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PERFORMANCE AUDIT REPORT

INDIA

WEST BENGAL FORESTRY PROJECT

(CREDIT 2341-IN)

June 25, 1999

*Sector and Thematic Studies Group
Operations Evaluation Department*

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Currency Equivalents (annual averages Rs./US\$)
 Currency Unit = Rupees (Rs.)

Year	Official ^a	Market ^b	Year	Official ^a	Market ^b
1975	8.38	9.75	1986	12.61	14.15
1976	8.96	10.10	1987	12.96	14.55
1977	8.74	9.60	1988	13.92	17.00
1978	8.19	9.65	1989	16.26	19.00
1979	8.12	9.10	1990	17.50	19.80
1980	7.86		1991	22.74	28.00
1981	8.66		1992	25.92	32.30
1982	9.46		1993	30.49	31.45
1983	10.10	13.40	1994	31.37	31.60
1984	11.36	15.00	1995	34.95	
1985	12.37	13.85	1996	34.95	

a. "International Financial Statistics," IMF, Vol. XLVIII, 1995.

b. Pick's Currency yearbook, World Currency Yearbook and Currency Alert, various issues.

Fiscal Year

GOI and all states: April 1 to March 31

Abbreviations and Acronyms

ERR	Economic rate of return
FD	Forest Department
FPC	Forest protection committee
GOI	Government of India
ICFRE	Indian Council of Forestry Research and Education
ICR	Implementation Completion Report
NGO	Non governmental organization
OED	Operations Evaluation Department
PAR	Performance Audit Report
SAR	Staff Appraisal Report
WBFD	West Bengal Forestry Department
WBFP	West Bengal Forestry Project

Director-General, Operations Evaluation	: Mr. Robert Picciotto
Director, Operations Evaluation Department	: Ms. Elizabeth McAllister
Manager, Sector and Thematic Evaluations	: Mr. Gregory Ingram
Task Manager	: Ms. Nalini Kumar

ROBERT PICCIOTTO
Director-General
Operations Evaluation

June 24, 1999

MEMORANDUM TO THE EXECUTIVE DIRECTORS AND THE PRESIDENT

**Subject: Performance Audit Report on India
West Bengal Forestry Project (Cr. 2341-IN)**

Attached is the Performance Audit Report prepared by the Operations Evaluation Department on the above named project, for which a credit in the amount US\$34.0 million was approved in March 1992. The credit was completely disbursed. Total project cost was US\$44.1, compared with an appraisal estimate of US\$39.0 million. The project was originally scheduled to close on September 30, 1997, but was extended until December 31, 1997.

This audit was undertaken as an input to one of six country studies supporting the OED review of the 1991 Forest Policy and its implementation.

Experience with the social forestry projects in the 1970s and 1980s convinced the World Bank that a sector-wide approach to forestry was required in India. Consequently, Bank projects approved since FY92 have taken a comprehensive approach, shifting from social forestry alone to include management of government forests, active participation of communities, and a greater role for NGOs—along with an emphasis on policy and institutional reform. The Bank adopted a state-by-state approach and approved two sector-wide projects in the spring of 1992: Maharashtra Forestry (Cr. 2328-IN) and West Bengal Forestry (Cr. 2341-IN). The latter was the first to be completed.

The primary project objective was to support the Government of West Bengal's development strategy for the forest sector. The project was to help arrest forest degradation, establish a sustainable protection system, enhance productivity, and conserve biodiversity through people's participation and the introduction of more productive forest management practices. The strategic approach was to protect forest areas by working with local communities in joint forest management through the formation of Forest Protection Committees (FPCs).

The project design was complex. Ex-post analysis revealed several design weaknesses. Even so, the project achieved its physical objectives for area planted and treated, and Staff Appraisal Report expectations for bringing forest area under FPC protection were exceeded. There was also an immense change in the attitude of the Forest Department (FD) towards working with the people. The project effort in biodiversity conservation (Wildlife and Protected Areas component) was successful in filling critical gaps in information through completion of several wildlife studies. However, the process of reorganization of the FD was not well thought through.

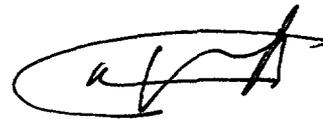
Project experience reveals some important lessons: First, although the sector-wide

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approach was an improvement over the narrow focus of the social forestry phase of the India program, careful thought and analysis is required before issues like reorganization are made a part of project design. Reorganization of the FD in West Bengal made irreversible changes in the structure of an organization that, except for horizontal expansion, had endured for 100 years. When imperfect, such changes can have a major negative impact on the functioning of the implementing agency. Second, a sector-wide approach should not imply isolation of the forestry sector from other related sectors. A forestry project that builds rural development assets cannot be designed in isolation from the agricultural or rural development strategy for the region. The forestry effort should be positioned as a part of the overall development strategy for the area. Third, although the *strategic approach* of working with the people in protecting the forests was a step in the right direction, the *process* of achieving this strategic collaboration was target and time driven. The participatory model of forest management that the project was attempting to spread requires the building of grassroots institutional capacity in participating FPCs. This is a complex task that cannot necessarily be accomplished in a set time frame. In comparison to traditional credit instruments, the new instruments, like the Adaptable Program Loans, which can allow for time to build consensus and capacity, may be better suited for such projects.

The audit agrees with the ICR in rating sustainability as **uncertain**, institutional development as **modest**, and Bank and borrower performance as **satisfactory**. However, it downgrades the ICR estimate of project outcome from **satisfactory** to **marginally satisfactory**. This is because the negative effects of the reorganization, and weak design will be felt for a long time in the state and have been a setback for the department. The reorganization of FD was proposed by the Bank and during implementation adherence to the time deadline became more important than learning from the experience of the pilot districts.

Attachment

A handwritten signature in black ink, consisting of a large, stylized loop followed by several vertical strokes and a final horizontal stroke.

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Principal Ratings

	<i>ICR</i>	<i>PAR</i>
Outcome	Satisfactory	Marginally Satisfactory
Sustainability	Uncertain	Uncertain
Institutional Development	Partial	Modest
Borrower Performance	Satisfactory	Satisfactory
Bank Performance	Satisfactory	Satisfactory

Key Staff Responsible

	<i>Department Director</i>	<i>Division Chief</i>	<i>Task Manager</i>
Appraisal	H. Vergin	Jan Wijnand	Ann Clark
Midterm	H. Vergin	Ridley Nelson	P. Guhathakurta
Completion	Edwin Lim	Michael Baxter/Ridwan Ali	Jessica Mott

Preface

This is the Performance Audit Report (PAR) for the West Bengal Forestry Project (Cr. 2341-IN), for which a credit in the amount US\$34.0 million was approved in March 1992. The credit was completely disbursed. Total project cost was US\$44.1, compared with an appraisal estimate of US\$39.0 million. The project was originally scheduled to close on September 30, 1997, but was extended until December 31, 1997.

Since 1992, the Bank's forestry strategy in India has focused on sector-wide projects combining policy and institutional reforms with support for a wide range of forestry investments and related activities. Two such projects were approved in the spring of 1992: Maharashtra Forestry (Cr. 2328) and West Bengal Forestry (Cr. 2341). West Bengal Forestry was the first to be completed.

This audit is based on the Implementation Completion Report (ICR), Staff Appraisal Report (SAR), and Development Credit Agreement; review of Bank files; and discussions with Bank staff. An Operations Evaluation Department (OED) mission visited West Bengal in November 1998 to discuss the credit with government officials, interested academics, nongovernmental organizations (NGOs), and beneficiaries. The cooperation and assistance of all stakeholders and government officials is gratefully acknowledged.

