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IMPLEMENTATION COMPLETION REPORT
(PPFI-P9100 IDA-29160 TF-28479)

ON A

CREDIT/GRANT

IN THE AMOUNT OF US$ 48 MILLION

TO THE

GOVERNMENT OF INDIA

FOR INDIA ECODEVELOPMENT PROJECT

October 31, 2004

South Asia
Agriculture and Rural Development

CURRENCY EQUIVALENTS

(Exchange Rate Effective)

Currency Unit	=	Rupees (Rs.)
Rs. 1	=	US$ 0.023
US$ 1	=	Rs. 44

FISCAL YEAR
2004 2005

ABBREVIATIONS AND ACRONYMS

BCRLP : Biodiversity Conservation and Rural Livelihoods Project
BNHS : Bombay Natural History Society
BZ : Buffer Zone
CAS : Country Assistance Strategy
CBD : Convention on Biological Diversity
CCEA : Cabinet committee on Economic Affairs
CDF : Community Development Fund
CW : Civil Works
DEA : Department of Economic Affairs
DO : Development Objective
EDC : Ecodevelopment Committee
FDA : Forest Development Agency
FREEP : Forestry Research, Education and Extension Project
GEF : Global Environment Facility
GO : Government Order
GOI : Government of India
GOK : Government of Karnataka
GOR : Government of Rajasthan
GOS : State Government
Ha. : Hectares
HH : Household
ICB : International Competitive Bidding
IDA : International Development Association
IBRD : International Bank for reconstruction and Development
IEDP : India Ecodevelopment Project
IUCN : International Union for Conservation of Nature
JFM : Joint Forest Management
KMTR : Kalakkad Mundanthurai Tiger Reserve
LCB : Local competitive Bidding
LPG : Liquified Petroleum Gas
KMs : Kilo Meters
M : Millions
METT : management Effectiveness Tracking Tool
MOEF : Ministry of Environment and Forests
MTR : Mid Term Review
NCB : National Competitive Bidding
NBF : Non Bank Finance

NGO : Non Government Organisation
NTFP : Non-Timber Forest Produce
PA : Protected Area
PAMIA : Protected Area Mutual Impact Assessment
PPF : Project Preparation Facility
PRA : Participatory Rural Appraisal
PRI : Panchayati Raj Institutions
PTO : Project Tiger Office
SAR : Staff Appraisal Report
SFD : State Forest Department
SHG : Self Help Group
SOE : Statement of Expenses
Sq. Km. : Square Kilometers
TOR : Terms of Reference
TR : Tiger Reserve
UNDP : United Nations Development Program
VDF : Village Development Fund

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Sector Manager	Adolfo Brizzi
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INDIA
Ecodevelopment

CONTENTS

Project ID: P036062	*Project Name:* Ecodevelopment
Global Supplemental ID: P009584 *(Fully Blended)*	*Supp. Name:* Ecodevelopment
Team Leader: R. R. Mohan	*TL Unit:* SASES
ICR Type: Core ICR	*Report Date: March 8, 2005*

1. Project Data

Name: Ecodevelopment
L/C/TF Number: PPFI-P9100; IDA-29160
Country/Department: INDIA
Region: South Asia Regional Office

Sector/subsector: General agriculture, fishing and forestry sector (38%); General public administration sector (24%); Sub-national government administration (22%); Forestry (9%); Other social services (7%)
Theme: Biodiversity (P); Participation and civic engagement (P); Environmental policies and institutions (S); Indigenous peoples (S)

KEY DATES			Original	Revised/Actual
PCD:	01/22/1992	*Effective:*	12/09/1996	12/29/1996
Appraisal:	05/07/1995	*MTR:*		05/24/2000
Approval:	09/05/1996	*Closing:*	06/30/2002	06/30/2004

Supplemental Name: Ecodevelopment
L/C/TF Number: TF-28479

Sector/subsector: Other social services (57%); Central government administration (41%); Vocational training (2%)
Theme: Biodiversity (P); Participation and civic engagement (P); Environmental policies and institutions (P)

KEY DATES			Original	Revised/Actual
GEF Council:	04/01/1995	*Effective:*	12/09/1996	12/29/1996
Appraisal:	05/07/1995	*MTR:*		05/24/2000
Approval:	09/05/1996	*Closing:*	06/30/2002	06/30/2004

Borrower/Implementing Agency: GOI/MOEF
Other Partners: State Forest Departments of Bihar/Jharkhand, Gujarat, Karnataka, Kerala, Madhya Pradesh, Rajasthan and West Bengal

STAFF	Current	At Appraisal
Vice President:	Praful C. Patel	D. Joseph Wood
Country Director:	Michael F. Carter	Heinz Vergin
Sector Manager:	Adolfo Brizzi	Shawki Barghouti
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2. Principal Performance Ratings

(HS=Highly Satisfactory, S=Satisfactory, U=Unsatisfactory, HL=Highly Likely, L=Likely, UN=Unlikely, HUN=Highly Unlikely, HU=Highly Unsatisfactory, H=High, SU=Substantial, M=Modest, N=Negligible)

Rating

Outcome:	S
Sustainability:	L
Institutional Development Impact:	SU
Bank Performance:	S
Borrower Performance:	S

	QAG (if available)	ICR
Quality at Entry:	S	S
Project at Risk at Any Time:	Yes	

The project performance has shown a substantial turn around after MTR

3. Assessment of Development Objective and Design, and of Quality at Entry

3.1 Original Objective:

The main objective of the project was to conserve biodiversity by implementing the ecodevelopment strategy of the Government of India in and around seven protected areas (PAs). The project was conceived as a first five year time slice to pilot the approach for a longer program which would be expanded to other protected area sites. Accordingly the project also included support for preparation of future biodiversity projects. Specific objectives were: (a) to improve capacity of PA management to conserve biodiversity and increase opportunities for local participation in PA management activities and decisions; (b) to reduce negative effects of local people on biodiversity, reduce negative impacts of PAs on local people and increase collaboration of local people in conservation efforts; (c) to develop more effective and extensive support for ecodevelopment; (d) to ensure effective management of this project; and (e) to prepare future biodiversity projects. The project objectives were consistent with the Bank's Country Assistance Strategy (CAS) and government priorities. The global objective, to conserve biodiversity in seven critical areas in a megadiversity country, was fully consistent with guidance from the Convention on Biological Diversity (CBD) and GEF Council guidance.

3.2 Revised Objective:

At the Midterm review (MTR) the objectives were reviewed to focus on implementation of ecodevelopment activities around the seven PAs and the preparation of future biodiversity projects was dropped.

3.3 Original Components:

The project was designed as a fully blended IDA/GEF project, costed at $67 M over five years. The project had five main components which corresponded to the specific objectives.

a) **Improved PA management** (estimated costs US$15.3 M; 23% of total costs; actual expenditures US$15.m; 25% of total costs). The park management component aimed to strengthen park protection and management in seven PAs through (i) improved PA planning processes and building capacity of PA staff (ii) incorporating PA concerns into regional planning and regulation (iii) protecting and managing ecosystems and habitats within the PA and (iv) upgrading PA amenities for field staff.

b) **Village ecodevelopment** (US$36 m; 54% of total costs; actual expenditures US$ 33 M, 54% of total costs). This component was designed to reduce negative impacts of local people on biodiversity and increase collaboration of local people in conservation by: (i) conducting participatory microplanning and providing implementation support for microplans in ecodevelopment villages (ii) implementing reciprocal commitments that foster alternative livelihoods and resource uses, to be financed by a village ecodevelopment program, with specific measurable actions by local people to improve conservation (iii) special programs for additional joint forest management, voluntary relocation, supplemental investments through a discretionary fund for special needs that could not be covered under the routine ecodevelopment activities and a provision for entry point activities though a credibility fund to build initial rapport.

c) **Education and awareness and impact monitoring and research** (US$5.2 M – 8.7% of total cost; actual expenditures US$ 2.8 M; 4.5% of total costs) to develop more effective and extensive support for PA ecodevelopment including: (i) promoting public support for conservation through environmental education and awareness campaigns; (ii) impact monitoring and research to improve understanding of issues and solutions relevant to PA management and interactions between PAs and people.
d) **Overall project management** (US$ 5.8 M, 9% of total costs; actual expenditure US$ 9.3 M, 15% of total costs)
e) **Preparation of future biodiversity projects** (US$ 2.6 M, 3.9% of base costs; actual expenditure US$ 0.61 M, 1.0% of total costs) including (i) Second Ecodevelopment project (ii) Biodiversity Information project and (iii) Ex-situ conservation project. Additionally, the project included reimbursement of Project Preparation Facility (US$2 M or 3% of total costs; actual expenditure US$ 0.05 M, 0.1% of total costs).

3.4 Revised Components:

The process-oriented project design, required creation of new institutions at village level and new skills among forestry staff and villagers. In the context of the initial poor performance and unsatisfactory rating of the project and to better reflect the time needed to build this capacity, during MTR, targets for EDC microplans were reviewed and reduced at individual sites so that activities could be completed within the *original* project time frame. This meant that all buffer zone villages were not able to form EDCs and prepare microplans and some original target villages were excluded. At the same time, allocation norm per household was increased from Rs10,000 to Rs 12,500 and additional emphasis was placed on targeting the most needy and forest-dependent members of communities. The MTR also emphasized the need to capture and disseminate lessons learned from specific sites and to develop sustainability strategies for ecodevelopment activities at specific sites. At scheduled closure (June 2002), at the request of GOI, the project sites were offered opportunity for 2 one year extensions, subject to satisfactory performance against agreed criteria. Based on actual performance against the criteria, Six parks got 2 one year extensions and one park could get only a one year extension. The project cost allocations were restructured after cancelling close to US$ 8 M from the Credit (US$ 5.6 M) and Grant (US$ 2.2 M) in June 2002. An exercise to re-denominate the GEF grant in US$ (instead of SDRs) was carried out in September 2004.

3.5 Quality at Entry:

Satisfactory. The project's primary biodiversity and environmental objectives were fully consistent with India's biodiversity and GEF priorities. The GOI was committed to piloting a participatory process to PA management and ecodevelopment which set new standards for relationships between forestry staff and village communities living in and around PAs.

It was always recognized that five years was a short project duration and the project was conceived as an intervention within a larger time scale. The project's scale, process-oriented design, institutional complexity and implementation schedule were ambitious and demanded strong support and commitment from State governments and capable NGO assistance. It was one of the early fore runner of process oriented project designs in the Bank. Some of the positive features of the design were : (i) the project addressed key components giving importance to technical and social issues; (ii) it incorporated a social assessment, a participation plan, and process documentation; (iii) for the first time,m there had been consideration of voluntary resettlement in a protected area context; (iv) the project attempted to reconcile the legitimate needs of both conservation and communities (quid-pro-quo linkages between investments benefiting local people and linkages to local people's conservation responsibilities and actions) which required close monitoring of reciprocal commitments and impacts; (v) the design was supported by field oriented assessment of "indicative' planning; (vi) the preparation process emphasised on client ownership and consultations with stakeholders; (vii) exhaustive documentation and detailed guidelines were prepared as part of preparation; (viii) the design approach to include community contribution of 25% helped in directing the proposed activities to be demand based and led to better accountability of the forest

department (though some useful lessons have been learnt subsequently in structuring the community contribution); (ix) the concept of generating a Community Development Fund (CDF) was an important pillar for local level EDC sustainability after the close of the project (as substantial resources would still be available with communities for continued development);

In the context of an evolving devolution of power (between centre and states governments), institutional capacity was over estimated. In hind sight, it would have been useful to : (i) reach more specific agreements on capacity building, streamlining of procedures, delegation of authority, budget flows and specific commitments to time-bound contracting; (ii) tie outside research contracts more rigorously to collecting baseline information and socioeconomic and biological monitoring at specific sites to assess project impacts; and (iii) though the project document identified key risks, it would have been more useful to carry out a sitewise segregated risk analysis (instead of clubbing all risks for all sites),; (iii) the project did not formally institute an organised strategic communication process (though it did stress on the need for communication with stakeholders); (iv) the criteria for selection of villages based on distance factor (2 KMs or 5 KMs did not, at some sites, adequately cover the impact zone.

The selection of multiple sites in different states was both an advantage and a disadvantage. The present design offered an interesting opportunity for experimentation and cross learning, while at the same time, it did diminish statewide engagement of the state forest department. Early critics of the project were of the view that the funding level being high, the project sites would attract influx from outside, which has not been found to be true in hind sight. Critics were also sceptical of the voluntary relocation concept in the prevailing context of the wild life act and related supreme court rulings. The project did prove, on a limited scale, that subject to carefully adhered process steps, voluntary relocation could be a feasible alternative. Some early critics were of the view that this project will cause starvation of resources for other wild life areas in the states. How ever, this fear does not seem to have come true in reality.

Considering all these factors, the overall Quality at Entry is rated as satisfactory.

4. Achievement of Objective and Outputs

4.1 Outcome/achievement of objective:

Satisfactory. The project has had significant environmental, social, economic and institutional impacts as documented by the key performance indicators (Annex 1) and detailed description provided in Annex 9.

Overview : This project is an example of a turn-around story. The project had a slow take off and the progress was unsatisfactory in the initial periods. Though the project became effective in December 1996, funds could not flow for an year (till October 1997) for want of approval by the Union Government. Complaints received from Nagarahole park culminated in an enquiry by the inspection panel (see section 7.2 and annex 10). These developments were further compounded by lack of continuity of task leadership and the project was rated as unsatisfactory. By MTR, there was a compelling need to restructure the project by revising targets of EDC coverage to realistic levels and given the poor performance at this stage, it was even decided to drop the component on preparation of future biodiversity projects. The project really started to perform only after the MTR, thanks to renewed efforts by all stakeholders (Communities, GOI and PA staff) with revised/refocused targets. Achievement of better results in the end was also facilitated by extensions of Credit/Grant closing date based on performance of the parks on agreed criteria.

Project outcomes and achievements :

Biodiversity Conservation and Environmental Benefits : **Highly Satisfactory.** Stakeholder workshops at all the sites identified improved conservation, measurable decreases in village generated threats to the PAs and improved people-park relationships as key positive outcomes of the project. Results of participatory monitoring activities indicate that : (i) a stable or slight increase in key carnivore and prey populations; (ii) improvement in the overall management effectiveness of the parks; (iii) all sites show a significant reduction in resource use (for fuelwood, grazing) that are attributable to project interventions;

Social and community benefits : **Satisfactory.** The project contributed towards improvement in the lives and livelihoods of local communities. Such social benefits included: (i) income generation opportunities benefiting poor communities close to the protected areas (e.g. the role of EDCs in pilgrim management at Periyar); (ii) sustained communities under severe drought conditions through wage labour (e.g., Ranathambore park); (iii) empowerment of local communities, particularly poor groups, by offering voice and choice through participation in planning, implementation and monitoring of ecodevelopment activities; (iii) offering opportunities to women (as members of EDC executive committees, through promotion of self help groups and as direct beneficiaries of targeted programmes); (iv) benefits to tribals and landless in many of the fringe villages through provision of community infrastructure, wage labour and targeted programmes (e.g., tribal trekkers in Kerala). Sample socio-economic surveys indicate improved incomes due to increased agricultural productivity(irrigation) and other incomes (ecotourism). The Hadi dwellers in the Nagarahole park (Karnataka), were not able to derive the full potential of benefits due to factors discussed under Annex 10.

