that the hill forests were closed to cutting. Many of the communities that initially attempted to exploit the newly protected forest later formed their own management groups. Presently the region consists of 32 forest protection groups headed by an apex organisation.

The spread of forest protection efforts

For effective forest protection, village leaders realised that they needed the support of not only their own, but also their neighbouring communities. Since the small hillside forests were effectively open access resources, villagers from surrounding communities shared them. Without any form of agreement with their neighbours, any unilateral attempts to impose access controls and a moratorium on cutting and grazing would have had little impact. Consequently, village leaders visited neighbouring communities during the early stages of their organisation and discussed the benefits of forest protection.

The groups carried out extensive meetings in different villages during the early years of protection. Having realised that they could not protect the forest on their own, they tried to solicit the support of the other villages in the reagion. These meetings served twin purposes – of extending motivation efforts and identifying community leaders to carry the movement across villages.

Southeast of Kudada hill, Bhitar Dari village leaders brought the five neighbouring hamlets together to discuss forest protection needs, before a consensus was reached among the communities to close access to the forest patches. Bhitar Dari leaders noted that the success of their efforts over the past twenty years was based on the joint commitment to forest protection.

North of Kudada hill, however, the spread of forest protection efforts was gradual. Initially villagers from Nandup met the neighbouring communities in 1974, wherein a Nandup tribal leader initiated the process. The other communities were reluctant to initiate forest closure, but agreed that Nandup be allowed to protect a small-forested hill on their border. A few years later, after being visited by three village leaders from neighbouring Nandup and Banduhuran, Talsa, Nutandih and Turamdih villages decided to protect the forest along the northern slopes of Kudada hill. They also prepared a form of a working rule for protecting the forest in the region:

- Cutting trees is an offence. All villagers of the particular village must socially boycott the family of any offender. No fine system is practised.
- Birds and other animals should be protected along with the forest. Hunting festivals should not be allowed in the protected areas.
- Frequent meetings will be conducted to resolve conflicts and discussions should focus on the regeneration of the forest.

- The forest protection committee must have no political affiliations.

Forming the web – coordination among FPCs

From the beginning of the forest protection committees, the attitude of the local volunteers had initially been to protect their own village forest. However, the message gradually spread to other parts so that the whole forest region could be protected. Local leaders played a significant role in the co-ordination among the different villages.

The concept of forest protection committees was spread to more than 34 villages, in most cases during social interaction at festivals, or through articles in local magazines and intervillage meetings. In 1974-75, a leader from one forest protection committee wrote a number of dramas in the local language. He recruited young men and women from different villages to perform them. The theme of all these dramas focussed around 'forest protection'. Every evening they met in a different village shared their experiences, and discussed forest protection and problem solving. These events served instrumental for dissemination of information and experiences among the tribals in the area.

The Emergence of Apex Co-ordinating Committee

In 1979, a meeting of all 32 villages in the area was called in Kudada to reach an agreement regarding the protection of the hill forests. The ten communities already engaged in forest protection convinced the other 22 to initiate active protection activities. An agreement was also reached to form an apex committee called the **Adarsha Gram Vikash Samiti (Ideal Forest Protection Committee)**. This committee was later renamed as Chotanagpur Van Suraksha Samiti and is now known as Van Evam Paryavaran Sanrakshan Samiti.

The apex committee now comprises representatives from the 32 communities participating in forest protection. Now that local community support for forest protection is strong, the committee feels its primary goal is to protect the local forests from outside threats. A number of private firms have been attempting to get mining rights to the hill tracks from the government. Indeed, experiences with the Uranium Company of India, Ltd. (UCIL), dramatically demonstrated the dangers of outside exploitation. In 1984, UCIL succeeded in securing rights to the Nandup hill, forcing a resettlement of the village that resulted in deforestation of the hill. Political party workers often attempted to carry out illegal felling in the region, but met with resistance from the local villagers. In January 1995, at a meeting of the apex committee, the leadership noted that the biggest threat facing the thirty-two villages of Kudada was of a political nature and resolved to act against any such external threat.

