

INTEGRATING CONSERVATION AND DEVELOPMENT IN PROTECTED AREA MANAGEMENT – CAN WE DO IT?

RUCHI BADOLA, A.K. BHARDWAJ AND S.K. MUKHERJEE

Wildlife Institute of India, Dehra Dun (U.P.)

Introduction

The loss of forests in India, as well as the contemporary concerns like competing claims of different segments of the society over declining forest resources, has long attracted the attention of scholars and writers. In the past two decades, these have also drawn the attention of policy makers, and are reflected in the shift in conservation agenda of the government, from concerns to protect timber supplies to issues ranging from local livelihoods, to involvement of local people in forest management (Badola, 1997a). The new generation of approaches has emerged in the country, from a shift in global concerns from 'preservation' to 'conservation'. In India as elsewhere there is a move towards involving local people living in and around National Parks and Wildlife Sanctuaries (WLS) in 1970 the number increased to 86 National Parks and 478 Sanctuaries respectively¹ (WII Database) (Anon., 2000). The basic management approach of these areas has been the conventional 'isolationist' approach, whereby management seeks to protect the park from people living in surrounding areas.

These areas were explicitly seen as "pristine environments similar to those that existed before human interference, delicately balanced ecosystems that need to be preserved for our enjoyment and use and that of future generations" (Gomez-Pompa and Kaus, 1992). The philosophy behind this approach is thus of 'preservation' or 'protection'. The role of the government is to guard natural resources from 'inappropriate' uses, in order to shield wildlife and other natural resources from exploitation (Anon., 1995), and this is achieved through strict enforcement of legislation, patrols to prevent illegal activities and infrastructure maintenance. However, in India out of the human population of 1 billion, 64 per cent of the rural population and 100 million tribals (Lynch, 1992) depend on the forests for their sustenance. Ninety million cattle graze inside the forests (Dwivedi, 1993). Firewood consumption in India is 1,73,412 Ktons (Anon., 1997), with 62 per cent derived from forests (Leach, 1987). Income from Non-Timber Forest Produce (NTFP) is important for the 60 million households living below the poverty line. According to a survey carried out in the mid 1980s, over

* Paper presented in the International Workshop on : Decade of JFM-Retrospection and Introspection. June 19-20, 2000, New Delhi.

¹ The NPs and WLS correspond to category I and IV of IUCN respectively.

65 per cent of the PAs were characterized by human settlements and resource use (Kothari *et al.* 1989). In such a scenario an attempt to protect the PAs from human intervention by coercion results in hostile attitudes of local people towards wildlife management and forestry staff, which often fuels open conflicts between communities and the forest department. Between 1979 and 1984, 51 clashes were reported in connection with NPs and 66 with WLS (Guha and Gadgil, 1992).

While conflicts continued to characterize the forest department-community relationships, a more favourable, socio-political climate for restructuring forest management was developing (Badola, 1995). A major breakthrough was achieved in the 1970s in West Bengal with the initiation of the Arabari pilot project, which stressed the importance of involving village communities in the protection of natural forests (Poffenberger, 1992). These and other such participatory management approaches and their early replicates in Haryana, Gujarat, Orissa and other States encouraged the Ministry of Environment and Forests, Government of India to pass a radically new forest policy in 1988. The policy notes, "Forests should not be looked upon as a source of revenue, but as a National asset to be protected and enhanced for the well being of the people and the nation". One prime component of the policy mandates that, "The people will be actively involved in process of protection, conservation and management of forests". In pursuance of the above policy, the Government of India issued guidelines in June 1990 to all the states to adopt "Joint Forest Management" (JFM) which seeks to develop partnerships between State Forest Departments (as custodians and co-

managers) and local community organizations (as co-managers) for sustainable forest management. User groups receive usufruct rights only, clearly noting that land is not to be allocated or leased (Poffenberger and Singh, 1993). No less role has been played by the entry of national and international NGOs into the scene and the support they extend to local organizations to assert people's rights over forest resources. Added to all these factors was the huge international funding that the forestry sector has been attracting due to global concerns for biodiversity conservation which hinges on people's participation as an imperative condition.

