Burkina Faso

FY2024 Ex-Post Evaluation Report of Japanese Grant Aid Project

"Project for Improvement of the Southeastern Tansoba Bypass in Ouagadougou"

External Evaluator: Akiko Shimizu, TAC International Inc.

## 0. Summary

This project aimed to improve the urban transport and inter-regional logistics network by fully rehabilitating the southeastern section of the bypass road and constructing new motorcycle lanes and other facilities in the capital city Ouagadougou. The objective of the project was consistent with Burkina Faso's development plans, development needs, and Japan's ODA policy, and the appropriateness of the project plan was confirmed. Although external coherence was not identified, internal coherence was recognized as synergy effects with other JICA projects were observed. Therefore, its Relevance and Coherence are high. Most of the outputs on the Japanese side were produced as planned; however, the construction of service roads, which was the responsibility of Burkina Faso, has not been completed. Although the project cost was within the plan, the project period slightly exceeded the plan. Therefore, Efficiency of the project is moderately low. Regarding Effectiveness, quantitative evaluation was difficult due to the lack of data. On the other hand, qualitative effects such as improved safety for road users and reduced flood damage were confirmed, and assessed as mostly achieved. In terms of Impacts, the improvement in traffic convenience due to reduced flooding was observed, while diminished access to roadside shops due to the lack of service road construction was also identified. In addition, while the project is considered to have contributed to revitalizing inter-regional logistics, its spillover effects on economic development along the project section were seen to be limited. Furthermore, the Resettlement Action Plan was not implemented as planned, and consideration for project-affected residents was not sufficient. Therefore, Effectiveness and Impacts of the project are moderately low. As for Sustainability, some issues were observed in institutional and organizational aspects, financial aspects, environmental and social considerations, and the current status of operation and maintenance. Therefore, Sustainability of the project effects is moderately low.

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

## 1. Project Description


Project Location
(Source: Ministry of Foreign Affairs)

Rehabilitated Tansoba Bypass Road
(Source: Taken by the evaluator)

### 1.1 Background

Burkina Faso is located inland in West Africa, and its capital city, Ouagadougou, has functioned as a key logistics hub connecting coastal countries such as Côte d'Ivoire, Ghana, and Togo with landlocked countries including Niger and Mali. In Ouagadougou, traffic congestion in the city center caused by the increasing population and traffic volume, particularly due to the concentration of large freight vehicles, had become an issue. Moreover, the Tansoba Bypass Road, which constitutes part of the ring bypass road, experienced particularly heavy traffic. This is because the road hosts a dry port serving as a logistics hub and also marks the starting point of international corridors leading to the Port of Lomé in Togo, to Niger, and to the Port of Tema in Ghana. In order to alleviate such traffic congestion, development of the ring bypass road in Ouagadougou had been underway; however, since its construction in 1990, no full-scale renovation had been carried out. As a result, damage to the pavement and inadequate drainage facilities hindered smooth traffic flow. In addition, large vehicles and motorcycles were sharing the road, and due to the particularly high volume of motorcycle traffic, the road had not been fully functioning as a bypass. To address these issues, the "Project for the Improvement of the Southeast Tansoba Bypass in Ouagadougou" (hereinafter referred to as "the project") was implemented for a 6.97 km section of the Tansoba Bypass Road.

### 1.2 Project Outline

The objective of the project is to improve the urban transportation and inter-regional logistics network by fully rehabilitating the southeastern section of the bypass road and constructing new motorcycle lanes and other facilities in the capital city Ouagadougou, thereby contributing to the facilitation of intra-regional trade and the promotion of regional economic integration.

| | |
|---|---|
| Grant Limit / Actual Grant Amount | 5,801 million yen / 5,800 million yen |
| Exchange of Notes Date | August 2017 / August 2017 |

| | |
|---|---|
| / Grant Agreement Date | |
| Executing Agency | Ministry of Infrastructure and Opening Up (Ministère des Infrastructures et du Désenclavement)[1] |
| Project Completion | March 2022 |
| Target Area | Ouagadougou City |
| Main Contractor | Dai Nippon Construction |
| Main Consultant | INGEROSEC Corporation |
| Preparatory Survey | February 2016–May 2017[2] |
| Related Projects | [Related JICA Projects]<br><Technical Cooperation for Development Planning><br>The Project on the Corridor Development for West Africa Growth Ring Master Plan (2015–2018)<br><Technical Cooperation Project><br>Project for Capacity Development of Road Maintenance Management (2021–2025)<br><Grant Aid Project><br>The Project for the Improvement of Equipment for Road Maintenance (2024)<br>[Other International and Partner Organizations]<br>West African Development Bank: Supported the feasibility study for the target section of the project (2015) |

## 2. Outline of the Evaluation Study

2.1 External Evaluator

Akiko Shimizu, TAC International Inc.

2.2 Duration of Evaluation Study

This ex-post evaluation study was conducted with the following schedule.

Duration of the Study: September 2024–January 2026

Duration of the Field Study: December 1 – 21, 2024 and April 7 – 18, 2025

2.3 Constraints During the Evaluation Study

[1] At the time of the ex-ante evaluation, it was the Ministry of Infrastructure (Ministère des Infrastructures).

[2] The implementation period of the Preparatory Survey is not explicitly stated in the documents provided by JICA; however, it was considered to have started in February 2016, when the first field survey began, and ended in May 2017, when the outline explanation survey was completed.

(1) Evaluation of Effectiveness Based on Limited Data

None of the four quantitative indicators established at the time of the ex-ante evaluation were monitored by the executing agency, and the relevant data were not available at the time of the ex-post evaluation. Among these indicators, "improvement in average travel speed" was measured through on-site data collection by the evaluator and a local consultant; however, as described later, it was deemed inappropriate as an indicator for measuring the project's effects. As a result, the evaluation of Effectiveness could not be supported by quantitative evidence and had to rely solely on qualitative information, which imposed certain limitations on the objectivity of the evaluation.

(2) Ex-post Evaluation in a Conflict-Affected Country

In Burkina Faso, the security situation deteriorated as exemplified by terrorist attacks that occurred in Ouagadougou in January 2016 and August 2017. In addition, since 2017, terrorist incidents have occurred frequently, particularly in the Sahel Region near the border with Mali, with continued attacks especially in the northern and western border areas. As the project rehabilitated a road located in the central area of Ouagadougou, no direct impact from the deteriorating security situation was observed during project implementation. At the time of the ex-post evaluation as well, while the worsening security conditions may have affected the national economy as a whole, no direct impact on the effects of the project was identified.

