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PERFORMANCE ASSESSMENT REPORT

INDIA

**ANDHRA PRADESH FORESTRY PROJECT
(CREDIT 2573-IN)**

July 8, 2002

*Sector and Thematic Studies Group
Operations Evaluation Department*

Currency Equivalentents (annual averages)

Currency Name: Rupees, *Currency Unit:* (Rs.)

Appraisal 1994 Rs.31.00 = US\$1.00
Completion 2001 Rs.45.60 = US\$1.00

Abbreviations and Acronyms

APFD	Andhra Pradesh Forest Development
EDC	Ecodevelopment Committee
ERR	Economic rate of return
FDC	Forest Development Corporation
FMIS	Forest Management Information System
FRR	Financial rate of return
GIS	Geographical information system
IDA	International Development Association
ICB	International competitive bidding
ICR	Implementation Completion Report
JFM	Joint Forest Management
MIS	Management information system
MTR	Mid-Term Review
NGO	Nongovernmental organization
NTFP	Non-timber forest product
OP	Operational Policy
SAR	Staff Appraisal Report
TDP	Tribal Development Plan
VSS	Van Samarakshan Samiti

Fiscal Year

April 1 – March 31

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July 8, 2002

MEMORANDUM TO THE EXECUTIVE DIRECTORS AND THE PRESIDENT

**SUBJECT: Performance Assessment Report on Andhra Pradesh Forestry Project
(Cr. 25730-IN)**

Attached is the Performance Assessment Report (PAR) for the India Andhra Pradesh Forestry Project (Cr. 25730-IN), for which a credit in the amount of SDR 55.6 million (US\$77.4 million equivalent) was approved on February 24, 1994. The project closed as scheduled on September 30, 2000, and was fully disbursed (US\$91 million equivalent). There was no cofinancing.

The *main objectives* of the project were to increase forest productivity and quality, protect the environment, alleviate rural poverty, and strengthen sector policies to be consistent with those objectives. They were to be achieved by: (i) introducing local participation in protection and management of public forests; (ii) increasing the productivity of designated forest lands and other marginal lands; (iii) maintaining and improving biodiversity; (iv) increasing private participation in sector development; and (v) improving public forest management and development. It was expected that through these activities the project would also increase the subsistence and incomes of fringe forest populations, many of whom are tribal people.

The *project components*, after some relatively minor mid-course correction, were: (i) regeneration and rehabilitation of forests by Joint Forest Management (JFM) including special investment for tribals. (ii) increasing forest productivity on forest land through support for in-filling and plantations, including the establishment of high-yielding eucalyptus plantations under the Forestry Development Corporation (FDC). (iii) increasing forest production on private and communal lands through the sale of quality seedlings and the promotion of group farm forestry. (iv) improving planting material quality and conducting research. (v) biodiversity conservation, including improved Protected Area management, eco-development with rural community participation, and research and education programs. (vi) strengthening institutional and forest sector management including policy and administrative reform, training, improving staff amenities, upgrading forest management facilities, and installing a forest management information system. A Tribal Development Plan was prepared and implemented. A number of associated additional activities were taken up by the proactive Forestry Department including community thrift groups.

The project impact was, on balance, highly satisfactory notwithstanding substantial remaining unfinished business for the follow-on project in addressing the needs of the poorest. Over the relatively short time span of a single project, it transformed a previously largely "command and control" forestry department into a service organization supporting forest management through participation by community groups. There was significant improvement in governance and openness. Many NGOs assisted with implementation. An important follow-on project will help to consolidate the significant gains made. There remain however weaknesses in the extent to which the project supported the poorest and some poor were losers rather than gainers. Among these are illegal forest encroachers who lost the forest land they were cultivating without explicit compensation. Some may have

benefited from income earning elements of the Tribal Development Plan. While the issue of illegal encroachment in forests in India and how to address it poses complex dilemmas, the lack of an explicit plan to replace lost income represents a safeguard violation which needs to be addressed in the follow-on project.

The PAR rates Bank Performance as Unsatisfactory because of the safeguard violation. The project achieved, and in most cases exceeded, its relevant objectives with a satisfactory level of efficiency. Approximately 850,000 hectares of degraded forest have been brought under improved management and protection, more than twice the appraisal target; 335,000 hectares of JFM forest area have been treated, about twice the appraisal target; 2,666 Vana Samrakshana Samiti (VSS, Forest Protection Committee) were formed, about two-thirds more than the appraisal target. Although the project fell short of its target for clonal plantations—about 8000 hectares planted against a target of 17,500 hectares—the growth rate in the eucalypt plantations has been outstanding. The project developed an exceptional Geographical Information System and is able to annually show the changes in forest cover for each VSS being supported along with a range of other data. This remote sensing imagery clearly shows significant improvements in forest cover. The project also supported a number of important interventions related to wildlife and protected areas.

The project findings, tempered by other OED experience, offer five main lessons. *First*, it is possible to turn around the strategy of a large public entity from command-and-control to community participation quite quickly given commitment at the top. It is a longer process to develop community skills and create incentives throughout the service. Therefore, sustained skills development for government staff especially at the lower levels and for other stakeholders in participatory processes over periods longer than a single project is necessary. *Second*, in any tribal forest situation there is a high potential for involuntary resettlement. During project review, Bank management should carefully question claims in natural forest management projects that no involuntary resettlement issues are anticipated. *Third*, even where a high percentage of the poor are forest dependent, it is much easier to manage forests for trees than for the poor. Equitable distribution of the benefits needs early attention through pro-poor policy, government and community processes, and resource management systems. *Fourth*, economic analysis of community development interventions will usually be incomplete if it assesses only the net benefits associated with members themselves or their allocated area. This is because others may have previously utilized resources inside the boundary, and also because members may have previously utilized resources outside the boundary.

Attachment

OED Mission: Enhancing development effectiveness through excellence and independence in evaluation.
About this Report

The Operations Evaluation Department assesses the programs and activities of the World Bank for two purposes: first, to ensure the integrity of the Bank's self-evaluation process and to verify that the Bank's work is producing the expected results, and second, to help develop improved directions, policies, and procedures through the dissemination of lessons drawn from experience. As part of this work, OED annually assesses about 25 percent of the Bank's lending operations. In selecting operations for assessment, preference is given to those that are innovative, large, or complex; those that are relevant to upcoming studies or country evaluations; those for which Executive Directors or Bank management have requested assessments; and those that are likely to generate important lessons. The projects, topics, and analytical approaches selected for assessment support larger evaluation studies.

A Project Performance Assessment Report (PPAR) is based on a review of the Implementation Completion Report (a self-evaluation by the responsible Bank department) and fieldwork conducted by OED. To prepare PPARs, OED staff examine project files and other documents, interview operational staff, and in most cases visit the borrowing country for onsite discussions with project staff and beneficiaries. The PPAR thereby seeks to validate and augment the information provided in the ICR, as well as examine issues of special interest to broader OED studies.

Each PPAR is subject to a peer review process and OED management approval. Once cleared internally, the PPAR is reviewed by the responsible Bank department and amended as necessary. The completed PPAR is then sent to the borrower for review; the borrowers' comments are attached to the document that is sent to the Bank's Board of Executive Directors. After an assessment report has been sent to the Board, it is disclosed to the public.

About the OED Rating System

The time-tested evaluation methods used by OED are suited to the broad range of the World Bank's work. The methods offer both rigor and a necessary level of flexibility to adapt to lending instrument, project design, or sectoral approach. OED evaluators all apply the same basic method to arrive at their project ratings. Following is the definition and rating scale used for each evaluation criterion (more information is available on the OED website: <http://worldbank.org/oed/eta-mainpage.html>).

Relevance of Objectives: The extent to which the project's objectives are consistent with the country's current development priorities and with current Bank country and sectoral assistance strategies and corporate goals (expressed in Poverty Reduction Strategy Papers, Country Assistance Strategies, Sector Strategy Papers, Operational Policies). *Possible ratings:* High, Substantial, Modest, Negligible.

Efficacy: The extent to which the project's objectives were achieved, or expected to be achieved, taking into account their relative importance. *Possible ratings:* High, Substantial, Modest, Negligible.

