

Country Name	The Project for the Comprehensive Urban Transport Master Plan for the Greater Maputo
Republic of Mozambique	

I. Project Outline

Background	Maputo City, the capital city of Mozambique, had a population of approximately 1.2 million (2009) and is the political and industrial center of the country. Also, it is the origin of the Maputo Corridor which is the busiest trunk road in the Southern African Development Community. In addition, residential and industrial development extended to neighboring cities including Matola, Boane and Marracuene and those areas created the Greater Maputo metropolitan area. As a result, vitalized mobility of passengers and goods brought about traffic congestions in routes between Matola and Maputo. In particular, the traffic flows on the National Road No.4 increased by three times for the last decade. Under those situations, the government of Mozambique requested the government of Japan a technical cooperation to formulate a comprehensive urban transport master plan for the Greater Maputo.										
Objectives of the Project	<p>Through preparing a master plan for networks of public transport and roads, as well as traffic control in the Greater Maputo for 2035, conducting pre-feasibility study on priority project of Bus Rapid Transit (BRT), proposing recommendations on the bus system in the Greater Maputo and technical transfer of survey methodologies and master planning to the counterpart, the project aimed at implementation of the proposed master plan as a development plan for urban transport in the Greater Maputo and the priority project, thereby contributing to development of urban transport infrastructure in the Greater Maputo.</p> <ol style="list-style-type: none"> Expected Goals through the proposed plan¹: The urban transport infrastructure is developed in the Greater Maputo. Expected utilization of the proposed plan by the project: 1) The master plan prepared by the project is implemented as a development plan for urban transport in the Greater Maputo. 2) The priority project selected by the project is implemented. 										
Activities of the Project	<ol style="list-style-type: none"> Project site: Greater Maputo covering Maputo City (except for Inhaca Island), Matola City, the southern area of Marracuene District, and the eastern area of Boane City, including Mozal and Boane Main activities: 1) Information collection and situation analysis on urban transport in the Greater Maputo, 2) Demand forecast on urban transport in the Greater Maputo, 3) Master planning on urban transport in the Greater Maputo, 4) Preparation of improvement plans for road network, public transport and traffic control, management and safety, 5) Pre-Feasibility study on the priority project, and 6) capacity development plan to implement the proposed master plan and technical transfer, etc. Inputs (to carry out above activities) <table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">Japanese Side</td> <td style="width: 50%;">Mozambique Side</td> </tr> <tr> <td>1) Mission members: 14 persons</td> <td>1) Staff allocated: 19 persons</td> </tr> <tr> <td>2) Training in Japan: 14 persons</td> <td>2) Land and facility: Office space with furniture</td> </tr> <tr> <td>3) Equipment: Computers.</td> <td>3) Equipment necessary for the study: Vehicles</td> </tr> </table> 			Japanese Side	Mozambique Side	1) Mission members: 14 persons	1) Staff allocated: 19 persons	2) Training in Japan: 14 persons	2) Land and facility: Office space with furniture	3) Equipment: Computers.	3) Equipment necessary for the study: Vehicles
Japanese Side	Mozambique Side										
1) Mission members: 14 persons	1) Staff allocated: 19 persons										
2) Training in Japan: 14 persons	2) Land and facility: Office space with furniture										
3) Equipment: Computers.	3) Equipment necessary for the study: Vehicles										
Project Period	January, 2012 to March, 2014	Project Cost	(ex-ante) 350 million yen, (actual) 313 million yen								
Implementing Agency	Maputo City Council										
Cooperation Agency in Japan	PADECO Co., Ltd. Nippon Koei Co., Ltd.										

