

LINKING LOCAL COMMUNITY INITIATIVES, ASPIRATIONS AND CONSERVATION : LESSONS FROM DALMA SANCTUARY IN BIHAR

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Introduction

Human communities, especially those living in and around protected areas, often have important and long-standing relationships with these areas in the form of dependence on these resources for their livelihood and cultural survival. Increasingly, resources, which justify establishment of protected areas, include cultural landscapes and adapted natural systems created by long-established human activity. These embrace cultural identity, spirituality and subsistence practices, which frequently contribute to the maintenance of biological diversity.

These relationships have too often been ignored and even destroyed by resource conservation and management initiatives. Sometimes, Protected Areas have been established on lands possessed and used by local people. Communities have in many cases been the victims of inadequate land and resource use patterns, as well as the inadequacy of rural development programs, thus being compelled to exploit and degrade their environment. This can impoverish rural populations and constrain the effective management of Protected Areas.

India's widespread network of Protected Areas (PAs) in the form of National Parks and Wildlife Sanctuaries has been the most ambitious strategy for conserving India's wildlife and natural habitats. Presently there are about 86 National Parks and 480 Sanctuaries in India with their current coverage extending about 4.65% of the total geographic area of the country. These areas are important tourist attractions and protect watershed, help define national identity and conserve biological diversity. Our society would be much poorer if PAs had not been established.

But these PAs are based on a myth, a charming myth, but still a myth; that nature is separate from people, and that nature is diminished whenever people try to live amongst it. The process of setting up and managing these PAs in India has resulted in severe problems for local communities which are traditionally dependent on these natural resources for their livelihood and sustenance. The Wildlife (Protection) Act, 1972 remains the basic law of governance of these PAs, which has a militaristic approach towards PA management and allows for very limited scope for local people

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to derive any benefits from the PAs. To add injury to the wound, creation of most of these PAs involved the exclusion of local people. Lack of consultation and meaningful communication with these communities, restrictions on their access to the natural resources of these PAs, and indifference in their approaches to resources conservation and use, have created considerable alienation, resulting in conflicts of various kinds between local communities and governmental agencies. These form the basis of conflict between local people and Protected Areas. Furthermore illegal exploitation of resources by urban dwellers and pressures from commercial activities in and around these areas have made the situation more complex.

Open protests and rallies against PAs, attacks on forest guards, poisoning of animals and deliberate burning of forests have become commonplace. Resentment by local people to Protected Area legislation and enforcement agencies has led to acts of sabotage and civil disobedience.

A series of meetings, informal consultations, and public events have been organised on this and related subjects in the last few years, including: (i) A workshop on exploring joint protected area management at the Indian Institute of Public Administration in September 1994, in which wildlife officials from the Central and State governments and NGOs, community representatives, and independent wildlife experts participated (Anon., 1996); (ii) a journey through several protected areas in Western and Central India in Jan.-Feb. 1995, facilitating dialogue on a continuous basis between community representatives and forest officials, and (iii) a result of which, an ongoing consultation between human right activists

and wildlife conservationists to explore a common ground. In all these meetings, a need to explore alternative management strategies for PAs has been expressed.

Area

Dalma, which was declared a Wildlife Sanctuary in the year 1976, lies in the Chotanagpur biotic province (6B) of the Deccan peninsula zone under Indo-Malayan region, about 16 km to the North of Jamshedpur in Singhbhum District of Bihar. It is spread over a total area of 193 km², bordered by National Highway 33, Subarnarekha river and the industrial city of Jamshedpur in the South and Puruliya District of West Bengal in the East.

The area falls entirely in the catchment of Subarnarekha river. It is covered with large hills, of which Dalma (926 m) is the highest. Cultivation is interspersed with forests, with most of the low lying areas being under cultivation. The Sanctuary is covered by Northern Tropical Dry Deciduous (5B/C1C) and Peninsular Sal Forest (5B/C2). Pure Sal (*Shorea robusta*) stands usually grow on the northern slope while the remaining area consists mainly of mixed forest. The area supports the habitat for a variety of wildlife species, the most conspicuous of which is the Asian Elephant. The area is good Elephant habitat and water is available in abundance round the year. Other species include Sloth bear, Wild boar, Giant squirrel, Indian wolf, Rhesus macaque, Barking deer, Porcupine, Indian hare and the rare Mouse deer.

