

Ex-Post Project Evaluation 2017:Package IV-3 (Cameroon, Tanzania, Rwanda)

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Republic of Cameroon

FY2017 Ex-Post Evaluation of Japanese Grant Aid Project

“The 5th Project for Construction of Primary Schools”

External Evaluator: Tomoyuki Sho, IC Net Limited

0. Summary

The objective of this project is to enhance the learning environment for the students in the North West Region by rebuilding temporary and dilapidated classrooms and providing school furniture, thereby contributing to the achievement of the Cameroonian government’s policy goals of reducing disparities across regions and improving the quality of primary education.

Since the project was consistent with Cameroon’s national development policy, education sector strategy, and development needs at the times of planning and ex-post evaluation, as well as Japan’s aid policy at the time of planning, its relevance is high. The outputs of the project, such as the constructions of classrooms and toilets and the provisions of desks and chairs, were produced as planned. Yet the project period exceeded the plan by one month, whereas the project cost was within budget. Therefore, the efficiency is fair. After completion of the project, the number of usable classrooms and that of students who are able to learn in the fine environment significantly increased. Furthermore, the improved educational environment boosted the students’ academic performance, and the constructions of sanitary toilet facilities also have had positive impacts on the students’ health and hygienic conditions. Thus, the effectiveness and impact of the project are high. As for the operation and maintenance, the “Anglophone Crisis¹” has negatively affected the number of enrolled students. Consequently, the existing organizational structure, which relies on the Parent-Teacher Association (hereinafter referred to as “PTA”) and PTA levy for the day-to-day maintenance and repairs for the school, has not been functioning well. In addition, some minor problems were observed in the institutional and financial aspects of the executing agency. Therefore, the sustainability of the project is fair.

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

1. Project Description

¹ In the English-speaking regions including the North West Region, which was the target area of this project, the conflict between the Anglophone (English-speaking) separatists and the government/security forces has gradually intensified since around October 2016, and escalated into the situations where armed clashes, abductions, etc. are causing casualties.



Project Site



Two-story Classroom Buildings Constructed by the Project

1.1. Background

The Government of Cameroon laid out a primary goal of “spreading basic education to all the citizens” in its *Poverty Reduction Strategy Paper* (hereinafter referred to as “PRSP”) (formulated in 2003) and the *Growth and Employment Strategy Document* (Document de Stratégie pour la Croissance et l’Emploi, hereinafter referred to as “DSCE”) (formulated in 2009) and has been aiming to achieve a primary education completion rate of 100% by 2020. Likewise, the *Education Sector Strategic Plan* (hereinafter referred to as “ESSP”) (formulated in 2006) listed “reducing disparities and achieving 100% enrollment and completion rates,” as well as “improving the efficiency and quality of educational services,” as priority issues in primary education. And its Action Plan set targets in terms of the constructions of classrooms and toilets, the provision of desks and chairs, and the renovation of classrooms.

After primary education in Cameroon became free of charge in 2000, however, the construction of facilities could not catch up with a dramatic increase in the number of students. As of 2008/2009, the actual number of classrooms built remained 47,926, as opposed to the government’s target of 67,620 classrooms in public primary schools (target year: 2015), running short of about 20,000 classrooms. Moreover, because 16,381 classrooms, or 34% of the existing classrooms at public elementary schools, were semi-permanent or temporary buildings, there was high demand for rebuilding them as soon as possible. Particularly, in the North West Region, which was the target area of this project, the percentage of the semi-permanent or temporary classrooms among the existing classrooms was about 54% , i.e., more than 20 percentage points higher than the national average of 31%. And the gross enrollment rate was 92%, or 16 percentage points below the national average of 108%².

Since 1997, Japan had continued to support the construction of 1,331 classrooms at 101 sites in 22 cities in nine out of the 10 regions through the 10 phases of the four projects for the construction of primary schools.

² Data on the percentage of semi-permanent or temporary classrooms among the existing classrooms and on the gross enrollment rate are for 2009/2010 (Source: MINEDUB Statistics Section, *Statistical Yearbook 2009/10*).

However, no project for the construction of primary schools had yet been carried out in the North West Region. Under these circumstances, the Government of Cameroon requested the Government of Japan for a grant aid project in 2008 that enables the construction of facilities and the procurement of educational furniture in the North West Region.

1. 2. Project Outline

The objective of this project is to enhance the learning environment for the students in the North West Region by rebuilding temporary and dilapidated classrooms and providing school furniture, thereby contributing to the achievement of the Cameroonian government's policy goals of reducing disparities across regions and improving the quality of primary education.

E/N Grant Limit / Actual Grant Amount	966 million yen / 966 million yen
Exchange of Notes Date / Grant Agreement Date	July 2011 / July 2011
Executing Agency	Ministry of Basic Education, Division of Planning, Projects and Cooperation
Project Completion	May 2014
Main Contractor	—
Main Consultant	Consortium of Matsuda Consultants International Co., Ltd. and Atelier d'Architecture et d'Urbanisme Co., Ltd.
Procurement Agency	Japan International Cooperation System
Basic Design	October 2010–July 2011
Related Projects	<p>Grant Aid Projects:</p> <ul style="list-style-type: none"> • Project for Construction of Primary Schools (Phase I) (1997) • Project for Construction of Primary Schools (Phase II) (1998) • Project for Construction of Primary Schools (Phase III) (1999) • 2nd Project for Construction of Primary Schools (Phase I) (2001) • 2nd Project for Construction of Primary Schools (Phase II) (2002) • 2nd Project for Construction of Primary Schools (Phase III) (2003) • 3rd Project for Construction of Primary Schools (Phase I) (2005) • 3rd Project for Construction of Primary Schools (Phase II) (2006) • 3rd Project for Construction of Primary Schools (Phase III) (2007) • 4th Project for Construction of Primary School (2009) <p>Grant Assistance for Grass Roots Projects:</p> <ul style="list-style-type: none"> • Project for Construction and Equipment of Makari Primary School (2002) • Project for Renovation of Efrain Yasaman Primary School (2004)

	<ul style="list-style-type: none"> • Project for Expansion of Joseph Stintzi Secondary School (2005) • Project for Construction and Equipment of Six Classrooms in Tokombéré (2006) • Project for Construction and Equipment of Four Classrooms at Keraua Public School (2008) • Project for Construction and Equipment of the Center for the Hearing-Impaired in Garoua (2008) • Project for Construction of Five Classrooms in Mbandjock (2009) <p>Other International Organizations and Aid Organizations, etc.:</p> <ul style="list-style-type: none"> • World Bank “Education Reform Support Project” (2005–2012) • Agence Francaise de Developpement (AFD) “Debt Reduction-Development Contract” (including the plan of constructing primary schools in the education development priority area) (2007–2013) • African Development Bank (AfDB) “Education Plan II” (including the construction and rehabilitation of primary school buildings) (2002–2006) • Islamic Development Bank (IsDB) “Construction and Equipment of 48 Primary Schools” (1997–2006) • IsDB “Pilot Project for Improving the Quality of Basic Education” (2009–2012) • United Nations Children's Fund (UNICEF) “Basic Education Plan” (2008–2012)
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2. Outline of the Evaluation Study

2.1. External Evaluator

Tomoyuki Sho, IC Net Limited

2.2. Duration of Evaluation Study

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

Duration of the Study: November 2017 – December 2018

Duration of the Field Study: February 4 – 28, 2018; June 18 – 26, 2018

2.3. Constraints during the Evaluation Study

In the English-speaking regions, which include the project’s target area of the North West Region, and the South West Region, the conflict between Anglophone (English-speaking) separatists and the government/security forces became increasingly intensified since around October 2016 after the protest activities had been initiated by teachers and lawyers against the mainstreaming of the French system. As the security situation deteriorated (“Anglophone Crisis”), a curfew became imposed at the time of the first field study. As a consequence, the evaluator conducted site visits only at eight sites in the three school districts of

Bamenda, Bali, and Tuba out of the 17 sites in the seven school districts³. Site visit activities at other eight sites in the three school districts of Santa, Ndrop, and Bafut were carried out by local consultants under the direction of the evaluator. And for one site in the remaining school district of Fundong, a desk review was conducted. In addition, at the time of the second field study, the security situation had further deteriorated, and thus no site visits in the North West Region were made. Instead, follow-up interviews with education officials from the North West Region and additional information gathering, etc. were conducted primarily through a meeting with the delegate of the Regional Delegation of Basic Education (Délégation Régional de l'Éducation de Base, hereinafter referred to as "DREB"), which took place in Bafoussam in the West Region. Subsequently, the information collected about each site relies heavily on questionnaire surveys sent to each school's head teacher⁴.

Furthermore, as the Anglophone Crisis became widespread, it has become difficult for students to go to school safely. Subsequently, the numbers of students at the target schools of this project have been decreasing and some of the schools have been forced to be temporarily closed. As a result, the extent to which the facilities constructed by this project have been utilized, and such, have changed significantly before and after the outbreak of the crisis. And even at the time of ex-post evaluation, the schools are in a state of flux. Because it is not appropriate to evaluate and make a judgement on the development outcomes of this project solely on the basis of the circumstances surrounding the project sites at the time of ex-post evaluation, this evaluation has made efforts to collect and analyze information/data separately for the pre-crisis and post-crisis periods to a maximum extent possible when assessing the project outcomes. Yet much of the data at the site/school level had been based on self-reported data submitted by each school, and thus there has been a concern that the information may vary significantly in their reliability. Therefore, those provided data were mainly used for the purpose of cross-checking their consistencies with the respondents' answers to the interviews and questionnaire surveys. Citing specific figures is kept to a minimum.

3. Results of the Evaluation (Overall Rating: B⁵)

3. 1. Relevance (Rating: ③⁶)

3. 1. 1. Consistency with the Development Plan of Cameroon

At the time of planning, PRSP and DSCE –Cameroon's national development policy documents– listed guaranteeing and universalizing primary education to all students and citizens as a priority goal in the field of education. In addition, the ESSP (target years: 2006–2013) –a strategic document of the education sector–, and its action plan stated that reducing disparities and achieving 100% enrollment and completion rates, as well as improving the efficiency and quality of educational services, as priority objectives in primary education, and developed specific plans on the construction of classrooms and the procurement of desks and chairs. At

³ During the site visits, the evaluator had stayed in Bafoussam in the West Region adjacent to the North West Region. The evaluator travelled by road about 78 kilometers to Bamenda, and then conducted site visits from Bamenda while making there as a base.

⁴ All the target head teachers, however, had responded to the questionnaire surveys sent to them.

⁵ A: Highly satisfactory, B: Satisfactory, C: Partially satisfactory, D: Unsatisfactory

⁶ ③: High, ②: Fair, ①: Low

the time of ex-post evaluation, the strategic document (target years: 2013–2020), which was updated in 2013, and its action plan have succeeded to the same policy objectives, although their target figures have been downwardly revised. In light of the above, this project is highly consistent with the development policy and education sector strategy of Cameroon.

3. 1. 2. Consistency with the Development Needs of Cameroon

In the North West Region –the target area of this project–, the percentage of permanent classrooms in public elementary schools was 46% at the time of planning (2009/10), which was lower than the national average of 69%. In addition, because the English-speaking North West Region has not adopted the double-shift system unlike the French-speaking regions, it has been more likely to run short of the number of classrooms relative to the number of students. Yet, among the 10 regions of Cameroon, no project for the construction of primary schools had yet been implemented in the North West Region through Japan’s grant aid assistance. In the target schools of the project, only 17 classrooms out of the existing 237 classrooms were judged usable continuously at the time of planning. Thus, urgent improvement was needed.

At the time of ex-post evaluation, as the Anglophone Crisis has been intensifying, the separatists who had been appealing the boycott of school education have even resorted to arson of school. And the environment where children can learn safely in school has been under threat. Under these circumstances, the schools constructed by this project (which are locally known as the “Japanese schools”) have become recognized by many parents as the safest schools in the area because of the school yard fences, gates (both built by the Cameroonian side), and robust school buildings⁷. Yet, as the security situation further deteriorates and the likelihood that the crisis continues for long has increased, an increasing number of households have started making their children stay at home, transferring them temporarily to schools in French-speaking regions, or even moving out permanently with all family members. As a consequence, even among the target schools of the project, some have been forced to be occasionally closed as the number of attending students drops. Still, the underlying problem of the shortage of robust classrooms has not changed. Therefore, once the security situation recovers and children come back to school, it is likely that strong needs for the construction of classrooms (especially robust and safe Japanese schools) are going to resurface⁸. In light of the above, this project is consistent with the development needs of Cameroon.

3. 1. 3. Consistency with Japan’s ODA Policy

At the time of planning, the *Official Development Assistance Charter* (formulated in 2003) stated that poverty reduction is a key development goal and promised to provide “assistance to such sectors as education, health care and welfare, water and sanitation and agriculture and will support human and social development

⁷ Considering a risk that the school would be closed due to the deterioration of a security situation after the payment of high tuition fees in a private school, an increasing number of parents had had their children transferred from private schools to public “Japanese schools” in the early stages of the crisis.

⁸ However, if the crisis continues for long and more and more households are to move to French-speaking regions, it is concerned that it may take a long period of time to return to the normal situation before the crisis.

in the developing countries” to achieve that goal. In addition, the *Yokohama Action Plan* of the 4th Tokyo International Conference on African Development (TICAD) (formulated in 2008) declared a focus on the improvement of access to basic education and its quality as a measure to be taken in the subsequent five years and promised to “support construction and rehabilitation of school buildings and related infrastructure.” Moreover, *ODA Country Data Book 2008* clearly stated that top priority in Cameroon is given to primary education. Thus, consistency between the project and Japan’s ODA policy is high.

In light of the above, this project is highly relevant to Cameroon’s development policy and development needs, as well as Japan’s ODA policy. Therefore, its relevance is high.

3. 2. Efficiency (Rating:②)

3. 2. 1. Project Outputs

Table 1 shows the actual outputs of this project. Apart from 11 design changes, the outputs have been constructed and procured virtually as planned. Owing to the occurrence of budget surplus, two two-story classroom buildings and two toilet facilities (corresponding to Lot 13–Lot 16 in the Summary of Facilities Constructed of Table 1) and educational furniture were additionally procured in this project. Thus, the output of the project has become higher than originally planned. The remaining design changes other than the additional procurements were relatively minor and have not affected the output and project outcomes substantially. And those changes were done appropriately as adjustments to the situations on the ground or compliances with the local regulations.

Table 1. Actual Construction of Facilities and Procurement of Equipment

Number of Project Sites: 17 sites
Number of Facilities: 15 two-story classroom buildings, 34 one-story classroom buildings, 24 toilet facilities
Number of Classrooms: 202 classrooms (of which, three classrooms in two schools were unusable at the time of ex-post evaluation due to arsons)

Summary of Facilities Constructed			
Lot	No.	Site Name (School Name)	Type of Facility
1	BM-1	GS/GBS* Ngomgham Gr.I, IIA, IIB	2 two-story classroom buildings, 2 toilet facilities
2	BM-2	GS Bamenda GMI Gr.I, IIA, IIB	3 two-story classroom buildings, 1 toilet facility
3	BM-3	GS Mulang Gr.I, II	3 two-story classroom buildings, 2 toilet facilities
4	BM-4	GPS Atuakom Gr.I, II	2 two-story classroom buildings, 1 toilet facility
	BM-5	GS Alamatson	2 one-story classroom buildings, 1 toilet facility
5	BL-1	GS Bali Town Gr.I, II	3 two-story classroom buildings, 2 toilet facilities
	BL-2	GS/GBPS Bali Town	
6	ND-1	GS Bambalang Gr.I, II	5 one-story classroom buildings, 2 toilet facilities
7	ND-2	GS Mbamang Gr.I, II	5 one-story classroom buildings, 2 toilet facilities
8	ST-1	GS Menka	3 one-story classroom buildings, 1 toilet facility
	ST-4	GS Buchi	2 one-story classroom buildings, 1 toilet facility
9	ST-2	GS Santa/GBPS Santa	3 one-story classroom buildings, 1 toilet facility
	ST-3	GS Banjong	2 one-story classroom buildings, 1 toilet facility
10	TB-1	GBS Tubah	2 one-story classroom buildings, 1 toilet facility
	TB-2	GS Mallam	2 one-story classroom buildings, 1 toilet facility

11	BF-1	GS Bujong	2 one-story classroom buildings, 1 toilet facility
	BF-2	GS Agyati	2 one-story classroom buildings, 1 toilet facility
12	FD-1	GS Fundong	4 one-story classroom buildings, 1 toilet facility
13	BM-1	GS/GBS Ngomgham Gr.I, IIA, IIB	1 two-story classroom building
14	BL-1	GS Bali Town Gr.I, II	1 two-story classroom building
	BL-2	GS/GBPS Bali Town	
15	BM-1	GS/GBS Ngomgham Gr.I, IIA, IIB	1 toilet facility
16	BL-1	GS Bali Town Gr.I, II	1 toilet facility
	BL-2	GS/GBPS Bali Town	

Note: GBPS denotes Government Bilingual Primary School, GPS denotes Government Practicing School, and GS denotes Government Primary School.

Equipment (Educational Furniture)

Desk-chairs for students (30 sets per classroom), Desks/chairs for teachers (1 set per classroom), Desks/chairs for head teachers, Chairs for guests (3 chairs per school), Meeting tables (1 table per school), Cleaners' closets (1 closet per classroom), Key boxes (1 box per school)

Sources: Materials provided by JICA, site visits

Overall, the officials of the Ministry of Basic Education (Ministère de l'Education de Base, hereinafter referred to as "MINEDUB"), as well as head teachers, teachers, and students, all speak very highly of the qualities of the classroom buildings and toilet facilities constructed and the educational furniture procured by the project. However, there were some cracks on the classroom walls being finished with mortar at GS Mulang and water leakages from the roofs at GS Bamenda GMI. Those occurred after the defect liability period expired, and the Cameroon side made repairs on its own. Moreover, the locks for the cabinets installed in the head teachers' rooms and meeting rooms, as well as the door locks for the head teachers' rooms, meeting rooms, and classrooms, could not stand continuous use and got broken, and have been replaced at a large majority of the schools. Because those locks can be easily damaged by applying force, they have become targets for thieves, and many schools have suffered from thefts and damages to property. A number of the schools have even installed higher quality locks and protective iron door fences outside the doors as a countermeasure. It seems that the locks that are robust for continued use should have been installed from the beginning⁹. Yet, as mentioned, overall satisfaction with the classroom buildings and educational furniture is very high. In light of the above, the outputs have been produced as planned.

3. 2. 2. Project Inputs

3. 2. 2. 1. Project Cost

Because the actual project cost borne by the Cameroon side could not be identified, the project cost has been evaluated only using the cost borne by the Japanese side. And the actual cost turned out to be 98% of the plan and thus within budget (see Table 2). It has also been confirmed that the inputs borne by the Cameroon side, such as the construction of school yard fences and planting on slopes, had been carried out at all the 17 sites and that drawing water into a place had been completed at all the 13 sites where it was technically possible.

⁹ Although it is not a quality problem, the design of the windows made of perforated blocks was not very popular because rain, wind, and dust often blow in.

Table 2. Planned and Actual Project Costs

(Unit: million yen)			
	Plan	Actual	As Percentage of the Plan (%)
Total Project Cost	1,163	--	--
Cost borne by Japanese side	965	945	97.9
Cost borne by Cameroonian side	198	--	--

Source: Materials provided by JICA

3. 2. 2. 2. Project Period

As shown in Table 3, when taking into account the increased output due to the additional procurement, the actual project period exceeded the planned period by one month and becomes 103% of the plan. Although the project period had been extended for two months (until April 2014) as a result of the additional procurement, the delivery of furniture had been delayed by one month from the extended period at one site (GS/GBS Ngomgham) where the additional procurement for the provision of furniture took place. In light of the above, the project period exceeded the plan¹⁰.

Table 3. Planned and Actual Project Periods

Plan		Actual		As Percentage of the Plan
<u>Original Plan</u> July 2011 (start of G/A) – February 2014 (completion)	32 months	July 2011 (start of G/A) – May 2014 (completion)	35 months	109%
<u>After the Extension of the Project Period due to the Additional Procurement</u> July 2011 (start of G/A) – April 2014 (completion)	34 months			103%

Source: Materials provided by JICA

In sum, although the project cost was within the plan, the project period exceeded the plan by one month. Therefore, the efficiency of this project is fair.

3. 3. Effectiveness and Impacts¹¹ (Rating:③)

3. 3. 1. Effectiveness

3. 3. 1. 1. Quantitative Effects (Operation and Effect Indicators)

At the time of planning, the “Number of classrooms that can be used continuously at the target schools” and the “Number of students who can learn in a safe environment at the target schools” were selected as quantitative indicators for the effectiveness of this project. And developing 190 robust classrooms with proper

¹⁰ The Cameroon side highly appreciates smooth technical transfer made under this grant aid assistance project for community development because the Japanese construction consultant well understood the Cameroonian customs and culture.

¹¹ Sub-rating for Effectiveness is to be made with consideration of Impact.

learning environments at the 17 target sites (29 schools) and improving the school circumstances for 11,400 students had been chosen as the targets of the indicators (see Table 4).

Table 4. Quantitative Indicators for Effectiveness

Indicator	Baseline	Target	Actual	Actual
	2011	2017		2018
	At the time of planning	3 years after project completion	Before arsons due to the crisis	At the time of ex-post evaluation
Number of classrooms that can be used continuously at the target schools	17	207	219	216
Number of students who can learn in a safe environment at the target schools * (persons)	1,020	12,420	13,140	12,960

Sources: The actual numbers are based on the information collected by site visits and the data provided by the target schools.

*Note: It is calculated by multiplying the number of classrooms that can be used continuously by 60, which is an average classroom size in Cameroon.