The ICR, in two volumes, is of good quality and includes a series of informative working papers.

Following standard OED procedures, the draft PAR was sent to the borrower for comments before being finalized. Borrower comments have been received and are included in Annex B.

1. Introduction

1.1 Mounting human and livestock pressure has led to severe degradation of India's forest resources. In addition, between 1950 and 1980, an estimated 43,000 km² of forest was diverted to non-forest uses such as agriculture, irrigation, hydropower projects, and industry.¹ Although the Forest Conservation Act of 1980² considerably slowed this process, the increasing demand for fuelwood, fodder, and raw material for forest industries continued to degrade India's forest areas. Between 1980 and 1987, remote sensing indicated that the country was losing 15,000 km² of forest a year.³

1.2 In the 1970s, the Government of India (GOI)⁴ initiated a program of social forestry to halt the degradation of natural forests. This program attempted to ease human and livestock pressure on natural forests by planting trees for fuelwood and fodder on village land held in common property, farmer's lands, wastelands, and along roads, railways, and canals. The Bank subsequently supported seven social forestry projects in various parts of the country. Most of these had limited success. The experience with these projects convinced the World Bank that a sector-wide approach to forestry was required. Consequently, Bank projects approved since FY92 have taken a comprehensive approach, shifting from social forestry alone to include management of government forests, active participation of communities, and a greater role for NGOs—along with an emphasis on policy and institutional reform. The Bank adopted a state-by-state approach in India and approved two sector-wide projects in the spring of 1992 (Maharashtra Forestry, Cr. 2328-IN, and West Bengal Forestry, Cr. 2341-IN).

1.3 West Bengal occupies 2.7 percent (88,752 km²) of India's geographical area and accounts for 8.34 percent of its population. The state has a population density of 767/km², compared with an all-India density of 273/km² (1991 census). The West Bengal Forestry Project (WBFP) is the second Bank sponsored forestry project in the state. The first, West Bengal Social Forestry (Cr. 1178-IN) was approved in October 1981 and closed in March 1991.

¹ In 1991, records showed that India had 770,000 kms² (23.4 percent of geographical area) of forests. The 43,000 kms² is about 5.5 percent of the total forest area (1.3 percent of geographical area).

² The act limits state government powers, enjoining them from de-reserving reserved forests or diverting forest lands for non-forest purposes without central government permission. The act was made more stringent in 1988.

³ Poffenberger, Mark, and Betsy McGean, eds. "Village Voices, Forest Choices: Joint Forest Management in India." Oxford University Press, Bombay, Calcutta, Madras. 1996, p. 19. The former estimate refers to the rate of de-reservation of forest land, versus the high rate of loss of forest cover.

⁴ Constitutionally in India, forestry is on the "concurrent" list, meaning that basic policy guidelines are formulated by the central government, but policy implementation and administration of forests lands is a state responsibility. The states have considerable autonomy to undertake reforms for policy implementation and administration.

2. Objectives and Design

Objectives

2.1 The primary project objective was to support Government of West Bengal's development strategy for the forest sector. The project was to help arrest forest degradation, establish a sustainable protection system, enhance productivity, and conserve biodiversity through people's participation and the introduction of more productive forest management practices.

Design

2.2 The project components included social forestry, training and research, regeneration and afforestation, wildlife and biodiversity conservation, and fodder development. The strategic approach was to protect forest areas by working with local communities using a pattern established at Arabari (see Box 1). Specifically, the SAR target was to bring 1,760 kms² of forest area under Forest Protection Committee (FPC) protection. This was to be facilitated through active NGO participation. The project was to use specific treatment models for regeneration and afforestation work in the forest areas.⁵ The fodder development component was to help address the serious overgrazing problem in forest areas. In non forest areas, support for social forestry was to continue. The project also sought to increase the organizational efficiency of the Forest Department (FD) through restructuring its operations.

Box 1: The Arabari Experience, West Bengal

West Bengal is considered the birthplace of joint forest management (JFM). Experience at Arabari (Midnapur District) showed that a cooperative effort by the community and the Forestry Department (FD) could regenerate degraded forests. At Arabari, the initiative of a single forest officer converted 12.72 km² of denuded *sal* (*shorea robusta*, a tree species) into a luxuriant forest. The commercial value of the forest—nil in 1972—was estimated at Rs. 90 million in 1988. The forest officer realized that it would be difficult to regenerate and protect the forest area without the cooperation of the local people who depend on the forest for their livelihood. His strategy involved local villagers (618 families) in joint management of the forest resources through the formation of forest protection committees (FPCs). Planting *acacia auriculiformis*, cashew nuts, *sabai* grass, sisal, and eucalyptus created sustained productive employment, and villagers were given usufruct rights for minor forest products. With their basic needs met, the people cooperated in protecting the forest and helping it regenerate. The benefits from the standing crops (timber was to be harvested in the tenth year after forest protection) were shared between the FD and the villagers.

2.3 The design was complex as the Bank was dealing with sector-wide concerns in forestry in India for the first time. Ex-post analysis reveals several weaknesses in design.⁶ First, the application of rigid treatment models was contradictory to the strategic participatory approach (Joint Forest Management (JFM)) of working with communities in forest protection.⁷ In addition, as the project failed to develop an effective monitoring system, achievements under the treatment models could not be evaluated and revised with experience.⁸

⁵ Sixteen treatment models were identified and they were to be applied according to soil characteristics and suitability of species in different regions of the state.

⁶ The ICR working papers bring out some of the design weaknesses.

⁷ For example, seedling spacing recommendations prescribed by the models were rigidly followed even when field experience showed that major changes were required.

⁸ Borrower comments are as follows : At the beginning of the project an effective monitoring and evaluation system was developed by the Monitoring Wing of Forest Directorate. For the purpose of monitoring the progress of the project,

2.4 Second, though the project included a component for social forestry, its preoccupation with JFM to the neglect of problems identified during implementation of the earlier social forestry project (poor extension, improper coordination between departments, etc.) had negative implications for project implementation.⁹ Continued absence of interdepartmental coordination is a case in point. Coordination between the fodder and livestock department and FD remained weak throughout.¹⁰ Linkage between the research wings of the two departments did not develop either. Similarly, preparation of the “tree card”¹¹ system was slow as it required a complicated process of inter-departmental verification of land ownership. Weak extension¹² was responsible for farmers’ and FPC members’ lack of access to timely information on marketing and often low quality of wood lots. Weak extension was also responsible for improper dissemination of research results.¹³

2.5 Third, financial sustainability issues were not given adequate attention early in the project cycle. As a result, on project closure, the state FD found itself totally starved of funds. The earlier social forestry project had been an “additionality” for the state government; that is, the Bank credit provided funds over and above the budget allocations for forestry from the government. This gave the FD considerable resources to carry out social forestry. Under the WBFP, however, several departmental activities that were normally financed through state funds were put under the Bank project.¹⁴ Between FY92/93 and FY96/97, foreign assistance financed 25 percent of total departmental expenditure.¹⁵ In 1992, the budget allocation for the FD was approximately Rs. 200 million. As normal procedures allow for a 10 percent increase each year, in 1998/99, the budget allocation should have been approximately Rs. 320 million. Instead, the FD was left with a budget allocation of approx. Rs. 90 million. Whatever the reasons for this budget slash, several

a monthly financial return and a half-yearly physical return forms were evolved. On this basis semi annual and annual reports were published each year. For undertaking survey monitoring and on-going evaluation of the various treatment models, several formats were evolved, measurements were taken and other data were collected from the field. These data were analyzed and the Annual Survey Monitoring Reports were prepared.