The Government of India provided further impetus to this declaration, particularly in the field of PA management by committing funds for eco-development since 1991 (Centrally Sponsored Scheme: Eco-development around National Parks and Sanctuaries), with the basic objectives of reducing pressures on the core area of PAs. Eco-development or Integrated Conservation and Development Projects (ICDP), as they are called otherwise, seeks to conserve biodiversity through local economic development and by offering alternative income generating opportunities to reduce forest dependence (Badola *et al.*, 1998). Eco-development is a site specific conservation friendly package of measures for rural development and use of natural resources by the local people so as to contribute to PA conservation (Panwar, 1992). Both JFM and eco-development emphasize people's participation in natural resources management through empowerment. However, while in JFM villagers are able to obtain a share of forest produce, wildlife laws prohibit the extraction of forest produce for human use from NPs and WLS (Singh, 1998). The

scope for linking eco-development with JFM is hence limited thus reducing a potentially important means of utilising buffer zones in WLS to meet the resource requirements of the local people (Rodgers, 1992)².

Evolution of the concept of Eco-development

The initial investments in eco-development were sporadic, fragmented rural development type activities. These were low profile, based on largely inflexible annual plans. The second generation of eco-development activities became more organised as the focus on micro planning evolved. However these were also based on the assumption of a direct relationship between poverty alleviation and environmental protection (Badola, 1998) as also on the fact that providing people with alternatives to forest products is sufficient to guarantee the conservation of natural resources for all times to come. There was not much focus on the processes involved in community participation, empowerment of the partners and collaborations with other stakeholders. It is a fact that none of the alternative opportunities tested so far generated sufficient interest and benefits to dissuade forest-dependent people from going to the forests. Moreover in most cases it is difficult to develop sufficient and lucrative alternatives so as to involve most villages in and around PAs (Pandey, 1998). Secondly, resource use has more than economic dimensions. From the perspective of forest utilization, dependency as often assumed,

is not a function of economic status alone. Forest dependence due to a lack of purchasing power or physical lack of access to alternatives can be termed 'actual' dependency. However, forest use is often also a result of its free access and part of cultural and traditional lifestyles of the people. This can be termed 'habitual' or 'traditional' dependency, which most development activities do not address (Badola, 1997b).

As the concept evolved the role of the primary stakeholders shifted from supplicants hoping to become "beneficiaries" of the largesse distributed by the government (Mahajan, 1991) to active partners project design and implementation. The concerns over the performance of the beneficiary oriented-approach to participation under the Integrated Conservation and Development Projects or Eco-development (Box 1) have also led to the focus on collaborative management or Joint Protected Area Management as it is referred to, which envisages the involvement of local communities and other stakeholders in PA management. It is realized that unless the local communities are given definite role, responsibilities and benefits from PAs, the long-term sustainability of such programs will not be there (Badola and Hussain, 1999a). Another lesson that emerged from these projects was that in addressing the issues of local livelihoods and development, mechanisms to institutionalize linkages with other stakeholders need to be developed. This is important in view of the

²Prior to the 1991 amendments to the Wildlife (Protection) Act, regulated resource use in the buffer zones of PAs, while the core area was completely closed. Most PAs and Project Tiger areas in India have a core/buffer zonation; the core Zone has the NP status while the buffer could either be a WLS or a reserved forest. The buffer zones were designed to reduce border conflicts by allowing regulated resource use. According to the 1991 Amendment, in case of WLS, the Chief Wildlife Wardens have to certify that any manipulation is in the interest of wildlife, and this manipulation has to be approved by the State Governments.

Box 1***Generation of ICDPs***

Following World Congress on Parks in Bali in 1982, role of local communities living in and around the parks to secure conservation goals got wider acceptance. WWF launched Wild Land and Human Needs programme, 1985. The programme initiated around 20 Integrated Conservation Development Projects (ICDPs) from the Caribbean to the Himalayas. By 1994, WWF had extended support to 50 ICDPs of which 15 were continuation from 1st generation while the remaining projects date back from 1990 or later (2nd generation ICDP). The 1st generation ICDP tried to compensate the local communities for lost access to resource inside the PA and the damage suffered through the wildlife. This compensation included both cash and more frequently a whole lot of off-farm alternative income options and community assets. Many of these ICDPs over a period of time grew large, and mostly unmanageable due to complexity of activities and their linkages to conservation. The conservation linkages of developmental activities remained weak. The assumption that alternative source of livelihoods would replace the old one could hardly be realized as the local communities hardly had a choice to express their needs and thereby they remained alienated from the programme. The second generation of ICDP therefore drew on the lesson from 1st one by shifting focus to land based activities and sustainable resource management. People were seen as resource managers and collaborative partnerships with the management have been built as answer to resource degradation. The projects are designed and implemented with intensive community involvement. While the 2nd generation ICDP will take time to bear fruits and the lessons from them might ultimately shape designing 3rd generation of ICDP in the 21st century. Though difficult to predict at this stage, it seems quite plausible that the 3rd generation ICDP are going to be based on eco-region rather than just the PA and its surrounds as a focus.