II. Result of the Evaluation

1 Relevance
<p><Consistency with the Development Policy of Mozambique at the Time of Ex-Ante Evaluation and Project Completion></p> <p>The project was consistent with Mozambique's development policy of the "Absolute Poverty Reduction Strategy" (2004-2010), prioritizing improvement of urban transport in the Greater Maputo as an origin of the Maputo Corridor, and the "Poverty Reduction Strategy" (2011-2014), focusing on infrastructure development for better investment environment. The development priorities were confirmed at the time of ex-ante evaluation and at the time of project completion.</p> <p><Consistency with the Development Needs of Mozambique at the Time of Ex-Ante Evaluation and Project Completion ></p> <p>The project was consistent with the Mozambique's development needs to cope with increasing traffic flows and traffic congestions in the routes between Matola and Maputo in the Greater Maputo due to vitalized mobility of passengers and goods brought by expansion of residential and industrial areas. There was no change in the development needs from the time of ex-ante evaluation to the project completion.</p> <p><Consistency with Japan's ODA Policy at the Time of Ex-Ante Evaluation></p> <p>The project was consistent with a Japan's ODA policy for Mozambique, prioritizing support for vitalization of regional economy, including development of corridors, of the three priority areas confirmed by the 6th policy dialogue between Mozambique and Japan in March of 2011².</p> <p><Evaluation Result></p> <p>In light of the above, the relevance of the project is high.</p>

¹ The degree of achievement of expected goals is not to be assessed in principle at the time of ex-post evaluation, since it is defined as the medium-to-long-term goals which will be attained as a result of crystallizing the proposed plan ("output" of the project).

² Ministry of Foreign Affairs, "ODA Databook", 2011

2 Effectiveness/Impact

<Status of Achievement of the Objectives at the Time of Project Completion>

The study on the comprehensive urban development plan for the Greater Maputo was completed by the project as planned. The final report of the study was composed of the following three main components: i) The master plan including proposed projects and a list of the priority projects; ii) Pre-feasibility study on the Bus Rapid Transit (BRT) system proposed by the project; iii) Recommendation on the BRT system proposed by the project based on the results of the pre-feasibility study. Technical transfer of survey methodologies and master planning to the counterparts were partially delivered. While the training program was mostly implemented in Japan as planned except a training on the Traffic Management Software. Although the planned training in Brazil was not implemented, the technical visits in Brazil were conducted.

<Utilization Status of the Proposed Plan at the Time of Ex-post Evaluation>

The master plan proposed by the project have been partially utilized at the time of ex-post evaluation. After the project completion, the master plan became officially recognized as a development plan for urban transport in the Greater Maputo by the Ministry of Transport and Communications, and the establishment of the Greater Maputo Metropolitan Transport Agency (GMMTA)³ has been promoted with coordination among relevant agencies. The master plan proposed by the project has been under implementation (Indicator 1-1). Despite of the budget shortage caused by the unsustainable public debt⁴ and qualified/trained personnel for implementation, 28 projects in the sectors of urban public transportation, traffic management, including the 8 proposed projects, were implemented and completed during the period from 2013 to 2018. However, Implementation of the priority projects proposed by the project (Indicator 2-1) has not taking place yet due to the lack of budget to cover the high cost submitted by the contractor. In addition, it is also because the implementing agencies, such as Marracuene, Boane and Matola City Council were not aware of the master plan document. Implementation arrangements and organizational settings based on the recommendation by the project (Indicator 2-2) has not been started yet. Recommendations on improvement of the public bus service system have not be able to be implemented because the BRT project has not been implemented yet. However, the introduction of large-size buses and replacement of Chapas⁵ have been already implemented. Also, through a partnership with the private sector, the METROBUS project was implemented in the Maputo/Matola corridor. Recommendation on the Photovoltaic Power System was partially implemented.

<Status of Achievement for Expected Goals through the Proposed Plan at the Time of Ex-post Evaluation>

The expected goal was partially achieved at the time of ex-post evaluation. As mentioned above, the 8 projects proposed in the master plan were implemented under the Director Plan of Mobility and Transports for the Metropolitan Area (Greater Maputo) for the period from 2013 to 2018 (Indicator 1). The traffic congestions in the area (Indicator 2) have been limitedly reduced because of the increase in the traffic volume and the limited capacity of public transportation yet.

<Other Impact at the time of Ex-post Evaluation>

No positive or negative impact was observed at the time of ex-post evaluation so far.

<Evaluation Result>

In light of the above, through the project, the final report was completed as planned and the plans, including that of the BRT system, have been partially utilized. Therefore, the effectiveness/impact of the project is fair.

