

Ex-Ante Evaluation (for Japanese ODA Loan)

South Asia Section 1, South Asia Department

Japan International Cooperation Agency

1. Name of the Project

Country: India

Project: Project for Community-Based Forest Management and Livelihoods Improvement in Meghalaya

Loan Agreement: March 27, 2020

2. Background and Necessity of the Project

(1) Current State and Issues of the Forest Sector in India

In India, the forest area has been declining due to disordered logging and changes in land use, with the forest coverage rate declining to 19.2% in 1997. However, by afforestation and other forest conservation activities, the rate improved to 21.5% in 2017 (Indian State of Forest Report 2017). Based on the standards set by the Government of India, in 2017 the percentage of Very Dense Forest whose tree crown density is 70% or over was 13.8%, that of Moderately Dense Forest whose tree crown density is 40% or over but under 70% was 43.5%, and that of the Open Forest whose tree crown density is under 40% was 42.7% (Indian State of Forest Report 2017). The percentage was high in Open Forest, in which quality is degraded by illegal logging and excessive extraction. Many people including poor people live around forests, and they are dependent on forests for their living materials, such as fodder and firewood, and income sources. The deterioration of forests threatens their lives and causes a decline in forest functions including water source retention and soil conservation. It also results in a decline in the yield of crops due to floods and other natural disasters or a lack of agricultural water. These conditions have become more apparent with the population increase in recent years. Improving forest deterioration is an urgent issue.

In the Green India Mission (formulated in 2014), the Government of India set the following goals for sustainable forest management and ecosystem conservation: increase in the forest area by five million ha over 10 years, improvement in the quality of forest in 500,000 ha, biodiversity conservation and watershed conservation over 10 million ha, and improvement in livelihoods of three million households located around forests. The Government also specified the capacity development of the Joint Forest Management Committees, a

community-based forest management organization, and the establishment of an appropriate forest management system through cooperation between local communities and public organizations.

Meghalaya is a state having a population of 2.96 million (Census of India, 2011) and is located in the northeast region of India. The per-capita income in Meghalaya is ranked 24th among 33 states in India, and fifth among seven states in the northeast region where economic development lags (Preparatory Survey). In Meghalaya, the forest area accounted for approx. 76.4% of the total area (22,429 km²) in 2017. However, forests have been deteriorated as the forest area decreased by 142 km² (approx. 1.2%) and the rate of the Open Forest increased by 157 km² to approx. 42% from 2013 to 2017 (Indian State of Forest Report 2017). Direct causes of recent deforestation and forest degradation are: shortening of the cycle of slash-and-burn shifting cultivation due to the population increase, forest fire due to open burning before grazing, cutting trees for quarrying, and non-compliance with regional customary law. These phenomena are caused by a lack of a land use plan, lack of an alternative means of livelihood, and vulnerability of management systems of public organizations and local communities. Deforestation and forest degradation cause a decline in the production of timber and non-timber forest products, soil erosion, and sedimentation in rivers, which leads to the deterioration of local communities' livelihoods and access to water resources. To prevent deforestation and forest degradation, the Government of Meghalaya specified the promotion of forest conservation, including sustainable land planning and management, in the Meghalaya Vision 2030.

In Meghalaya, approx. 90% of the forest (forest land) ownership rights belong to communities and individuals (Preparatory Survey). These forests (forest lands) are administratively managed by the Autonomous District Council (hereinafter referred to as "ADC"), a community-based administrative organization established in accordance with the Sixth Schedule of the Constitution of India. To sustainably use forests and other natural resources and improve livelihoods of local communities in rural areas, the Government of Meghalaya has established the Meghalaya Basin Development Authority (hereinafter referred to as "MBDA") under the Planning Department to coordinate and integrate administrative services, which have been provided by various departments to local people, and make efforts for sustainable management of natural resources and support for livelihoods improvement.

The Project for Community-Based Forest Management and Livelihoods Improvement in Meghalaya (hereinafter referred to as "the Project") will conserve natural resources in communities in Meghalaya by carrying out afforestation and water and soil conservation activities against deforestation and forest degradation as well as carrying out livelihood improvement activities for local people and strengthening the institutions. The Project is placed as an important project in the forest sector in India.

