

Ex-Ante Evaluation (for Japanese ODA Loan)

1. Name of the Project

Country: The Republic of the Union of Myanmar

Project: Regional Development Project for Poverty Reduction (Phase 2)

Loan Agreement: March 1, 2017

Loan Amount: 23,979 million yen

Borrower: The Government of the Republic of the Union of Myanmar

2. Background and Necessity of the Project

(1) Current State and Issues of the Regional Development Sector in Myanmar

Since the transfer to a civilian government in 2011, the Government of the Republic of the Union of Myanmar (hereinafter referred to as "Myanmar") has started various reforms aimed at democratization, peace agreements and economic revitalization. The lifting of economic sanctions by Western countries and the expansion of trade and investment have encouraged economic activities in Myanmar. As a result, the economic growth rate is expected to reach 8.4% in FY2016 (ADB).

On the other hand, the socio-economic situation in Myanmar is still in a state of development. The Gross National Income (GNI) per capita announced by the United Nations' Department of Economic and Social Affairs in 2015 was 1,063 US dollars, and Myanmar is positioned as a "Least Developed Country (LDC)" as of May 2016. Although the poverty rate has been slightly improving over the past few years, it was 25.6% as of 2010, the second highest among the Mekong countries after Laos. In particular, with regard to basic infrastructure development in Myanmar in terms of roads and electricity and water supply services, the road pavement rate is 24% (61% on average in the Mekong countries), the electrification rate is 32% (ibid. 69.8%) and the national average of the water supply rate (ratio of households receiving their water supply through water pipes) is 8.2% (ibid. 28.4%), which means that Myanmar is still lagging behind in comparison to other Mekong countries, and this has become one of the major factors behind poverty, which hinders economic development.

In addition, economic disparities between regions and states have been considered as one of the obstacles for national development. For example, the poverty rate varies to a great extent between regions and states. The poverty rate of Chin State, the state with the highest poverty rate, is about 6.5 times higher than that of Kayah State, which has the lowest poverty rate. In the regions and states with high poverty rates, the development rate of basic infrastructure tends to be low.

(2) Development Policies for the Regional Development Sector in Myanmar and the Priority of the Project

In order to achieve balanced national development, the Myanmar government has formulated the "National Comprehensive Development Plan (NCDP)" (2014). The goals of the NCDP are to maximize the economic potential of each region/state to

lessen the poverty disparity, establish a sustainable and diversified market economy, and achieve comprehensive development and growth. Also, in July 2016 the new administration led by the National League for Democracy announced economic policies that, among other things, have made balanced economic development across states and regions as an important goal. Therefore regional development and poverty reduction are considered as an important matter of concern of the state. In this regard, the Regional Development Project for Poverty Reduction (Phase 2) (hereinafter referred to as "the Project"), which conducts the construction, rehabilitation and installation of basic infrastructure in regional areas (roads/bridges, electricity supply, water supply) is consistent with these policies.

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

The Project will contribute to regional development by building basic infrastructure, thereby contributing to poverty reduction in regional areas. It is consistent with the Japan's Country Assistance Policy for Myanmar (April 2012) namely; "assistance to improve people's livelihoods" and "assistance for the development of infrastructure and related systems necessary for sustainable economic growth". Assistance for infrastructure improvement in regional areas includes the ODA loan project "Regional Development Project for Poverty Reduction (Phase 1)" (hereinafter referred to as "Phase 1"). The Project has been requested by the Myanmar Government for the continuous support with different project sites/scopes, in addition to the assistance provided in the Phase 1.

(4) Other Donors' Activities

The World Bank has been implementing community driven development projects (since 2012). This project targets community infrastructure development such as village roads and village water supplies, infrastructure that is smaller in scale than the infrastructure targeted by the Project. Also, the Asian Development Bank supports two road improvement projects in rural areas (Ayahwadi Region: since 2014, Karen State: since 2015), but there is no overlap between the Project and the roads targeted by these projects.

(5) Necessity of the Project

Assistance is essential not only in Yangon, Mandalay and other larger cities but also in regional areas, where many poor people live, in order to accelerate economic development and poverty reduction in Myanmar. The Project provides assistance for basic infrastructure, which directly benefits local residents in regional areas. It is consistent with the development policy of the Government of Myanmar as well as Japan's assistance policies. It is expected to contribute to sustainable development goals (SDGs) 1 and 11, therefore, JICA's assistance for the Project is highly necessary and relevant.