Status of Achievement of Utilization Status of the Proposed Plan and Expected Goals through the Proposed Plan

Aim	Indicators	Results
(Utilization Status of the Proposed Plan) 1. The master plan prepared by the project is implemented as a development plan for urban transport in the Greater Maputo.	Indicator 1 The master plan prepared by the project as a development plan for urban transport sector in the Greater Maputo is implemented.	Status of achievement: Achieved (Ex-post Evaluation) The following projects were implemented and completed under the Director's Plan of Mobility and Transports for the Metropolitan Region based on the master plan. <ul style="list-style-type: none"> ● Public Transportation System: 6 projects ● Traffic Management: 1 project ● Road maintenance (including extension): 21 projects ● Traffic management and road maintenance ● Traffic management and road maintenance.
2. The priority project selected by the project is implemented.	Indicator 2-1. The prioritized project proposed by the project (BRT system) is implemented.	Status of achievement: Not achieved (Ex-post Evaluation) <ul style="list-style-type: none"> ● Only one high prioritized project for the BRT system proposed by the project has already been under preparation.
	Indicator 2-2. Implementation arrangements and organizational setting based on the recommendations by the project is developed.	Status of achievement: Partially achieved (Ex-post Evaluation) <ul style="list-style-type: none"> ● Recommendations on introduction of large-size buses and replacement of Chapas were implemented. ● Recommendations on operational and management system of the BRT system have not been implemented yet. ● Recommendation on the Photovoltaic Power System was partially implemented

³ GMMTA is expected to be established as a public company for effective tendering, construction and operation of the proposed master plan, including the BRT system, which crosses several municipal boundaries.

⁴ According to the IMF staff report issued in February 2018, the total public debt of the government of Mozambique is assessed to be on an unsustainable path.

⁵ Chapas is the collective term used to describe one of public passenger transport services in the Greater Maputo provided by small private operators using 15-seat minibuses or medium-sized vehicles seating about 25.

(Expected Goals through the Proposed Plan) (Not considered for to be evaluation judgement) 1. The urban transport infrastructure is developed in the Greater Maputo.	1. The projects proposed by the project are implemented.	Status of achievement: Achieved (Ex-post Evaluation) The following have been implemented and completed for the period from 2013 to 2018. From 2013 up to this ex-post evaluation, the following priority projects were implemented: i) creation of the Metropolitan Transport Agency; ii) The BRT executive project was elaborated; (iii) transforming informal operators into cooperatives, by the corridor; iv) designed and implemented the project of renewal of the transport fleet for the public and private sector; v) the training of drivers and managers of cooperatives; vi) implemented the METROBUS (rail system) project on the Maputo/Matola line; vii) implemented traffic management projects with the introduction of Bus Lane; viii) initiated the pilot project of concession of route for the operators in the line Maputo Marracuene;
	2. The traffic congestions are mitigated in the Greater Maputo.	Status of achievement: Not achieved (Ex-post Evaluation) ● The traffic congestion in Greater Maputo suffered a slight reduction with the start-up of the METROBUS project and the increase in the fleet in the Metropolitan area.

(Source) Interviews with Maputo City Council

3 Efficiency

Although the outputs were produced as planned and the project cost was within the plan (ratio against the plan: 90%), the project period exceeded the plan (ratio against the plan: 110%). Therefore, the efficiency of the project is fair.

4 Sustainability

<Policy Aspect>

On June 30, 2009, the Decree 4/96 approved the “National Transport Policy” and the “Strategy of the Integrated Transportation System” in order to promote implementation of the proposed master plan and the priority projects proposed by the project. However, the master plan and the priority projects proposed by the project have been endorsed by the national policy.

<Institutional Aspect>

It is expected that implementation of the proposed master plan and the priority projects can be somehow ensured by the institutional arrangement which has been still on going. GMMTA is going to take the responsibility for conducting the master plan and the priority projects proposed by the project for development of urban transport infrastructure in the Greater Maputo. As mentioned above, GMMTA was approved by the Ministry of Transport and Communications but have still been under creation. The Ministry of Transport and Communications is responsible for creation this organization to implement the proposed master plan and priority projects. Councils of Maputo City, Matola City, Boane City and Marracuene District take the responsibilities for carrying out the master plan and priority projects to develop urban transport infrastructure in their respective area.