With regard to the indicator “Number of classrooms that can be used continuously at target schools,” 12 classrooms had been additionally procured on top of the initially planned 190 classrooms. Consequently, until classrooms were damaged by arsons at GPS Atouakom in the Bamenda school district and at GS Fundong in the Fundong school district in May 2017 and in August 2017, respectively¹², the actual number of 219 classrooms compared to the target of 207 classrooms (106% of the plan) had been achieved. At the time of ex-post evaluation, however, two classrooms at GPS Atouakom and one classroom at GS Fundong are unusable¹³. Thus, the actual number becomes 216 classrooms (104% of the plan) (see Photo 1).

With regard to the usage of the classrooms, it has been confirmed by checking the before crisis data that the classrooms constructed by the project had been well utilized except two classrooms at GBPS Bali Town. The primary schools constructed by this project, which have been known as “Japanese schools,” have received high reputation for their well-maintained educational environment. The number of the students who want to enroll in the schools, including those who want to transfer to, tends to increase after completion of the project, particularly in urban areas. Yet, in GS/GBPS Bali Town, two classrooms have been left unused since right after project completion (see Photo 2). Although six classrooms had been constructed in GS/GBPS Bali Town due to the additional procurement, the number of students has not increased even after project completion, due to the suburban/rural location with limited access. Although securing a construction site must have been an important factor to consider, the resolution of classroom shortages and the reduction of classroom sizes would have been accomplished more effectively if the additional procurement had been done at a more conveniently-located site near a center of the school district.

In the Bamenda school district, the numbers of classrooms to be constructed were made smaller than the

¹² The separatists have been calling boycotts of school education, and it is believed that the two Japanese schools had been set on fire as a means of threatening a vast majority of the parents who have refused to obey the appeal, because the Japanese schools symbolize the environment where students can learn most safely.

¹³ The classrooms damaged by arson at GPS Atouakom have been being rebuilt by the government and has been almost completed at the time of ex-post evaluation (with a cost of FCFA 21 million). A similar reconstruction has been planned at GS Fundong with secured government funding. Due to growing security concerns, however, it is not certain when the construction can be started.

numbers of classroom shortage at three sites due to restrictions on the areas and shapes of the sites. And to compensate for the shortfall, the number of classrooms to be constructed was made larger than the number of classroom shortage by two classrooms at GS Mulang as there were less restrictions on a construction site. One of its classrooms, however, has been turned into a library as the number of students turned out to be lower than expected, and thus has not been used as originally planned. From the above, it was confirmed that 199 classrooms out of the 202 continuously usable classrooms constructed by this project (99%) had been being used as originally intended before the crisis broke out. If taking into account the classrooms that have been unusable due to arsons, that number would become 196 classrooms (97%).

In Ndop, however, nine classrooms that had been constructed by Plan International (hereinafter referred to as “PI”) have been unused and left abandoned since this project was completed. At the time of planning, the construction of the robust classroom buildings by PI on the same site had already been decided. Nevertheless, the information had not been widely shared in advance among the stakeholders¹⁴.



Photo 1. A Classroom Damaged by Arson



Photo 2. A Classroom Left Unused

The target number of the indicator “Number of students who can learn in a safe environment at the target schools” has been calculated simply by multiplying the target number of classrooms by the classroom size of the time of planning in Cameroon; that is, 60 students. According to MINEDUB officials, the standard classroom size in Cameroon has remained to be considered as 60 students at the time of ex-post evaluation. Thus, the actual number becomes 12,960 persons compared to the target of 12,420 persons.

At some of the target schools in the school districts of Bamenda and Santa, however, the numbers of the students who want to enroll in had rose after project completion. Subsequently, the number of students per classroom went beyond 100. It had become normal before the crisis that three or four students occupy one bench that is designed for two students. On the other hand, at some of the target schools in suburban/rural areas in the school districts of Bali, Santa, Ndop, Bafut, and Fundong, the numbers of students per classroom ranged from about 30 to 40, and the actual number of students per classroom differed significantly among

¹⁴ Under ordinary circumstances, the nine classrooms built by PI should be counted as the “number of classrooms that can be used continuously at the target schools.” However, those classrooms have been left unused since the completion of this project and are not in a good condition at the time of ex-post evaluation. Therefore, they are not included in the actual number.

schools.

In light of the above, it is recognized that the number of classrooms that can be used continuously at target schools has increased substantially by this project, and the number of students who can learn in a safe environment at the target schools has also increased.

3.3.1.2. Qualitative Effects (Other Effects)

At the time of planning, the followings were listed as qualitative indicators for the effectiveness of this project.

- The construction of the head teacher's offices and meeting rooms equipped with the storage function of teaching materials will enable the adequate storage and use of teaching and administrative documents and thus improve school management capacity.
- The construction of sanitary and gender-separated toilets for boys and girls will contribute to maintaining the health and hygienic conditions of the students and will help improve access to school for girls by developing girl-friendly toilets.
- The construction of school infrastructure with an adequate educational environment is expected to enable more effective classroom teaching.

3.3.1.2.1. Improving School Management Capacity and Making Classroom Teaching More Effective

With regard to the indicators “Improving school management capacity” and “Making classroom teaching more effective,” it was confirmed through face-to-face interviews and questionnaire surveys that securing the safe storage spaces of teaching materials and administrative documents has improved the management capacities of teachers and contributed to more effective classroom teaching. During the site visits, it was observed that carefully-crafted education posters were being posted on classroom walls¹⁵, which appears to indicate that the teachers have been making sufficient preparations for their classes. From the face-to-face interviews with teachers and group discussions with students, it was also felt that the creation of the bright environment where both teachers and students can more easily concentrate on the class has universally raised the motivation of both of them, not limiting itself to just providing more physical space for storing teaching and other materials. As a result, the students’ performance has improved as demonstrated by the fact that the success rate of the First School Learning Certificate/Certificat d’Études Primaires (hereinafter referred to as

¹⁵ Face-to-face (qualitative) interview surveys with teachers were conducted at 22 schools in 16 sites of the six school districts except Fundong, using semi-structured questionnaires. The target teachers to be interviewed were selected by the school. The total number of the respondents was 57, of which 42 were females and 15 were males, and by age group, one person was in the 20’s, 17 persons in their 30’s, 30 persons in their 40’s, and 9 persons in their 50’s. (However, the interviews conducted at three schools out of the 22 schools had missing data on the characteristics of the respondents, and thus were not included.) Group discussions with students were carried out at 13 schools in 11 sites of the five school districts except Fundong and Bafut, by a group of 8 to 10 students. The target students to participate were selected by the school with equal numbers of male and female students from the upper primary graders. The total number of the participants was 108, of which 54 were boys and 54 were girls, and by grade, one student was in grade 3, two students in grade 4, 12 students in grade 5, and 93 students in grade 6.

"FSLC/CEP") examination had gone up in many schools. (For the details on the FSLC/CEP success rate, see the "Impacts" section.)



Photo 3. A Class in Session



Photo 4. A Classroom

3.3.1.2.2. Maintaining Students' Health and Hygiene Conditions and Improving Access to Education for Girls

With regard to the indicator "Maintaining students' health and hygienic conditions and improving access to education for girls," the health and hygienic conditions of the students have enhanced as a result of the construction of toilets with a sanitary environment. According to the face-to-face interviews and questionnaire surveys, the number of infections reported to school by students has decreased in many schools.

On the other hand, the "gender-separated toilets for boys and girls" have not been enforced in many schools, contrary to what the project intended. Or, in some schools, although the toilets have still been intended to be gender-separated, the rules have not been followed by the students. This is because the number of toilets is limited compared to the number of students, and thus many students tend to use whatever toilet that is available at the moment. It has been suggested by many head teachers, teachers, and students that the toilet facilities should have been structurally divided to make them gender-separated. (The present toilet facilities are not partitioned by walls for boys and girls, with just one common entrance.) Consequently, improving access to education for girls through developing the girl-friendly environment has not been accomplished.

At the target schools, however, the number of girls has generally exceeded the number of boys, and thus access to education for girls has not been recognized as an issue. As shown in Table 5, even in the North West Region as a whole, the number of enrolled students is higher for girls than for boys. Moreover, the FSLC/CEP success rate by gender in the North West Region is consistently higher for girls than for boys¹⁶.

¹⁶ For example, the success rates were 85.0% for boys and 89.1% for girls in 2013, 88.2% for boys and 90.5% for girls in 2014, 86.1% for boys and 88.4% for girls in 2015, and 88.7% for boys and 91.0% for girls in 2016.

Table 5. Number (Percentage) of Enrolled Students in Primary Schools by Gender in the North West Region

	Boys	Girls	Total
Public School	55,931 (49.8%)	56,354 (50.2%)	112,285 (100%)
Total	69,730 (49.6%)	70,945 (50.4%)	140,675 (100%)

Source: North West Region DREB, *Regional Statistics Summary for Primary Education in the North West for the 2017/2018 Academic Year*

3.3.2. Impacts

3.3.2.1. Intended Impacts

In this project, Cameroon's policy goals of reducing regional disparities and improving quality in primary education have been listed as its overall goals. Yet, no specific qualitative indicators for impacts have been selected. To measure the extent to which the impact of the project has been accomplished, this evaluation has adopted the shares of permanent/semi-permanent/temporary classrooms as an additional indicator in terms of reducing regional disparities, and compared data before and after the project to infer to what extent the project outcomes have been achieved. In terms of improving quality, this study has examined the trends of the FSLC/CEP success rate at the school district level.

3.3.2.1.1. Improving the Share of Permanent Classrooms in the North West Region

The share of permanent classrooms in primary schools in the North West Region improved about 9.5 percentage points from 2009/10 to 2016/17 (see Table 6). This project is estimated to have contributed to an improvement of about four percentage points. Because the trend in the national average during the same period is unknown (national average was 69% in 2009/10), whether the regional disparities have narrowed or not cannot be confirmed. Nevertheless, it is certain that the disparities on the shares of permanent/semi-permanent/temporary classrooms between the North West Region and the national average would have been wider without the implementation of this project.

Table 6. Number (Percentage) of Permanent/Semi-permanent/Temporary Classrooms in Primary Schools in the North West Region

	2009/10	2016/17
Permanent	2,183 (46.1%)	2,675 (55.6%)
Semi-permanent	1,699 (35.9%)	1,445 (30.0%)
Temporary	849 (17.9%)	693 (14.4%)
Total	4,731 (100%)	4,813 (100%)

Sources: MINEDUB Statistics Section, *Statistical Yearbook 2009/10*; North West Region DREB, *Regional Statistics Summary for Primary Education in the North West for the 2017/2018 Academic Year*

3.3.2.1.2. Improving the Success Rates of the First School Learning Certificate/Certificat d'Études Primaires (FSLC/CEP) at the Target Schools

As mentioned above, according to the interviews with head teachers and teachers, as well as group discussions with students, the completion of superb educational facilities have enhanced the motivation of the teachers and students alike and created the environment where they can concentrate on classroom learning. Consequently, the students' performances have gone up and the FSLC/CEP success rate has risen in many schools. Table 7 shows that the average FSLC/CEP success rate of the target schools at the school district level, weighted by the number of students in each school. The average success rate of all the target schools had increased from 76% in 2013/14 to 87% in 2016/17. Over the same period, the success rate for the North West Region as a whole increased only modestly from 87% to 90%¹⁷. Although various factors are likely to have contributed to the increase in the success rates, it appears certain that this project has made large contributions to the improved success rates at the target schools.

Table 7. Improved Success Rates of the First School Learning Certificate/Certificat d'Études Primaires (FSLC/CEP) at the Target Schools

(Unit: %)

School District	2013/14 (Before Project Completion)	2016/17 (After Project Completion, Before the Crisis)
Bamenda	78.4	86.6
Bali	93.4	97.1
Ndop	54.6	70.1
Santa	94.6	100
Tubah	47.5	81.9
Bafut	97.3	100
Fundong	60.4	87.7
All Target Schools	75.8	87.0
North West Region as a Whole	87.0	89.8

Sources: Face-to-face interviews/questionnaire surveys, data provided by North West Region DREB

3.3.2.2. Other Positive and Negative Impacts

3.3.2.2.1. Impacts on the Natural Environment

Because this project was to improve the existing primary schools' facilities, few negative environmental and social effects were expected, and no environmental assessment has been conducted. According to the interviews with the executing agency officials, the measures that address any possible undesirable effects, such as the cutting and embankment of slopes at the sites and the installation of rainwater treatment facilities, have been carried out as planned. No negative impact on the natural environment, which had not been foreseen at the time of planning, has been confirmed.

¹⁷ As the crisis continues for a long time, the FSLC/CEP success rate has subsequently declined sharply. This is probably because an increasing number of students have become not able to attend the classes necessary for the preparation of the exam as they stay at home or the school is closed. The success rate for the North West Region at the time of ex-post evaluation is 51.0%.

3.3.2.2.2. Land Acquisition and Resettlement

There was a case where residents had illegally set up a temporary house in a corner of a large primary school yard (public land). And their evictions became necessary when constructing school yard fences. However, no conflict between the residents and the government, and such, ever occurred, and no compensation was made because it had been squatting.

3.3.2.2.3. Other Impacts (Gender)

As mentioned above, the project's aim of improving access to education for girls through the development of the gender-separated toilets for boys and girls and the subsequent creation of the girl-friendly environment has not been achieved. But, because the number of girls is generally higher than that of boys at the target schools, girls' access to education has not been regarded as an issue. Moreover, the number of enrolled students has been higher for girls than for boys in the North West Region as a whole, and the FSLC/CEP success rate in the North West Region has also been consistently higher for girls than for boys.

Summarizing effectiveness and impacts, the target "number of classrooms that can be used continuously at target schools," as well as the target "number of students who can learn in a safe environment at the target schools," have been achieved, regarding effectiveness. In addition, securing the safe storage spaces of teaching materials and administrative documents has improved the management capacities of teachers and contributed to more effective classroom teaching in many schools. Furthermore, as a result of the construction of toilets with a sanitary environment, the health and hygienic conditions of the students have enhanced and the number of the registered infections of the students has decreased. Regarding the impacts, the share of permanent classrooms in primary schools in the North West Region improved nearly 10 percentage points after project completion, and this project is likely to have contributed to the reduction of regional disparities to a certain extent. Moreover, the FSLC/CEP success rates have risen at the target schools, and thus a certain effect on improving the quality of primary education can be confirmed.

In light of the above, it has been found that the expected outcomes were generally accomplished, and thus the effectiveness and impact of the project are high.

3.4. Sustainability (Rating:②)

3.4.1. Institutional / Organizational Aspect of Operation and Maintenance

The day-to-day maintenance of the facilities and equipment developed by this project has been expected to be jointly handled by the school council, the PTA, and the head teacher. In particular, the PTA has played a crucial role¹⁸. As the number of students has been declining in many schools due to the Anglophone Crisis, however, the functioning of the PTA has been weakening at the time of ex-post evaluation. As the crisis

¹⁸ For example, the replacement of the cabinet and door locks that got broken and the installment of protective iron door fences have been funded through PTA levy. Also, PTA levy was used to hire maintenance workers and temporary teachers.

continues with no end in sight, a lot of households have started to move to French-speaking regions to send their children to school there. Even if the crisis would be brought under control quickly, those households are likely not to return to the North West Region soon. Therefore, the North West Region's education officials are now concerned that the organizational arrangement for maintenance that relies heavily on the PTA will not function as smoothly as it used to be, at least, in the next four to five years.

With regard to the long-term maintenance, the MINEDUB's Japanese Project Execution Unit used to play the leading role in the formulation of decennial, large-scale maintenance and repair plans¹⁹ during the periods when JICA projects for the construction of primary schools had been continuously implemented. But the said unit was dissolved in March 2017 after the completion of this project for the construction of primary schools, and no long-term maintenance and repair plans have become formulated afterwards. In light of the above, although no large problem has occurred yet, the organizational structure of both the day-to-day operation and maintenance at the school level and the long-term operation and maintenance by the executing agency has been weakened compared to before. Thus, there is a minor problem in its institutional aspect.

3.4.2. Technical Aspect of Operation and Maintenance

Skills required for day-to-day maintenance and repairs have been the levels that can be sufficiently dealt with by local contractors. So far, repairs of the cracks on the classroom walls, replacements of the defect locks for the cabinets and the doors, installments of the protective iron door fences outside the doors, and such, have been done without problems. Also, in Bamenda, the repairs and rebuilding of the classrooms damaged by arson have been almost completed by local contractors. In light of the above, there is no specific problem observed in the technical aspect of operation and maintenance.

3.4.3. Financial Aspect of Operation and Maintenance

According to the interviews with the head teachers and officials, it has been getting difficult to secure adequate funds for the day-to-day repairs and maintenance of the facilities and equipment through PTA levy and the functional credit from the government budget. Traditionally, PTA has been very active in the North West Region, and day-to-day maintenance expenses have been financed out of PTA levy. After the crisis, however, the collection has dramatically decreased as the number of students dropped and the number of parents who stopped making payments also increased.

In addition, the funds necessary for large-scale maintenance and repair plans had been financed through the counterpart budget of the on-going project during the periods when the projects for the construction of primary schools had been continuously implemented. Yet, as JICA projects with MINEDUB as the executing agency no longer exist, an adequate budget for long-term maintenance has not been secured any more at the time of ex-post evaluation²⁰. For the long-term maintenance of the primary schools constructed by the JICA projects

¹⁹ For repainting/repairing and the maintenance of drainage facilities, etc.

²⁰ Given the purpose of the counterpart budget, a mechanism that depends on the counterpart budget for financing large-scale maintenance and repair plans does not appear to be a long-term, sustainable solution.

in all over Cameroon, MINEDUB has budgeted a total of 55 million CFA francs for 2019, and 70 million CFA francs for 2020 and for 2021, respectively. Over the next few years, needs for the long-term maintenance and repairs of all the schools are to be surveyed, and the amount required for long-term maintenance would be examined. Nevertheless, it cannot be said at this point that any additional source of long-term funds has been identified²¹. In light of the above, there are some minor problems in the financial aspects of operation and maintenance.

3. 4. 4. Status of Operation and Maintenance

With regard to the status of operation and maintenance, the situation before the crisis broke out has been examined. The classrooms constructed by this project had been well-utilized except for the two oversupplied classrooms at GS/GBPS Bali Town, as mentioned above. (One classroom, however, has been used as a library at GS Mulang.) Although the two classrooms at GPS Atouakom and one classroom at GS Fundong, which had been damaged by arsons, are not usable at the time of ex-post evaluation, the repairs and reconstruction of the classroom at GPS Atouakom have been almost completed by the government. The educational furniture procured along with the facilities has also been well-utilized except for those had been burned out and those placed in the unutilized classrooms. Although the locks for the cabinets installed in the head teachers' rooms and meeting rooms, as well as the door locks for the head teachers' rooms, meeting rooms, and classrooms, had some defects, the PTA had played an essential role in day-to-day maintenance and appropriately dealt with the defect problems, and such, before the crisis. Some cracks on the classroom walls being finished with mortar at GS Mulang and water leakages from the roofs at GS Bamenda GMI, which occurred after the end of the defect liability period, had also been repaired by the Cameroon side. Therefore, there is no major problem in the status of operation and maintenance.

In light of the above, there are some minor problems observed in terms of the institutional and financial aspects. Therefore, sustainability of the project effects is fair.

4. Conclusion, Lessons Learned and Recommendations

4. 1. Conclusion

The objective of this project is to enhance the learning environment for the students in the North West Region by rebuilding temporary and dilapidated classrooms and providing school furniture, thereby contributing to the achievement of the Cameroonian government's policy goals of reducing disparities across regions and improving the quality of primary education.

Since the project was consistent with Cameroon's national development policy, education sector strategy,

²¹ The annual budget allocated to the Japanese unit as the counterpart budget was roughly ten times the budget secured at the time of the ex-post evaluation. Since more than half of that budget is believed to have been allocated to the long-term maintenance expenses of school facilities, the current budget on long-term maintenance remains at the level of around 20% or less of that time.

and development needs at the times of planning and ex-post evaluation, as well as Japan's aid policy at the time of planning, its relevance is high. The outputs of the project, such as the constructions of classrooms and toilets and the provisions of desks and chairs, were produced as planned. Yet the project period exceeded the plan by one month, whereas the project cost was within budget. Therefore, the efficiency is fair. After completion of the project, the number of usable classrooms and that of students who are able to learn in the fine environment significantly increased. Furthermore, the improved educational environment boosted the students' academic performance, and the constructions of sanitary toilet facilities also have had positive impacts on the students' health and hygienic conditions. Thus, the effectiveness and impact of the project are high. As for the operation and maintenance, the "Anglophone Crisis" has negatively affected the number of enrolled students. Consequently, the existing organizational structure, which relies on the PTA and PTA levy for the day-to-day maintenance and repairs for the school, has not been functioning well. In addition, some minor problems were observed in the institutional and financial aspects of the executing agency. Therefore, the sustainability of the project is fair.

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

4. 2. Recommendations

4. 2. 1. Recommendations to the Executing Agency

None.

4. 2. 2. Recommendations to JICA

(1) Carrying Out Continuous Support: The "Japanese schools" have become schools with an excellent reputation in Cameroon. They have attracted children of the parents who strongly care about the education of their children and motivated teachers, and have contributed to improving the quality of education. Yet, providing superb school facilities compared to other public schools only to a small portion of students may not be entirely satisfactory from a viewpoint of expanding access to public education. Therefore, to further contribute to enhancing the level of primary education in Cameroon, it is desirable to continue constructing primary schools, while making such efforts of choosing construction sites more selectively, so as to avoid the "Japanese schools" from becoming the institutions for a relatively small number of lucky students who can attend there. The Cameroon side also highly appreciate Japan's past aids, which were made on a continuous basis.