(Source - Larson *et al.*, 1998)

fact that threats to PAs also come from sources other than local dependencies.

There has been a growing recognition that protected areas as fortress of rich biodiversity and natural resources surrounded by a resource starved local population and irrational developmental plans that are least sensitive to ecological concerns could hardly be a viable answer to biodiversity conservation. Realizing the critical significance of including PAs in regional plans, the Staff Appraisal Report

of the World Bank (Anon., 1996) states that "PAs can be successful in realizing their long-term conservation goals only to the extent that their priorities can become integrated into large-scale land use planning initiatives and regulations at the local and regional levels". If various agencies work for the common agenda of development, which is rooted in conservation ethics, financial and technical resources could be easily pooled (Rathore *et al.*, 1998). In view of the huge government outlay for the 9th Plan in Rural

Development (Rs. 2,000 crores), it becomes all the more sensible to integrate conservation with development. However there are certain issues that are emerging in the few areas where some success is being achieved in trying to balance the livelihood aspirations of the local communities with conservation goals by trying to integrate conservation and development.

Legal and policy issues

Under the present tenurial arrangements it is difficult to involve local people in conservation as the earlier concept relies on excluding people from the PAs rather than integrating them. Most definitions of the concept refer to reducing the 'negative impacts' of people on PAs and PAs on people. With few exceptions,

Box 2		
<i>State Government orders regarding provision of consumptive benefits to local people</i>		
State	Date	Main Features
West Bengal	30th June, 1996	Upon satisfaction that collection and removal of certain products is necessary for improvement and management of wildlife, Chief Wildlife Warden may grant permission as follows. 25% share of poles obtained from drift and over wood removal and 100% share of fire wood obtained from drift and over wood removal, thatch and other grasses obtained from fire lines and fire prone zones.
Uttar Pradesh	7th April, 1995	Under Section 29(c) of the Wildlife (Protection) Act, Chief Wildlife Warden has granted permission for removal of Bhabar grass and drift and fallen wood as a management tool. This has been used in Rajaji NP to meet local demands.
Kerala	Nil	Most sanctuaries allow NTFP collection to tribal cooperative societies in buffer zones. Although it is not mentioned in the plans it is an accepted practice.
Madhya Pradesh	Nil	In 1994 ban was imposed on the collection of NTFPs from all PAs. Presently this is being allowed as a practice in 104 out of 185 sanctuaries in the State.

linkages of people with PAs in the form of access to resources are merely incidental to the management practices (Kothari *et al.*, 1997). Although, the exclusionary approach may achieve a reduction in biomass extraction from PAs, it ultimately fails to develop any interest in conservation among local communities. Tenure insecurity reduces the incentive to invest in land improvement and conservation. The Wildlife Protection Act, 1972 prohibits consumptive use of resources within PAs. Provisions for continuation of resource use exist in the law but the implementation depends on. These two benefits directly affect the livelihoods and incomes of local people. Other interpretation. In the absence of clear use rights and responsibilities the use is often indiscriminate. However it is being increasingly realized that to develop stakes of local people in conservation it is important to ensure that people receive benefits from/due to the PA on a sustainable basis. The benefits should be, timely, accrue on the local level, tangible and equitably distributed. Studies on distribution of benefits and costs from the PAs have shown that the most significant benefits at the local level can be the consumptive benefits (People's requirements of fuel wood, fodder, NTFPs etc.) and benefits from tourism

(Wells, 1992) benefits such as ecological are available at the national and global levels. This calls for such measures that maximize tangible benefits at the local levels. To the extent that resource sharing contributes to the local consumptive benefits without jeopardizing the resource sustainability and overall conservation goals, the efforts of PA management in reconciling to such benefits would go a long way in creating people's stakes (Rathore, 1996). Provisions exist in the Wildlife (Protection) Act (Section 24, and Section 29) which can be used for the benefit of the local communities in tune with Protected Area management objectives. Certain State Governments have taken steps in this direction (Box 2) although at this stage it is difficult to predict the long term impacts of these decisions.

