

Ex-ante Evaluation

1. Name of the Project

Country: Republic of the Philippines

Project: Forestland Management Project

Loan Agreement: 30 March 2012

Loan Amount: 9,244 million yen

Borrower: The Government of the Republic of the Philippines

2. Background and Necessity of the Project

(1) Current State and Issues of the Forestry Sector in the Philippines

At the start of the twentieth century, at least 70 percent (approximately 23 million hectares) of the Philippines was covered with forests, but by 1990, the country's forest area decreased to about 22 percent (6.57 million hectares). This is due to large-scale commercial-based deforestation, and disorganized land use including slash and burn agriculture and excess logging by some poor communities to sustain their livelihood. This decrease in forest cover meant not only a decrease in forest resources, but led to disasters such as landslides and floods due to soil erosion and a decreased capacity of the country's forests to retain water. Thus, the Philippines experiences floods on nearly an annual basis due to the annual average of 20 typhoons and rainstorms.

Although forest cover in the country increased by 165,000ha from 1990 to 2010, it remains far below the forest rehabilitation target set by the government of the Philippines (300,000ha by 2010), and further forest rehabilitation and conservation is needed. Especially, in the mountainous region where the poverty rate is higher than other regions in the country, the decrease in forest cover due to disorganized land use including slash and burn agriculture by some poor communities to sustain their livelihood leads to landslides and draught, which in turn accelerate decrease in forest cover.

(2) Development Policies for the Forestry Sector in the Philippines and the Priority of the Project

The government of the Philippines adopted the forestry policy in the latter half of the 1970's, Protected Area Community-Based Resource Management (PACBRMA) and Community-Based Forest Management (CBFM) since the 1990's. Local residents participate in forest rehabilitation and conservation efforts and their livelihoods are improved. In addition, Philippine Development Plan (2011-2016) lists the conservation, protection and rehabilitation of forest among its top priorities. This project conducts community-based forest management and the contribution to the above-mentioned policies is essential.

(3) Japan and JICA's Policy and Operations in the Forestry Sector

The Government of Japan's Country Assistance Program for the Republic of the Philippines regards one of its priority issues to be "Empowerment of the Poor and Improvement of the Living Conditions of the Poor" and its direction to be the "Expansion of

Basic Social Services (Improving the Living Conditions of the Poor).” It provides support for proper forest management (including assistance for coastal areas) such as reforestation which contributes to measures against floods, mudslides etc. This project is also aligned with this policy. JICA’s assistance in this sector includes: Japanese ODA loans “Forestry Sector Program” in 1988 and “Forestry Sector Project” in 1993, and technical cooperation project “the enhancement of Community-Based Forest Management Program (CBFMP)”.

(4) Other Donors’ Activity

The World Bank has granted loans for the National Program Support for Environment and Natural Resources Management (NPSENRM) (2007-2012), in which it aims to strengthen the country’s environmental policies and enhance ecosystems consisting of river basin and marshes, providing assistance for the Department of Environment and Natural Resources (DENR) to improve efficiency and effectiveness in its service delivery. It also has drawn forest border lines for the target areas of this project. In addition, the Asian Development Bank supports sustainable environmental management including forest management and the enhancement of the community livelihoods in its natural resources and environmental management sector development program. Note that these programs do not overlap with this project’s target areas.

(5) Necessity of the Project

The target areas of this project are the river basins that the government of the Philippines prioritizes in its forest management. The areas have a relatively high probability of soil erosion and flood and have a higher rural poverty rate than other river basins, thus requiring urgent actions for proper forest management including community-based forest management and improvement of livelihoods of upland dwellers. Since this project is aligned with the government of the Philippines’ development policy and the government of Japan’s country assistance program, it is necessary and relevant for JICA to support this project.

3. Project Description

(1) Project Objectives

The objective of the project is to strengthen forestland management through implementing community based forest management including agroforestry and community based enterprise development in three river basins (Upper Magat and Cagayan River Basin and Pampanga River Basin in Luzon; and Jalaur River Basin in Panay Island) in a sustainable manner, thereby improving forest conservation and socio-economic conditions of upland dwellers, and contributing to disaster risk mitigation efforts in vulnerable areas.

(2) Project Site/Target Area

Upper Magat and Cagayan River Basin and Pampanga River Basin in Luzon, and Jalaur River Basin in Panay Island

(3) Project Components

- 1) Preparatory Works (survey and mapping, socio-economic baseline survey, etc.)
- 2) Community Organizing and Capacity Development
- 3) Site Development (including agroforestry and community based enterprise development)

- 4) Construction of Agroforestry Support Facilities
- 5) Policy Initiative (establishment of Watershed Management Council (WMC) , etc.)
- 6) Monitoring and Evaluation (survey on survival rate of trees planted, etc.)
- 7) Institutional Strengthening (capacity development of Sub-Project Site Management Office (SUSIMO) of DENR, etc.)
- 8) Consulting services (support for construction supervision, fund management, and technical assistance, etc.)

(4) Estimated Project Cost (Loan Amount)

11,832 million yen (Loan Amount: 9,244 million yen)

(5) Schedule

March 2012-September 2021 (115 months). The completion of Site Development (retention fee payment to qualified POs) (scheduled to complete in September 2021) shall be the time of the project completion.