There are 132 villages in and around Dalma Sanctuary, of which 85 are inside it. Agriculture is the main occupation of the villagers, with rice and vegetables being the main crops. This is supplemented by

collection and sale of forest produce wage labour and craft work as agricultural output is low. Most of these villages are underdeveloped and have limited access to basic facilities such as drinking water, housing, employment, electricity etc.

Although Dalma was declared a Wildlife Sanctuary in the year 1976, there has been no assessment of rights and concessions of the local people and consequently a final notification of Dalma Sanctuary as required under Section 26-A of Wildlife (Protection) Act has not been issued till date. The local villagers are dependent on forests for a lot of their resource needs as well as for supplementing their incomes. Some of the resources derived from the forests include firewood, timber, fruit and oil seeds, flowers of Mahua tree (for food and making liquor), medicinal plants, grazing for livestock, grass and tree bark for rope making, bamboo, and others.

Pressures

Due to low agricultural production, landlessness and poverty, local people are also dependent on sale of forest resources for their livelihood. Many families are totally dependent on the sale of firewood from the Sanctuary during certain period of the year. The Sanctuary's forests are a main source of firewood not only for the adjoining town of Jamshedpur and nearby 'haats'. There are also around 32,000 cattle in and around the Sanctuary and these are often grazed in the forest. External pressures on the Sanctuary include :

- Urban demand for timber and fuelwood
- Mafia controlled timber extraction
- Natural resources based industries

such as illicit liquor distillation, brick-making, stone crushing and dairy operations in the vicinity.

Annual tribal hunt : Dalma Sanctuary has a unique feature in the form of an annual tribal hunt which takes place here in the month of May every year when on one particular day in the week following Buddha Purnima, a tribal group hunt takes place on Dalma hills. Tribals from neighbouring areas in Bihar as well as the adjoining States of Orissa and West Bengal participate in this event which is attended by around 20,000 people armed with all sorts of weapons like spears, bow and arrows and axes etc., and causes extreme damage to the wildlife and habitat of the Sanctuary. Although animal hunting is absolutely prohibited under the law, the Forest Department is simply unable to stop this annual practice due to the sheer magnitude of the crowd of the participants as well as its own limited resources. As it is an integral part of tribal culture, local people are unwilling to abandon this practice.

Issues

The issues concerning the Sanctuary authorities and local people are affecting each others interests, causing confrontation and problems, which have been identified after series of discussions and meetings with both the concerned :

- Energy and fuelwood for bonafide consumption
- Livestock grazing and fodder
- Tribal hunt
- Timber and non-wood forest produce for bonafide consumption/smuggling
- Crop damage by wild animals
- Forest fires
- Socio-economic problems.

Initiatives for community forest protection

Degradation of the low-lying forest area had severely threatened the livelihood of the villagers, forcing them to think of some drastic measures for conserving these vital resources. Over the past few years, the local villagers have taken up the cause of forest protection. A number of villagers have formed Forest Protection Committees (FPCs) to protect the forest area in their villages. There are more than 30 such working committees. Most of them have done very good work, successfully halting thereby the degradation of forest areas to a certain extent. This is despite the fact that these committees are all informal in nature and operate more or less independently of the Forest Department.

Reasons for protection : The main reason for protection has been the conservation of resources. Most of these protection efforts date back to the early 1990s. Around that time, the passing of Bihar Joint Forest Management (JFM) Resolution, information on which was spread by NGOs and the Forest Department greatly encouraged the creation of a number of Village Forest Protection Committees or Van Samitis in the villages under degraded forests. In turn these FPCs are allowed certain benefits from the forests and the forest produce under predefined benefit sharing arrangements between the Forest Department and the FPCs. Many local communities have therefore voluntarily formed informal FPCs for protection and use of forests in the PA on the lines of JFM resolution of the State Government. Another reason for the initiation of community protection efforts was the outcome of the various efforts of the Social Forestry Division of the Forest Department

in the 1980s. Whereas in some cases, the Department encouraged community protection efforts, in some areas, where it is alleged that the Department actually cut down Sal forest to raise plantations of Acacia and Eucalypts, people's protection efforts began as a reaction against Social Forestry.