Conservation-development linkages

Economic incentives may often not be strong enough to keep people from exploited a PA (Wells and Brandon, 1992). The common assumption is that people have fixed income needs and if these can be met through development then these individuals will cease their destructive activities. However, the economic needs of most people are not fixed; people are striving

Box 3

Establishing linkages

One village demanded that eco-development funds be used to street lighting in the main road. This proposal was objected to because the implementing agency did not see a link between street lights and reducing pressures on the PA. However, the villagers argued that many young villagers sneaked out at night to poach animals in the PA. If the streets were lighted they could be more easily spotted and prevented!

Source: Singh (1998)

for greater security. Therefore people might continue illegal activities in conjunction with receiving economic benefits from conservation (Sanjayan *et al.*, 1997). This is the case with the Periyar Tiger Reserve

and Borivilli and Mudumalai Sanctuaries for example, which are surrounded by communities whose prosperity is increasing over the years due to increased tourist inflow. But this economic prosperity has at

Box**Strengths and weaknesses of some****Periyar Tiger Reserve**

Although the eco-development project was initiated here in 1992, it got impetus in 1994 with the launching of the GEF project. The larger success has been in eco-tourism by involving the local people, who were involved in illegal collection of cinnamom bark from the Park for the last two decades. Similarly the local tribal communities have been empowered by the maximizing their incomes from their pepper plantation by removal of middle men from marketing. This empowerment has been accompanied by channelizing their energies for the active Park protection. At present the question is of sustaining these eco-tourism activities through local committees. Presently the main actor in this program has been the Kerala Forest Department alone and there is lack of linkage within the forest department (Kerala, Tamil Nadu) as well as other line agencies. Although a fair amount of research data exists, monitoring is inadequate.

Nagarajun-Sirisalem Tiger Reserve

The eco-development process started here with the training of the eco-development officer at the Wildlife Institute of India in 1994, under the GOI-UNDP collaborative project of WII. The biggest success of the program has been to bring back in the mainstream the local communities who had adopted an anti-department approach by involving in the illegal activities. Through regular and continuous capacity building and awareness programs a very strong coordination of different stakeholders and line agencies has been established. A high level of awareness of the intangible benefits from the PA particularly in the form of ground water recharge have been a major factor in the success of the program. Strong local institutions, social auditing, process documentation and a comprehensive database are some strengths. The main problem is the continuity of the team and sustainability of these efforts after the project and ecological monitoring.

Kalakad-Mundunthurai Tiger Reserve

Eco-development program was initiated here in 1994. This is also one of the sites under the Forestry Research, Extension and Education Project (FREEP) of the IDA. Its major strength is the emotional linkage of the people with the park through a package of alternatives for meeting their dependencies.

the same time been at the cost of the surrounding PAs. Unless people are able to link these benefits as coming from the PAs and unless a strong institutional base

accompanied by capacity building and awareness is developed, (e.g. Annapurna Conservation Area in Nepal), the above assumption may not hold good.

4

Eco-development projects in the country

Linkages with the local NGOs and the strength of the local institutions are other achievements. The main gray areas are ecological monitoring inside the PA and the linkages with other district programs.

Rajaji National Park

The Park had been facing severe conflicts among the management and the local communities including Gujjars and the NGOs. Through the WII's project launched in 1996 "Building partnerships for biodiversity conservation in Rajaji National Park", series of consultations and capacity building of staff and communities took place. An atmosphere of mutual trust has been generated thereby making a beginning of the eco-development process in the area. The main strength of the program has been an active spearhead team with adequate capacities and departments' initiative in share of usufructs, particularly Bhabar grass with the local communities. Micro planning has been initiated and a positive atmosphere is coming up. Buffer Zone is not at all maintained. Major shortcomings are a lack of coordination with the line agencies and lack of an adequate and continuous buffer zone.

Panna Tiger Reserves

They have just begun the programme. There is adequate capacity in the form of trained spear head team and database. However, the institutions are still nascent and there is a lack of an sufficient awareness among the local people regarding the program. The problem is also how to balance between the protection and eco-development when there is no separate staff. Linkages with line agencies are yet to be developed.

Great Himalayan National Park

This is the second site under FREEP. Their strong point is the research data base available. Main issue is inadequate capacity of the staff, lack of awareness among the communities and weak conservation-development linkages. Marketing of medicinal plants and innovations of eco-tourism need to be strengthened. It is a clear example of what happens when the program is implemented without adequate capacity building and awareness.

