

FY2024 Simplified Ex-Post Evaluation Report of Japanese Grant Aid Project

External Evaluator: Akemi Serizawa, International Development Center of Japan

Duration of the Study: September 2024-January 2026

Duration of the Field Study: 19 January 2025-2 February 2025

Country Name

United Republic of
Tanzania**The Project for Widening of New Bagamoyo Road Phase 2**

Location of the project site (source: JICA Library)

New Bagamoyo Road (source: Evaluator)

I. Project Outline

Background	In Dar es Salaam, the economic hub of Tanzania, road network development had not kept pace with its population growth and rapid motorization, resulting in severe traffic congestion. New Bagamoyo Road is a main road connecting the northern part of Dar es Salaam and its city centre. “The Project for Widening of New Bagamoyo Road” (2010-2014) (Phase 1) by JICA widened the section between Mwenge intersection and Tegeta (12.9 km) from two to four lanes. The section between Morocco intersection and Mwenge intersection (4.3 km) remained a two-lane road and was a bottleneck of traffic, with some areas susceptible to flooding during the rainy season.			
Objectives of the Project	This project aimed to ease traffic congestion on the New Bagamoyo Road in Dar es Salaam by widening the section between Morocco intersection and Mwenge intersection, thereby contributing to smoother traffic and logistics in the city.			
Contents of the Project	1. Project Site: Dar es Salaam 2. Japanese side: Widening of New Bagamoyo Road (between Morocco Intersection and Mwenge Intersection, 4.3 km), installation of drainage system (approximately 13 km), construction of service road (4 km), detailed design, construction management 3. Tanzania side: Removal of electric poles in the road construction site, relocation of water pipes			
Implementation Schedule	E/N Date	Detailed design (D/D): September 2017 Main body: February 2018	Disbursement Date	N/A
	G/A Date	Detailed design (D/D): September 2017 Main body: February 2018	Completion Date	December 2020 (date of road opening)
Project Cost	E/N Grant Limit / G/A Grant Limit: Detailed Design 69 million yen, Main body 3,782 million yen Actual Grant Amount: Detailed Design 69 million yen, Main body 3,798 million yen			
Executing Agency	Tanzania National Roads Agency (TANROADS)			
Contracted Agencies	Main Contractor: NIPPO-DAI NIPPON JV			
	Main Consultant: INGEROSEC Corporation			

II. Result of the Evaluation**Summary**

In Dar es Salaam, road network development had not kept pace with its population growth and rapid motorization, resulting in severe traffic congestion. “The Project for Widening of New Bagamoyo Road” (2010-2014) (Phase 1) by JICA widened the section between Mwenge intersection and Tegeta from two to four lanes. The section between Morocco intersection and Mwenge intersection remained a two-lane road and was a bottleneck of traffic, with some areas susceptible to flooding during the rainy season. This project aimed to ease traffic congestion on the New Bagamoyo Road by widening the section between Morocco intersection and Mwenge intersection, thereby contributing to smoother traffic and logistics in Dar es Salaam.

This project is consistent with Tanzania’s policies and development needs as well as Japan’s assistance policy for Tanzania at the time of ex-ante evaluation. No internal coherence was identified because there were no other JICA projects being carried out in related sector and no collaboration was planned or implemented during the implementation of this project. Phase 4 of the Bus Rapid Transit (hereinafter referred to as “BRT”) is being constructed on New Bagamoyo Road with support by the World Bank. From the design stage of the JICA project, road widening and BRT construction were coordinated with the BRT Department of TANROADS, which

contributed to cost reductions for the BRT project and demonstrated external coherence. From the above, the relevance and coherence of this project are high. Efficiency of the project is high because the output was produced as planned and the project cost was within the plan, while the project period slightly exceeded the plan. The ease of traffic congestion, which was anticipated as the effectiveness of the project, was judged taking the following points into consideration that one of the five indicators was achieved and two were mostly achieved, but there were no data for the remaining two indicators. Nevertheless, certain effects have been confirmed based on three indicators and the qualitative survey of road users, and the effectiveness is judged to be high. Smoother traffic and logistics, as expected as the impact, has also been confirmed. From the above, as the project has mostly realized the planned effects its effectiveness and impacts are high. Regarding the operation and maintenance of this project, there is a slight problem in the financial aspect, there are no major problems in the policy/system, organizational/institutional and technical aspects as well as environmental/social considerations. Therefore, the sustainability of the project effects is high.