These FPCs were primarily self-initiated, with some initial encouragement by NGOs. A number of committees were formed in quick succession. The success of the first few committees in Sari and Nutandih villages, served as models for others to follow. In villages such as Khokro and Ghosedih, the encroachment by neighbouring villagers who were protecting their own forests, forced villagers to take steps to bring the village forests under protection. Religious and cultural sensibilities also played an important role in encouraging forest protection.

Constitution and rules of committees : These are basically informally constituted bodies and enjoy no legal or official recognition. A committee usually consists of two bodies : a general body consisting of all the residents of the village, and a smaller core group. The general body meets about three to four times a year while the core group meets more often. The core group consists mainly of educated youth of the village. The majority of rules regarding forest protection are decided at the preliminary meetings by popular consent. There are variety of approaches followed by different committees. In some of the areas, cutting of trees from the protected area is completely banned, and part of the forest area is left unprotected to fulfill resource requirements, while in some other committee, only certain species which are of economic or food value are protected and there is no restriction on the collection of

dry wood. Rules are enforced by combination of physical prevention, confiscation of implements and wood, imposition of fine and social sanctions. However, system for enforcement of rules and punishments vary from place to place. In most of the cases, first time offenders are left with a warning. The threat of fines, however, does operate as a deterrent. Further, while deciding punishments, there is a lot of flexibility. Since severity of the offence as well as the economic status of the offender are taken into account. The offenders are first tried by the committee and if the committee is unable to arrive at a decision or if the offender wishes to appeal against its decision, the matter is taken to the court of the Panchayat Sarpanch. In the case of severe offences, especially where outsiders are involved, the offenders may be handed over to the Forest Department.

Functions of the committees : The main function of the committee is to ensure the protection of a particular forest patch demarcated for protection. The areas chosen for protection usually falls within the territorial boundary or mauza of the village. This area is usually well demarcated by physical features such as ridges of hills or streams. The committee's work therefore mainly includes formulation of policy and rules, holding meetings to deal with various issues such as illegal felling, coordinating the protection activities of the various 'tolas' of the village, trying and punishing offenders, exhorting villagers to aid forest protection, and representing the villagers during interactions with the Forest Department and NGOs.

A number of NGOs such as Shramjivi Unnayan Samiti, Tata Steel Rural Development Society, Tribal and Harijan

Welfare Cell and Gram Vikas Kendra are operating in the area. The role of NGOs has been crucial in encouraging and sustaining the functioning of FPCs in the area. The conservation efforts of the villagers have received the support and encouragement of the NGOs.

Far more serious is the issue of wood extraction for commercial purpose. In areas where people are largely dependent on fuelwood sale for their livelihood, it is indeed difficult for a FPC to impose a total ban on wood cutting. While the people find it difficult to face the powerful timber mafia head on, in many instances, they have resorted to blocking or digging up of roads to stop the plying of timber trucks. Community based protection over the last eight years or so has resulted in the regeneration of Sal forests.

Aspirations

A workshop on "Dalma Sanctuary : prospects for conservation" was organized to initiate a process of constructive dialogue and interaction between various interest groups associated with the sanctuary on the various problems and issues concerning it. The Workshop, for the first time ever, brought to one platform, senior wildlife officials, local villagers and voluntary and private sector agencies. It was most heartening that the a joint resolution was issued by all participants. This was perhaps the first time that Forest Department and villagers have jointly issued a resolution on the management of a Sanctuary. Some of the expectations of the local villagers included :