## 3. Results of the Evaluation (Overall Rating: C[3])

### 3.1 Relevance/Coherence (Rating: ③[4])

#### 3.1.1. Relevance (Rating: ③)

##### 3.1.1.1 Consistency with the Development Plan of Burkina Faso

At the time of the ex-ante evaluation, the *Transport Sector Development Strategy in Burkina Faso* (*Stratégie de Développement du Secteur des Transports au Burkina Faso*) (2011–2025) identified the "improvement of traffic conditions in major cities through the development of bypass roads" as one of its priority areas. Furthermore, in the *National Road Development Program* (2016–2020) (*Programme National Routier: PNR*), formulated in 2016, the improvement of urban transport, including in Ouagadougou, was positioned as a priority initiative in the sector. In addition, the development of major roads connecting to neighboring countries was set as one of the strategic directions.

At the time of the ex-post evaluation, the *Second National Economic and Social Development Plan* (*Plan National de Développement Economique et Social*, hereinafter referred to as "PNDES-II") (2021–2025) identified "development of high-quality and resilient

[3] A: Highly satisfactory, B: Satisfactory, C: Partially satisfactory, D: Unsatisfactory
[4] ④: Very High, ③: High, ②: Moderately Low, ①: Low

infrastructure" as one of its strategic objectives, with expected outcomes including improvements in the quality, safety, and convenience of transport infrastructure. In addition, the *Action Plan for Stabilization and Development* (*Plan d'Action pour la Stabilisation et le Développement: PA-SD*), formulated in 2023 by the transitional government, identified "state reconstruction and improved governance" as one of its four priority areas, under which measures related to transport infrastructure, such as road paving, were presented. Furthermore, in terms of transport sector policy, the *Sectoral Policy for Infrastructure in Transport, Communication, and Housing* (*Politique Sectorielle des Infrastructures de Transport, de Communication et de l'Habitat: PS-ITCH*) (2018–2027) positioned "improvement of urban mobility" as one of the strategic outcomes, with indicators including the expansion of major road development and reduction of travel time in urban areas.

Therefore, it can be concluded that the project was consistent with Burkina Faso's development plans both at the time of the ex-ante evaluation and at the time of the ex-post evaluation.

3.1.1.2 Consistency with the Development Needs of Burkina Faso

At the time of the ex-ante evaluation, only 5.4% of the total road length in Burkina Faso was paved (as of 2013), and even at the national road level, the pavement rate remained below half at 49.7%, making the development of road infrastructure an urgent issue. In addition, as part of its regional policy, the country had adopted a joint strategy on international corridors and road infrastructure under the framework of the West African Economic and Monetary Union. Given that Burkina Faso was positioned as a strategic hub for regional economic integration, the development of international corridors extending from Ouagadougou to the borders of neighboring countries such as Ghana, Benin, Togo, and Niger was recognized as one of the country's important development needs.

At the time of the ex-post evaluation, the need for road infrastructure development remained high, with the expansion of paved roads and the planned development of urban roads identified as urgent issues. In the PNDES-II, strategic objectives include increasing the proportion of paved roads from 27.42% in 2020 to 36.70% by 2025, achieving a 100% development rate for urban roads, and doubling the proportion of rehabilitated paved roads. These targets indicate a high level of need in all areas of road infrastructure, including new construction, rehabilitation, and maintenance. Regarding the development of the ring bypass in Ouagadougou, of which the section targeted by the project forms a part, the northern section connecting National Road No. 3 and National Road No. 1 is currently under development with support from the West African Development Bank and other partners. For the remaining undeveloped sections, the continued need for support has been identified. In addition, the development of a 125 km outer ring road (north-south bypass) encircling Ouagadougou is

underway as an important infrastructure project aimed at improving traffic flow within and outside the city and enhancing the efficiency of regional and international logistics.

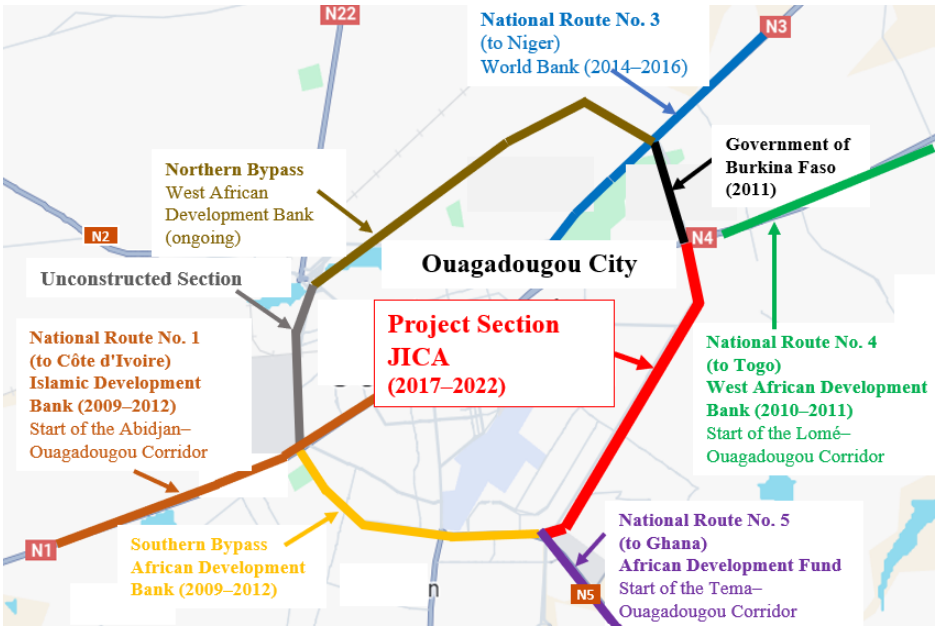


Figure 1: Development Status of the Ring Road Including the Project Section and International Corridors

Source: Prepared by the evaluator using Google Maps

Therefore, it can be concluded that the objective of the project was consistent with Burkina Faso's development needs both at the time of the ex-ante evaluation and at the time of the ex-post evaluation.