While the committee currently rejects felling the young secondary forests or even thinning them to generate revenues, they are interested in exploring ways to enhance its productivity. As the sal trees reach maturity of age, they begin producing oil-bearing seeds. With nearly 4,0000 hectares of forest, collection and processing of oil seeds could provide the protection groups with substantial revenues. Sal leaf plate making could also ensure adequate revenue for the villagers. A large number of NTFPs available in the forest could also be a major source or revenue for the villagers in the region. But capitalisation, technology and market information is not easily available to the committee. The objectives of the Community Forest Management at Kudada have singularly been that of forest management. Creation of income generation options always took a second place, as a result the forest has not really benefited the villagers economically. **What now remains to be**

seen is whether these forest protection groups of Kudada can proceed from forest protection to productive management.

<u>The Case of Bero – Tale of Individual leadership</u>

Bero block is a tribal block situated in Ranchi district of Jharkhand, about 35 kms. from Ranchi proper. It spreads over 114 villages and 20 panchayats inhabited mostly by the Munda and Oraon tribes. The area comprises entirely of poor tribal people, for whom the forest is a major provider of sustenance and income. During the last century, this area had a forest cover of nearly 80%, which reduced to around 60% by the early decades of this century. Today off-course, officially it is around 20%. Deforestation caused drying of small streams and rivers which was often closely followed by droughts. The main tribal economy, agriculture was seriously affected due to water scarcity and topsoil erosion. As poverty exerted itself, fuelwood selling remained as the only source of income for the rural poor. Many a times, smugglers and contractors, with the help of local political support carried out illegal activities in the area. The acute shortage of wild food, fuelwood and fodder from the forest drove the local population further against the wall, into hardships and harassment.

Early Ecological Concerns

The village Khaksitoli was amongst the first village in the area to lead the movement against forest degradation. This is a homogeneous community, habitat to the Oraon tribe, having very little land holding and depending largely upon local forest as a source of livelihood. In the late 60s, the village Pradhan Shri Simon Oraon, in response to the degrading forest resources and the dependence of the community on it, called a meeting among 20 adjacent villages for formation of village forest protection committees (VFPC) to protect all nearby forestland with the help of locals in the area. Three local committees were formed in Hariharpur-Jamtoli village - Jamtoli VFPC, Khaksitoli VFPC and Berotoli VFPC. In the same meeting, they also divided the forest area among the three VFPCs. The total forest area surrounding the village was 179 acres, which was redistributed amongst the three villages.

Shri Simon Oraon, who is also the Parha Raja (king of the hamlets) exerts considerable influence in the area. He is presently the Parha Raja of 4 Parhas – Barah (12) Parha, Ekkis (21) Parha, Aath (8) Parha and Dus(10) Parha. He has done commendable development work in the area like road making, construction of water harvesting structures and ofcourse has played a tremendous role in the regeneration of the forest in the area. It was he who played a leading role in putting a stop to forest degradation by collecting the local community to act synergistically.

This case takes a look at the above mentioned three VFPCs (Jamtoli VFPC, Khaksitoli VFPC and Berotoli VFPC). This case goes on to look at the ecological and economic turnaround that the forest protection at Bero managed to achieve after years of protection.

Institutional profiles of three SIFPGs and one VFPC at Bero

The profiles of the four villages have been included to provide an outlook of the institutional profiles existing in the four villages. This table very clearly brings out the differences in the profile of the SIFPGs against the JFM committee. What is commendable is the fact that the three SIFPG that form this case study have been in existence long before JFM was even heard of and are functioning effectively till date.