Efficiency: The extent to which the project achieved, or is expected to achieve, a return higher than the opportunity cost of capital and benefits at least cost compared to alternatives. *Possible ratings:* High, Substantial, Modest, Negligible. This rating is not generally applied to adjustment operations.

Sustainability: The resilience to risk of net benefits flows over time. *Possible ratings:* Highly Likely, Likely, Unlikely, Highly Unlikely, Not Evaluable.

Institutional Development Impact: The extent to which a project improves the ability of a country or region to make more efficient, equitable and sustainable use of its human, financial, and natural resources through: (a) better definition, stability, transparency, enforceability, and predictability of institutional arrangements and/or (b) better alignment of the mission and capacity of an organization with its mandate, which derives from these institutional arrangements. Institutional Development Impact includes both intended and unintended effects of a project. *Possible ratings:* High, Substantial, Modest, Negligible.

Outcome: The extent to which the project's major relevant objectives were achieved, or are expected to be achieved, efficiently. *Possible ratings:* Highly Satisfactory, Satisfactory, Moderately Satisfactory, Moderately Unsatisfactory, Unsatisfactory, Highly Unsatisfactory.

Bank Performance: The extent to which services provided by the Bank ensured quality at entry and supported implementation through appropriate supervision (including ensuring adequate transition arrangements for regular operation of the project). *Possible ratings:* Highly Satisfactory, Satisfactory, Unsatisfactory, Highly Unsatisfactory.

Borrower Performance: The extent to which the borrower assumed ownership and responsibility to ensure quality of preparation and implementation, and complied with covenants and agreements, towards the achievement of development objectives and sustainability. *Possible ratings:* Highly Satisfactory, Satisfactory, Unsatisfactory, Highly Unsatisfactory.

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Principal Ratings

	<i>ICR*</i>	<i>ES*</i>	<i>PPAR</i>
Outcome	Highly Satisfactory	Highly Satisfactory	Highly Satisfactory
Institutional Development Impact	High	High	High
Sustainability	Likely	Likely	Likely
Borrower Performance	Satisfactory	Satisfactory	Satisfactory
Bank Performance	Satisfactory	Satisfactory	Unsatisfactory

* The Implementation Completion Report (ICR) is a self-evaluation by the responsible operational division of the Bank. The Evaluation Summary (ES) is an intermediate OED product that seeks to independently verify the findings of the ICR.

Key Staff Responsible

	<i>Task Manager</i>	<i>Division Chief</i>	<i>Country Director</i>
Appraisal	Ann Clark	Shawki Barghouti	Heinz Vergin
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Preface

This is a Performance Assessment Report (PAR) for the India Andhra Pradesh Forestry Project (Cr. 25730-IN), for which a credit in the amount of SDR 55.6 million (US\$77.4 million equivalent) was approved on February 24, 1994. The project closed as scheduled on September 30, 2000, and was fully disbursed (US\$91 million equivalent). An Implementation Completion Report (Report No. 22021) was submitted by the South Asia Region on March 8, 2001.

The report was prepared by the Operations Evaluation Department (OED) based on the Implementation Completion Report (ICR), the Staff Appraisal Report (Report No. 12193, January 24, 1994), the Development Credit Agreement, and review of Bank files. The project was also discussed with Bank staff, beneficiaries, government staff at central, state, and district levels, corporations, and nongovernmental organizations (NGOs). Villages visited within districts were randomly chosen with some accommodation to travel efficiency. The cooperation and assistance of all stakeholders, NGOs, and government officials is gratefully acknowledged, as is the support of the staff of the World Bank Country Office in India. The report benefited from preliminary findings based on the field work for a case study of World Bank project impacts on Scheduled Tribes being undertaken in AP by OED. That work is not complete yet and may, therefore, supplement or modify some of the findings reported in this PAR.

The ICR is clear and generally well presented, although it leaves room for further drawing of lessons and did not address the issue of forest encroachers in relation to Bank safeguard policies. Following standard OED procedures, the draft PAR was sent to the borrower for comments before being finalized. The comments of the Andhra Pradesh Forestry Department are included as Annex B.

1. Background

Forests cover about 20 percent of India's land area and contribute about 1 percent to GDP. The forest area has increased slightly in recent years, but about 42 percent of the forested land is degraded and nearly all forest land is state-owned. About 200 million people, about 20 percent of the population, depends partly or entirely on forest resources for a livelihood. About 6.4 million hectares of the state of Andhra Pradesh (AP) is designated as forest—about 23 percent of the land area—the actual forest cover is closer to 4.7 million hectares. Forest land is about 70 percent deciduous, 25 percent thorny, and 5 percent other forest types—about 45 percent of the forest land is degraded. There are three main zones: the coastal plains, the eastern ghat hill ranges running northeast to southwest, and the western peneplain with rolling topography. Rainfall ranges from 750 millimeters per year in the South to 1,300 millimeters per year in the north.

The *main objectives* of the project were to increase forest productivity and quality, protect the environment, alleviate rural poverty, and strengthen sector policies to be consistent with those objectives. They were to be achieved by (i) introducing local participation in protection and management of public forests; (ii) increasing the productivity of designated forest lands and other marginal lands; (iii) maintaining and improving biodiversity; (iv) increasing private participation in sector development; and (v) improving public forest management and development. It was expected that through these activities the project would also increase the subsistence and incomes of fringe forest populations, many of whom are tribal people.

The *project components*, after some relatively minor mid-course correction, were:

- Regeneration and rehabilitation of forests by Joint Forest Management (JFM) including special investment for tribals.
- Increasing forest productivity on forest land through support for in-filling and plantations, including the establishment of high-yielding eucalyptus plantations under the Forestry Development Corporation (FDC).
- Increasing forest production on private and communal lands through the sale of quality seedlings and the promotion of group farm forestry.
- Improving planting material quality and conducting research.
- Biodiversity conservation, including improved Protected Area management, eco-development with rural community participation, and research and education programs.
- Strengthening institutional and forest sector management including policy and administrative reform, training, improving staff amenities, upgrading forest management facilities, and installing a forest management information system.

2. Findings

The project was highly *relevant* to the needs of the forestry sector of Andhra Pradesh, but it was relevant to the needs of different elements of the forestry sector in different ways. It was highly relevant to the environmental objective to regenerate degraded forests and restore biodiversity. It was relevant to the needs of many farm families partly dependent on forests. Relevance to the poorest, however, is more questionable although some certainly benefited. The project was instrumental in developing and consolidating a fundamental shift in the AP approach to forest management. Arguably AP is now the leading state in India in shifting to JFM.

Institutional development is rated high. While there is unfinished business on institutional development, particularly in improving consultative processes and skills and procedures for funds management and forest land allocation, the institutional turnaround over a relatively short period in a public service department with a long tradition of command and control has been impressive. Substantial social capital has been generated through the support for community involvement in forest management. NGOs rightly continue to point out numerous areas of shortfall. They are impatient with slow progress and lack of transparency. But, given the difficulty of turning around a large government bureaucracy, progress has been good by any reasonable standard.

Outcome is rated highly satisfactory. The project achieved, and in most cases exceeded, its relevant objectives with a satisfactory level of efficiency. Approximately 850,000 hectares of degraded forest have been brought under improved management and protection, more than twice the appraisal target; 335,000 hectares of JFM forest area have been treated, about twice the appraisal target; 2,666 Vana Samrakshana Samiti (VSS, Forest Protection Committee) were formed under the project, about two-thirds more than the appraisal target. Including VSS outside the project the total numbers reached about 6,000. The program of introducing smokeless stoves (*chulas*) may have reduced the use of firewood but some observers have found that many did not work or were not used. Although the project fell short of its target for clonal plantations—about 8000 hectares planted against a target of 17,500 hectares—the growth rate in these plantations has been outstanding.

Outcome is highly satisfactory: the project achieved a substantial strategic change in a short time; the focus needs to shift now to ensure that the poor benefit more, and that encroachers find viable alternative livelihoods.