⁹ The region however is of the view that part of the problem for social forestry stemmed from implementation not design.

¹⁰ “ARDD field program is still weak, so also is the budgetary support and FD-ARRD coordination in mutually reinforcing field operations.” Supervision report, April 1994.

“Despite requests by the Bank, FD-ARDD collaboration for identification and implementation of a joint program remains elusive except in respect of fodder cultivation as intercrop in forest plantations in some areas in south-west Bengal.” Field Report Supervision Mission, August-September 1994.

¹¹ Tree cards certify ownership of trees thereby making it easier to get permission for their transport and marketing.

¹² “The extension program under the project was weak. While the project emphasized the need for quality extension, no specific programs were developed to improve extension efforts and no budget was allocated under the project to support the WBFD’s efforts in extension.” Working paper 3, para. 16, ICR.

¹³ The borrower notes that adequate arrangement for Social Forestry activities such as extension, publicity, training etc. could not be provided in this project. Extension in marketing information was lacking. Steps like training and awareness in marketing are urgently required.

¹⁴ The borrower in its comments notes that in future, projects should be prepared in such a manner that the project funds flow as an addition to the existing work program.

¹⁵ ICR (para. 16).

activities started under the Bank project came to a stop. This was due to inadequate attention to financial sustainability issues early in the project.¹⁶

2.6 Finally, the project design relied on NGOs for training, helping build FPC capacity and increasing gender participation. However, no provision was made for effective collaboration between NGOs and the FD.¹⁷

¹⁶ The region notes that during the last two years of supervision, the Bank team repeatedly raised the issue of post project funding, although unfortunately this did not result in follow up action within the FD.

¹⁷ The region in its comments adds the historical context and notes that at the time of preparation and appraisal, there was functioning - albeit ad hoc and informal collaboration between NGOs and the Forest Department. The project design assumed that this collaboration would grow and develop further. The design failed to identify and address the risk of these informal relationships, which were dependent on the views and actions of a few senior government officials, and not institutionalized. The project implementation failed to develop alternative strategies that did not rely on NGO collaboration, when the relationships between the Forest Department and the NGOs fell apart.

The borrower in its comments notes that the relationship between NGOs and the FD left much to be desired because of absence of committed NGOs and perhaps lack of motivation on the part of FD personnel.

3. Implementation

3.1 The project became effective in June 1992 and was implemented over five and a half years. The midterm review (January-February 1995), which reduced the physical plantation targets by approximately 8 percent (Table 4.1), was weak and unable to correct for shortcomings in project design.¹⁸

3.2 A key implementation problem was the reorganization of the FD.¹⁹ The reorganization was meant to be time bound. But the Bank's covenanted date for completing the task—January 31, 1994—was highly unrealistic. The Government Order for the reorganization was issued only after a three-year delay,²⁰ and it was fully implemented by April 1996. With the reorganization, field staff from the district level and below were to be integrated into one service, to be subdivided on geographical lines to achieve an equitable distribution of the workload. The purpose was to improve and integrate the services at delivery, i.e. in the field, with farmers and FPCs. This approach was piloted in two districts, Purulia and Kurseong. However, during implementation, there was more concern about meeting time deadlines than learning from the lessons of the pilot. Ultimately the reorganization did not achieve its purpose of optimizing use of department staff. Apart from the fact that it reduced the area under the jurisdiction of a District Forest Officer increasing his accessibility to his subordinates and opened promotion opportunities for some, overall it had a negative impact on the forestry organization in the state. It created fissures and lowered morale. No adequate arrangements were made for social forestry and soil conservation activities.²¹ When these two wings were dissolved²² soil conservation and social forestry activities were neglected. Without the soil conservation wing, the state has lost central funds because it is no longer able to prepare and execute projects according to stringent GOI guidelines.

3.3 Another major problem was the project preoccupation with meeting physical targets. The contradiction between the application of rigid treatment models for forest regeneration and afforestation and the JFM strategy of bringing forest areas under the protection of communities is noted in para. 2.3.²³ However, during implementation, the concern with meeting quantitative targets, for number of FPCs formed and registered, diluted the participatory nature of the strategy

¹⁸ "At the [midterm review] the Bank made significant changes to the biodiversity and forest research and plant propagation components in response to field experience, but the mission failed to adequately address the major problems: the treatment models, the JFM government order, the inflexible budget allocation and the weak monitoring system." ICR p. 8.

¹⁹ The Region in its comments notes that the reorganization was but one part of a wider institutional reform agenda.

²⁰ The state government had formed a committee to work out the details of the reorganization. However, the state delayed its decision on the recommendations of the committee. Several issues remained controversial within the department and could not be resolved quickly: the decision on the future of the soil conservation wing; adjustment of boundaries of all Divisions and Circles to merge conventional demarcation between territorial and social forestry divisions; and distribution of workloads at the level of the Chief Conservators.

²¹ The borrower in its comments notes that to integrate into one service all the staff from district level and below and to subdivide the jurisdiction on geographical lines was a wrong approach. By doing reorganization in this line the specialized wings were dissolved and these works suffered most.

²² In the North, the soil conservation divisions were not dissolved because the reorganization was not fully implemented.

²³ The region in its comments notes that while part of the problem of rigid treatment was the design itself, another major element was the interpretation of the design and its application in the context of existing bureaucratic procedures and the lack of significant reformulation at mid term.

of working with the communities in protecting forest areas even in the south where JFM is considered successful. Micro plans were to be the basis of planning for resource management in a particular FPC. Micro plans are site specific management plans prepared jointly by the forest community and the department to help plan for sustainable management of the forest resource. However, as implemented, they were rigid and did not allow Divisional Forest Officers and other field officers to make site-specific adjustments. The whole micro planning exercise was process-oriented, neglected capacity and institution building and did not result in specific actions for forest protection.²⁴

3.4 The drive to meet targets also led to wastage of resources when treatment and regeneration was undertaken in several areas, even when not required. The report of the Accountant General West Bengal notes:

“Sal plantations were to be regenerated through coppicing, multiple shoot cutting (MS) and thinning operation. However, the department had incurred an expenditure of Rs. 44.56 lakh [4.46 million] and Rs. 87.46 lakh [8.74 million] during 1992-93 and 1996-97 in MS cutting and thinning although site conditions were not conducive for such regeneration.” *Brief, Accountant General West Bengal.*²⁵

3.5 Again, under the pressure of a target driven approach, WBFP attempted to spread an FPC model that had been successful in southwestern Bengal to other parts of the state (especially the north) without adequate assurance that the model would work. The ecological, economic, social, climatic, and even forest conditions are totally different in the north and while different plantation models were advocated, it was not determined whether JFM (as was advocated for the south) would be the best approach to applying those models.²⁶ In the south, the forests were badly degraded with negligible yield before FPC formation. In addition, uniform interest among the fringe population, a uniform political outlook in the region, and low gestation period in protection and production were conducive to forest protection through FPCs. In the north, on the other hand, the luxuriant forests, diverse and conflicting interests among the fringe population, and the varied political outlook hindered forest protection through FPCs. Hence, it is not surprising that only 25 percent of the FPCs in the north are reported to be effective.