In light of the above, this project is evaluated to be highly satisfactory.

Overall Rating¹	A	Relevance & Coherence	③ ²	Effectiveness & Impacts	③	Efficiency	③	Sustainability	③
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<Special Perspectives Considered in the Ex-Post Evaluation/Constraints of the Ex-post Evaluation>

Despite the agreement before the commencement of the project, the executing agency has not carried out the traffic surveys. As a result, they only had data on speed out of the five effectiveness indicators. For traffic volume of vehicles, the evaluator used the results of traffic surveys conducted by other JICA projects to estimate the actual values for the target year. As there was no existing data on traffic volume of passengers and cargo, and it was difficult to measure it during the ex-post evaluation, it was regarded as “no data”. There was no data on the number of days of flooding, but it was derived from the qualitative survey of road users.

1 Relevance/Coherence

<Relevance>

[Consistency with the Development Policy of Tanzania at the Time of Ex-Ante Evaluation]

Tanzania’s *Third Poverty Reduction Strategy* (2010-2014) identified the development of road networks and easing of traffic congestion in the cities as necessary actions to accelerate economic growth and increase income. *The Ten-year Transport Sector Investment Programme Phase 2* formulated in 2012 also set the improvement of trunk roads as one of its objectives. Therefore, this project was consistent with Tanzania’s development policies at the time of ex-ante evaluation.

[Consistency with the Development Needs of Tanzania at the Time of Ex-Ante Evaluation]

In Dar es Salaam, traffic congestion was a problem because the road network was not fully developed. New Bagamoyo Road is a main road connecting the northern part of Dar es Salaam and its city centre. “The Project for Widening of New Bagamoyo Road” (2010-2014) (Phase 1) of JICA widened the section between Mwenge intersection and Tegeta (12.9 km) from two to four lanes. The section between Morocco intersection and Mwenge intersection (4.3 km), the target section of this project (Phase 2), remained a two-lane road and was a bottleneck of traffic, with some areas susceptible to flooding during the rainy season. The widening of New Bagamoyo Road was also included in the city’s Transit Oriented Development (hereinafter referred to as “TOD”) master plan. BRT Phase 4 has been planned on New Bagamoyo Road, and it was expected that the widening of the road and the introduction of the BRT system would significantly reduce traffic congestion. Additionally, development of commercial facilities and residential areas was anticipated to progress alongside the urbanization of the roadside area. Therefore, this project was consistent with Tanzania’s development needs at the time of ex-ante valuation.

<Coherence>

[Consistency with Japan’s ODA Policy at the Time of Ex-Ante Evaluation]

Japan’s *Country Assistance Policy for the United Republic of Tanzania* (June 2012) identified “infrastructure development to support economic growth and poverty reduction” as a priority area, and this project was positioned within the “Transport and Transportation Network Development Programme.” Therefore, this project was consistent with Japan’s development cooperation policy at the time of the ex-ante evaluation.

[Internal Coherence]

No other JICA projects were implemented in related sectors during the implementation of this project, and no coordination was planned or implemented. Therefore, internal consistency is not identified.

[External Coherence]

BRT Phase 4 is being constructed on New Bagamoyo Road with support from the World Bank. From the stage of Outline Design (O/D) of this project, road widening and BRT construction were coordinated between the BRT Department of TANROADS and this project. From the preparation stage of the tender documents of this project, information was intensively shared by the two parties, and the width of the BRT and the location of the station buildings were reflected in this project. A nine-metre-wide land strip was secured in the centre of the road for the BRT, and the construction was underway as of January 2025. This coordination contributed to cost reductions for the BRT project. From the above, external coherence was identified.

<Evaluation Result>

In light of the above, the relevance and coherence of the project are high³.