Moreover often activities under the ecodevelopment programme are largely selected via a basket approach through a referral list. This list can be quite comprehensive but does not amount to a strategy. As a result there are generally weak conservation-development linkages. The forest department's choice of activities with direct conservation-development linkages might not find favour with the local communities, who might prefer better roads, micro irrigation and other community assets (Box 3). The field practitioners then struggle to prove that indirect linkages have been well spelt out (Rathore *et al.*, 1998).

Capacity building

Capacity building of local people remains weak especially in accounting and managerial skills, institution and team building, and leadership and technical skills such as processing and marketing. In the absence of capacity building there can be no meaningful partnerships and programs cannot be sustainable, instead they may be appropriated by a few powerful individuals (Badola, 1999). No less important however is the need to empower the frontline staff who are at the cutting edge-it is they who ultimately implement the programme in tandem with other partners at the field level. The role of training to impart new understanding, new skills and shaping up of appropriate attitudes can be hardly overstated. However a lack of trained people in the field of ecodevelopment is obvious. In most cases training programs are conducted too late.

Moreover ecodevelopment is often implemented as a time oriented target driven project. The success in such cases is often person or project oriented. If

individuals get transferred or projects end then the processes may be hampered or simply fail (Badola and Hussain, 1999a). To ensure the sustainability and viability of ecodevelopment, a process approach that builds up common understandings and norms, is needed

Integration with line agencies

To provide for regular coordination at protected area level with a range of interest groups, PA level functional coordination committee is clearly called for. Even though the GEF and other externally aided projects envisage inter-departmental cooperation, the legal, policy and administrative frameworks to achieve this remain hazy. In most cases the PA management staff does not even control the activities in the buffer zones. The draft amendment to Wildlife Protection Act, 1972 has proposed setting up of two newly proposed categories of protected areas i.e. Conservation Reserves and Community Reserves. The conservation reserve that are proposed to be declared around existing protected areas would have Community resource Management Committees drawing representation of the various interest groups. Adequacy of such proposed measures need serious scrutiny keeping in view the mandate that such structures are required to discharge (Rathore *et al.*, 1998).

Research and monitoring

To be able to take informed decisions the management of PAs needs to involve professional researchers to collect baselines information and carry out research. Project partners need to reach consensus on key indicators to be monitored and the level of precision needed (Larson *et al.*, 1998).

Quantitative and qualitative monitoring and evaluation indices are required to measure progress towards the objectives, guide project management and assess progress towards sustainability once external support is withdrawn.

The pilot projects under India ecodevelopment and IDA assisted Great Himalayan National Park and Kalakad-Mundunthurai Tiger Reserve projects have to an extent made a beginning towards participatory research by setting the research agenda with a range of interest groups and sharing the research responsibilities. While 'participation' in research in the fields of ecodevelopment have just begun, there is a need to consolidate this and ensure consultation with the interest groups on regular basis for sharing of research findings. Linkages of research findings and their subsequent application have remained a gray area in the past that needs to be corrected.

Staff welfare and motivation

The PA staff is now required to elicit the participation of local communities in conservation along with the usual protection responsibilities. The concerns often voiced by this group is 'how can we expect people to come to the meetings called by us or to believe in us when only yesterday we have impounded their cattle for entering the PA and tomorrow we may be required to punish them for gathering fuel wood?' (Badola, 1998). This is a new and dual role for which most of them are ill prepared. There is an urgent need to understand the 'psyche' of the field staff. Given the difficult working conditions, low salaries, poor amenities and a feeling of neglect there is a lack of motivation among the field staff to do better. Some States have started

addressing this problem by focusing on HRD (e.g. Madhya Pradesh) and setting up of staff welfare mechanisms such as the Kanha Staff Welfare Cooperative Society. States like Kerala have initiated the process of staff insurance. A number of government and non-government initiatives in the form of awards and recognition to the staff for their unique contributions have started generating a new confidence among them.