Achievement of specific project development objectives (PDO) :

The project has successfully achieved its development and global objectives by developing many of the new processes, systems and capacity for implementation and expansion of the ecodevelopment management model.

DO1: *Improved capacity of Protected Area (PA) management to conserve biodiversity and increase opportunities for local participation in PA management activities and decision making* : **Satisfactory.** At all sites the project improved the capacity of PA management to conserve biodiversity, and work with local communities to increase collaboration, and benefits from, conservation efforts. The reconstituted Stakeholder committees have started meeting in all parks after a systematic review of membership. Regional planning committees have been constituted at all project sites. Forestry staff, at several sites, worked with EDCs to develop and implement highly innovative solutions which addressed both PA management and livelihood needs.

DO2: *Reduced negative impacts of local people on biodiversity, reduced negative impacts of PAs on local people, and increased collaboration of local people in conservation efforts* : **Satisfactory.** In project sites 581 EDCs covering about 75,000 HHs (SAR target 806 EDCs covering 71,000 HHs) are operational. Participatory monitoring systems from the field indicate continued improvement with regard to negative impact of people on PAs and vice versa. IUCN instrument, which was administered to all parks, confirms improved Park-People relationships. EDCS have generated substantial funds (US$ 4 million) and have started managing these funds using guidelines developed through a participatory process.

DO3: *More effective and extensive support for conservation and ecodevelopment* : **Satisfactory.** The project led to more effective and extensive support for the ecodevelopment model, including policy changes so that all seven states passed government orders to institutionalize ecodevelopment statewide for PAs. Individual sites have developed strategies to continue and expand ecodevelopment activities through

linkages to other State and national government programs (e.g. Forest Development Agency in Nagarahole park, Famine Relief programs in Ranthambore) and/or establishment of new financing mechanisms (e.g. Periyar Foundation).

DO4: *Effective management of the project* : **Satisfactory.** Despite bottle necks in early phases, (i) funding requests of Parks were promptly attended; (ii) all delayed/pending studies and dissemination activities have been completed; (iii) monitoring tools have been main streamed across project tiger sites; and (iv) lessons learnt have been widely disseminated by PTO to other parks, NGOs and other stakeholders.

DO5: Preparation of future biodiversity projects : **Unsatisfactory.** Since the proposed future biodiversity project has not been prepared, this DO is rated as 'Unsatisfactory".

Global Objective :
To conserve biodiversity in seven critical areas in a megadiversity country in order to contribute to global biodiversity conservation and to do so in a way that would reduce negative impacts of local people on PAs and reduce negative impacts of PAs on local people: **Satisfactory.** The project has achieved its global objective by (i) strengthening the protection and management of 6020 Sq. Km of recognized global importance for biodiversity; (ii) adding 18.19 Sq. Km of additional protected areas (Gir Park); (iii) developing many of the new processes, systems and capacity for implementation and expansion of the ecodevelopment management model in relation to ***PA management and collaboration with local communities, Support for ecodevelopment,*** *and* ***Replication*** potential through dissemination of lessons learnt to other parks in the country (an indicator being renewed interest shown by GOI for a new project *Rural Livelihoods and Biodiversity Conservation* which will build on IEDP lessons). Simple monitoring systems, involving PA staff and villager participation and self-monitoring, demonstrate measurable decreases in village generated threats to the PAs and vice versa. IUCN monitoring questionnaire reveals that there is significant improvement in people - park relationships in comparison with pre-project situation. Based on these factors, the global objective is rated as "Satisfactory".

4.2 Outputs by components:
The project performed satisfactorily overall at the activity level, producing the expected outputs (see Annex 9 for details).

Improved Protected Area Management**:** Significant achievements include (i) preparation of new/revised management plans in all seven sites incorporating zonation, tourism management, environmental education and community participation; (ii) preparation of baseline maps with GIS capability; (iii) identification of measures to better integrate PA management with regional planning; (iv) development of sustainability strategies at park level; (v) ecorestoration activities (clearance of invasive species, water management); (vi) upgradation of park infrastructure (communication systems, staff accommodation, camping/patrol infrastructure and basic field kits); (vii) training of park staff (field work, surveys and study tours-cross visits and limited overseas visits). Limitations experienced were mainly related to persistent staff vacancies at many sites.

Ecodevelopment : Major achievements include (i) forming and supporting over 580 EDCs covering close to 75,000 households (including formation of innovative groups such as professional groups, user groups and federations); (ii) participatory preparation and implementation of micro plans benefitting communities (local infrastructure, irrigation, community facilities, income generation) and individual households (fuel saving devices, skill building, income generation); (iii) generation of substantial community development funds (estimated at US$ 4 million) through community contributions for EDC sustainability; (iv) conduct of community capacity building activities (including exposure visits, EDC management training, skill

training; (v) promotion of over 1000 women self hep groups; (vi) establishment of participatory monitoring systems to monitor reciprocal commitments; (vii) establishment of guidelines for sustainable management of community development funds; (viii) promotion of innovative EDC groups (professional groups, user groups); (ix) emergence of voluntary patrol groups and communication systems forewarning park staff of presence of poachers in the park vicinity; (X) investments for reducing human-wildlife conflicts (game proof walls/fences, insurance schemes for crop/hut damage) and (xi) targeted interventions with the use of special (credibility/discretionary) funds to build initial credibility and to attend to special needs having high conservation value.

Limitations experienced in the implementation of the component related to (i) lack of dedicated staff for ecodevelopment in some locations; (ii) inadequate professional/NGO support available at some sites (to ensure transparency, inclusion and accountability of local level institutions); (iii) inadequate capacity building of EDCs in some parks (e.g., Ranathambore park); (iv) non-coverage of the impact area, partly due to reducing the coverage during MTR and partly due to inadequacy of the 2 Km impact zone definition; (v) in parks and EDCs where only individual household level investments were targeted, the poor and needy groups were being left out due to the 25% cash contribution expected. At later stages of the project, all parks made attempts to address these left out groups through special programmes and by reorienting the investments to community level (rather than household level) and encouraging contribution 'in kind'. By and large, all sites demonstrated a high degree of innovation and contributed best practice examples.

Research and impact monitoring : Achievements under this component include : (i) Some parks (Gir and Periyar parks) undertook highly relevant wildlife and socio economic research; (ii) 30 small short term research projects were supported focussing on park management requirements; (iii) the management effectiveness tracking tool (METT) was used to track progress and the refined tracking tool has been main streamed by PTO for other parks; and (iv) tools for participatory impact monitoring were introduced.

Though the project provided for a generous funding of this component, limitations experienced in implementation included the following: (i) management oriented research needs identified in the management plans came too late; (ii) some research needs were not relevant to PA management; and (iii) procedural delays in selection. appointment and award of studies; and (iv) inadequate dissemination of research reports (only exception being Periyar park which displayed summaries all research studies in its web site). As a result, the funding remained largely under utilised.

***Conservation Awareness* :** Achievements under this component included (i) running of effective educational and media campaigns ; (ii) training of teachers; (iii) education centers, nature camps and nature workshops for schoolchildren as well as Eco-clubs and national Green Corps in schools; (iii) establishment of Eco-clubs in EDC villages; (iv) publishing of news letters; (v) dissemination of information from economic studies on the value of the park to local communities; (vi) street plays, processions and wildlife weeks and nature clubs that provided important opportunities to link PAs to local community and culture; and (vii) preparation of local language field guides on the Birds of North India (Urdu, Hindi, Gujarati) and South India (Tamil, Kannada, Marathi, Malayalam and Telugu).

Project Management

The overall project was managed by the Project Tiger Office in MOEF. The project made a serious attempt to capture and disseminate lessons learned during implementation. Exchange of lessons learned (from the earlier FREEP project as well as the IEDP sites) between sites and more widely through dissemination workshops were useful. This level of analysis and dissemination can be regarded as best practice. From the MTR onwards, Consultants were employed to monitor project progress at all PA sites and provide

feedback to PTO for appropriate action. PTO successfully organised international exposure visits and led a team to the parks congress in South Africa where it organised a widely appreciated working session on the IEDP. PTO also mainstreamed the METT monitoring tool as a part of regular monitoring system for other parks. By and large, PTO ensured timely release of funds to the states.

Limitations experienced included the following : (i) PTO had to cope with diverse demands from other Project Tiger responsibilities and lacked adequate staff to perform techno-managerial functions (including financial management) expected of it; (ii) the institutional set up as envisaged in SAR ("watchdog") did not materialize; (iii) there was no incentive for the states to have a State level coordinating mechanisms as the project covered only one site in each state; (iv) technical assistance at individual sites, was not always fully utilized; and (v) better management of consultants would have ensured better quality and timely delivery of products.

4.3 Net Present Value/Economic rate of return:

At appraisal it was recognized that no economic analysis could be carried out for this project as a whole because of the heterogeneous nature of the benefits (biodiversity conservation, empowerment, alternative livelihoods) and the near impossibility of quantifying many of them.

4.4 Financial rate of return:

No financial analysis was carried out for any of the project's components or activities for similar reasons stated above.

4.5 Institutional development impact:

The project supported significant changes within the implementation organizations and in external relationships between the Forestry staff and the park and forest fringe villagers in park buffer zones. **The improvement in relationships between PA staff and local communities at all PAs may be one of the most significant contributions to long-term sustainability of the PAs and biodiversity conservation in India.** The project also contributed to improved and more collaborative working relationships between the PA management staffs and other government line departments at the field level, including through the regional planning committees chaired by the District Collector. The project also improved collaboration between PA staff and local government structures such as the panchayats and empowered local villagers to better take part in, and benefit from, local governance processes. These new partnerships as well as the capacity and social capital built at the village level through the Ecodevelopment process are likely to contribute to the sustainability of achievements to date.

5. Major Factors Affecting Implementation and Outcome

5.1 Factors outside the control of government or implementing agency:

The influence of outside factors has been mixed. Militant activity (mainly in Jharkhand State and to some extent in West Bengal) made working conditions difficult for forestry staff. Nevertheless, in both states, PA staff have been able to build up effective working relationships with local communities and establish effective EDCs, even when other government agencies have not been able to operate, and, in the case of Palamau, with very limited funding for the early part of the project. Severe drought in Ranthambore (Rajasthan) and Gir (Gujarat) impacted on village welfare and slowed down implementation of EDC activities since it was difficult for individuals and communities to raise the necessary 25% contributions towards ecodevelopment activities in drought years. In Rajasthan, the PA staff were able to mobilize resources under the Famine Relief program for construction of game-proof walls and rehabilitation of step wells in addition to the resources provided under the project. These activities not only provided wage labour for poor villagers, but also provided substantial conservation benefits, reduced park-village conflict (reduced wildlife crop raiding in village fields) and water sources for livestock outside PA boundaries.

Adverse publicity from some activist NGOs, and especially controversy about the Nagarahole park and resettlement of tribals, affected the public perception of the project. Innovative measures which can reconcile conservation and the legitimate needs of local communities and provide a useful model for future interventions did not get the attention that it deserved. A two way project communications strategy, in place from the outset, would have helped the project to absorb new insights from civil society and professional debate and at the same time help disseminate accurate updated information and results from the project.

5.2 Factors generally subject to government control:

(i) *Delays in the Budget flow* at the state level has been a major issue throughout the project with regular delays in budget disbursements and special budgets arriving late in the financial year, limiting their usefulness. Fund flows from State governments were especially poor in Palamau (Bihar) and Ranthambore (Rajstahan) parks but also affected the Gir (Gujarat) park. Fund flows to the Palamau park improved dramatically after the creation of the new state of Jharkhand. (ii) *Staff deployment and skill need*: In most states, restrictions on new recruitment to replace aging staff is a continuing constraint for PA management. (iii) *Contracting*: Clearance delays in processing and approval of consultant contracts, both at central and state levels delayed or prevented implementation of several consulting contracts. The problem was especially acute in Rajasthan where Ranthambore park was unable to benefit from any consulting contracts to assist with management planning, research, ecodevelopment training or to build a new visitor centre because of delays and lack of clearances from the state government.

5.3 Factors generally subject to implementing agency control:

Strong commitment at individual PA levels enabled the development of strong PA-community relationships and led to considerable innovation and progress in furthering ecodevelopment objectives and modalities. The project design envisaged considerable assistance and support from NGOs with the community moblisation, conduct of PRA and microplanning process aspects of ecodevelopment. These support organisations were expected to contribute their expertise in ensuring that local level institutions were inclusive, transparent and accountable. Lack of good NGO capacity at several sites delayed microplanning and led to PA staff having to take on this responsibility. This increased the burden of work on local field staff when they were already beset with staff shortages. This is one of the factors causing variance among the EDCs in their performance quality. In some cases (e.g., Nagarahole park), inability to locate suitable NGOs with requisite skills, capacity and tribal knowledge, adversely affected the quality of *Hadi* (in-park settlement) microplanning and trust building processes. State forest departments could also have also proactively adopted communication strategies to disseminate project achievements and to learn from feed back.

5.4 Costs and financing:

The total project cost was estimated at US$ 67 million at appraisal with funding by IDA Credit (US$ 28 M), GEF Grant (US$ 20 M), Central and State Governments (US$ 14.4 M) and Communities (US$ 4.5 M). Based on the revised targets at MTR, a sum of US$ 8 M was cancelled, Credit/Grant allocations were restructured in June 2002 and the revised cost stood at US$ 63.30 M. A re-denomination exercise was carried out to denominate the GEF Grant in US$ (instead of SDRs) in September 2004. The actual estimated total project costs at end of project (EOP) stood at US$ 61.02 M comprising Improved park management US$ 15.5 m (SAR US$ 15.31 M, revised US$ 15 M); Village ecodevelopment US$ 32.75 M (SAR US$ 36 M, revised US$ 35 M); Develop support for ecodevelopment US$ 2.8 M (SAR US$ 5.2 M, revised US$ 3 M); and Project Management US$ 9.3 M (SAR 5.83 M, revised US$ 9.4 M. Funds allotted for preparation of future biodiversity projects (SAR US$ 2.6 M, actual US$ 0.61 M) was not used as result of the decision during MTR to drop this component. The funds provided for PPF (SAR US$ 2 M, actual US$ 0.05 M) remained unutilised.

