

Ecodevelopment

Many Questions, Some Answers



Shekhar Singh

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Scripted in 1999. Was an effort to summarise the many questions that were raised, in the last five or six years, about the ecodevelopment approach to wildlife conservation, and to discuss the answers available.

Sketch of the Sloth bear on the cover is by Pratibha Pande

The seeming conflict between the needs of local rural communities and the imperatives of biodiversity conservation has characterised the management of protected areas in many countries of the South. India is no exception. Efforts to contain the pressures from a growing human population have increasingly been unsuccessful, especially where the major strategy has been policing in one form or another. Even where efforts have been made to seek the participation of local populations in the management and protection of protected areas, such participation is rarely forthcoming if the park managers cannot address the basic demands of these local people: their demands for subsistence level biomass and incomes.

It is in this context that the Government of India adopted a new approach, called *ecodevelopment*, to resolve some of the human nature interaction conflicts and to conserve biodiversity in a sustainable and equitable manner. This paper is an attempt to look back at the early experiences of *ecodevelopment* planning and implementation and to discuss some of the questions that have emerged. Though this paper does not intend to repeat the discussions already available in various other papers and documents on *ecodevelopment*¹, in order to make the debate comprehensible, it briefly describes the status of wildlife protected areas in India and the concept of *ecodevelopment*. The focus of the paper is the India *Ecocodevelopment* Project, supported by the *Global Environment facility (GEF)*. However, much of what is said here is also relevant to other *ecodevelopment* initiatives.

WILDLIFE PROTECTED AREAS IN INDIA

India has an impressive network of 85 national parks and 448 sanctuaries, covering 4.2% of the country's land area. Almost all the states and Union Territories in India have one or more wildlife protected area.

However, the total number of PAs, and their collective area, though important indicators of the status of biodiversity conservation through PAs, are not enough. Despite the large number of PAs, wild biodiversity in India is not currently secure. There are three main reasons for this:

- A. Gaps in coverage
- B. Inadequate size of PA units
- C. Human use pressures

¹ See, for instance, Singh, Shekhar, *Biodiversity Conservation Through Ecodevelopment: Planning and Implementation Lessons from India*, UNESCO, Paris, 1997; Singh, Shekhar, *Integrated Conservation Development Projects for Biodiversity Conservation: The Asia Pacific Experience*, The World Bank, 1995

Gaps in Coverage

At the behest of the Ministry of Environment and Forests (MoEF), Government of India (GOI), the Wildlife Institute of India (WII) developed a biogeographic classification for India and surveyed the coverage of the various regions, provinces and biomes, and of endangered species, by the protected area network. The WII report came to the following conclusions:

"The biogeography classification recognizes ten broad biogeographic zones containing 25 biotic provinces (eg. North West, West, Central and East Himalayas of the Himalayan Zone). Provinces may be divided into smaller regional units. These are described, justified and mapped in the report.

"The review of protected area adequacy is based on four main criteria: that each state has a duty to conserve its full range of resources; that each ecological formation within each biogeographical division be protected by at least one area of national park status, that major protected areas need to be of sufficient size to contain viable populations of key species; and that core areas need the protection of viable peripheral buffers. The report is concerned with identifying requirements for adequate long term conservation. Recommendations are made on the basis of biological importance not ease of implementation.

"In mid 1987 there were 54 parks of 21,003 sq km and 372 sanctuaries of 88,649 sq km giving a combined coverage of 109,652 sq km or 3.3% of the country. These protected areas are not distributed equally within the states or biogeographic regions*.

"These PAs are not distributed uniformly across the states or across the biogeographic zones or provinces of the country. Some states and zones are relatively well covered, others very poorly covered." [Rodgers and Panwar 1988]

According to a recent study [Mehta 1998] undertaken by WWF India as a part of the Biodiversity Conservation Prioritisation Project (BCPP), of the 22 biogeographic provinces identified by Rodgers and Panwar [Rodgers and Panwar 1987], only nine had PAs covering 4.2% or more of the zone. Of the remaining 14, data was not available for determining percentage of coverage of two (West Coast and East Coast), though West Coast had only four PAs covering 488.8 sq km, clearly not enough. The status of the remaining 11 was as follows:

BIOGEOGRAPHIC PROVINCE	CODE	% OF AREA UNDER PAS
Thar	3b	1.9
Punjab	4a	0.6
Gujarat-Rawara	4b	3.1
Malabar Plains	5a	0.7
Deccan Plateau	6a	2.3
Eastern Plateau	6c	3.2
Chota Nagpur	6d	4.0
Upper Gangetic Plains	7a	2.9
Lower Gangetic Plain	7b	1.3
Brahmaputra Valley	8a	3.5
Assam Hills	8b	2.4

It is clear from the above that despite the overall coverage of 4.2%, many of the biogeographic provinces had PAs covering less than 4.2% and, infact, four of them had less than 2% under protection.

The same study [Mehta 1998] also analysed the coverage of PAs in terms of hosting populations of schedule 1 mammal species (species determined as deserving the highest status of conservation). The findings suggested (see table below) that at least 12 of the schedule 1 species were reported from less than five PAs. Though some of this might be due to gaps in surveys or problems with the reporting methodology, however for these and many other species there is a question mark whether they are being accorded adequate protection through the PA system in India.

Also, the populations and status of most of the threatened species is not accurately known even within the PAs and it is possible that even where they are reported from, their populations might be on the decline.

