

Ex-ante Evaluation

1. Name of the Project

Country: India

Project: Tripura Forest Environmental Improvement and Poverty Alleviation Project

(Loan Agreement:03/30/2007; Loan Amount: 7,725 million yen; Borrower: The President of India)

2. Necessity and Relevance of JBIC's Assistance

The percentage of forest coverage in India is 23.7% (2003), placing it below the world average of 29.6% (2003). Many people, including the poor, depend on the forest for animal fodder, fuel, and income. In addition, the recent growth of Indian population is increasing the load on its forests, thus accelerating their deterioration. Due to the drop in the water level as a result of the decline in the groundwater retention capacity in the forest, a vicious cycle has developed in which there is a shortage of water for agricultural use and drinking water and in which the lives of the poor, who depend on the forest for their livelihoods, are repressed.

In 10th 5-Year Plan (April 2002 – March 2007) by the Government of India, major topics are the increase of the rate of forest cover (to reach 25% of the total national land area by FY2007 and 33% by FY2012) and regeneration of degraded forests. Also through that plan, it is expected that sustainable forest management and support to the people dependent on forests for obtaining alternative means of income will be achieved through the promotion of JFM in which the government administration and local residents will cooperate in afforestation and forest management. Moreover, in Common Minimum Program (May) of the current administration, emphasis is placed on investment in afforestation projects for employment creation.

In JBIC's current Medium-Term Strategy for Overseas Economic Cooperation Operations, priority areas for assistance to India are "rural development that benefits the poor" and "environmental improvement". The assistance to this project is consistent with this strategy.

In the state of Tripura, about 83% of the population lives in rural areas. Thirty-one percent of the state population belong to scheduled tribes (indigenous peoples) and a large majority of whom live by relying heavily on forests. The poverty rate at 40% in the state's rural areas is very high; degraded forests are the egregious outcome of activities such as excess extraction of forest resources and shifting cultivation. During the four years, from 1999 to 2003, in some 430km² of dense forest, the canopy rate has declined by about 20%, resulting in such serious problems as soil runoff and the decline in soil's ability to retain water. Under these circumstances, as part of its effort to reinvent the forestry sector and implement its anti-poverty measures, the state of Tripura is striving to promote sustainable forestry management and preservation of biodiversity with the participation of residents. Thus JBIC's assistance in this project, which strives to rehabilitate the forest and raise the income of the local residents, is highly necessary and highly relevant.

3. Project Objectives

The objective of this project is to rehabilitate the forests in Tripura, a state in the northeastern region of India, and raise the income of the local residents by extending assistance to participatory afforestation and to those engaged in shifting cultivation, as well as to preserve the biodiversity of the region, thereby improving regional environment and alleviating poverty.

4. Project Description

(1) Target Area

State of Tripura

(2) Project Outline

- (a) Afforestation
- (b) Community development and livelihood improvement activities
- (c) Assistance for shifting cultivators
- (d) Biodiversity conservation
- (e) Supporting activities for forest conservation
- (f) Consulting services (assistance in procurement and fund management, technological assistance, etc.)

(3) Total Project Cost/Loan Amount

9,216 million yen (Yen Loan Amount: 7,725 million yen)

(4) Schedule

April 2007 – March 2015 (96 months)

(5) Implementation Structure

- (a) Borrower: The President of India
- (b) Executing Agency: Forest Department, Government of Tripura
- (c) Operation and Maintenance System: Same as (b)

(6) Environmental and Social Consideration

(a) Environmental Effects/Land Acquisition and Resident Relocation

(i) Category: B

(ii) Reason for Categorization

This project will not have significant undesirable impact on the environment given the characteristics of the sector, the characteristics of the project and the characteristics of the project area under the “Japan Bank for International Cooperation Guidelines for Confirmation of Environmental and Social Consideration” (established in April 2002). Thus this project is classified as Category B.

(iii) Environmental Permit

The EIA report is not required for the project in the country’s legal system.

(iv) Anti-Pollution Measures

No particular adverse impact on the environment is expected because the executing agency will issue appropriate guidance when pesticides and fertilizers are used.

(v) Natural Environment

Adverse impact on the natural environment is expected to be minimal because, in this project, native species will be mainly planted out of consideration for the ecosystem.

(vi) Social Environment

This project requires no land acquisition or resident relocation because it will be carried out in

national forests and on private land selected for inclusion through community participation.

(vii) Other/Monitoring:

Monitoring of the afforestation will be conducted jointly by the executing agency and local residents.

(b) Promotion of Poverty Reduction

The percentage of households living below poverty line and of scheduled tribes in the project is higher than in the rest of the state. This project aims to improve the living standard of the poor in these deprived areas through afforestation and undertaking of support activities for shifting cultivators.

(c) Promotion of Social Development (e.g. Gender Perspective)

The local residents will form Joint Forest Management Committees (JFMCs) and participate in the planning and implementation of afforestation, forest management, and community development and thereby implement Joint Forest Management (JFM). All adult males and females are encouraged to participate in the JFM committees, and a minimum quota of 33% for female members of JFM committees is established out of consideration for gender equality. Furthermore, self help groups (SHGs) centering on women are formed to undertake livelihood improvement activities in the processing, marketing, etc., of non-timber forest products.

(7) Other Important Issues

None

5. Outcome Targets

(1) Evaluation Indicators (Operation and Effect Indicator)

Indicators	Target (2017, 2 years after completion)
Afforestation area (ha)	55,100
Quantity of planting (numbers)	110,200,000
Survival rate (%)	First year after planting: 90% Third year after planting: 70% Fifth year after planting: 50%
Number of JFMCs established	400
Number of SHGs established	1,400
Rate of forest cover (%)	Wasteland (0-10%) sparse trees (10%-40%) Sparse trees (10%-40%) dense forest (40% or more)
Production of forest products (rupees/year)	627,000,000
Increase in income per beneficiary household (%)	10
Job creation (person days)	38,900,000
Training lecture attendees (numbers)	16,300

*The baseline for "Increase in income per beneficiary household" will be set after conducting a baseline survey following conclusion of the loan agreement.

(2) Internal Rate of Return

Economic Internal Rate of Return: 18.7%

- (a) Cost: Project costs (excluding tax), operation and maintenance expenses
- (b) Benefit: Increase in fuel wood production, prevention of soil erosion, etc.
- (c) Project Life: 50 years

6. External Risk Factors

Economic stagnation/deterioration and natural disasters in India and surrounding areas of the project

7. Lessons Learned from Findings of Similar Projects Undertaken in the Past

From the ex-post evaluations of similar projects in the past, it was learned that, to implement JFM smoothly, it is necessary to prepare guidelines that indicate comprehensively and in simple language the scale of JFM, criteria for selecting land for afforestation, operating standards for JFMCs, and the system for accountability, etc., and then to implement the project in accordance with those guidelines. This project aims at smooth implementation of JFM by employing experts versed in India's forest management, preparing manuals for drawing up a micro plan and managing JFM committees.

8. Plans for Future Evaluation

(1) Indicators for Future Evaluation

- (a) Afforestation area (ha)
- (b) Quantity of planting (numbers)
- (c) Survival rate (%)
- (d) Number of JFMCs established
- (e) Number of SHGs established
- (f) Rate of forest cover (%)
- (g) Production of forest products (rupees/year)
- (h) Increase in income per beneficiary household (%)
- (i) Job creation (person days)
- (j) Training lecture attendees (numbers)
- (k) Internal rate of return: EIRR (%)

(2) Timing of Next Evaluation

After project completion