However, during the follow-on project, which had been pre-appraised at the time of the PAR mission, two concerns, mainly related to the extent to which the poor and encroachers have gained or lost, need to be addressed. First, as noted above, the Bank's safeguard policy on involuntary resettlement was violated. Illegal encroachers have been evicted from forest land that has been newly allocated to VSSs. In at least some cases and possibly many cases, this has been without de facto compensation. While some of the former encroachers may have picked up temporary labor income this was without explicit compensation since there was no formal arrangement for resettlement and rehabilitation¹. Second, some poorer community members have been forced, either by Forestry Department (FD) or by a VSS, to sell their goats or to stop headloading of wood for sale. While this may have been beneficial for forest growth, it reduced income for some households. These challenging equity concerns, with no easy solutions, need to be resolved under the next project.

LESSONS

Several generic lessons from this project underscore findings elsewhere.

1. It is possible to turn around the strategy of a large public entity from command-and-control to community participation quite quickly given commitment at the top. It is a longer process to develop community skills and create incentives throughout the service. Therefore, sustained skills development for government staff especially at the lower levels and for other stakeholders in participatory processes over periods longer than a single project is necessary.

1. In Annex B the AP Forest Department dispute that there was any forced eviction. They also note that encroachment, being illegal, cannot be compensated. They argue that no VSS members complained of lost land. The mission, based on field observation, discussion with NGOs, and findings of the subsequent OED Tribal Study Survey, believes that some households, although an unknown number, did lose land-based income sources as a result of the project without explicit arrangements aimed at fully and sustainably replacing that income. As noted later in the report, the mission is aware of the complexity of this issue. Under the follow-on project it appears it is being addressed through a Resettlement Plan.

2. In any tribal forest situation there is a high potential for triggering involuntary resettlement. During project review, within the new safeguard monitoring management formats, Bank management should carefully question claims in natural forest management projects that no involuntary resettlement issues are anticipated and focus on this issue should be sustained during supervision.

3. Even where a high percentage of the poor are forest dependent, it is much easier to manage forests for trees than for the poor. Equitable distribution of the benefits needs early attention through pro-poor policy, pro-poor government and community processes, and pro-poor resource management practices.

4. Economic analysis of community development interventions will usually be incomplete if it assesses only the net benefits associated with members themselves or their allocated area. First, because others may have previously utilized resources inside the boundary, and second, because members may have previously utilized resources outside the boundary. Whether the net costs and net benefits balance out is an empirical question requiring attention.

FUTURE DIRECTIONS

Some issues specific to Andhra Pradesh require attention under the follow-on project:

- Evicted encroachers under the first project should be traced and evaluated for income replacement. This will be challenging and procedures to limit false claims will be needed. A plan should be developed for handling future encroachment cases. This is in hand as a draft Resettlement Plan for the follow-on project but it will need refining with NGO input.
- Social audits following agreed procedures supported by NGOs and random audits of VSS/FD accounts at village level by private auditors should be adopted.
- More attention should be given to equity and the impact of FD and VSS decisions on the poorest. Monitoring and training to give FD and VSS members techniques for listening to and responding to the needs of the poor will be important.
- A grazing policy, called for originally under the AP Forestry Project but of uncertain status, should not be promulgated unless it is to be simply a process-based policy. Grazing strategy at the state level is not amenable to generic controls; optimal forage management is too location-specific. Localized grazing management strategies may well be beneficial at village level to both people and plants but should be supported with location-specific social and technical advice rather than be governed by a generic strategy².
- At present, the coverage of JFM is limited. It now needs to be further extended to the non-degraded forest areas which present different sets of challenges.
- A realistic and actionable strategy for resolving the differences between JFM practice in AP and the national Forest Conservation Act is needed to ensure no reversals on permissible timber harvest practices and benefit sharing. (Some harvest plans have been on hold because of this – which threatens the JFM concept). Within this framework, the benefit sharing arrangements for timber – for both intermediate and final products – need further clarification. Model calculations should be made available publicly to demonstrate precisely how net benefits will be determined.
- More needs to be done on demand and supply projections and price forecasting. With such widespread synchronized regeneration and plantation establishment, price crashes are possible.
- The current revisiting of the Girijan Cooperative Corporation (GCC) monopoly over NTFP needs to be completed quickly. Floor prices or privatization are likely to be the main options, but testing of alternatives with selected products on a pilot scale may be warranted.

2. In Annex B, the AP Forestry Department say there is no initiative to force a policy on grazing. However, the mission found that there was a draft document that appeared at one time to have been under consideration.

3. Analysis

RELEVANCE

Project relevance was high overall. This finding is consistent with recent findings in the India Evaluation Country Case Study for the OED study – *The World Bank's 1991 Forest Strategy and Its Implementation* (2000) – which concluded that the Bank's aggregate forest sector assistance in India had been relevant, although needing improvement, particularly in integrating agriculture, rural development, and forest sector strategies and in building an overarching Bank strategy for the forest sector. It noted that the selection of promising states, such as Andhra Pradesh, to show what could be done was an appropriate route to that strategy. It is widely acknowledged that the project was instrumental in consolidating a fundamental shift in the AP approach to forest management, building on earlier experience both locally and in other states. It was highly relevant to the regeneration of degraded forests, and, in due course, restoration of biodiversity. It was relevant to the needs of many farm families who partly rely on forests for their needs. However, the extent to which it was relevant to the poorest of the poor and those predominantly dependent on forests is more questionable. If there were not some questions in this area relevance would be rated high.

EFFICACY

Social impact data are limited, but impact data on forest cover changes are excellent. Efficacy—the extent to which the project objectives were achieved taking into account their relative importance—is rated high. Community participation was introduced (objective i); productivity was increased (objective ii); biodiversity was improved, although on a limited scale (objective iii); and public forest management was improved (objective v). The extent to which private participation was increased was more modest (objective iv), but private seedling nurseries were supported and a number of employment opportunities were developed. Approximately 850,000 hectares of degraded forest were brought under improved management and protection, more than twice the appraisal target; about 345,000 hectares of JFM forest area were treated, about twice the appraisal target; 2,666 VSSs were formed, about one-third more than the appraisal target and assisting about one-third more households. There has been some observation of impacts on Naxalite movement practices possibly associated with the project – see Box 1. Sixty-five Women Community Volunteers were trained. Support was extended beyond the project to 3,550 more villages using non-project funds. Impact surveys suggest a reduction in fuelwood use of 37 percent due to the program of smokeless stoves (*chulas*), which would have reduced smoke-induced health problems. However, some observers have questioned the validity of this data. The project fell short of its target for clonal plantations established by the Forest Development Corporation—about 8000 hectares against a target of 17,500 hectares—however, the timber growth rate has been outstanding with yields for clonal eucalypts expected to reach about 200m³ per hectare after seven years compared to about 70m³ per hectare for non-clonal material. Substantial work was also done by FD on medicinal plants both in research and extension.

Poverty Impact and Gender. Relative to projects in other sectors, efficacy in reaching the poor has probably been satisfactory since forests support many of the poorest rural people in India. 74 percent of respondents in the OED Scheduled Tribes Study reported that their incomes had increased but all respondents in non-VSS villages felt their incomes had decreased – due to loss of land allocated to VSS villages who still often had access to non-VSS village areas. However, efficacy in improving the welfare of the poorest *within* the selected communities has

Many poor VSS members have gained short-term income and can anticipate substantial future income gains, but some – possibly many – goat owners, headloaders, and shifting cultivators have lost income and some of those outside the VSS may not see any project benefits.

been weaker. Livestock herders, fuelwood headloaders, *podu* cultivators (shifting cultivators), and a disproportionate number of women, all within the poorest groups, may too often have been losers, although some have picked up temporary employment on water conservation structures³ or benefited from the Tribal Plan support. The India Evaluation Country Case Study for the OED study – *The World Bank's 1991 Forest Strategy and Its Implementation* (2000) – highlighted the potential poverty impact of forestry interventions but also noted the challenges of including poor tribal people in the benefits and the potential hardships that the initial protection phase can cause to the poorest. Nevertheless, some indication of overall efficacy is that there is a demand from non-VSS villages⁴ to be included, although this is probably as much related to the fact that it is the route to funding than to any longer-term assessment of benefits. The OED Scheduled Tribe Study survey found that indigenous people were clearly among the groups that benefited. The follow-on project aims to do better at supporting the disadvantaged. While the failure to reach the poorest is a weakness, getting the coverage and processes widely in place first, and deepening the pro-poor focus as skills increased, in retrospect was probably the best approach given the window of opportunity for this fundamental strategic shift⁵.