(6) Project Implementation Structure

- 1) Borrower: The Government of the Republic of the Philippines
- 2) Executing Agency: Department of Environment and Natural Resources (DENR)
- 3) Operation and Maintenance System: SUSIMO will monitor to ensure that People's Organizations (POs) continue to manage forest after the site development. In addition, Local Government Units (LGUs) and POs will maintain agroforestry support facilities that are scheduled to be constructed in this project.

(7) Environmental and Social Consideration/Poverty Reduction/Social Development

1) Environmental and Social Consideration:

- ① Category: B
- ② Reason for Categorization: The project is not likely to have significant adverse impact on the environment under the JBIC guidelines for confirmation of environmental and social considerations (April 2002) in terms of its sectors, characteristics and areas.
- ③ Environmental Permit: The laws and regulations of the Philippines does not require Environmental Impact Assessment (EIA) on this project.
- ④ Anti-Pollution Measures: Organic fertilizers will be used in accordance with Department of Agriculture's standards. DENR in cooperation with the agricultural staff of the LGUs will guide the POs in the proper use and management of fertilizers and adverse impact on the environment is not expected.
- ⑤ Natural Environment: This project intends to plant trees in devastated lands and will make very little negative effects, if any, on the environment. Furthermore, considering the local ecosystems, afforestation with native species is also scheduled. The target areas of this project include candidates for protected areas, and the project will ensure that PACBRMA is signed between DENR and POs and with these agreements POs will select proper tree species, manage forests and agroforestry. This will minimize adverse impact, if any, on environment.
- ⑥ Social Environment: Afforestation and construction of agroforestry support facilities

will be conducted in public land, and land acquisition and resettlement will not be required. The government of the Philippines will ensure that indigenous peoples are involved from the initial stage of the formation of POs.

- ⑦ Other/Monitoring: DENR will monitor soil protection and water quality, based on the DENR’s forest management standards.
- 2) Promotion of Poverty Reduction: The percentage of the population living below the poverty line in the project’s targets areas is higher than the national average. This project aims to improve improvement of livelihoods of upland dwellers through implementing community based forest management including agroforestry and community based enterprise development and paying fees to POs for forest management.
- 3) Promotion of Social Development (e.g. Gender Perspective, Measure for Infectious Diseases Including HIV/AIDS, Participatory Development, Consideration for the Person with Disability etc.):
- Gender: Socio-economic baseline research will be conducted to collect gender specific data and the findings of the research will be used to improve the framework so that men and women can equally utilize forest resources. In addition, SUSIMO will promote women’s participation in community based forest management including agroforestry and community based enterprise development.
- Participatory action/good governance: Local residents will participate in selecting afforestation areas and tree species. POs will lead the implementation planning for construction of agroforestry support facilities and the local residents can earn money by participating in the construction.
- (8) Collaboration with Other Donors: The project will collaborate with the Japanese NGOs operating in the Philippines.
- (9) Other Important Issues: None

4. Targeted Outcomes

(1) Quantitative Effects

1) Performance Indicators (Operation and Effect Indicator)

Indicator	Baseline	Target(2023) 【Expected value 2 years after completion】
Rehabilitation/Restoration of degraded forestland and grass land (ha)	-	65,500
Survival rate of trees planted (%)	-	80
Applied soil conservation measures (ha)	-	5,800

The number of CBFMA/PACBRMA acquisition by POs in sub-project areas	-	105
Monthly average household income in each sub-project (%)	(Note)	(Note) to be determined during the Socio-Economic Baseline Survey

(Note) Socio-Economic Baseline Survey of PO average household income will be conducted in the initial stage of project implementation.

2) Internal Rate of Return

Based on the conditions indicated below, this Project's Economic Internal Rate of Return (EIRR) is 19.5%.

【EIRR】

Cost: Project cost (excluding VAT), and O&M cost

Benefit: increase in stumpage value for controlled tree cutting under CBFM program, sales of agro-forestry produce, sales of fodder produce by silvo-pasture, etc.

Project Life: 50 years

(2) Qualitative Effects

The capacity enhancement for sustainable watershed management, environmental conservation (decrease in flood frequency at a lower reaches of a river, soil conservation, forest rehabilitation, etc.), the improvement of livelihoods of upland dwellers and the empowerment of the poor

5. External Factors and Risk Control

Natural disasters

6. Lessons Learned from Past Projects

Ex-post Evaluations of other similar projects indicate that project implementation structure and project implementation manuals should be prepared at an initial stage of a project and SUSIMO should be staffed sufficiently for the smooth implementation of the project. In this project DENR prepares project implementation manuals and submits to JICA, and DENR issues a ministerial order to ensure that SUSIMO will be sufficiently staffed.

Also, when local residents participate in forest rehabilitation and conservation efforts and their livelihoods are improved, sustainable forest management is created. In this project includes agroforestry and community based enterprise development with the support of experts specialized in organization management including financial management and rural development.

In addition, the preparation of an accurate electronic mapping is necessary for efficient forest rehabilitation and management, and it is implemented in this project.

7. Plan for Future Evaluation

(1) Indicators to be Used

- 1) Rehabilitation/Restoration of degraded forestland and grass land (ha)
- 2) Survival rate of trees planted (%)
- 3) Applied soil conservation measures (ha)
- 4) The number of CBFMA/PACBRMA acquisition by POs in sub-project areas
- 5) Monthly average household income in each sub-project (%)
- 6) EIRR (%)

(2) Timing

2 years after the completion of the project

END