3.1.1.3 Appropriateness of the Project Plan and Approach

In the project, lessons learned from past grant aid road development projects implemented by JICA in the African region were appropriately utilized. Specifically, the report titled *"Basic Research for Improvement of Road Development Projects by Japan's ODA in African Countries – Ethiopia, Ghana, Tanzania –"* prepared in 2013 pointed out the necessity of paying sufficient attention to design conditions such as pavement structure, based on cases where post-completion deterioration in quality, such as rutting and cracking, had occurred. Reflecting these lessons, the project implemented soil replacement work using high-quality soil in certain sections where poor soil conditions had been identified, and additionally, modified asphalt was applied to prevent asphalt damage. These design improvements, based on past lessons, are considered to have contributed to ensuring the quality of the road infrastructure.

Therefore, the appropriateness of the project plan and approach was confirmed.

3.1.2 Coherence (Rating: ②)

3.1.2.1 Consistency with Japan's ODA Policy

At the time of the ex-ante evaluation, *Japan's Country Development Cooperation Policy for Burkina Faso* (2012) identified "promotion of regional economic integration" as a priority area. It indicated that support contributing to regional economic integration, such as the improvement of cross-border customs procedures and the development of regional infrastructure, would be considered.

Therefore, consistency with Japan's ODA policy at the time of the ex-ante evaluation was recognized.

3.1.2.2 Internal Coherence

At the time of the ex-ante evaluation, no specific collaboration or coordination with other JICA projects had been envisaged. However, during the implementation of the project, synergy effects through coordination with the following two JICA projects were confirmed.

The "Project on the Corridor Development for West Africa Growth Ring Master Plan," a technical cooperation for development planning implemented from 2015 to 2018, developed plans for three international corridors spanning four countries (Côte d'Ivoire, Ghana, Togo, and Burkina Faso). As part of this initiative, measures concerning the development of corridors from Ouagadougou to Togo and Ghana were compiled. In this context, the project contributed to improving traffic flow along these corridors by rehabilitating the road connected to them. Thus, although the linkage between the two projects was indirect, they generated synergy effects in terms of enhancing connectivity across the international corridors.

The "Project for Capacity Development of Road Maintenance Management," a technical cooperation project implemented from 2021 to 2025, was launched to strengthen the capacity of the Ministry of Infrastructure in maintaining paved roads. During the implementation of the project, information concerning the organizational structure, staffing, and operation and maintenance status of the Ministry of Infrastructure was shared with the said project. In addition, by enhancing the Ministry's capacity for road operation and maintenance, the said project is considered to help prevent traffic disruption caused by deterioration of roads, including the section improved by the project, thereby contributing to the sustainability of the project.

Therefore, synergy effects through concrete collaboration and coordination with other JICA projects were confirmed, and internal coherence was recognized.

3.1.2.3 External Coherence

The Government of Japan expressed its support for the strategic master plans, including the West Africa Growth Ring, at the Fifth Tokyo International Conference on African

Development (TICAD-V) held in 2013. The project involved the rehabilitation of the road serving as the starting point of an international corridor and is therefore considered to contribute to the West Africa Growth Ring initiative proposed at TICAD-V. However, no contribution, through concrete collaboration or coordination with other donors, to the achievement of the project's outcomes and objectives was confirmed.

Therefore, external coherence was not recognized.

The objective of the project was consistent with Burkina Faso's development plans, development needs, and Japan's ODA policy, and the project plan was appropriate. Although external coherence was not recognized, internal coherence was recognized as synergy effects with other JICA projects were observed.

Therefore, its Relevance and Coherence are high.

### 3.2 Efficiency (Rating: ②)

#### 3.2.1 Project Outputs

The planned and actual outputs on the Japanese side in the project are shown in the table below.

Table 1: Planned and Actual Outputs by the Japanese Side in the Project

| Component | | Plan | Actual |
|---|---|---|---|
| Civil Works | Roadway width improvement | 6.97 km in total (2 lanes on each side, 7.0 m × 2) | As planned |
| | Construction of motorcycle lanes | 6.97 km in total (1 lane on each side, 3.5 m × 2) | As planned |
| | Road drainage facilities | Drainage gutters, road-crossing box culverts | 4 additional cross-drainage pipes installed |
| | Construction of pedestrian bridges | 4 locations (2.0 m wide) | 2 locations (3.5 m wide) |
| | Bus stops | 24 locations (on both sides) | As planned |
| | Street lighting and traffic signals | Installed along the entire section | As planned |
| | Safety measures | | Guardrails installed along the edges of motorcycle lanes (approx. 6,000 m) |
| Consulting Services | | Detailed design, tender assistance, construction supervision, etc. | As planned |

Source: Documents provided by JICA and interviews with the executing agency

[Main Changes in the Outputs by the Japanese Side]

1. Additional Installation of Cross-Drainage Pipes: To address flooding that occurred at specific locations during heavy rainfall in the implementation phase, four additional cross-drainage pipes were installed, enhancing the water drainage capacity. However, according to the executing agency, the downstream drainage capacity of the existing channels is limited, and flooding has continued to occur at the same locations even after project completion.

2. Reduction in the Number of Pedestrian Bridges: The width of the pedestrian bridges was increased from 2.0 meters to 3.5 meters to improve safety and align with the design of existing bridges. As a result of this change, the number of bridges was reduced from four to two.
3. Additional Installation of Guardrails for Motorcycles: To prevent collision accidents involving motorcycles and pedestrians, guardrails were installed in sections where the height difference between the main road and the sidewalk exceeds one meter.

With regard to the outputs on the Burkina Faso side in the project, the construction of service roads (one 6-meter-wide road on each side) had been planned; however, as of the ex-post evaluation, no prospects for its implementation had been established due to lack of funding. The construction of service roads was initially included as part of the Japanese component, with the aim of improving traffic flow on the main road. However, during the cost estimation process, it was found that the estimated total amount exceeded the funding request submitted by the Government of Burkina Faso, and was subsequently designated as the responsibility of the Burkina Faso side. As discussed in the section on Effectiveness, the lack of service road construction has limited the project's effect on improving traffic convenience.

### 3.2.2 Project Inputs

#### 3.2.2.1 Project Cost

The actual project cost on the Japanese side was 5,800 million yen, compared to the planned 5,801 million yen, and was within the plan. The project cost on the Burkina Faso side was also 132 million yen as planned. Accordingly, the total project cost was 5,932 million yen against the planned 5,933 million yen, which was within the plan (100% of the planned amount).