SCHEDULE 1 MAMMAL SPECIES	NUMBER OF PAS REPORTED FROM
Antelope, Tibetan or Chiru	1
Bear, Sun or malay	2
Cat, Pallas's	1
Civet, Malabar	2
Deer, Brow antlered or Thamin	1
Dolphin, Gangetic	4
Dugong	1
Gazelle, Tibetan	2
Hog, Pygmy	3
Langur, Golden	2
Lion, Indian	1
Lynx	3

Size of PA Units

In order to ensure minimum viable populations of species, especially larger mammal species, it is important that PA units are of an adequate size. To some extent the existence of corridors between Pas can make up for the smallness of the PA size, by allowing different populations to mix. However, for the proper evolution of floristic communities, even with corridors a minimum size is essential.

There is no agreement on what is a minimum viable population of breeding pairs and what is the minimum viable unit of a PA. However, the average size of a PA in India works out to 278 sq km. This is seen by many as an inadequate size to maintain genetically viable populations of many large mammals. The fact that more than two thirds of the Pas are less than 200 sq km and the almost total absence of significant corridors between Pas, exacerbates this problem further. According to one study [IIPA 1989] only 30% of the national parks and 26% of the sanctuaries were connected by corridors to another PA.

Human Use Pressures

Human use pressures faced by PAs in India are primarily from five sources. These are:

- a. Commercial uses
- b. Infrastructural and development projects and activities
- c. Air and water pollution
- d. Religious and cultural uses
- e. Local community subsistence needs

Commercial Uses

Despite the law prohibiting such uses, commercial extraction of timber and other non-timber forest products, mining, commercial fisheries, industrial activities, excessive and inappropriate tourism and other commercial activities still continue in many of the PAs. For example, the IIPA data indicates that 16% of the national parks and 43% of the sanctuaries responding reported extraction of timber. A recent trend has been to denotify protected areas in order to facilitate commercial activities.

Infrastructural and Development Projects and Activities

This includes dams, roads, townships, power transmission lines, and other such activities. The IIPA data indicates that 56% of the national parks and 63% of the sanctuaries responding reported use or occupation by departments other than the wildlife department. These uses included roads, irrigation and hydel projects, housing, agricultural activities, railway lines and facilities, water supply projects, military activities and transmission lines.

Air and Water Pollution

Activities outside PAs, which pollute the air or water of the PA, also take their toll of the biodiversity.

Religious and Cultural Uses

A recent study [Sankaran and Singh 1998] indicates that 50% of the PAs surveyed had sites of religious or cultural significance within them. Though in many cases these do not pose any threat to the PA, in some the pilgrims and visitors to such sites become a major disturbance. Some notable examples are the Sabrimala Temple in Periyar Tiger Reserve, and temples in Sariska Sanctuary and Gir National Park.

Local Community Subsistence Needs

Pressures arising from the subsistence needs of local communities are the most difficult to handle. This is partly because they have a great level of legitimacy considering that they are for subsistence and also because many of

the local communities have historical links and dependencies with the PA. Such pressures are also very widespread. According to the IIPA data:

- 43% of the national parks and 68% of the sanctuaries responding reported the existence of rights and leases,
- 67% of the national parks and 83% of the sanctuaries responding reported grazing within.
- 36% of the national parks and 56% of the sanctuaries reported the extraction of NTFP.

MAJOR CONSTRAINTS

National parks and sanctuaries in much of India today are like biodiversity supermarkets, surrounded by thousands of hungry people and cattle who look upon the resources inside the park just as hungry people would look at a supermarket's food-laden glass window. How long can walls, fences, moats and even armed guards keep these people and their cattle out? How fair is it, in any case, to keep them out?

Historically, the same government which set up these protected areas showed little interest in providing any alternatives to those whose access to basic livelihood resources was cut off by the establishment of these PAs. Those few who had 'legal' titles to these resources eventually got some compensation. However, the many who used them because their forefathers and mothers had used them for generations, perhaps from much before laws were formulated and titles established, got nothing, not even sympathy. They were often considered encroachers who had 'illegally' usurped 'public' resources and who should be grateful that they were not all being packed off to prison.

Such an approach inevitably led to tensions and conflicts between the local people and PA managers, especially after India became independent and the citizens of free India became increasingly aware of their political power. It became progressively difficult to remove people and their impacts from parks and sanctuaries, and where people were forcibly removed or restrained, they often retaliated by killing wild animals and burning forests.

Attitudes hardened among foresters and other wildlife enthusiasts on the one hand, and rural and tribal community leaders on the other. The Government of India, especially by the enactment of the Wild Life (Protection) Act of 1972, and through other policy initiatives, gave lip service to the cause of wildlife conservation, but did little to resolve what soon became known as the conflict between wildlife and people.

An often quoted, and misquoted, statement of the then Indian Prime Minister, Mrs. Indira Gandhi, that "poverty was the greatest polluter.." further encouraged those within and outside the government who wanted to reduce the debate to one of 'development versus environment' or 'people versus tigers'.

Looking back today, it seems clear that the predominant attitude towards the environment, even as late as the nineteen seventies, was ill informed. Even a preliminary assessment of facts would have shown that true development could not come about without a judicious use of natural resources; that the fruits of economic development could never benefit the poor unless their basic needs, especially for potable water, breathable air and for a sustained supply of fuelwood, fodder, and other natural products and services, were first met. In other words, whether poverty brought about pollution or not, pollution certainly caused or, at the least, exacerbated poverty.