4. 3. Lessons Learned

(1) Coordinating with Other Donors/Resources in School Construction: In Ndop, the classrooms constructed by Plan International have become unused and left abandoned after classrooms were built by this project.

Adequate coordination with other donors/resources should have been made in terms of school construction²².

(2) Determining the Number of Classrooms to be Constructed and Selecting School Construction Sites on the Basis of Dynamic Estimation on Student Enrollment: In some target sites located in a center of a school district, the number of the students who want to enter or transfer to the target school had rose after project completion. And before the crisis, the number of students per classroom in some schools exceeded 100. On the contrary, in some suburban and rural sites away from a center of a school district, the number of students per classroom remained around 30 to 40 even before the crisis. When determining the numbers of classrooms to be constructed at the time of planning, the project made calculations mostly on the basis of the number of students at that time only, regardless of projected changes in the number of students –giving only a minimum consideration to projected population growth, an increase in transfer students from neighboring schools, and so on²³. If the project aims at increasing the number of students who can learn in a safe environment and reducing the number of overcrowded classrooms, it should dynamically forecast the demand for school enrollment to the extent possible and incorporate it in the plan. In the end, this project constructed a relatively large number of classrooms in not easily accessible suburban and rural areas within a school district. To make development outcomes more effective, it is desirable to devise an elaborate strategy such as constructing a larger number of classrooms selectively in a center of a school district, while considering population density and distribution, geography, and transportation access.

(3) Further Customizing Construction Design by School: It is not unusual that a site with more than 1,500 students and that with about 500 students have the same number of toilet facilities constructed. In the schools where the numbers of students are expected to increase rapidly after project completion, the number of toilets to be constructed, in addition to the number of classrooms to be built, should be determined flexibly according to the number of students. Also, it is desirable that the size of the meeting room is to be customized to a certain extent according to the size of the school (number of teachers). Currently, the size of the meeting room is the same whether for a school with a dozen teachers or for a school with a few teachers. Thus, in large-size schools, it is not possible for all teachers to have a meeting together.

(4) Installing Gender-Separated Toilets for Boys and Girls that Are Partitioned by Walls: To enforce the rule of the gender-separated toilets, it is desirable that the entrance and the sections for boys and girls are to be divided physically by walls (see Photo 5). With the current design of the toilet facilities, it is difficult to have the students (especially younger-age boys) observe the gender-separated toilets, particularly, at large-size schools, due to shortage of toilets.

²² According to officials from the executing agency, donor coordination has become better through the Local Education Group (LEG) since then.

²³ As an exception, to compensate for the shortage of classrooms in neighboring sites, two extra classrooms had been constructed at GS Mulang; that is, the number of classrooms to be constructed was set larger than the number of classroom shortage. Its demand forecast for school attendance, however, has turned out to be incorrect, and one of the classrooms is being used as a library.



Photo 5. Toilet Facilities

United Republic of Tanzania

FY2017 Ex-Post Evaluation of Japanese Grant Aid Project

“The Project for Widening of New Bagamoyo Road”

External Evaluator: Tomoyuki Sho, IC Net Limited

0. Summary

The objective of this project is to ensure smooth and steady traffic on the New Bagamoyo Road in Dar es Salaam by widening its 12.9-km target section between the Mwenge and Tegeta intersections, thereby contributing to the improvement of urban transport mobility and a reduction in the transportation cost of trade goods such as agricultural produce.

Because this project was consistent with Tanzania’s national development policy, road sector strategy, and development needs at the times of planning and ex-post evaluation, as well as Japan’s aid policy at the time of planning, its relevance is high. On the other hand, although the outputs of the project had been constructed and procured almost as planned, the project cost and the project period both exceeded the plan. Therefore, the efficiency is fair. As a result of improving New Bagamoyo Road, the driving time required during peak hours is reduced to a quarter of the level of the time of planning even at the time of ex-post evaluation, despite a dramatically increased traffic volume. Thus, the likelihood that the target of the average traffic speed would have been met had been measured immediately after project completion is high. In addition, the reduction of transportation cost is achieved to a certain extent, as the fuel cost of a traffic vehicle has been lowered due to a shorter driving time. Moreover, urban transport mobility is improved as the availability and frequency of public bus services have substantially increased after project completion. As evidenced by residential land and commercial developments along and near the road, positive impacts on fueling the local economy and increasing employment opportunities have also been recognized. Therefore, the effectiveness and impact of the project are high. As for the operation and maintenance of New Bagamoyo Road, no problems have been identified in terms of the institutional, technical, and financial capacities of the executing agency. However, there is some problem in the status of operation and maintenance because flooding and surface ponding in some roadside areas outside the road construction sites have become worsened after project completion. Therefore, the sustainability of the project is fair.

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

1. Project Description



Project Location

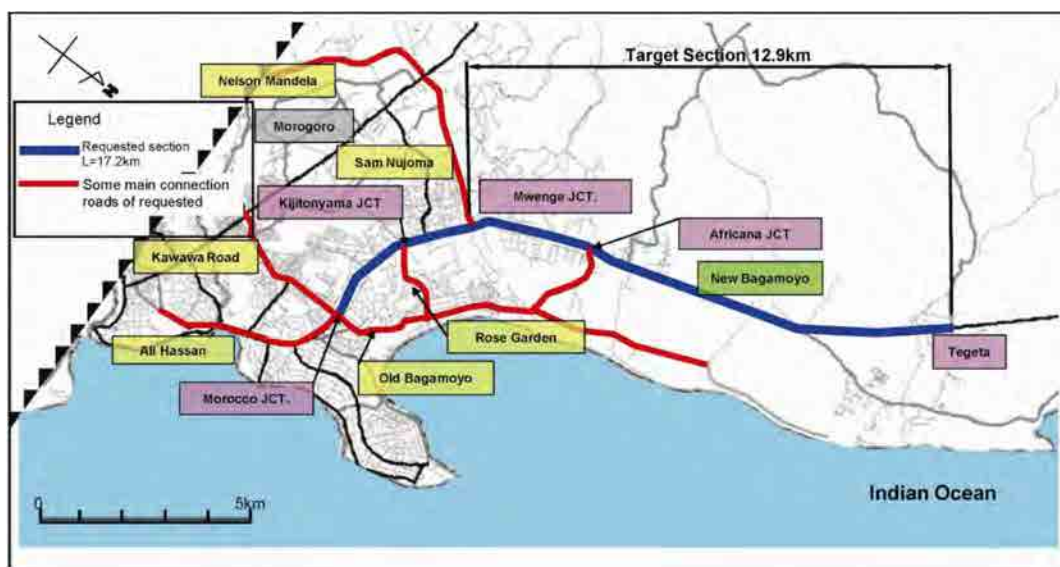


Road Improved by the Project

1.1. Background

As demand for urban traffic expanded dramatically in response to the recovery of the Tanzanian economy, road traffic volume in the Dar es Salaam metropolitan area increased rapidly in the 2000s. In the meanwhile, traffic congestion significantly deteriorated on the major trunk roads of Morogoro Road, Nyerere Road, Kilwa Road, and New Bagamoyo Road due to the uncoordinated development and the concentration of traffic in urban areas. In particular, New Bagamoyo Road, the target road of this project, was the only major trunk road in Dar es Salaam that had not been widened to a four-lane at the time of planning, and thus its traffic congestion during peak hours in the morning and evening was severe. Therefore, mitigating traffic congestion through the widening of the road was a pressing issue.

Against this background, the Government of Tanzania made a request for grant aid on this project in August 2004, and after reviewing the target section of the road, submitted a new request to the Government of Japan in August 2007. In the meanwhile, the Transport Policy and System Development Master Plan study (April 2007–June 2008) recommended an about 17-km section of the New Bagamoyo Road from Morocco intersection to Tegeta intersection as a priority project to be undertaken by 2015, and thus a preparatory survey was conducted for this section. However, a further survey was judged to be necessary to fix the exact road alignment because of the existence of underground structures, etc. on the section of 4.3km between Morocco intersection and Mwenge intersection. Finally, the target section of this project had been determined to be the 12.9-km section from Mwenge intersection to Tegeta intersection (see Figure 1).



Source: Preparatory Survey Report

Figure 1. Target Section of the Project for Widening of New Bagamoyo Road

1.2. Project Outline

The objective of this project is to ensure smooth and steady traffic on the New Bagamoyo Road in Dar es Salaam by widening its 12.9-km target section between the Mwenge and Tegeta intersections, thereby contributing to the improvement of urban transport mobility and a reduction in the transportation cost of trade goods such as agricultural produce.

Grant Limit / Actual Grant Amount	D/D: 60 million yen / 59 million yen Main Work: 5,095 million yen (Additional GA: including 222 million yen) / 5,060 million yen
Exchange of Notes Date / Grant Agreement Date	D/D: February 2010 / February 2010 Main Work: May 2010 / May 2010 Additional GA: January 2014 / January 2014
Executing Agency	Tanzania National Roads Agency (TANROADS)
Project Completion	July 2014
Main Contractor	Konoike Construction Co., Ltd.
Main Consultant	INGÉROSEC Corporation
Basic Design	March 2009–October 2009
Related Projects	<p>Technical Cooperation Projects:</p> <ul style="list-style-type: none"> • Study of Dar es Salaam Road Development Plan (1995) • Study of Dar es Salaam Transport Policy and System Development Master Plan (2007–2008) <p>Grant Aid Projects:</p> <ul style="list-style-type: none"> • Salender Bridge Widening Project (1980) • Morogoro Road Improvement Project (1984–1985) • Project for the Improvement of the Road Network in the Metropolitan Area (1991–1995) • Project for the Improvement of Road Repair Equipment (1993, 1995)

	<ul style="list-style-type: none"> • Project for the Bridge Improvement on Trunk Roads (1996–1998) • Dar es Salaam Road Improvement Project (1997–1999) • Project for Widening of Kilwa Road (2004–2009) <p>Other International Organizations and Aid Organizations, etc.:</p> <ul style="list-style-type: none"> • World Bank “Integrated Roads Project I, II” (1990, 1994) (Loan) • European Development Fund (EDF) “Nelson Mandela Road Project” (2003–2009) (Grant aid) • European Union (EU) “Backlog Maintenance Programme for the Central Corridor” (2006) (Grant aid) • Danish International Development Agency (DANIDA) “Dar-Mlandizi Road Project” (1997) (Grant aid) • Kuwait Fund / Organization of the Petroleum Exporting Countries (OPEC) / Saudi Fund/Government of Tanzania “Mkuranga-Kibiti Road Project” (2001) (Loan)
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2. Outline of the Evaluation Study

2. 1. External Evaluator

Tomoyuki Sho, IC Net Limited

2. 2. Duration of Evaluation Study

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

Duration of the Study: November 2017 – December 2018

Duration of the Field Study: March 10 – 28, 2018; July 1 – 11, 2018

2. 3. Constraints during the Evaluation Study

Having considered that this project was to widen New Bagamoyo Road, one of the major trunk roads in Dar es Salaam, into four lanes (two lanes in each direction) for the section between Mwenge and Tegeta, the direct and indirect beneficiary effects had been expected on the entire population of Dar es Salaam (about three million) at the time of planning. Yet, the second-round impact of a project on a trunk road like this one, which constitutes a part of the vital road network, would be strongly influenced by its connectivity to other roads, which are out of the scope of the project. In addition, it would be affected by other non-road factors (economic trends, policies, etc.) and thus it must be extremely difficult to assess the net effect of this project alone on the vast target beneficiary areas, while separating it from the impacts of the other non-project factors. Consequently, this evaluation focused primarily on the areas along and near New Bagamoyo Road where the direct effects of the project can be expected. For the second-round impact such as the effects on the residents’ economic activities and on the local commercial development, the causality cannot be easily determined in a quantitative manner in a study of a limited scope like this one. Thus, this evaluation has relied heavily on the analysis of qualitative information collected from site visits and face-to-face interviews with local residents, transportation companies, shop owners, and others.

3. Results of the Evaluation (Overall Rating: B¹)

3. 1. Relevance (Rating: ③²)

3. 1. 1. Consistency with the Development Plan of Tanzania

Tanzania's national development policy documents at the times of planning and ex-post evaluation, the *National Strategy for Growth and Reduction of Poverty* (NSGRP) (formulated in 2005) and the *Second Five Year Development Plan* (FYDP II) (formulated in 2016), both point to the expansion of infrastructure projects related to road network construction as a primary objective for the promotion of the growth of the economy and development across regions. Particularly, improving mobility and alleviating congestion through the improvement of urban transportation networks was listed as a priority. In addition, the country's development strategy document for the transport sector *10 Year Transport Sector Investment Program* (TSIP) (formulated in 2008) gives top priority to the expansion and modernization of trunk roads in Dar es Salaam for the purposes of promoting economic and social activities and improving the well-being of the people, and mentions the New Bagamoyo Road project. The *Five-Year Strategic Plan* of the Tanzania National Roads Agency (hereinafter referred to as "TANROADS") has also consistently mentioned that improving the trunk roads in Dar es Salaam including New Bagamoyo Road is a priority, and the latest *5th Five-Year Strategic Plan* (formulated in 2018) lists the improvement of the road section between Mwenge and Morocco as one of the priority projects.

In light of the above, the project is highly relevant to the development policy and road sector policy of Tanzania.

3. 1. 2. Consistency with the Development Needs of Tanzania

The population of Dar es Salaam is about 4.36 million (2012 census)³, of which about 1.78 million live in Kinondoni Municipality where New Bagamoyo Road runs through. Most households in Kinondoni are in the middle class and many own private vehicles⁴, and the traffic volume of New Bagamoyo Road has increased dramatically along with a rapid population growth (64% up from the 2002 census). Yet, New Bagamoyo Road was the only one among the four major trunk roads in Dar es Salaam that had not been widened to a four-lane at the time of planning, and thus chronic traffic congestion had become being caused. Particularly, due to severe congestion caused by low-speed vehicles and damaged road surface, it had become to take two to three hours during peak commuting hours in the morning and evening to drive from Tegeta intersection, the terminal point of the target road section, to the center of the city for a distance of about dozen kilometers.

Even at the time of ex-post evaluation, traffic volume has been increasing as a result of the accelerated development of residential land and the construction of commercial facilities along and near the road after completion of the project. According to the traffic count surveys conducted near Mwenge intersection, the

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

² ③: High, ②: Fair, ①: Low

³ The 2016 population estimate of Dar es Salaam is approximately 5.47 million.

⁴ The number of private vehicles owned per 1,000 residents in Kinondoni at the time of planning was 46.0, which was slightly higher than an average of 42.6 for Dar es Salaam as a whole (Source: UITP/UATP, *Report on Statistical Indicators of Public Transport Performance*, 2010).

starting point of the target road section, in 2008 and 2017⁵, the number of passing vehicles sharply increased more than 2.3 times in nine years at an annualized rate of 9.9%. Therefore, there continues to be strong needs for the improvement of New Bagamoyo Road, as demonstrated by the decision to carry out the improvement of the 4.3-km road section between Mwenge and Morocco, as the second phase of the project, which had not been included in the target 12.9-km section of this project⁶.

Expecting the extension of Bus Rapid Transit (hereinafter referred to as “BRT”) lanes into the project road section in the future, reserved spaces for BRT lanes have been set aside in the median strip in this project. No specific problems have been found in terms of the cooperation and division of roles with the Government of Tanzania, the African Development Bank (AfDB), and the World Bank, of which the latter two have played key roles in BRT. At the time of ex-post evaluation, BRT is scheduled to be introduced into New Bagamoyo Road by December 2023 as part of the fourth phase of the BRT construction project.

In light of the above, the project is consistent with the development needs of Tanzania.

3. 1. 3. Consistency with Japan’s ODA Policy

At the time of planning, the *Country Assistance Program for the United Republic of Tanzania* (2008) stated the Government of Japan would assist in the infrastructure development, which is the foundation of economic growth, and continue to place high priority on assistance in the transport sector such as road, in which Japan has a technological comparative advantage. Also, its Priority and Sectoral ODA Policies section mentioned that the government would consider providing an aid in the road sector so that Dar es Salaam, the nation’s de facto capital, would be able to fulfill its functions adequately.

Thus, the consistency between the Project and Japan’s ODA policy is high.

In light of the above, this project is highly relevant to Tanzania’s development policy and development needs, as well as Japan’s ODA policy. Therefore, its relevance is high.

3. 2. Efficiency (Rating:②)

3. 2. 1. Project Outputs

Table 1 shows the actual outputs of this project. Apart from eight design changes, the outputs have been constructed and procured as planned. The design changes had been done appropriately in order to accommodate requests for improvement by the Tanzanian side to adjust to the situations on the ground, or to comply with the local standards. And it is confirmed that they were all reasonable.

⁵ Source: Eight-Japan Engineering Consultants Inc.

⁶ A grant agreement has been concluded in February 2018. From January to July 2016, the Tanzanian side provisionally improved the section between Mwenge and Morocco and plainly expanded it into four-lanes with a cost of approximately five billion shillings.

Table 1. A Summary of the Actual Facilities Constructed

Item		Description
Target Section		12.9 km (Sta. 4.3 km – Sta. 17.2 km)
Road Paving Work	Surface Course	Asphalt concrete 5 cm (carriageway) or 3 cm (footpath)
	Binder Course	Asphalt concrete 5 cm
	Base Course	Base course 10 cm (asphalt stabilized: DBM)
		Sub-base course: 12.5 cm – 33 cm (cement stabilized)
	Protective Shoulder	Cement stabilization + bitumen sealing
Underground Drainage Work		Sta. 8.2 km – Sta. 9.5 km subsoil drain
Width		Carriageways 7.5 m x 2; BRT central reservation 9.0 m; footpaths 1.5 m
Bridge Work	Mlalakuwa Bridge	PC-T girder bridge (post tension); 30 m long with pile foundations
	Lugalo Bridge	PC-T girder bridge (post tension); 30 m long with spread foundations
	Tegeta Bridge	PC-T girder bridge (post tension); 30 m long with pile foundations and spread foundations
Road Drainage Work		<ul style="list-style-type: none"> • Concrete block open drains: newly constructed along the entire route • Road crossing culvert: 28 locations (box culvert of 900 mm x 900 mm or other specifications) • U-shaped side drain: 400 mm x 300 mm at cut sections, etc. • Inlet/outlet: 52 locations • Catch basin: 43 locations
Auxiliary Road Structures		<ul style="list-style-type: none"> • Kerbstone work • Road markings • Guard rails • Road signs • Bus bays

Sources: Materials provided by JICA, site visits, face-to-face interviews and questionnaire surveys

The defect liability period of this project for road pavement was set to be for three years after completion of the project (August 2014 - July 2017) because some defects such as ruts and waves had been found at the early stages after completion. The places where those defects had been found during the defect liability period were appropriately repaired based on the agreement between the Tanzanian side and the Japanese side. Although some waves were spotted in parts of the road even at the time of ex-post evaluation, it has been caused by a dispersion in the quality of asphalt mixture production, according to the construction consultant. And its design specifications including pavement structure and its total thickness were as good as or better than those of Sam Nujoma Road (completed in 2008) and Nelson Mandela Road (completed in 2012) in Dar es Salaam, where the improvement plans were being developed almost concurrently.

With regard to auxiliary road structures, bus stops were constructed in a total of 38 locations on both sides of the road⁷, and protective fences (guardrails) were installed on one side in the direction from Mwenge intersection toward Tegeta in the section between Km 6.3–Km 6.4, and on the other side in the direction from Tegeta intersection toward Mwenge in the section between Km 10.5–Km 10.6. As for traffic signs, a total of about 90 were confirmed to have been installed at the both sides of the road. Due to budgetary constraints,

⁷ During heavy rain in February 2018, the roof of a bus stop next to Mwenge intersection collapsed with its support pillars into side ditches, and it got subsequently removed.

street lamps became out of the scope of this project, and no street lamps have been installed even at the time of ex-post evaluation⁸. The Tanzanian side has completed the installment of traffic lights (out of the scope of the project) at six locations with a cost of 1.3 billion Tanzanian shillings in June 2017.

3.2.2. Project Inputs

3.2.2.1. Project Cost

Because data on the actual project cost borne by the Tanzanian side could not be obtained⁹, the efficiency related to the project cost has been evaluated using the cost borne by the Japanese side only. When comparing the planned cost with the actual cost, the actual project cost borne by the Japanese side exceeds the planned cost by about 4% (see Table 2). The reason is that the volume of poor-quality soil that needed replacing turned out to be unexpectedly high because much of the land for road construction had been privately-owned and could not be entered for conducting soil surveys during the preparatory survey period¹⁰. Consequently, given that the construction contractor could not continue its construction work with a budget shortfall, an additional grant agreement of 222 million yen was signed in January 2014. In short, the actual project cost exceeded the planned cost.

Table 2. Planned and Actual Project Costs

	Plan	Actual	(Unit: million yen) As Percentage of the Plan (%)
Total Project Cost	5,451	--	--
Cost borne by Japanese side	4,933	5,119	103.8
(Main Work)	4,873	5,060	103.8
Construction cost	--	4,896	--
Design and supervision cost	--	164	--
(Detailed Design)	60	59	98.3
Cost borne by Tanzanian side	518	--	--

Source: Materials provided by JICA

3.2.2.2. Project Period

As shown in Table 3, the actual project period exceeded the planned period by eleven months (29%). The

⁸ The installation work of street lamps by TANROADS has been interrupted due to technical difficulties at the time of ex-post evaluation. TANROADS officials attribute the difficulties the construction work has faced to the narrow strip reserved between the sidewalk and the side ditches, which are not wide enough for installing street lamps, and believe that the basic design had not adequately taken into account the installation of street lamps.