Table 2: Profile of Four VFPC under Community Protection at Bero Block, Ranchi

	Jamtoli VFPC	Khaksitoli VFPC	Berotoli VFPC
Years of Informal committee formation	1972-1975	1965-1970	1972-1975
Agriculture land available	862 acre	100 acre	180 acre
Year of VFPC formation FD	1991	1991	1991
No. of household in VFPC	210	35	58
Forest Area under each VFPC	135 acre	70 acre	95 acre
Custodial protection systems	Voluntary	Voluntary	Voluntary
Village meetings	Every week on Tuesday	Every week on Tuesday	Every week on Wednesday
Record of minutes in the meeting	Very often	Every meeting	Very often
Patrolling pattern	4 persons rotationally upto one week. During paddy sowing and harvesting season everybody becomes busy, they cannot give time for few days	2 full time person kept for patrolling, If necessary members may also go for patrolling	4 persons daily go for patrolling. If somebody is absent some other member from some family do the job, after 12 days the rotation repeats.
Women involvement	Women are invited only in big meetings when adjacent other 2 VFPC also attend meeting	Women are actively involved in weekly meetings. The committee values their suggestions.	Though women are in the executive committee of the VFPC they are rarely invited. Women are interested in attending the meeting. They also carry out patrolling at times.
Dispute/ fine case	They fine Rs. 10-50/- according to the nature of offence. Fined money are used in	Social boycotting is practised i.e. if the offender is from the village, otherwise they	Imposing fine is practised. Some times the offender is handed over to the Forest

	village development work	are convinced as not to cut trees. If that does not work they are charged fine what ever is decided in the meetings	Ranger if they are unable to pay the fine amount
Present community forest management group	Active	Strong	Active

Source: - Primary data

Surprisingly enough the Self-initiated VFPCs at Bero does not merely perform its role in forest protection but is involved in a whole lot of other activities related to the development of the village like construction of water construction structures, soil and water conservation measures and resolving inter and intra village conflicts etc.

The role played by these institutions conforms to the existing development paradigm in India where integrated rural development is the order of the day.

Regeneration of Natural Forest

The forest of the area is under dry tropical deciduous forest. Sal (Shorea robusta) is the major species associated with other local trees like Bija (Pterpcarpus marsupium), Kendu (Diospyros melanoxylon), Mahua (Madhuca indica), Pial (Buchnania lanzan), Bhela (Semecarpus anacardium), Dhawra (Anogeissus latifolia), Kurchi (Holarrhena antidysentrica), Bahera (Terminalia bellerica), Saaja (Terminalia tomentosa) etc.

The local forest of Bero, Jamtoli, Berotoli VFPC's are all regenerating Sal coppice forest. Khaksitoli forest has little matured crop. The ecological study shows maximum number of plant individuals available in 3-years protected patch of Bero. The highest number of herb individual was recorded in Jamtoli. There is a clear relationship between age of protection and growth of trees, which is directly proportionate. Over all 12 species of mature trees, 24 species of mature saplings/shrubs and 35 of young seedlings/herbs were recorded at Khaksitoli. The availability of climbers was the highest in Khaksitoli forest patch. This goes a long way in proving that the regenerating capacity of a forest is directly dependent on the number of years of protection.

It has been observed that in the process of protection through various institutional arrangements, the phytodiversity of the area recovered which helped in improving the socio-economic condition of the villagers by the availability of a range of NTFP. The villagers always sell their items to the middlemen who comes to the village to collect the forest products like mainly dry mahua flowers, ber seeds, lac, sal seeds, and achar seeds. The middlemen visit every household to collect the items, in exchange for money, salt or at times other desired items as asked for by the villagers. Villagers' experience about the system is good, as the amount collected by them is very little and would not be feasible to carry to the nearby market. While surveying in the village haat at Bero proper, which is about 8 km from Hariharpur, it was noticed that forest products are mostly traded by the women folk. There are about 20 items collected from the community managed forest area, which gives significant benefits to the local tribal community.