Similarly, even a superficial political analysis would have shown that what was sought to be projected as a human animal conflict was actually a conflict between two classes of human beings, one who acquired and held on to a disproportionate amount of resources, far beyond their legitimate needs, and the other who did not even have the little needed for survival. The a large proportion of the poor and the landless were marginalised from that 96% of the country's area which was outside the PA network and, consequently, forced to turn to the remaining four percent within PAs. Clearly justice demanded that first these lands outside parks and sanctuaries be redistributed and their holdings rationalised, rather than the nation be forced to commit ecological suicide just because powerful vested interests insisted on holding on to what was legally and morally not theirs.

In operational terms this meant that what is required is to:

- i. Fight for the equitable distribution of productive resources (especially land) at least in the areas adjacent to (outside) the PA. If this land was redistributed, the local people would not need to commit ecological suicide by destroying the sanctuaries and forests, and thereby their own future.
- ii. Insist that sustainable alternatives were identified or developed for meeting those basic subsistence needs of the local people which were earlier being met from the protected area. These could include :
 - **biomass** for: fuel, construction, artisanal production (including grasses, bamboos, leaves, wood), food, social and cultural uses.
 - **Other natural resources** like water, stone, sand, clay, top-soil, and minerals.

- **Incomes** through the collection and sale of any of the above.
 - **Land** for habitation, cultivation and related activities.
- iii. Ensure that the management of the protected areas was people friendly and at the same time ecofriendly.
 - iv. Ensure that the local people felt a sense of ownership in the PA and a stake in its well being. This implied the involvement of local communities in the management of the PA. It also implied that the local people, who had sacrificed the most for the PA, also be the first recipients of any of the financial benefits that might flow from the PA. As there was ordinarily not much forest working in a protected area, the main financial benefits would be in regular and daily wage employment for protection work, and through activities related to tourism.
 - v. Ensure that the sacrifice and concern of the local communities was not negated by the government or by other disinterested people who destroyed, or allowed the destruction, of the protected area in the name of "development" or to earn a little profit.

It was only in 1991 that an effort to actualise this approach was finally made. The Government of India codified and operationalised, in 1991, an ecodevelopment strategy for wildlife protected areas in India.

ECODEVELOPMENT

Recognising these constraints and learning from some successful experimentation around a few protected areas, the Government of India decided to evolve a strategy by which the basic needs of the local populations, for biomass and incomes, could be met sustainably without degrading the wildlife protected areas. This strategy got named ecodevelopment.

As a first step, the Government of India formulated a scheme by which they could support ecodevelopment around protected areas. This scheme was initiated in 1991 and has been supporting ecodevelopment around a large number of PAs. However, even from the start it was evident that for ecodevelopment to have the desired impact, it would have to be implemented very intensively, covering all the impacting populations around PAs. This required detailed, micro level, planning with the participation of the concerned populations. Given the fact that it was a new approach, it was essential to develop some pilot projects from which optimal strategies could be learnt and disseminated.

Accordingly, the the Government of India decided to initiate intensive ecodevelopment projects, with financial support from the World Bank under the

Forestry Research, Extension and Education Project, in two protected areas: Kalakad Mundunthurai Tiger Reserve in the state of Tamil Nadu and the Great Himalayan National Park in Himachal Pradesh.

In addition, the Government of India also formulated the India Ecodevelopment Project, which was funded by the Global Environment Facility, to cover seven more protected areas: Gir National Park in Gujarat, Pench Tiger Reserve in Madhya Pradesh, Periyar Tiger reserve in Kerala, Buxa Tiger Reserve in west Bengal, Ranthambhore Tiger Reserve in Rajasthan, Palamau Tiger Reserve in Bihar and Nagarhole Tiger Reserve in Karnataka. Both these projects are ongoing.

Ecodevelopment : the concept

Ecodevelopment is essentially a strategy to protect areas with significant biodiversity values (protected areas or PAs) from local, livelihood, pressures, in a manner which minimises the dislocation and suffering of the communities dependent on the PA. This is sought to be done primarily by diverting pressure from the PA through developing, in partnership with the concerned communities, alternate, sustainable, sources of biomass and incomes.

In order to forge a lasting partnership with the local people, efforts are also made to increasingly involve them in the management of the area. It is ensured that they have the first right to the financial benefits that accrue from the area, for example in the form of tourism revenues.

Planning for eco-development

Choice of areas

The first step towards planning for eco-development involves the selection of areas. After the first level prioritisation of PAs with significant biodiversity value and threats, a few have to be selected from among them for the initiation of eco-development. The main issue is whether the first priority should be given to PAs with high level of pressures, which are therefore in urgent need of attention but also more difficult to tackle, or to those with relatively less pressures and therefore more likely to show success quickly.

There are clear advantages in both types of choices. However, as the eco-development approach is new and much learning is required, it is perhaps desirable to be cautious. Consequently, most of the areas selected should have light to medium pressures, while a few heavy pressure areas can also be included, especially if they have a relatively better management infrastructure.

Distribution across states and regions should also be kept in mind so that experience is gathered under diverse biological, social and administrative conditions and various states are familiarised with the approach.

Compilation of secondary data

The next step is to compile all available and relevant secondary data, including maps and satellite imagery, for the selected areas. A socio-economic survey of the areas adjacent to the selected PAs is also required prior to the sample micro level planning exercise, so that the macro profile of each region is also available to the micro level planning teams. Detailed maps also need to be developed, based on remote sensing imagery and on available topographic maps. These should subsequently be checked against maps developed by the village communities.