3.6 The implementation of the fodder and livestock development component was initially hampered by procurement and staffing problems, inappropriate site selection, and misdirected research.²⁷ These shortcomings were largely overcome in later years. The midterm review enlarged the fodder and livestock development component by adding an objective to provide alternative livelihood options for FPC members in livestock rearing and forage and seed production. The component had little impact on reducing heavy grazing on forests (the major

²⁴ The region in its comments notes that rigidity problems stemmed from the treatment models and the annual budget allocations to district forest officers which took notional project targets and concretized them into annual spending targets. They further note that one point that was overlooked during project design and preparation, although addressed during project implementation was the critical importance in Indian forestry of ‘working plans’ and the need for updated working plans to reflect the revised functions of the FD.

²⁵ The borrower in its comments notes: Sal plantations were regenerated through coppicing, M.S. cutting and thinning in those areas where these were required.

²⁶ The region feels that the problems of JFM in the north were not so much a result of the targets and design but rather a failure to monitor and change with experience.

²⁷ Early research was not oriented toward meeting the long-term requirement of identifying fodder species that could be intercropped with forests.

objective), however, as more effort was spent on identifying fodder species and encouraging people in FPCs to switch to hybrid cattle.²⁸

3.7 Marketing problems crucial to the success of forestry operations were not resolved. Although the tree card system was to facilitate getting permission for transporting and marketing trees, its benefits may have been temporarily negated by a recent (May 15, 1998) Calcutta High Court general order. That order restrains people from cutting and destroying trees without obtaining permission from municipal and local land development officers. The closure of a coal mine in the area, which until recently provided a large market for wood products, is likely to further aggravate the marketing situation. Moreover, villagers are still not able to get the best returns when they market non-timber forest products.

3.8 As in the case of earlier forestry projects in the country, frequent transfers of forest officials continued to plague the current project. It hampered the learning and capacity building process. To the credit of the Bank and the FD, however, the research wing had a relatively stable officer corps during the project. However, after project closure, most of the Divisional Forest Officers in the research wing were transferred.

²⁸ The borrower in its comments notes that since the ARDD component was too small to cover the entire area, pressure of grazing on forest could not be reduced. Heavy investment is required to cover the entire livestock population in and around the forest.

4. Outcomes

Achievement Of Objectives

4.1 Though forest degradation has been arrested in the area brought under FPC protection as is clearly evident from the field visits,²⁹ achievements are not so clear with respect to establishment of a *sustainable* protection system. Satellite imagery shows that total forest cover in West Bengal has increased to 13,370.46 km² (15.06 percent of total geographical area) in 1994 in comparison with 13,287.30 km² (14.97 percent) in 1991 and 12,712.281 km² (14.32 percent) in 1988.³⁰ However, project evidence shows that even though physical objectives for area planted and treated were met, average new plantation survival may not have been higher than 50 percent, with wide variations in results in different parts of the state. In addition, though SAR expectations for bringing forest area under FPC protection were exceeded, genuine participation was not achieved.³¹ It is still too early to know what will happen to the protected forest area in the long run (sustainability concerns) when external funds may not be available to support FPC activity. Will the FPC members have enough incentives for protecting the forests? Or will the immediate needs of the people in the area bring the forest area down to its previous level of degradation?

4.2 As regards productivity, improved planting material, management techniques, etc. will ensure future productivity gains. Current improvement is reflected in the increased flow of non timber forest products like *sal* leaves and seeds, *kendu* leaves, *sabai* grass, edible mushrooms, medicinal plants, etc. from previously degraded forest lands.

Table 4.1: Plantation Targets and Achievements

Activity	SAR target (ha)	MTR (ha)	Actual (ha)	Percentage of MTR
Rehabilitation of Degraded Forest Lands	76,030	62,180	72,023	116
Production Forestry on Forest lands	5,000	5,581	6,432	115
Forestry Development on Non-Forest lands (Strips)	4,000	3,996	3,824	96
Farm Forestry	91,925	94,562	102,769	109
Mangroves	27,750	20,463	20,663	101
Total	203,903	186,782	205,711	110

Source: Table 1 Working Paper 2. Implementation Completion Report, Volume 2.
MTR = Midterm Review

4.3 The project effort in biodiversity conservation under the Wildlife and Protected Areas component were successful in filling critical gaps in information through completion of several wildlife studies.³² But slow appointment of consultants delayed the preparation of action plans (to address wildlife conflict with human populations) based on those studies. The plans, were finally not implemented. However, the FD's capacity for biodiversity conservation has been strengthened through the building of infrastructure and research capability (long-distance

²⁹ Substantial areas of degraded forests in southwestern Bengal have been regenerated through coppicing.

³⁰ Forest Change Detection Studies and Wetland Mapping in West Bengal Through Digital Image Processing of Indian Remote Sensing Satellite Data Report of the Collaborative Project of Wildlife Wing, Forest Department, Govt. of West Bengal and Regional Remote Sensing Service Center, Kharagpur. October 1997.

³¹ Participation in the project has been rated according to 2 criteria—its level and breadth. Level is divided into four categories which are : information sharing, consultation; collaboration; empowerment. Breadth tries to capture how much of the project involves participatory mechanism. West Bengal Forestry ranks high in terms of breadth but between consultation and collaboration in terms of level.

³² The West Bengal Government Order for Ecodevelopment (the first in India) is an important milestone in the history of protected area conservation.

telephone network, erection of power fencing, and building of camp sheds and watchtowers).³³ In addition, forest protection and regeneration activities contributed to improved wildlife habitats.³⁴

4.4 In the case of research, though substantial progress was made on the agenda,³⁵ dissemination of results was weak. The government seriously delayed critical international contracts for research assistance. The work of the consultants began late and there was little time to implement the recommendations before project closure. There was also dissatisfaction with the work of the consulting firm that had been hired. On the positive side, committing research staff to the project for virtually its entire period ensured continuity.

Other Impacts

4.5 The project had a beneficial impact on employment and income generation among the poor (especially in the south) through support activities, returns from non-timber forest products, work on forestry operations and group farm forestry (Box 2 provides an example of success of the scheme from the literature) to which the project continued to provide support. The supporting works were meant to mobilize community effort in forest protection.³⁶ However, the rigid micro planning exercise (para 3.3), resulted in a demand for investments, catalogues of desirable community assets—ponds, culverts, gully plugs, hand pumps, check dams, even bus shelters—by FPCs that they wanted the FD to make in their villages. The FPC members provided the labor on these investments and in planting and regeneration activities in forest areas. Studies show a decline in seasonal out migration from these areas (south west Bengal)—hardly surprising, as villagers were happy to stay in their villages when employment was available close at hand.

³³ A proposal to create a Wildlife Research Unit was dropped.

³⁴ The region would like to add that mainstreaming biodiversity conservation in the 280,000 ha of forest areas under JFM, the mangrove protection, and the innovative development of ecodevelopment were significant project outcomes.

³⁵ The region would like to draw more attention to improvements in forest technology made under the project.

³⁶ The region notes that the need for forestry operations will continue in the future and is likely to provide future employment even in the absence of external financing. They further add that it is even more certain that government expenditure on harvesting operations (and employment benefits associated with those operations) will not be dependent on the availability of external financing over the long term. The region feels that in the case of the rural development investments, even if they are not channeled through the forest department, future budget allocations for rural development are likely.