2 Efficiency

¹ A: Highly satisfactory, B: Satisfactory, C: Partially satisfactory, D: Unsatisfactory

² ④: Very High ③: High, ②: Moderately low, ①: Low

³ Relevance: ③, Coherence: ③

The planned project cost was 3,862 million yen in total, consisting of 3,793 million yen for the main body of the project, in which 3,782 million yen by the Japanese side and 11 million yen by the Tanzanian side were included, and of 69 million yen for the detailed design. The actual project cost was 3,887 million yen in total (100% of the plan), consisting of 3,818 million yen for the main body of the project, in which 3,798 million yen by the Japanese side and 20 million yen by the Tanzanian side were included, and of 69 million yen for the detailed design. The planned project period was from December 2017 to December 2020 (37 months), but the actual project period was from February 2018 to October 2021 (45 months) (122% of the plan). Under the influence of Coronavirus Disease 2019 (COVID-19), construction was continued on a minimal scale without interruption from April to October 2020 at the request of the executing agency. During this period, the construction area, time, work process, and number of work groups were kept to a minimum, and the minimum number of staff necessary for this scale of work was assigned. Due to the impact of this temporary reduction in construction scale, the construction period was extended by 4.53 months. The project output was produced as planned.

Although the project period slightly exceeded the plan due to the delay of construction caused by COVID-19, the output was produced as planned and the project cost was within the plan. Therefore, the efficiency of the project is high.

3 Effectiveness/Impacts⁴

In this ex-post evaluation, the evaluator classified “easing traffic congestion” as the effectiveness of the project, and “smoother traffic and logistics” as its impact.

<Effectiveness>

The five indicators set at the time of ex-ante evaluation⁵ are treated as the indicators of effectiveness while they have different relationships with traffic congestion. They can be understood as follows: Indicator 1 (annually averaged traffic volume between Morocco and Mwenge) as well as Indicators 2 and 3 (traffic volume: number of passengers and volume of cargo) are the indicators that are expected to increase by easing congestion. Indicator 4 (peak average speed between Morocco and Mwenge) is the indicator that shows immediate changes by easing congestion. Indicator 5 (days of road inundation) is the indicator that examines the flooding situation as one of the causes of traffic congestion.

For Indicator 1 (annually averaged traffic volume between Morocco and Mwenge), as data was not available from TANROADS, the evaluator used traffic survey data collected by other JICA project teams as substitute data. The target section of this project is between Morocco intersection and Mwenge intersection, with Kijitonyama intersection located exactly halfway between the two intersections. In this ex-post evaluation, the traffic volume in 2024 was estimated based on the 2023 survey data for the Kijitonyama intersection as a substitute data for Indicator 1.

Data of 2022: The local consultant of the Project for Transit Oriented Development (TOD) for Dar es Salaam implemented traffic survey on Thursday 18 August 2022, from 6:00 to 20:00.

Table 1. Result of traffic survey in 2022 (vehicles) (unit: number)

	Inbound	Outbound	Total
Mwenge	21,331	17,691	39,002
Morocco	16,379	13,997	30,376

(Source: Traffic survey report by Mhandisi Consultancy Ltd. in the Project for Transit Oriented Development (TOD) for Dar es Salaam, published in June 2023)

Data of 2023: The Preparatory Survey team for the Dar es Salaam Intersection Improvement Project implemented traffic survey from Monday 23 October to Tuesday 24 October 2023.

Table 2. Result of traffic survey in 2023 (vehicles) (unit: number)

	Inbound	Outbound	Total	Difference from the 2022 survey results
Mwenge	21,279	22,310	43,589	112%
Near Kijitonyama	29,748	28,979	58,727	N/A
Morocco	25,948	28,464	54,412	179%

(Source: Traffic survey data of the Preparatory Survey team for the Dar es Salaam Intersection Improvement Project)

The number of vehicles in 2023 was 112% of that in 2022 at Mwenge intersection and 179% of that in 2022 at Morocco intersection. Assuming that the same rate of increase continued from 2023 to 2024 at both intersections, the number of vehicles at Kijitonyama intersection, which is located between the two intersections, is estimated to have increased from 58,727 in 2023 to somewhere between 65,774 (if the increase rate was 112%) and 105,121 (if the increase rate was 179%) in 2024, making it highly likely that the indicator achieved the target of 70,000 vehicles. Therefore, this indicator is deemed to have been mostly achieved.