Institutional arrangements

It is advisable to have a central coordinating NGO who could coordinate the work of the state and local level NGOs and institutions. Such local level NGOs and institutions must also be identified for each PA. Certain national level expert institutions and individual consultants were Personnel from the identified NGOs and institutions, along with wildlife staff from each of the selected PAs, need to be trained, before the start of the project, in the basic techniques of ecodevelopment planning, including methods of participatory rural appraisal (PRA).

Indicative planning

It is considered advisable not to develop a detailed plan prior to the project initiation. Only an indicative plan should be drawn up to determine the planning methodology, the broad thrust of the project, and the likely costs. A sample of three to five villages around each of the PAs can be selected for initial micro level planning exercises, which form the basis of the indicative plan.

Micro level planning

As a first step, the villagers and the PA management staff, along with NGO representatives, should sit together and agree upon:

1. the negative impacts that the people have on the PA.
2. The negative impacts that the PA has on the people.
3. The best methods for reducing these impacts.

Based on these exercises, an indicative plan needs to be written up, stressing more the approach to be followed in determining what to do in the project rather than laying down in advance the actions required.

Detailed micro level plans for all the remaining impacting villages around each PA should be developed during the project implementation phase, using the methodology developed during the indicative planning process.

Though ecodevelopment promotes a site specific approach and, as such, it is difficult to prescribe a universal formula which must be applied to all areas. However, generally speaking, the three basic elements are:

- a. *Participation of the local people* to the extent where they make the decisions within a very wide framework. The only conditions that must be satisfied by any activities, investments or strategies chosen are:
 - # they must contribute to the conservation of the PA.
 - # They must not be illegal.
 - # They must be environmentally sustainable.
 - # For income generation activities, they must be economically viable and sustainable.
 - # They must not be discriminatory to caste, class, gender or age.
- b. *Integration of various sectoral initiatives.* Generally there are various income generation and other development activities being taken up by various departments of the government, and in some cases by non governmental organisations, around national parks and sanctuaries. These represent, if properly harnessed and focused, a great potential for ecodevelopment both in terms of financial and of human resources. On the other hand, if there is no coordination between these different sectors then very often the activities of one agency can be at cross purposes to those of another. In any case, ecodevelopment itself involves activities which are strictly speaking within the purview of rural development, agricultural extension, tribal development, or other such sectors. Consequently, it is essential that there work be integrated within the project.
- c. *Site specific micro level planning.* In rural development activities there is often a great thrust on replication of strategies and approaches. The idea seems to be that if some formula works in one place then it would work everywhere. However, whatever its merits, the imperative to replicate almost always degenerates into generalised strategies which are inappropriate to every specific location, even while appearing attractive at a national level. Consequently, the ecodevelopment approach stresses on site specific,

painstaking, micro level planning. Such a micro level plan has a far better chance of, on the one hand, capturing all the nuances of the local level reality and, on the other, reflecting the priorities and preferences of the local community.

To support the micro level planning team, and to provide the village communities with information about the availability of markets, and about the social and environmental impacts of various activities, a list of possible income generating activities, along with their pre-requisites, impacts and prospects for being economically viable, should be developed in advance and provided to the planning teams.

Management Planning

Ecodevelopment is unlikely to succeed if it is not supplemented by effective management of the PA. Therefore, along with eco-development planning the management plan also has to be developed, and in a manner that interfaces with the eco-development plan and creates an opportunity for the participation of the local people in PA management. For this, the PA managers, other outside experts and the local people have again to sit together. Very often there is a need to orient the local population in principles of wildlife management relevant to the specific PA.

Peoples Participation in Ecodevelopment

A major element of the eco-development strategy is the participation of local communities in both planning and implementation.

Planning

Ecodevelopment planning is done at a village level, by the villagers, who are facilitated by a micro level planning team consisting of a representative of the forest department, usually a forester, representatives of the selected local NGO, and some local community representatives. Prior to the setting up of these planning teams, an appropriate local level NGO is identified for each of the protected areas. Representatives of the identified NGOs, along with the concerned forest staff, are trained in participatory rural appraisal methodology and in interactional analysis.

In the initial stages there might be some confusion on how micro level planning is to be done. There is often a demand by those supporting the project that the project proposal be complete in every detail and every bit of expenditure be identified. They are, however, also keen that this be done in a participatory manner, in partnership with the local communities. It seems undesirable to approach the villagers at a stage when it is not even certain that the project

would be approved and, even if it was finally approved, when the funds would become available. Apart from the expectations one would raise among the villagers : expectations that might not be fulfilled, at least not in the near future, there is also the real danger that by the time the project comes to the implementation stage, the ground realities might have changed and, consequently, sticking to micro level plans made five years earlier would not be desirable.

The need is for a flexible project design where the money is not committed in advance to specific activities but is available to be allocated and used according to the preferences of the community.

What needs, however, to be specified in great detail is the process by which this money is to be allocated and the broad parameters within which the money is to be spent. In order to ensure that this flexibility in project design actually results in participatory decision making and cuts out delays, financial powers must be delegated to the micro level planning teams, which could sit in a village and, based on a discussion with the villagers, sanction the required expenditure there and then without any further reference to higher authority.

To ensure that, at the village level, the decisions are made with the minimum of class, caste, gender and age bias, various methods of interaction need to be identified. Apart from village discussions, which often get dominated by the articulate, the upper caste, or the men, separate group discussions should be held with women, with backward classes, with the old and with special interest groups. In addition, choices were indicated through a voting system where individuals indicated their choice by placing a pebble near the icon which represented their choice.