Box 1. Interface with the Naxalite Movement

The Naxalite movement (named after a village in West Bengal where the movement started in 1967) started as a revolt against the inequities of land distribution in India. For many years Naxalites have operated, using violence against government, in poorer tribal forest areas. (The mission saw two recently dynamited government buildings.) They support and exploit tribal needs for more control over the forests than is enabled by the FD and the Forest Conservation Act. There is mixed evidence on the impact of the project on the Naxalite movement and vice versa. There has been some suggestion that earlier antagonism to the JFM program by Naxalites, who had been encouraging forest clearance for agriculture, has reduced somewhat. If this was the case, it would be an important contribution. About 40 percent of Andhra Pradesh VSSs are operating in areas dominated by Naxalites⁶. In a few areas, however, villagers who have seen the benefits from the JFM program have started to turn pressure back on the Naxalites to allow JFM, with, reportedly, some limited success. There is evidence that in AP Naxalites are themselves supporting some interventions similar to those under the JFM program. However, overall the picture is still mixed. There remain large areas of forests where the Forest Department have no control and where such things as NTFP prices and renovation of ponds are determined entirely by the Naxalites. While in many Naxalite locations it is impossible to provide outside support because of the risks, some of this pressure has had positive impacts on GOAP strategy.

The Tribal Development Plan expenditure made quite a significant contribution to poor tribal households. Of the 251,600 households included in VSSs, 124,000 families were from scheduled tribes and other weaker sections of the communities who benefited from this plan or other associated support. The plan support provided skills, amenities, and income-generating investments such as percolation tanks, leaf plate making, and fruit trees. Wisely, benefits for tribal peoples were extended

3. People in several villages complained about the ban on goat grazing. One man, when asked why he had not replaced his goats with sheep, which the VSS was permitting, said that as soon as he sold his goats the money lender had demanded immediate repayment.

4. Preliminary findings from the OED Scheduled Tribes Study survey.

5. In Annex B, the AP Forest Department argues that the project did reach the poorest. The mission's position is that, overall many poor were helped, as indicated by the Tribal Study survey. Nevertheless, the mission spoke to some members of VSSs who appeared to be mostly the poorer ones, who had lost income due to changes such as bans on goat grazing and headloading. Moreover, from the Tribal Study survey evidence, it seems clear that a number of non-VSS people, often in neighboring villages to VSS villages, lost out due to loss of forest resource access of various kinds.

6. At this point in the Box the final draft seen by AP Forest Department had referred to Adilabad as having some non-functional VSSs due to Naxalite activity, in the light of AP FD comments in Annex B, and lack of direct evidence, this has been omitted.

to others when it became apparent that discrimination might cause discontent. The impact studies, covering 10% of the VSSs formed up to March 1998, were carried out by a number of different institutions and NGOs. They show significant benefits in a number of areas but are of variable, mostly modest, quality and do not establish a “without project” counterfactual or baseline.⁷ They suggest that the *average* income increases within VSSs sampled has been Rs5,600 per household per annum (this is close to a model calculation that suggested about Rs5,400). However, income losses over the protection phase, for example from reduced goat grazing, do not appear to have been captured by the impact surveys, nor losses to people outside the VSS.

The project had some positive impacts related to gender issues. Women make up about a third of the members of Managing Committees. Women VSS members formed 1,175 thrift groups—an activity not envisaged at the beginning. This was associated with the reported 400,000 such groups in AP as a whole which mobilized \$240 million last year. Overall, the Forest Department did a good job of supporting such AP-wide developments and tapping into other sources of support for VSSs, although NGOs have complained that there is still insufficient program information available to villagers.

GIS System. The GIS system established by the project is certainly the best of any Bank forestry project in India, and probably one of the best globally, although there have been weaknesses in ground truthing. It has now provided four years, coming up to five, of annual forest cover remote sensing data for each VSS forest area showing a consistent trend in forest cover improvement—a unique record that is of increasing value. The computerized maps are contoured, carry the location, specifications, and cost of structures, and show roads and other VSS data. It is a costly system (though costs have been reduced by using it as a training program), but it will almost certainly pay off in the long run. As noted by the NGOs, there remains an urgent need to revisit VSS boundaries in many cases.

The GIS, a remarkable achievement, shows good and quite rapid improvements in forest cover.

Hydrological Impact. The mission found no convincing quantitative evidence on the soil moisture conservation gains of the forest improvement and soil conservation structures, although there is some positive anecdotal evidence. However, it is too early to expect quantitative evidence. Apart from the fact that this is a complex hydrological issue, because forests not only improve water percolation but also extract more water than most other vegetation, it would take a number of years to separate the impacts of forest change and man-made structures from the impact of rainfall pattern.

Some Missed Technical Opportunities. Unfortunately, interagency coordination difficulties prevented implementation of a collaborative forage program. This leaves a very important component lagging for the follow-on project. Forage production, and testing of appropriate and practical rotational livestock management systems in different forest zones, perhaps adaptations of the Holistic Resource Management system, is extremely important in ensuring sources of income for the poor.

Two neglected areas of technical efficacy that are relevant to poverty alleviation are livestock and fisheries. The potential for livestock production, fed with both fodder crop and managed rotational grazing systems, is substantial and has not been addressed. The potential for fish farming in the larger water conservation tanks created by the project and related programs may be significant in the less ephemeral waterbodies. Specialist help from the Fisheries Department should be sought. As with other common property resources, there are options to designate tank fishing rights to the poor that could be explored. (This has been done in Bangladesh.)

7. No indicators were set at the start. The impact studies were contracted out to a number of agencies. Guidance on methodology was insufficient to assess the counterfactual.

EFFICIENCY

Efficiency is rated substantial. The ICR found a satisfactory ERR: a 22 percent base case, rising to 26 percent taking fuelwood at an economic parity price, and 29 percent including global carbon sequestration benefits. The methodology used in the ICR was largely, but not entirely, satisfactory. The re-estimated ERR is slightly higher than the 20% ERR estimated at project appraisal. The methodology questions relate to a widely encountered generic issue with economic analysis of community development: by treating the benefiting communities and their allocated land area as the unit of analysis, net gains or net losses outside those areas are omitted. Also omitted are possible economic costs from changed management practices inside the village area, for example increased fuelwood collection pressure on village revenue land i.e. outside the reserve forest area. In particular, it is not clear from the economic analysis what the impacts on surrounding areas or non-VSS members have been. This is partly an equity issue but also partly an economic question.⁸ It would be fair to record, however, that getting data on external cost or benefit streams is, by its nature, extremely difficult. Thus, in the absence of a substantial study, it can reasonably only be expected to be alluded to qualitatively. Also, there are data questions about carbon sequestration given the lack of ground surveyed data on standing biomass. However, it is unlikely that these uncounted costs net of possible uncounted or reduced benefits would reduce the ERR below the Opportunity Cost of Capital.

INSTITUTIONAL DEVELOPMENT

Institutional development impact is rated, on balance, high, but there is much still to be done to complete the transition to effective statewide community forest management, to achieve equitably distributed income, and to resolve land allocation issues. Nevertheless, by global standards, progress over the six years has been commendable for such a fundamental strategic redirection.

The contribution to building social capital at the village level has been more than substantial notwithstanding the significant task still ahead. While NGOs are impatient with rate of progress and weaknesses, the dramatic change in direction has been a major achievement – in line with a number of similar shifts in AP over the last five years. Social capital gains have been achieved not simply in direct forestry related activities but in related areas such as thrift groups.