Bero has been a very successful case study of forest protection through self-initiated action. This case study took root in the period where co-optive management of the forest was not heard of in India. It was much later, in 1990, the Government of India accepted the JFM resolution. What the GOI contemplated much later was achieved by the villagers at Bero long before. A number of issues with important management implications, emerged during the case study. It supports that local community can be effectively protect the forest without the influences of state custodial management as in Khaksitoli VFPC. The ecological results clearly revealed that strong institutional arrangement with increasing years of protection in regenerating forest, favour results like increase in biodiversity, biomass productivity and NTFP availability.

Discussions

From the above citations it can be concluded that traditional natural resource management systems have emerged as a result of the stress building up on the natural resources like water bodies, forest, sacred groves and pasture lands etc. These resources have been managed to satisfy the religious and cultural sentiments attached to them, the impending resource needs, need for restoration of the degraded areas, historical land tenure etc. Most such SIFPGs that evolved over the years have had similar concerns, which also resulted in their sustainability over the years.

Most forest users rely on the forest for only part of their income. Apart from full time workers of forestry based commercial agencies and government forestry officials, forest exploitation represents supplemental income through fuelwood and NTFPs – although the additional income may be extremely important. Traditional forest users, like the tribals in many parts of India, usually have low incomes, and rely on forests to make up for the disposable income as also for their requirements of fuelwood, building material etc. At the same time they also lack clear, formal property rights over the trees and the forest areas, whether they are extracting timber or other forest resources.

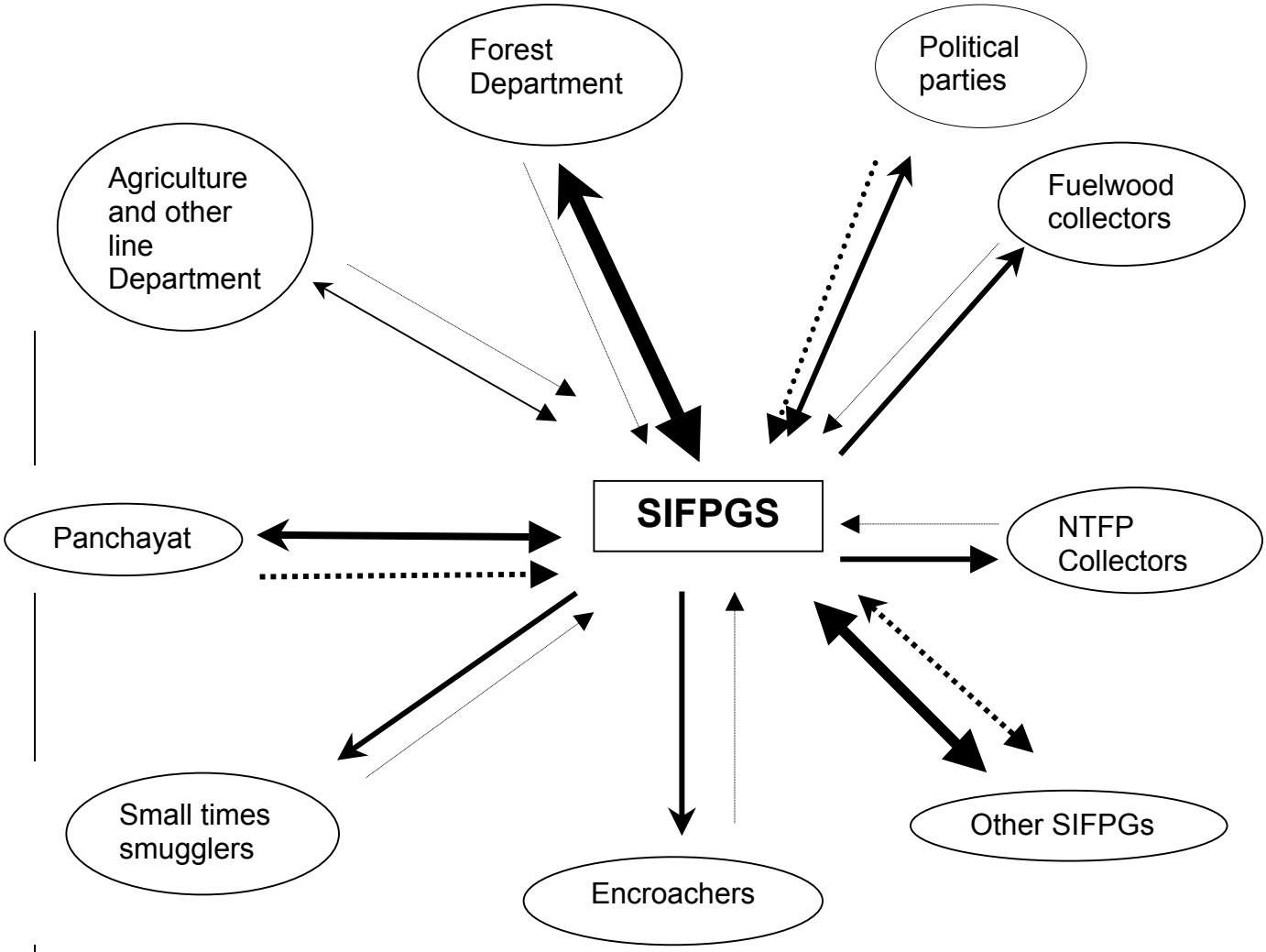
The characteristics of forest users and their predicament therefore make it clear that forest users need to be organised for two essential purposes: to motivate ongoing forest use and to restrict overuse (Ascher 1995).