Implementation

Village level ecodevelopment activities need to be managed by the villagers themselves. For this purpose, it is necessary to identify the most suitable village level institution. This could be an existing institution like the panchayat (village government), or a mahila mandal (womens group), or, where required, the villagers could form an ecodevelopment committee. The village level institution should sign the memorandum of understanding with the forest department undertaking, on behalf of the village, to abide by the conditions of the MOU, and in return to get, on behalf of the village, the support required for implementing ecodevelopment activities.

Such activities could include income generating activities, activities aimed at the regeneration of nature, at the development of fuel and fodder, and at minimising impacts of the PA on the village community, their crops and livestock.

Flow of funds

Funds to support these various activities should flow to the village institutions, in some cases through the forest department and in other cases through a cooperative or a society set up for the purpose. In addition, for each village, a trust fund could be set up where 25% of the wages due to the villagers for work undertaken under the project can be deposited. A matching amount can be contributed from the project funds. This trust fund should be operated by the village institution and should remain with the village even after the project has finished.

ECODEVELOPMENT ISSUES AND QUESTIONS

For the last five or six years, there has been a vigorous debate on the concept of ecodevelopment and on its implementation, especially focussed around the India Ecodevelopment Project. This debate has contributed much to both the evolution of the concept and to its becoming widely known. Some of the main elements of the debate are described below.

The planning process

There has been much debate on whether the planning process, as envisaged in ecodevelopment projects, is participatory enough. Many NGOs and activists, and even some forest officers, have felt that it is not. Essentially, ecodevelopment projects are planned for in two stages. First, there is an indicative plan, which lays down the broad parameters of the project, develops an indicative budget and time frame, and describes the methodology to be followed for building up the detailed, micro-level plans and for implementing and monitoring the project. Once the project has been approved and initiated, the participatory, village level, planning begins. This process has been described earlier in the section on planning.

Perhaps one reason why there has been dissatisfaction expressed with the planning process is because there is wide disagreement on how much participation is enough. Also, there is a somewhat unreasonable expectation that democracy will suddenly appear in societies, overnight, where traditionally the social structure has been very hierarchical and stratified. Critics are not satisfied unless the participatory process they see in reality conforms to the ideal scenarios they read about in text books.

The fact is that, in much of Indian rural society, decision making has been far from democratic. There are distinct caste, sex and age biases. Another significant barrier is the bureaucracy itself, which works in a system that is hierarchical and almost totally non-participatory. To expect that people working in such systems will suddenly become totally democratic when they start dealing with the village community, is unrealistic. Ecodevelopment envisages training and

orientation for the PA staff. It also envisages selecting PA managers who are more inclined to work in a participatory manner. However, it would be a long time before the expectations of many of the NGOs, especially the more radical ones, can be met on this count.

To try and minimise this problem, the project envisages that at least one NGO, and where required more than one, would be involved in each PA, to facilitate the participatory process. However, even where consultations are managed by NGO representatives, the age old and well known divisions of caste, class, gender and age still make real participation difficult. Besides, NGO representatives have their own biases, which also feed into the process.

In short, to make the process genuinely democratic and participatory is perhaps the greatest challenge in ecodevelopment. Clearly, there are no easy answers. All that can be claimed is that the ecodevelopment project has taken some big steps towards a participatory model of decision making, though there is still quite some distance to go.

Indicative Planning

As earlier mentioned, the MoEF proposed to plan for the project in two phases. First, a somewhat quickly formulated indicative plan, on the basis of which the project would be approved. Then a set of more detailed and participatory PA and micro level plans.

Initially the World Bank team was not willing to accept the concept of an indicative plan. What this really involved was that the broad objectives and strategies of the project would be identified in the plan and, based on a detailed survey of three or four sample villages, a costing per village would be indicated. From this, the over all budget would be extrapolated. However, the detailed items of expenditure would be decided only after the project was approved and initiated. This would be done in consultation with the local communities, on a site-specific basis, with authority at the local level to approve the expenditure so decided upon. Only the process by which such participatory decisions are to be made would be detailed in the indicative plan.

The World Bank team was not sure whether the Bank authorities would accept this as, in the past, all Bank projects required a detailed budgeting, item by item, of every paisa that was to be spent. However, at the same time the Bank was keen to have a participatorily developed project.

It was pointed out to the Bank team that it was undesirable and inconsiderate to take up hours and days of the village communities time, in 'participatorily planning', only to tell them that if and when the project comes through they might get some of the things that they planned for. The lack of any

immediate prospects of getting any of the planned facilities and services also takes away the motivation of village communities to participate in the planning process and to participate seriously. Besides, if the micro level planning is done many years in advance of implementation, by the time the project is implemented the ground reality changes, making much of the plan inappropriate. Also, if the gap between planning and implementation is too long, people forget what they had said and planned for, and do not feel a sense of ownership towards the plan.

All these arguments resulted in the Bank agreeing to allocate the bulk of funds as an 'ecodevelopment fund' without any further break-up. The concerned communities, during the implementation phase, would decide the details of how it was to be spent.

By persuading the Bank to depart from its earlier practice of pre-planning for every paisa, the Government of India succeeded in introducing the sort of flexibility into Bank projects that had not been seen before. This also opened up the way for other projects and projects in other countries to demand and get similar flexibility.