⁹ According to interviews with the officials, the items to be borne by Tanzania side (1. Cost of relocating existing buildings; 2. Cost of relocating underground water pipes; 3. Cost of relocating telephone lines and poles; 4. Cost of relocating electricity lines and utility poles; 5. Cost of transplanting roadside trees; 6. Cost of registering construction companies; and 7. Bank commissions) had been carried out as planned, and the total cost borne by the Tanzanian side amounted to more than 12 billion shillings. However, the figure has not been corroborated with data.

¹⁰ Some might regard the project cost overrun caused by the increased volume of poor-quality soil that needed replacing is due to an unforeseeable external factor. However, it does not fall in the category of external factors specified in JICA's References for External Ex-Post Evaluation, such as "extraordinary natural catastrophe, warfare, or temporary evacuation due to security problems." It does not contribute to an increase in output, either. Therefore, when evaluating efficiency, this evaluation does not add the amount of the additional grant agreement, which became necessary for the increased volume of poor-quality soil that needed replacing, to the planned project cost.

reason is that the construction periods had been extended three times due to record rainfalls in December 2011 and in April 2014, although there was no delay at the detailed design stage. More specifically, because the torrential rainfall had caused partial road flooding, landslides, the collapse of a retaining wall of a bridge, it became necessary to review and revise the design before restoring damages and resuming the remaining construction work. And this delayed the construction. In light of the above, the project period exceeded the plan.

Table 3. Planned and Actual Project Periods

Plan		Actual		As Percentage of the Plan
February 2010 (signing of D/D contract ¹¹) – March 2013 (completion)	38 months	July 2010 (signing of D/D contract) – July 2014 (completion)	49 months	+11 months 128.9%

Source: Materials provided by JICA

In short, both the project cost and project period exceeded the plan. Thus, efficiency of the project is fair.

3. 3. Effectiveness and Impacts¹² (Rating:③)

3. 3. 1. Effectiveness

3. 3. 1. 1. Quantitative Effects (Operation and Effect Indicators)

At the time of planning, the average traffic speed of vehicles and the traffic capacity were selected as quantitative indicators for effectiveness. Through the implementation of this project, the average traffic speed during the peak commuting hours in the morning and evening was expected to improve dramatically from 6.5 km/h to 42 km/h, whereas the traffic capacity was expected to increase from 825 vehicles/hr/lane to 1,740 vehicles/hr/lane (see Table 4).

Table 4. Effect Indicators: Average Traffic Speed during Peak Hours and Traffic Capacity

(Unit: km/h)

Effect Indicator	Baseline	Target	Actual
	2009	2013	2017
	At the time of planning	At the time of project completion	At the time of ex-post evaluation
Average traffic speed (km/h during the peak commuting hours)	6.5	42	29.7
Traffic capacity (vehicles/hr/lane)	825	1,740	(1,740)

Sources: Materials provided by JICA, site visits

Note: The actual average traffic speed was measured by the evaluator.

¹¹ The Ex-Ante Project Evaluation Report and the work implementation schedule of the Preparatory Survey Report both indicate the planned period of 38 months, but the Ex-Ante Project Evaluation Report is not clear about the starting point. Since the work implementation schedule does not include the period between the exchange of notes (E/N) to the signing of D/D contract, this evaluation has assumed that the planned period was 38 months by making the starting point for evaluation the signing of D/D contract and counting both months at the start and end of the period. The construction completion date is regarded as the completion of the project.

¹² Sub-rating for Effectiveness is to be made with consideration of Impact.

The actual data on the indicator "Average traffic speed" had not been collected immediately after completion of the project. Therefore, the evaluator measured the average traffic speed at the time of ex-post evaluation by following the traffic flow between the starting and terminal points at a normal speed (in the morning and evening peak hours of weekdays in each direction). As a result, the average traffic speed turned out to be approximately 30km/h at the time of ex-post evaluation, which is a dramatic improvement over the baseline value measured at the time of planning but still short of the target for the time of project completion¹³. Nevertheless, given the following factors, it is considered that a possibility that the target has been achieved at the time of project completion is sufficiently high.

- Population Growth in the Areas along and near the Road: The areas along and near New Bagamoyo Road (such as Madale, Mabwepaude, Mbweni¹⁴) have witnessed a rapid population growth since right after the completion of the project in 2014, owing to large-scale residential land developments that have taken place to the north of Tegeta junction and elsewhere¹⁵. As a result, traffic volumes along the road has also increased dramatically, as demonstrated by the results of the above-mentioned traffic count surveys conducted near Mwenge intersection.
- Increased Traffic Flow via Msata Road: In March 2017, a project to pave and improve Msata Road that runs between Msata and Bagamoyo (64km) had been completed¹⁶, and the Northern Region (such as Arusha and Tanga) and Dar es Salaam have become connected by way of New Bagamoyo Road. Consequently, large cargo trucks and long-distance buses, which used to go through Morogoro Road, have become to use New Bagamoyo Road, and traffic volume has significantly increased.

As mentioned, a comparison of the traffic count surveys conducted near Mwenge intersection in 2008 and in January 2017 indicates that the number of travelling vehicles had sharply increased more than 2.3 times in nine years at an annualized rate of 9.9% (see Table 5). In reality, an increase in traffic volume has been accelerated since the completion of the project in July 2014. Also, the number of large buses and trucks has gone up since the improvement of Msata Road was completed, which took place after the traffic count surveys. Therefore, the pace of an increase in traffic volume along New Bagamoyo Road for the period between project completion and ex-post evaluation must have been even more dramatic than that estimated from the data presented in Table 5.

¹³ In a total of 28 measurements, the maximum average speed was 43.7 km/h, the minimum 18.0 km/h, and the standard deviation 7.8 km/h. The target average speed was met four times out of the 28 (approximately 14%).

¹⁴ In Mbweni, 20,000 housing units have been developed, according to local road consultants.

¹⁵ However, data on population estimate for a year after the 2012 decennial census could not be obtained.

¹⁶ It cost approximately 126 billion shillings.

Table 5. Road Traffic Count Surveys: 2008 and 2017

(Unit: number of vehicles)

Survey Location: Near Mwenge Intersection													
Date	Type of Vehicle												Total
	Passenger Car	Taxi	Pick-up & Van	Microbus (Dala-dala)	Medium Bus (Dala-dala)	Large Bus	Group Bus	2-axle Truck (Light Truck)	3-axle Truck (Dump Truck)	Heavy Truck	Motor-cycle / Bajaj	Bicycle, Pushcart, etc	
2008	5,667	824	2,374	2,696	781	717	287	852	409	168	535	712	16,022
January 2017	19,704	247	1,325	311	4,727	2	365	1,205	1,055	548	7,428	477	37,394

Source: Eight-Japan Engineering Consultants Inc.

Note: Length of the surveys is for 14 hours per day from 6 a.m. to 8 p.m.

- Stories Told by Road Users: According to face-to-face interviews with the road-side residents who have been using New Bagamoyo Road and those who work for business and transportation companies¹⁷, traffic speed had dramatically improved in the first year after completion of the project. In the following years, however, these gains obtained from the alleviation of traffic congestion have been gradually lost due to the traffic volume increases.
- Installment of Speed Humps: Speed humps (traffic calming devices) were installed by TANROADS at six locations on the road (near the Lugalo barracks) as safety measures, and thus the traffic speed of vehicles has been reduced.
- Speed Limit near a Construction Site: The construction of a pedestrian overpass has been in progress at the point of Km 3.5 in the direction from Mwenge intersection toward Tegeta at the time of ex-post evaluation, and the traffic speed around the site has been limited to 30km/h.

Considering these points, in addition to the views expressed by TANROADS officials and local road consultants, it seems reasonable to assume that the likelihood is high for the target of the average traffic speed during the peak hours being achieved right after completion of the project in 2014.

The indicator “Traffic capacity” is not an empirical indicator to be measured but rather to be estimated from parameters such as the number of lanes, the specifications of road shoulders, and the ratio of large-sized vehicles. Its value had been calculated based on the road design. Because the outputs of this project were produced virtually as planned, the target of the traffic capacity must have been achieved at the same time as project completion.

¹⁷ The total number of target road-side residents and shop owners responding to the qualitative surveys was 51, of which 18 were interviewed around Mwenge and 33 around Tegeta. Thirty-four were males and 17 were females, and by age group, three persons were in their 10's, 10 persons were in the 20's, 13 persons in their 30's, 17 persons in their 40's, five persons were in their 50's, and three persons in their 60's. Among them, 24 were shop owners and eight were professional drivers. Others were four students, three government workers, two housewives, etc. The total number of those targets who work for business and transportation companies responding to the qualitative surveys was 15, of which 12 were managers of transport and business (such as iron works, gasoline sales, beverage manufacturing and bottling, cement, chemistry/cosmetics, poultry products processing, dairy products processing) companies, two were employees, and one was truck driver. The average number of employees of the transport/business companies is 226 (minimum 22 persons, maximum 700 persons).

This evaluation selected the “Driving time” as an additional quantitative indicator for measuring project effects, and its data were collected at the same time when the average traffic speed during peak hours was measured. Since the average traffic speed is obtained by dividing the distance of the target road section by the driving time, it is possible to say that both the travel time and the average traffic speed measure the same phenomenon from different points of view. The baseline and target values of the driving time were calculated by dividing the distance of the target road section by the baseline and target values of the average traffic speed, respectively. Table 6 shows that the driving time between Mwenge and Tegeta at the time of ex-post evaluation has been reduced to a quarter of the level of the time of planning by more than an hour and a half.

Table 6. Additional Effect Indicator: Driving Time during Peak Hours

(Unit: minute)

Indicator	Baseline (2009)	Target (2013) At the year of project completion	Actual (2018) At the year of ex-post evaluation
Driving Time	119	18.4	28

Sources: Materials provided by JICA, site visits

Note: The traffic speed was measured and calculated by the evaluator.

3.3.1.2. Qualitative Effects (Other Effects)

At the time of planning, the three indicators had been selected as qualitative indicators for the indirect effects of this project, of which the following indicator is considered to be related to the effectiveness.

- Widening the road to a two-lane road in each direction will ensure smooth traffic by separating vehicles travelling at normal speed from those at slower speed.

Through the site visits and face-to-face interviews, it is confirmed that the target of this indicator has been mostly achieved, although, at the time of ex-post evaluation, there are some sections where the separation of normal-speed vehicles and slower-speed ones has become less clear during the peak hours due to increased traffic volume. Owing to the widening of the road into two lanes on each direction, as well as the installments of a median strip and traffic signs, many road users have felt that safety has also been improved¹⁸. Yet, some road users are concerned about the safety of driving at night because no street lamps have been installed.

3.3.2. Impacts

3.3.2.1. Intended Impacts

Among the qualitative indicators chosen at the time of planning for measuring the indirect effects of this project, the following two indicators are considered to be related to the impacts.

- Shorter driving time will contribute to a reduction in the transportation cost of trade goods such as

¹⁸ The number of road traffic deaths in Kinondoni Municipality, where New Bagamoyo Road runs through, dropped (52%) from 242 deaths in 2014 to 117 deaths in 2015. The number of road traffic deaths in the rest of Dar es Salaam excluding Kinondoni decreased (22%) from 264 deaths to 205 deaths during the same period.

agricultural products.

- The enhanced traffic capacity of the road, along with the operationalization of the BRT services, will improve the urban transport mobility of the general public in Dar es Salaam¹⁹.

This evaluation has assessed the extent to which the outcomes of these impacts have been accomplished mainly through face-to-face interviews with those who work for transportation and business companies, which have been using New Bagamoyo Road, as well as interviews and group discussions with road-side residents and shop owners, and site visits.

(1) Reduction in Transportation Cost

Many of the users of New Bagamoyo Road responded to the interview surveys that as road traffic became smooth and travel time became shorter, the transportation cost has been decreased through saving the cost on gasoline. (However, the prices of trade goods, such as agricultural produce, were not recognized to have been decreased²⁰.)

(2) Improvement of Urban Transport Mobility

Prior to the project, the numbers of bus routes and operating buses for passenger buses (dala-dala) had been limited compared to other major trunk roads of Morogoro Road, Nyerere Road, and Kilwa Road²¹. But after completion of the project, the situation has improved. In addition, the size of passenger buses has become larger and travel time has become shorter than before the project implementation as traffic congestion was eased. Therefore, the level of comfort has also been enhanced. (Table 5 also confirms that minibuses have been being replaced by medium buses²².) Moreover, access to hospitals, banks, and supermarkets has become much easier than before, and the residents' level of satisfaction has increased. In the meanwhile, the passenger bus fare has not been raised. Thus, the perceived affordability of the bus services should have risen compared to before.

3.3.2.2. Other Positive and Negative Impacts

(1) Impacts on the Natural Environment

No sustainable negative impact has been occurred on the natural environment as a result of this project²³.

¹⁹ As mentioned, BRT is planned to be introduced into New Bagamoyo Road by December 2023 as part of the fourth phase of the BRT construction project. It is expected that the convenience of the public transportation system will be further improved with the operation of BRT, which will get constructed on the foundation of this project's outcomes.

²⁰ On the other hand, many residents responded that more varieties of agricultural produce have become available for purchase compared to before.

²¹ Source: Kyong Dong Engineering Co., Ltd., *Traffic Survey and Demand Forecasting Report* (2017).

²² Table 5 indicates that the number of large buses travelling had dropped. However, since the upgraded Msata Road went open immediately after the traffic count survey, the number of large buses is believed to have increased as well. During the site visits at the time of ex-post evaluation, a large number of large intercity buses travelling toward the Tegeta intersection via the Bagamoyo intersection on Msata Road were witnessed.

²³ This project is classified as Category B in its impact on the environment (applying *JICA Guidelines for Environmental and Social Considerations* (2004)).

The Environmental Impact Assessment (EIA) report was approved in January 2010. It was confirmed through the face-to-face interviews and questionnaire surveys with the officials of the executing agency that appropriate actions on traffic controls, noise, vibration, and such, had been taken during the construction period in accordance with the mitigation measures and that their monitoring had been carried out as planned. However, no documents/data on the EIA of the project were provided from TANROADS.

(2) Resettlement and Land Acquisition

The Resettlement Action Plan (RAP) of the project had been formulated in accordance with the Tanzanian land management laws, and the land acquisition and resettlement had been carried out as planned. Two households became subject to resettlement, and a compensation of 19.3 million shillings was paid in total. Also, water catchment facilities of Dar es Salaam Water and Sewerage Authority (DAWASA) were demolished according to the plan and a compensation was made. No specific complaints, and such, have been received from residents.

(3) Fueling Local Economic Activity

The upgrading of the road has triggered the openings of large commercial facilities especially in the areas near Tegeta intersection and Gwaba intersection, as well as large-scale residential land and housing development along and near the road. The constructions of several modern buildings are under way at the time of ex-post evaluation. The interviews with roadside residents and shop owners also confirmed that new hospitals, supermarkets, etc. have been being opened, and businesses by local residents have become more active. Many of the youth, in particular, have started the manufacturing and sales of blocks and beds, carpentry work, sales of food/fruits/drinking water, services of three-wheeled bike (bajaj) and bike taxis, etc. Although various factors other than the upgrading of the road must have affected the development of the local economy, the development of the areas along and near the road must have progressed much more slowly than what has happened if this project had not been implemented.



Photo 1. Modern Buildings under Construction along the Road



Photo 2. Street Vendors along the Road

(4) Unexpected Negative Impact

After completion of this project, road flooding during the rainy season has become worse in some sections such as Africana intersection²⁴. Moreover, surface ponding due to drainage water from the road has become widespread in some areas, and residents have had difficulty in handling the issue in their daily lives. Many residents and shop owners expressed their frustration at the drainage water from the road during the site visits and the interviews. It is considered that the fundamental causes of the problem include the disorderly development of residential land and deforestation in the upstream areas of the road, as well as the municipal drainage connections that have not taken into account how much volume of flow they can handle. Still, the road drainage facilities constructed by the project, such as road crossing culverts and side ditches, have turned out to be not fully capable of managing flow volume during the rainy season, and this has also affected the issue in the end.

In this project, the side roads and the installation of auxiliary ditches just outside the roads, which had been proposed by the construction consultant, had become out of the scope due to budget constraints. Besides, the rehabilitations of a sediment basin at the upstream of the road and the existing drainage facilities had become out of the scope of the project for budgetary reasons as well. It appears that the plan should have been formulated by carefully taking into account components other than the main road, such as road drainage facilities, and a necessary budget for it should have been secured.

To summarize effectiveness and impact, the average traffic speed during peak hours at the time of ex-post evaluation turned out to be approximately 30 km/h, which fell short of the target speed of 42 km/h in the project completion year, with regard to effectiveness. However, since the completion of the project, large-scale residential land developments, and such, have been carried out in the areas along and near the road, and subsequently rapid population growth and a dramatic increase in traffic volume have taken place. In addition, the pavement improvement of the Msata road that runs between the Msata and Bagamoyo intersections was completed in March 2017, and thus the Northern Region and Dar es Salaam became connected through New Bagamoyo Road. Consequently, a large number of big cargo trucks and long-distance buses, which used to go through Morogoro Road, began using New Bagamoyo Road, and traffic volume has substantially increased. Taking these factors into consideration, it is highly likely that the target of the average traffic speed during the peak hours had been being achieved right after the completion of the project in 2014. Also, the target of the traffic capacity has been achieved at once when the project was completed as the output of the project was produced according to the plan. Furthermore, ensuring smooth and steady traffic through the separation of vehicles travelling at normal speed from those at slower speed has been mostly achieved.

Regarding impact, ensuring of smooth and steady traffic and shortening of travel time must have contributed to a reduction in transportation cost to a certain extent by saving gas expenses. Also, urban transport mobility has been enhanced through a large increase in the number of passenger bus services running

²⁴ At the time of ex-post evaluation, the rehabilitation and improvement of a road connecting to Africana intersection (approximately one kilometer long) is being carried out by TANROADS.

on New Bagamoyo Road after the completion of the project. Moreover, robust large-scale residential land development and commercial development have been brought in along and near the road, and growth in local economic activity and employment opportunities was observed.

In light of the above, the effectiveness and impact of the project are high.

3. 4. Sustainability (Rating: ②)

3. 4. 1. Institutional / Organizational Aspect of Operation and Maintenance

TANROADS, the executing agency of the project, was established in July 2000 and has jurisdiction over the development, maintenance, and management of the road networks under the auspices of the Ministry of Works, Transport and Communications (hereinafter referred to as "MWTC"). TANROADS has the board of directors which is comprised of 9 directors, including the chief executive officer who serves as the secretary to the board of directors. As shown in Table 7, the number of regular employees at TANROADS at the time of ex-post evaluation is 748 (2,257 including contract employees), and it has decreased by about 5% from 791 since the time of planning. Over the year, the number of employees has decreased by 38, as new hiring has been limited. However, TANROADS has been planning to push through a major reorganization after June 2018 and its preparation is under way²⁵. Nearly 200 new employees are planned to be hired accordingly²⁶. In light of the above, no specific problem has been found on the institutional aspect of operation and maintenance.

Table 7. Number of TANROADS Employees

(Unit: persons)

Department	2007 (at the time of planning)	2017	2018 (at the time of ex-post evaluation)
Maintenance	--	621	585
Business Support	--	61	57
Procurement & Contracts	--	9	8
Planning	--	53	59
Projects	--	21	18
Internal Audit	--	14	21
Legal Services	--	7	
Total	791	786	748

Source: TANROADS data

3. 4. 2. Technical Aspect of Operation and Maintenance

Through interviews with stakeholders including the construction consultant, and local road consultants, no specific problem has been confirmed about the technical levels of either TANROADS, its Dar es Salaam Regional Manager's Office, or the outsourced subcontractors. Even at the time of ex-post evaluation, the upgrading of a road (including side ditches) connecting to Africana intersection is being carried out, and thus

²⁵ The reorganization is planned mainly because the maintenance and management of airport facilities become under the jurisdiction of TANROADS.

²⁶ The reorganization is expected to be implemented as soon as approval from the Present's Office is obtained.

the road constructed by this project has been being further improved. Moreover, a large-scale maintenance and expansion work is underway at the section between Bagamoyo intersection and Bunju, which is a part of the road between Bagamoyo and Tegeta intersections (approximately 41 km) that joins Msata Road and New Bagamoyo Road. Thus, maintenance and expansion of the road network that further enhances the function of the target section of this project has been in progress, and it is considered to show that TANROADS has adequate maintenance skills. On a side note, almost all TANROADS engineers have university degrees in the fields such as civil engineering, road engineering, transportation engineering, and so on. In light of the above, there were no specific problems about the technical aspect of operation and maintenance.

3.4.3. Financial Aspect of Operation and Maintenance

TANROADS relies heavily on the Road Funds and the Development Funds for its revenues. The Development Funds are financed by the Consolidated Funds of the Ministry of Finance, which are allocated to TANROADS through MWTC²⁷. The Road Funds, on the other hand, are mainly financed by gasoline tax and overload charges, and 63% of the collected amount is allocated to TANROADS, 30% to municipalities, and 7% to MWTC.

As for the initial TANROADS budget for 2016/2017, both revenue and expenditure increased significantly from the previous year, as shown in Table 8. Yet, the actual total revenue turned out to be about 17% below the previous year's level because revenue from the Development Funds dropped significantly relative to the budget. Still, the actual expenditure increased about 47% and the maintenance management expenses/management construction costs rose about 2.8 times over the previous year. As a result, the balances for both the initial budget and the actual amount were in large deficits. According to TANROADS officials, however, its budget is managed through the medium-term expenditure framework (MTEF) and any amount of deficit will be financed next year through grant revenue (Development Funds) under this mechanism. Therefore, there is no concern about the financial stability of TANROADS at all.