Box 2: Special Schemes that Have Benefited the Poor

Group Farm Forestry was introduced in West Bengal in 1985. Under this program, private and state-owned wastelands were leased to the landless for 99 years (they were granted a *patta* or a land right). A field survey of 59 tree-growing families found that poor families in villages around Nepura, in the Arabari forest range, derived substantial benefits from farm forestry. Most of these families depended on their labor for their livelihood. Under motivation of the FD, they planted their *patta* land, which was unsuitable for agricultural cultivation, to eucalyptus. The families invested little other than their labor on the plantations. None of them irrigated the plantations. Nevertheless, they received considerable cash income from the sale of their trees. The survey found that the cash inflow was put to four important uses: i) purchase of land, ii) marriages of daughters, iii) house repair and building, and iv) other pressing family commitments. This experience, the study author notes, "signifies a unique opportunity to use wasteland afforestation as a means to improve the livelihoods of poor people."^a *Shah, Tushaar. 1987. "Gains from Social Forestry: Lessons from West Bengal." ODI Social Forestry Network. London*

a. The SAR plantation targets on non-forest land were 911.25 kms² for the WBF. Actual achievement was 1027.7 kms². The farm forestry component was to assist individuals with tree planting on farms and homesteads and groups of farmers with plantings on wastelands. Figures are not available on the breakdown between the number of kms. planted on individual farms and those under group farm forestry.

4.6 Though employment and income increased, the project has created dependency among participating FPCs.³⁷ As the FD invested in village infrastructure, the expectation and demand for more investments grew. In some villages, FPC members look at these village-level investments as compensation for not cutting down trees. With project closure, the flow of funds to the villages has stopped. It is too early to know what will happen to the protected forests. The villagers remain hopeful that money will flow again, and FD officials abet this hope with assurances that another Bank project is likely to come through.³⁸ With no more assets to 'distribute', some field-level FD staff are already reluctant to visit FPCs.³⁹ The implications of the supporting works program for project sustainability is examined in a later section (para 5.2).

4.7 Though almost 3,300 FPCs were registered, the project strategy of involving communities in JFM can only be considered partially successful as there is still a long way to go to achieve genuine participation. In the case of gender concerns, though the issue of the Government Order of November 1991, that made women joint members in the FPCs⁴⁰ was a

³⁷ Exceptions to this do exist. Some FPCs have realized the long-term benefits that can accrue to communities from forest protection. This is especially true of FPCs that were formed before the project. But such examples are few amongst FPCs formed during the project. Participating NGOs, such as the Ramakrishna Mission, are concerned about the excessive money flow to the FPCs. These NGOs are helping build capacity among villagers. They emphasize that it is not as important to meet the immediate economic needs of the villagers as is to create capacity in them for long-term economic and social development. Their view is that through JFM, FD should emphasize protection of livelihood systems, not just trees.

³⁸ "Probably because FPC formation was implied rather than included, no provision was made for FPC financing once the project ended, resulting in funds being spent rather than "invested," i.e. beneficiaries were not asked to repay the funds spent on their improvements to a village fund, in fact no village funds were required." Working Paper 4 ICR Volume II. This ICR comment on FPC formation for the mangrove areas appears to be true for FPC formation exercise in the whole project.

³⁹ Revealed in a conversation with field-level functionaries in Midnapore District. The staff noted that when they go to the villages they are asked when the FD will be providing for other assets on the "wish list." In the absence of more funding, they are unable to answer.

⁴⁰ The West Bengal JFM resolution, issued in 1989 to formalize collaborative forest management agreements, had not formally recognized the role of women in forest protection.

substantial achievement, the project success in mainstreaming women in forest protection activities was limited (see Box 3).

Box 3: Gender Participation in the WBFP

On paper at least, JFM offers women an equal opportunity to participate in the management of forest resources. While the 1989 West Bengal JFM resolution did not recognize the role of women in forest protection, the modified Government Order of November 1991 provided for joint membership of husband and wife in the FPCs. Nonetheless, women's participation in FPC activities is reported to be limited.^a Out of the almost 3,300 registered FPCs only 16 have a membership entirely of women. A major cause is lack of awareness of their rights. Other factors that inhibit their participation are social values and mores and inappropriate FPC meeting places and times. The strategy of WBFP relied on NGOs to mobilize women to participate. But a working relationship between NGOs and the FD never fully developed. A survey^b of 76 FPCs in Nayagram Range, Midnapur District, revealed a very slow rise in female participation in FPC activities. In most of the FPCs, members were not even aware of the provision for female enrollment and joint partnership. Women had no role in village meetings covering such issues as forest protection, collection of non-timber forest products (*sabai* grass which is used for rope making, bags and floor carpets and is abundantly grown in the region), and forest theft—despite their major role in collecting non-timber forest products and in protecting the forest from intruders. In all the 76 FPCs of the Nayagram Range the survey found that women were still passive players in formal forest management. Much needs to be done to generate awareness and increase the participation of women in formal FPC activities. The survey, however, reports progress in increasing their participation in training activities held to improve their skills for processing quality *sabai* grass products. These products are then sold in towns and cities and generate income for women and their families.

a. Monitoring Report of West Bengal Forest Department, 1993.

b. "Gender Portrayals in Forest Management of Nayagram." Participatory Forest Management Project Rural Development Center, Indian Institute of Technology, Kharagpur. Sponsored by the Ford Foundation. PFM Study Series 1996.

Economic Rate of Return

4.8 The SAR estimated the ERR at 20 percent over 30 years. The ICR, unable to reconstruct the economic analysis in the SAR,⁴¹ re-evaluated the project using a *with-without* project approach and estimated the overall ERR at 9 percent based on 85 percent of total costs. The ICR notes that actions taken to consolidate project results in the future are expected to raise the ERR to 12 percent. The justification leading to the ERR calculations are credible.

⁴¹ The ICR team found that the appraisal analysis made erroneous assumptions about what would have happened in the without-project scenario.

5. Ratings

Outcome

5.1 The audit downgrades the ICR estimate of project outcome from satisfactory to **marginally satisfactory**.⁴² This is because the negative effects of the reorganization,⁴³ the budget situation, and weak project design will be felt for a long time in the state and have been a setback for the Forestry Department. The whole process of organizational change has to be well thought through. When imperfect, such changes can have a major negative impact on the functioning of the implementing agency. It is still too early to know what remedial steps the department and the government have taken or will take. Despite these shortcomings in project design and implementation, the audit does not downgrade the project to unsatisfactory because it had a positive impact on arresting forest degradation in the state (the main objective).

Sustainability

5.2 The audit agrees with the ICR in rating sustainability as **uncertain**. Given the current financial crisis⁴⁴ (para 2.5), the marketing problems, and lack of a clear strategy to ensure how the regenerated forest area is kept under forest cover in the long run,⁴⁵ a rating of unlikely was also considered. However, the audit rates sustainability as uncertain since the issue is much more complex. The regenerated forest area can be kept under tree cover only if the FPC members get enough returns in terms of non timber forest products and share of final harvest to be able to compensate for the income foregone.⁴⁶ Though, returns from NTFPs have started flowing to the community they are currently insufficient.⁴⁷ Until the time they become sufficient, villagers will have to find income and employment through other means. A genuine participatory approach had not been institutionalized by the project. Had the micro planning exercise (para 3.3) been less rigid, it is quite possible that the FPC members themselves would have found a way for sustainable management of their forest resources. There are examples of a few FPCs (mainly pre project) having taken the initiative to set up revolving funds to ensure a sustained flow of income overtime. Since such a mechanism was not institutionalized, it falls on the FD to find a way out. The attitudinal change in the FD towards working with the people has been immense. Since most FPCs look to the FD for further economic support while the forests regenerate (para 4.6) FD, through training and awareness, has to convince FPCs members of the long run benefits that can

⁴² The region in its comments notes that the ICR did not have the marginally satisfactory category as an option. Were this option available, they would probably have used it.

⁴³ The reorganization of FD was proposed by the Bank and during implementation adherence to the time deadline became more important than learning from the experience of the pilot districts.

