Ex-ante Evaluation

1. Name of the Project
Country: India Project: Uttar Pradesh Participatory Forest Management and Poverty Alleviation Project (Loan Agreement: March 10, 2008; Loan Amount: 13,345 million yen; Borrower: The President of India)
2. Necessity and Relevance of JBIC's Assistance

The rate of forest and tree cover in India is 23.7% (2003), which is lower than the global average of 29.6% (2003). The lives of many, including those of the poorest segment of the population, rely on forests for fodder, fuel and cash-earning. However, population growth has accelerated the deterioration of the forest and caused, not only depletion of forest resources, but also lowering of groundwater levels due to decline in the forest's ability to absorb water and soil, and exertion of adverse impacts such as shortage of agricultural and drinking water. Consequently, the poor who rely mostly on forests for their livelihood find themselves in a vicious cycle of having to struggle to make a living by increasing their dependence on the forest.
 	
   The Government of India aims to raise the rate of forest coverage by 5% by the completion of the 11th Five-Year Plan (April 2007–March 2012). Also, in addition to revitalizing the degraded forests, the plan lays emphasis on (i) sustainable forestry management by implementing the Joint Forest Management (hereinafter referred to as "JFM") and (ii) the support for those who rely on the forest for their livelihood to ensure alternative sources of income. Moreover, in the current administration's Common Minimum Programme, launched in May 2004, emphasis is placed on investments in afforestation projects that create jobs.
 	
   In JBIC's Medium-Term Strategy for Overseas Economic Cooperation Operations, priority areas for assistance to India are "Regional Development that Benefits the Poor" and "Response to Environmental Issues." The assistance provided by this project is therefore consistent with this strategy.
 	
   In FY2003, the rate of forest and tree cover in the state of Uttar Pradesh was only 9.0%, which was much lower than the average of 23.7% for India as a whole, while the ratio of open forests to total forest area was much higher, 57.5% (compared to an average of 42.4% for India as a whole). However, in the northern and southern parts of the state, where the density of forests is high, Scheduled Castes and Scheduled Tribes (indigenous tribes), who have a high incidence of poverty, rely on forests for their livelihood. Their overgrazing and excess harvesting of forest resources are partly responsible for causing degradation of the forests. The state of Uttar Pradesh, which has the country's largest population living in poverty, is striving to implement poverty alleviation projects with the Department of Rural Development playing the key role. However, since most of these projects are concentrated in the central region, support has not reached surrounding forest areas distributed along the state border. Thus JBIC's support for this project, which aims to raise the living standard of the poorest segment of the population as well as to regenerate the forests, is highly necessary and relevant.

3. Project Objectives

The project aims to restore degraded forests , to augment forest resources and to improve livelihood for and empower the local people who are dependent on forests by promoting sustainable forest management including JFM plantation and community/tribal development, in the state of Uttar Pradesh in north India, thereby promoting regional environmental improvement and poverty alleviation.

4. Project Description

(1) Target Area

Northern and southern parts of the state of Uttar Pradesh

(2) Project Outline
   (a) Forest conservation and management
   (b) Community Development and Livelihood Improvement
   (c) Supporting Activities
   (d) Consulting services (support for procurement and fund management, etc.)

(3) Total Project Cost/Loan Amount

16,394 million yen (Yen Loan Amount:13,345 million yen)

(4) Schedule

March 2008–March 2016 (97 months). Project completion is defined as when the Supporting Activities are completed.

(5) Implementation Structure
   (a) Borrower: The President of India
   (b) Executing Agency: Forest Department, Government of Uttar Pradesh
   (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

Since the project will be implemented in national forests, it will involve neither land aquisition nor involantary resettelement.

(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 sites are in the forest regions in the northern and southern parts of the state of Uttar Pradesh. Both the poverty level and the Schduled Tribe/Caste population ratio of each area targeted by the project are higher than both the national average and the state average. The project will select its target villages by using the poverty level and the degree of reliance on forest resources as two of its criteria. The project aims to improve the living standard of the poorest segment of the state population by promoting, among other things, participatory forest conservation activities and regional development and livelihood improvement activities.