Table 8. Changes in TANROADS Budget and Actual Amounts over Time

(Unit: million Tanzanian shillings)

	Item	2013/2014		2014/2015		2015/2016		2016/2017	
		Initial Budget	Actual	Initial Budget	Actual	Initial Budget	Actual	Initial Budget	Actual
Revenue	Road Funds Board	314,536	315,010	469,495	191,369	541,281	454,676	519,870	451,016
	Development Funds	-	-	-	-	251,653	767,979	1,222,116	527,898
	MWTC Consolidated Funds (Personal Emolument)	9,384	10,767	10,925	11,595	15,912	16,117	16,289	15,377
	Direct Donor Fund	4,500	1,245	-	-	-	-	-	83
	Finance Income	950	950	900	413	391	709	42,961	32,864

²⁷ In audited financial statements, the Development Funds and the Development Expenses have been treated as independent items since 2015/2016.

	Other	9,060	9,060	5,760	9,844	4,271	14,977	2,662	17,159
	Total	338,430	337,032	487,080	213,221	813,508	1,254,458	1,803,897	1,044,996
Expenditure ²⁸	Wages, Salaries and Employee Benefits	25,922	28,153	22,925	30,596	45,681	41,461	16,289	15,651
	Administration Costs	17,675	22,700	34,384	20,622	28,952	23,502	52,087	31,220
	Maintenance Management Expenses	9,720	11,421	23,553	10,025	486,831	270,571	1,012,402	751,612
	Maintenance Construction Costs	278,080	290,274	405,318	240,623				
	Development Expenses	-	-	-	-	251,653	1,012,990	1,410,104	1,023,100
	Finance Costs	111	174	900	214	391	226	80,859	31,266
	Other	-	0	-	-	-	-	154,300	126,749
	Total	331,508	352,722	487,080	302,080	813,508	1,348,750	2,726,041	1,979,597
	Surplus/(Deficit)	6,922	(15,690)	0	(88,859)	0	(94,292)	(922,144)	(934,601)

Sources: National Audit Office, *Report of the Controller and Auditor General on the Financial Statements of the Tanzania National Roads Agency for the Year Ended 30th June, 2014, 2015, 2016, and 2017.*

According to the balance sheets of TANROADS, its accumulated surpluses were negative, as shown in Table 9, and the amount of deficit increased from 2016 to 2017. Yet, net assets turned into surpluses because infrastructure assets such as roads and bridges became recognized as TANROADS' assets as TANROADS adopted the International Public Sector Accounting Standards, and capital amount (Taxpayers Funds) significantly increased accordingly. In short, there is no specific problem observed in the financial aspect of operation and maintenance.

Table 9. Balance Sheets of TANROADS

(Unit: million Tanzanian shillings)

	2013	2014	2015	2016	2017
Current assets	383,277	383,204	421,325	701,656	284,302
Non-current assets	494,653	1,349,979	1,889,109	4,756,596	19,539,672
Total assets	877,930	1,733,183	2,310,434	5,458,252	19,823,974
Current liabilities	454,397	887,435	1,186,291	1,951,295	1,096,605
Deferred income (Grant)	36,061	10,358	27,062	163,667	97,936
Non-current liabilities	484,227	896,258	1,163,927	3,530,978	434,165
Deferred income (Grant capital)	484,227	896,258	1,163,927	3,530,978	434,165
Total liabilities	938,624	1,783,692	2,350,218	5,482,272	1,530,770
Total net assets	(60,694)	(50,509)	(39,785)	(24,020)	18,293,203
Accumulated surplus	(66,880)	(56,696)	(45,971)	(30,206)	(281,707)
Total liabilities and Total net assets	877,930	1,733,183	2,310,434	5,458,252	19,823,974

Sources: National Audit Office, *Report of the Controller and Auditor General on the Financial Statements of the Tanzania National Roads Agency for the Year Ended 30th June, 2014, 2015, 2016, and 2017.*

Note: As of June 30 of each fiscal year.

²⁸ Maintenance Management Expenses refer to indirect department costs for the maintenance of the existing roads; Maintenance Construction Costs refer to direct costs necessary for the repair (maintenance) work of the existing roads; Development Expenses refer to costs necessary for constructions to develop new roads.

3.4.4. Status of Operation and Maintenance

Through the site visits and interviews with the officials concerned, it was confirmed that the recommendations made by the Japanese side during the defect liability period, such as removing weeds, cleaning road surface, and monitoring road pavement surface, have been mostly being carried out. The beauty of the road and its median strip is well-maintained particularly around the Lugalo barracks, as students from neighboring schools also participate to remove weeds and clean along the road (see Photo 3). When it comes to road drainage facilities, however, it was observed during the site visits that partially collapsed side ditches and laterally eroded road embankment had been left abandoned (see Photo 4). As mentioned, road flooding has become worse than before in some sections of the road, because the capacities of road crossing culverts and side ditches turned out not to be up to par to handle flow volume during the rainy season. Moreover, after the project completion, surface ponding due to water flowing from the road toward roadside houses has been posing a problem in residents' daily life in relatively widespread areas. During the interviews, a large number of residents voiced complaints against the road flooding and surface ponding during the rainy season in the areas along the road²⁹.

In light of the above, some minor problems have been observed in terms of the current status. Therefore, sustainability of the project effects is fair.



Photo 3. Well-Maintained Median Strip



Photo 4. Collapsed Side Ditch and Side Walk
Due to Heavy Rain

4. Conclusion, Lessons Learned and Recommendations

4.1. Conclusion

The objective of this project is to ensure smooth and steady traffic on the New Bagamoyo Road in Dar es Salaam by widening its 12.9-km target section between the Mwenge and Tegeta intersections, thereby contributing to the improvement of urban transport mobility and a reduction in the transportation cost of trade

²⁹ TANROADS officials think that adequate consideration had not been given to the basic design of the project's road drainage facilities. At the same time, they consider that the issue of surface ponding around roadside houses should, in principle, be resolved through urban planning rather than road improvement.

goods such as agricultural produce.

Because this project was consistent with Tanzania's national development policy, road sector strategy, and development needs at the times of planning and ex-post evaluation, as well as Japan's aid policy at the time of planning, its relevance is high. On the other hand, although the outputs of the project had been constructed and procured almost as planned, the project cost and the project period both exceeded the plan. Therefore, the efficiency is fair. As a result of improving New Bagamoyo Road, the driving time required during peak hours is reduced to a quarter of the level of the time of planning even at the time of ex-post evaluation, despite a dramatically increased traffic volume. Thus, the likelihood that the target of the average traffic speed would have been met had been measured immediately after project completion is high. In addition, the reduction of transportation cost is achieved to a certain extent, as the fuel cost of a traffic vehicle has been lowered due to a shorter driving time. Moreover, urban transport mobility is improved as the availability and frequency of public bus services have substantially increased after project completion. As evidenced by residential land and commercial developments along and near the road, positive impacts on fueling the local economy and increasing employment opportunities have also been recognized. Therefore, the effectiveness and impact of the project are high. As for the operation and maintenance of New Bagamoyo Road, no problems have been identified in terms of the institutional, technical, and financial capacities of the executing agency. However, there is some problem in the status of operation and maintenance because flooding and surface ponding in some roadside areas outside the road construction sites have become worsened after project completion. Therefore, the sustainability of the project is fair.

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

4. 2. Recommendations

4. 2. 1. Recommendations to the Executing Agency

None

4. 2. 2. Recommendations to JICA

None

4. 3. Lessons Learned

Formulating a Plan While Taking into Full Account the Components Other Than the Main Road, Such as Road Drainage Facilities, and Securing Funding to Implement It

The problem of road flooding and surface ponding in the areas along the road became worse in some sections of the road after completion of the project. Consequently, despite that the project has contributed not only to ensuring smooth and steady traffic and improving transport mobility but also to fueling the local economy, many residents have negative impression on the project.

The probable fundamental causes of the problem are disorderly residential land development and deforestation in the upstream areas of the road, as well as drainage connections without considering downstream capacities. Yet, the capacities of the drainage facilities, such as road crossing culverts and side ditches, constructed by the project also turned out not to be up to par to handle flow volume during the rainy season, and it affected the problem. The facts that drainage facilities outside the road construction site became out of the scope of this project and that a sediment basin at the upstream of the road and the existing drainage facilities had not been rehabilitated at the timing of the implementation of this project due to budget constraints have led to the problem as well.

Despite a major trunk road, no street lamps have been installed for budgetary reasons, and it has also pushed down the otherwise high overall reputation of the project as many consider it to have negatively impacted on the safety of driving at night. Although which components to include in the scope of the project should be judged on a case-by-case basis, it is deemed desirable that the plan of a project like this one should be formulated at the time of planning by carefully taking into account components other than the main road, such as road drainage facilities and auxiliary road structures as well, and its necessary budget should have been obtained³⁰.

³⁰ On a side note, a grant agreement that extends up to 3.78 billion yen for Phase 2 of this project has been signed for a target section of 4.3km. Considering that a target section of this project (Phase 1) was 12.9km and the actual amount borne by the Japanese side was 5.12 billion yen, it is a dramatic increase. The budget for the Phase 2 project cost reflects the expenses that had not been included in this project, such as rehabilitation of the drainage facilities outside the road construction sites, construction of the side roads, installation of street lamps, poor-quality soil surveys, and physical contingency (5%).

United Republic of Tanzania

FY 2017 Ex-Post Evaluation of Technical Cooperation Project Report

“Project for Capacity Development for Regional Referral Health Management / Project for
Capacity Development in Regional Health Management Phase II”

External Evaluator: Tomoko Shibuya, IC Net Limited

0. Summary

The aim of this project through Phase 1 and Phase 2 (hereinafter collectively referred to as the “Project”) was to develop the capacity and functions of Regional Health Management Teams (RHMTs) in all 21 regions (increased to 25 regions during the Project) of Tanzania, by developing training programs on managerial practices including Supportive Supervision (SS), for the Ministry of Health and Social Welfare¹ (hereinafter referred to as the “Ministry of Health (MOH)”) conducting SS to RHMTs, and for RHMTs conducting SS to Council Health Management Teams (CHMTs) and Regional Referral Hospitals (RRHs), while also clarifying the institutional framework, thereby contributing to the capacity development of RRHs and CHMTs as well as the improvement of health management at the regional level.

The Project had challenges in its design for Phase 1. The Project was launched when the structure of MOH for RHMT had not been established, and a wide range of plans, such as the strengthening of cooperation among the central, regions, and districts and the development of the capacity of RHMTs, were to be developed in three years, a limited period. However, the Project is highly relevant as its purpose is consistent with the policy and development needs of Tanzania and Japan’s ODA policy with regard to “Development of administrative managerial capacity for providing public services with the progress in decentralization.”

The roles of RHMTs are to inform CHMTs and RRHs of the national policy, have them develop appropriate plans, and carry out activities according to the plans through SS. The Project clarified the roles and largely established a structure to enable RHMTs to function. The supervision capacity of RHMTs also improved. However, one of the Indicators to determine the effectiveness of the Project “The annual average number of opportunities that RHMTs conduct SS to CHMTs and RRHs”, which is one of the most important indicators, was not achieved. As a result, although the Overall Goal Indicator “Approval rate of Comprehensive Council Health Plans (CCHPs)” was achieved, the “Submission rate of Comprehensive Hospital Operation Plans (CHOPs)” was not achieved. According to a hearing survey of CHMTs and RRHs in five regions, the importance of RHMTs had been partly recognized but limited. Considering all the matters above, the effectiveness and impacts of the Project are fair.

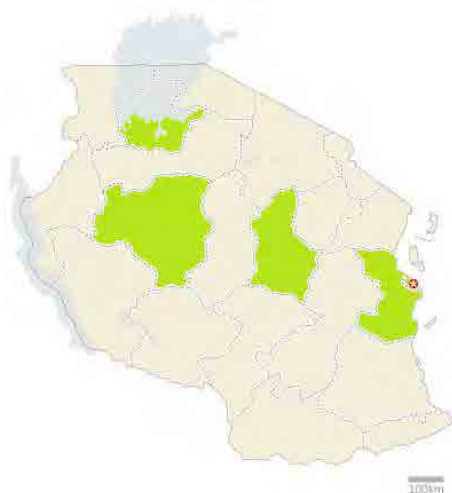
The efficiency of the Project is high as its cost and period are within the plan.

¹ During the Project, the name of the ministry was “Ministry of Health and Social Welfare,” but it changed to “Ministry of Health, Community Development, Gender, Elderly and Children” at the time of the ex-post evaluation. In this report, it is described as “Ministry of Health (MOH)” for both during the Project and at the time of the ex-post evaluation.

As for sustainability, the Project does not have a new regional health system or a mechanism to strengthen the roles and functions of RHMTs because of a structural change after Project completion and a high percentage of resignations, turnover, and transfers. Problems have been observed with regard to the policy background, organizational, technical, and financial aspects. Therefore, sustainability of the Project effects is low.

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

1. Project Description



Project Locations



Dodoma RHMT weekly conference

Note: The Project was intended for all over Tanzania.

Note: The green parts are regions subject to the field survey for the ex-post evaluation.

1.1 Background

In Tanzania, health sector reform has been carried out since 1994 to promote a shift from central government-led health administration to district government-led health administration, in order to provide basic health services to the public. In the reform, it was expected that CHMTs would take the lead in providing health services based on the council health plan and managed and supervised primary healthcare facilities. On the other hand, RHMTs had not been formulated as a team in some regions, and although they were established before 2008, they were not authorized by law. The health policy developed in 2007 stipulated the necessity of RHMT in all regions, and it was approved as an organization based on the policy in 2008 when the Project was launched. However, the development of an environment and a system to enable RHMT, as a branch organization of the central government, to disseminate the policy throughout districts and to provide administrative support to the districts, had lagged.

With the progress in decentralization, Japan was requested by the government of Tanzania to develop the administrative capacity of RHMTs based on its experience in implementing

“Morogoro Health Project (MHP)” from April 2001 to March 2007.² According to the request, Japan decided to implement the “Project for Capacity Development in Regional Health Management” for six years from April 2008³ with the aim of developing the managerial capacity of RHMTs.

1.2 Project Outline

		Phase 1 ⁴	Phase 2 ⁵
Overall Goal		Regional Referral Health Management (RRHM) is improved to provide sustainable health services.	Managerial performance of Regional Referral Hospital Management Teams (RRHMTs) and Council Health Management Teams (CHMTs) is improved.
Project Purpose		Regional Health Management Teams (RHMTs) are strengthened in order to provide quality regional referral health services.	Performance of all RHMTs in supporting CHMTs and RRHMTs is improved.
Output(s)	Output 1	Management skills of RHMTs to respond to changing environments and new technologies are strengthened.	Management skills of RHMTs in supporting CHMTs and RRHMTs are improved.
	Output 2	Supportive Supervision from RHMTs to CHMTs is integrated and functions.	Roles and functions of RHMT to support CHMTs and RRHMTs are institutionalized and consolidated.
	Output 3	Central Supportive Supervision (Central Management Supportive Supervision; hereinafter “CMSS”) from the central to RHMTs is institutionalized in MOH & PMORALG.	Guidelines and tools for RHMTs to perform their functions are developed. ⁶
	Output 4	A coordinated mechanism in responding to local issues among central and regional levels is strengthened.	
Total cost (Japanese Side)		351 million yen	354 million yen
Period of Cooperation		April 2008–March 2011	November 2011–October 2014

² In MHP, regional and district administrators cooperated to examine and analyze health issues of regional residents, and the issues were reflected in annual regional and district plans, considering consistency with the national plan and the participation of local stakeholders (personnel related to local governments). Through the process of preparing a budget and implementing the project, efforts were made to develop the capacity of RHMTs and CHMTs as well as strengthen the cooperative relationship between regions and districts.

³ The scheduled project period was three years initially but changed to six years in total because of the formulation of Phase 2.

⁴ In phase 1, the description of PDM version 5 (developed in October 2010) in Japanese is partially different from the one in English. This ex-post evaluation was conducted based on the English version, which contains records of signatures of MOH and JICA to confirm the PDM.

⁵ In phase 2, the description of PDM version 3 (developed in October 2013) in Japanese is partially different from the one in English. This ex-post evaluation was conducted based on the English version of PDM version 3 (developed in 2013 October). In the terminal evaluation, “More than 70% of CHOPs are submitted to MOH and PMORALG by FY 2016/17” was used for Overall Goal Indicator 2, instead of “More than 70% of CHOPs are approved in the first submission at the Basket Fund Committee (BFC) meeting by FY 2016/17.” The possible reason is the project could not obtain “approval rate,” because the participants of CHOP assessment training were not involved in the CHOP assessment process, and there was no assessment process during the project implementation period as mentioned in the project completion report.

⁶ In phase 2, the PDM version 3 (developed in October 2013) in English mentioned that “Guidelines and tools for RHMTs to perform their functions are improved,” while the one in Japanese said “Guidelines and tools for RHMTs to perform their functions are developed.” The ex-post evaluation used the latter description in Japanese because the project focused on “development.”

Implementing Agency	MOH, Prime Minister's Office, Regional Administration and Local Government (PMORALG) ⁷	MOH
Other Relevant Agencies / Organizations	None	None
Supporting Agency/Organization in Japan	Foundation for Advanced Studies on International Development, Moe Consulting Inc.	None
Related Projects	<p>[Technical cooperation] “Morogoro Health Project (MHP)” (2001–2007) “Strengthening Development of Human Resource for Health” (November 2010–November 2014) “Health Systems Strengthening for HIV and AIDS Services Project” (October 2010–October 2014) “Project for Strengthening Hospital Management of Regional Referral Hospitals” (May 17, 2015–May 16, 2020)</p> <p>[Expert] Dispatch of Health Policy Advisor (March 2017–March 2019)</p>	

Source: Materials provided by JICA

Figure 1 shows an outline of the Project. Through two phases, the Project aimed at the capacity development of RHMTs and effective support by RHMTs to CHMTs and RRHs. In other words, the Project aimed to have RHMTs promote the independent development of CHMTs and RRHs with the progress in decentralization, and improve health services in cooperation with CHMTs and RRHs. Phase 1 clarified the roles and functions of RHMTs and developed their capacity in the health system of Tanzania, through the development of CMSS by MOH to RHMTs. Based on the Outputs and experience in Phase 1, Phase 2 further developed the managerial capacity of RHMTs and, through SS by RHMTs to CHMTs and RRHs, developed the managerial capacity of CHMTs and RRHs.

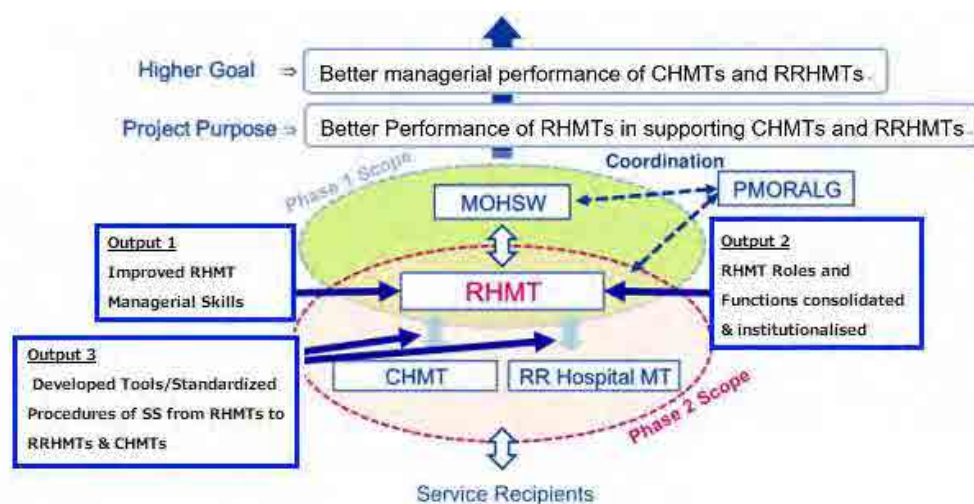


Figure 1: Outline of Project Design

Note: Descriptions of the Outputs indicate those in Phase 2.

⁷ In the restructuring of 2015, PMORALG was transferred and renamed President's Office-Regional Administration and Local Government (PORALG). In this report, subsequent discussions of events from 2015 will refer to PORALG.

Source: Created by the evaluator based on materials provided by JICA

1.3 Outline of the Terminal Evaluation

1.3.1 Achievement Status of Project Purpose at the Terminal Evaluation

It was believed that the Project Purpose would be achieved by the completion of the Project. Concerning one of the five Indicators of the Project Purpose, “The annual average number of RHMTs which conduct Supportive Supervision (SS) quarterly to RRHMTs and all CHMTs with standardized tools reached 75% for RRHMTs and 90% for CHMTs by FY2013/14,” the achievement of the numerical target on SS to CHMTs was “challenging.” However, it was evaluated that the numerical target on SS to RRHs would be achieved. As for “All RHMT Annual Plans are submitted on time and approved by MOH by June 2014,” the achievement of the numerical target (100% of RHMTs) was “challenging.” However, as the Indicators on the capacity of RHMTs on plan creation had been achieved at the time of the terminal evaluation, it was evaluated that the Project Purpose would be achieved by the completion of the Project.

1.3.2 Achievement Status of Overall Goal at the Terminal Evaluation (including other impacts.)

It was determined that the Overall Goal of the Project would be achieved within three to five years after the completion of the Project. At first, the department of MOH in charge of CHMT of the time did not approve the involvement of RHMTs with the appraisal of CCHP⁸. However, the involvement of RHMTs in the appraisal process has been approved since 2014/15, which is the year when the project completed. Based on this, it was expected at the terminal evaluation that RHMT’s assistance would be provided on a full scale after the completion of the Project, and the CCHP approval rate would increase in the first appraisal. As for good practices, it was confirmed at the terminal evaluation that they have been widely shared both at the national and regional levels.