Conclusion

The issues discussed above have in fact emerged as the determining factors in the success and sustainability of community involvement in PA management. Box 4 shows how some of these have shaped the outcome of the ecodevelopment projects. To be effective and sustainable the above issues will need a detailed attention before any kind of community involvement in PA management is planned for. Moreover, in spite of almost two decades of experience with people's participation there is no clear consensus on what would be the logical outcome of a collaborative management approach and the rights and responsibilities of the local communities and other stakeholders with regard to natural resource management (Badola and Hussain, 1999a). This is particularly important in view of the fact that 19% of India's population still lives below the poverty line. The benefits of growth during the first three decades of planning, when GDP grew only at 3.6% a year, were clearly offset by a high growth rate of population of about 2% a year (Anon., 1998). The inadequacy of the rural development programs especially in the remote wilderness areas lacked the capacity to address the peculiar problems of degrading marginal farmlands and common property

resources (Panwar, 1992) Insensitive infrastructure development has contributed to habitat fragmentation and degradation. In a situation where basic livelihoods are unavailable to the local communities there is always a scenario of conservation *vs.* development. The opportunity cost of conservation is perceived to be very high not only by the local people but also by the policy makers which weakens the support for it at all levels (Badola and Hussain, 1999b). A workshop conducted by the Wildlife Institute of India and the Lal Bahadur Shastri National Academy of

Administration, Mussoorie in June 1999, recommended a comprehensive review of the national and state laws relating to natural resources and appropriate changes to harmonize these laws keeping in focus, conservation of biodiversity, sustainable use of biological resources and basic livelihood security (Anon., 2000). These need to be a major agenda for discussions in forums like the present one where field practitioners, senior policy makers, academicians and NGOs working at various levels are able to share their experiences and thoughts.

SUMMARY

The Protected Area (PA) Network in India has helped to conserve a significant part of India's biodiversity. It has, however, engendered conflicts between the livelihood requirements and aspirations of the local communities living in and around these areas, and PA managers. The stress has been on reducing or eliminating altogether the human sources of biotic pressures, with the assumption that any such pressure was detrimental to wildlife interests. Although such an approach to conservation has been successful to a certain extent, it also alienated the local people from the PAs. Enlisting the cooperation and support of local people has thus, emerged as a major priority area of *in situ* biodiversity conservation. This is the concept of ecodevelopment as it is referred to in India or Integrated Conservation and Development in many other countries. Ecodevelopment, addressed the livelihood problems of people surrounding PAs, using as its basic thrust the diversion of as much pressure from PAs as possible. However with almost a decade of experience with ecodevelopment, there is now a focus on collaborative management or Joint Protected Area Management as it is referred to, which envisages the involvement of local communities and other stakeholders in PA management. This paper discusses the concept of ecodevelopment, its evolution and the problems associated with developing collaborative partnerships with different stakeholders. It examines some of the recent models of community participation in PA management across the country. Besides a strong policy and legal support, other factors like strong conservation-development linkages, trained and motivated manpower and a strong research base and regular monitoring play a role in its success. The paper goes on to conclude that in order to ensure the sustainability of such programs, the logical outcome of a joint management approach and the rights and responsibilities of the local communities and other stakeholders should be clarified. The integration of the PAs into landscape or regional level planning by a comprehensive review of the national and state laws relating to natural resources is required.

रक्षित क्षेत्र प्रबन्धकार्य में संरक्षण और विकास का एकीकरण करना

रुचि बडोला, ए०के० भारद्वाज व एस०के० मुखर्जी

सारांश

भारत में रक्षित क्षेत्रों के जालकर्म ने भारत की जैवविविधता रक्षित करने में महत्वपूर्ण सहायता पहुंचाई है। किन्तु इसने इन क्षेत्रों तथा इनके आसपास बसने वाले लोगों, स्थानीय समुदायों की आजीविका उपार्जन की जरूरतों और आकांक्षाओं तथा रक्षित क्षेत्रों के प्रबन्धकों के मध्य विवाद भी उत्पन्न किए हैं। अभी तक जैविक दबाव डालने वाले मानव संसाधनों