(c) Promotion of Social Development (e.g. Gender Perspective, Measures to Prevent Infectious Diseases Including AIDS, Participatory Development, Consideration for the Handicapped, etc.)

Under this project, Joint Forest Management Committees (JFMCs) and Eco-Development Committees (EDCs) will be formed in teritorial and wildlife divisions, respectively. These committees will put into practice participatory joint forest management (JFM) by participating in the planning and execution of forest conservation and management, joint sanctuary management, regional development and so on. Additionally, taking into consideration the gender perspective, including having all male and female adults participate in committee activities, the project will promote formation of Self Help Groups (SHGs) centering on those whose reliance on forest resources is particularly high, such as women and members of scheduled tribes. Through SHGs, livelihood improvement activities such as processing and marketing non-timber forest produces, will be put into practice. Moreover, environmental education and school afforestation programmes are slated to be implemented in schools in principal in urban areas of the state for the purpose of increasing people's awareness of the importance of environmental conservation.

(7) Other Important Issues

The project will help mitigate the effects of climate change by rehabilitating degraded forests. It will also conduct a study on the application of a Clean Development Mechanism (CDM) for this project and provide technical support.

5. Outcome Targets

(1) Evaluation Indicators (Operation and Effect Indicator)

Indicator	Target (2018, 2 years after completion)

Afforestation area (ha)	80,500
Quantity of planting (numbers)	28,230,000
Survival rate (%)	1st year: 76%, 3rd year: 64%, 5th year: 55%
Number of Joint Forest Management Committees (JFMCs) formed	800
Number of Eco-Development Committees (EDCs) formed	140
Number of Self Help Groups (SHGs) formed	2,680
Rate of forest cover (%)	Wasteland (0–10%) → open forest (10–40%) Open forest (10–40%) → dense forest (40% or higher)
Production of forest produce (rupee/year)	337,000,000
Annual income increase percentage per household *	7.9%
Employees (man-day)	19,900,000
Trainees (numbers)	30,774

* The benchmark for "average annual income per household regarding the benefited forest owner" is expected to be established after the loan agreement is signed and the baseline study is conducted.

(2) Number of beneficiaries: 724, 000

(3) Internal Rate of Return (Financial and Economic Internal Rate of Return)

Based on the conditions indicated below, the Economic Internal Rate of Return (EIRR) is 13.79%.

[EIRR]

(a) Cost: Project cost (excluding tax and duties), operation and maintenance expenses

(b) Benefit: Increase in fuel-wood and forest products, prevention of soil erosion, etc.

(c) Project life: 50 years

6. External Risk Factors

Economic stagnation/deterioration in India and the area surrounding the project sites, as well as natural disasters

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

From the ex-post evaluations of similar projects in the past, the lesson learned is that in order to implement JFM, it is important (i) to prepare, in comprehensive and easy-to-understand language, guidelines that indicate, among others, the scale of the JFM, the basis of the wood-lot selection, the basis for operating Joint Forest Management Committees, and a system for getting people to take responsibility, then (ii) to implement the project in accordance with those guidelines. This project aims to implement the JFM, in a quick and efficient manner, by employing experts thoroughly versed in India's forest management and have them prepare micro plans and a manual for managing JFMCs.

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 Joint Forest Management Committees (JFMCs) formed

(e) Number of Eco-Development Committees (EDCs) formed

(f) Number of Self Help Groups (SHGs) formed

(g) Production of forest produce (rupee/year)

(h) Rate of forest cover (%)

(i) Annual income increase percentage per household (%)

(j) Employees (man-day)

(k) Trainees (numbers)

(l) Internal rate of return: EIRR (%)

(2) Timing of Next Evaluation

    2 years after project completion