Utilisation of IDA Credit (actual US$ 18.63 M as against SAR US$ 28 M) stood at 66.5% of SAR estimate and 93% of the revised estimate .The utilisation of GEF Grant (actual US$ 16 M as against SAR US$ 20 M) stood at 80% of SAR estimate and 94% of the revised estimate. This is a fully blended project and the relative share of funding of components by IDA Credit and GEF Grant remained more or less as intended, though some minor variations are noticed. The share of Government funds has increased (SAR US$ 14.4 M, actual US$ 21.4 M), mainly because of project extension for 2 years and the consequent increase in non-bank funded project management costs. Categorywise disbursement shows substantial increase in civil works and equipment costs, largely due to additional eco-restoration activities (which also served as employment generation source) than anticipated at appraisal (See Annex 2 for detailed analysis).

The Project was designed in a pre-LACI era and consequently, there was limited financial management inputs during the preparation of the Project. PTO did not have sufficient oversight over the finance function, other than transfer of funds based on approved annual plans. Periodic training of project staff in Bank policies and procedures, an essential requisite considering the frequent transfers of government personnel, was also lacking. As a result, there were instances of mis-classification of expenditure, claiming of ineligible expenditure, significant errors in preparation of claims etc. Audit reports were delayed by some PAs (Rajasthan, Bihar/Jharkhand, Madhya Pradesh, Gujarat), which lead to issuance of warning letters and at times temporary suspension of reimbursement of SOEs during the life of the project. On account of these lapses, the financial management of the project was rated unsatisfactory for some time. However, the project authorities at the State level took initiatives to resolve some these issues and the situation improved partially with time.

6. Sustainability

6.1 Rationale for sustainability rating:

Likely. While it is still early days to assess the sustainability, particularly given the complex interplay of natural, socio-economic and political factors, the likelihood of sustainability of the project outcomes is rated as 'likely' based on an assessment at three levels (local EDC, park/State and national levels).

EDC Level sustainability : (i) Institutional sustainability: Substantial progress has been achieved in mobilizing local communities for conservation through the formation of EDCs. The EDCs have been given capacity building inputs through (a) training and exposure visits; (b) formation of federations; (c) formation of SHGs and linking them with EDCs and other financing institutions; (d) linking EDCs with local governments. At sites where quality and quantity of effort at capacity building have been high results are obvious and likely to be lasting. (ii) Financial sustainability In almost all EDCs substantial funds have accrued to CDFs (approx. US$ 4 million). The sustainability of the EDCs beyond the project rests with the EDC's ability to effectively manage and utilize the CDF as revolving funds with financial accountability and transparency (regular audits). All PAs have developed guidelines and procedures for utilization of CDF funds, but Ranthambore and Palamau parks need to provide additional training to improve management: (iii) Social sustainability Although the project did not specifically target only the poorest and most forest-dependent members of the community, later interventions, especially creation of community infrastructure, helped to increase income and employment of poorer members through wage labour. SHGs also proved to be effective mechanisms for empowering women. Increased focus has been put on outreach and extension activities to build local support, including activities targeted towards local schools. (iv) Ecological sustainability has been built into PA management plans(e.g. zoning for visitor and wildlife management; habitat restoration and water management; clearance of invasive species; recommendations for an expanded buffer zone at Periyar and creation of Meghamalai Sanctuary across the border in Tamil Nadu). The improved relationships with villagers and participatory monitoring show that threats from

village use of PA resources have been substantially reduced at all PAs. Field assessments indicate that about 60-70% of EDCs are capable of sustaining their activities with minimal external inputs. How ever, it is important that PAs continue to expand training to build capacity of EDC members with a focus on 1) management of CDFs and SHGs 2) decision making and conflict resolution and 3) accessing external grants and resources, including skills and fund management training through national-level NGO programs (e.g. CARE). While necessary inputs and systems are in place, continued sustainability is dependent on follow-up measures on the above from the field officers. Linkage of EDCs with Panchayat Raj institutes will further contribute to enhanced likelihood of sustainability. .

Park/State level sustainability : Regional coordinating committees are functioning well in Palamau, Gir and Pench park areas. These committees provide links between the PAs and other government agencies to better integrate PA and ecodevelopment objectives into regional development. Pench is able to access funds from a State PA fund, fuelled by PA visitor fees, while Periyar has set up a Park Welfare Fund and the Periyar Foundation, which benefits from visitor fees. Ranthambore also has an ecodevelopment tourism surcharge in place (although GOR is yet to return these funds to the park). As part of their sustainability strategies, all PAs have identified and are accessing additional sources of funding to maintain ecodevelopment efforts including access to regular government funds for rural infrastructure (Buxa; Gir, Periyar, Ranthambore); forest development corporations and FDAs (Buxa, Nagarahole parks) and panchayat programs (e.g. Periyar, Gir). State governments in all states (except Kerala) have issued clear enabling orders for ecodevelopment. These were first issued for specific sites only for the duration of the project but were subsequently made open-ended and applied state-wide so that experiences can be replicated at other PAs. **One important threat** that still needs to be addressed is the case of villages that have an impact on project parks, but which have not been covered under the project. This is a matter of concern particularly in Ranathambore park where significant number of impacting villages are yet to be covered under ecodevelopment and the state support has been found wanting..

National level sustainability : The continued financial support and commitment from the Government of India for wild life conservation and ecodevelopment seems assured. The following indicators augur well for long term support to the ecodevelopment programme and wildlife conservation n India : (i) Plan allocation for wild life conservation has been stepped up from Rs. 1700 million in the VIII th plan (1996/97-2001/02) to Rs. 4700 million in the IX th plan (2002/03-2007/08). There are indications that the total budget may reach Rs. 8000 million during the X th plan; (ii) Ecodevelopment strategy has been incorporated in the approach to the X th plan documents and ecodevelopment has been institutionalized as a fund delivery and management model both nationally and at the state levels. Commitment and interest of GOI is also visible through a request for a land scape based follow-on project, which will cover other non project sites. Beyond the project lifetime, central government funds will be channeled through PTO to provide resources for capacity building and ecodevelopment activities. **PTO needs to address the threat related to impacting villages in the project areas that were not covered under IEDP** through funding and technical support (particularly worrisome is the case of Ranathambore park).

6.2 Transition arrangement to regular operations:

Many of the project activities are already integrated into regular Forestry department operations and MOEF, through PTO, provides a regular budget to finance ecodevelopment activities. Individual protected areas have also been highly proactive in finding mechanisms to continue and expand ecodevelopment, including establishment of PA funds and better linkages with State and federal programs include FDA arrangements. The plan documents of MOEF and GOI have incorporated the ecodevelopment approach.

7. Bank and Borrower Performance

Bank

7.1 Lending:

Bank Identification and Preparation. **Satisfactory.** The project built on previous experiences with Joint Forest Management in India, was highly participatory and designed with professional support from national consultants having experience and knowledge of local forestry and conservation issues.

Bank Appraisal. **Satisfactory.** The appraisal team had a good multi disciplinary skill mix and appropriately assessed commitment, capability, and complexity of all major relevant aspects of the project. The 1994 GOI proposal was for 8 sites but the Bank reduced the project to seven sites by excluding Simlipal park over concerns about proposed involuntary resettlement of people from the protected area. The appraisal document is a best practice example in providing detailed treatment of guiding principles and processes. The down side relates to over-estimating the availability, capacity and willingness of NGOs to collaborate with forestry departments in microplanning activities and under estimating the time period associated with clearance procedures in GOI.

7.2 Supervision:

Satisfactory. The Bank's performance during early implementation of the project was problematic with four Task Team Leaders in the first three years of implementation. The project was also impacted by the decision to refer the project to the Inspection Panel. Later supervisions benefited from the task team being led out of the resident mission in Delhi. The MTR provided the opportunity to restructure the project to make EDC targets more realistic and achievable and to strengthen support for PTO to increase emphasis on monitoring, training, sustainability and derivation and dissemination of lessons learned. Overall the Bank provided good quality advice and significant technical assistance and showed flexibility in adapting project design and targets consistent with a process orientated and learning approach. Client feed back indicates that the technical inputs and aide memoirs from the missions provided useful guidance for adaptive management and were useful tools for monitoring the project. Bank management supported a performance criteria based system for providing project extensions. How ever, the decision not to consider a project extension at MTR and the eventual decision to provide extension only on an year-by-year basis (instead of 2 years at one go) limited the opportunities to extend ecodevelopment activities to all villages within the buffer zone at every PA site.

Compliance with Bank policies and procedures

Indigenous people and voluntary relocation **:** During the past few decades, the creation of PAs has some times caused people living in the PAs to lose access to resources. The project as such was not expected to cause additional deterioration in living standards of such communities, but instead provide opportunities to address and ameliorate existing conditions. Positive contributions from the project include developing systematic and participatory systems for voluntary relocation, wage employment opportunities through project initiated ecorestoration activities and opportunities for skill building and limited assets through participatory microplanning process. Project sites have reported that by and large many tribal families did benefit from the opportunities offered by the project. Five parks (Gir, Nagarahole, Palamau, and Buxa and Ranthambore) have villages within the park. Only Nagarahole and Ranthambore undertook organised resettlement of villagers to locations outside the park during the project.At Ranthambore one village, Padra, was voluntarily relocated out of the core zone. In Nagarahole, 250 tribal families (out of 1550 households in 54 hadis) were resettled voluntarily to Veeranahosahally revenue village. The GoK provided 1931 ha of land (2 ha per family, 1 house + Rs 1 lakh) and the project provided additional transitional support such as basic facilities, and agricultural support for two years as well as other benefits similar to EDC villages. At both parks the Bank reviewed the process and requested proper verification of voluntariness and documentation of the resettlement process and impact (see Annex 10 for a case study and lessons learnt). In

Buxa, a low key voluntary resettlement process was adopted by which the households which wanted to move out were fully supported, as and when they moved out.

***Inspection panel investigation*:** One site which drew repeated attention and attracted controversy was the Nagarahole site. The prevailing (pre-project) conflict situation (between the forest department and local tribals) and differing perspectives on the part of conservationists and pro-tribal (development) NGOs, culminated in a complaint and an enquiry by the Bank's Inspection Panel. The panel's report was discussed by the Bank's Board on December 10, 1998 and concluded that a full investigation was not required and instructed Bank Management to work with the Government, in consultation with the beneficiaries, to address the findings of the Inspection Panel on how to intensify project implementation, including the preparation of Hadi (In-Park) micro plans. Bank exercised due diligence by laying down procedures for ascertaining the voluntariness of relocation, assessment of the economic status of the relocated families and in organising support measures to improve the economic livelihoods of the relocated families. In addition, towards ensuring that the option for voluntary relocation is 'real', and that the stay option is not tenuous, micro plans were prepared for all the 42 Hadis (In-Park settlements) and investments too were attempted. While some benefits did accrue to the Hadi residents, the tribal population could not derive the maximum benefits from the opportunity due to factors such as (i) inability to locate support NGOs with requisite capacity, skills and knowledge of tribal culture; (ii) continued conflict and lack of trust between the forest department and a section of tribals; and (iii) limitations on the type of investments permitted inside national parks under the wildlife act. It was unfortunate that the voluntary relocation at Nagarahole happened in an atmosphere of conflict and hostility between the forest department and a section of the in-park inhabitants. This made the process painful for all - those who genuinely wanted to abandon traditional forest based life for a more modern one, and those who wanted to retain their life style - as they saw each other as being (mis)used in this conflict. The project assumed that a consultative and process oriented approach during implementation would address local conflicts and yield beneficial results for all. How ever this did not happen as desired due to the prevailing ground realities. The main lessons drawn from the Nagarahole experience are as follows: (i) A site wise segregated risk analysis is essential to assess the intensity of local conflicts; (ii) scale and duration of consultations with local tribals and other stakeholders during project preparation must relate to the intensity of conflicts; (iii) in high conflict situations, suitable forum for consultation and conflict resolution or at least an agreement on such a mechanism should be in place during project **preparation**; (iv) transparent information dissemination system should be in place so that flow of inaccurate information does not add to further mistrust among stakeholders.

7.3 Overall Bank performance:

Satisfactory, consistent with the ratings described above.

Borrower

7.4 Preparation:

Satisfactory. The Project Tiger Office, MOEF and the participating states collaborated with the Bank team during project preparation. Central and State governments supported engagement with civil society organisations on the debate created by the project. How ever, the state governments could have better articulated their constraints and limitations in implementing such an innovative and complex project during preparation. This was the first time that the village investments were to be determined and prioritised by the villagers, leading to an 'apparent loss of power and control' by forest department. Support to this new concept, did reflect a progressive community oriented approach of the MOEF and the state forest departments.

7.5 Government implementation performance:

Satisfactory. In general, the implementation performance which was rated a unsatisfactory, improved

considerably in the post MTR period. Government of India fully supported the project and ensured that funds were available to the state governments for the project activities. The state governments, barring exceptions, displayed commitment. One area of failure where the Bank and GOI had to step in constantly in most states to rectify the situation was related to the timely release of funds. The state governments did take necessary actions for issuing necessary government orders for project implementation and subsequently for extending these orders beyond project period and beyond project parks. Some of the state governments (Jharkhand, Gujarat, Kerala and West Bengal) mobilised or allocated additional resources for taking up ecodevelopment activities during the latter stages of the project. Rajasthan was one State where government support to the project was consistently below par where none of the opportunities for enlisting NGO support or for carrying out important research activities and studies were utilised. Even the ecodevelopment tourism surcharge collected from the park was not returned to the park despite several discussions on the subject. Performance of Palamau park improved dramatically after formation of the new State of Jharkhand. One general shortfall is related to staffing levels, which were below agreed levels in many parks. Considering overall performance of the GOI and the seven state governments, the government implementation performance is rated as satisfactory.

7.6 Implementing Agency:

Satisfactory. The project was implemented by the state forest departments with a team headed by the park director. Barring exceptions, the project had the benefit of a highly committed and motivated team of officers and staff in the parks. This enabled building strong partnership with local communities and led to considerable innovation. Each park, without exception, had some contribution to make in the form of innovation and/or best practice examples. A case in point is Ranathambore park, where despite inadequate government support, the field team toiled to cope up with the constraints (such as severe drought conditions), and still managed to produce some visible results. Periyar park innovated by forming professional and user group EDCs and demonstrated the value of removing rural indebtedness as a tool for building trust and confidence. All parks collaborated with visiting supervision missions and did their best to undertake remedial measures where needed.

7.7 Overall Borrower performance:

Satisfactory. In view of the rationale explained above, the overall borrower performance is rated as satisfactory.

8. Lessons Learned

Several useful lessons have been learned from implementing the project the project. Detailed note on lessons is presented under Annex 11 and some important ones are highlighted here :

- **Strengthening park-people relationships**. The project helped improve relations between forest departments and local people from a high conflict situation to one of improved cooperation and collaboration through implementation of the ecodevelopment model. (i) The change in relationships was directly proportional to the levels of trust established and the degree of transparency in functioning and empowerment of EDC. (ii) Joint training of ecodevelopment committees and forest front-line staff, and joint visits to other PAs, also contributed to better relationships, understanding and trust. (iii) Ecodevelopment was most successful where PAs were able to benefit from early specialized training for forestry staff and additional skills provided through contract staff (e.g. sociologists, women development officers, ecologists and special training provided through specialist NGOs). (iv) Imaginative use of early grants through the credibility fund can be a useful way to help the poorest members of the community to escape the debt trap set by money lenders and the destructive cycle of poverty and poaching (e.g. Periyar).

