Ex-ante Evaluation

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| **1. Name of the Project** |
| Country: India<br><br>Project: Gujarat Forestry Development Project Phase 2<br><br>(Loan Agreement: 03/30/2007; Loan Amount: 17,521 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. 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.<br><br>In the 10<sup>th</sup> 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 the Common Minimum Programme (May 2004), emphasis is placed on investment in afforestation projects for employment creation.<br><br>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 provided by this project is consistent with this strategy.<br><br>The forest and tree cover of geographic area of Gujarat in FY2003 was 13.0%, placing it well below the Indian national average (23.7%). Moreover, as shown by the fact that the percentage of open forest included in that is 57.5% (Indian national average: 42.4%), in addition to having a low amount of forest, the quality is also low. In eastern hilly area of Gujarat where forest is widely distributed, scheduled tribes depend on the forest for their livelihoods, and overgrazing and excessive gathering of forest resources is inviting deterioration of the forest. Under the Tenth Five-Year Plan, Gujarat is encouraging the participation of local residents particularly in the regeneration of the degraded forest. Thus, JBIC's assistance in this project to regenerate the forest and raise the living standards of the poor is highly necessary and highly relevant. |
| **3. Project Objectives** |
| The objective of this project is to regenerate the forest and raise the living standards of the local residents by conducting community-based afforestation and activities to improve livelihoods in the state of Gujarat in western India, thereby contributing to improvement of the local environment and poverty reduction. |
| **4. Project Description** |

(1) Target Area
State of Gujarat

(2) Project Outline
    (a) Afforestation (including mangrove planting)
    (b) Wildlife Conservation and Development
    (c) Community/ Tribal Development
    (d) Supporting Activities for forest conservation activities
    (e) Consulting services (assistance in procurement and fund management, and technological assistance, etc.)

(3) Total Project Cost/Loan Amount
20,923 million yen (Yen Loan Amount: 17,521 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 Gujarat
    (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 is 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 project site is located in the eastern hill country of Gujarat where the percentage of households under the poverty line and the percentage of scheduled castes and tribes in each district is the highest in the state. This project aims to improve the standard of living of the poor by implementing afforestation and activities for local development and improvement of livelihood.

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

This project will organize the following: Joint Forest Management Committees (JFMCs) for territorial forests, Social Forestry Development Committees (SFDCs) for community lands, and Eco Development Committees (EDCs) for wildlife conservation areas. These bodies will put Joint Forest Management (JFM) into practice by participating in the planning and implementation of forestry management, wildlife area management, and local development, etc. Moreover, consideration will be given to the gender perspective by encouraging the participation of all adult women and men in these bodies and by setting a quota for female members of executive committees. Moreover, Self-Help Groups (SHGs) composed mainly of women will be organized, and SHGs will engage in activities to improve livelihoods, such as by processing and sale of non-timber forest products.

(7) Other Important Issues

None

| 5. Outcome Targets |
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(1) Evaluation Indicators (Operation and Effect Indicator)

| Indicator | Target (2017, 2 years after completion) |
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| Afforestation area (ha) | 146,600 |
| Quantity of planting (numbers) | 152,000,000 |
| Survival rate (%) | First year after planting: 80-90%<br>Third year after planning: 50-60%<br>Fifth year after planting: 40-50% |
| Number of JFMCs established | 1,100 |
| Number of SFDCs established | 800 |
| Number of EDCs established | 210 |
| Number of SHGs established | 1,500 |
| Rate of forest cover (%) | Wasteland (0%-10%) → sparse trees (10%-40%)<br>Sparse trees (10%-40%) → dense forest (40% or more) |
| Production of forest products (rupees/year) | 132,000,000 |
| Increase in income per | 7.5 |

| beneficiary household (%) | |
|---|---|
| Job creation (person days) | 43,100,000 |
| Training lecture attendees (numbers) | 223,250 |

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

(2) Internal Rate of Return
Economic Internal Rate of Return: 15.3%
    (a) Cost: Project cost (excluding tax), operation and maintenance expenses
    (b) Benefit: Increase in fuel woods 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 evaluation of Phase I, it was learned that it is necessary to gather baseline data before the project and to conduct proper monitoring. 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. In this project, it is planned to conduct a baseline survey at the beginning of the project and Gujarat Forest Department and the consultant will conduct monitoring at the beginning, interim, and conclusion of afforestation activities . Moreover, the project aims to smoothly implement JFM by hiring experts knowledgeable in forest management in India to prepare manuals for micro-plan and JFMC management.

## 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 SFDCs established
    (f) Number of EDCs established
    (g) Number of SHGs established
    (h) Increase in income per beneficiary household (%)
    (i) Rate of forest cover (%)
    (j) Production of forest products (rupees/year)
    (k) Job creation (person days)
    (l) Training lecture attendees (numbers)
    (m) Internal rate of return: EIRR (%)

(2) Timing of Next Evaluation
After project completion.