#### 3.2.2.2 Project Period

The planned implementation period of the project was 46 months, from August 2017 (the month of the Grant Agreement signing) to May 2021 (the month the facility began operation). In reality, the project period extended from August 2017 to March 2022, totaling 56 months—10 months longer than planned (122% of the planned period). However, approximately one month[5] of this delay was attributed to the Coronavirus Disease-2019 (hereinafter referred to as "COVID-19") which was considered as an external factor. Therefore, the actual project period is evaluated as 55 months (120% of the planned period).

[5] Based on documents provided by JICA and an inquiry with the project consultant, it was confirmed that the transportation of materials was delayed due to the impact of COVID-19, resulting in a two-month delay in construction compared to the original plan. However, since the actual extension of the construction period was limited to approximately one month, the delay attributable to COVID-19 was assessed to be about one month.

[Main Reasons for Delay]

1. The start of bidding was delayed by approximately seven months due to scope revision in response to increased construction costs caused by exchange rate fluctuations, as well as delays in the relocation of electric and water utilities, which were the responsibility of the Burkina Faso side.
2. The procurement of imported materials required for design changes was delayed due to the impact of COVID-19, resulting in an approximately one-month delay in the construction period.
3. After the completion of construction, the issuance of the completion certificate took time, resulting in an approximately two-month delay in project completion.

Although there were minor scope changes, the outputs on the Japanese side were generally delivered as planned. On the other hand, the construction of service roads, which was the responsibility of the Burkina Faso side, has not been completed. Although the project cost was within the plan, the project period slightly exceeded the plan.

Therefore, Efficiency of the project is moderately low.

### 3.3 Effectiveness and Impacts[6] (Rating: ②)

#### 3.3.1 Effectiveness

##### 3.3.1.1 Quantitative Effects (Operation and Effect Indicators)

Regarding the four quantitative indicators established at the time of the ex-ante evaluation, the executing agency did not possess the relevant data at the time of the ex-post evaluation. Among these, an on-site measurement[7] of "improvement in average travel speed (km/h)" was conducted by the external evaluator and the local consultant, based on discussions with the executing agency. The measured value was 28 km/h, which fell short of the target value of 44 km/h and was also below the baseline value of 37 km/h set at the time of the ex-ante evaluation. This result is considered to be attributable to increased stopping time at traffic signals installed at ten locations. Although the number of traffic signals remained the same as before project implementation, the executing agency explained that the addition of signal control for turning movements of oncoming traffic and newly established motorcycle lanes led to longer stopping times. It is possible that the target value for this indicator did not sufficiently take into account such increases in stopping time at signals, and the indicator is therefore considered inappropriate for measuring project effects. Accordingly, all of the quantitative indicators are considered difficult to evaluate due to the lack of data and the inadequacy of indicator setting.

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

[7] Measurement Method: Measurements were conducted during three time periods—6:00–9:00, 12:00–13:00, and 17:00–18:00—on both a weekday and a weekend. Based on the travel times recorded in a total of six runs, the travel speeds were calculated, and the average value was used.

Table 2: Quantitative Indicators (Operational and Effect Indicators)

| | Baseline Value | Target Value | Actual Value | | | |
|---|---|---|---|---|---|---|
| | 2016 | 2024 | 2022 | 2023 | 2024 | 2025 |
| | | 3 Years After Completion | Completion Year | 1 Year After Completion | 2 Years After Completion | 3 Years After Completion |
| Operational Indicators | | | | | | |
| 1. Annual Average Daily Traffic (vehicles/day) | 14,000 (64,600) * | 37,000 (134,000) * | N/A | N/A | N/A | N/A |
| 2. Annual Average Number of Passengers (persons/day) | 39,100 | 92,300 | N/A | N/A | N/A | N/A |
| 3. Annual Average Cargo Volume (tons/day) | 4,500 | 6,900 | N/A | N/A | N/A | N/A |
| Effect Indicator | | | | | | |
| 4. Improvement in Average Travel Speed (km/h) | 37 | 44 | N/A | N/A | N/A | 28 |

* Figures in parentheses include motorcycles.
Source: Documents provided by JICA and interviews with the executing agency

3.3.1.2 Qualitative Effects (Other Effects)

Among the qualitative effects identified in the ex-ante evaluation, the following were organized as qualitative effects of Effectiveness: "(1) Enhanced safety through the separation of motorcycles and other vehicles," and "(2) Improved pedestrian safety through the installation of sidewalks and pedestrian bridges." In addition, this ex-post evaluation adopted "(3) Reduction of road flooding damage through the development of drainage facilities," as a supplementary qualitative indicator.

Regarding "(1) Enhanced safety through the separation of motorcycles and other vehicles," according to the executing agency, accidents involving motorcycles and four-wheeled vehicles have decreased. However, no data could be obtained to substantiate this statement. Interviews conducted with six road users[8] revealed that motorcycle users perceived an improvement in safety. In addition, according to the public transportation company operating buses along the project section (Société de Transport en Commun, hereinafter referred to as "SOTRACO"), the design in which the motorcycle lanes run behind bus stops (see Figure 2) may have reduced the risk of entrapment accidents involving motorcycles during bus stops and departures. On the other hand, it was also pointed out that due to the unfamiliar design, some motorcycles have continued straight ahead and collided with the bus stops. Furthermore, although guardrails were installed where the motorcycle lane is at least one meter higher than the sidewalk, it was also pointed out that, from a safety perspective, guardrails should have been installed along all sections with such elevation differences exist.

[8] The interviews were conducted with six individuals who were purposively selected from among those waiting for buses along the project section. Three of the interviewees were women. It should be noted that, due to the limited number of interviewees, the results of the interviews cannot be generalized.