⁴⁴ The region notes that the financial situation in West Bengal is much more adequate in the current fiscal year.

⁴⁵ The current project provided for income and employment generation through supporting works and planting and regeneration activities (paras 4.5 and 4.6). There was no clear strategy to ensure future income to FPC members in the absence of a Bank project.

⁴⁶ This analysis of sustainability is mainly for the south and the mangrove areas where large forest areas were regenerated. The mangroves have significant benefits related to flood control. In the north, local people's involvement in protection was inadequate (para 3.5).

⁴⁷ There is a difference of perception between the region and OED on this issue. The region agrees that knowledge on NTFPs is currently insufficient, but based on available information used in their ERR calculations they note that income flows from NTFP far exceed that from employment generated.

accrue to the people from the forests. Working with participating NGOs, the department can pursue setting up of revolving funds in the FPCs. Procuring additional resources would provide the FD time required to consolidate this grass root institution building. A follow on Bank project has been prepared by the State. If this materializes, FD would have the time and resources to address sustainability concerns. Regardless of resource financing, FD will have to build a clear strategy of ensuring a sustained income flow in the future and also address the marketing and other problems that remain. If FD does not do this and uses the resources in the future program to also merely 'distribute' assets to villages as under the current project, then sustainability would become unlikely.

Institutional Development

5.3 The audit agrees with the ICR in rating institutional development under the project as **modest**. A large part of the JFM effort in the state predates the project.^{48 49}

Borrower Performance

5.4 The audit agrees with the ICR rating of borrower performance as **satisfactory**. Though genuine participation has not been achieved, the FD's efforts have resulted in bringing large areas of degraded forest land under FPC control. Except for delays, borrower compliance with covenants was generally satisfactory. The current inadequate budget situation is beyond the control of the implementing agency.

Bank Performance

5.5 Given the weakness in project design, Bank pressure to implement the reorganization without a thorough evaluation of all its implications, the weakness of the midterm review, the adherence to rigid procedures for project implementation, and the non-participatory manner in which the project was prepared,⁵⁰ the audit ideally would downgrade Bank performance to marginally satisfactory. To this day, FD officials in the state refer to the project as the *World Bank Forestry Project* rather than the *West Bengal Forestry Project*. However, OED makes no provision for a marginally satisfactory rating for Bank performance. The audit therefore rates Bank performance as **satisfactory** because the unsatisfactory rating is too harsh for two reasons. First, this was the first time the Bank undertook a sector-wide project in forestry in India, hence it had no model for comparison and significant learning was involved. Strong efforts have been made in later sector-wide projects (in Andhra Pradesh, Madhya Pradesh, Kerala, and Uttar Pradesh) to overcome many of these shortcomings. Second, the Bank effort resulted in significant achievements on the research, wildlife, and protected areas components, and large areas of degraded forest land were brought under tree cover and FPC protection, especially in the south, as a result of regeneration of *sal* forests.

⁴⁸ "However, for the sake of clarity and candidness, it needs to be stated that this success has little to do with the project: (i) JFM predates the project and is well on its own, with or without the project." Internal email August 1995.

⁴⁹ The region disagrees with this sentence and notes that the initial conceptualization and piloting of JFM was achieved prior to the project. However, the improvements in the government order were closely associated with project preparation. They further note that JFM was quite controversial prior to the project. The project directly increased the number of forest department staff who understand and accept JFM, shifting the orientation of the entire department. Effort spent on JFM definitely increased under the project.

⁵⁰ "The fact that the project preparation was managed by the Bank and not borrower weakened the sense of ownership. Many staff at the working level felt that it was Bank's project, a feeling that prevailed in FD throughout the life of the project." Working Paper 2, ICR Volume 2.

6. Findings and Lessons

Lesson 1: Great caution is required when issues like reorganization are made a part of project design

6.1 Given the state of forest degradation in West Bengal, the Bank's strategy of reducing poverty and protecting the environment in India, the WBFP was highly relevant.⁵¹ The sector wide approach taken by this project was an improvement over the narrow focus of the social forestry phase. Since states are responsible for implementation and administration of forests (footnote 4), a sectoral approach, which involves working with the whole of FD rather than a segment, allows for comprehensive planning for the whole sector. However, the Bank and the borrower should both carefully think through the whole process, weigh all the pros and cons, before issues like reorganization are made a part of project design and conditionality.⁵² Reorganization of the FD in West Bengal made irreversible changes in the structure of an organization that, except for horizontal expansion, had endured for 100 years. When imperfect, as they were in this case, such changes can have a major negative impact on the functioning of the implementing agency.

Lesson 2: A sector wide project, can be made more effective when coordination with GOI on certain issues is built into project design

6.2 These are issues like coordination between national and state level research organizations. In the case of the WBFP, though substantial progress was made on the research agenda, the linkage with national level research institutions (for example with the Indian Council of Forestry Research and Education (ICFRE) was not strong. As a result, there was little chance for the state level research institutions to benefit from the work being done at ICFRE and other central organizations.

Lesson 3: A coordinated multi-sectoral approach can provide for increased effectiveness and better planning

6.3 The WBFP extended the role of the FD beyond its core competencies. Before the social forestry phase, the department had been confined to protecting forest lands. With social forestry, its role grew to include village wastelands and common lands. Under the WBFP, the department has also taken over the role of a *development agency*. This is not a role in which the FD has a comparative advantage.⁵³ Rather, the Bank project thrust this new role on the department. Neither

⁵¹ Since the focus is on involvement of populations living adjacent to forest areas in forest protection, in so far as these populations are amongst the poorest in the country, the Bank forestry projects, target the poor directly.

⁵² The Region agrees with the need to carefully think through reorganization issues in project design and has made two observations: first they emphasize the importance of including the proper expertise not only for project preparation but also during supervision when reorganization activities are included in a project; second they note the lack of any place for specialization in forest services (and associated training requirements) is a major weakness in these times when forestry is moving from a policing/management, revenue raising concept to a scientific service. The ICR recognizes the riskiness associated with organizational reform.

⁵³ "WBFD staff are initiating activities in which they do not have a comparative advantage. Examples include directly marketing alternative livelihood products on behalf of local FPCs, training FPC members in specialized non-forestry skills, and design and supervision of works where other agencies have more expertise. WBFD management need to curtail such initiatives in order to ensure that staff focus on the department's forestry mandate and that local people receive the highest quality and most effective support services available." Supervision Report, December 8, 1995. The region in its comments notes that the FD acted on this comment to correct the situation.

government (central or state) recognize the FD as the agency to bring such rural development programs to the people. Little thought was given to several important questions: Is the FD the right agency for this effort? How would other government departments, such as rural development, react to the FD playing development agency in some villages and not others? What impact would playing this role have on those other departments? Is there an immediate need for an integrated rural strategy that calls for a cooperative endeavor between various government departments—forestry, irrigation, agriculture, soil conservation, education—that operate at the field level?⁵⁴ A sector wide approach should not mean isolation in design and implementation from other related sectors. A forestry project that builds rural development assets cannot be designed in isolation from the agricultural or rural development strategy for the region.⁵⁵ The forestry effort should be positioned as a part of the overall development framework for the area.⁵⁶ For a complete picture, this would also imply coordination with state and central efforts in forestry and agriculture. This coordinated multi sectoral approach was lacking in the WBFP.