Among the other project institutional achievements were: the development of an exceptionally successful GIS system (although, as noted, there are still forest inventory shortcomings); the completion of the Institutional Development Study for APFD, which was reorganized modestly in 1998; good training manuals and operational guidelines; a Government Order issued to guide the implementation of JFM; and amendment of the timber transit rules to give deregulation and simplification. The AP Forest Act is in the process of being amended. The monitoring part of *Monitoring and Evaluation* was handled well with above average data reporting. Evaluation was handled less well. There were sample impact studies contracted out but the mission reviewed the methodology and a sample questionnaire carefully and found the approach and guidance limited in its capacity to elicit incremental attributable net benefits or to show poverty alleviation impact. This is a globally widespread weakness in rural projects.

The reorganization could have been more aggressive in terms of staffing and procedural changes but appears to have been generally well handled and gave a somewhat more efficient staffing distribution. However, there are still a number of procedural issues to be addressed including some irregularity of meetings by the District Forest Committees – a concern expressed by NGOs. Also, the performance

8. The larger the share of total VSS managed land in the total forest area, the more these external trans-boundary cost and benefit impacts become internalized as the external zone shrinks. But that is still some way off.

incentives arrangements need further attention. There are some outstanding concerns related both to possible delays in FD Working Plans for harvest and in compatibility of those plans with village microplans and VSS wishes which need resolution quickly if benefits from harvest of timber products are not to be delayed. The synchronized regeneration that is underway is going to put a strain on harvest planning capacity.

NGOs. The project worked with NGOs wherever they were available, a total of 257 of them (there are about 10,000 NGOs operating in AP as a whole). However, in some areas, no suitable or interested NGOs could be found. There is some evidence from the impact surveys that VSSs supported by NGOs performed better. Many NGOs, and the AP NGOs' Committee on Joint Forest Management, have mixed feelings about the project and the Forestry Department. On the one hand, they believe the project has resulted in a number of promising new directions and they support a follow-on project. But they also expressed concerns, the most important of which are summarized in Box 2.

Box 2. NGO Concerns

NGOs voiced a number of concerns and recommendations for the future at a meeting the mission held with the NGO Committee on Participatory Forest Management and in written material. These are reported here without comment on validity. The mission agrees in whole or in part with a number of them and these are discussed at the appropriate point in the text ⁹.

- Planning and institutional issues include: (i) VSS land should be allocated on natural boundaries rather than FD administrative boundaries, where previous land use arrangements involved several villages there have been problems and delays addressing land disputes; (ii) The Tribal Development Plan is too similar to the Village Development Plan, it needs more tribal-focussed differentiation; (iii) Village microplans should include institutional roles and responsibilities.
- Financial issues include: (i) VSSs still have little control over funds use, which is based largely on Forest Department Treatment Models. A program of transfer of financial responsibility supported by training and NGO help is needed. Fund disposal should primarily be at VSS level; (ii) How beneficiary shares will be calculated needs clarification. Rights over bamboo, plantations, and growth that existed before the VSS are especially unclear. Much pre-VSS growth is still due to community protection and should be rewarded; (iii) There is insufficient reward to VSSs whose members catch timber smugglers. A share of fines should go to the VSS. Arrangements for fines should be clarified; (iv) FD procedures for funding NGOs are haphazard and insufficiently transparent.
- Production issues include: (i) Too little is being done to develop production and income from NTFPs. VSSs should be given rights to sell NTFPs on their own; (ii) Livestock need more attention; (iii) There should be no Grazing Policy—each village is different. Goats should not be banned. There should be integrated village livestock plans.
- Poverty impact and gender issues include: (i) Some tribals undertaking shifting cultivation, grazing, wood collecting, etc. have been marginalized within the VSSs. They need more representation on the Management Committees; (ii) There should be poverty indicators for the next project; (iii) There should be more women's representation and focus on women's production concerns. There is an extra burden on some women due to JFM.
- Institutional structure and process issues are: (i) the District forest committee meetings are not regular. There should be regular meetings at range and divisional level; (ii) There should be an ombudsman.
- Issues directly related to the follow-on project are: (i) Terms of Reference for the role of NGOs in the next project should be developed by a stakeholder committee; (ii) Many NGOs are suspicious of the title of the follow-on project – Community Forest Management – they see it as a cosmetic shift signaling greater handover to VSSs than they believe the FD is prepared to deliver. They would prefer that a change of name should follow further advances in community approach rather than precede it.

9. In Annex B, the AP Forestry Department responds to many of these NGO points. As indicated in the Box, in the interest of providing the NGOs a voice, the mission reports here the main points raised by them without comment. The AP FD response is therefore useful for balance.

Institutional Tensions. Notwithstanding the substantial institutional achievements, a number of problems remain, mainly related to performance at the community level. *First*, there appears to be a divergence between the intent of JFM, which is for communities to largely manage the allocated forest area, and FD management rules, which call for working plans formally approved by the FD. At present, in many villages, it appears that the working plan, prepared by the Forest Officer but not at the village level, is paramount and is largely rubber-stamped by the VSS

committee(s). Instead, the village Microplan should become the working plan and should be under the control of the VSS with the FD holding the right to veto extreme practices, such as clear-felling, that would violate their forestry oversight remit, and also giving technical advice¹⁰. Currently, as noted by a number of observers and NGOs, the FD working plans focus on timber, while NTFPs are the predominant immediate interest of the poorest. NGOs believe that VSS committee members have generally been less poor than the poorest and therefore are more interested in supporting, rather than questioning, the forest staff's focus on timber rather than NTFPs. *Second*, this same divergence is evident in financial management, where the intent is for VSSs to manage funds but where, in late 1998, the Principal Chief Conservator of Forests (PCCF) felt compelled by the fiduciary responsibility imposed by both government and the Bank to issue a warning to staff that they must ensure proper records at VSS level. The problem here is that the government cannot devolve more financial responsibility to communities while still holding its own staff responsible for misuse or poor recording of money at community level. Some risks may have to be taken if real transfer of financial responsibility is to be effected. But also VSS presidents would need to be held more accountable. (There are pros and cons for the proposal under the new project for two accounts at VSS level, one for FD money and one for VSS money.) *Third*, the VSSs may still not be representing the poor or women adequately. This is a widespread problem globally with community groups and cannot be solved by edict. It needs continual attention and training of staff, communities and NGOs. *Fourth*, the VSSs are largely unconnected to the existing panchayat system. This may have had its advantages initially, but it is likely to become a problem in future, particularly since some of the broader VSS activities come close to encroaching on panchayat social development responsibilities. VSSs need now to be anchored legally within the panchayat system, even if loosely as associated committees with one common member to allow breathing room. *Fifth*, as the ICR rightly points out, there is a danger that in its understandable enthusiasm for a holistic development approach APFD will, and perhaps already has, overstepped the bounds of its responsibility into a range of social areas it is not equipped to handle. While in the opening phases of a forest-based rural development push some treading outside institutional bounds may be useful for eliciting community interest and ensuring a holistic approach, this will need to be reined-in in subsequent phases to remain within broad forestry skill areas and to retain overall state government efficiency. Concern about overstepping bounds has been raised before by OED about other forestry projects in India¹¹.

Although the strategy is to hand over forest management to local communities, APFD still maintains a predominant focus on, and responsibility for, forest cover, controls public funds, and commands the technical skills. There are therefore a number of institutional tensions to be resolved.

The Need for Community Performance Analysis and Exit Plans. As might be expected, there is a wide range of performance across VSSs. NGOs have done a good job in supporting them. An institutional maturity study involving the analysis of factors that seem to contribute to strong VSS and poverty performance would be useful. This would also help to differentiate those VSSs needing less

10. In Annex B, the AP Forest Department agrees with the importance of coordination between working plans and micro-plans and outlines a number of steps that are now being taken to ensure this.

11. See India – Alleviating Poverty Through Forest Development, Evaluation Country Case Study Series, OED World Bank, 2000.

help from those needing more help. This would then lead into an exit strategy, which needs to be planned at the community level with community participation. Under the follow-on project there should be an agreed set of criteria for stages in increasing community self-sufficiency and FD withdrawal. Government cannot provide continued intensive facilitation support for VSSs permanently.