(2) Japan and JICA's Policy and Operations in the Forest Sector in Meghalaya, India

Under the Country Development Cooperation Program for India (March 2016), support for sustainable and inclusive growth was defined by the Government of Japan as one of the priority sectors. The Country Development Cooperation Program specified the promotion of support for the forest sector to develop programs for increasing incomes of the poor and to address environmental and climate change issues. JICA Country Analysis Paper for India (April 2018) analyzed that it was important to take measures that lead to appropriate conservation and use of forest resources. Thus, the Project is consistent with the program and analysis. The Project is also consistent with the development policies of the Government of India and the policies of Meghalaya as well as cooperation policies and analyses of the Government of Japan and JICA and contributes to the improvement in local communities' livelihoods and sustainable management of forest resources. The Project will therefore contribute to Goal 1 (No poverty) and Goal 15 (Sustainable use and management of forests) of the Sustainable Development Goals.

In Japanese ODA loans for India in the forest sector, there are 27 projects with loans totaling 269.9 billion yen as of February 2020.

(3) Other Donors' Activity

In India, the Global Environment Facility has provided support for the establishment of a biodiversity conservation plan and its activity plan. In Meghalaya, the World Bank (WB) has implemented a project for improving the capacity of community-based natural resource management under the Meghalaya Community-Led Landscapes Management Project (2018–2023). In addition, the International Fund for Agricultural Development (IFAD) has implemented a project for improving local communities' living conditions and livelihoods in rural areas under the Meghalaya Livelihoods and Access to Markets Project (2015–2024).

3. Project Description

(1) Project Objectives

The objective of the Project is to restore and conserve natural resources within the villages by sustainable forest management, livelihood improvement, and institutional strengthening, thereby contributing to conservation of environment, biodiversity, and uplifting of socio-economic conditions of people in the State of Meghalaya.

(2) Project Site/Target Area: Meghalaya

(3) Project Components

- 1) Sustainable forest management (e.g. development of a participatory land use plan, raising nurseries, afforestation, registration with the forest conservation system, and water and soil conservation activities in approx. 500 communities)
- 2) Community Development and Livelihood Improvement (e.g. community infrastructure development, production and processing of forest products, horticulture, livestock raising, and startup support for approx. 500 local communities)
- 3) Institutional Strengthening (e.g. capacity development for communities and institutions concerned)
- 4) Consulting Services (e.g. implementation management)

(4) Estimated Project Cost (Loan Amount)

13,076 million Yen (Loan Amount: 10,397 million Yen)

(5) Schedule

Planned between March 2020 and March 2030 (total of 121 months).

Project completion is defined as the completion of all the activities (March 2030).

(6) Project Implementation Structure

- 1) Borrower: President of India
- 2) Guarantor: N/A
- 3) Executing Agency: Meghalaya Basin Development Authority, Government of Meghalaya
- 4) Operation and Maintenance System: Concerning activities carried out directly by the MBDA and related departments, the MBDA and related departments will take their budgetary steps to continuously maintain and manage the activities after the completion of the Project. As for activities led by local communities, local communities will continuously manage a

revolving fund to be set during the Project period, and will manage, maintain, and operate the activities after the completion of the Project. To ensure local communities' continuous activities, the Project Management Unit will provide training to strengthen their maintenance and management capacity.

(7) Collaboration with Other Donors

- 1) Japan's Assistance Activity: N/A
- 2) Other Donors' Assistance Activity: In Meghalaya, the WB and the IFAD have implemented projects. Necessary adjustments have already been made to prevent overlap in the target area between their projects and the Project.

(8) Environmental and Social Consideration/Cross-Sectoral Issues/Gender Category

1) Environmental and Social Consideration

① Category: FI

② Reason for Categorization: The Project is classified as FI because it is impossible to specify subprojects for the Project before loan agreement, and the subprojects may have an undesirable impact on the environment as defined by the JICA Environmental and Social Guidelines (established in April 2010).

③ Other/Monitoring: Under the Project, MBDA should categorize each subproject so that the necessary measures are taken in each category. The categorization should be implemented according to India's domestic laws and ordinances as well as the JICA Environmental and Social Guidelines (established in April 2010), with the help of consultants hired using funds borrowed in the form of the Japanese ODA loan. Subprojects include no Category A projects.