No data was available for Indicators 2 and 3 (traffic volume of passengers and cargo).

The actual data of Indicator 4 (peak average speed between Morocco and Mwenge) from 2021 to 2023 obtained from TANROADS was 40 km/h, which was the same as the target value. This indicator can be judged as having achieved the target while the data of 2024 was 35 km/h and slightly decreased than before. In the qualitative survey of road users⁶, all 20 participants

⁴ When providing the sub-rating, Effectiveness and Impacts are to be considered together.

⁵ The table at the last part of the Effectiveness and Impact section summarizes these five indicators.

⁶ The evaluator conducted the qualitative survey of road users on Tuesday 28 January and Wednesday 29 January 2025 in Makunbusho Bus Terminal and

agreed that the traffic congestion had been eased, and the travel time had been significantly reduced. Their responses support that this indicator was achieved.

Regarding Indicator 5 (days of road inundation), flooding occurred along New Bagamoyo Road during the heavy rain in November 2024. According to the road users, there was no flooding after the completion of this project except that event, and that heavy rain was so severe that it caused flooding throughout the city. The number of days of flooding per year can be estimated as being between 0 and 1, and the effectiveness of the road drainage measures has been sufficiently confirmed. Therefore, this indicator has been mostly achieved.

Regarding ease of traffic congestion that was expected as effectiveness of this project, although data was not available for two out of the five indicators, one indicator was achieved and two were mostly achieved. Furthermore, the results of the qualitative survey of road users indicate that traffic congestion has been eased. Therefore, effectiveness of this project is high.

<Impacts>

As described below, it has been confirmed that smoother traffic and logistics, the anticipated impact, has been mostly achieved. The evaluator includes the qualitative effects anticipated at the ex-ante evaluation (ensured punctuality of passenger transport, improved convenience of transportation, and improved traffic safety through lane separation) in the impact: “smoother traffic and logistics.”

According to TANROADS and road users, eased traffic congestion has resulted in the improved punctuality of buses and the reduction in travel time. For example, while travel time from Mwenge to the commercial areas in the city centre of Dar es Salaam (Posta and Kariakoo) used to take about an hour, it now takes about 30 minutes. In addition, safety has been improved, and accidents have decreased by the separation of lanes, the installation of sidewalks, and the installation of lighting. As BRT construction is underway in the centre of the road and is enclosed by netting, it appears that there are few cases of reckless crossing by pedestrians. Access to social services such as schools, health facilities, and commercial centres has also improved by the reduced travel times, and some of the interviewees mentioned that school buses and ambulances were able to pass more easily. After the completion of the road widening, land prices along the road have risen, the landscape has improved, and the area is developing as a commercial district. From the above, smoother traffic and logistics have been achieved.

According to *the Guidelines for Environmental and Social Considerations Projects of JICA* (April 2004), this project was classified as Category B because it was not a large-scale road project and the potential adverse impacts on the environment were not serious, and it did not have sensitive characteristics or was in sensitive areas that were listed in the Guidelines. The *Environmental Impact Assessment Report* was approved in January 2010 and measures to mitigate contamination were taken during construction based on this report, and no environmental problems occurred. No particular problems such as air pollution, noise or waste were observed.

TANROADS reported that 17,200 square meters of land was acquired, and 38 residents were involuntarily relocated. According to the preparatory survey report of this project (2017), the land acquisition and relocation of residents were carried out in accordance with JICA guidelines and the domestic law of Tanzania. After Dar es Salaam Regional Office of TANROADS assessed the compensation, the city of Kinondoni, where the road is located, double-checked the assessment, and the people to receive compensation and the city council discussed in the meetings until both sides agreed. The compensation payments were completed by the end of 2012. From TANROADS' list of compensation recipients, the evaluator managed to interview two of them who were continuing business along the road and familiar with the circumstances at that time. Both had part of the parking lots in front of their shops taken away for this project and received compensation. Neither of them was satisfied with the compensation, claiming that the compensation amount was too low compared to the land's assessed value for tax purposes, which could be derived from the sharp rise of land prices and inflation with the development of the roadside. One of them has filed a lawsuit against the Tanzanian authorities. While the compensation was made in accordance with regulations as TANROADS and the survey results showed, there is also information that businesspersons operating shops along this road targeting the middle or upper class often take legal action when they are dissatisfied with land acquisition procedures or compensation amounts. Both businesspersons reported that customers decreased during the project due to inconvenience in accessing their shops, but after construction was completed, customer numbers and income increased to a certain extent due to the revitalization of the roadside area.