FD Skills and Incentives. With respect to FD skills supported under the project, understanding of participatory community approaches appears, from mission observation, to be increasing at both senior levels and lower levels. Some individual lower level staff exhibited quite strong participatory skills. However, there remains an element of authoritarian FD approach at the community level, which is exacerbated by the military-style uniform which is clearly incompatible with a JFM approach. Beyond the longstanding tradition, the authoritarian approach arises partly from lack of skills and partly from anomalies in the community approach itself vis a vis government regulations. NGOs propose more differentiation of training by groups and by need.

The FD recently has initiated a performance-based incentive system for staff that is arguably unfair and may result in a distorted outcome. In the new system, postings choices, a very important matter in the Indian civil service, are based on improvement in forest cover in areas under the staff member's responsibility—as confirmed by the annual remote sensing imagery. Under this system, trees, rather than incomes for people, become the objective. Depending on how it is applied, it may also be unfair to staff in relatively more challenging climatic areas. The incentive system needs to be revisited. Any new system developed should give a substantial weighting to expressed VSS satisfaction with local FD staff performance (as reported by men and women separately).

BANK PERFORMANCE

Bank performance was, for the most part, fully satisfactory, in some respects highly satisfactory but there was a safeguard violation, albeit one with a number of complicating aspects. Bank preparation and appraisal support assisted generally strong quality at entry—although there are some questions about the extent of informed participation by tribal people in VSSs¹². Supervision, which shifted halfway through the project from headquarters to the Country Office, was especially strong on the technical side and with respect to participatory forest management skills¹³. The supervision decision to permit the Forestry Development Corporation to handle the clonal planting material following problems in finding qualified bidders was pragmatic and appropriate. The Mid-term Review was well handled, although it should have picked up the emerging encroachment safeguard issue.

Bank performance was generally good, but for a violation of the Involuntary Resettlement safeguard. This compels an unsatisfactory Bank performance rating.

A Safeguard Violation. It is claimed by FD that encroachment and shifting cultivation was reduced by 81 percent in JFM areas—good for the forests but in some cases bad for the poorest, at least in the short term. In pursuing this encroachment reduction, some, and possibly many, encroachers in forest reserve areas allocated to VSSs were moved off their cultivated land either by the Forest Department or by VSSs themselves without explicit compensation and without any formal process of keeping track of them. There appear to have been varying degrees of compulsion or voluntariness. In some cases

12. The OED Scheduled Tribes Study draft suggests that the predominance of the Telugu language in AP and low literacy means that many tribal people are not aware of what is being discussed at meetings or of written material available and particularly of the financial workings of their VSS.

13. There is a touching memorial plaque to a deceased Bank staff member – Norman Jones – at one of the Forestry Research Stations in gratitude for his exceptional technical services.

wage labor or income-generating investments under the Tribal Development Plan may have *de facto* compensated some families, at least partially, but more by chance than by established process. Notwithstanding these losses by individual households, overall, the OED surveys for the Scheduled Tribes Study found that the project had enhanced customary rights for many tribal people by giving them more control over forest areas. The extent of uncompensated loss of land by individual encroachers remains unclear partly because, with the encroachers gone, they are not readily observed. However, the fact that it has occurred in a number of cases is not in doubt. One case was found during the mission field visits. The field work for the OED tribal study also found several complaints about the loss of cultivable land in one project VSS and one complaint on behalf of others not present in a non-project VSS. In addition, NGOs quoted a number of cases that appeared to be based on first hand observation¹⁴.

What the 1990 Operational Directive Says About This. The 1990 Involuntary Resettlement Guidelines, applicable at the time of appraisal, call for a formal process of compensation. There is no doubt that these Guidelines did apply to encroachers in AP, although the issue of encroachers is certainly a complex one. The specific language of Operational Directive 4.30 includes the following: “The objective...of the policy is to ensure that the population displaced by a project receives benefits from it.... Displaced persons should be ...compensated for their losses...assisted with the move and supported during the transition period...and assisted in their efforts to improve their former living standards.... If suitable land is unavailable, non land-based strategies built around opportunities for employment...may be used.Resettlement plans should be based on recent information about the scale and impact of resettlement on the displaced population.... Compensation is facilitated bydeveloping mechanisms to prevent illegal encroachers...entering to take advantage of...compensation arrangements.¹⁵.. Some types of loss, such as access to...forest areas cannot easily be...compensated for in monetary terms. Attempts must therefore be made to establish access to equivalent and culturally acceptable resources and earning opportunities.”Earlier in the OD it notes that, “The absence of legal title to land by such groups should not be a bar to compensation.” And later it notes that, “Vulnerable groups at particular risk are indigenous people ...who...may not be protected through national land compensation legislation.The objective is to treat customary and formal rights as equally as possible in devising compensation.” It should be noted that the 1990 OD 4.30 does not explicitly *include* illegal encroachers in forest areas although it does state that illegal encroachers, subsequent to notification of the project land requirements, need *not* be compensated. However, the explicit mention in the OD of loss of access to forest areas and the reference to customary rights indicates that the intent of the OD was that encroachers in forest areas should be counted as involuntary resettlers. Other than in areas of overlap related to the same issue, the 1991 OD 4.20, the Indigenous Peoples Operational Directive, does appear to have been adhered to. A quite comprehensive Indigenous Peoples Development Plan was prepared and implemented and, in fact, the number of beneficiaries covered by it was extended beyond that envisaged in the plan.

The Numbers and the Dilemma in Applying the Operational Directive. The precise number of households who were displaced from their land but did not receive compensation that adequately replaced their livelihood is not known since, as noted above, some who were displaced may have

14. The South Asia Region acknowledges that some people lost encroached land but they also note that despite their best efforts to gather information during supervision, it was only after the project closed, while preparing the follow-on project, that they learned about the details and extent of retrieval of encroached forest lands from the social assessment study carried out by the Andhra Pradesh Forest Department (September 2001). They confirm that the follow-on project has built in mitigation measures to deal with any such eventuality in the future as well as support to adversely affected families due to the previous project through group-based economic activities.

15. This was clearly a reference to encroachers who become encroachers for the purpose of gaining compensation, e.g., moving up to the edge of a road that they know will soon be widened.

received sufficient replacement of livelihood through the benefits of the Tribal Development Plan support. This encroachment issue was raised in the recent India Case Study of OED's review of the Bank's 1991 Forest Strategy¹⁶. It must be acknowledged, however, that this particular safeguard presents complex issues and dilemmas for both Bank and borrower in a forest environment. First, if a formal compensation process for illegal forest encroachment had been established, it would have substantially increased the incentive for illegal forest encroachment, as indeed happened India-wide in 1987 when the government suggested that they would legalize encroachments existing before 1980, a decision that was later reversed. Thus, the social consequences of applying such a safeguard in this particular case are probably net positive, at least in the short term, but the environmental consequences may be negative with, potentially, some degree of intrusion into areas covered by the Bank environmental safeguards. Second, even the social consequences would be mixed since, in some cases, substantial encroachment in upstream forests is likely to have negative consequences on equally poor people lower in the catchment. Third, the removal of encroachers did not begin with the project itself but has been part of an intermittent but on-going process – of limited success. Following OD 4.30 therefore is not a simple matter in this case. Nevertheless, however challenging the practical application of the safeguard may be, and however complex the social and biological relationships, the Bank did not initiate any action to resolve this issue in the context of this project and, by the terms of the Bank's safeguards, it should have.