1. **Motivating ongoing forest use** – The first requirement for maintaining forests and smaller stands of trees is to ensure that individuals and groups are motivated to grow trees, and to exploit the forests' non-timber resources on an ongoing basis. This is another way of saying that incentives for people to commit themselves to exploiting forest resources sustainably; a balance of restraint and enthusiasm must be encouraged. This can only be done if future economic returns from forest exploitation appear as attractive as the possible income from the maximum immediate exploitation of the forest.
2. **Discouraging overuse and misuse** – The second requirement for sustaining forests is clearly related to this need for ongoing, sustainable forest use. Organisation is often needed to present overexploitation from destroying the resource base. Discouraging overuse goes beyond ensuring that those entitled to use the forest resources will use it within bounds; it also requires that other people often must be kept from using the forest resources altogether. The challenge lies to determining how to decide on inclusion exclusion and to execute it in a fair and productive way.

The two case studies provide ample evidence that self-initiated forest management system must have an institutional base consisting of complexes of norms and behaviours shared by the user group. Such a strong institutional base was evident in both the cases mentioned wherein both the groups acted collectively to manage their scarce resources. In both the cases a strong and careful process of institution building played an

important role in the institutionalization of the process. Leadership role played by certain members within the community ensured that the community organised the effective use of the available resources.

Fig. 1: Institutional profile of the two SIFPGs studied in relation to the other user groups, before and after the process institutionalisation



Arrows pointing inwards, indicate that the SIFPGs have/had little influence over other groups and that a focus on empowerment is needed. Arrows pointing outward indicates the positive influences that such SIFPG have on the other institutions. Such profiles clearly illustrate that developing forest management coalitions is a dynamic process. (Dotted lines indicate situation existing prior to institutionalisation of the process and thickness of the lines indicates the degree of influence). This shows that institutional frameworks are not static either, the needs of interest group – and what they regard as significant incentives will change over time. This is especially likely to happen as forest bring in returns, income grows and people switch towards more productive and remunerative forest product activities. Forest will prove to be a stepping at some point, they may no longer want – or need to manage the resources.