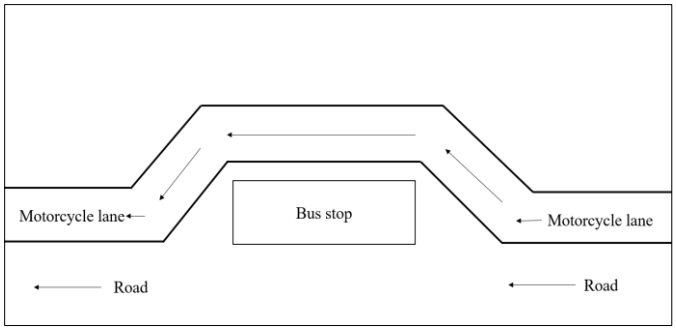


Figure 2: Design in Which the Motorcycle Lane Passes Behind the Bus Stops
Source: Prepared by the evaluator

Photo 1: Section with a Height Difference Between the Road and the Sidewalk
Source: Taken by the evaluator

Regarding "(2) Improved pedestrian safety through the installation of sidewalks and pedestrian bridges," interviews with the six road users confirmed that the installation of sidewalks, street lighting, and pedestrian bridges has contributed to the improvement of pedestrian safety. As for the sidewalks, all six interviewees expressed that they felt safety had improved. In particular, they mentioned that the secured distance between the sidewalks and the road was effective in preventing accidents. On the other hand, it was also confirmed that in some sections, parked vehicles and the presence of street vendors were obstructing pedestrian movement, indicating that the intended effect of the sidewalks has not been fully realized in some sections. As for the street lighting, all six interviewees stated that it contributed to improved visibility at night and a reduction in crime risks. The combined effect of street lighting and sidewalks can be evaluated as having established an environment where pedestrians can walk safely and securely even at night. As for the pedestrian bridges, although they are facilities expected to improve safety, in reality, many pedestrians were observed crossing the road directly instead of using the bridges. At the time of the ex-post evaluation, it was confirmed that public awareness activities to promote the use of pedestrian bridges were being conducted through radio broadcasts.

Photo 2: Constructed Sidewalk

Photo 3: Vehicles Parked on the Sidewalk

Source: Taken by the evaluator (Photos 2 and 3)

Regarding "(3) Reduction of road flooding damage through the development of drainage facilities," according to the executing agency, although flooding has occurred at one location due to issues with the drainage facility (see Section 3.4.7 "Status of Operation and Maintenance" under Sustainability for details), road flooding damage in other sections has been significantly reduced. Similar views were also expressed during the interviews with SOTRACO and road users.

### 3.3.2 Impacts

#### 3.3.2.1 Intended Impacts

Among the qualitative effects identified in the Ex-Ante Evaluation Sheet, the effect of "(1) Reduction in transport costs in the project section through shortened travel time" was organized as Impacts. In addition, in this ex-post evaluation, the following effects were supplementarily identified as Impacts: "(2) Improved convenience of transportation in Ouagadougou," "(3) Revitalization of the regional economy and promotion of regional development," and "(4) Revitalization of inter-regional logistics."

Regarding "(1) Reduction in transport costs in the project section through shortened travel time," the Chamber of Commerce and Industry (Chambre de Commerce et d'Industrie du Burkina Faso), which operates the dry port, stated that although fuel prices have increased in recent years, shortened travel time may have helped reduce fuel consumption. However, as no reduction in travel time was confirmed in the quantitative indicators of Effectiveness, there is no objective data to support this statement. In the interview with SOTRACO, it was noted that while there has been no reduction in fuel consumption, the improvement of the road pavement may have facilitated smoother driving, potentially reducing bus maintenance costs.

Regarding "(2) Improved convenience of transportation in Ouagadougou," interviews with the six road users confirmed that all respondents perceived a reduction in traffic congestion, partly due to the mitigation of road flooding[9]. Some also mentioned improved access to public facilities such as hospitals and schools. On the other hand, it was pointed out that the lack of service road construction has limited access to roadside shops, and that the road has not sufficiently fulfilled its function as a local access road for surrounding residents.

Regarding "(3) Revitalization of the local economy and promotion of regional development," interviews with four business operators—a pharmacy owner, a supermarket

[9] In response to the question of whether traffic congestion has been mitigated compared to before through the road improvement, five respondents answered "significantly mitigated," and one responded "relatively mitigated," from the following options: "significantly mitigated," "relatively mitigated," "not much mitigated," "not mitigated at all," and "don't know / no opinion."

owner, a manager of a car dealership, and a representative of the Ouagadougou International Handicrafts Fair (Salon international de l'Artisanat de Ouagadougou, hereinafter referred to as "SIAO")—confirmed that the impact of the project varied greatly depending on the type of business or facility. According to the pharmacy owner, access to the store was blocked during the project period, resulting in a drastic drop in sales and the consequent dismissal of two employees. Even after the project completion, the difference in elevation of approximately one meter between the space in front of the store and the main road worsened accessibility, and sales have significantly decreased compared to before the start of the project. The supermarket owner also stated that sales had dropped to about one-fourth of the pre-project level. Although this may be due to a variety of factors such as the overall economic downturn, the worsened access from the main road to the store has also had a major impact. While acknowledging the reduction of traffic accidents and smoother traffic flow resulting from the road improvement, the owner noted that many business operators along the roadside are suffering from decreased sales. In particular, in the evening, unauthorized stalls occupy the space in front of the store, leading to a decline in customers. The owner pointed out that "if the service roads had been constructed, unauthorized stalls and illegal parking could have been suppressed, and the situation might have improved to some extent," thereby expressing the necessity of service road construction. According to the manager of the car dealership, the number of customers and sales decreased significantly during the project implementation period. Although they have gradually recovered since the project completion, some businesses have not yet returned to the pre-project level. On the other hand, in the interview with SIAO, it was indicated that smoother traffic has contributed to promoting facility use. SIAO is a complex facility that includes handicraft shops, restaurants, and an event hall, and during the national-scale event held once every two years, it attracts many visitors. The interview revealed that the road improvement under the project alleviated traffic congestion, allowing more people to visit the facility smoothly. It should be noted that the views of the four business operators interviewed reflect the situation of enterprises located along the project section and do not necessarily represent the overall trend of the region.

Regarding "(4) Revitalization of inter-regional logistics," according to the Chamber of Commerce and Industry, the improvement of the road under the project has facilitated the entry and exit of trucks at the dry port. Since the volume of logistics fluctuates due to various factors such as economic conditions and has not been officially verified through specific surveys, it is difficult to clearly demonstrate a causal relationship. However, considering that the project section functions as a connecting point with multiple corridors, it is suggested that the project has made a certain contribution to the revitalization of inter-regional logistics.