Resettlement Action Plan. To the credit of both the Bank and borrower, for the follow-on project, a draft Resettlement Action Plan to deal with precisely this issue has been prepared. The draft seen addresses the issue fairly well, but there is limited definition of types and level of compensation and income support for cases where substitute land cannot be found. It allows encroachers who do not wish to avail themselves of alternatives (following VSS/FD persuasion) to remain on their plots provided certain forestry-based land use practices are followed. It provides for picking up previous encroachers indicating that, "in terms of eligibility for R&R support, all those families who have been in occupation of forestland assigned to VSS since its constitution will be entitled to receive R&R assistance". Tracing earlier encroachers who have moved and excluding false claims and allowing for possible income compensation already provided under the Tribal Development Plan will not be an easy task but it should be given priority. The total numbers out of a total of 5000 VSSs to be reached after the second project are about 46,000 families of which about 13,000 are landless and the remainder have some holdings outside the VSS forest area. The mission notes that there is likely to be a big difference in income impact between those who, subsequent to VSS forest land allocation, end up as VSS members eligible for the VSS benefits and those who do not and are also not picked up by neighboring VSSs. The proposal indicates that surrender of encroached land will be voluntary and a consent letter will be signed. If a family chooses to stay they will be expected to take up agro-forestry or plantations. There is obviously risk of pressure being brought to bear, even by the VSS itself, and a need for an independent appeals body. There are also issues here related to the Forest Act. It will be important that poor encroachers who have been using forest land as an income source and did not move in for the purpose of getting compensation be differentiated from commercial types of illegal encroachment such as businesses, private housing, commercial plantations, and tourist lodges. Illegal encroachment in these cases should still be actively pursued to the full extent of the law. Criteria for this differentiation will be needed.

16. See page 73 of the India – Alleviating Poverty Through Forest Development Case Study OED 2000 where it notes: "However, there is very little recognition in the Bank documents about the hardships that tribal groups face when land is brought under protection."

BORROWER PERFORMANCE

Borrower performance was satisfactory, in many respects highly satisfactory. While, as noted above, much remains to be done to address equity and rights issues, improve participatory skills, and extend JFM to forest areas that are not yet degraded, the APFD made a fundamental about-face in the way forests are managed. Strong commitment is evident at the highest levels and there is a degree of openness about solving problems that did not exist before. Public access to information was enhanced although there is still more to be done.

Governance and Transparency. With respect to governance, NGOs expressed concerns about transparency and the misuse of public funds under the project notwithstanding some progress towards openness. There appears to have been grounds for these concerns and there have been a number of FD staff removed from their positions in APFD for misuse of FD funds. However, there has clearly been an attempt to improve public funds management both in the FD and AP as a whole under the guidance of the Chief Minister. For example, in some VSSs there are large painted notice boards at village level showing the main project expenditures. However, implementation of transparency appears weaker than the rhetoric. For example, NGOs note that these village notice boards are not kept up to date and there is still lack of information on programs available. Supporting openness, the Chief Minister has required a round of quarterly public meetings (Janmabhoomi) at each village where district public servants are supposed to provide information about programs and listen to grievances. But these also are claimed by some NGOs to be not living up to their promise – although the mission did not witness a Janmabhoomi in action.

Willingness to tackle corruption appears to be there at the higher levels of FD. There are now clear instructions from the PCCF to staff that no Forest Range Officer or Forester should directly pay any contractor for VSS works, although the mission was not able to establish how closely this is actually followed. Overall, therefore, there have been efforts in the governance direction. But more needs to be done in the direction of the design of systems for openness and transparency.¹⁷ APFD indicated that they have plans for this under the follow-on project. *In particular, the use of social audits following agreed procedures and supported by NGOs and sample spot random audits of VSS/FD accounts at village level by private auditors should be adopted.* A percentage for audit should be pre-determined – perhaps 1 percent per year. This would need backing up with a program of training in book-keeping for VSS members.

SUSTAINABILITY

Sustainability is rated likely overall. Sustainability is defined as the resilience to risk of net benefits flows over time, in particular, how well the project can be expected to weather technical, financial, economic, social, environmental, ownership, and institutional, shocks. There are a number of elements in this case.

Sustainability of Government Commitment to the Community Forest Management Approach. There is little doubt that the AP government's commitment to the approach will be sustained. It comes from the highest level of government. Whether the Ministry of Environment and Forests and the central government more broadly is on board to the same extent is more doubtful. The anomaly that a number of the interventions being supported in Forest Reserve areas by the APFD under JFM are arguably at

17. The NGO coordinating committee would like an extent of openness that would tell them which NGOs have been paid what amounts for what tasks. As the mission indicated to the NGOs, there are costs as well as benefits to this aspect of openness. It would be highly inefficient if large numbers of NGOs took to pursuing the FD to ask why a particular NGO had been selected for a task or why it had been paid a particular amount.

variance with the national Forest Conservation Act, and the fact that court cases could still, in the future, force strict adherence, leaves concern about whether the forest regeneration now occurring can be fully exploited¹⁸. Some states, including AP, have requested changes in the legislation, and there have been various degrees of bending of the rules and inconsistencies between the law and directives. Given the complexity and range of competing interests it is questionable whether this anomaly is best addressed by changing the law or by applying it in a more flexible manner either at the state level or through adjusted central directives. Given the increasing national strength of the JFM movement, the mission expects that these anomalies will gradually be resolved by some means. But there are uncertainties and risks. Another AP commitment question is to what extent JFM will actually be extended to less-settled and less-degraded forest areas – areas which present different sets of rights, incentives and management challenges. The intent to move in this direction is demonstrated by a recent February 2000 JFM central government circular and some APFD officers have already started doing this. But some NGOs doubt how far this will be taken.

Sustainability of the VSSs as Local Forest Management Entities. VSSs appear to be sustainable in a narrow sense. Any VSS that walked away from the rights to a large and exclusive share of the substantial benefits of a forest area would be extremely ill-advised. In that sense, it is possible to anticipate that VSSs will be sustained in the longer term. In the shorter term, until substantial income flow from regeneration starts, VSS members can be expected to lose some interest in the absence of project-paid labor. In the OED survey, only 4 out of 29 villages visited were getting significant income flows from NTFP and timber harvest. For the others this was still in the future. However, provided this loss of interest does not reach the point of complete collapse with a reversion to no protection, the regeneration will probably continue reasonably well while the price of neglect will grow quite rapidly¹⁹. This seems the most likely scenario, except possibly in the driest areas. A more difficult question is the extent to which VSSs will be able to sustain a technically and financially sound equitable management system with full village participation. It is possible to conceive of future difficulties that are unlikely to result in a total failure to manage the forest area sustainably but that could result in inequitable management practices and serious internal conflict. Community groups are not inherently pro-poor (although representation seemed reasonably balanced in villages visited) and may increasingly exhibit capture by the wealthy as the high value of harvestable timber becomes evident. Moreover, VSS financial skills are still very weak and need more attention. At present, VSS committees appear to give insufficient consideration to the possibility of paying cash dividends, and have excessive focus on locking up income in the VSS community fund or using it for community investments. *Cash dividends will help the poor.* These issues will have to be monitored, managed and guided by the Forest Department and supporting NGOs.²⁰

18. In Annex B, the AP Forest Department argues that Joint Forest Management is neither an illegal activity nor does the Forest Conservation Act specifically prohibit it. However, the mission found that there are clearly some land use practices which might be chosen by a VSS under a JFM arrangement which are against the forest legislation and there appear to be some differences of interpretation in different states. Some unease was expressed to the mission by the Ministry of Environment and Forests about some practices which suggested that there remain some differences of interpretations about what the legislation permits. Hopefully the law can be applied pragmatically to achieve a win/win for people and the environment.

19. Community groups have been observed elsewhere, in both Bank and NGO programs, to grow and weaken in pulses as resources over which decisions must be made, increase and decrease. But often this is simply a process of reshuffling and rekindling of social capital which emerges from hibernation again when the incentives become more evident e.g. in this case, when the value of the timber and NTFP becomes sufficient. The challenge here is to bridge the incentives gap without irretrievable community forest management collapse.