2) Cross-Sectoral Issues: Under the Project, local communities will form the Village Project Implementation Committee and voluntarily carry out community-based activities for the development of a sustainable forest management plan and a livelihood improvement activity plan. Since the Project is expected to reduce 92,724 tons of CO₂ a year, it will contribute to measures against climate change (measures for climate mitigation and adaptation).

3) Gender Category: GI (S) Gender activity integration project

<Details of Activities/Reason for Categorization> After launching the Project,

gender awareness training will be provided for the MBDA, Forests and Environment Bureau, Water and Soil Conservation Bureau, ADC, and local communities. Through the collection of gender-related information and issue analysis, activities will be carried out from the gender perspective. Self-help groups composed mainly of women will carry out livelihood improvement activities so that women's opinions can be reflected in the plans.

(9) Other Important Issues: N/A

4. Targeted Outcomes

(1) Quantitative Effects

1) Outcomes (Operation and Effect Indicator)

Indicator	Baseline (Actual Value in 2019)	Target (2031) 【Expected value 2 years after project completion】
Area under forest management (ha)	-	22,500
Increase of accessibility to water (%) (Note 1)	(Note 2)	40 (Note 3)
Decrease of soil runoff (%)	(Note 2)	50 (Note 3)
Registrations with the forest conservation system (Note 4)	(Note 2)	500
Increase of household income (%)	(Note 2)	30 (Note 5)
Number of Enterprises developed	-	22
Representation of women in VPICs (%)	-	(minimum) 33
Ratio of female participation in the project activities (%) (Note 6)	-	(Note 2)
Use of GIS for planning and monitoring (%)	(Note 2)	100

(Note 1) Households that have access to tanks, chambers or water sources within 500 m radius from their dwelling are regarded as having access to water.

(Note 2) The baseline and target are based on the results of the baseline survey conducted by the SPMU after launching the Project.

(Note 3) The percentage of decrease in the amount of soil outflow. The target communities in the first batch will be subject to the evaluation at the completion of the Project (communities that will be subject to batches, of the three batches, which carry out activities in the first two years after the preparation period of the Project).

(Note 4) The number of forests registered with a legal registration system for

forest conservation possessed by the Forests and Environment Department and the ADC.

(Note 5) The percentage excludes the effect of the price escalation.

(Note 6) The rate of participation in each activity will be calculated.

(2) Qualitative Effects: Forest ecosystem conservation, women's participation in the workforce, etc.

(3) Internal Rate of Return

Based on the conditions below, the Economic Internal Rate of Return (EIRR) of the Project was calculated as 14.0%. Since the Project does not produce any income through MBDA, the Financial Internal Rate of Return (FIRR) was not calculated.

【EIRR】

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

Benefit: Incremental net return by timber, non-timber forest products, income generation activities, prevention of soil erosion, water use, and CO₂ reduction

Project Life: 50 years

5. External Factors and Risk Control

(1) Preconditions: N/A

(2) External Factors: The deterioration of political and economic situations and large-scale natural disasters will not be caused in the surrounding area of the Project.

6. Lessons Learned from Past Projects

A lesson learned from the results of the ex-post evaluation of the Gujarat Forestry Development Project, a Japanese ODA loan for India, was that it is critical to strengthen the facilitation capacity of local forest officers. This is because the participation of local communities in sustainable forest management after project completion greatly affects the expression of the project effect. To implement the Project according to the local peoples' needs, it is necessary to encourage local communities' participation in developing a detailed activity plan in the target communities and selecting activities based on the plan.

For the smooth implementation of the Project, the Project will encourage

proactive participation of local communities from the project planning stage in sustainable forest management and livelihood improvement activities carried out through the Village Project Implementation Committee. The Project will also provide training for the capacity development of local employees in community-based forest management.

7. Evaluation Results

The Project is consistent with the development policies of the Government of India and the policies of Meghalaya as well as cooperation policies and analyses of the Government of Japan and JICA. The Project contributes to the improvement in local communities' livelihoods and sustainable management of forest resources and contributes to Goal 1 (No poverty) and Goal 15 (Sustainable use and management of forests) of the Sustainable Development Goals. Consequently, JICA's support for the Project is highly necessary.

8. Plan for Future Evaluation

(1) Indicators to be Used

As described in 4. (1) through (3)

(2) Timing

Ex-post evaluation: Two years after the completion of the Project