For women, elderly, and people with disabilities, the road is easy to use because the roadway and sidewalks are separated and there are pedestrian crossings. It is recognized that crimes have been deterred, and safety has been improved by lighting.

From the above, expected effects were mostly realized by the implementation of this project. Therefore, the effectiveness and impacts are high.

Quantitative Effects

Indicators	Baseline 2014 Baseline Year	Target 2023 3 years after Completion	Actual 2021 Completion Year	Actual 2022 1 year after Completion	Actual 2023 2 years after Completion	Actual 2024 3 years after Completion
Indicator 1. Annually	44,000	70,000	No data	(*1)	(*2)	No data

Mwenge area. Twenty persons (11 men and 9 women) were surveyed. They include five bus drivers (5 men), one bus conductor (1 woman), eight self-employed (3 men and 5 women including a man and a woman with disabilities), one office worker (1 man), one housewife (1 woman), three retired persons aged 65 and over (no jobs) (1 man and 2 women). As road users, ten were pedestrians (4 men and 6 women) and ten were drivers (7 men and 3 women).

averaged traffic volume (Morocco-Mwenge) (vehicles/day)						
Indicator 2. Traffic volume, Number of passengers (persons/year)	150,000	220,000	No data			
Indicator 3. Traffic volume, Volume of cargo (freight ton/year)	25,000	35,000	No data			
Indicator 4. Peak average speed (Morocco-Mwenge) (km/h)	3	40	40	40	40	35
Indicator 5. Days of road inundation (day/year)	30	0	No data In November 2024, heavy rain caused flooding around New Bagamoyo Road. The number of days of flooding is estimated to be between 0 and 1 day per year.			

Source: The base values and target values are from the ex-ante evaluation sheet. The actual value in 2022 of Indicator 1 (*1) is from the traffic survey report of the Project for Transit Oriented Development (TOD) for Dar es Salaam (published in June 2023). The actual value in 2023 of Indicator 1 (*2) is from the traffic survey data of the Preparatory Survey team for the Dar es Salaam Intersection Improvement Project. The actual value of Indicator 4 is from the questionnaire response from TANROADS. The data of Indicator 5 is from the qualitative survey of road users.

4 Sustainability

[Policy and System]

The JICA Project for Revision of Dar es Salaam Urban Transport Masterplan (2016-2018) proposed the concept of TOD Megacity, and the roads and BRT have been developed according to this concept. The areas along New Bagamoyo Road are more urbanized and has more commercial facilities than other radial roads extending from the city centre to the suburbs and has been designated as one of five priority corridors in this concept. The development of New Bagamoyo Road, which will eventually be served by BRT, will contribute significantly to the realization of TOD. Based on the above, the sustainability of the policy aspect is high.

[Institutional/Organizational Aspect]

TANROADS is under the Ministry of Works. Its mission is “to manage national roads network and airports development by planning, designing, construction and road maintenance for socio-economic development.” Its headquarters are in Dodoma, the capital, and the Maintenance Directorate and Dar es Salaam Regional Office are responsible for the maintenance of New Bagamoyo Road. The organization structure of TANROADS and its roles have been established. Therefore, the sustainability of the institutional and organizational aspect is high.

[Technical Aspect]

The number of staff and technical capabilities of the above-mentioned departments of TANROADS are sufficient for road maintenance. Training on road and bridge maintenance planning and implementation is provided to maintenance staff, and relevant manuals are used. There are no issues with the road maintenance capabilities of TANROADS, and the technical sustainability is high.