1. Village forest protection committees should be granted some form of recognition and legal sanctity to

- provide them certain amount of tenurial security and authority. However it is being felt by the Forest Department to advance with this process of empowerment slowly and cautiously as there exists an apprehension of selfish interests to take advantage of this step, especially those with political, commercial or even criminal connections.
2. There is a general interest in access to forest resources being mainstay of their livelihood. Rights to survival (including deadwood and NWFPs) which are not detrimental to conservation objectives should be granted, as in cases of West Bengal and bhabar grass collection in the Rajaji National Park, U.P.
 3. All eco-development activity should be undertaken with the active participation and collaboration with the local villagers, especially the FPC members.
 4. Local villagers must be given priority for employment by the Forest Department.
 5. There should be greater and more effective and equitable coordination between the village FPCs and the Forest Department on a regular basis.
 6. It is essential that resource alternatives are developed, for activities which are detrimental to the conservation objectives of Dalma, especially for fuelwood resources. This should be done through the combined efforts of the local villagers, the Forest Department and the NGOs.
 7. The forest land surrounding the Sanctuary, most of which is wasteland, could be used specifically for Social Forestry or Joint Forest Management work aimed at developing alternative forest resources for the people of the area.
 8. The Samitis should be formed at three levels :
 - (a) Village level
 - (b) At the level of group of villages (8-10 each)
 - (c) Regional level e.g. the entire Dalma region should have an apex body which will include representatives of village samitis, NGOs, Forest Department, as well as the local district administration.
 9. The Forest Department and NGOs should train villagers in resource management, development of fuel and fodder sources as well as development works.
 10. The apex body should oversee, control and supervise the working of the lower level committees.

Eco-development Approach

An approach towards the management of the Sanctuary is being envisaged, with emphasis on "eco-development" (Anon., 1995). Some of the development works undertaken as part of the eco-development strategy include :

- Construction of dug wells for irrigation purposes.
- Construction of check dams
- Provision of hand pump for draining water
- Distribution of improved varieties of chullahs

- Distribution of fruit bearing tree seedlings
- Soil conservation works by contour trenches.

Under the management plan for Dalma Sanctuary, the issue of dependence of the local community on Dalma's resources as well as crop raising by wild animals is acknowledged and it is hoped that eco-development will help reduce the conflict arising due to these issues. It is also thought of declaring these informal and unofficial forest protection committees as official Eco-development committees. Depending upon the performance of these committees in forest protection and wildlife conservation, preferences will be given to implement the various eco-development works in preferably those villages which fall under these well performing protection committees. All the eco-development work will be carried out with their input, advice and co-operation.

Lessons

Community participation and equality need to be achieved urgently in decision making process, with mutual respect. These processes require direct community involvement, as well as the participation of concerned governmental and non-governmental organizations. Customary tenure systems, traditional knowledge and practices, and the role of men and women in communities, must be respected and built upon in designing and implementing conservation plans.

It has become increasingly evident that forests and protected areas can not be protected effectively by the state machinery alone. Excessive biotic pressure leads to the destruction of the habitat for wildlife

and the very purpose of constituting the protected areas gets defeated. However, if a sense of belonging towards their resources can be reinstalled towards the local communities and the value of resources are explained to them, it is possible to protect and conserve the protected areas. Local communities should be united and their enormous power should be channelised to fight the external destructive forces.

Experiences in Dalma Sanctuary may be considered as an encouraging initiative in this regard. In case of the annual tribal hunt, after a lot of convincing and persuasion by the Forest Department and the NGOs, many of the local villagers including some of the organisers of this event are beginning to help in finding ways of making this tribal hunt less environmentally destructive. Simultaneously, particularly on the side of direct techniques of natural resource conservation, local communities have decided to protect a large chunk of forests from the onslaught of timber mafia, fire and the makers of illicit distilleries, which ultimately led to the natural regeneration and habitat improvement. This experience of community based conservation particularly in a protected area with lot of restrictions on legitimate access to the natural resources may be an example for the policy makers to redefine the management policy for protected areas.

Thinking ahead

Some of the important and general issues that thus emerge for effective forest and PA management in the country are :

- (a) *Need for participatory management and controls* : The villagers of Dalma have demanded to be included in the formal

JFM scheme of the Government. This indicates that communities often do realize the difficulty of managing the natural resources on their own, especially given the internal and external social dynamics and political and commercial forces. An active role of the state as a partner in the management of resources is often envisaged by these communities, but on equal terms and in the capacity of a supporter and guide rather than a ruler or politician. Further, there is a need to understand existing community structures much better, and to build on their diversity and strengths as far as possible.

(b) *External pressures* : Destructive commercial forces, in the face of which Forest Department have often felt helpless, can be resisted with the help of a mass support, as has been proved by an effective control over the annual tribal hunt. After a lot of persuasion by the Forest Department and the local NGOs, it was possible to convince the local tribals about the destructive and irreversible adverse impacts of this ancient, barbaric and cruel practice. These effects eventually resulted into a decreasing trend in the number of killings after such an initiative.