- **Village development linked to forest protection.** The creation of microplans and community funds linked village development to PA protection and provided villagers with choices about livelihood and development options. (i) Microplanning needs time and good facilitation. Due to new participatory processes involved, inexperience of EDC members, PA staff and many NGOs, opportunities should be built in to the process to revisit and adapt the plan, based on experience and to ensure inclusiveness of the needy and most forest-dependent villagers. (ii) Recognizing differences among households, in regard to economic status and degree of dependence on PA resources for livelihood, it is necessary to prioritize activities between, and within, villages based on dependency on forest resources (red, yellow, green with red villages showing greatest dependency). The poorest individuals may be most dependent on forest resources yet least able to find 25% contribution (e.g. to access LPG stoves to reduce pressure on firewood collection). (iii) The EDC as a village level institution has proved effective but long-term sustainability depends on sense of ownership and benefits derived by members from these institutions. The internal homogeneity of villages in terms of caste, economic activity or economic stratum can influence the success of EDCs and ecodevelopment activity. Small homogenous sub-village level subgroups may function more effectively than large, village level heterogeneous groups. EDCs organized by profession/user groups at (e.g. Periyar) successfully built on existing institutional structures. Similarly women's SHGs perform effectively due to small size, cohesiveness and high levels of communication within the group. (iv) Ecodevelopment requires dedicated PA field staff. The expectation that staff could take on ecodevelopment responsibilities as well as normal duties was unrealistic. Experience showed that having exclusive staff for ecodevelopment allowed more frequent interaction as facilitators with villagers and increased trust and avoided conflicting roles. (v) For transparency and accountability microplans need to be available in local languages and accessible in the village. Billboards listing ecodevelopment activities and funding allocations proved a useful mechanism for ensuring transparency.

- ***Sustainability.*** The long-term sustainability and success of the ecodevelopment programs and individual EDCs can be enhanced through linkages to political processes and local and national government programs. (i) Panchayats can enhance the width and success of ecodevelopment programs through their capacity to mobilize funds for village level development. (ii) The ability of PAs and EDCs to maintain development efforts will depend on strengthened linkages and alignment of other government programs to support activities that reduce conflict between PA and community needs. All PAs have already demonstrated good ability to access other government resources (e.g. Famine relief, World Food Program, State development programs) and further strengthening of regional committees will enhance this process. (iii) Ecotourism can provide new opportunities, through ecodevelopment surcharges on visitor fees, or through alternative livelihoods (e.g.at Pench where promoting the park as Mowgli country increased visitor numbers and provided alternative livelihoods as boatmen to former fish poachers).

- ***Proactive communication strategy.*** India has a strong civil society movement, both pro-conservation and pro-poor, and the project attracted much criticism for a) sacrificing biodiversity objectives to address poverty issues and b) disadvantaging poor communities to support wildlife conservation. Much of this criticism focused on specific project components and management interventions, in particular the Village Area Development Component, including relocation of communities. While such debate is healthy, opportunities to improve processes for better benefit to the communities are lost if the debate turns out to be destructive and paralyzing,. A key lesson for future projects is the need to have a pro-active two way communications strategy in place from preparation onwards to ensure that (i) good public information is disseminated about the goals and achievements of the project and (ii) constructive

feed back influences project interventions.

- ***Other.*** (i) *Reciprocal co-financing:* The need to provide 25% co-financing towards ecodevelopment activities led to some village families being excluded from ecodevelopment benefits. For future ecodevelopment projects it may be more effective to use the simpler model adopted at KMTR , where SHG s were established first and the project then provided additional co-financing. The KMTR model has proved sustainable beyond the project lifetime with delegation of powers to village members for decision making over fund utilization providing the basis for responsible and effective functioning of village groups. (ii) *Coverage of villages:* Because of the difficulties in establishing EDCs, not all villages within a 2 km buffer zone were included within the project. Future projects need to deal with all the villages impacting on the PA (whether these fall within the 2 km zone or beyond) and to identify priority target villages, and households, based on levels of forest dependency. (iii) *Multiple site:*A major strength of the project was the decision to work at multiple sites across seven states. This allowed experimentation with different models of ecodevelopment, exchange of best practice, and cross site visits for EDC members and PA staff. The expertise and knowledge acquired through this project should be used in future ecodevelopment efforts by linking some of the current centers into a learning network. (iv) Relocation of villages located inside PAs needs to be addressed realistically. Usually villagers have greater opportunities for income generation and access to development, education and other government schemes outside the parks. Settlements within parks are also subject to restrictions cattle grazing, collection of forest products and limited ecodevelopment options. Relocation, however, needs to be voluntary and well documented but should be available to all families within a social group. Partial resettlement may be only a short-term solution with numbers of families and cattle increasing to be a future management issue (e.g. Maldhari nesses at Gir).

9. Partner Comments

(a) Borrower/implementing agency:

INDIA ECODEVELOPMENT PROJECT
THE PROJECT TIGER DIRECTORATE
Ministry of Environment and Forests
Bikaner House, New Delhi

March 4, 2005

The India Ecodevelopment Project was implemented as a centrally sponsored scheme of the Ministry of Environment & Forests in seven sites , commencing from the ninth plan and spilling over to the first two years of the tenth plan period . The Project Tiger Directorate of the Ministry of Environment & Forests has also been implementing the other Centrally Sponsored Scheme of 'Ecodevelopment around National Parks and Sanctuaries including Tiger Reserves' , and the externally aided FREEP project since the eighth plan period , and normative guidelines for implementing these schemes were already in vogue . Further , many states also had the experience of implementing the externally aided Forestry Projects . However , the India Ecodevelopment Project was more focused and larger in scale , which gave a definite perspective to implementation of ecodevelopment inputs in the country . The strategy of participative planning , institutionalization of the village level institutions of Ecodevelopment Committees, creation of village level fund , reciprocal commitments with the stakeholders and the codification of resolutions from the project states and the like fostered the project .
Despite criticism leveled against the project in some quarters , the most noteworthy contributions of the

project were :

- vindication of the guiding philosophy of the ongoing Project Tiger that conservation requires both strengthening of protected area infrastructure as well as providing viable alternatives to stake holder communities, for reducing the resource dependency on the Protected Area resources .

- providing an option to the local people in a scenario of overuse and abuse of forest resources

- generating a positive signal in the minds of stake holders that protected area staff not only care for wild animals and forests within their area , but also the people who live close by and depend on the forest resources for their sustenance .

- the ‘ wise’ as well as ‘best’ practices emanating from various project sites provided a ‘menu’ of options for mainstreaming as well as refining the conservation and monitoring practices .

The lessons learnt under the project also underlined the following :

- need for delineating a proper impact zone around protected areas instead of an arbitrary radial zone of 2 km for ecodevelopment , so that all stakeholders in the surrounding villages are addressed to ensure the desired support for biodiversity conservation .

- need for a separate complement of field staff and officers to implement the ecodevelopment inputs so that the main mandate of wildlife conservation in protected area is not compromised .

- need for an ongoing staff development plan in the protected areas to ensure availability of able field staff with definite tenures in the right age group for implementation .

- commitment of the project state to ensure fund flow to the implementing field formation within a definite period from the release of funding support under the project from the Central government , to ensure timely utilization of funding support .

- need for more emphasis on the capacity building of implementing staff before embarking on a project of such magnitude.

- making the project procedures more field friendly and less procedure oriented .

- need for more emphasis on sectoral integration of resources to mainstream conservation concerns in the area in holistic manner.

- need for initiating efforts to sustain the gains of the project beyond project life from the formative years of the project itself .

(b) Cofinanciers:

(c) Other partners (NGOs/private sector):

10. Additional Information

A concerted effort was made under the project to document good practice modalities for training, operation of VDF, participatory monitoring etc. at individual sites and to exchange information and experience through cross-site visits, workshops, documentation and lessons learned studies. Lessons learned and good practice will be incorporated into the new *Biodiversity Conservation and Rural Livelihood Project* under preparation. Key IEDP sites will be utilised as training centers as part of a learning network under BCRLP.

Additional information is available in the following publications:

Indian Institute of Forest Management. 2004 Workshop on Dissemination of Ecodevelopment Experiences from IEDP at National Level.

JPS Associates 2004. Consolidated Final Report for Seven Protected Areas and Project Tiger Office. Intensive Project Performance Review –IEDP (Phase III).

PEACE Institute. 2004. Lessons learned from Ecodevelopment Experiences in India.

TERI. 2004. Institutional and Financial Sustainability Issues under the India Ecodevelopment Project.

Annex 1. Key Performance Indicators/Log Frame Matrix

Table 1. : Development Objectives Indicators Matrix

	Development Objective	Expectation	Status June 2004
a.	Improve PA management Capacity and improve opportunities for local participation	June 2004 :(1) Improved PA management plan operational in all 7 sites with continuous updating based on feedback; (2) Forums for stakeholder participation are fully operational; (3) Measures for regional planning successfully in operation	[1] More than two years experience in application of plan and credible post project arrangements for continued operation of PA management plan and public dissemination mechanisms; [2] Forums for stakeholder participation fully operational; [3] Institutional mechanisms for regional planning are in place and operational for analysis of regional development initiatives
b.	Reduce negative impact of people on PA and vice versa through village ecodevelopment program	June 2004: (1) 806 EDCs involving 71,000 households fully operational; (2) Reduced dependence of communities on PA; (3) Improved relationship between Park and People	[1] 581 EDCs formed (MTR target 569] covering 75000 households and fully operational; [2] participatory monitoring indicates reduced dependence; [3] vastly improved people-park relationships reported from all parks
c.	More effective and extensive support for Conservation and Development	June 2004: (1) Enhanced public awareness and support for conservation; (2) Impact monitoring plan prepared and baseline measured and monitoring for 2 years; (3) Sustainable identification and funding for research	[1] Wide range of stakeholders covered under environmental awareness programmes with positive impact; [2] Baseline measurements completed. Impact monitoring plan agreed and integrated into PA management plan; [3] Pilot project implemented in Periyar for sustainable access to funds for development and research
d.	Effective management of Project	June 2004: (1) Sustainable fund flow ensured on time; (2) Lessons learnt disseminated; (3) Intensive project monitoring operational	[1] Fund flow situation greatly improved; [2] Lessons learnt study completed; Dissemination workshops held in 5 regions; [3] Intensive monitoring undertaken with external support; Management Effectiveness Tracking Tool (METT) streamlined for all parks by PTO.
e.	Future biodiversity projects prepared	Component dropped at MTR	This component was dropped at MTR due to tardy progress of the project at that stage. How ever, based on subsequent turn around of the project, GOI has launched the project preparation process for a follow-on project

Table 2. : Measurement of conditions for success :

The Biodiversity Support Program has listed five main conditions for success in any conservation effort: clarity in conservation goals and objectives; equitable and effective social processes and alliances (participation and partnerships); appropriate incentives for biodiversity valuation and conservation; supportive policies (local, national and international); and sufficient awareness, knowledge and capacity to conserve biodiversity. Add to this recipe some clear indicators, flexible and adaptive management and a long term commitment of steady support and financing and one may have a chance at success and sustainability. Too often one or more of these ingredients are missing. How did IEDP measure up?:

Criteria for success	IEDP Overall	Gir	Ranthambore	Pench	Palamau	Buxa	Periyar	Nagar-ahole
Clear and achievable objectives	S	S	S	S	S	S	S	S
Participation and partnerships	S	S	PS	S	S	S	HS	PS
Biodiversity valuation & linkages e.g. watershed)	Not exploited enough	Watershed study	Goods & services valued	Links to water		Strong benefits from usufruct rights	Water provision to Tamil Nadu	
Supportive policies	S	State GO	State GO	State GO	State GO	State GO		State GO
Awareness	S – Wildlife weeks	Excellent outreach	Only partially successful	Strong	PS	S	HS	S
Long-term financing	S – Federal schemes	State programs	Ecodevelopment surcharge	State	State	Forest Development	Periyar Foundation	FDA
Law enforcement and good governance	S	S	S	S	S	S	S	S
Monitoring & management	PS	S	PS	S	PS	S	S	PS
Capacity for ecodevelopment	S	HS	PS	S	S	HS	HS	PS
Linkages conservation and development	S	S	S	S	S	S	HS	PS

Table 3. : Ecodevelopment benefits at individual PAs

PA	Sq.km	No. of EDCs	SHGs	Households	VDF	Sustainability	Gender
Buxa	761	61 (**58)**	400+	9750	Rs 2.80 crore	WBFDC revenue recycling	Women involved in forest protection
Gir	1412	109	71	15599	Rs	GFDP, State Plan,	Empowerment

			(52)		2.79 crore	FDA.	of women, esp Maldhari ness
Nagarahole	643.4	108 (80 villages; 28 hadis)		15,000	Rs 2.36	FDA (Rs2.4 crores) – 40 new EDCs	Women's empowerment and active participation in EDCs
Palamau	213 + 813 BZ	65	30	5,312	Rs1.2 9	FDA –Rs 41.97 lakh	
Pench	449.39	99	320	10,433	Rs2.3 5	VDF Revolving fund GoMP forestry profits (10% timber, 20% bamboo) Park fund Project tiger & State funds	EDC representation women landless mandatory
Periyar	777	72	157	5,540 (40,000pp)	Rs 3 crore	Park welfare Fund Periyar Foundation Ecodvelopment visitor surcharge Community-base d ecotourism	EDCs organized by profession user
Ranthambhore	282.03 +672.8 2 (KD)	62 (of 112)	22	14,151	Rs 3 crore	Ecodevelopment surcharge Links to Famine Relief	

Table 4. : Biodiversity benefits at individual PAs

PA	**Effective management (sq.km)**	**Invasive Alien Species cleared**	**Reduced threats**	**Other social benefits**
Buxa	761		30% reduction cattle; grazing area reduced by 40%; 35% less firewood. Stray cattle fines	Tourism Electrification State shares timber & tourism benefits , improved agriculture
Gir	1412	3,697 ha	70% reduced firewood; 10-30% less grazing	EDCs managing IGAs-horticulture plantations, LPG/biogas installed in around 3000 HH.