3. Project Description

(1) Project Objective

The objective of the Project is to improve access to basic social infrastructure in regional areas through construction, rehabilitation, and installation of roads, bridges, power and water supply facilities nationwide, thereby contributing to poverty reduction and socio-economic development of Myanmar.

(2) Project Site/Target Area

Seven regions and seven states across Myanmar will be targeted. However, the Project does not cover Nay Pyi Taw Union Territory, which is the capital of Myanmar, Yangon City and other urban areas, as well as regions in conflict areas near the country border and secluded areas. The sub-project sites will be regional cities and their surrounding areas in principle. As a result of selection of sub-projects based on the candidate list submitted by the Government of Myanmar, no sub-projects have been selected for Kayah state and Yangon region, but there is a possibility that they will be included at the implementation stage.

(3) Project Components

1) Road and bridge sub-projects

Asphalt pavement (including the improvement of small bridges attached to the targeted road)

2) Electricity supply sub-projects

Construction of low voltage (less than 66kV) power transmission/distribution grids or expansion of existing grids (including the construction and installation of some substations and transformers)

3) Water supply sub-projects

Development/expansion of water conveyance, distribution and supply facilities in regional cities (including the development of water purification facilities)

4) Consulting services

Design review, preparation of bidding documents, construction supervision, strengthening the financial management capacity of executing agencies, assistance with project evaluation and monitoring, and assistance on environmental and social considerations, etc.

(4) Estimated Project Cost

27,173 million yen (including an ODA loan amount of 23,979 million yen)

(5) Schedule

From March 2017 – May 2022 (63 months). The Project is considered to have been completed when the facilities of all sub-projects are put into service (May 2021).

(6) Project Implementation Structure

1) Borrower: The Government of the Republic of the Union of Myanmar

2) Guarantor: N/A

3) Executing Agencies: The Department of Highways of the Ministry of Construction is the executing agency for road and bridge sub-projects; the Electricity Supply Enterprise of the Ministry of Electricity and Energy and the Mandalay Electricity

Supply Corporation of the Ministry of Electricity and Energy for electricity supply sub-projects; and the Department of Rural Development of the Ministry of Agriculture, Livestock and Irrigation for water supply sub-projects. The Foreign Economic Relations Department of the Ministry of Planning and Finance acts as the Coordination Agency and handles necessary coordination between related ministries, agencies and regional governments. Its roles include organizing meetings for the Project Management Unit to periodically review the progress of the Project.

4) Operation and Maintenance System: The regional offices of each executing agency and the Township Development Committees of each region or state

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

1) Environmental and Social Considerations

① Category: B

② Reason for Categorization: The Project does not fall under the category of large-scale projects in the road and bridge sector, power distribution sector and water supply sector cited in the JICA Guidelines for Environmental and Social Considerations (published in April 2010), so its potential adverse impacts on the environment are deemed negligible. The Project does not have sensitive characteristics, nor is it located in any sensitive area that might be impacted by influences cited in the Guidelines.

③ Environmental Permit: Myanmar domestic law does not require the preparation of an Environmental Impact Assessment (EIA) for the Project.

④ Anti-Pollution Measures: The objective of the Project is to newly construct or rehabilitate existing roads and bridges as well as electricity and water-supply facilities, with none of the construction or rehabilitation work being large scale. The construction work may have a negative impact on air quality or cause noise, but measures to mitigate such negative impacts, such as the use of low-emission construction machinery, watering, proper collection of waste, and prohibition of night work, will be taken during construction work, so that no significant negative impact on the environment is expected. Since the aim of the Project is to construct small-scale facilities and rehabilitate existing facilities, no significant negative impact on the environment is foreseen even after the facilities start operation.

⑤ Natural Environment: The target project area includes no sensitive areas such as national parks or their surrounding areas and the negative impact on the natural environment is expected to be minimal.

⑥ Social Environment: In the Project, the acquisition of about 5 ha of land has occurred and 100 residents have been affected, including 11 households involuntarily resettled (45 persons). Compensation and land acquisition will follow due procedures according to a simplified involuntary resettlement program that is based on JICA Environmental Guidelines and Myanmar

national decrees. There were no particular opposing opinions during consultations with affected residents.