The fact that all plans had to be developed in consultation with the local communities did not mean that there were no constraints on the local communities. The project prescribed certain guidelines that had to be followed in determining what types of activities could be supported by the project. The guidelines prescribed in the project, for income generation activities, were that they must:

- Demonstrably reduce pressure on the PA.
- Be economically viable and sustainable.
- Not be socially and morally oppressive.
- Not be illegal.

Interesting examples of activities that violated one or more of these conditions emerged during the initial planning phase. For example, from one village there was a demand that ecodevelopment funds be used to provide street lighting on the main street. This proposal was objected to because providing street lights could in no way reduce pressures on the PA. However, the village elders argued that many young villagers sneaked out at night to poach animals in the PA. If the streets were lighted, they would be more easily spotted and prevented!

Similarly, in a high altitude village, the villagers agreed to stop extracting resources from the PA if the project helped them in cultivating and marketing *charas (cannabis)*!

Implementing Agency

Another issue that is hotly debated is the desirability of getting the forest department to implement ecodevelopment projects. One view is that the revenue department, which normally implements all rural development programmes, should implement the project. It is argued that as many of the components of the ecodevelopment project involve rural development type activities and major co-ordination efforts between various field agencies, the revenue department would be more appropriate. However, as has been discussed later in greater detail, if a link is to be established in the people's mind between ecodevelopment inputs and conservation of the PA, the inputs must come from the same agency that is responsible for managing the PA.

But a more serious argument is that the forest department or, for that matter any government agency, is incapable of handling such a project and it should be implemented through NGOs. Though there are obvious advantages in having NGOs manage such projects, the question is whether there is adequate NGO capacity to handle such projects in their entirety. For many PAs, there is inadequate local presence of appropriate NGOs and the involvement of remote NGOs is rarely sustainable. Also, for the project to be successful, it must have the co-operation and support of the forest departments and of other government departments. This can only be ensured if they are also meaningfully involved in the process.

The Market Forces Argument

Another attack on ecodevelopment comes from those who believe that it promotes the growth of the market economy among the communities living around the PA. They believe that the introduction of such a market economy would bring in those very forces of consumerism that have been the main cause for the destruction of biodiversity elsewhere. In the extreme version, such a view also demands that the people living in and around PAs should continue to live traditional, low consumption, lifestyles, like their fore fathers, so that they are less of a threat.

However attractive such a scenario might seem to some, in actual fact the market economy and the consequent forces of consumerism have penetrated almost all parts of India, without the help of ecodevelopment. In these circumstances, all that ecodevelopment can attempt to do is to help provide the people living around PAs with a legitimate way of earning their living, so that they can satisfy their market needs without adversely impacting on the PA.

However, even more significantly, the local communities living in and around PAs must have the right to decide what type of a lifestyle they want to live. It is

not for ecodevelopment planners, NGOs and officials, most of who are themselves willing members of the consumerist society, to foreclose options for others.

Size of Investments

Another issue for debate has been the size of investments made in ecodevelopment. It is argued by some that the investments being made under the project were too high and that these would flood the area with money. Under the India ecodevelopment project, the average investment over five years, per PA, works out to about thirty crores of rupees (US \$ 7 million). There are at least three reasons why concern is shown about the levels of investments.

First, there is an apprehension that such high levels of funding are not possible for the remaining five hundred plus PAs, especially when foreign funds dry up. This is a valid concern, especially given the very low levels of investments that have been characteristic of past allocations for the wildlife sector. However, on the other hand, the investments under the project are an indication of the sorts of investments really required in order to conserve these PAs in a manner not unfair to the local communities. Even though we might not, from our own resources, be able to provide what is really required, at least the inadequacy of current provisions would be starkly highlighted.

Besides, even if we cannot protect properly every area, there is no harm in protecting whatever we can. This is especially true as the availability of funds for the ecodevelopment project does not in any way reduce or otherwise negatively affect the availability of funds for other PAs.

There is also the question whether the local staff has the ability to spend such a large amount of money. Past experience has shown that many externally funded projects have had poor record of expenditure because of this problem.

Early into the project design process it was recognised that some innovative financial mechanisms would have to be created to solve some of the finance related problems. Consequently, the idea of setting up a trust fund was mooted. This not only allows money to be spent as and when required but also does not bind the project down to a five-year period. It also allows money to be diverted to more PAs in case it is more than what is required for the original seven. The option of setting up a trust fund is currently being investigated.

There is also a concern that the influx of so much money will see a corresponding rise in corruption. This is always a danger in such projects. However, to minimise this danger, a policy of transparency has been suggested and it is proposed that project expenditure be subjected to a people's annual audit through *jan sunwais* or people's hearings.

There are also those who protest that the ecodevelopment project is further sinking India into the debt trap and that when the government has to repay this debt then there would be serious implications on the availability of funds for wildlife conservation in India.

In actual fact, even the loan component of the project is from the IDA soft loan window. Given the very low interest rates and the long repayment period, this works out to about 70 to 80% grant and only 20 to 30% loan. Besides, this loan is from the country committed funds for India and if they are not tapped for the wild life sector, they would most certainly go to some other sector, like irrigation or transport. Further, repayment of international loans is not debited to the sectoral head, as they are considered to be plan assistance, and there is no basis for the fear that the repayment of these loans, sometime in the future, would be out of the already meagre allocations for the wildlife sector.

PAs or JPAs

This, then, brings us to the next issue: why does the ecodevelopment project assume that PAs should be free of people? Much criticism has rested against the project on this count. Even today, there is hope in some quarters that the project designers will see the error of their ways and admit that they were wrong to think this way.