Figure 2: SWOT analysis of Self-initiated Forest Protection Systems in India

Strength	**Threats**
1. Decentralised forest management leads in sustainable forest management. 2. Use of traditional knowledge and techniques in the management of the forest. 3. The socio-cultural aspects are strong within the resource management paradigm. 4. In the management of the forest resource conceptualisation, decision making and implementation, all steps are being taken care by the community. 5. Community working as single unit can take up the role of forest protection better. 6. Better chances of equitable sharing of products	1. Chances of politicising the self-initiated groups efforts. 2. Vested commercial interests 3. Imposition of external programmes and policies without understanding local realities 4. Impact of globalisation and Liberal economic policy 5. Chances that illegal forces from within or outside the community create trouble 6. Internal dynamics including inequity 7. Forest management systems could crumble as a result of failure of institutional mechanisms if communities fail to sustain itself. 8. Threats from outsiders over land tenure holding. 9. The institutional aspects could face problems in sustaining itself if not appropriately bound together by individual efforts.
Weakness	**Opportunity**
1. Levels of understanding of management issues among the community members are lacking. 2. Conflict resolution mechanism not always clearly laid out. 3. Future management plans not very clear. 4. Forest Management is more protection oriented neither sustainable use oriented. 5. Individual efforts play a strong role in binding institutions together. 6. Efforts are due to charismatic leadership rarely second line leader develop.	1. Linking the efforts of community group in the activities / programmes under different line department. 2. Traditional patterns of forest management stands a better chance sustainability. 3. Self-initiated community forest groups stand a better chance of success with IGAs. 4. Capacity building of well-established institutions is a simpler task, can be developed with little effort.

Conclusion

The Joint Forest Management program in India is now more than ten years old and has been implemented in most states in India. On the other hand, self-initiated CFM systems have been sustaining themselves for much longer periods of time and have proven beyond any doubt their viability. There is, therefore, a need to understand and learn from the diversity of the CFM systems, to generate information for policy makers,

Forest Departments, NGOs and the local communities for incorporating the dynamics into the present forest policies in India.

The two case studies of Bero and Kudada have explained beyond doubt that self-initiated forest protection systems have very well succeeded in achieving what the Forest Department aspired to in the last many years. Kudada has been the finest example of how ecological degradation leads to concerns within the community to initiate activities gradually leading to the spread of such measures to surrounding areas and culminating with the formation of a federating body. What also deserves a mention here is the fact that Kudada managed the commendable resurgence of the forest in the face of a severe drought that it faced in the year 1964. A similar ecological concern was also visible in the case of Bero where the early concern was initiated by tremendous individual/group efforts that motivated the community members to operate co-operatively to ensure forest protection. Kudada is also an example where community groups formed formal apex bodies for resolving conflicts and facilitating communications and co-ordinations with government agencies, like the forest department. The two case studies have credibly proved that Community Forestry in the form of Self-initiated Forest Protection has a real chance provided -

1. Limits are imposed on the number of users, which can reduce the pressure on the forest resource. It would mean the control of forests uses by a more – or – less well-defined group of people claiming customary use rights.
2. traditional users living in or near the forest site and having an interest in the long-term viability of that forest know that they can continue to enjoy the benefits of the forest.
3. the government permits local forest users to police the forest, allowing effective regulation a real chance.
4. the traditional forest users, who are generally more likely to have developed management systems compatible with the long-term survival of the forest, have a chance.

Given the above, even in this era of globalisation, forest management stands a true chance.

The evolution of forest management institutions in the two case studies has been a sequential process. In both these cases, the process typically began with growing concerns among village leaders and members over deteriorating forest conditions. This followed a series of meetings by the village leaders and members for establishing institutional norms and forest management options. Once appropriate forest management practices are firmly in place that they radiate to neighboring areas.