3.3.2.2 Other Positive and Negative Impacts

(1) Impacts on the Environment

The project was classified as Category B for *JICA Guidelines for Environmental and Social Considerations* (promulgated in April 2010), as it did not fall under the categories of large-scale projects in the roads and bridges sector, its undesirable impact on the environment was not considered significant, and it neither had sensitive characteristics nor was located in a sensitive area. The Environmental Impact Assessment (hereinafter referred to as "EIA") report was approved by the Ministry of Environment in 2017 as planned. According to the executing agency, monitoring during the construction and operation phases was conducted in accordance with the EIA, and no significant negative impacts were observed. Appropriate countermeasures were taken for anticipated issues such as air and water pollution. In addition, complaints from residents were reported by the relevant municipal office, which served as the contact point, to the executing agency, and measures were taken to address these complaints. As of the time of the ex-post evaluation, no negative environmental impacts were observed.

(2) Resettlement and Land Acquisition

Along the land acquired for road widening, many stalls, street vendors, and itinerant traders were operating businesses. Given the significant impact of relocation, even illegal occupants were required to be compensated for income loss, investment loss, and other losses in accordance with JICA's Guidelines. A Resettlement Action Plan (RAP) was formulated, identifying 281 Project Affected Units (hereinafter referred to as "PAUs") (equivalent to 852 affected persons). The plan stipulated compensation ranging from 135,000 to 285,000 CFA per unit for these PAUs. In addition, for those among affected persons identified as marginalized population, such as the poor or widows, additional measures were planned, including extra consultations, the assignment of a dedicated expert, priority referrals for unskilled labor opportunities, and the distribution of a one-time payment from a special budget. The RAP also included "gender equity" as a monitoring indicator, with the goal that all affected women would be satisfied with the compensation they received. However, according to the executing agency, the RAP was not implemented as planned, and the compensation initially envisaged for the PAUs was not paid. In government projects not involving other donors, it is the policy under domestic law not to provide compensation to occupants when the land is acquired for the public interest. The same approach was reportedly taken in the project with the consent of the residents.

At the time of the ex-post evaluation, interviews were conducted with six out of the 281

affected persons of PAUs eligible for compensation[10]. The interviews revealed that although multiple stakeholder meetings had been held, no specific explanations were provided thereafter regarding the amount and timing of compensation, resulting in insufficient information being made available to raise complaints. The interviews also confirmed that some residents felt they had no choice but to agree to relocation without compensation, as they had been operating on state-owned land. Some expressed dissatisfaction that their livelihoods became unstable due to the non-payment of compensation[11], and some felt that their expectations for compensation had been betrayed. Based on the above, it can be concluded that the project gave insufficient consideration to the PAUs and that there were significant issues in the resettlement process. Furthermore, while the JICA Guidelines require monitoring and consideration of funding suspension in the case of improper implementations, monitoring during the project was also considered insufficient. Although some monitoring forms were submitted, the status of prior briefings on compensation details and payment execution was not grasped. According to the executing agency, no additional measures are currently planned to address compensation, and there is no outlook for future action[12].

(3) Gender Equality, Marginalized People, Social Systems and Norms, People's Well-being, and Human Rights

Among the six road users interviewed, all three female respondents answered that the installation of sidewalks and streetlights has enabled them to walk with a greater sense of security. A mother with a child specifically commented, "I believe I used to feel it was dangerous walking with my child when the road was narrow, but now I can pass through safely." Therefore, the installation of sidewalks and streetlights can be considered to have contributed to improved safety also from the perspective of women.

On the other hand, as mentioned earlier, gender-responsive measures and the initiatives for marginalized groups facing obstacles to fair social participation, such as the poor and widows, planned under the RAP were not implemented.

(4) Other Positive and Negative Impacts

During the project implementation, three fatal accidents/incidents occurred within the

[10] After obtaining a list of the PAUs, telephone interviews were conducted with six randomly selected individuals (5 males, 1 female).

[11] The livelihood status of the six interviewees after project completion is as follows: three individuals resumed their businesses along the project road, but their income has decreased to one-sixth to one-tenth of what it was before the project. One individual relocated and continued their business in another location; another was forced to change jobs and closed the business; and the remaining individual did not resume any business after relocation and is currently unemployed.

[12] JICA has initiated discussions with the executing agency regarding the measures for addressing the RAP, including the payment of compensation.

construction area. Although the causes of death were not identified for two of these cases, it could not be denied that they were related to the project, as they included events that might have been preventable with enhanced safety measures. Consequently, the overall safety management system was reviewed, and appropriate additional measures were implemented from the perspective of preventing recurrence. Specifically, measures included increasing the number of Japanese personnel on site, further securing pedestrian and traffic routes, and installing concrete blocks to prevent intrusion, thereby enhancing restrictions on entering the construction area.

With regard to the quantitative effects of Effectiveness, evaluation was difficult due to the lack of data and the appropriateness of the indicators. On the other hand, qualitative effects were mostly achieved, as improvements in road user safety and a reduction in road flooding damage were confirmed. Regarding Impacts, while improved traffic convenience due to the reduction of flooding damage was observed, it was also confirmed that the lack of service road construction worsened access to roadside shops. Although the project was suggested to have contributed to the revitalization of inter-regional logistics, negative impacts such as reduced sales and employment in roadside businesses were also identified, indicating that the impact on economic development along the project section was seen to be limited. Furthermore, the RAP was not implemented as planned, and there were significant issues in the resettlement process, with insufficient consideration given to the project-affected persons.

Based on the above, the project has achieved its objectives only to a certain extent. Therefore, Effectiveness and Impacts of the project are moderately low.

### 3.4 Sustainability (Rating: ②)

#### 3.4.1 Policy and System

At the time of the ex-post evaluation, under the national development plan PNDES-II (2021–2025), the improvement of the quality, safety, and convenience of transport infrastructure was set as a target. In the development plan of the transitional government, PA-SD (2023), measures related to “transport infrastructure,” including road paving, were also outlined. In addition, in PS-ITCH (2018–2027), the sector policy for the transport sector, “maintenance of transport infrastructure” is set as one of the strategic objectives. It clearly states the need to ensure the sustainability of road infrastructure through maintenance and upgrading, and strengthening operational capabilities to improve road durability is also identified as an important issue. Therefore, in terms of policy and system aspects, the sustainability of the effects of the project is considered to be secured.