There is a more extreme version of this view, which questions the very rationale of a protected area and argues that all such areas should be disbanded and given over to the local communities.

The debate on what human use should be allowed in PAs and, indeed, should there be protected areas at all, is an important one that still has a long way to go before it runs out of steam. Admittedly, the ecodevelopment project is designed within the context of the prevailing law and policy in India. When that law and policy changes, certainly all sorts of new possibilities will open up for ecodevelopment.

The ecodevelopment project does not appear to be attempting to change social norms, but to get as much space as possible for animals, plants and human beings within the existing norms. Perhaps the important thing is to ensure that it does not in any way inhibit the debate for greater social justice, nor does it compromise those who rightly believe that animals and plants also have rights.

Relocation of human populations

Perhaps the most contentious issue associated with ecodevelopment is the relocation of human populations living within PAs. In India the law does not permit any human habitation within a national park and only limited habitation within sanctuaries (see annexe 1). However, many of the parks and sanctuaries have

human populations within them and most of these people have strong socio-cultural roots in the area. Many of them are forest dwelling and tribal people who would find it very difficult to integrate into the wider society. They are, therefore, usually unwilling to shift out.

On the other hand, it has been the dream of many wildlifers, both within and outside the government, to rid wildlife PAs of human populations and especially of livestock. Many of these see the ecodevelopment project as a good way of getting the resources required to shift out villages from within PAs. In any case, often the continued residence of human populations within the PA is not only a threat to the animals and their habitat but also results in these people being denied most of the basic facilities enjoyed by people living outside.

On the one hand, there is a perception among some that if most or all of the people living inside PAs are not moved out, there is little use of doing ecodevelopment around the PAs and strengthening management capabilities. On the other hand, there are people who are strongly opposed to any one being thrown out of their homes just because these homes have suddenly become a part of a protected area. There is also a demand from the World Bank lawyers to explain how the project is going to tackle the problem, considering the Indian law was unequivocal on the subject.

Perhaps the only answer to this dilemma is to prescribe, as the project did, a policy of voluntary displacement. The policy lays down that only those families can be moved out who voluntarily want to go.

Initially there was resistance from many wildlifers who felt that such a policy meant the end of any hope of shifting out people from PAs. However, discussions with people living inside many of the PAs established that there were many among them who would be happy to shift out if they were assured a fair resettlement package and process. It was soon recognised that the only practical way was to resettle those who were willing, and to do it so well that others would also soon become willing. Even if some elected not to shift, the pressures on the PA would be significantly reduced because many others have left.

In reality, this approach is not as difficult as it might sound, for in each of the PAs selected there are fortunately at least a few families who want to shift out. In order to induce the remaining to voluntarily move out it has to be ensured that these few, initially rehabilitated, families are so well provided for that their example tempts the rest.

There is concern that, perhaps, in the guise of voluntary relocation, people would be forced to shift out. This could be done by making their lives so difficult inside the PA that they have no other option, or by claiming that they

are willing, even when they are not. To guard against the latter, NGOs have been selected for each PA. These NGOs have been given the responsibility of surveying and recording the names of those families who are genuinely interested in shifting out.

To prevent people from being forced out because of deprivations, it is also proposed to make those living inside the PAs, who opt to stay there, eligible for some of the benefits of ecodevelopment. Obviously these benefits would have to be in consonance with the requirements of a wildlife PA. Also, the young people living inside a PA can be helped to develop skills such that they would have much greater value outside the PA. This would encourage at least the younger generation to seek a life outside, thereby gradually but surely solving the problem.

Apart from the high financial costs of such an approach, which are certainly justified, the main problem is the reaction of the host communities. In order to compensate these forest dwellers for all they have left behind once they relocate, often they have to be provided with a level of lifestyle that is higher than that of the host community or of people living outside the PA. This creates a potential for social tension and makes those, who did not encroach into the forest, feel that they were perhaps wrong in not breaking the law. In some situations, it has also led to people purposely encroaching on PA area and then demanding to be relocated.

This problem can be minimised by ensuring that ecodevelopment benefits flow to the host communities so that even though they might not get as much as the relocated families, at least there is some lessening of the gap between the two.

Preventing the magnet syndrome

Considering ecodevelopment strategies result invariably in investments around the PA boundary, to develop alternative income generation avenues or to otherwise meet basic needs, there is a potential of such investments becoming a social magnet and encouraging the immigration of poor people from elsewhere. The resultant increase in population around PAs would, in the medium to long term, heighten rather than lower pressures on the PA. In countries like India, investments and opportunities in urban centres have often led to such immigration.

As a planning exercise, experiences from other parts of the country and from other countries were reviewed². It was recognised that this could be a major problem where temporary surpluses are created because of large investments in infrastructural projects, like major irrigation and industry

² *Integrated Conservation Development Projects for Biodiversity Conservation: The Asia Pacific Experience*, ibid.

projects. Such projects initially create a demand for labour that cannot be met locally and, therefore, attracts immigration. They also create a similar demand for services and goods.

However, a study done as a part of the planning exercise established that most often the economic status of areas around PAs was lower than the rest of the region. Historically, forested areas have got less than their share of infrastructural development and this itself in many cases has been the reason why some wilderness survives there. In some other cases the presence of PAs in a region has, itself, inhibited development activities. Consequently, the investments that were coming in through the ecodevelopment project would not even bring the PA surrounds at par with the larger region, leave alone make them into magnets.