Institutional characteristics of SIFPGs in India

1. **Rules and regulations are embedded in their culture.**
2. **Conservation initiatives are attached with religious or totemic value.**
3. **Rules are informal but very rigid, followed strictly by the members of the communities.**
4. **All access, use and conservation related rules have evolved in a codified manner gradually through trial and error.**
5. **Functional characteristics of the systems are in-**

The Government of India has yet to pay attention to such self-initiated forest users group. After years of ignoring such groups the MoEF finally decided to benefit from numerous such groups existing in many parts of India. The Forest Department has now realised that it could limit the number of people extraction the resource, and in particular limit resource extraction for people who have been living in the area long enough to have learned something about conserving the resource for the long run, by assisting local resources users in maintaining the boundaries against outsiders. Another compelling reason for the government to pursue conservation through the recognition of the authority of community organisations is the potential of such

organisations to educate and apply social pressure on community members to treat the resource base respectively. It is increasingly being believed that the most direct way the government can safeguard the user rights of a forest user community is by sorting out the claims to various user rights and ratify some of them as legal.

In terms of conservation actions, part of the logic implicit within the sustainable development concept has been to link the conservation of a particular resource with the perceived development needs of the community that is (at least partly) dependent on that resource for livelihood support. In its simplest form, the argument supporting this linking generally has three strands -

- The first is that if the development needs of the local community can be met from alternate sources, this will lessen their impact on the resource to be conserved
- The second is that economically impoverished communities can not be expected to be interested in conservation while their basic subsistence needs not having being met. Consequently, efforts should be made to improve their socio-economic well being so that they will be in a position to take more interest in resource conservation
- The third strand is that local communities are more likely to agree to conservation initiatives if they can be actively involved in the planning and management of resource use and if they can share in the benefits. In this way resources can be conserved while at least some of the basic needs of the dependent population are met from appropriate utilisation of the resources

At the outset the following lessons from the self-initiated forest management systems in India must be kept in mind –

- ✔ Tenurial security is a more effective incentive than monetary incentive.
- ✔ If communities set up their own institutions, they exhibit exemplary resource use and are able to exert considerable social pressure on the erring members of the group.
- ✔ Effective local organisation on participation can only occur if members of the organisation are able to achieve some of their social and economic goals through participation.
- ✔ Whatever the formal roles, effective organisations are based on a set of institutionalised rules and practices. Efforts to foster new organisations must, therefore, focus on negotiation of mutually acceptable rules and practices.
- ✔ Local (territorially –based) communities will not be an appropriate basis for effective local organisations in community forestry unless they comprise a group of people with shared interests in a particular forest patch.
- ✔ Multi-functional groups will usually be appropriate only if the members share common interests in the majority of functions.
- ✔ Institutional frameworks are not static systems rather they are dynamic and the needs of interest group change significantly over time.
- ✔ In forming such groups as far as possible coordinated group behavior must be encouraged instead of individual motivational efforts
- ✔ It is critically important to take a full stock of the genius of the people and evolve strategies to strengthen such innovative practices and initiatives in order to minimize the threat to this fragile ecological habitat and tribal culture.
- ✔ Biodiversity provides a greater assurance of livelihood security than the timber value of the forests

It seems obvious that where an effective local indigenous organisation exists, it should be used as the basis for forest management where this can be done with an acceptable degree of equity. If no appropriate and equitable indigenous organisation exists only then attempts must be made to sponsor new organisations based on appropriate social units. All such efforts should concentrate on the process of institutionalising group norms and values. The crucial thing is to learn from effective indigenous organisations about the sociological basis of their effectiveness and use them while establishing these new groups.

The Indian experience of self–initiated forest protection reveals that given the enabling policy environment, such groups can not only manage to regenerate degraded natural forests but rapidly expand conservation efforts to other areas. We must learn from the social dynamics of all such experiences and incorporate them to strengthen the ongoing JFM effort. Extensive documentation of existing practices and their analysis is required to understand the community perceptions and dynamics regarding conservation need to be carried out. The Government of India must take immediate steps to motivate and provide incentives to such groups as per their cultural purview as well as establish high-level committees to inquire into the constraints faced by such communities. Merely establishing formal organisation without the much need institutional backup would not help the process. Providing the new community institutions the much-desired social input, legal back up and appropriate technical inputs would go a long way in managing India's forest resources successfully.

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