Nagarahole	643.4		45% less grazing; 45-50% less firewood	250 tribal HH resettled
Palamau	213 + 813 BZ	1,860 ha	28% less firewood;	30% increased crops. 90% landless wage labor
Pench	449.39	12,782 ha	Grazing 95% less area; reduced firewood	2,326,4848 days of wage labor for poor; Water points and game walls
Periyar	777		Firewood 50% less; 50% less NTFP; cattle 45% less	250,000 days wage labor; Socioeconomic survey 15000 –one third better EDC - pilgrim management
Ranthambore & Kela Devi	282.03 672.82		50% reduced grazing;70-80% less fuel wood	Game walls; step wells; water points; Kilhari (no axe) bands

Annex 2. Project Costs and Financing

Project Costs by Components
(US$ millions)

					ACHIEVEMENT	
S. No	Componenet	At appraisal	Revised after cancellation and GEF Grant re-denominati on	Actuals at EOP	Appraisal estimate	Revised Credit/ Grant
1	Improved PA Management	15.31	15.00	15.49	101.2%	103.3%
2	Village Ecodevelopm ent	36.09	35	32.75	90.7%	93.6%
3	Develop effective and extensive support for Ecodevelopm ent	5.19	3	2.77	53.4%	92.3%
4	Project Management	5.83	9.5	9.35	160.4%	98.4%
5	Prep. Of future biodiversity projects	2.58	0.75	0.61	23.6%	81.3%
6	Reimburseme nt of PPF	2.00	0.05	0.05	2.5%	100.0%
	Total	67.00	63.3	61.02	91.1%	96.4%

Project Costs by Components
(percent)

S. No	Componenet	At appraisal	Revised after cancellation and GEF Grant re-denomination	Actuals at EOP
1	Improved PA Management	22.9%	23.7%	25.4%
2	Village Ecodevelopment	53.9%	55.3%	53.7%
3	Develop effective	7.7%	4.7%	4.5%

	and extensive support for Ecodevelopment			
4	Project Management	8.7%	15.0%	15.3%
5	Prep. Of future biodiversity projects	3.9%	1.2%	1.0%
6	Reimbursement of PPF	3.0%	0.1%	0.1%
	Total	100.0%	100.0%	100.0%

Project Costs by Financiers
(US$ million)

					A C H I E V	E M E N T
S. No	Financier	At appraisal	Revised after cancellation and GEF Grant re-denomination	Actuals at EOP	Appraisal estimate	Revised Credit/ Grant
1	IDA	28.00	20.00	18.63	66.5	93.2
2	GEF	20.00	17.00	16.03	80.2	94.3
3	Community	4.59	5.00	4.97	108.3	99.4
4	State/Central Government	14.42	21.00	21.39	148.3	101.9
	Total	67.00	63.30	61.01	91.1	96.4

Project Costs by Financiers
(Percent Share)

S. No	Financier	At appraisal	Revised after cancellation and GEF Grant re-denomination	Actuals at EOP
1	IDA	41.8	31.6	30.5
2	GEF	29.8	27.3	26.3
3	Community	6.9	7.9	8.1
4	State Government	21.0	11.1	35.0
	Total	100.0	100	100

Project costs by disbursement categories (GEF+IDA)
(US$ million)

					A C H I E V	E M E N T
Cat. No	Category	At appraisal	Revised after cancellation and GEF Grant re-denominati on	Actuals at EOP	Appraisal estimate	Revised Credit/ Grant
1	Civil Works	5.462	8.268	8.386	153.5%	101.4%
2	Equipment, Vehicles	2.012	2.544	2.774	137.9%	109.0%
3	Civil Works, Equipment	22.420	17.091	15.88	70.8%	92.9%
4	Consultants, NGOs	11.499	6.964	6.392	55.6%	91.8%
5	Project Management	0.575	0.578	0.566	98.4%	97.9%
6	Consultant, NGO, Training (Part F)	2.010	0.585	0.605	30.1%	103.4%
7	Refinancing PPF	2.010	0.05	0.05	2.5%	100.0%
8	Unallocated	2.010	0.92	-	-	-
	Total	47.999	37.00	34.654	72.2%	93.7%

Project costs by disbursement categories (IDA)
(US$ million)

					A C H I E V	E M E N T
Cat. No	Category	At Appraisal	Revised after cancellation	Actuals at EOP	Appraisal estimate	Revised Credit/ Grant
1	Civil Works	2.728	4.134	4.205	154.1	101.7
2	Equipment, Vehicles	1.005	1.272	1.288	128.2	101.3
3	Civil Works, Equipment	12.924	9.361	9.014	69.7	96.3
4	Consultants, NGOs	5.744	3.400	3.174	55.3	93.4

5	Project Management	0.287	0.278	0.289	100.7	104.0
6	Consultant, NGO, Training (Part F)	2.010	0.585	0.605	30.1	103.4
7	Refinancing PPF	2.010	0.050	0.050	2.5	100.0
8	Unallocated	1.292	0.920	-	-	-
	Total	28.000	20.000	18.626	66.5	93.1

Project costs by disbursement categories (GEF)
(US$ million)

					A C H I E V	E M E N T
Cat. No	Category	At appraisal	Revised after cancellation and Grant re-denominati on	Actuals at EOP	Appraisal estimate	Revised Credit/ Grant
1	Civil Works	2.734	4.134	4.181	152.9	92.1
2	Equipment, Vehicles	1.007	1.272	1.486	147.6	107.2
3	Civil Works, Equipment	9.496	7.730	6.866	72.3	88.8
4	Consultants, NGOs	5.755	3.564	3.218	55.9	87.0
5	Project Management	0.288	0.300	0.277	96.2	92.0
6	Consultant, NGO, Training (Part F)	-	-	-	-	-
7	Refinancing PPF	-	-	-	-	-
8	Unallocated	0.719	-	-	-	-
	Total	19.999	17.000	16.028	80.1	90.8

Project Costs by procurement arrangements at appraisal
(US$ million)

		P R O	C U R E	M E N T	M E T	H O D	
C. No.	Description	ICB	LCB	Other	Consulting	NBF	Total

					services		
1.	Civil Works		0.44 (0.18) [0.18]	6.99 (2.80) [2.80]			7.43 (2.97) [2.97]
2	Equipment/ Vehicles	0.33 (0.13) [0.13]		2.34 (0.93) [0.93]			2.67 (1.06) [1.06]
3.	Eco development Fund (CW, Equip. etc)			30.47 (13.05) [9.63]			30.47 (13.05) [9.63]
4	Consultancies, Studies, Training etc.			0.94 (0.47) [0.47]	11.18 (5.59) [5.59]		12.12 (6.06) [6.06]
5.	Project Management (travel, recurrent costs)			0.67 (0.27) [0.27]		9.06	9.73 (0.27) [0.27]
6.	Project preparation (future projects)			0.26 (0.26)	2.32 (2.32)		2.58 (2.58)
7.	Refinancing PPF			0.20 (0.20)	1.80 (1.80)		2.00 (2.00)
	Total	0.33 (0.13) [0.13]	0.44 (0.18) [0.18]	41.87 (17.98) [14.10]	15.31 (9.71) [5.59]	9.06	67.00 (28.00) [20.00]

Project Costs by procurement arrangements at EOP
(US$ million)

		P R O	C U R E	M E N T	M E T	H O D	
C. No.	Description	ICB	LCB	Other	Consulting services	NBF	Total
1.	Civil Works			10.48 (4.20) [4.18]			10.48 (4.20) [4.18]
2	Equipment/ Vehicles			3.48 (1.29) [1.49]			3.48 (1.29) [1.49]

3.	Eco development Fund (CW, Equip. etc)			30.64 (9.01) [7.14]			30.64 (9.01) [7.14]
4	Consultancies, Studies, Training etc.				6.39 (3.17) [3.22]		6.39 (3.17) [3.22]
5.	Project Management (travel, recurrent costs)			0.85 (0.29) [0.28]		8.50	9.35 (0.29) [0.28]
6.	Project preparation (future projects)				0.61 (0.61)		0.61 (0.61)
7.	Refinancing PPF				0.05 (0.05)		0.05 (0.05)
	Total			45.17 (14.80) [12.81]	7.05 (3.83) [3.22]	8.50	61.01 (18.63) [16.03]

Annex 3. Economic Costs and Benefits

At appraisal it was recognized that no economic analysis could be carried out for this project as a whole because of (i) the heterogeneous nature of the benefits (biodiversity conservation, empowerment, alternative livelihoods) and the near impossibility of quantifying many of them and (ii) while, on a site specific basis, it is in fact feasible to quantify financial returns on livelihood investments (and the financial viability of these investments is in fact important, if failure means that people would have to continue to use PA resources in unsustainable and destructive ways), the fact that the site specific conditions of these investments vary so much throughout the project. Instead, the project included steps in the process of selecting the ecodevelopment investments, such as the budget constraint, which would create a framework in which beneficiaries would intuitively weigh the costs and benefits to make the most appropriate choice for their specific context.

The following observations would be indicative of the project costs and benefits :

1. Detailed componentwise costs and benefits are out lined in Annex 21 of the appraisal report The actual benefits have been described under Section 4 of the ICR. The project helped (i) strengthening the protection and management of 6020 Sq. Km of recognized global importance for biodiversity; (ii) adding 18.19 Sq. Km of additional protected areas (Gir Park); (iii) successfully test the ecodevelopment approach; (iv) improve relationships between PA staff and local communities at all PAs, thereby increasing support for PA management; (v)promoted greater involvement of local communities in forest stewardship, participatory monitoring and management interventions that both reduced threats to the PAs and also provided new livelihood opportunities (e.g. the role of EDCs in pilgrim management at Periyar). Stakeholder workshops at all the sites (during the ICR mission) identified improved conservation and people-park relationships as key positive outcomes of the project. The project was able to demonstrate that ecodevelopment and social fencing was an effective tool for PA protection. The impact of village activities on biodiversity in protected areas has been reduced through ecodevelopment initiatives and village reciprocal commitments. Simple monitoring systems, involving PA staff and villager participation and self-monitoring, demonstrate measurable decreases in village –generated threats to the PAs.

2. The project contributed to the improvement in the lives and livelihoods of local communities (see annex 9). Such social benefits included : (i) income generation opportunities benefiting poor communities close to the protected areas; (ii) sustained communities under severe drought conditions through wage labour (e.g., Ranathambore park); (iii) empowerment of local communities, particularly poor groups, by offering voice and choice through participation in planning, implementation and monitoring of ecodevelopment activities; (iii) offering opportunities to women (as members of EDC executive committees, through promotion of self help groups and as direct beneficiaries of targeted programmes); (iv) benefits to tribals and landless in many of the fringe villages through provision of community infrastructure, wage labour and targeted programmes (e.g., tribal trekkers in Kerala). The Hadi dwellers in the Nagarahole park (Karnataka), were not able to derive the full potential of benefits due to reasons described under Annex 10. While most of the expected benefits have accrued, some of the anticipated benefits/outputs which fell short of expectations are : (i) Model developed for integrating PA concerns into regional planning was developed How ever, this was not either not operationalised in some of the sites, and if operationalised, the effectiveness needs further improvement in remaining sites; (ii) preparation of future biodiversity projects.

3. The project generated an estimated 7 million person days of wage employment over the project period. This was significant in the drought conditions prevalent during most of the project period and particularly so in severely stressed sites such as the Ranathambore park.

4. All ecodevelopment investments had a 25% cost sharing element. This, by and large, helped to ensure that individuals and communities did carefully consider alternate choices. The practice of revisiting and revision of micro plans enabled better choices due to change of preferences and better understanding of the project among communities. This is not to say that all communities chose all investments optimally, but a majority of them did. In addition, the cost sharing formula ensured greater transparency in the system and better accountability was demanded from the park officials.

5. The EDCs, at project closure have resources of the order of US$ 4 millions, which is being recycled by the communities for livelihood improvement loans. Over 60% of EDCs are likely to multi ply and grow this resource several fold in the next few years through productive lending.

6. The following indicators augur well for long term support to the ecodevelopment programme and wildlife conservation n India : (i) The plan allocation for wild life conservation has been stepped up from Rs. 1700 million in the VIII th plan (1996/97-2001/02) to Rs. 4700 million in the IXth plan (2002/03-2007/08). During the 10th plan, the total budget may reach Rs. 8000 million; (ii) Ecodevelopment strategy has been incorporated in the approach to the Xth plan documents and continued support from GOI seems certain. This is in contrast to the pre-programme situation where a skeletal supply driven programme was being undertaken with very thinly spread resources by the GOI.

Annex 4. Bank Inputs

(a) Missions:

Stage of Project Cycle	No. of Persons and Specialty (e.g. 2 Economists, 1 FMS, etc.)		Performance Rating	
Month/Year	Count	Specialty	Implementation Progress	Development Objective
Identification/Preparation				
03/16/1993	*2*	FORESTRY(1); ENVIRONMENT (1)		
11/11/1994	*11*	TEAM LEADER (1); ENVIRONMENTAL SPEC. (2);ENVIRONMENT CONSULTANT (1); ANTHROPOLOGIST (1); CONSULTANT ANTHROPOLOGY (2); CONSULTANT INSTITUTIONAL (3); INFORMATION SPEC.(1)		
Appraisal/Negotiation				
02/15/1996	*8*	TEAM LEADER(1); ECONOMIST (1); ECOLOGISTS (2); BOTANIST (1); FORESTERS (2)		
Supervision				
02/28/1997	*8*	ECONOMIST (1); MISSION LEADER (1); FORESTER (1); SOCIAL SCIENTIST (3); ECOLOGIST (1); PARK MANAGEMENT SPEC. (1)	S	S
05/16/1997	*5*	TEAM LEADER (1); PROCUREMENT SPEC. (1); ENVIRONMENTAL SPEC. (1); FINANCIAL SPEC. (1); SOCIAL DEVELOPMENT (1)	S	S
12/03/1997	*7*	MISSION LEADER (1); SOCIAL SCIENTIST (1); ECOLOGIST (1); ECONOMIST (1); FINANCIAL SPECIALIST (1); FORESTER (2)	S	S
04/29/1998	*2*	MISS. LEADER/ECOLOGIST (1); FORESTER (1)	S	S
08/16/1998	*4*	MISS. LEADER/AG. ECON (1); COMISSION LEAD. SOCIOL (1); LEGAL (1); SOCIOLOGIST (1)	U	U
03/08/1999	*5*	PRINCIPAL ECONOMIST (1); NATURAL RESOURCES SPEC (1); SOCIOLOGIST (2); PA	S	S

		MANAGEMENT SPEC. (1)		
08/06/1999	*2*	MISSION LEADER(1); SOCIAL DEVELOPMENT SPECIALIST (1)	S	S
02/10/2000	*4*	SOCIAL SCIENTIST (1); SOCIAL DEVELOPMENT (1); NATURAL RESOURCES SPEC (1); FINANCE AND DISBURSEMT (1)	U	U
05/19/2000	*10*	MISSION LEADER(1); FORESTRY SPECIALISTS(2); NRM SPECIALISTS(3); GEF COORDINATOR(1); ECONOMIST(1); PROCUREMENT SPECIALIST(1); FINANCIAL MANAGEMENT(1)	U	U
11/29/2000	*8*	TEAM LEADER, SOCIAL DE (1); CONSERVATION (2); GENDER (1); SOCIAL DEV. (1); PROCUREMENT (1); FINANCIAL MANAGEMENT (1); FORESTRY, COST TABLES (1)	S	S
05/03/2001	*7*	MISSION LEADER (1); SOCIAL DEV SPECIALIST (2); CONSULTANT (1); DISBURSEMANT SPEC. (1); PROCUREMENT SPECIALIST (1); TEAM LEADER (1)	S	S
10/13/2001	*9*	TEAM LEADER (1); SR SOCIAL DEV SPEC (2); SOCIAL DEV SPEC (1); SR BIODIVERSITY SPEC (1); FINANCIAL MAN. SPEC (1); PRINCIPAL ECONOMIST (1); SR PROCUREMENT ENGIN. (1); CONSULTANT (1)	S	S
05/20/2002	*8*	MISSION LEADER (1); PARK MANAGEMENT & BIOD (1); GENDER ISSUES (1); SOCIAL DEV ISSUES (4); FORESTRY CONSULTANT (1)	S	S
11/01/2002	*11*	MISSION LEADER (1); ENVIRONMENT SPECIALIST (1); SOCIAL DEV SPECIALIST (3); NATURAL RES SPECIALIST (1); FORESTRY SPECIALIST (1); FINANCIAL SPECIALIST (1); PROCUREMENT SPECIALIST (1); CONSULTANT FORESTRY (1); SOCIAL DEV	S	S