को कम करने अथवा उन्हें बिल्कुल दूर कर देने पर अधिक जोर रहा है तथा यह मानकर चला गया है कि ऐसे दबाव वन्य प्राणियों के हितों के प्रतिकूल जाते हैं। यद्यपि ऐसी दृष्टि अपनाना कुछ सीमा तक संरक्षण करने में सफल भी रही है, इसने स्थानीय लोगों को रक्षित क्षेत्रों से अलग भी कर डाला है। इस तरह स्थानीय लोगों की सहायता और सहकारिता प्राप्त करना व स्थानीय जैवविविधता संरक्षण के लिए बहुत आवश्यक पूर्वता क्षेत्रों में आ गया है। इसे ही पारिस्थिकी-विकास धारणा कहते हैं, जैसा कि इसे भारत में तथा एकीकृत संरक्षण और विकास नाम अन्य देशों में दिया गया है। पारिस्थिकी विकास में रक्षित क्षेत्रों के चतुर्दिक रहने वाले लोगों की आजीविका समस्याओं पर ध्यान दिया गया है और उसे रक्षित क्षेत्रों पर पड़ने वाले दबावों का यथासंभव दूर रखने का आधारभूत कार्य मानकर व्यवहार किया गया है। किन्तु, पारिस्थिकी-विकास में लगभग एक दशक का अनुभव मिल जाने पर भी अब सहयोगात्मक प्रबन्ध अथवा संयुक्त रक्षित क्षेत्र प्रबन्ध पर जैसा इसे अब कहा जाने लगा है, ध्यान केन्द्रित किया जाने लगा है, जिसमें स्थानीय समुदायों तथा रक्षित क्षेत्रों के प्रबन्ध में, लोगों के हित जुड़े हुए हैं, उन्हें भी साथ मिलाकर चलने की बात स्वीकारि गई है। प्रस्तुत अभिपत्र में, पारिस्थिकी-विकास के मूल विचार, इसका विकास, तथा इसमें जिन-जिन का हित जुड़ा हुआ है, उन विभिन्न समुदायों की सहयोगात्मक साझीदारी विकसित करने में सामने आने वाली समस्याओं का विवेचन किया गया है। इसमें देशभर के रक्षित क्षेत्रों के प्रबन्ध में समुदायों की भागीदारी के अनुपातन मॉडलों का परीक्षण किया गया है। इसके अतिरिक्त दृढ़नीति और कानूनी सहायता तथा संरक्षण विकास के मजबूत जुड़वों जैसे अन्य कारकों, प्रशिक्षित और लगनशील मानवशक्ति, मजबूत अनुसन्धान आधार तथा नियमित जांच-पड़ताल करते रहने की भी सफलता पाने में भूमिका रहती है। अभिपत्र का निष्कर्ष यह बताया गया है ऐसे कार्यक्रमों को निरन्तर चलाते रह सकने के लिए संयुक्त प्रबन्ध दृष्टि से मिलने वाले स्थानीय समुदायों और उसमें अपना हित रखने वाले वर्गों के तर्कसंगत परिणामों, स्थानीय समुदायों के अधिकारों और जिम्मेदारियों को स्पष्ट किया जाना चाहिए। रक्षित क्षेत्रों की भूदृश्य या क्षेत्रीय स्तर की आयोजना करते समय उनमें एकीकरण के लिए राष्ट्रीय संसाधनों से सम्बन्धित राष्ट्रीय और राज्यीय कानूनों की सर्वसमावेशी समीक्षा कराना भी आवश्यक होगा।

References

- Anon. (1994). *Whose Eden? An overview of community approaches to wildlife management*. International Institute for Environment and Development. A report to the Overseas Development Administration of the British Government.
- Anon. (1996). Staff Appraisal Report. India Ecodevelopment Project. South Asian Department, Agriculture and Water Division, The World Bank, Washington DC.
- Anon. (1997). Regional Study on Wood Energy Today and Tomorrow in Asia. *Field Document No. 50*. Regional Wood Energy Development Programme in Asia. Food and Agriculture Organisation of the United Nations, Bangkok.
- Anon. (1998). *Looking back to think ahead-Green India 2047*. Tata Energy Research Institute, New Delhi.
- Anon. (2000). *National Wildlife Database*. Wildlife Institute of India, Dehra Dun.
- Badola, R. (1995). Critique of People Oriented Conservation Approaches in India: An Entitlements Approach, *Study Report*, Institute of Development Studies, University of Sussex, UK.
- Badola, R. (1997a). A critique of Community Based Conservation Practices in India. Paper presented at *Forum 97: New Linkages in Conservation and Development*. Istanbul, Turkey, November 16-21.
- Badola, R. (1997b). Economic assessment of human-forest relationship in the forest corridor linking the Rajaji and Corbett National Parks. *Ph.D. Thesis* submitted to the Jiwaji Univ. Gwalior, India.