(c) *Survival and basic developmental needs* : of communities which are seemingly unconnected to the sanctuary management requirements, are equally vital to address.

(d) *Special management unit* : There is an urgent necessity, and possibility, of carrying out integrated land use plans for the whole region within which sanctuary is embedded. One view is to declare the sanctuary and its surrounding region as a special management unit, and set up an institutional structure to build up a detailed land/water use plan and manage this whole

area. This is somewhat akin to the Special Area Development Authorities set up in many parts of India, but with an orientation towards conservation in this case.

(e) *Livelihood strategies* : should also reinforce the positive interaction of Sanctuary and people. For alleviating pressure from such Protected Areas the productivity of land and water resources needs to be enhanced. Provision by consumptive uses particularly NWFPs to local people on a sustainable basis can be expected to show promising results, however zones from where such regulated use could be allowed without undermining the interest of wildlife can be identified. Further, in case of non-consumptive benefits, eco-tourism holds the best potential.

(f) *Need for participatory monitoring* : All the above, however, needs to be along with a continuous monitoring and evaluation. This itself will be most effective if it is a participatory and transparent. Result of such monitoring will be used by the local managers in evolution of management strategies.

Conservation must be embedded in local communities if it is to flourish as a voluntary rather than a coercive effort. Some communities practice conservation quite successfully themselves and need no outside help. Ideally, this is what community based conservation is all about. Unfortunately, such initiatives are exceptional in today's world due to population growth, poverty, economic exploitation, weak policies, and lack of localized skills and resources. The success of such conservation efforts therefore will depend upon outside forces and how

conducive they are to the growth and spread of conservation within and between communities. For the most part, local and outside views into alignment will be essential to successful promotion of grass-root conservation.

SUMMARY

The management of Protected Areas is complex due to high pressure of people living in and around them. This paper deals with a case study of Dalma Wildlife Sanctuary in Bihar where local communities in and around the Sanctuary organized themselves in form of informal village Forest Protection Committees and controlled the grazing of cattle, illicit felling and annual tribal hunt and catalysed the natural regeneration without any financial support.

बिहार में डालमा अभयारण्य से मिले पाठ : संरक्षण से स्थानीय सामुदायिक उपक्रमों,
आकांक्षाओं को जोड़ना

संजय श्रीवास्तव

सारांश

रक्षित क्षेत्रों का प्रबन्ध करना उनमें तथा उनके आसपास रहने वाले लोगों का भारी दबाव पड़ने के कारण बहुत जटिल कार्य है। इस अभिपत्र में बिहार के डालमा वन्य प्राणि अभयारण्य का विशेष अध्ययन प्रस्तुत किया गया है और इस अभयारण्य में तथ्य इसके चतुर्दिक रहने वाले स्थानीय समुदायों में संगठित होकर औपचारिक ग्राम वन रक्षण समितियाँ बना ली हैं तथा पशु चराई, अवैध कटान तथा वार्षिक वन आदिवासी शिकार कार्यक्रम को नियन्त्रित किया है और बिना किसी प्रकार की वित्तीय सहायता प्राप्त किए प्राकृतिक पुनर्जनन को प्रोत्साहित किया है।

References

- Anon. (1993). *Parks for Life : Report of the IVth World Congress on National Parks and Protected Area I*. IUCN - The World Conservation Union, Gland, Switzerland.
- Anon. (1995). *Eco-development Survey under Dalma Wildlife Sanctuary, Jamshedpur*. Bihar Forest Department, Bihar.
- Anon. (1996). *Workshop on "Dalma Sanctuary" prospects for Conservation* Jamshedpur. Indian Institute of Public Administration.
- Datye, Hemant S. (1995). *Ecology of Elephant of Dalma Wildlife Sanctuary, Bihar, Central India. Ecology of Asian Elephant; Final Report*, Bombay Natural History Society, Bombay.
- Kothari, A., F. Vania, P. Das, K. Christopher and S. Jha (1947). *Collaboration for Conservation : Towards Joint Management of Protected Areas in India*. Indian Institute of Public Administration, New Delhi.