#### 3.4.2 Institutional / Organizational Aspect

The maintenance of national roads, regional roads, and other roads is under the jurisdiction

of the Directorate General for the Maintenance of Transport Infrastructure (Direction Générale de l'Entretien des Infrastructures de Transport, hereinafter referred to as "DGEIT")[13]. Under DGEIT, there are the Directorate for Network Supervision and In-House Works (Direction de la Surveillance du Réseau et des Travaux en Régie, hereinafter referred to as "DSRTR"), which is responsible for supervising the entire road network and implementing in-house works, and the Directorate for Road Infrastructure Maintenance (Direction de l'Entretien des Infrastructures Routières, hereinafter referred to as "DEIR"), which is responsible for managing periodic and routine maintenance works. As of April 2025, 37 engineers are assigned to DSRTR and 38 engineers to DEIR. According to DGEIT, the staffing necessary to perform the duties of the directorate has been adequately secured.

On the other hand, for the bus stops installed under the project, the entity responsible for maintenance has not been clearly identified. According to SOTRACO, in projects supported by other donors, the bus stops were formally transferred from the executing agency to SOTRACO; however, for the project section, no official documentation was provided to facilitate such transfer. As a result, when a bus stop is damaged due to an accident and the police request its removal, SOTRACO is unable to respond. It is therefore urgently necessary to clarify the responsibility for the maintenance of the bus stops through consultations between the executing agency and SOTRACO.

### 3.4.3 Technical Aspect

According to DGEIT, trained engineers are assigned to road maintenance, and periodic training sessions are conducted to strengthen their technical capacities. In addition, with the support of JICA's "Project for Capacity Development of Road Maintenance Management" (2021–2025), the preparation and revision of manuals and technical guidelines have been promoted. Furthermore, under JICA's Grant Aid "the Project for the Improvement of Equipment for Road Maintenance" (2024), the procurement of road maintenance equipment is planned, and further strengthening of maintenance capacity is expected.

Through periodic capacity-building training for engineers and support from JICA to strengthen maintenance capacity, the sustainability in technical aspects is considered to be ensured.

### 3.4.4 Financial Aspect

The financial resources for the maintenance of national standard roads are principally covered by the Special Road Fund of Burkina Faso (Fonds Spécial Routier du Burkina, hereinafter referred to as "FSR-B"), and any shortfalls are to be supplemented by the national

[13] As a result of the organizational restructuring in December 2024, the name was changed from Direction Générale de l'Entretien Routier (DGER) to DGEIT.

budget. As shown in the table below, the maintenance costs from 2021 to 2024 have been fully funded by FSR-B.

Table 3: Road Maintenance Expenditures (Unit: Million CFA)

| | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|
| ①Expenditures for Routine Maintenance (including emergency maintenance) | 20,218 | 25,593*1 | 2,729*1 | 23,068 |
| ②Expenditures for Periodic Maintenance | 36,587 | 567,162*2 | 0 | 0 |
| Total Road Maintenance Expenditures (①＋②) | 56,805 | 592,755 | 2,729 | 23,068 |

*1: Part of the expenditures initially planned for 2022 was carried over to 2023 due to delays in maintenance activities in areas affected by deteriorating security conditions. As a result, only emergency maintenance expenditures (2,729 million CFA) were executed in 2023.
*2: Periodic maintenance was carried out on National Roads No. 14 and No. 22.
Source: FSR-B

With regard to routine maintenance expenditures, including emergency maintenance, spending has remained relatively stable except in 2023. On the other hand, no expenditures were made for periodic maintenance in 2023 and 2024, and according to the executing agency, funding is unlikely to be secured for 2025 as well. Ideally, maintenance costs would be calculated based on actual needs, and corresponding budget allocations would be secured in a planned manner; however, in reality, maintenance activities are implemented within the constraints of limited budgets. In addition, given that the construction of service roads, one of the components of the project, has yet to be implemented due to financial constraints, there are certain concerns regarding the financial sustainability.

### 3.4.5 Environmental and Social Aspect

As of the time of the ex-post evaluation, no concerns regarding environmental considerations have been identified.

On the other hand, issues remain from the perspective of social considerations, as the RAP was not implemented as planned. In the project, compensation for the PAUs has not been budgeted and therefore remains unpaid. Furthermore, it was confirmed that the relocation procedures lacked transparency and that resettlement was carried out without sufficient consensus-building. While the implementation of the project improved transportation convenience and benefited many people, the fact that compensation has yet to be provided to the PAUs who were severely affected in terms of their livelihoods and economic activities has left a lingering sense of distrust toward the project.

### 3.4.6 Preventative Measures to Risks

At the time of the ex-post evaluation, no risks related to operation and maintenance were

identified.

3.4.7 Status of Operation and Maintenance

While no major issues were identified regarding the operation and maintenance of the main road itself, several challenges were observed concerning auxiliary facilities and equipment, as detailed below.

[Drainage Facilities]

At the time of the ex-post evaluation, one location was identified where flooding occurs annually. This is likely due to sediment accumulation carried from upstream and insufficient capacity of the downstream drainage channel. As an emergency measure, dredging of the accumulated sediment is essential. In the medium to long term, fundamental countermeasures such as expanding the capacity of cross drains and channels are required.

Photo 4: Sediment Accumulation Observed at the Outlet of the Cross Drain
(Source: Taken by the evaluator)

[Other Auxiliary Facilities]

A damaged guardrail caused by an accident was identified. Regarding pedestrian bridges, unsanitary conditions and broken surface tiles were observed. In addition, several bus stops were found to be in poor condition, including one with damaged posts, another with its roof completely removed, and others with broken glass on the side panels.

Photo 5: Damaged Guardrail Photo 6: Pedestrian Bridge with Broken Tiles Photo 7: Damaged Bus Stop

Source: Taken by the evaluator (Photos 5, 6, and 7)

Based on the above, while some issues have been observed in the institutional and organizational aspects and in the current status of operation and maintenance, there is a high prospect for improvement or resolution. On the other hand, issues remain in financial as well as environmental and social aspects, and they are not expected to be resolved.

Therefore, Sustainability of the project effects is moderately low.

