

Japanese ODA Loan

Ex-Ante Evaluation (for Japanese ODA Loan) Southeast Asia Division 4, Southeast Asia and Pacific Department, Japan International Cooperation Agency (JICA)

1. Basic Information

Country: The Republic of the Union of Myanmar

Project: Yangon Urban Development Project

Loan Agreement: January 21, 2020

2. Background and Necessity of the Project

(1) Current State and Issues of the Urban Development Sector in Myanmar and the Positioning of the Project

The Republic of the Union of Myanmar ("Myanmar") has continued high economic growth since the transition to civilian government and economic liberalization in 2011, especially in the Yangon metropolitan area, the center of Myanmar's economic activities. As a result, the population of the Yangon metropolitan area has increased from about 5.6 million (2011) to about 6.19 million (2016).

JICA has helped Myanmar to formulate and revise the "Strategic Urban Development Plan of Greater Yangon" and the "Urban Transport Development Program in Greater Yangon" (referred to as the "Master Plans") since August 2012 in order for the Greater Yangon area to promote sustainable development in the future. In the Master Plans, the construction of drainage channels to reduce flood damage, the development of roads to alleviate traffic congestion in Yangon, the development of streets in the central business district, etc. are cited as issues that need to be addressed urgently.

Specifically, insufficient capacity of existing drainage channels and other problems cause poor drainage of rainwater towards the outside of the city, causing flooding and affecting economic activities and civic life. Traffic congestion is caused by inefficient intersection structures, inadequate development of traffic safety facilities (median strips, road signs, and road facilities around level crossings), bus stops, sidewalks, etc. In addition, although there are many historical and religious buildings in the central business district, due to inadequate development of streets, those places are not safe and comfortable for pedestrians and tourists.

In response to these problems, the Yangon Region Government and the Yangon City Development Committee (hereinafter referred to as the "YCDC") have positioned improvements of urban environment and traffic congestion as priority projects in the Master Plans, and the Project is consistent with the policy of the Yangon Region Government and the YCDC.

(2) Japan and JICA's Cooperation Policy, etc. in the Urban Development Sector and the Positioning of the Project

In the “Japan's Projected Economic Cooperation to the Republic of the Union of Myanmar” established in April 2012, "assistance to improve people's livelihoods" and "assistance for development of infrastructure and related systems necessary for sustainable economic development" are specified as priority fields, which include assistance for the urban development sector of Yangon City. Also, "(vi) urban development/urban transport" is one of the pillars of the “Japan-Myanmar Cooperation Program” agreed upon between the Japanese and Myanmar Governments in November 2016. Furthermore, the Project is consistent with the cooperation policy agreed upon between Myanmar State Counsellor Aung San Suu Kyi and Japan's Prime Minister Abe in the meeting held in November 2017, focusing on accelerating specific cooperation on "development of Yangon."

(3) Other Donors' Activities

The Asian Development Bank (ADB) is planning a congestion relief project on some roads in Yangon. The World Bank (WB) has been implementing the “Myanmar Southeast Asia Disaster Risk Management Project” including the renovation of rainwater drainage channels in the central business district of Yangon since October 2017.

3. Project Description

(1) Project Objective

The objective of the Project is to improve urban environment of Yangon city by measures including rehabilitation of drainage facilities, removing bottlenecks on major roads and improving streetscape in the central business district, and thereby contributing to social economic development of Yangon city.

(2) Project Site/Target Area

Yangon City

(3) Project Components

The final decision on the following project components will be made by the YCDC, in principle, based on urgency and priority in the implementation stage.

a) Renovation of drainage channels: Renovation of drainage channels and installation of sluices and pumps for five existing drainage channels, among Yangon's 17 major waterways, that need to be developed in the short/medium-term and can be implemented quickly.

b) Removing causes of congestion on major roads: Improvement of intersections,

installation of traffic safety facilities (median strips and road signs), bus stops, sidewalks, etc. of 6 high-priority roads, among Yangon's 12 high-priority roads, based on the traffic conditions, traffic volume, and other factors. Also, improvement of roads around the nine level crossings that should be implemented in priority, among the 25 crossings on the Yangon Circular Railway Line.

c) Development of streets in the central business district: Rehabilitation of roadways and sidewalks to improve pedestrian safety and landscape in the historic districts in the central business district.

d) Consulting services: Support for detailed design, bidding assistance, construction supervision, traffic safety measures, and environmental and social considerations.

(4) Estimated Project Cost

27,113 million yen (including ODA loan of 24,085 million yen)

(5) Project Implementation Schedule

From January 2020 to February 2026 (74 months in total) provided that the project is considered to be completed when all the facilities are placed in service in February 2025.

(6) Project Implementation Structure

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

2) Executing Agency: Yangon City Development Committee (YCDC)

3) Operation/Maintenance and Management Agency: Same as the executing agency.

(7) Collaboration and Division of Roles with Other Projects and Donors

1) Japan's Assistance Activities

JICA has been implementing the “Project for Improving Public Bus Service in Yangon” (technical cooperation) since January 2018 in which some road improvements are planned in areas where traffic congestions occur near bus stops.