- ⑦ Other/Monitoring: For road, bridge, electricity and water supply sub-projects, the relevant executing agencies and contractors will conduct monitoring activities for air quality and noise during construction work according to monitoring plans.

2) Promotion of Poverty Reduction:

In regions and states (excluding the Yangon region), where the poor population exceeds the national average of approximately 900,000 people, a project budget of about 2 billion Japanese Yen is allocated on average. In addition, it is confirmed that the electricity and water tariff will be affordable for local residents and a tariff system that takes into account the livelihood/financial situation of the poor will be established through consultation with the development committees of regional and state governments. Thus, the Project is categorized as a Poverty-Focused Project.

3) Promotion of Social Development

Problems which might cause poverty as well as local demands, both of which could vary in each region/state, are learned through dialogues with local residents from the planning stage of the Project. They are duly considered when confirming the necessity of the Project and selecting the sub-projects.

(8) Collaboration with Other Donors:

N/A

4. Target Outcomes

(1) Quantitative Effects

1) Performance Indicators (Operation and Effect Indicators)

Indicator	Baseline (Note 1, 3) (Actual Value in 2015)	Target (2023) (Note 1, 3) [2 years after project completion]
(a) Road and bridge sub-projects		
● Annual Average Daily Traffic (vehicles per day)	114	430
● Average Velocity (km/hour)(Ave.)	31	41
(b) Electricity supply sub-projects		
● Electrified Households by grid (Total)	134,894	393,284
● Sales volume (MWh/year) (Total)	47,201	406,424

(c) Water supply sub-projects		
● Population Served (person) (Note 2)	519,913	1,422,080
● Amount of Water supply(m ³ /day) (Note 4)	46,324	135,267

(Note 1) Baseline and target values are those at the time of appraisal, and have been calculated for each sub-project; average values are stated for road and bridge sub-projects, and total values are stated for electricity and water supply sub-projects. A consultant in charge of monitoring and evaluation supports the monitoring of the executing agency.

(Note 2) The population supplied with water has been confirmed with a questionnaire sent to the regional or state government and maps of the water supply areas.

(Note 3) If sub-projects are replaced, the baseline and target values will be revised.

(Note 4) Volume of water distributed from distributing reservoirs

(2) Qualitative Effects: Improvement of residents' living standard in regional areas, development and poverty reduction in regional areas

(3) Internal Rate of Return: Due to the nature of the Project, in which a number of sub-projects are implemented, the IRR will not be calculated.

5. External Factors and Risk Control

To facilitate the smooth implementation of the Project, which will run numerous sub-projects throughout Myanmar simultaneously, the central government needs to be updated with the project progress status through information sharing from regional and state governments, and a mechanism for close cooperation between these two has to be established.

6. Lessons Learned from Past Projects and Application of Lessons Learnt to the Project

(1) Lessons Learnt from Past Projects: Based on the ex-post evaluation results of the "Autonomous Region of Muslim Mindanao Social Fund for Peace and Development Project" (2003-12) for the Republic of the Philippines, it has been pointed out that with regard to the implementation of projects involving sector loans and consisting of multiple sub-projects, there are two problematic points: the difficulty in portfolio management for the project as a whole for the lending side during the implementation phase of the project and the verification of sustainability after the completion of the project. Therefore, the lesson has been learned that target projects should be specified to some extent at the start of the project.

(2) Application of Lessons learned to the Project: The target sub-projects have been identified in advance and the implementation structure of the executing agencies, financial measures have been confirmed for the Project. Further improvement of the capacity of the executing agencies concerning proper maintenance and management

is planned to be achieved through guidance from ODA loan consultants, etc.

7. Plan for Future Evaluation

(1) Indicators to be Used

The Project effects for each sub-project will be confirmed with the following indicators.

1) Road and bridge sub-projects

Average volume of traffic (cars/day)

Average travel speed (km/hour)

2) Electricity sub-projects

Number of electrified households

Volume of electricity sold (MWh/year)

3) Water supply sub-projects

Number of population supplied with water

Volume of water supplied (m³/day)

(2) Timing of the Next Evaluation

Two years after project completion