Lesson 4: The need to fulfill preset targets should not be allowed to dilute project goals

6.4 The change in attitude of the department towards working with the people has been immense. The department is now convinced that forest conservation cannot be accomplished without the cooperation of the people. A change in attitude of the FD had begun with the social forestry projects, which brought the hitherto aloof FD into contact with the people. Under social forestry, the FD attempted to work with the people to meet their fuelwood and fodder needs outside the reserve forests. People's participation under social forestry was used in a much broader sense and included simple mobilization, voluntary contribution, or simply sharing of benefits. With this generous interpretation, even provision for wage labor was described as participation.⁵⁷ With JFM, the FD attempted to involve the people in the protection and rehabilitation of forest areas themselves. However, as in the case of social forestry, because of the need to fulfill preset targets, genuine participation—the kind that would mean villagers influence and share control over development initiatives and the decisions and resources—was rarely achieved even in the south.⁵⁸ Most of the genuine participatory examples are from before the project. Under the project, despite all the rhetoric, the FPC formation exercise was target driven—which results from “we (FD) manage and direct you (FPC members) participate.” Though WBFP emphasized participation, little attention was given to the time and resources required to carry out a genuinely participatory institution building exercise. This was also the problem with the attempt at increasing gender participation. Neither was the reorganization

⁵⁴ “Issues related to an integrated or a complimentary approach to development are areas in which important lessons can be learned from China and Turkey as exemplified by certain programs funded by the Bank (e.g. the Eastern Anatolia project in Turkey, in which the department of forestry takes the lead and yet cooperates with the departments of infrastructure and agriculture, or in China where a number of departments concerned with agriculture, forestry, and infrastructure and village water supply or health and education cooperate.” (Uma Lele, January 13, 1999, Back to Office Report—OED's Review of the 1991 Forest Policy and Its Implementation Visit to India: The Poverty/Forestry/Conservation Interface).

⁵⁵ The region notes that the executive committees of the FPCs include representatives from the Panchayat institutions which coordinate the rural development input in a village.

⁵⁶ The region in its comments notes that a key issue is the extent to which other agencies are operating at all in remote forest areas—generally they are not.

⁵⁷ International Labor Organization report on Social Forestry in India (1988).

⁵⁸ The Bank's Learning Group on Participatory Development defines participation as “a process through which stakeholders influence and share control over development initiatives and the decisions and resources which affect them.”

helpful in reducing the work load of the Beat (field level) officer, who still attends to an average of 7–8 FPCs and has little time to help with the day-to-day problems of individual FPCs.

Lesson 5: Suitability of lending instrument has an important bearing on project outcome

6.5 The *strategic approach* of working with the people in protecting the forests was a step in the right direction. The JFM concept that the project was trying to spread was not new to India (Box 1). In this sense, the Bank was supporting a home grown concept in the country, but for which resources within the country were inadequate. Forestry projects like WBFP are capable of bridging this important resource gap. However, the *process* of spreading the JFM concept was not well thought through. The shortcomings in design and the weak implementation did not lead to an efficient resource allocation and have put project sustainability at risk. Perhaps, the WBFP, is an example of where the Bank could do better by using its new instrument, the Adaptable Program Loans (APLs) which can allow for time to build consensus and capacity.⁵⁹ The participatory model of forest management that the project was attempting to spread requires that institutional capacity be built in participating FPCs. This complex task, where decentralized and participatory implementation is important, where the project involves a reorganization of the implementing department, where grass roots institutional capacity needs to be built, and where the development process itself has to nurture processes that are locally determined and based on participatory decision making, cannot readily be accomplished within a set time frame. Yet, the project followed the Bank's usual investment path of identification, preparation, appraisal, and implementation, which assumes that the project can be defined ex-ante, that it can be implemented in a fixed period with time-bound disbursements, and solutions to development constraints are known.

⁵⁹ The Region notes that the project design of subsequent forestry projects in Madhya Pradesh, Uttar Pradesh and Kerala have adopted a two phase approach which is quite similar to that of an APL

Annex A

BASIC DATA SHEET

WEST BENGAL FORESTRY PROJECT (IDA CR. 2341-IN)

Cumulative Estimated and Actual Disbursements (US\$ million)

	FY92	FY93	FY94	Fy95	FY96	FY97	FY98
Appraisal estimate	2.0	6.4	11.9	18.7	25.1	31.6	34
Actual	0	5.58	10.32	15.98	22.28	30.38	34.88
Actual as % of estimate		87	87	86	89	96	103
Date of final disbursement	June 9, 1998						

Project Dates	Date Planned	Date Revised	Actual
Identification			06/29/1990
Preparation			05/24/1991
Appraisal			06/14/1991
Negotiations			12/02/1991
Board presentation			03/17/1992
Signing			03/25/1992
Effectiveness			06/23/1992
Completion	03/31/1997		09/30/1997
Credit Closing	09/30/1997		12/31/1997

Staff Inputs

Stage of Project Cycle	Actual	
	Weeks	US\$
Preparation to Appraisal	58.1	158.8
Appraisal	32.1	93.6
Negotiations through Appraisal	6.3	14.4
Supervision	101.2	229.7
Completion	32.6	127.7
Total	230.3	624.2

Mission Data					Performance rating		
<i>Stage of Processing</i>	<i>Date (month/year)</i>	<i>No. of persons</i>	<i>Staff days in field</i>	<i>Specializations represented⁶⁰</i>	<i>Implementation status</i>	<i>Development objectives</i>	<i>Types of problems</i>
Identification	5/90	2	4	A, E			
Preparation	10-11/90	16	29	E, A, F, FT, EN, S, FI, NR, FD, I			
Preparation	1-2/91	7	25	A, E, C, F, P, FN, FD			
Appraisal	6-7/91	6	15	E, C, F, P, FN, FD			
Supervision	3/93	2	10	F	S	S	Administrative, Financial
Supervision	10/93	3	15	F, S, A	S	S	Procurement, Administrative, Financial (ARDD)
Supervision	2/94	1	7	F	S	S	Technical, Procurement, Administrative, Financial (ARDD)
Supervision	8-9/94	2	11	F, P	S	S	Procurement, Administrative, Marketing, Training, Technical (ARDD)
Mid-term Review	2/95	6	13	F, FT, IT, EN, F, S, FD	S	S	Procurement, Administrative, Marketing, Training, Policy
Supervision	10-11/95	5	13	E, FT, EN, F, S	S	S	Social, Technical, Procurement, Administrative, Marketing, Training, Financial
Discussions	2/96	2	2	E, FN	NA	NA	Financial
Supervision	6/96	2	11	E, F	S	S	Marketing, Financial, Procurement
Supervision	10/96	5	16	E, F, EN, S, FT	S	S	Sustainability, Social, Marketing, Financial, Administrative, Project structure
Supervision	5/97	2	5	E, F	S	S	Sustainability, Administrative, Social, Financial, Marketing
Implementation Completion Rvw.	1/98	8	15	E, F, FN, EN, S, FT, FM			Sustainability

Specialization: A=Agriculturalist; C – Cost Specialist; E – Economist; EN – Environmental Specialist; F – Forester; FD – Fodder Specialist; FI – Forest Industries Specialist; FM – Forest Product Marketing Specialist; FN – Financial Analyst; FT – Forestry Technology Specialist; I – Institutional Specialist; IT – Information Technology Specialist; NR – Natural Resources Specialist; P – Procurement Specialist; S – Social Development Specialist.

Borrower Comments

06-15-99P05:03 RCVD

**Government of West Bengal
Directorate of Forests,
Office of the Principal Chief Conservator of Forests,
West Bengal.**

No. 1382 / 118E/3D-1/99Dated : Calcutta the 24th May, 99.

From : The Principal Chief Conservator of Forests,
West Bengal.