[Financial Aspect]

The Roads Fund Board provided TANROADS with 471,333 million Tanzanian schillings (approximately 25.2 billion yen) as the budget for maintenance to cover the fiscal year 2022/23⁷. Approximately 21 million Tanzanian schillings (approximately 1.15 million yen) among that was allocated for the maintenance of roads in Dar es Salaam in fiscal year 2024⁸. According to TANROADS, the same level of budget is expected to be secured in the medium term, but with the expansion of the road network, the current maintenance budget is not sufficient.

[Environmental and Social Aspect]

Based on information from TANROADS, the qualitative survey of road users, and site visit by the evaluator, no particular environmental issues such as air pollution, noise, vibration or waste were identified. As mentioned above, although one of the stores affected by the land acquisition filed a lawsuit regarding the compensation, the compensation amount was paid in accordance with the regulations.

[Preventative Measures to Risks] Not applicable

[Current Status of Operation and Maintenance]

Through the site visit, the road, sidewalks, drainage systems underneath, and service roads were all found to be in generally good condition.

<Evaluation Result>

From the above, regarding the operation and maintenance of this project, although the financial situation may not allow for sufficient budget allocation for future road network expansion, the budget for current maintenance is secured. In terms of environmental and social considerations, there is a lawsuit related to land acquisition, but measures were taken in accordance

⁷ Source: National Audit Office (March 2024) *TANROADS Report of the Controller and Auditor General on the financial and compliance audit for the financial year ended 30 June 2023* <https://www.tanroads.go.tz/reports>

⁸ Source: Questionnaire response from TANROADS

with the prescribed procedures. There are some issues in these aspects, no major problems have been observed in the related policy/system, organizational/institutional, technical aspects and environmental and social considerations. Therefore, the sustainability of the project effects is high.

III. Recommendations & Lessons Learned

[Recommendations to Executing Agency] None

[Recommendations to JICA] None

[Lessons Learned]

Importance of the establishment of a system to collect data for the indicators and its reliable implementation in road projects

If the executing agency does not conduct traffic surveys after the completion of the project, the data for the indicators is not available even if data collection was agreed upon between the agency and JICA. Speed can be measured by the evaluator of the ex-post evaluation and traffic volume surveys on number of vehicles can be conducted by hiring surveyors if there are sufficient working days and budget, but it is difficult to measure traffic volume of passengers and cargo during ex-post evaluation.

When adopting traffic volume and other indicators in road projects, it is desirable to establish a system to collect data for the indicators at the project formation stage. Specifically, based on lessons learned from other road development project⁹, it is necessary to clearly state the definitions and measurement methods of indicators in the preparatory survey report, and to have the executing agency and the project implementation consultants jointly conduct measurements upon project completion so that the executing agency can independently conduct measurements for ex-post evaluation. It is advisable not to adopt traffic volume of passengers and cargo as indicators unless it is certain that statistical data exists and is available.

(end)



Photo 1. New Bagamoyo Road
(source: Evaluator)



Photo 2. New Bagamoyo Road: Monument of the project
near Morocco intersection (source: Evaluator)

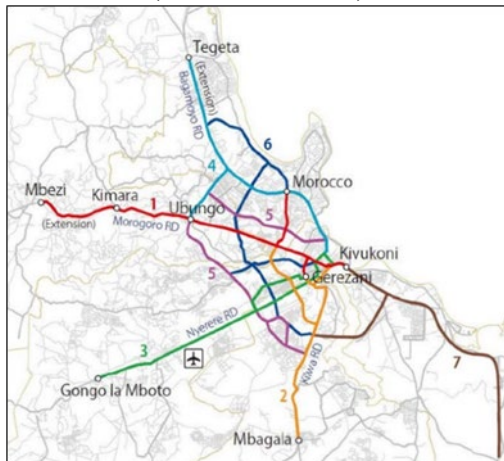


Figure 1. BRT Plan

BRT Phase 4 (light blue) is related to the road widened by this project.

(source: The Project for Revision of Dar es Salaam Urban Transport Master Plan in United Republic of Tanzania: Final Report Summary (2018))

⁹ Source: FY2017 Ex-Post Evaluation report of Japanese Grant Aid Project “The Project for Improvement of National Road No.9 as East-West Economic Corridor” in Lao People’s Democratic Republic