20. One possible perverse aspect of this to be watched will be the possibility that the VSS committee, working with Forest Officers whose incentives are toward increased forest cover, may react to the challenges of deciding how to share benefits in communities with internal conflict by taking the easy way out and choosing protection rather than utilization for income. Indeed, during field visits there appeared to be somewhat excessive focus of protection and insufficient attention to

Sustainability of the Income Streams. At least as important as sustainability of the forests, and an element in the sustainability of the VSSs, is the sustainability of the income streams that create the incentive for people to maintain interest in forest management. In this respect, the situation is in transition and the capacity of the poor to handle that transition is important. In the more degraded areas, and in the drier zones, forest and NTFP recovery is relatively slow and improved incomes are not yet matching the previous (unsustainable) off-take. The project aimed to compensate for this through employment in the construction of water management structures and through forest management work. The impact studies, with all their weaknesses, seem to suggest that, for the many people who are members of the VSS, this was probably just about achieved. (Further information on this will come from OED work on the impact on tribals currently underway in AP). Village visits by the mission suggested that, in the drier areas, with slower regeneration, there may still remain an income gap to be filled for a few more years. However, in the high rainfall areas, with faster regeneration, a significant flow of income can, in most cases, be tapped very soon. Overall, the rate of regeneration is remarkable (as it has been found to be in other parts of the world), and a plausible hypothesis would be that it will not be the rate of growth that will be the income constraint but the rate at which both FD and the VSSs can translate utilization of that growth into income and get it into the hands of the poor. In this respect, the finalization of Felling Plans and the integration of those with Microplans appears to be a constraint.

The government is committed and overall sustainability is rated likely overall, but the ability of the FD and the VSSs to sustain sufficient focus on equity to develop and maintain long-term participation by the poorest needs more attention.

Sustainability of the Forests Themselves. The remote sensing imagery, now covering a four-year period, appears to be unequivocal: forest cover is steadily improving under VSS management, almost universally. The data suggest that, in six JFM sample districts, since 1996, dense forest cover increased by an average of 19 percent and open forest by as much as 26 percent. Natural regeneration increased by 60 percent in some cases. The number of tree species increased significantly and it is claimed that forest fire incidence was reduced by about 50 percent. The establishment of fast-growing eucalyptus plantations with a potential of 2,000,000 incremental cubic meters of wood per year will have a substantial impact on reducing demand elsewhere in natural forest. However, in a situation of quite widespread natural forest regeneration managed by communities, production increases may have positive environmental impacts but negative income and poverty impacts depending on price elasticities and the extent to which a household is a consumer or producer. It will not be easy to forecast the net impact on welfare.

Sustainability of Biodiversity. The project contributed positively to biodiversity conservation. Four new Protected Areas were created. An Integrated Protected Areas System (IPAS) Plan was prepared, and implementation was initiated. Some 240 Eco-development Committees (EDC's) around 11 Protected Areas were established, although they have not functioned as well overall as the VSSs. A Biodiversity Cell was established and, in the field, the Wildlife Divisions were strengthened. Research was completed on 13 topics related to wildlife ecology. Substantial work was undertaken in reforesting mangrove areas. Within the VSS managed forest areas the mission observed directly, and was informed of, gains in fauna, including the return of leopards (for herders and wood collectors not a benefit). There remain some challenging issues about the role of EDCs and the members more limited freedom (compared to VSSs) to utilize forest products in Protected Areas. NGOs raised this concern. This is a complex India-wide issue with no easy solutions. Since this was a small component, this PPAR does not address that issue in depth. It is simply noted that AP is little different from other

management for optimal production. On the FD's part, felling plans, which call for FD as well as VSS involvement, seem to be lagging.

states on this parks versus people issue of what rights of access and collection forest dwellers or fringe residents should have to wildlife parks.

Financial Sustainability of the Project Initiated Support. While a number of uncertainties on financial sustainability remain, on balance it is rated as likely. The project pumped into the sector about US\$14 million per year over 6 years. The government contribution was approximately 10 percent of this at US\$1.4 million per year. Can that level of expenditure be sustained? Does it need to be sustained? Based on the budget levels of the APFD there is little possibility that approximately 10 times the 1999 project budgetary allocation could be found, although during the project period the government of Andhra Pradesh *did*, in fact, find substantial additional funds for several years for support for many additional VSSs outside the project areas. However, by the time the follow-on project is completed, incomes from regenerated forest areas should be more than sufficient in most cases to cover forest management costs at the VSS level, and the VSSs themselves, with close to 10 years of operational experience by then, should be largely sustainable with modest levels of “touch-up” maintenance support from both the FD and NGOs. As the value of regeneration grows, one financial question warranting more consideration relates to the extent that financial institutions could contribute to incentives and financial sustainability by advancing VSSs funds for the cost of harvesting operations or development investments secured by the standing product as certified by FD inventory. Some work in this direction has already been done.

Annex A. Basic Data Sheet

INDIA ANDHRA PRADESH FORESTRY PROJECT (CREDIT 2573-IN)

Key Project Data (Amounts in US\$ million)

	<i>Appraisal Estimate</i>	<i>Actual or current estimate</i>	<i>Actual as percent of Appraisal estimate</i>
Total project costs	89.1	91.0	102%
Credit amount	77.4		

Some data missing from ICR

Cumulative Estimated and Actual Disbursements

	<i>FY94</i>	<i>FY95</i>	<i>FY96</i>	<i>FY97</i>	<i>FY98</i>	<i>FY99</i>	<i>FY00</i>	<i>FY01</i>
Appraisal estimate	2.3	10.1	20.9	36.3	51.9	67.3	77.4	
Actual (US\$M)								
Actual as percent of appraisal								
Date of final disbursement:								
Some data missing from ICR								

Project Dates

	<i>Original</i>	<i>Actual</i>
Identification		01/92
Preparation		04/92 – 02/94
Appraisal		04/23/93
Negotiations		11/93
Board Presentation		02/24/94
Effectiveness	07/29/94	07/29/94
Closing date	09/30/00	09/30/00

Staff Inputs (staff weeks)

	<i>Actual Weeks</i>	<i>Actual US\$000</i>
Preappraisal	143	348.8
Appraisal/Negotiations	76	197.4
Supervision	136	351.7
Completion	5	6
Total	360	903.9

Mission Data

	<i>Date (month/year)</i>	<i>No. of persons</i>	<i>Staff days in field</i>	<i>Specialization represented¹</i>	<i>Performance rating²</i>		<i>Types of Problems³</i>
					<i>Implementation Status</i>	<i>Development objectives</i>	
Identification/ Preparation	January 1992 April 1992- February 1993	10		TL(1), EC(2), PA(1), ES (1), FS(2), FTS(1), S(2)			
Appraisal	April 1993/ November 1993	9		TL(1), E(1), ES(1), FS (2), FT(1), S(2), PS(1)			
Supervision	June 1995	3		FS(2), FT(1)	S	S	
	July 1995	3		FS(2), FT(1)	S	S	
	October 1995	7		S(1), FS(2), E(1), PS(1), FT(1), IT (1)	S	S	
	May 1996	4		FS(1), S(2), NRE	S	S	
	February 1997	9		NRE(1), PA(1), E(1); FT(1), PS(1), ES(1), DS(1), S(1), FS(1)	S	S	
	June 1997	2		FS(1), S(1)	S	S	
	December 1997	5		FS(1), SF(1), FT(1), IT(1), CP(1)	S	S	
	June 1998	3		FS(1), SF(1), S(1),	S	HS	
	December 1998	7		FS(1), SF(1), S(1), FT(1), FM(1), IT(1), S(1)			
	June 1999	2		FS(1), NRM(1)	S	S	
	November 1999	8		FS(2), NRM(1), S(1), E(1), FM(1), SF (1)	S	HS	
	June 2000	2		FS (1); SF(1)	S	S	
	Completion	November 2000	2		FS(2), FS(1), E(1)	HS	HS

E=Economist, PA=Program Assistant-COSTAB, ES=Env. Specialist, FS=Forestry Specialist, FT= Forest Technology Specialist, S=Sociologist, PS=Procurement Specialist, IT=IT Specialist, NRE=Natural Resources Economist, DS= Disbursement Specialist, SF= Social Forester, CP=Community Participation Specialist, S=Silviculturist, FMS=FM Specialist, NRM=Natural Resources Management

Other Project Data***FOLLOW-ON OPERATIONS***

<i>Operation</i>	<i>Credit no.</i>	<i>Amount (US\$ million)</i>	<i>Board date</i>
AP Community Forest Management Project (Under preparation/appraisal)			

Annex B. Comments from the Borrower

Helen Phillip
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