For the implementation of the Master Plan, the government recently appointed the Board of Directors of GMTTA. It is a small structure still under construction. There is no staff deployed yet to provide support to the Agency and the approval of the staffing structure and governance structure is awaited for subsequent appointment of staff.

Since the traffic management software were not installed yet as expected, the monitoring and management of specific projects to improve traffic have been limited.

<Technical Aspect>

There is a still room for improvement of technical capacity to implement the master plan. GMMTA is expected to have staffs who have the sufficient knowledge and skills to implement the master plan and priority projects proposed by the project. Also, according to the above councils, all of technicians in the councils have the adequate knowledge and skills to develop urban transport infrastructure in their respective area because each council adequately provides training programs to their technicians through the projects including the Capacity Building of the Bus Sector, the Improvement of the Bus Sector, the Road Maintenance Capacity Strengthening Project and the Establishment of Greater Maputo Metropolitan Transport Agency. On the other hand, according to the technicians, they have still required any job trainings for successful performance of their tasks.

Since the planned training on the traffic management software has not been delivered, the capacity for monitoring and management of specific projects to improve traffic has not been improved.

<Financial Aspect>

The government of Mozambique allocated 12 million US dollars (USD) as a 15% co-participation in the financing agreement with the Brazilian Government for implementation of the proposed projects in the master plan. This value was used for the elaboration of the executive project and study of environmental impact of the project. Also, the government invested around 80 million dollars in the process of transforming the informal sector into a formal one with the acquisition of 300 new buses, which form delivered to 07 cooperatives in the Metropolitan Area of Maputo. The BRT project was not implemented due to the cut of funding for cooperation projects by the Brazilian Government with several countries in 2015. The project was revised for the implementation of a light BRT, costing approximately 50 million dollars.

<Evaluation Result>

In light of the above, some problems have been observed in terms of the institutional and technical as well as financial aspects of the agencies have been observed. Therefore, the sustainability of the effects through the project is fair.

5 Summary of the Evaluation

The master plan and pre-feasibility for the BRT project's priority project were prepared as planned, and some proposed projects and project recommendations were partially implemented. However, the most priority project of BRT has not been implemented yet though under preparation. In terms of sustainability, about 12 million dollars was allocated by the government of Mozambique to prepare the BRT executive project but the BRT project was scaled down due to the cut of funding. The organizational setting for implementation of

the master plan has been still ongoing and the technical capacity of GMMTA needs to be improved. As for efficiency, the project period exceeded the plan.

Considering all of the above points, this project is evaluated to be partially satisfactory.

III. Recommendations & Lessons Learned

Recommendations for Implementing Agency:

(For Maputo and Matola City Councils)

- Maputo and Matola City Councils should identify alternative funding sources for implementation of the priority projects, including usage of Public Private Partnerships within the next 3 years.
- Since the Government of Brazil has suspended financing the BRT project through ODEBRECHT Company, Maputo City Council and Municipal Company of Public Transport (EMTPM) should seek alternative sources for funding the capacity building of the company in the areas of management, maintenance and planning of the transportation and BRT system for smooth implementation of the priority project proposed by the project, from 2019 to 2020.
- Co-participation of the National Administration of Roads (ANE) through the Road Fund should intervene in the improvement of the road network under ANE in Greater Maputo

Lessons Learned for JICA:

Taking into consideration the economic situation that the country is going through, it was not possible to implement some priority projects. However, in addition to the implemented traffic management activities, the government has allocated about 92 million dollars to ensure a decent transportation service for the population. It is noted that it is necessary to further deepen the work with the Municipalities, in order to take more ownership of the Master Plan. Consideration should be given to the possibility of translating the executive summary into Portuguese, in order to facilitate its use by technicians of all Metropolitan Area Municipalities, including transporters.