			(1)		
	05/06/2003	*8*	MISSION LEADER (1); SOCIAL DEV SPECIALIST (4); BIODIVERSITY SPEC. (1); CONSULTANT FORESTRY (1); SOCIAL DEV (1)	S	S
	12/26/2003	*10*	MISSION LEADER (1); SOCIAL DEV SPECIALISTS (3); BIODIVERSITY SPECIALIST (1); fORESTRY SPECIALIST (1); fORESTRY CONSULTANT (1); FINANCIAL MANAGEMENT SPECIALIST (1); FINANCIAL MANAGEMENT CONSULTANT (1);PROGRAM SUPPORT (1)	S	S
	06/30/2004	*9*	MISSION LEADER (1); SOCIAL DEVELOPMENT SPECIALISTS (2); BIODIVERSITY SPECIALISTS (1); FORESTRY SPECIALIST (1); FORESTRY CONSULTANT (1); FINANCIAL MANAGEMENT SPECIALIST (1); FINANCIAL MANAGEMENT CONSULTANT (1); PROGRAM SUPPORT (1).	S	S
ICR	06/30/2004	*2*	SOCIAL DEVELOPMENT SPECIALISTS (1); BIODIVERSITY SPECIALISTS (1);.	S	S

Mission details for the pre-appraisal period are incomplete

(b) Staff:

Stage of Project Cycle	Actual/Latest Estimate	
	No. Staff weeks	US$ ('000)
Identification/Preparation	119	360
Appraisal/Negotiation	110	298
Supervision	427	918
ICR	20	40
Total	676	2016

Figures above include Bank and GEF funds; Staff weeks for pre-1999 priod might include consultant time; Figures derived from Cost Accounting system for pre-1999 data and from SAP for remaining years

Annex 5. Ratings for Achievement of Objectives/Outputs of Components

(H=High, SU=Substantial, M=Modest, N=Negligible, NA=Not Applicable)

	Rating				
☒ *Macro policies*	○ *H*	○ *SU*	● *M*	○ *N*	○ *NA*
☒ *Sector Policies*	○ *H*	● *SU*	○ *M*	○ *N*	○ *NA*
☒ *Physical*	○ *H*	● *SU*	○ *M*	○ *N*	○ *NA*
☒ *Financial*	○ *H*	○ *SU*	● *M*	○ *N*	○ *NA*
☒ *Institutional Development*	○ *H*	● *SU*	○ *M*	○ *N*	○ *NA*
☒ *Environmental*	○ *H*	● *SU*	○ *M*	○ *N*	○ *NA*
Social					
☒ *Poverty Reduction*	○ *H*	○ *SU*	● *M*	○ *N*	○ *NA*
☒ *Gender*	○ *H*	○ *SU*	● *M*	○ *N*	○ *NA*
☐ *Other (Please specify)*	○ *H*	○ *SU*	○ *M*	○ *N*	● *NA*
☒ *Private sector development*	○ *H*	○ *SU*	○ *M*	● *N*	○ *NA*
☒ *Public sector management*	○ *H*	○ *SU*	● *M*	○ *N*	○ *NA*
☐ *Other (Please specify)*	○ *H*	○ *SU*	○ *M*	○ *N*	● *NA*

Annex 6. Ratings of Bank and Borrower Performance

(HS=Highly Satisfactory, S=Satisfactory, U=Unsatisfactory, HU=Highly Unsatisfactory)

6.1 Bank performance	*Rating*			
☒ *Lending*	○ *HS*	● *S*	○ *U*	○ *HU*
☒ *Supervision*	○ *HS*	● *S*	○ *U*	○ *HU*
☒ *Overall*	○ *HS*	● *S*	○ *U*	○ *HU*

6.2 Borrower performance	*Rating*			
☒ *Preparation*	○ *HS*	● *S*	○ *U*	○ *HU*
☒ *Government implementation performance*	○ *HS*	● *S*	○ *U*	○ *HU*
☒ *Implementation agency performance*	○ *HS*	● *S*	○ *U*	○ *HU*
☒ *Overall*	○ *HS*	● *S*	○ *U*	○ *HU*

Annex 7. List of Supporting Documents

1. Implementation reports from individual sites and PTO
2. Indian Institute of Forest Management. 2004 Workshop on Dissemination of Ecodevelopment Experiences from IEDP at National Level.
3. JPS Associates 2004. Consolidated Final Report for Seven Protected Areas and Project Tiger Office. Intensive Project Performance Review –IEDP (Phase III) and other periodic reports on intensive project performance monitoring
4. PEACE Institute. 2004. Lessons learned from Ecodevelopment Experiences in India.
5. TERI. 2004. Institutional and Financial Sustainability Issues under the India Ecodevelopment Project.

Annex 8 Summary of borrowers report

IMPLEMENTATION COMPLETION REPORT SUMMARY
(INDIA ECODEVELOPMENT PROJECT)

A. Background

The World Bank aided India Eco-development Project was an externally aided Centrally Sponsored Plan Scheme of the Ministry of Environment & Forests, for carrying out eco-developmental works in and around select Protected Areas in the country. The Project was financed by the International Development Association (IDA) loan and Global Environment Facility (GEF) grant, apart from funds received from Government of India, States & Project beneficiaries. The agreement with IDA and GEF was signed on 30.09.1996 after obtaining the approval of the Expenditure Finance Committee, and the project was made effective from 27.12.96. The approval of the Cabinet Committee on Economic Affairs was accorded on 14.10.97.

The project was implemented in seven Protected Areas, viz: Palamau (Jharkhand), Buxa (West Bengal), Nagarhole (Karnataka), Periyar (Kerala), Pench (Madhya Pradesh), Gir (Gujarat) and Ranthambhore (Rajasthan). Subsequently, as decided by the World Bank, it was accorded an extension for six sites only, with the exclusion of the Nagarhole National Park (Karnataka). The Cabinet Committee on Economic Affairs approved the extension of the project upto 30.06.2004.

The Project aimed at conserving biodiversity through Ecodevelopment. The major components of the project were: (i) Improved Protected Area Management (ii) Village Ecodevelopment (iii) Environmental Education and awareness (iv) Impact Monitoring and Research.

B. Implementation Mechanism and Performance Ratings

The scheme was implemented as a Centrally Sponsored Plan Scheme (CSS) of the Ministry of Environment & Forests (Project Tiger Office) through the State Wildlife Wings (Forest Department) of the Project States. All funds to the Protected Areas were transferred through the State Governments. The Chief Wildlife Wardens/Field Directors incurred the expenditure and thereafter submitted, through the State Governments, the reimbursement claims to the extent permissible to the Office of the Controller of Aid, Accounts and Audit, Ministry of Finance, Department of Economic Affairs, New Delhi in the manner and in the forms prescribed by the World Bank under the agreement signed with IDA and GEF. In respect of the National Level Activities, expenditure was incurred by the Project Tiger Office and presented to the World Bank

in the same manner as prescribed for the States.

The Project was implemented on the basis of Annual Plan of Operations (APOs) prepared by the Project States based on the management plan for the protected area. The Project States prepared the log-frame matrix listing activities in chronological order on a priority basis, which formed the basis for Annual Plan of Operations. This was sent to the Government of India and to the World Bank for approval. Based on the cost of Annual Plan of Operations, the World Bank prepared cost tables for the respective States. The revised costs were reconciled by the Government of India for the preparation of the required budget and release of funds to the Project States.

The progress of implementation of the project by the Project States was reviewed periodically by the Review Missions of the World Bank, which visited the selected sites. Normally, two such Missions were sent by the World Bank in a year. The progress was simultaneously monitored by the Project Tiger Office through visits of the IGF & Director, Project Tiger and the Addl. Director, India Ecodevelopment Project. As mandated in the Project, national level consultants were appointed to carry out an independent intensive review of project performance in the project states. The Consultants undertook site visits to each of the PAs once every quarter and submitted detailed Field Visit Reports and Half-Yearly progress reports to the Project Tiger Office. The reports were discussed and the findings were presented to the Steering Committee of the India Eco-development Project, chaired by the Secretary (E&F).

C. Overall Assessment of Objectives

1. The basic objective of the Project Tiger Office, inter-alia, was timely release and monitoring of funds to the PA States, which was successfully ensured.

   The total funds released to PA States under the Project was as follows:

Table:
Park-wise Statement of releases under (CSS).
(Total cost of the CFS: Rs. 200.97 crores)

(Rs. in lakh)

State	Releases
Buxa	3099.36
Gir	3566.17
Nagarhole	3865.33
Palamau	1268.89
Pench	2685.90
Periyar	2762.40
Ranthambhore	2010.42
Project Tiger Office	816.07
C. Total	**20074.54**

2. The PTO (CCU) initiated and finalized several consultancies at the national level, details of which are at Annexure-A.

3. **Timely finalization of consultancies at the national level by the Project Tiger Office, resulted in dissemination of the outcome to project sites, which not only fostered better implementation of the ongoing project, but also resulted in providing indicative road maps for sustenance of activities beyond the project life.**

4. The Information Technology equipment provided to all the PA States have considerably improved the efficiency in office management apart from building up of scientific data base.

5. The documents emanating from national consultancies are excellent guides for the PA States under the project, which could also be used by other such States.

6. The experience gained in managing the unique India Ecodevelopment Project at the national level would facilitate conceiving and implementing new projects of similar nature in future by the Project Tiger Office.

D. Overall Project Performance

During the initial period of project implementation the financial achievement remained considerably low, for example, during 1997-98 about 50% funds were utilized mostly for creating infrastructure and improving PA management capacity. This is indicative of low absorptive capacity of PAs for incurring expenditure in the initial phase on specialized projects. Once the PAs upgraded their infrastructure as well as their capacity for undertaking implementation, the investment levels in subsequent years increased to satisfactory levels; after 1998-99, investment levels were over 80% of released funds, indicating an upsurge in project activity.

It was during 1998-99 and later that substantial investments were made under the Village Ecodevelopment component across most of the PAs. This component suffered in the initial years, perhaps due to the need for building credibility between the PA officers and beneficiary families. However, a participatory approach for PA management started taking shape over time, resulting in active participation of villagers in project activities, apart from making their 25% contribution. The year 2000-01 saw expenditure overshooting the released funds. In the extension phase (2002-2003 and 2003-2004), the utilization of project funds remained high.

Table : India Ecodevelopment Project - Component-wise release of funds based on Cost Tables.

State	PA Management	Village Eco-development	Environment-al Education	Monitoring & Research	IT	Total
Buxa	1224.39	1711.32	39.34	115.78	8.53	3099.36
Gir	811.08	2518.72	57.66	169.00	9.71	3566.17
Nagarhole	1376.00	2354.58	78.06	42.69	14.00	3865.33
Palamau	340.91	879.66	27.94	10.38	10.00	1268.89
Pench	721.84	1799.12	70.35	84.27	10.32	2685.90
Periyar	1339.76	1194.07	112.04	106.53	10.00	2762.40
Rantham bhore	407.16	1470.27	92.43	30.56	10.00	2010.42

Total	**6221.14**	**11927.74**	**477.82**	**559.21**	**72.56**	**19258.47**
Project Tiger Office						816.07
Grand Total						**20075.54**

E. Lessons Learnt

· Microplans should have budgetary provisions for all families of the village and not just those who join EDC initially.

· Ecodevelopment should not be restricted only to area within 2 km. of radial distance from the PA boundary, but should cover the entire impact zone.

· Inclusion of all villages falling in impact zone for receiving Ecodevelopment benefits is important. Such a zone should be under the unified control of the PA management along with the field staff so that the stakeholders perceive the signals in the correct perspectives.

· For increased community participation, there should be uniform rate of villagers' contribution across schemes.

· For sustainability of EDCs (Eco-development Committee) optimal utilization of Village Development Fund as a revolving fund managed by a special institutional arrangement like a 'Foundation' is required for ensuring:-

o Income generating activities for EDC
o Interest earning to maintain assets generated through IEP
o EDC linkages with micro-enterprises
o Formation of SHGs (Self Help Group) for empowering women

· For effective project implementation, following pre-requisites must be met.

o Adequate field level staff and a site-specific staff development plan
o Smooth & timely fund flow
o Adequate mechanisms for integrating PA plans & related strategies with financial planning
o Availability of microplans (local language) from the start of the project
o Frequent meetings with village EDCs and maintenance of resolution registers and account details.
o Completion of staff capacity building/skill development trainings in first year
o Enhancement of capacity of EDC chairmen with respect to accounting & record management

· Sustained efforts in a project mode from the Project Tiger Division is required in an ongoing manner for achievement of overall objectives of reducing biotic pressure on parks and conservation of biodiversity.

· Several best/wise practices for mainstreaming biodiversity conservation emerged in different project sites. Based on such experiences, directions have been issued to all field officers, suggesting a 'menu' of options for guidance.

· The monitoring and evaluation mechanism of Tiger Reserves/Parks has also been refined based on the lessons learnt under the Project.

Annex 9. Note on project outcomes, achievements and outputs

Biodiversity Conservation and Environmental Benefits

The project was successful in strengthening protection and management of seven parks and reserves, of recognized global importance for biodiversity (Buxa, Gir, Nagarahole, Palamau, Pench, Periyar, Ranthambore). The parks are representative of different habitats and ecoregions and support important predator-prey systems. Together they give good biogeographic coverage and contribute to the sustainability of priority Indian parks at the State, national and regional level. The project led to creation of 18.19 Sq.km of new protected areas (extension to Gir) and more effective management of more than 6020 Sq.km (602,000 hectares) of PA in seven states. The project tested, and proved the usefulness of, the ecodevelopment model in supporting PA protection and management and led to the adoption of State Government Orders for Ecodevelopment for all PAs in all seven states, thereby institutionalizing ecodevelopment as a modality for future PA management and central and State government funding. Specific monitorable interventions led to improved management effectiveness (see annex 1), clearing of extensive areas of invasive alien species, habitat restoration, improved water and fire management and increases in wildlife populations of key carnivore and prey species.