2) Other Donors' Assistance Activities

The ADB is planning a congestion relief project on some roads in Yangon. The WB has been implementing the “Myanmar Southeast Asia Disaster Risk Management Project” including the rehabilitation of rainwater drainage channels in the central business district of Yangon since October 2017. For both of these projects, JICA has already confirmed with the executing agency that there is no overlap in the target areas with the Project.

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

1) Environmental and social considerations

i. Category: B

- ii. Reason for Categorization: The project is not likely to have significant adverse impact on the environment under the JICA Guidelines for Environmental and Social Considerations (April, 2010) in terms of its sectors, characteristics and areas.
- iii. Environmental Permit: Because Myanmar's domestic laws will require the preparation of an Initial Environmental Examination (IEE) report for some sub-projects, the executing agency will formulate the IEE report by April 2020 based on the environmental impact assessment framework, to obtain approval from the Environmental Conservation Department (ECD) by June 2020.
- iv. Anti-Pollution Measures: In the environmental impact assessment framework, mitigation measures, such as water sprinkling, installation of water purification tanks, and use of low-noise heavy equipment, are proposed for air and water pollution, noise, vibration, etc. during construction work, and mitigation measures, such as traffic control, are proposed for air and other pollution after the start of service. After sub-projects have been determined, mitigation measures will be implemented in accordance with the environmental management plan established based on the environmental impact assessment framework.
- v. Natural Environment: Since the project sites are not in or near sensitive areas, such as national parks, the Project is considered to have minimal adverse impacts.
- vi. Social Environment: If the Project involves land acquisition or resident resettlement after sub-projects are determined, such acquisition will be implemented according to the resettlement action plan prepared based on the environmental impact assessment framework.
- vii. Other/Monitoring: For drainage, road, and street sub-projects, the executing agency and contractors will monitor air quality, water pollution, noise, vibration, etc. during construction work and after the start of service according to monitoring plans.

2) Cross-Cutting Issues

The Project is expected to contribute to climate change mitigation (adaptation) measures by the component of rehabilitation of drainage channels which will mitigate the deterioration of the public health environment during heavy rains and floods anticipated as a result of climate changes. Because the Project's construction work is assumed to be carried out in downtown, YCDC has agreed with the executing agency in bidding documents to provide appropriate guidance

and countermeasures for contractors so that their employers will not suffer from HIV during the construction.

3) Gender Classification

[Not applicable] GI (Gender Informed)

<Reason for classification> Although the possibility of incorporating a gender perspective is examined for each individual sub-project in the implementation stage of the Project, specific efforts that would contribute to gender equality and women's empowerment will not be implemented at present.

(9) Other Important Issues

None in particular.

4. Targeted Outcomes

(1) Quantitative Effects

1) Outcomes (Operation and Effect Indicators)

Indicator	Baseline	Target (2026) (2 years after project completion)
(Rehabilitation of drainage channels) Drainage discharge capacity (m ³ /s) Drainage pump station capacity (m ³ /s) Number of inundation events in the target area (times/yr) Inundation area in the target area (m ² /yr) (*3)	(*1)	(*2)
(Removing causes of congestion on major roads) (*4) Average rush-hour transit time at major intersections (min)		
(Development of streets in the CBD) Pedestrian traffic (persons/hour)		

(*1) Scheduled to be confirmed on a sample basis in the implementation stage where sub-projects are identified.

(*2) Scheduled to be set on a sample basis in the implementation stage where sub-projects are identified.

(*3) "Inundation" is defined as water flooding up to the knee level.

(*4) "Rush hour" is defined as the period of 8 hours in total: from 6 to 10 a.m. and 4 to 8 p.m.

(2) Qualitative Effects

Improvement of Yangon City environment, economic revitalization, social development, and traffic safety improvement in Yangon City

(3) Internal Rate of Return

The Project's internal rate of return is not calculated because sub-projects implemented cannot be identified in advance.

5. Prerequisites and External Factors

(1) Prerequisites: None in particular

(2) External factors: None in particular

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

Based on the ex-post evaluation results of the yen-loan project "Small-scale Pro Poor Infrastructure Development Project (2)" (2005) for the Socialist Republic of Vietnam, it has been pointed out that it is necessary to develop a sector loan implementation management system consisting of multiple sub-projects and a maintenance system after project completion.

Based on the above lessons, it has been agreed to set up a Project Management Unit (PMU) for project implementation, maintenance, and daily decision-making for each component, a working committee to carry out coordination and technical discussions with related organizations other than the YCDC, as well as a steering committee to coordinate with other policies and projects and to make policy decisions at the level of the Yangon Region Government headed by the Yangon Region Chief Minister for the Project.

7. Evaluation Results

The Project conforms to the development challenges and policies of Myanmar as well as the assistance policies and analysis of Japan and JICA, and contributes to the economic and social development of Yangon City by promoting the improvement of Yangon City environment and traffic congestion. Also, as it is deemed to contribute to Sustainable Development Goals 9—build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation—and Goal 11—make cities and human settlements inclusive, safe, resilient and sustainable—, it is highly necessary for JICA to provide support for the implementation of the Project.

8. Plan for Future Evaluation

(1) Indicators to be Used

As provided in 4. (1) to (3).

(2) Next Evaluation Schedule

Ex-post evaluation: Two years after the project completion