1.3.3 Recommendations from the Terminal Evaluation

At the time of the terminal evaluation of Phase 2, the following recommendations were provided to the implementing agencies:

Table 1: Recommendations at the Time of the Terminal Evaluation

Implementing Agency	Recommendations
(1) Project Team	• Development of a sustainable mechanism (exit strategy) of SS and training

⁸ A structure to secure a certain level of quality of CCHP was set through the Project. By conducting appraisal of CCHP by RHMT after CHMT creates CCHP and sharing its score with CHMT, the structure will secure the quality of CCHP before it is submitted to MOH.

(2) MOH	<ul style="list-style-type: none"> • Strengthening cooperation with PMORALG • Efforts to strengthen and continue the functions of regional health service units • Simplification of planning, report creation, and appraisal process of CCHP and CHOP • Avoidance of frequent updates of the district health plan creation program system⁹ (PlanRep) • Transfer of authority in CCHP approval system from MOH to RHMTs • Strengthening RRH management assistance
(3) RHMT	<ul style="list-style-type: none"> • Strengthening involvement of RHMTs (There are some CHMTs and communities directly communicating with the central government without the involvement of RHMTs.)

Source: Phase 2 Terminal Evaluation Report

2. Outline of the Evaluation Study

2.1 External Evaluator

Tomoko Shibuya, IC Net Limited

2.2 Duration of Evaluation Study

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

Duration of the Study: November 2017–December 2018

Duration of the Field Study: February 14–March 23, 2018; June 19–July 4, 2018

2.3 Constraints during the Evaluation Study

Since the completion of the Project in October 2014, the structure of the governmental organization related to health administration has changed twice. In 2015, the Division of Health, Social Welfare and Nutrition was established in PORALG, which has made the involvement of PORALG with RHMTs strong and has created a system requiring close cooperation between MOH and PORALG. In addition, after the presidential statement in November 2017, the jurisdiction over RRHs was changed from RHMTs under PORALG to MOH¹⁰. The field study for the ex-post evaluation was conducted during the transition period before such structural change. Therefore, the sustainability of the Project had to be evaluated through a description of the current state based on the limited information collected by the end of the second field study and future prospects for sustainability based on the description.

The hearing survey was conducted in MOH, PORALG, development donor, RHMTs and RRHs in five out of 26 regions, with two CHMTs in each region, and information was collected from at least two people in each organization. As people in the regions who cooperated with the hearing survey were selected from those well-versed in CCHP and CHOP, information obtained from them is considered to be opinions representing the organizations. The five regions where

⁹ CCHP is required to be submitted by using software called “PlanRep.” However, as PlanRep made many system errors, it was frequently updated.

¹⁰ At the time, as budgets for RRHs were under PORALG, a full-scale change was made from the new fiscal year in July 2018.

the hearing survey was conducted were determined according to the RHMT performance ranking¹¹ obtained during the Project, and from considering the travelling process, regions representing all the regions after being classified into three groups (high, middle, and low) based on the degree of socioeconomic development estimated from urbanization and literacy rates. Dar es Salaam is the largest city in Tanzania, Dodoma is the capital of Tanzania, and Mwanza is the second largest city in Tanzania. As excellent human resources tend to concentrate in urban areas, survey results in the five regions may be overestimated. Moreover, questionnaires were distributed to all regions and answers were obtained from 12 regions. However, as qualitative information was insufficient,¹² only quantitative information was used.

As described above, the hearing survey was conducted in five out of 26 regions, and part of the questionnaires could not be analyzed. Therefore, it cannot be considered that information obtained through the hearing survey is opinions representing the target people of the Project.

3. Results of the Evaluation (Overall Rating: C¹³)

3.1 Relevance (Rating: ③¹⁴)

3.1.1 Consistency with the Development Plan of Tanzania

At the time of the planning of Phase 1, “Strengthening the roles of regions with the progress in decentralization” and “Establishment of RHMT in each region and strengthening its roles” were specified in the *Poverty Reduction Strategy I* (2005–2010; developed in 2005) and the *National Health Policy* (developed in 2007), respectively.

At the time of the completion of Phase 1 and the planning of Phase 2, the *Health Sector Strategic Plan Three (HSSP III)* (2009–2015; developed in 2009) and the *Poverty Reduction Strategy II* (2010–2015; developed in 2010) described that RHMT was, as a branch organization of MOH, an important organization in the health system for contributing to the improvement of the quality of health services at the regional or lower level. These documents were still effective at the time of the completion of Phase 2. Based on this, it was considered that the Project Purpose was consistent with policy documents, but the launch of the Project was a little too early for the following reasons.

Although the strengthening of the roles of regions was described in the policy documents with the progress in decentralization, the establishment of RHMT in each region was described for the first time in the *National Health Policy* developed in 2007, the year before the launch of the

¹¹ With the aim of improving the performance of RHMTs and increasing the motivation and organizational power of RHMTs of all regions, the performance ranking was introduced, with a commendation system based on the ranking, in the second year of Phase 2 of the Project.

¹² It is considered to be a cause that neutral answers were provided to the survey because the questionnaires distributed to RHMTs were not submitted to the evaluator but submitted to PORALG having jurisdiction over RHMTs, or the information could not be used for the evaluation because no specific data was provided due to insufficient understanding of the Project.

¹³ A: Highly satisfactory, B: Satisfactory, C: Partially satisfactory, D: Unsatisfactory

¹⁴ ③: High, ②: Fair, ①: Low

Project. In addition, the purpose of the Project was to substantially realize “Improvement of the local health administrative capacity through strengthening of the management and operation system at the regional level,” which was specified in HSSP III as a prioritized policy. However, the document of HSSP III was developed in the year following the launch of the Project. Actually, through efforts of the Project, a responsible person controlling RHMT-related projects and having decision-making authority was assigned and the regional health service unit was established in MOH one year and four months after the launch of the Project. As described above, the implementation system of the Tanzanian side had not been established at the time of the launch of the Project, and it was not considered that planned activities could be sufficiently carried out.

3.1.2 Consistency with the Development Needs of Tanzania

In Tanzania, decentralization has progressed since the health sector reform in 1994, which has promoted a shift from central government-led health administration to district government-led health administration. Therefore, financial and technical support of the central government and donors was mainly provided on a priority basis to CHMTs, having a responsibility for health service delivery, and the capacity of CHMTs was higher than that of RHMTs. In addition, as there were many health policies and guidelines at the time of the planning of the Project, procedures to thoroughly inform districts, having a responsibility for health service delivery, of the health policies and guidelines were not consolidated. This resulted in the generation of problems. For example, local governments could not provide health services according to national healthcare standards, and the quality of health services varied depending on the capacity of CHMT. In Tanzania, having a vast national land, there was a great need to develop the capacity of RHMTs in order to disseminate policies and conduct SS to CHMTs while mediating between the central government and CHMTs.

3.1.3 Consistency with Japan’s ODA Policy

The *Country Assistance Program for Tanzania* (developed in 2000) positioned the “Improvement of local basic medical technology, enhancement of the referral system, and residents’ educational activities” as priority sectors, and JICA’s Country-specific Program, which was an attached document of the *Country Assistance Program*, specified the importance of assistance for health administration reform. The *Country Assistance Program for Tanzania* (developed in 2008, the year the Project was launched) stated that it focused on the local health administration system against vulnerable health administration with the rapid progress in decentralization. The *Country Assistance Policy for the United Republic of Tanzania* (developed in 2012), established in the year following the launch of Phase 2, specified the development of the administrative and financial managerial capacity as its policy. In all these documents,

“Development of the administrative managerial capacity for providing public services” was set as the comprehensive assistance policy for Tanzania, with the progress in decentralization. Therefore, the Project was consistent with Japan’s policy at the time of planning.

3.1.4 Appropriateness of the Project Plan and Approach

The project plan and approach were appropriate to a certain degree. As shown in Figure 1, Phase 1 promoted the strengthening of cooperation between MOH and RHMTs, improvement of the basic managerial capacity of RHMT employees, and strengthening of cooperation between RHMTs and CHMTs. Phase 2 focused on the capacity improvement of RHMTs and SS among RHMTs, RRHs, and CHMTs. In Phase 1, a responsible person in MOH controlling RHMT-related projects and having decision-making authority was not assigned at first, and it was difficult to assist newly established RHMTs. Considering such conditions, it was difficult to achieve the goal of Phase 1 in the period of three years because of a wide range of project contents as described above. Therefore, the change in project contents in Phase 2 was considered practical, considering the capacity and structure of MOH at the time.

In addition, as described in “3.2 Effectiveness and Impacts,” Phase 1 had some planning issues. For example, the achievement could not be measured due to no numerical targets being set,¹⁵ and the Indicators were not those to be determined objectively. The latter was pointed out at the terminal evaluation, but the PDM¹⁶ was not changed by the completion of the Project. The PDM for some Output Indicators was also not changed after determining that target activities were not carried out. It is considered that a change in the PDM immediately before the completion of the Project was difficult as the change requires the agreement of stakeholders. However, it is desirable to set specific and collectible Indicators, including numerical targets, and promptly change the PDM.

As specific numerical targets were defined in Phase 2, it is considered that a practical PDM was created. However, the original roles of RHMTs are to control CHMTs and RRHs and support their plans and activities. Therefore, it was desirable to include Indicators to be achieved by RHMTs, such as a regular meeting between Regional Medical Officer (RMO) and District Medical Officer (DMO)/ Medical Officer in Charge (MOI), etc., in addition to SS.

In light of the above, the relevance of the Project is high as its implementation is sufficiently consistent with the development policy and development needs of Tanzania and Japan’s ODA policy. However, there are still issues in the plan and approach of Phase 1.

¹⁵ As examples of Indicators for which specific numerical targets were not included, there are: Output 1 Indicator 1 “Knowledge level of participants on training topics is improved,” Indicator 2 “Number of RHMT members trained under the Technical Cooperation-Regional Referral Health Management (TC-RRHM) is increased,” and Output 4 Indicator 2 “Opportunities of RHMT meetings at zonal level are increased.”

¹⁶ PDM (Project Design Matrix) indicates the basic plan of the Project.

3.2 Effectiveness and Impacts¹⁷ (Rating: ②)

3.2.1 Effectiveness¹⁸

Both for Phase 1 and Phase 2, the purpose to be achieved by the completion of the Project was that RHMTs effectively provided support to activities of CHMTs and Regional Referral Hospital Management Teams (RRHMTs) and carried out activities at an appropriate time based on appropriate plans they developed.

3.2.1.1 Achievement of Project Purpose

[Phase 1]

At the time of the terminal evaluation, it was determined that the two Indicators of the Project Purpose were not indicators that can objectively measure changes of the capacity of RHMTs. Before the ex-post evaluation, there was an attempt to set supplemental indicators, but MOH did not have data of the time, and there is little qualitative information on the strengthening of the functions of RHMTs. Therefore, the achievement of the Project Purpose cannot be evaluated.

Table 2: Achievement of Project Purpose (Phase 1)

Purpose	Indicator	Result
Regional Health Management Teams (RHMTs) are strengthened in order to provide quality regional referral health services.	Capacity assessment results of RHMTs are improved between 2008–2011, to respond to demands of both the Central and Districts.	The performance of RHMTs cannot be determined objectively only by the score.
	Task assessment results of RHMTs are improved between 2008 and 2011.	

Source: Materials provided by JICA

In Phase 1, the policy dissemination guideline was not developed (Output 2 Indicator 3) and the involvement of PMORALG with CMSS was limited, but there were no major problems with the establishment of the structure of CMSS at the time of the completion of the Project. This resulted in the achievement of the institutionalization of CMSS, the coordination mechanism between the central and RHMTs, and the improvement of management knowledge of RHMT employees to some extent.¹⁹ However, according to the hearing survey of MOH, RHMTs actually had enough knowledge to provide support to CHMTs at the time of the completion of Phase 1, but the capacity, structure, and tools had not been established. Of the activities carried out in Phase 1, those related to policy dissemination, CMSS, and the coordination and support mechanism between the central and RHMTs were not included in the PDM for Phase 2. In

¹⁷ Sub-rating for Effectiveness is to be put with consideration of Impact.

¹⁸ The development status of the Project Purpose and Outputs at the time of the ex-post evaluation should be described in the column for impacts, but is described in the column for effectiveness, in order to make a comparison with achievement at the time of Project completion.

¹⁹ For details, refer to Appendix 1

addition, according to the hearing survey of the implementing consultants, the cooperation between the central and RHMTs was limited.

At the time of the ex-post evaluation, there were issues in maintaining the expression of effects of Phase 1. In Phase 1, for the delivery of standard health services, RHMTs prepared a policy dissemination package and distributed it to all regions in order to disseminate the health policy and guideline to CHMTs. At the time of the ex-post evaluation, RHMTs, CHMTs, and RRHs in five regions where the hearing survey was conducted, recognized that RHMTs had a role in disseminating the policy, and such role functioned to some extent. However, the policy dissemination package could not be found in all the five regions. In addition, there were many cases where the policy and guideline were directly shared between the central and CHMTs or RRHs in the five regions, without the involvement of RHMTs. It is necessary to reconfirm and improve the flow of policy dissemination.

Furthermore, CMSS to be conducted both by MOH and PORALG was conducted only by MOH, and the frequency of CMSS has been reduced year by year because of a budget shortfall. Although the Division of Health, Social Welfare and Nutrition was established in PORALG in 2015, Outputs of this Project, such as guidelines, structure, and tools for CMSS, etc., have not been taken over by MOH employees who were subject to CMSS capacity development to PORALG.

Table 3: Number of RHMTs where CMSS was conducted

During Phase 1	During Phase 2				After Project Completion		
2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
22	13	8	NA	NA	12	8	6

Source: Phase 1 Completion Report and questionnaire (MOH)

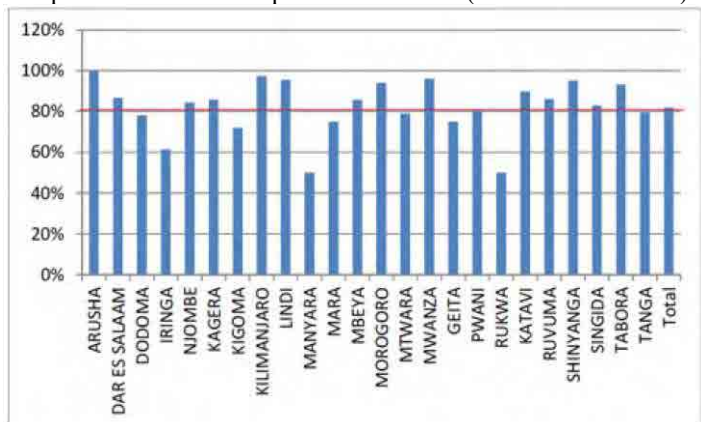
[Phase 2]

Table 4: Achievement of Project Purpose (Phase 2)

Purpose	Indicator	Result	Achievement																																											
Performance of all RHMSs in supporting CHMTs and RRHMTs is improved.	The annual average number of RHMTs which conduct Supportive Supervision (SS) quarterly to RRHMTs and all CHMTs with	[SS to CHMTs by using tools]	At the time of Project completion: Not achieved At the time of the ex-post evaluation: Not achieved																																											
		<ul style="list-style-type: none">At the time of Project completion and at the time of the ex-post evaluation, the rate of SS did not reach the target of 90%.RHMTs started to use Regional Management Supportive Supervision (RMSS) tools for CHMTs (RMSS-C)²⁰ in FY 2012/13 fourth quarter.																																												
		Rate of RHMTs that conducted SS to all CHMTs by using tools																																												
		<table><tr><th rowspan="3"></th><th colspan="8">During Phase 2</th></tr><tr><th colspan="4">2012/2013</th><th colspan="4">2013/2014</th></tr><tr><th>Q1</th><th>Q 2</th><th>Q 3</th><th>Q 4</th><th>Q 1</th><th>Q 2</th><th>Q 3</th><th>Q 4</th></tr><tr><td>Rate of SS (%)</td><td>43</td><td>43</td><td>71</td><td>86</td><td>52</td><td>62</td><td>60</td><td>76</td></tr><tr><td>Rate of the creation of SS reports (%)</td><td>38</td><td>43</td><td>67</td><td>81</td><td>52</td><td>62</td><td>56</td><td>72</td></tr></table>			During Phase 2								2012/2013				2013/2014				Q1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Rate of SS (%)	43	43	71	86	52	62	60	76	Rate of the creation of SS reports (%)	38	43	67	81	52	62	56	72
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²⁰ RMSS-C includes the check list, progress confirmation sheet, SS register, and SS report.

standardized tools reached 75% for RRHMTs and 90% for CHMTs by FY2013/14.	<table><tr><th rowspan="3"></th><th colspan="8">After Project Completion</th></tr><tr><th colspan="4">2015/2016</th><th colspan="4">2016/2017</th></tr><tr><th>Q1</th><th>Q2</th><th>Q3</th><th>Q4</th><th>Q1</th><th>Q2</th><th>Q3</th><th>Q4</th></tr><tr><td>Rate of SS (%)</td><td>NA</td><td>78</td><td>95</td><td>95</td><td>50</td><td>48</td><td>76</td><td>98</td></tr></table> <p>2015/16 annual average: NA (because data for Q1 is unknown) 2016/17 annual average: 68%</p> <p>Note: The gray parts indicate periods before the introduction of standardized tools. Note: Q1, Q 2, Q 3, Q 4 indicate the first quarter, the second quarter, the third quarter, and the fourth quarter, respectively. Source: Completion Report, questionnaire (MOH)</p> <p>[SS to RRHMTs by using tools]</p> <ul style="list-style-type: none">• The indicator did not reach the target of 75% at the time of Project completion. There was no data at the time of the ex-post evaluation.• The reason why the indicator was not achieved at the time of Project completion was due to a delay in the creation of RMSS tools for RRHs (RMSS-H) because the MOH’s intention for CHOPs was unclear.• During training between November and December 2013, it was recommended to conduct SS from FY 2013/14 third quarter (January–March). <p>Rate of RHMTs (in 21 regions) that conducted SS to RRHs by using tools</p> <table><tr><th rowspan="3"></th><th colspan="2">During Phase 2</th></tr><tr><th colspan="2">FY 2013/14</th></tr><tr><th>Third quarter</th><th>Fourth quarter</th></tr><tr><td>Rate of SS (%)</td><td>71% (15/21)</td><td>62% (13/21)</td></tr><tr><td>Rate of the creation of SS reports (%)</td><td>71% (15/21)</td><td>62% (13/21)</td></tr></table> <p>Source: Completion Report Note: The Completion Report did not state the reason why 25 regions were not the target, but 21 regions were. It is guessed that new regions were not subject to the monitoring during the period listed.</p>		After Project Completion								2015/2016				2016/2017				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Rate of SS (%)	NA	78	95	95	50	48	76	98		During Phase 2		FY 2013/14		Third quarter	Fourth quarter	Rate of SS (%)	71% (15/21)	62% (13/21)	Rate of the creation of SS reports (%)	71% (15/21)	62% (13/21)	
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All RHMT Annual Plans are submitted on time and approved by MOH by June 2014.	<ul style="list-style-type: none">• The rate of RHMTs that submitted their annual plans on time improved from 19% at the time of the submission of FY 2012/13 plan to 76% in FY 2013/14 and 72% in FY 2014/15. However, the target of 100% was not achieved. As the newly established four regions have been included since the submission of FY 2014/15 plan, it might be difficult to achieve the numerical target of 100%.• After Project completion, the rate of RHMT annual plans submitted on time was high, 92%, in two consecutive years. However, the target of 100% was not achieved. <p>Rate of RHMTs that submitted their annual plans on time</p> <table><tr><th colspan="4">During Phase 2</th></tr><tr><th>2011/12</th><th>2012/13</th><th>2013/14</th><th>2014/15</th></tr><tr><td>No information</td><td>19% (4/21)</td><td>76% (16/21)</td><td>72% (18/25)</td></tr></table> <table><tr><th colspan="2">After Project Completion</th></tr><tr><th>2015/16</th><th>2016/17</th></tr><tr><td>92% (23/25)</td><td>92% (24/26)</td></tr></table> <p>Note: Until FY 2013/14, 21 regions, excluding new regions, had been the target. Source: Regional health service unit, Completion Report, questionnaire (MOH)</p>	During Phase 2				2011/12	2012/13	2013/14	2014/15	No information	19% (4/21)	76% (16/21)	72% (18/25)	After Project Completion		2015/16	2016/17	92% (23/25)	92% (24/26)	At the time of Project completion: Not achieved At the time of the ex-post evaluation: Not achieved																													
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80% or more of RHMTs get a score of 70 or higher out of 100 points in the RHMT annual plan assessment by June 2014.	<div>Rate of RHMTs gaining 70 points or higher</div> <div>During Phase 2</div> <table><tr><td>2011/12</td><td>2012/13</td><td>2013/14</td><td>2014/2015</td></tr><tr><td>43% (9/21)</td><td>86% (18/21)</td><td>88% (22/25)</td><td>96% (24/25)</td></tr></table> <div>After Project Completion</div> <table><tr><td>2015/16</td><td>2016/17</td></tr><tr><td>92% (23/25)</td><td>88% (23/26)</td></tr></table> <div>Source: Project materials, questionnaire (MOH)</div> <ul style="list-style-type: none">The rate reached 86% in the FY 2012/13 plan and 96% in the FY 2014/15 plan, which exceeded the target of 80%.The target score of 70 points has been achieved since Project completion.According to the central government, which conducts appraisal, it is appreciated that RHMTs created and submitted their annual plans that were systematized during the Project. On the other hand, it is necessary to improve the plans as their quality did not reach the standard level.	2011/12	2012/13	2013/14	2014/2015	43% (9/21)	86% (18/21)	88% (22/25)	96% (24/25)	2015/16	2016/17	92% (23/25)	88% (23/26)	At the time of Project completion: Achieved At the time of the ex-post evaluation: Achieved																																								
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60% or more of RHMTs submit the quarterly progress reports on time by October 2014.	<ul style="list-style-type: none">Since FY 2013/14, new regions that have taken basic training have been required to submit quarterly progress reports. The rate of submission was 88% in the first quarter and the second quarter. As a whole, the Indicator target of 60% or higher was achieved even in a busy season.After Project completion, 60% or more of RHMTs submitted the quarterly progress reports on time in each quarter both in FY 2016/17 and FY 2015/16.Since the establishment of the Division of Health, Social Welfare and Nutrition in PORALG, which has jurisdiction over RHMTs, a person in charge of RHMTs (called the “Guardian”) in the division has had a role in reminding RHMTs of the submission of reports and plans.	At the time of Project completion: Achieved At the time of the ex-post evaluation: Achieved																																																				
Over 80% of annually planned activities are implemented by 60% or more of the RHMTs at the end of FY 2013/14.	<ul style="list-style-type: none">At Project completion, 16 out of 25 regions (64%) carried out 80% or more of the activities scheduled in their annual plans and achieved the Indicator.The remaining nine RHMTs had the capacity to carry out planned activities but could not carry them out mainly due to insufficient financial resources.Although data on all the regions was not available at the time of the ex-post evaluation, 12 regions that provided answers to the questionnaire achieved the Indicator. <div>Implementation rate of planned activities (FY 2013/14 results)</div>  <table><caption>Implementation rate of planned activities (FY 2013/14 results)</caption><thead><tr><th>Region</th><th>Implementation Rate (%)</th></tr></thead><tbody><tr><td>ARUSHA</td><td>100</td></tr><tr><td>DAR ES SALAAM</td><td>85</td></tr><tr><td>DODOMA</td><td>75</td></tr><tr><td>IRINGA</td><td>60</td></tr><tr><td>NIOMBE</td><td>85</td></tr><tr><td>KAGERA</td><td>85</td></tr><tr><td>KIGOMA</td><td>70</td></tr><tr><td>KILIMANJARO</td><td>95</td></tr><tr><td>LINDI</td><td>95</td></tr><tr><td>MANYARA</td><td>50</td></tr><tr><td>MARA</td><td>75</td></tr><tr><td>MBEYA</td><td>85</td></tr><tr><td>MOROGORO</td><td>95</td></tr><tr><td>MTWARA</td><td>75</td></tr><tr><td>MWANZA</td><td>95</td></tr><tr><td>GEITA</td><td>75</td></tr><tr><td>PWANI</td><td>80</td></tr><tr><td>RUKWA</td><td>50</td></tr><tr><td>KATAVI</td><td>90</td></tr><tr><td>RUVUMA</td><td>85</td></tr><tr><td>SHINYANGA</td><td>95</td></tr><tr><td>SINGIDA</td><td>85</td></tr><tr><td>TABORA</td><td>95</td></tr><tr><td>TANGA</td><td>80</td></tr><tr><td>Total</td><td>80</td></tr></tbody></table> <div>Source: Completion Report</div>	Region	Implementation Rate (%)	ARUSHA	100	DAR ES SALAAM	85	DODOMA	75	IRINGA	60	NIOMBE	85	KAGERA	85	KIGOMA	70	KILIMANJARO	95	LINDI	95	MANYARA	50	MARA	75	MBEYA	85	MOROGORO	95	MTWARA	75	MWANZA	95	GEITA	75	PWANI	80	RUKWA	50	KATAVI	90	RUVUMA	85	SHINYANGA	95	SINGIDA	85	TABORA	95	TANGA	80	Total	80	At the time of Project completion: Achieved At the time of the ex-post evaluation: Data unavailable
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Total	80																																																					