To ✓ : Mr. Gregory Ingram, Manager,
Operations Evaluation Department,
Sector and Thematic Evaluation Group,
The World Bank.
1818 H street N.W
Washington, D.C. 20433
U.S.A
INDIA-West Bengal Forestry Project (Cr. 2341-IN)
Draft Performance Audit Report.

We are in receipt of the Draft Performance Audit Report on West Bengal Forestry Project. Borrower comments are furnished below :

At the beginning of the Project an effective monitoring & evaluation system was developed by the Monitoring Wing of Forest Directorate. For the purpose of monitoring the progress of the project, a monthly financial return and a half-yearly physical return forms were evolved, on the basis of semi-annual & annual reports were published each year. **Accommodated as a footnote in para. 2.3 of audit

For undertaking survey monitoring and on-going evaluation of the various treatments models, several formats were evolved, measurements were taken and other data were collected in the field. These data were analyzed and Annual Survey Monitoring Reports were prepared.

Adequate arrangement for Social Forestry activities such as extension, publicity, training etc. could not be provided in this project. Extension in marketing information was lacking. Steps like training and awareness in marketing are urgently required.

**Accommodated as a footnote to para. 2.4 of the audit

Contd.....p/2.

*****Accommodated as a footnote to para. 2.5 of the audit***

In future projects should be prepared in such a manner that the project funds flows as an addition to the existing work programme.

*****Accommodated as part of footnote to para. 2.6 of the audit***

Relationship between N.G.O. and F.D. left much to be desired because of absence of committed NGOs and perhaps lack of motivation on the part of F.D. personnel.

To integrate into one service all the staff from district level and below and to subdivide the jurisdiction on geographical lines was a wrong approach. By doing reorganisation in this line the specialised wings were dissolved and these works suffered most.

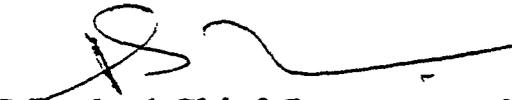
*****Included as a footnote to para. 3.2 of the audit***

Sal plantations were regenerated through coppicing, M.S. cutting and thinning in those areas where these were required.

*****Included as a footnote to para 3.4***

Since ARDD component was too small to cover the entire area, pressure of grazing on forest could not be reduced. Heavy investment is required to cover the entire live stock population in and around the forest.

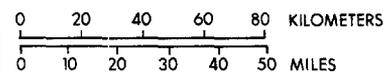
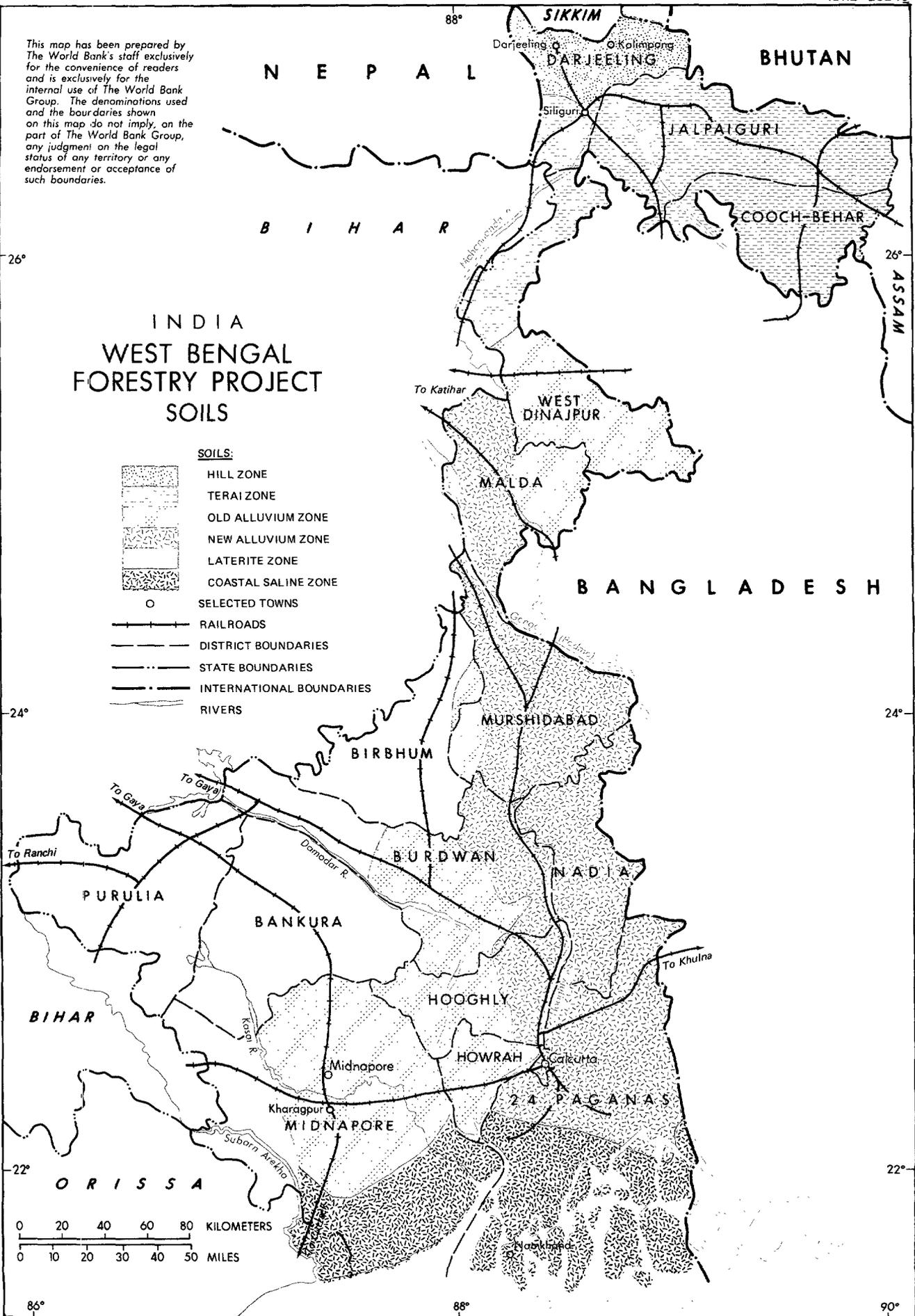
*****Included in para. 3.6 of the audit report as a footnote***


Principal Chief Conservator of Forests,
West Bengal.

This map has been prepared by The World Bank's staff exclusively for the convenience of readers and is exclusively for the internal use of The World Bank Group. The denominations used and the boundaries shown on this map do not imply, on the part of The World Bank Group, any judgment on the legal status of any territory or any endorsement or acceptance of such boundaries.

INDIA WEST BENGAL FORESTRY PROJECT SOILS

- SOILS:**
-  HILL ZONE
 -  TERAI ZONE
 -  OLD ALLUVIUM ZONE
 -  NEW ALLUVIUM ZONE
 -  LATERITE ZONE
 -  COASTAL SALINE ZONE
 -  SELECTED TOWNS
 -  RAILROADS
 -  DISTRICT BOUNDARIES
 -  STATE BOUNDARIES
 -  INTERNATIONAL BOUNDARIES
 -  RIVERS



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INDIA WEST BENGAL FORESTRY PROJECT NORMAL ANNUAL RAINFALL

- 1300 ——— ISOHYETS IN MILLIMETERS
- SELECTED TOWNS
- +—+—+— RAILROADS
- - - - - DISTRICT BOUNDARIES
- · — · — STATE BOUNDARIES
- · - · - · - INTERNATIONAL BOUNDARIES
- RIVERS