One of the project's greatest achievements was an improvement in relationships between PA staff and local communities at all PAs, thereby increasing support for PA management; this may be one of the most significant contributions to long-term sustainability of the PAs. Another exciting innovation within the project was the involvement of local communities in forest stewardship, participatory monitoring and management interventions that both reduced threats to the PAs and also provided new livelihood opportunities e.g. the role of EDCs in pilgrim management at Periyar. PA monitoring and participatory monitoring through EDC s demonstrated significant reductions in threats emanating from village activities e.g. reductions in cattle grazing in the PAs, firewood extraction, NTFP collection, poaching activities and other infractions.

Social and Community Benefits

The project significantly improved the lives and livelihoods of local communities in and around the seven target PAs, including tribal and landless communities, through a focused ecodevelopment program. The project has provided tangible benefits to some of the poorest communities and empowered many local villagers to take greater advantage of State government and panchayat schemes in the future.

Livelihood Benefits

Under the Ecodevelopment model the project has introduced participatory microplanning processes, community assets and innovative employment and income generation opportunities which have resulted in new and improved livelihood opportunities benefiting poor communities close to the protected areas. In particular community projects have provided wage labour to some of the poorest members of village societies and generated work for the landless and poor. New employment and market opportunities have been created explicitly to benefit the poorest members of society e.g. tribal trekkers, pepper marketing and Tribal Heritage schemes at Periyar; rope making at Pench and building of game walls and step well (baori) rehabilitation at Ranthambore. The community (CDF) and village (VDF) development funds, as well as small savings schemes and self-help groups established under the project, provide mechanism to sustain these benefits beyond the project.

Empowerment

The project created conditions for empowering communities of poor villagers living adjacent to the protected areas. Mandatory representation of women and landless in EDC committees have strengthened social justice and empowerment of the weaker members of society. PRA microplanning exercises were designed to ensure that less vocal and powerful village members were able to fully participate. The ecodevelopment funds have increased individual and community choices, helped to reduce debt and reliance on money lenders, and have contributed to empowerment through community-decision making and greater transparency in decisions relating to allocations of village development funds. The election of ecodevelopment committees, opportunities for cross-site visits and capacity building for EDCs in financial management and new skills have contributed to greater empowerment and confidence in dealing with government agencies, including Forestry Department staff and in participating in local government e.g. at Buxa 40 EDC members (including nine women) were elected to the panchayat.

Benefits to Women

The project design was highly aware of, and sensitive to, gender concerns and recognized that resource and income strategies of women may be different from those of men. Explicit provision was made to include women in decision-making processes in EDCs and executive committees and, as the project progressed, there was a significantly increasing degree of participation of women in project activities. Although all states had provisions in EDCs for women, the benefits to women varied between sites, both in level of participation and impacts. At all sites women benefited from targeted investments e.g. drinking water, LPG and other fuel-saving devices, and skills and EDC training. At Periyar almost half the investment support was directed to women and at Pench the project provided bicycles to enable women to attend training sessions. Formation of Self-Help groups (SHG) proved a useful way to engage small affinity-based groups with common socio-economic and cultural milieu and from these successes build participation into other village institutions (both through credit and capacity). Though SHG funds are small, the availability of the money can be critical to women members needing medicine for a sick child. Strengthening of women's involvement in EDCs is an ongoing process but in general women have become more engaged and empowered as a result of the project. This empowerment of women was greatly facilitated by employment of women development officers and women coordinators at some PAs.

Benefits to Tribals and Landless

Although most ecodevelopment interventions were targeted at the village level, landless and tribal villagers benefited most through community investments (e.g. community halls, wells) and through creation of wage labour, both for work within the protected area (fire management, habitat restoration and invasives clearance) and under EDC priority activities e.g. creation of water ponds, building of game-proof walls, clearance of invasives. (about 8 million person days over the project's duration). At Palamau, for example, community and group activities were given priority and 90% of the landless and poor derived wage labour benefits. At several PAs particular programs were targeted towards tribals and special needs groups e.g. tribal trekkers program at Periyar; rope making skills at Pench; Ecokunj community agriculture at Gir. In the severely drought hit Ranathambore Park, the employment opportunity provided by the project was greatly appreciated by the villagers. The Hadi dwellers in the Nagarahole park (Karnataka), how ever not able to derive the full potential of benefits due to reasons described under Annex 10.

Specific objectives The project has successfully achieved its development and global objectives by developing many of the new processes, systems and capacity for implementation and expansion of the ecodevelopment management model.

PA management and collaboration with local communities At all sites the project improved the capacity of PA management to conserve biodiversity, and work with local communities to increase collaboration, and benefits from, conservation efforts. Forestry staff showed high commitment to the ecodevelopment model and at several sites worked with EDCs to develop and implement highly innovative solutions which addressed both PA management and livelihood needs. Overall the project is probably one of the most creative in the whole Bank biodiversity portfolio in attempting to meet the dual objectives of conservation and poverty alleviation.

Support for ecodevelopment. The project led to more effective and extensive support for the ecodevelopment model, including policy changes so that all seven states passed government orders to institutionalize ecodevelopment statewide for PAs. While sustainability is still an issue, individual sites have developed strategies to continue and expand ecodevelopment activities through linkages to other State and national government programs e.g. Forest Development Agency (FDA) e.g. Nagarahole, Famine Relief programs (Ranthambore) and/or establishment of new financing mechanisms e.g. Periyar Foundation. The creation of village assets through this project has developed strong links between park protection and village development, and greatly improved relations and enhanced collaboration between forestry staff and local communities.

Replication: The focus on seven sites in seven different sites provided exciting opportunities for innovation and testing of new approaches, cross-site visits and learning. Since the MTR the project has focused on capturing, disseminating and building on lessons learned both from IEDP and from the previous FREEP project. This documentation has proved a valuable resource for designing and implementing future ecodevelopment interventions. The success of the IEDP has led to a request from GOI to develop a follow-on project, *Rural Livelihoods and Biodiversity Conservation*, which will build on lessons learned and expertise developed under IEDP to use existing PAs as part of a learning network to further expand the ecodevelopment model.

Biodiversity Conservation: The project was able to demonstrate that ecodevelopment and social fencing was an effective tool for PA protection. The impact of village activities on biodiversity in protected areas has been reduced through ecodevelopment initiatives and village reciprocal commitments. Simple monitoring systems, involving PA staff and villager participation and self-monitoring, demonstrate measurable decreases in village –generated threats to the PAs.

Project out puts - key components

Improved Protected Area Management

New or revised management plans were prepared at all seven sites, and are being used as the basis for preparation of annual work plans. Baseline maps have been established for landscape monitoring and GIS capability provides a tool for identifying “hot spots” for encroachment and management decisions. The parks have been zoned according to ecological considerations, conservation and management objectives and pilot measures tested to engage communities in strengthened support for PAs. Management plans include tourism and visitor management considerations, and environmental education, as well as strategies for community participation in management and benefit-sharing through ecodevelopment opportunities. Measures to better integrate PA management with regional planning and other local government development opportunities have been developed at all PAs though regional steering committees, but need to be further strengthened. Each park has developed a sustainability strategy to continue ecodevelopment activities linked to PA management beyond the project lifetime.

Under the project extensive habitat restoration, including water management, clearance of invasive species and improved fire management was undertaken at all PAs. The project also provided upgraded accommodation, other infrastructure, equipment such as radio communications and basic field kit, camping and patrol equipment for field staff which improved working conditions and increased staff morale.

Park staff benefited from training in fieldwork, transect surveys, and information management (including GIS as a monitoring tool) as well as cross-site visits to other PAs. Senior staff undertook study tours to other national parks both within India and to South Africa. Most career development training for field staff focused more on ecodevelopment activities rather than PA management because of manpower constraints, and the need for forestry staff to take on new roles as ecodevelopment facilitators and member secretaries to the EDCs.

Village Ecodevelopment

The project developed guidelines and procedures for establishing, funding and monitoring more than 560 ecodevelopment committees (EDCs), involving more than 74,000 households around the seven PAs (see table 3 in Annex 1). Under this component participatory microplanning led to a wide variety of development investments, including both community and individual household benefits. Investments included improved agricultural production, water management and irrigation structures, which improved agricultural production, as well as investments in fuel-saving devices and development of new skills training and livelihood opportunities for landless and special need groups. Although the original expectation was that microplans would be developed for all villages within 2 km buffer zone of each PA, there was not 100% coverage of villages around all parks. (Gir and Ranthambore established EDCs at only 50% of all buffer zone villages). Later in the project, special efforts were made to target the most needy and forest-dependent groups within villages and the emphasis changed to more community level rather than individual investments. The level of innovation in EDC activities was high, both in establishment of EDC groupings (e.g. resource user groups at Periyar); linkages between EDC activities and reducing human-wildlife conflicts (e.g. insurance to cover crop damage by wildlife at Buxa; game-proof walls at Pench, Ranthambore), and creation of community opportunities linked to PA tourism.

At all EDCs the 25% contribution was used to establish community development funds to ensure sustainability of ecodevelopment activities. The project provided considerable training for EDC members and forestry staff to manage EDC investments and village development funds. Other skills training was provided, including training targeted to women, and cross-site visits for both forest staff and EDC members to benefit from exchange of experiences. More than 1000 self-help groups were established under the project. In exchange for development investments, EDCs undertook reciprocal commitments to reduce pressure on the PAs and engaged in participatory monitoring and forest stewardship e.g. women forest patrols at Buxa and Periyar. Insurance schemes for members of patrols increased villager confidence and encouraged such patrolling.

Special Programs

The initial credibility funds proved useful in overcoming village skepticism after the failure of some previous programmes. The credibility fund bought good will through provision of benefits as diverse as community halls, musical instruments, school improvements, school uniforms, village ponds, temple, playgrounds. At Periyar funds were more targeted to assist some of the poorest members of society to pay off debts to moneylenders and escape the debt trap. The Discretionary fund, available to PA managers, proved useful in addressing the special needs of some of the most disadvantaged groups who were unable

to find the 25% contribution or for critical conservation activities that could not be taken up under routine ecodevelopment activities.. At Nagarahole park, the Discretionary fund was used to provide benefits to in-park hadis. At Palamau special need groups were organized for marginal farmers, landless, women, ex-cattle camp keepers, organized offenders. The Discretionary fund was also useful for supplying additional basic and first aid equipment to PA field staff to improve working conditions.

Research and Impact Monitoring

The project provided generous funding for research and impact monitoring. Management-oriented research needs were identified in the management plans but this framework was completed too late for the relevant research to be initiated under the project. Some parks such as Gir and Periyar undertook highly relevant wildlife and socioeconomic research but generally the large pool of research funding available to engage outside institutions was under-utilised and not always relevant to PA management needs. At the MTR, a new research window was opened to develop a Small Grants research program to be run by PA management. This small grants program supported 30 small research projects undertaken by staff from local universities and was successful in strengthening research links to local institutions.

Monitoring of Improved PA management From regular monitoring for Project Tiger and all-India carnivore surveys PAs showed stable or slight increases in populations of key carnivores and prey populations. All parks also used the Bank Alliance/GEF management effectiveness tracking tool (METT) to monitor trends in PA management effectiveness across the project lifetime. The results show some progress in improving management effectiveness overall and especially in strengthening operational training and effectiveness (see Table 2 Annex 1). Feedback from the IEDP sites was critical in refining the METT which has now been adopted by the GOI for all Project Tiger sites and by the GEF for all GEF PA projects.

Monitoring of Reduced pressure on PAs. From the outset, the project focused on impact monitoring, including participatory monitoring with feedback to EDCs. All sites were able to show reduction in levels of resource use from the PAs, including reductions in firewood collection (partly linked to provision of fuel-saving devices through EDCs) and numbers of cattle grazing in parks. Thus at Buxa, 40 of the 58 EDCs did active forest patrolling and assisted against timber and firewood theft. Over the project lifetime at Buxa firewood collection decreased by 70% and numbers of cattle entering the forest to graze were reduced by 40% through EDC measures such as a cattle pound, and introduction of improved stall-fed cattle, castration of bulls and improved feed.
Quantifying socioeconomic gains was more difficult although several PAs claim reduced dependence on PA due to marginal increases in agricultural productivity (30% increase at Palamau due to irrigation works) and other income sources. A socioeconomic survey of 1500 families at Periyar, showed that 338 families graduated from very poor to moderate and 200 from moderate to better off.

Conservation Awareness

Awareness and outreach was identified as a key strategy for promoting conservation and the ecodevelopment concept. Though the resources under this component were not fully utilized in all PAs (e.g. Ranthambore where resources earmarked for a visitor centre were not used due to contracting difficulties), Several PAs ran effective educational and media campaigns e.g. Periyar ran a journalists camp (Ecologue) and Buxa ran programs on PA and biodiversity conservation on local cable networks. Gir provided training for teachers, with training manuals, and established 8 education centers in schools, nature camps and nature workshops for schoolchildren, as well as Eco-clubs and national Green Corps in

schools. Periyar publishes a regular ecodevelopment newsletter for the EDC confederations and has popularized Plastic Free Days and 46 nature clubs. Building on the need to strengthen awareness of linkages between PAs and visible symbols such as rivers, Gir undertook an economic study showing the value of the park to neighboring communities in terms of water creation and water security for agricultural production. Street plays (Nagarahole), processions (Ranthambore) and wildlife weeks and nature clubs have provided important opportunities to link PAs to local community and culture. Under the project local language field guides were prepared on the Birds of North India (Urdu, Hindi, Gujarati) and South India (Tamil, Kannada, Marathi, Malayalam and Telugu). These were produced by the Bombay Natural History Society in collaboration with Birdlife International; BNHS will provide guides free of charge to PA staff but also sell copies of the field guides to fund future reprints.

Annex 10. Conservation and Voluntary Relocation -- The case of Nagarahole National Park

1. The Nagarahole (Rajiv Gandhi) National Park has an area of 640 Sq Km with 7,100 people resident within the park. Of this, 7,000 are tribals, with about 1,550 families living in 54 settlements. They belonging to Jenu Kuruba, Yarava, Betta Kuruba, Hakki Pikki and Soliga tribes. The Government of Karnataka (GOK) issued a notification on February 4, 1975 declaring its intention to constitute an area of 571.55 Sq Km (all reserved forests) as a National Park. Final notification and declaration as a National Park was effected from April 1, 1983. Further, on December 8, 1988, GOK issued another notification and expanded the Park's area by another 70 Sq Km. While, on one hand, it was maintained that tribals have no rights and are encouraged to relocate, on the other, the decision of GOK to lease out a part of the area to a Five Star Hotel (later stuck down by the courts) resulted in anguish among the tribals. The situation was further compounded by the Supreme Court's directive (issued in response to a petition by a conservation NGO in August 1997) to all states to complete notification processes after due settlement and extinguishing of rights. Lastly, though the India Ecodevelopment Project became effective, on paper, during December 1996, funds could not flow for an year (till October 1997) for want of approval by the Union Government. Consequently, the project could not show any early positive results on the ground, that was so essential for building mutual trust among the stake holders. The differing perspectives on the part of conservationists and pro-tribal (development) NGOs, culminated in a complaint and an enquiry by the Bank's Inspection Panel. The panel's report was discussed by the Bank's Board on December 10, 1998 and concluded that a full investigation was not required and instructed Bank Management to work with the Government, in consultation with the beneficiaries, to address the findings of the Inspection Panel on how to intensify project implementation, including the preparation of Hadi (In-Park) micro plans. It is in this context that the project's (and probably India's first ever) attempt on Voluntary Relocation of Tribals, made as per the Government of India's Beneficiary Oriented Tribal Development Scheme (and supplemented by the Project), assumes significance. It should be noted here that the relocation issue emanated mainly as a result of the legal framework for PAs, especially National Parks, which did not allow people to stay there and not because of Bank's insistence (based on assessment of the threat posed by the presence of people in the PA to the biodiversity conservation).