		Implementation rate of planned activities in 12 regions (FY 2016/17 results)			
		Morogoro	Tabora	Katavi	Mbeya
		62.50%	About 80%	81%	90%
		Iringa	Mara	Shinyanga	Arusha
		More than 90%	90%	80%	100%
		Rukwa	Mwanza	Pwani	Dar es Salaam
		85%	90%	80%	96%
		Source: Questionnaire for all regions			

Source: Materials provided by JICA, questionnaire (MOH and RHMT)

In Phase 2, in addition to the development and introduction of practical tools for conducting SS to RRHs and CHMTs, efforts were made to clarify the roles of RHMTs and improve their knowledge and skills for the creation and appraisal of regional health annual plans, CCHPs, and CHOPs. Activities to support CHMTs and RRHs were carried out by RHMTs, the quality of annual plans of RHMTs improved, and 60% or more of RHMTs carried out 80% or more of activities scheduled in their annual plans. However, the involvement of RHMTs with RRHs was limited. They just introduced tools for SS to RRHs. There are still issues in the effective implementation of support activities.

In light of the above, the Project Purpose was not fully achieved.

3.2.2 Impact

The Project originally aimed to have RHMTs promote the independent development of CHMTs and RRHs with the progress in decentralization and improve health services in cooperation with CHMTs and RRHs. This evaluation considered “Managerial performance²¹ of RRHMTs and CHMTs is improved”²² as the Overall Goal of Phase 1 and Phase 2 and determined, with the Indicators below, whether RRHs and CHMTs having responsibility for health service delivery carried out activities in an appropriate timeframe according to an appropriate plan developed based on their roles. Based on the judgment, it was checked how RHMTs subject to capacity development (Project Purpose) contributed to the Overall Goal.

The evaluation judgment placed emphasis on “SS by RHMTs to CHMTs and RRHs with standardized tools” (Indicator 1 of the five Indicators of Project Purpose for Phase 2), “Approval rate of CCHPs in the second appraisal” and “Submission rate of CHOPs” (Indicators

²¹ As the Project did not define the word “Management,” the ex-post evaluation defined it as “RRHs and CHMTs having responsibility for health service delivery carry out activities in an appropriate timeframe according to an appropriate plan developed based on their roles” based on details of activities and Indicators. As for good managerial practice, one of the Indicators of the Higher Goal, the ex-post evaluation defined it as “A means for effective managerial performance” rather than the achievement of the Higher Goal because the Project aimed at mutual learning among RHMTs.

²² The Higher Goals for Phase 1 and Phase 2 are “RRHM is improved to provide sustainable health services” and “Managerial performance of RRHMTs and CHMTs is improved,” respectively. It seemed that Phase 2 focuses on lower levels (districts and RRHs). However, considering that districts and RRHs actually provide health services, these Higher Goals are almost the same. Therefore, the ex-post evaluation considered the Higher Goal of the Project to be “Managerial performance of RRHMTs and CHMTs is improved.”

1 and 2 of the three Indicators of Overall Goal), and information obtained through the hearing survey conducted in five regions for the ex-post evaluation.

3.2.2.1 Achievement of Overall Goal

[Phase 1 and Phase 2]

The achievement of the Overall Goal is as shown in Table 5 below.

Table 5: Achievement of Overall Goal

Purpose	Indicator	Result	Achievement																																				
Managerial performance of RRHMTs and CHMTs is improved.	90% or more of CCHPs are approved in the first submission at the Basket Fund Committee (BFC) meeting by June 2017. (Overall Goal Indicator 1)	<div> <div> Change of Indicator </div> <div> <p>As external factors (delay in sharing of CHMT budgetary ceiling) may affect the approval rate of CCHPs in the first submission²³, it was considered that the Indicator was not suitable for the measurement of the quality of CCHPs. So, in the ex-post evaluation, the Indicator was changed to “90% or more of CCHPs are approved in the <u>second</u> submission at the Basket Fund²⁴ Committee (BFC) held for approving funds.”</p> <ul style="list-style-type: none"> The approval rate of CCHPs in the second submission recorded 90% or more for the first time in FY 2016/17 after the completion of the project. Support of RHMTs in creating CCHPs generally improved after Project completion. Negative factors that affect the quality of CCHPs: <ul style="list-style-type: none"> Frequent changes in the version of Plan Rep; The quality of plans of health facilities that are lower organizations of CHMTs²⁵; and RHMT’s lack of knowledge on CCHPs²⁶. Positive factors that affect the quality of CCHPs: <ul style="list-style-type: none"> Positive support system by RHMTs (in Mwanza and Pwani in particular among the five regions) to CHMTs, such as RMO taking charge of a district, etc. Holding a briefing session for the creation of CCHPs with the participation of all CHMTs, and a commitment to focusing on plans and management of CHMTs²⁷ (Dar es Salaam) </div> <div> <div>CCHP approval rate</div> <table> <tr> <th colspan="4">During Phase 2</th> <th colspan="2">After Project Completion</th> </tr> <tr> <td>2011/12</td> <td>2012/13</td> <td>2013/14</td> <td>2014/15</td> <td>2015/16</td> <td>2016/17</td> </tr> <tr> <td colspan="6">1st appraisal</td> </tr> <tr> <td>58%</td> <td>0%</td> <td>31%</td> <td>20%</td> <td>53%</td> <td>78%</td> </tr> <tr> <td colspan="6">2nd appraisal</td> </tr> <tr> <td>84%</td> <td>58%</td> <td>85%</td> <td>91%</td> <td>87%</td> <td>95%</td> </tr> </table> </div> </div>	During Phase 2				After Project Completion		2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	1st appraisal						58%	0%	31%	20%	53%	78%	2nd appraisal						84%	58%	85%	91%	87%	95%	Achieved
During Phase 2				After Project Completion																																			
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84%	58%	85%	91%	87%	95%																																		

²³ As the budgetary ceiling is announced after CHMTs submit CCHPs, it is appropriate to determine the Indicator based on the approval rate of CCHPs in the second submission.

²⁴ The Basket Fund is a method where the donor country and donor organization do not individually implement a cooperative project as part of aid coordination, but the government of a developing country and a donor organization consult with each other to implement a project by using a foundation they jointly established. Basket funders refer to donor countries and organizations that contribute funding to the Basket Fund.

²⁵ CHMT will create CCHP based on an annual plan submitted by a health facility over which it has jurisdiction.

²⁶ According to an opinion from CHMTs, the capacity and knowledge of CHMTs on CCHPs are equivalent to or exceed those of RHMTs.

²⁷ In Dar es Salaam, CHMT secures budget for holding a session for CCHP creation hosted by RHMT.

		Source: FY 2011/12 to 2014/15: MOH, Completion Report , FY 2015/16 to 2016/17: Questionnaire (MOH)												
70 % or more of CHOPs are submitted to MOHand PMORALG by FY 2016/2017. (Overall Goal Indicator 2)	<ul style="list-style-type: none"> The rate in FY 2013/14 during Project implementation was 78%, in FY 2015/16 after Project completion was 48%, and in FY 2016/17 was 60%, which did not reach the target of 70%. Negative factors that affect the submission of CHOPs: <ul style="list-style-type: none"> Low motivation towards plan development²⁸ Irregular SS by RHMTs to RRHs²⁹ Positive factors that affect the submission of CHOPs: <ul style="list-style-type: none"> “Guideline for Developing Comprehensive Hospital Operational Plans (CHOPs) for Regional Referral Hospitals”³⁰ prepared by JICA technical cooperation “Project for Strengthening Hospital Management of Regional Referral Hospitals” (2015-2020) in August 2016 <div> <div>CHOP submission rate</div> <table> <tr> <th colspan="2">During Phase 2</th> <th colspan="2">After Project Completion</th> </tr> <tr> <th>2013/14</th> <th>2014/15</th> <th>2015/16</th> <th>2016/17</th> </tr> <tr> <td>78% (18/23)</td> <td>NA</td> <td>48% (11/23)</td> <td>60% (14/23)</td> </tr> </table> </div>	During Phase 2		After Project Completion		2013/14	2014/15	2015/16	2016/17	78% (18/23)	NA	48% (11/23)	60% (14/23)	Not achieved
During Phase 2		After Project Completion												
2013/14	2014/15	2015/16	2016/17											
78% (18/23)	NA	48% (11/23)	60% (14/23)											
Good managerial practices initiated by RHMTs, RRHMTs and CHMTs are shared and accumulated. (Overall Goal Indicator 3)	<div>Source: Questionnaire (MOH)</div> <div>(Country level)</div> <ul style="list-style-type: none"> According to the hearing survey in PORALG and RHMTs, good practices have not been collected or shared effectively. The RHMT conference, which had been held during the Project for sharing good practices and promoting learning among RHMTs, has not been held since Project completion due to budget shortfall. The conference between RMO and DMO, which had been held during Project implementation, has been continuously held since Project completion, but it has not placed emphasis on good practices. The format for RHMT quarterly reports has a column for describing good practices, but not all the regions filled in the column. <div>(Regional level)</div> <ul style="list-style-type: none"> In Pwani, a CHMT performance evaluation system was established. In Tabora, case examples in which RHMTs shared cases of other districts and contributed to problem resolution could be found. 	Not achieved												

Source: Materials provided by JICA

As for the Indicators of the Overall Goal, the CCHP approval rate improved after Project completion, as described above. However, the improvement of the submission rate of CHOPs and the establishment of an effective structure to collect and share good practices are future challenges. In light of the above, the Project achieved its Overall Goal “RRHs and CHMTs having responsibility for health service delivery carry out activities in an appropriate time frame according to an appropriate plan developed based on their roles” at a limited level.

²⁸ This is because budget (Basket Fund) is not allocated to CHOPs, unlike CCHP, even if it is submitted.

²⁹ There is an opinion that it is difficult to make self-evaluation as many of the members of RHMTs work at RRHs and some of them are members of RRHMTs. As stated in this opinion, efficient, regular support has not been provided by RHMTs to RRHMTs.

³⁰ As with the Project, JICA technical cooperation “Project for Strengthening Hospital Management of Regional Referral Hospitals” aims to improve hospital management of RRHs. According to the hearing survey, all the RRHMTs in the five regions used this guideline for creating CHOPs. Therefore, the submission rate of CHOPs and the quality of CHOPs are expected to improve through the Project.

3.2.2.2 Other Positive and Negative Impacts

None in particular

As described above, a certain level of effects expressed through the implementation of the Project. The effectiveness and impacts of the Project are fair.

By Project completion, the roles of RHMTs had been clarified, RHMT members had obtained knowledge and skills to support CHMTs and RRHMTs, and a support structure had been largely established. After Project completion, it was expected that RHMTs would promote the independent development of CHMTs and RRHs, with the progress in decentralization, and would improve health services in cooperation with CHMTs and RRHs. However, RHMT's contribution to improvement of the managerial performance of CHMTs and RRHs was limited. In addition, as all the RHMTs subject to the hearing survey conducted only perfunctory SS, it was not considered that SS reached the expected level.

3.3 Efficiency (Rating: ③)

3.3.1 Inputs

Table 6: Project Inputs

Inputs	Phase 1		Phase 2	
	Plan	Actual (At the time of Project completion)	Plan	Actual (At the time of Project completion)
(1) Expert dispatch	Not specified	Long-term: 3 people Short-term: 2 people (Total: 70.33 MM)	Not specified	Short-term: 9 people (98.1MM, including expenses covered by the consulting firm where Japanese experts belonged)
(2) Participants received	Not specified	9 people	Not specified	10 people
(3) Equipment	Vehicles, office equipment, etc.	Vehicles and office equipment including personal computers, printers and projectors, that cost equivalent to a total of approx. 4.815 million yen	Vehicles, IT equipment for internet connection (modem, etc.)	Vehicles and office equipment, etc.
(4) Total project cost (Japanese side)	350 million yen	351 million yen	360 million yen	354 million yen

(5) Total project cost (Tanzanian Side)	Personnel expenses for Tanzanian counterparts, expenses related to the preparation of facilities and land, etc.	Tsh. 178,524,500 (partial expenses for the implementation of monitoring and evaluation and CMSS activities), (Others including expenses for operation and utilities of the Project office, and vehicle fuel and maintenance to carry out CMSS activities, etc.)	Personnel expenses including salaries and allowances for Tanzanian counterparts, and expenses related to the operation of the Project office, etc.	Expenses for the operation of the Project office including utilities, personnel expenses for Tanzanian counterparts, etc.
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Source: Phase 1 and Phase 2 Completion Reports and Terminal Evaluation Reports

3.3.1.1 Elements of Inputs

[Dispatch of experts]

During Phase 1, a total of five long- and short-term experts were dispatched under the titles of “Health System Management/Governance,” Human Resource Development Specialist,” “Monitoring & Evaluation” and “Administrative Coordinator.” The total MM was 70.33 and was carried out mostly as planned.

During Phase 2, which was implemented between November 2011 and March 31, 2014, a total of nine short-term experts were assigned. Their areas of expertise were “Chief Advisor/Health System 1/Finance Management 1,” “Health Management/Health System 2/Finance Management 2,” “Capacity Development 1/Training Development 1,” “Capacity Development 2/Training Development 2,” “Health Planning 1,” “Health Planning 2” and “Administrative Coordinator/Training Management.”

[Training in Japan and Provision of equipment]

As indicated in Table 6, they were implemented mostly as planned.

3.3.1.2 Project Cost

With regard to the project cost, 100% of the planned budget was expended in Phase 1, and 97% of the planned budget was expended in Phase 2³¹.

3.3.1.3 Project Period

Both Phase 1 and 2 were implemented as planned (100%).

As explained above, both the project cost and project period were within the plan. Therefore,

³¹ The planned budget for Phase 1 was 350 million yen, and the actual expenditure was 351 million yen (100% of the budget), and the project cost was as planned. On the other hand, the planned budget for Phase 2 was 360 million yen, and the actual expenditure was 354 million, and the project cost was within the plan (98% of the budget.) Contrary to this finding, the Phase 1 contract was signed between JICA and the consulting firm with a contract value which was more than the planned budget. No written record was found to explain reasons for this discrepancy. Further, no relevant information was obtained through hearing surveys.

efficiency of the Project is high.

3.4 Sustainability (Rating: ①)

3.4.1 Policy and Political Commitment for the Sustainability of Project Effects

Sustainability in policy aspects is assessed as low at the time of the ex-post evaluation. The capacity development of RHMTs is not given priority in either the *Health Sector Strategic Plan Four* (HSSP IV, 2015–2020; developed in 2015) or the policy of the new fiscal year (FY 2018/19). Besides, while the Presidential statement of November 2017 confirmed the change in government offices responsible for the operation and management of RRHs, no policy or statement had been released by the time of the ex-post evaluation. During the hearing surveys with PORALG and MOH officers in June 2018, they stated that a task team in MOH was preparing documents about RRHs, but these documents would not include issues related to RHMT roles and future directions of RHMT and CHMT.

The information collected by July 4 indicated that MOH and PORALG had not reached a consensus on the implementation of the assessment and appraisal system of CHOP and SS visits to RRHs as well as the future relationship between RHMTs and RRHs. In addition, according to the basket funders, within five years, the central government will deposit budgets directly in bank accounts of all local health facilities operating under CHMTs. Provided that it is realized, health facilities will be required to prepare their budgets and expend accordingly although their current capacity for budget preparation is considered insufficient. Given this situation, MOH and PORALG are required to clarify the type of support to be provided by RHMTs and CHMTs to local health facilities, and roles and the position of RHMTs in the new structure. Both agencies, however, were taking no substantive action to rectify the situation at the time of the ex-post evaluation.

As new policies had not been shared with RHMTs, the RHMTs in Dar es Salaam and Dodoma were undertaking usual assignments including SS visits to RRHs when the second study team returned (July 4, 2018).

3.4.2 Institutional/Organizational Aspect for the Sustainability of Policy Effects

As of July 4, 2018, the sustainability of project effects in terms of institutional/organizational aspect is assessed as low. As described above, MOH is going to release a policy about RRHs. Conversely, it is unlikely that MOH is going to develop and issue any policy related to a new RHMT structure anytime soon because MOH and PORALG have reached no consensus about the future relationship between RHMTs and RRHs. In 2015, the Division of Health, Social Welfare and Nutrition was established in PORALG, leading to more involvement of PORALG in the management and operation of RHMTs. In spite of this, any official coordination meeting has not been organized between PORALG and MOH for the last two years. It is necessary to

promote cooperation and coordination between the two agencies in order to ensure the sustainability of the project effects.

When the Project was planned, it was aimed to ensure thorough dissemination of policy information from RHMTs to CHMTs and RRHs. However, the hearing surveys with the CHMTs and RRHs during this ex-post evaluation study revealed that while CHMTs and RRHs receive relevant information directly from MOH, RHMTs are unaware of such information at times. It is necessary to review the position and expected roles of RHMTs in order to use them strategically.

In many regions, RHMT core members³² are assigned to RRHs concurrently. As both PORALG and MOH plan to assign the members exclusively to RHMTs, if this is put into practice, RHMTs will be able to perform their functions more efficiently.

3.4.3 Technical Aspect for the Sustainability of Project Effects

With regard to the technical sustainability of project effects, there are issues to address with priority. At the time of the ex-post evaluation, RHMTs continuously used SS tools and provided feedback to CHMTs and RRHs in reference to the tools. This should be highly commended. However, as described above, PORALG and MOH had not reached consensus on the future relationship between RHMTs and RRHs. It was not clear to which organization the SS tools and skills to assess the CHOPs that were developed under the Project should be transferred. Despite a high percentage of resignations, transfers³³ and turnover of staff members at RHMTs and CHMTs, no mechanism has been in place to ensure the proper handover and transfer of duties by a member leaving an office to another taking over his/her position. Systematic training has not been carried out for new recruits. Unless these situations are rectified, the number of members who were trained by the Project will be continuously decreasing from RHMTs, and thereby RHMTs will not be able to sustain the technical capacity enhanced by the Project. Table 7 below shows the number of staff members in the eleven regions who were trained by the Project and are still working in the RHMTs at the time of the ex-post evaluation. It also indicates the percentage of resignations, transfers and turnover of RHMT staff members, which is around 25–50%. Among the five regions visited by the ex-post evaluation study team, the RHMTs situated either in the urban areas or their peripheral areas (Dar es Salaam, Mwanza and Pwani Regions) have a lower staff turnover. According to the information collected through hearing surveys at two CHMTs from each region, the staff turnover is higher in CHMTs than RHMTs.