## 4. Conclusion, Lessons Learned and Recommendations

### 4.1 Conclusion

The project aimed to improve the urban transport and inter-regional logistics network by fully rehabilitating the southeastern section of the bypass road and constructing new motorcycle lanes and other facilities in the capital city Ouagadougou. The objective of the project was consistent with Burkina Faso's development plans, development needs, and Japan's ODA policy, and the appropriateness of the project plan was confirmed. Although external coherence was not identified, internal coherence was recognized as synergy effects with other JICA projects were observed. Therefore, its Relevance and Coherence are high. Most of the outputs on the Japanese side were produced as planned; however, the construction of service roads, which was the responsibility of Burkina Faso, has not been completed. Although the project cost was within the plan, the project period slightly exceeded the plan. Therefore, Efficiency of the project is moderately low. Regarding Effectiveness, quantitative evaluation was difficult due to the lack of data. On the other hand, qualitative effects such as improved safety for road users and reduced flood damage were confirmed, and the project was assessed as mostly achieved. In terms of Impacts, the improvement in traffic convenience due to reduced flooding was observed, while diminished access to roadside shops due to the lack of service road construction was also identified. In addition, while the project is considered to have contributed to revitalizing inter-regional logistics, its spillover effects on economic development along the project section were seen to be limited. Furthermore, the RAP was not implemented as planned, and consideration for project-affected residents was not sufficient. Therefore, Effectiveness and Impacts of the project are moderately low. As for Sustainability, some issues were observed in institutional and organizational aspects, financial aspects, environmental and social considerations, and the current status of operation and maintenance. Therefore, Sustainability of the project effects is moderately low.

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

### 4.2 Recommendations

#### 4.2.1 Recommendations to the Executing Agency

(1) Operation and Maintenance of Drainage Facilities

In one location within the project section, flood damage has been reported, which is attributed to the accumulation of sediment from upstream areas and insufficient drainage capacity of the channels. As an urgent measure, it is necessary to conduct dredging before the rainy season to restore and enhance the drainage function. In the medium to long term, fundamental improvements such as widening of cross drains and increasing the discharge capacity of downstream channels should be considered. To realize these improvements, it is

essential to formulate a development plan and secure the necessary budget in coordination with the municipality responsible for the downstream channels.

(2) Repair of Guardrails and Pedestrian Bridges

It is necessary to repair damaged guardrails and pedestrian bridges to ensure the safety of users. In addition, coordination with the municipality is required for the regular inspection and cleaning of auxiliary facilities.

(3) Handover Procedures for the Maintenance of Bus Stops

The responsibility for the maintenance of bus stops remains unclear. According to SOTRACO, the absence of an official transfer letter has made it difficult to carry out maintenance and related activities. Therefore, the executing agency is required to conduct the handover procedures related to the maintenance of bus stops to SOTRACO in coordination with the municipality.

(4) Continued Efforts toward the Construction of Service Roads

The construction of service roads, one of the components of the project, has yet to be implemented due to a lack of funding. As the lack of service road construction has reduced traffic convenience in the areas surrounding the project section, the executing agency is required to make continued efforts to secure a budget for the construction of the service roads through consultations with the Ministry of Finance and FSR-B.

4.2.2 Recommendations to JICA

Follow-up on the Executing Agency's Efforts to Construct Service Roads

In this ex-post evaluation, it was recommended that the executing agency consult with the Ministry of Finance and FSR-B to secure the necessary budget for the construction of service roads. Although the feasibility of the service roads has not been ensured, in light of their importance as part of the project, JICA is expected to follow up on the progress of the executing agency's efforts to realize the service road construction.

4.3 Lessons Learned

(1) Importance of Strengthening Monitoring by the Implementing Consultant and Grievance Mechanisms under the Resettlement Action Plan (RAP)

In the project, the RAP was not implemented as planned, and compensation payments were not made. According to the executing agency, compensation was not paid based on agreement with the affected residents. However, interviews with affected residents revealed dissatisfaction with the procedures, as residents had no option to refuse relocation. Additionally, although basic

project information was posted on the notice board at the municipal office and multiple stakeholder meetings were held, no explanations were subsequently provided to residents regarding the amount and timing of compensation. Furthermore, while the municipal office was responsible for receiving complaints, the issue was confirmed that the mechanism to appropriately relay complaints to project stakeholders did not function effectively.

Even when the executing agency is responsible for implementation of the RAP, inadequate monitoring presents the risk that the RAP will not be executed as planned. Therefore, it was necessary for JICA and implementing consultant to carefully supervise the progress of resident relocation and carry out appropriate follow-up. Furthermore, to ensure residents' complaints are reliably communicated to project stakeholders, the grievance mechanisms should have been strengthened by documenting the complaint handling process and conducting regular follow-ups.

(2) Ensuring the Feasibility of Implementing Important Components Designated as Obligations of the Partner Country

The construction of service roads, one of the components of the project, was designated as an obligation of the partner country but has not yet been implemented due to insufficient funds. Preliminary works required at the planned site for the service road, such as relocating occupying stalls and the removal of buried electrical and water infrastructure, did not progress during project implementation. Consequently, by the time of the ex-post evaluation, there was still no prospect for the construction of the service roads, resulting in reduced traffic convenience in the surrounding areas of the project section, limited access to roadside shops, and adverse impacts on the function as residential access roads.

When designating important components as obligations of the partner country, it was necessary to confirm funding arrangements in advance, as well as concrete implementation plans and progress monitoring mechanisms. In particular, in countries without stable financial conditions, the outlook for securing funds becomes even more crucial. Furthermore, if there was no realistic prospect for securing the necessary budget or developing a detailed implementation plan, such components should have been incorporated into the components of Japanese side or the overall project plan itself should have been revised accordingly, rather than assigned to the partner country.

(3) Monitoring of Quantitative Indicator Data

Regarding the quantitative indicators set at the time of the ex-ante evaluation, the Minutes of Discussion stipulated that the executing agency would monitor these indicators until the target year. However, none of the quantitative indicator data were monitored, making it difficult to verify the project effects at the time of the ex-post evaluation. Factors behind the lack of data collection included, firstly, that conducting traffic surveys on completed roads was not part of the executing

agency's routine operations. In addition, responsibility for traffic surveys in the project section had been transferred to another ministry due to organizational restructuring, which further complicated data collection at the time of the ex-post evaluation.

Therefore, for similar projects in the future, it is important to set indicators that are either regularly collected through the executing agency's routine operations, or can be collected within the scope of the agency's human and financial resources. Furthermore, considering the risk of changes in responsibility for monitoring indicators, it is desirable for JICA to confirm, in the event of organizational restructuring, whether there have been changes to the agency responsible for monitoring. Additionally, it is advisable to clearly specify in project agreement documents at the project planning stage that, in the event of such a change in the responsible agency, the executing agency shall promptly report it to JICA and initiate discussions regarding the new responsible agency.

## 5. Non-Score Criteria

5.1 Performance

5.1.1 Objective Perspective

None.

5.2 Additionality

None.

(End)