However, another way of preventing the magnet syndrome from operating is to keep the investments under ecodevelopment as low as possible and certainly of the sort that do not suddenly create a large number of jobs or wealth. Where economic development is gradual but steady, it is far more likely to be assimilated by the local communities, be sustainable, and not attract attention of potential immigrants. Essentially ecodevelopment is not rural development. In rural development the objective is to raise the economic and social standards of the people, for its own sake. In ecodevelopment the only objective is to conserve the PA, albeit in a socially just manner, and only that level of investment is legitimate which is required to divert unacceptable pressures from the PA.

Establishing trade-offs over additionalities

The basic philosophy of ecodevelopment is that local communities who are negatively affecting PAs because of livelihood imperatives should be helped to develop alternative, environmentally and socially sustainable, sources of incomes and biomass, of their own choosing, so that they can phase out their dependence on the PA. However, the purpose of ecodevelopment is defeated if people impacting on PAs consider ecodevelopment inputs as additional, rather than alternate, to the resources they are currently getting from the PA. Given the fact that most of these people are desperately poor and that even after a successful ecodevelopment intervention they would continue to be poor, makes their wanting to consider all inputs as additional both likely and understandable. Unfortunately, it also means that the PA would continue to be degraded.

One way in which this is prevented is by entering into a memorandum of understanding with villages. The understanding is that the village community will phase out activities which are degrading the PA in return for certain specified investments and inputs. If the village community does not keep its part of the

bargain then the investments and inputs would stop. However, this threat is not very effective where ecodevelopment inputs are restricted to a specified project period of, for example, five years. In such a case, it is unlikely that the people would restrain themselves after the project is over and the inputs have ceased. To prevent this from happening, in the India Ecodevelopment Project village trust funds are being set up which will maintain inputs for perpetuity. The continued honouring of the memorandum of understanding would be linked to the access to these trust funds.

Also, the village would be, if it goes back on the understanding, subject to action under the law, and detection and prosecution would be much more likely as the PA management has in the meantime been strengthened and the number of villages violating the law have been significantly reduced. Obviously this threat could work only where a small proportion of the villages violate their agreement. In the long run, it must be acknowledged that only the genuine interest of the local communities in conserving the PA would save it. For this purpose it is not only important to minimise the deprivations they face because of the PA, and to involve them in its management, but also to ensure that whatever revenues are forthcoming from the PA, primarily through tourism, also be channelised to them. This will give them a further stake in the PA and its maintenance.

An additional strategy is to channelise ecodevelopment funds and other inputs through the park managers. This clearly establishes the connection between these inputs and PA management. Otherwise, given the fact that there are numerous agencies in the field attempting to provide inputs to the people, and that most of these agencies are unaware of even the existence of the PA, there is a danger that ecodevelopment inputs would also be seen and treated as unrelated to the PA.

CONCLUSIONS

In general, the ecodevelopment project and at least one version of the approach has been criticised on at least three counts.

First, it has been criticised on an ideological basis. It is unacceptable to both extremes of the conservation movement. To those who can be described as 'deep ecologists', it gives away too much to the people and does not retain enough for animals and plants. On the other hand, to those who consider 'wildlife conservation', at least in its present form, unjust to the poor and the tribal people, it retains too much for the plants and animals and does not open up enough spaces for the local communities.

The approach can then be seen as either 'falling between two stools' or 'adopting the middle path'. Perhaps it is correct to see it as the latter, and

consider its equidistance from both extreme positions as a strength. However, the middle is always a lonely and uncomfortable position.

The second set of criticisms comes from those who agree with the broad approach but disagree with the details of the concept and the planning process. Here there is much scope for change and improvement. Clearly an approach like this must be progressively made more participatory. It must have in built checks and balances and an ability to learn from successes and failures. However, the truth about what works and what does not will best emerge in the doing. Therefore, the priority must be to closely monitor and evaluate the process.

Annex 1

CURRENT LEGAL PROVISIONS

National parks and sanctuaries in India are set up under the Wild Life (Protection) Act of 1972 (hence forth referred to as WL Act) as amended in 1991. But while this is the first national legislation with the provision of setting up national parks and sanctuaries, various earlier laws provided for partial or full protection of species and ecosystems.

Under the WL Act, as amended in 1991, wildlife habitat is protected by setting up national parks and sanctuaries.

National parks are given a higher level of protection, considering no grazing is permitted within them and it is specified that:

"No person shall destroy, exploit or remove any wild life from a National Park or destroy or damage the habitat of any wild animal or deprive any wild animal of its habitat within such National Park except under and in accordance with a permit granted by the Chief Wild Life Warden and no such permit shall be granted unless the State Government, being satisfied that such destruction, exploitation or removal of wild life from the National Park is necessary for the improvement and better management of wild life therein, authorises the issue of such permit." [Section 35(6) of the Act]

Also, no private land holding or right is allowed within a national park.

Sanctuaries are accorded a lesser level of protection, for in sanctuaries grazing and rights might be permitted. certain other types of activities might also be permitted in sanctuaries, but again only "for the improvement and better management of wildlife".

Under the WL Act, national parks are fully protected from all human disturbance and, consequently, correspond to the revised category Ia (Scientific Reserves) of the IUCN categorization system for protected areas.

In a sanctuary, on the other hand, grazing and various rights can be permitted. A sanctuary, therefore, corresponds to IUCN category IV (Habitat and Wildlife Management Area).

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