- Badola, R. (1998). Local people amidst the changing conservation ethos: People-Protected Area relationship in India. Paper presented in the *International Seminar on Devolution and Decentralization of Forest Management in Asia and the Pacific*, November 30-December 4, Philippines.
- Badola, Ruchi (1999). People and Protected Areas in India. *Unsalvya*, 199.
- Badola, R., A.K Bhardwaj and B.M.S Rathore (1998). Sharing benefits of Conservation: emerging scenarios in people -PA relationships in India. Paper presented in the *National seminar on Biodiversity Conservation-Challenges and Opportunities*, October 9-10. Indian Council of Forestry Research and Education.
- Badola, Ruchi and S.A. Hussain (1999a). Collaborative Management of Protected Areas: Approach, Evolution and success. Background Paper for the *FAO-UNEP International Technical Consultation on Protected Area Management and sustainable rural development-How can they be reconciled*, 26-29, October, Harare, Zimbabwe.
- Badola, Ruchi and S.A. Hussain (1999b). Status of wildlife conservation in India: Need for public awareness. *Proc. International Workshop on Conservation and Public Awareness of Otters*, 9-12 December, TaiChung, Taiwan.
- Dwivedi, A.P. (1993). *Forests-the ecological ramifications*. Natraj Publishers, Dehra Dun.
- Gomez-Pompa, A. and A. Kaus (1992). Taming the wilderness myth. *BioScience*, 42 (2).
- Guha, R. and M. Gadgil (1992). *This fissured land; an ecological history of India*. Oxford University Press, New Delhi.
- Kothari, A., R.V. Anuradha and N. Pathak (1997). Community-Based conservation: Issues and Prospects, Paper presented at the *Regional Workshop on Community-Based Conservation: Policy and Practice*, New Delhi, 9-11 February.
- Kothari, A., P. Pandey, S. Singh and D. Variava (1989). *Management of National Parks and Sanctuaries in India - Status report*. Indian Institute of Public Administration, New Delhi
- Larson, P.S., M. Freudenberger and B. Wyckoff-Baird (1998). *WWF Integrated conservation and development projects: Ten lessons from the field 1985-1996*. World Wildlife Fund, Holmberg, J. Washington D.C.
- Leach, G. (1987). *Household energy in South-East Asia*, International Institute for Environment and Development, London
- Lynch, O.J. (1992). Securing community based tenurial rights in the tropical forests of Asia-an overview of current and prospective strategies. *Issues in Development*, World Resources Institute, Washington. pp. 2.
- Mahajan, V. (1991). Rural development programmes and wildlife conservation: A framework for policy design. *Report* - Wildlife Institute of India, Dehra Dun.
- Pandey, S. (1998). Biodiversity Conservation at India's Great Himalayan National Park: Lessons for Implementers. Paper presented at *National Seminar on Ecodocumentation*, Wildlife Institute of India, Dehra Dun, November 24-26.
- Panwar, H.S. (1992). Ecodevelopment- an Integrated approach to sustainable development for people and Protected Areas. Paper presented in the *IV World Congress on National Parks and Protected Areas*, 10-21 February, Caracas, Venezuela.
- Pimbert, M.P. and J.N. Pretty (1995). Parks, people and professionals: Putting "participation" into Protected Area management, *Discussion paper*, United Nations Research and Social Development, International Institute for Environment and Development and World Wildlife Fund.
- Poffenberger, M. and C. Singh (1993). The legal framework for Joint management of lands in India. *Legal frameworks for forest management in Asia: Case studies of community / State relations*. (Ed. Jefferson Fox).

- Rathore, B.M.S. (1996). Joint management Options for Protected Areas: Challenges and Opportunities. *People and Protected Areas: Towards participatory conservation in India* (A. Kothari, N. Singh and S. Suri, Eds.), Sage Publications, New Delhi.
- Rathore, B.M.S., A.K. Bhardwaj and R. Badola (1998). Changing paradigm of conservation and development, Paper presented at *Workshop on Ecodocumentation*, Wildlife Institute of India, Dehra Dun, November 24-26.
- Rodgers, W.A. (1992). *Guidelines for ecodevelopment around Protected Areas in India*. Draft. Wildlife Institute of India. Dehra Dun
- Sanjayan, M.A., S. Shen and M. Jansen (1997). Experiences with integrated-conservation projects in Asia. *World Bank Technical Paper No. 388*. The World Bank, Washington, D.C.
- Singh, S. (1998). Ecodevelopment in India: Some Concepts and Issues. Paper presented at *National Workshop on Ecodocumentation*, Wildlife Institute of India, Dehra Dun, November 24-26.
- Wells, M. and K. Brandon (1992). *People and parks: Linking protected area management with local communities*. The World Bank; W.W.F. and U.S.A.I.D. Washington, D.C.
- Wells, M.P. (1992). Biodiversity conservation, affluence and poverty: mismatched costs and efforts to remedy them. *Ambio* 21 (3): 237-243.
-