2. Key initiatives and accomplishments include : (i) completion of a systematic census of tribal families living inside the park; (ii) mechanisms developed to ascertain voluntariness on the part of the families willing to relocate; (iii) 250 tribal families relocated to sites outside the park; (iv) agriculture development activities for the tribals supported with the technical support arranged through an external consulting agency (Local Agricultural University); and (v) extending other livelihood support facilities by dovetailing with the existing Government development programs. A qualitative recall study (by an external consultant) on the status of first batch of relocated families concluded that "on the whole, the respondents

are happy about the relocation strategy as they were given the promised items of the incentive package (land for cultivation, dwelling houses, amenities such as drinking water, school and health facilities). The study while pointing towards higher occupational mobility, improved social networking and higher consumption pattern in the post relocation period, has also assessed reduction in incomes due to loss of wage employment (not yet being made up by increased agricultural income) and its adverse impact, particularly on women. This reflected on the challenges involved in transforming the tribals from being agricultural 'laborers' into 'managers' and that continued hand holding is essential.

3. In addition, towards ensuring that the option for voluntary relocation is 'real', and that the stay option is not tenuous, micro planning were completed for all the 42 Hadis (In-Park settlements) and investments too were attempted. While some benefits did accrue to the Hadi residents, the tribal population could not derive the maximum benefits from the opportunity due to factors such as (i) inability of the forest department to locate support NGOs with requisite capacity, skills and knowledge of tribal culture; (ii) continued conflict and lack of trust between the forest department and a section of tribals; and (iii) restrictions on the type of investments permitted inside national parks under the wildlife act.

4. Towards the end, the project was plagued by : (i) allegations of corruption – resulting in an enquiry by the Lok Ayukta (semi-judicial anti-corruption body of the GOK) ; and (ii) doubts about the 'ecodevelopment strategy'. The latter gained ground owing to a large number of elephant deaths. Pro-tiger NGOs propagated that the ecodevelopment strategy of focusing more on interface between local people and park resulted in lowering the bar on 'protection' leading to poachers and smugglers. Park authorities, however, maintained that the number of elephant deaths were 'natural' given the total population of elephants.

5. Not withstanding the above, it could be concluded that the project did contribute towards developing (and effecting) certain basic principles underpinning 'voluntary relocation. As the name suggests, it needs to be ensured that decision to move, or otherwise, is driven by the wishes of each local household. Full information on the entitlements including the location of the relocation center should be provided to enable decision making. Voluntariness, or otherwise, should be as assessed by an external agency. Lessons learnt indicate that decisions related to voluntary relocation need to be based upon:

(i) Evidence of a clear process of informed decision making.

(ii) Evidence that the timing of relocation is voluntary. It will not entail strict scheduling, not be time bound, because it is driven by wishes of local people rather than by an external event. During the project, people may move at different times and at their own pace and when it is suitable to them which would include the option of a consensus decision to move at one time.

(iii) Evidence that the relocation is to lands close to the PA.

(iv) Evidence that there has been careful and consultative planning of the relocation process.

(v) Evidence that the replacement land and other parts of the package are adequate in relation to resources owned or accessed prior to the move, duly taking into account: (i) legal status, including existing rights, concessions, accesses and legal protection; and (ii) registered and customary tenures and accesses.

(vi) Evidence of an on-going commitment to monitor and evaluate welfare changes of these families and make adjustments after the date of relocation. This would also mean developing a baseline data on

settlement patterns, social structure, income sources, resource use, indigenous knowledge, skills and management practices etc.

(vii) Evidence of ecological desirability.

(viii) Evidence of the alternatives offered to each household (the assumption that a move can not really be deemed 'voluntary' in the absence of any reasonable alternative. An indicative list of appropriate set of ecodevelopment options should be prepared, simultaneous to relocation package, for those tribals who choose to not to move out but stay inside the park.

Annex 11. Additional notes on lessons learned

11.1 Strengthening park-people relationships. The project engineered improved relations between forest departments and local people through implementation of the ecodevelopment model. The change in relationships was directly proportional to the levels of trust established and the degree of transparency in functioning and empowerment of EDC.

- The State Government Orders (GO) provided a critical legal framework and enabling environment for project implementation at target PAs . The institutionalization of ecodevelopment as an effective PA management model state-wide provides an opportunity to replicate ecodevelopment models in other PAs. However, there is a need for clearly stating villagers rights along with policy and legal structures (as exemplified at Periyar and Gir parks).
- Social fencing can be an effective tool for PA protection but it takes time and commitment to create understanding and awareness among forestry staff of the links between conservation and development and the need for genuine participation of local communities.
- Good PA leadership and capacity was critical to achieving PA and ecodevelopment objectives, with greatest success where there was a dedicated senior officer for ecodevelopment. Careful selection and long tenure of lead officers also contributed to continuity and trust.
- The PA management plan should be completed early in implementation to identify management zones and space for ecodevelopment opportunities before detailed microplanning and/or investment in park infrastructure.
- Joint training of ecodevelopment committees and forest front-line staff, and joint visits to other PAs, also contributed to better relationships, understanding and trust. Ecodevelopment was most successful where PAs were able to benefit from early specialized training for forestry staff and additional skills provided through contract staff . e.g. sociologists, women development officers, ecologists and special training provided through specialist NGOs. To sustain effective ecodevelopment programs, Forest departments need to retain these skills and build additional capacity to develop an ecodevelopment cadre as well as to strengthen links to capable local and national NGOs.

11.2 Village development linked to forest protection. The creation of microplans and community funds linked village development to PA protection and provided villagers with choices about livelihood and development options.

- Microplanning needs time and good facilitation due to new participatory processes; inexperience of EDC members, PA staff and many NGOs. Opportunities should be built in to the process to revisit and

adapt the plan, based on experience and to ensure inclusiveness so that the needy and most forest-dependent villagers are included.

- Recognizing differences among households, in regard to economic status and degree of dependence on PA resources for livelihood, is necessary to prioritize activities between, and within, villages based on dependency on forest resources (red, yellow, green with red villages showing greatest dependency). The poorest individuals may be most dependent on forest resources yet least able to find 25% contribution e.g. to access LPG stoves to reduce pressure on firewood collection. Even green villages, and green households, may receive benefits to honor good behaviors but would not be primary targets if EDC activities are designed to reduce threats to PAs.
- The EDC as a village level institution has proved effective but long-term sustainability depends on sense of ownership and benefits from those institutions. The internal homogeneity of villages in terms of caste, economic activity or economic stratum can influence the success of EDCs and ecodevelopment activity. Small homogenous sub-village level subgroups may function more effectively than large, village level heterogeneous groups. EDCs organized by profession/user groups at Periyar successfully built on existing institutional structures. Similarly women's SHGs perform effectively due to small size, cohesiveness and high levels of communication within the group.
- Ecodevelopment requires dedicated PA field staff. The expectation that staff could take on ecodevelopment responsibilities as well as normal duties was unrealistic. Experience showed that having exclusive staff for ecodevelopment a) allowed more frequent interaction as facilitators with villagers and increased trust and b) avoided staff being in two conflicting roles.
- Capacity building for villagers and forestry staff was critical. Special efforts are needed to train and build capacity of EDC members with emphasis on leadership, VDF management, entrepreneurial skills, conflict resolution, accessing external grants and government schemes and selection of appropriate ecodevelopment activities.
- Credible NGO support was helpful at some sites, especially in participatory processes such as microplanning and specialized training, but not all sites had access to capable NGOs. Where Forestry staff are left to shoulder the burden of preparing and implementing microplans, adequate time and investment needs to be put into initial capacity building.
- Women organizers were critical for engaging women more actively. The specific inclusion of women and landless in EDCs led to greater social justice and empowerment but also encouraged these groups to assume greater responsibility for natural resource management e.g. women forest patrols at Buxa and Periyar.
- Creating an EDC for field -level PA staff (e.g. Periyar) strengthened support for ecodevelopment among front-line staff and ensured that they also benefited from the social and economic benefits of ecodevelopment.
- Power equations prevailing in village society can permeate EDCs so that the poor remain marginalized. Effective operations of village EDCs with more equitable sharing of benefits may depend on continued infusions of funds and capacity from Forestry Departments and other government programmes.
- Imaginative use of early grants through the credibility fund can be a useful way to help the poorest members of the community to escape the debt trap set by money lenders and the destructive cycle of poverty and poaching e.g. Periyar.
- The 25% reciprocal contribution was built into the microplans to provide the capital for the community development fund but raising the 25% proved problematic in many villages, especially for individual or family benefits. Typically the more socio-economically secure are more likely and able to seize new initiatives. Community-based activities provided the poor with a stake and created more equitable sharing of benefits..
- For transparency and accountability microplans need to be available in local languages and accessible in the village. Billboards listing ecodevelopment activities and funding allocations proved a

useful mechanism for ensuring transparency.

- Sustainability of EDCs rests on the viability of income-generating activities and the capacity of EDCs and forestry staff to use VDF as a revolving fund with clear criteria, byelaws on allocation and use of funds and overall amount to be reserved, realistic interest rates on micro-loans and timely and transparent review of approvals and expenditures
- Over time, provision of new skills and empowerment may provide more sustainable benefits than income generation from goods. Where benefits depend on agricultural commodities, fluctuating prices and variable market mechanisms, solutions may be temporary in space and time and communities may need additional technical assistance. A key challenge for PA managers, is how to assist local communities to better help themselves, without taking on long-term responsibility for village welfare and development.

11.3 Sustainability. The long-term sustainability and success of the ecodevelopment programs and individual EDCs can be enhanced through linkages to political processes and local and national government programs.

- Panchayats can enhance the width and success of ecodevelopment programs through the capacity of the Panchayat Raj institutions to mobilize funds for village level development.
- The ability of PAs and EDCs to maintain development efforts will depend on strengthened linkages and alignment of other government programs to support activities that reduce conflict between PA and community needs. All PAs have already demonstrated good ability to access other government resources e.g. Famine relief, World Food Program, State development programs and further strengthening of regional committees will enhance this process.
- Ecotourism can provide new opportunities, through ecodevelopment surcharges on visitor fees, or through alternative livelihoods e.g. at Pench where promoting the park as Mowgli country increased visitor numbers and provided alternative livelihoods as boatmen to former fish poachers.
- If ecodevelopment is to continue as a successful and sustainable model, mechanisms need to be put in place to allow fund flows without delays to the PA level, perhaps through lines of special authority as established for FDAs.
- At the Central government level, there is a need for an effective and fully-staffed ecodevelopment wing in MOEF to better support national ecodevelopment programs as well as for overall project coordination.

11.4 *Overall Project design.*

- ***Reciprocal co-financing:*** The need to provide 25% co-financing towards ecodevelopment activities led to some village families being excluded from ecodevelopment benefits. For future ecodevelopment projects it may be more effective to use the simpler model adopted at KMTR , where SHG s were established first and the project then provided additional co-financing. The KMTR model has proved sustainable beyond the project lifetime with delegation of powers to village members for decision making over fund utilization providing the basis for responsible and effective functioning of village groups.
- ***Coverage of village :*** Because of the difficulties in establishing EDCs, not all villages within a 2 km buffer zone were included within the project. Future projects need to deal with all the villages impacting on the PA (whether these fall within the 2 km zone or beyond) and to identify priority target villages, and households, based on levels of forest dependency.
- ***Multiple site:*** A major strength of the project was the decision to work at multiple sites across seven states. This allowed experimentation with different models of ecodevelopment, exchange of best practice, and cross site visits for EDC members and PA staff. The expertise and knowledge acquired

through this project should be used in future ecodevelopment efforts by linking some of the current centers into a learning network.

- The up-front ***Credibility Fund*** and ***Discretionary Funds*** proved useful mechanisms for addressing special needs, facilitating the establishment of the EDCs and in providing useful additional benefits for both PAs and communities. Specifically Discretionary funds were used to provide ecodevelopment benefits to in-park hadis in Nagarahole, additional benefits for field-level staff e.g. uniform, boots, medical kits and establishing the small grants research programs in individual PAs.
- ***Relocation*** of villages located inside PAs needs to be addressed realistically. Usually villagers have greater opportunities for income generation and access to development, education and other government schemes outside the parks. Settlements within parks are also subject to restrictions cattle grazing, collection of forest products and limited ecodevelopment options. Relocation, however, needs to be voluntary and well documented but should be available to all families within a social group. Partial resettlement may be only a short-term solution with numbers of families and cattle increasing to be a future management issue (e.g. Maldhari nesses at Gir).
- ***Dealing with criticism*** India has a strong civil society movement, both pro-conservation and pro-poor, and the project attracted much criticism for a) sacrificing biodiversity objectives to address poverty issues and b) disadvantaging poor communities to support wildlife conservation. Much of this criticism focused on specific project components and management interventions, in particular the Village Area Development Component, including relocation of communities. While some of this debate was healthy, much of it became destructive and paralyzing so that opportunities were lost to improve processes and better benefit the communities of concern. A key lesson for future projects is the need to have a pro-active two way communications strategy in place from preparation onwards to ensure that (i) good public information is disseminated about the goals and achievements of the project and (ii) constructive feed back influences project interventions.
- ***Monitoring reciprocal commitments*** The microplans provided some minimal baseline information on demographic and socio-economic data but more effective monitoring of project impacts, including through participatory monitoring, would have helped to better adjust or prioritize ecodevelopment activities. Such monitoring needs to include impacts on income generation, reciprocal commitments, quality of EDC work implemented, department commitment to prevent grazing, poaching, timber thefts etc.
- ***Replication and dissemination*** and outreach strategies need to be built in from inception of the project. Important lessons should be disseminated widely a) to build capacity and allow replication and b) to create an informed climate of news about IEDP successes and issues to counter outside criticism.

- ***Professional staffing :*** Strong commitment from the States in staff deployment and at individual PA level was key to ecodevelopment success. Availability of contracted professionals brought necessary skills for community participation, ecodevelopment microplanning and monitoring when PAs were able to take advantage of such consultancies. Specialist contractual staff will be needed to sustain ecodevelopment efforts beyond the project, especially since Forestry Departments are suffering from manpower shortages and not replacing older staff..