³² One RHMT is composed of nine core members and nearly two dozen quasi-members.

³³ It does not mean that officers are transferred from RHMT to CHMT or the other RHMT.

Table 7: The Number of Staff Members Trained in the Eleven Regions and Rate of Staff Members who Left RHMTs

	Morogoro	Tabora	Katavi	Mbeya	Rukwa	Mwanza	Iringa	Mara	Arusha	Pwani	DSM ³⁴
Number of RHMT staff members trained during the Project	8	8	4	8	3	8	8	8	8	9	9
Number of RHMT staff members trained during the Project and still working at RHMTs	4	4	2	8	3	5	5	6	5	6	6
Percentage of resignations transfers and turnover	50%	50%	50%	0%	0%	38%	38%	25%	38%	33%	33%

Source: The Questionnaire Survey (RHMTs)

3.4.4 Financial Aspect for the Sustainability of Project Effects

The financial sustainability was recognized as an issue even from the implementation period and is still concerned at the time of the ex-post evaluation. RHMTs' three financial sources are from the basket fund, donors, and block grants (recurrent budget). However, they are mostly dependent on the basket fund and donors just as they were in the past.

According to the Phase 2 Terminal Evaluation Report, a total of 3.7 million USD was allocated to RHMTs from the Basket Fund. However, according to PORALG, the RHMT budget has decreased significantly; the FY 2018/19 budget allocated to RHMTs from the basket fund is limited as approximately 4.5 billion Tanzanian shillings (Tsh.) (equivalent to approx. 1.98 million USD³⁵). For FY 2018/19, the RHMTs in the Dar es Salaam region, the biggest region in Tanzania, and the Mwanza region, the second biggest region, are allocated not more than 277 million Tsh. (approx. 120,000 USD) and 211 million Tsh. (approx. 90,000 USD) respectively. The Katavi region is allocated not more than 130 million Tsh. (approx. 57,000 USD), which is the lowest in all the regions. The basket funders stated that approximately 3% of the Basket Fund is currently allocated to RHMTs, and there is no plan to increase this amount because the government does not have a clear policy on RHMT functions.

While there are budgets allocated by donors to RHMTs, they are generally earmarked to particular projects implemented by donors, which target specific areas such as Malaria and HIV/AIDS. Therefore, RHMTs are not given authority in most cases. A large portion of the block grants is allocated to personnel expenses; other than that, it is spent on utilities and other miscellaneous items that are necessary to maintain and operate RHMTs. The proportion of the block grant excluding personnel expenses in the RHMT budget is insignificant.

Because the government failed to announce its policy on RRHs before RHMTs completed the

³⁴ DSM (Dar es Salaam): Abbreviation of Dar es Salaam, which is the biggest city in Tanzania

³⁵ Exchange rate: 1 Tanzanian Shilling = 0.04792 yen and 1 USD = 108.812 yen. (Exchange rate of June 2018 in JICA's Exchange Rate Table 2018)

FY 2018/19 plans and budgets, the budget to conduct SS visits to RRHs is still included in the plans of RHMTs. Provided that the government decides to remove SS visits to RRHs from the responsibility of RHMTs, PORALG will review the RHMTs' budget plans in December and cancel its budget for SS activities from RHMTs to RRHs. In this case, the RHMTs' budget will shrink further and it can be more difficult for them to have any influence on the regional health management system. Conversely, if the government decides to continuously assign RHMTs to SS visits to RRHs, RHMTs will be able to keep the budget with them.

In light of the above, it is determined that there are problems related to financial aspects.

In conclusion, major problems have been observed with regard to the policy background, organizational, technical and financial aspects. Therefore, the sustainability of the project effects is low.

4. Conclusion, Lessons Learned and Recommendations

4.1 Conclusion

The aim of this Project was to develop the capacity and functions of Regional Health Management Teams (RHMTs) in all 21 regions (increased to 25 regions during the Project) of Tanzania, by developing training programs on managerial practices including Supportive Supervision (SS), for MOH conducting SS to RHMTs, and for RHMTs conducting SS to Council Health Management Teams (CHMTs) and Regional Referral Hospitals (RRHs), while also clarifying the institutional framework, thereby contributing to the capacity development of RRHs and CHMTs as well as the improvement of health management at the regional level.

The Project had challenges in its design for Phase 1. The Project was launched when the structure of MOH for RHMTs had not been established, and a wide range of plans, such as the strengthening of cooperation among the central, regions, and districts and the development of the capacity of RHMTs, were to be developed in three years, a limited period. However, the Project is highly relevant as its purpose is consistent with the policy and development needs of Tanzania and Japan's ODA policy in terms of "Development of administrative managerial capacity for providing public services with the progress in decentralization."

The roles of RHMTs are to inform CHMTs and RRHs about policies, have them develop appropriate plans, and carry out activities according to the plans through SS. The Project clarified the roles and largely established a structure to enable RHMTs to function. The supervision capacity of RHMTs also improved. However, one of the Indicators to determine the effectiveness of the Project "The annual average number of opportunities that RHMTs conduct SS to CHMTs and RRHs", which is one of the most important indicators, was not achieved. As a result, although the Overall Goal Indicator "CCHP approval rate" was achieved, the "CHOP submission rate" was not achieved. According to a hearing survey of CHMTs and RRHs in five

regions, the importance of RHMTs had been partly recognized but limited. Considering all the matters above, the effectiveness and impacts of the Project are fair.

The efficiency of the Project is high as its cost and period are within the plan.

As for sustainability, the Project does not have a new regional health system or a mechanism to strengthen the roles and functions of RHMTs because of a structural change after Project completion and a high percentage of resignations, turnover, and transfers. Problems have been observed with regard to the policy background, organizational, technical, and financial aspects. Therefore, sustainability of the Project effects is low.

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

4.2 Recommendations

4.2.1 Recommendations to the Implementing Agency

4.2.1.1 Recommendations to both MOH and PORALG

Regular organization of official coordination meetings with participation of both MOH and PORALG

The ex-post evaluation study team confirmed that although meetings have been appropriately organized between MOH and PORALG at a practitioner level, no official coordination meeting between both agencies has been organized for the past two years. The evaluation study team found at the second field survey in July 2018 that these agencies have different views on future systems of both SS visits to RRHs and CHOP appraisals. It is important for both agencies to regularly hold coordination meetings in a friendly manner to discuss and decide on a variety of issues. They include the review of the system of SS visits by MOH and PORALG to RHMTs, revision of tools for SS visits to CHMTs and RRHs, and implementation of continuous SS visits to RRHs that were established and developed under the project. Based on mutual agreement, they should work together for improvement of the health management system and health service delivery.

Strengthening of the RHMTs' Operational Mechanism in a New Structure

At the time of the ex-post evaluation study, MOH is responsible for the development of a "Policy" and a "Strategy" on RHMTs, while PORALG is assigned to the preparation of a "Plan" on RHMTs. However, none of the Policy, the Strategy and the Plan describes a future operational mechanism of RHMTs.

Since the devolution of authority and responsibility for public functions to council administrative offices, capacity development of CHMTs has been given higher priority than that of RHMTs. In some regions, CHMTs have knowledge about CCHPs and capacity to develop documents at a level equal to, or even better than, RHMT. Besides, most RHMT staff members are assigned to RRHs concurrently and have little time to work for RHMT activities. Under

these circumstances, the government announced that RRHs will be placed under the responsibility of MOH instead of RHMTs (that is administratively under the PORALG) from FY 2018/19. All health facilities including health posts will eventually receive basket fund directly from the central government based on the budget plan developed by themselves and be required to carry out activities in accordance with the prepared plan. In light of this, strategies on capacity development and human resource allocation of RHMTs should be implemented taking into account the roles and the position of RHMTs in the new regional health management system. An operational system of RHMTs should be strengthened in accordance with these strategies.

Capacity Development of RHMT Members

No institutional system has been in place for capacity development of RHMT members since project completion. As indicated above, in some regions, the capacity of RHMTs is not better than that of CHMTs, although RHMTs are in position to supervise the operation of CHMTs. In some regions, nearly 50% of the core members in RHMTs left their job, compared with the time of project completion. Nevertheless, RHMTs has no system to train new RHMT members on knowledge and skills gained under this project. It is recommended that the capacity of RHMT members be strengthened through regular training organized within the operational mechanism of RHMT that is to be strategically developed as discussed above.

Development and update of SS Tools

All RHMTs in the five regions visited indicated that it is necessary to update the tools for SS visits to CHMTs and RRHs that were developed by this project. Some RHMTs have revised the checklist, which is one of the SS tools, upon instruction from RMOs. However, the RHMTs in the other regions have been using the tools without any revisions or modifications because they were thinking that only MOH was authorized to do so. It is recommended that contents of the checklist be thoroughly reviewed taking into account points to be checked when RHMTs carry out SS visits to CHMTs, and be revised promptly.

Appointment of RHMT Core Members as Full-time PORALG Officers

During the project planning stage, the project was concerned that RMO is the only one regional health officer under PORALG. This situation has remained the same at the time of the ex-post evaluation. Most of the other eight core members of RHMTs are concurrently assigned to RRHs as medical personnel. While they are assigned to RHMTs to carry out administrative tasks, they are concurrently posted as medical personnel, who are under the supervision of an RRH director. In addition, they tend to give higher priority to RRH duties, thereby hardly spending sufficient time at RHMTs. As a result, it is difficult for RHMTs to implement SS visits

to RRHs in an effective and efficient manner. During the hearing survey, MOH and PORALG shared a plan that the eight core members of RHMTs will be appointed as independent full-time PORALG officers in the future (RMOs have already been PORALG officers.) Regardless of this plan of the two agencies, many core members whom the evaluation study team interviewed expressed their desire to be assigned to RRHs, instead of RHMTs. Hence, it may take time before this arrangement is introduced. However, it is highly recommended that RHMT core members be assigned only to RHMTs in order to operate them more efficiently and effectively.

Establishment of a Planning Support System for RHMTs and CHMTs with the Progress in Decentralization

Among the five regions where the ex-post evaluation study team conducted the hearing survey, there is one region where both the RHMTs and CHMTs consider the preparation of annual plans one of their high priority assignments. The CHMTs are aware of the importance to develop CCHPs, thereby allocating budgets to related activities, including expenses to participate in an annual five-day CCHP preparation workshop organized by the RHMT. At the workshop, they are able to work with the other CHMTs by referring to each other's document, resulting in better quality CCHPs. As a result, they are able to submit a CCHP before a deadline. Therefore, MOH and PORALG should encourage RHMTs and CHMTs to allocate appropriate budgets to organize and participate in meetings and workshops for CCHP development by fully explaining its importance.

4.2.2 Recommendations to JICA

None.

4.3 Lessons Learned

Commencing a project after an implementation system is in place.

It is important to carefully assess the timing of project commencement for technical cooperation projects to produce expected effects. As decentralization processes progress, essential roles, which can be played by regions, were gradually recognized. Nevertheless, a department or officers responsible for RHMTs in MOH was/were not appointed in a timely manner. The project was forced to operate without any implementation system for one year and four months after its commencement. During this period, the project organized the training for RHMTs and developed a draft policy dissemination package, but it took one year and four months to be able to carry out project activities in effective way. As a result, the effects of Phase 1 were not as much as expected. To avoid such a situation, it may be necessary to postpone the project commencement until an implementation system in MOH had been properly in place. It is recommended that JICA assists a recipient country in putting an implementation system in

place by providing small inputs including the dispatch of an expert, if the responsibility system and implementation system were not confirmed. Successful implementation of technical cooperation projects requires strong commitment of an implementing agency (a recipient country) to a project. It is important for JICA to assess the most appropriate timing of project commencement at the project planning stage.

Deciding on the project size based on planned inputs

Phase 1 was designed to carry out a variety of activities all across the nation within the short project period of three years. They included capacity development of all of the newly approved RHMTs, institutionalization of CMSS, strengthening of a coordination and support system between central and regional health agencies, and establishing and operationalizing SS visits by RHMTs to CHMTs. As a consequence, the effect of SS from RHMTs to CHMTs was limited. In the future, at the project formation stage, JICA should develop a well-focused project plan that can be realized within the expected project period of three years.

However, when the project focuses whole health management system, not only RHMTs, higher project effect would be expected if you plan pilot project which include “enhance cooperation between RHMTs and CHMTs, and develop their capacity” such as SS and regular meetings of RMO and DMO. In other words, the cooperation between relevant organizations is the key point for project effect and it’s quite important to set the activity and indicator which shows the relevant organization’s cooperation. Nevertheless, it is difficult to realize them for RHMTs, which had just been approved, in a period of three years.

Further, if the project is designed to support an organization that is newly created, in order to make steady project implementation and project effect, it is recommended that project sets the center project scope for cooperation between the project and the organization (in this project it refers to CHMTs), which is responsible for budget allocation and health service delivery.

When targeting a whole regional health management system as described above or when forming and planning a project to support a newly established organization, it is important to consider the activity plan and objective setting corresponding to the input scale after considering the focus of the project and the key point of realization of project effects.

Clarification of roles and functions of MOH and PORALG in JICA projects

In the future, it is recommended that role and functions as well as Outputs anticipated by respective agencies (RORALG and MOH in Tanzania) be elaborated in a Record of Discussions (R/D), when the projects are formed and planned in other country that has multiple administrative agencies with jurisdiction over a series of health systems such as administrative organizations, hospitals, health offices as in this project. It is difficult for donors to coordinate activities across line ministries. Therefore, if roles and functions of respective agencies as well

as their anticipated Outputs during the project implementation period are clarified, it is more likely that the project will be provided with cooperation smoothly by both agencies in the course of its implementation. This will contribute to continuing the project effects even after the termination.

Assessment System of Plans of subordinate offices under the Decentralized Governance

RHMTs are responsible for appraisal of the quality of CCHPs and CHOPs prior to their submission to PORALG and MOH. This procedure was established by this project and the JICA expert who was dispatched in 2017, and relevant activities for capacity development of RHMTs have also been implemented by both. After the appraisal of CCHPs, RHMTs inform CHMTs of their CCHP scores and request them to revise the document accordingly to improve quality. It would be almost impossible for the central government to carry out detailed appraisals of CCHPs, which are submitted by more than 180 CHMTs. Thus, to assign RHMTs to the first appraisal of CCHPs and CHOPs can be a good example of an approach to efficiently improve quality of the document. Because the capacity of RHMTs to appraise documents still had room for improvement in Tanzania at the time of the ex-post evaluation, relevant training should be continuously organized. It will also contribute to enhancement of project sustainability. Many of the other African countries also have a similar system to Tanzania in which health offices submit their plans to their superior offices. Few of these countries, however, have a mechanism to appraise submitted plans by scoring them objectively in order to ensure quality of plans. The appraisal mechanism introduced in Tanzania can be shared with other African countries that are under decentralized governance.

Appendix 1: Achievement of Output Indicators (At the Times of Project Completion and the Ex-Post Evaluation)

[Phase 1]

	Output/Indicator	At the time of Project Completion	At the time of Ex-Post Evaluation
Output 1	Management skills of RHMTs to respond to changing environments and new technologies are strengthened.³⁶	○	—
	1-1. Knowledge level of participants on training topics is improved.	○	—
	1-2. Number of RHMT members trained under the TC-RRHM is increased.	○	—
Output 2	RHMT Supportive Supervision from RHMTs to CHMTs is integrated and functions.	△	△
	2-1. Proportion of CHMTs supervised quarterly according to the Supportive Supervision Guideline is increased.	×	—
	2-2. Policy dissemination package is prepared and distributed.	○	×
	2-3. Policy dissemination guideline is developed.	×	—
Output 3	Central Management Supportive Supervision from the central to RHMTs is institutionalized in MOH & PMORALG.³⁷	△	×
	3-1. Standardized procedure for Central Management Supportive Supervision from the central to RHMTs is developed.	○	—
	3-2. Proportion of RHMTs supervised according to the standardized procedure/guideline is increased.	○	×
	3-3. Office in charge of Central Management Supportive Supervision is identified and functions in both MOH and PMORALG.	△	—
Output 4	A coordinated system³⁸ in responding to local issues among central and regional levels is strengthened.	○	—
	4-1. RHMT composition, rules and functions are clearly defined and understood among Regional Secretariats and Ministries.	△	—
	4-2. Opportunities for RHMT meetings at the zonal level are increased.	○	—
	4-3. RRHM sub-committee of the TC-SWAP is held when necessary.	○	—
	4-4. RRHM Newsletter is published biannually.	○	—

(○: Achieved, △: Partially achieved, ×: Not achieved, —: Not assessed at the time of the ex-post evaluation because they are related to activity performance)

³⁶ Changes in the knowledge level of participants were assessed not by an examination objectively but by self-evaluation after the training using the five-point grading scale. Although it was not objectively assessed, many participants indicated that training increased their knowledge. The training materials were developed in accordance with topics for each training session. A total of six management trainings were organized on “Leadership & Management,” “Strategic Thinking and Planning,” “Supportive Supervision and Coaching,” “Policy Dissemination” and “Annual Planning and reporting” with the participation of a total of 962 participants (out of which 742 were RHMT staff members.)

³⁷ Although the engagement of PMORALG in activities was not adequate, a CMSS mechanism was established, and during Phase 1, a total of six CMSSs were organized, visiting 16 – 22 regions every year. In light of this, it was concluded that the Output was sufficiently produced.

³⁸ It was mostly achieved by the end of Phase 1. Stakeholders, except RRHs, gained adequate understanding on roles and functions of RHMTs. The mechanism to promote coordination between central and regional agencies was strengthened through publication of newsletters and meetings in zones.

[Phase 2]

	Output/Indicator	At the time of Project completion	At the time of Ex-Post Evaluation
Output 1	Management skills of RHMTs in supporting CHMTs and RRHMTs are improved.	○	×
	1-1. Training package for the agreed six topics is developed and utilized.	○	×
	1-2. 80% or more of the RHMTs start making follow-up based on the training contents within a month after the training.	○	—
Output 2	Roles and functions of RHMT to support CHMTs and RRHMTs are institutionalized and consolidated.	○	○
	2-1. A final draft of the revised document “Functions of Regional Health Management System” is completed by September 2013 and approved officially by June 2014.	○	—
	2-2. All RHMTs adopt the revised organizational structure per the revised document by October 2014.	△	○
	2-3. Newsletters and promotion materials are distributed widely.	○	—
Output 3	Guidelines and tools for RHMTs to perform their functions are developed.	○	○
	3-1. Supportive supervision tools for RHMTs to CHMTs and RRHMTs are developed by February 2013 and by October 2013, respectively.	×	—
	3-2. RMSS tools are disseminated to all RHMTs by February 2013 (RHMTs to CHMTs) and by November 2013 (RHMTs to RRHMTs) respectively.	○	—
	3-3. 90% or more of RHMT members satisfy the quality of the RMSS-C tools and are willing to utilize to support CHMTs.	○	○
	Proposed Indicators) 3-4. RHMT members satisfy the quality of the RMSS-H tools and are willing to utilize to support RRHs.	—	○

(○: Achieved, △: Partially achieved, ×: Not achieved,—: Not assessed at the time of the ex-post evaluation because they are related to activity performance)

Appendix 2: State of Supportive Supervision Implemented in the Five Regions

Region A: Although there seem to have been some positive effects of SS on the capacity of CHMTs, the CHMTs have good capacity to begin with, and the effects of SS visits may be limited. With an initiative of the RHMT, a seven-day workshop was organized for the CHMTs in preparation of CCHPs. Among the five regions visited by the ex-post evaluation study team, RHMT members in only Region A are independent from RRHMT. This arrangement has helped the RHMT to establish a system to carry out SS visits to RRHs effectively.

Region B: SS seems to have some positive effects. The RHMT carries out SS visits to all CHMTs at every quarter. Compared to the other RHMTs visited, this RHMT demonstrates the strongest leadership. (For example, the RHMT requires RRHs for the submission of weekly reports and has effectively cooperated with RRHs. The RMO in person has been in charge of specific CHMTs and conducts SS visits to these CHMTs.) The RHMT is aware of its own constraints and has sufficient capacity to execute its duties. While the system has been in place whereby RRHs submit weekly reports to the RHMT, the frequency of SS visits by the RHMT to RRHs is not as high as it should be.

Region C: There are some positive effects of SS on the capacity of CHMTs. The RHMT files results of every SS visit by village, which are kept in a good condition compared with the other four RHMTs visited. It also uses the SS tools appropriately as intended by the project. However, CHMT members rarely share information with each other. In this regard, further capacity development of CHMTs is required. Since the RHMT gives higher priority to CHMTs than RRHs and the capacity of RRHMT is low, it can be concluded that the effects of SS on the capacity of RRHs have been limited.

Region D: This RHMT has revised the SS tools on its own, reflecting regional conditions. It indicates the positive engagement of the staff members in the supportive supervision. However, they are not able to conduct quarterly SS visits due to other assignments including political activities. They themselves admitted that they had failed to conduct SS visits to CHMTs and RRHs in an effective manner.

Region E: It seems that there are some positive effects of SS. While the RHMT stated that they conduct quarterly SS visits, the two CHMTs, which the ex-post evaluation study team visited, informed the team that the RHMT was not involved in the process to develop the FY 2018/19 CCHPs. Thus, there is a possibility that the RHMT has not carried out SS visits effectively. Although RRHs confirmed that the quality of SS visits by the RHMT has been improved, they seemed not to value the RHMT. Therefore, it can be concluded that SS visits by the RHMT to RRHs have not been effective. This RHMT demonstrated the best teamwork among the five RHMTs visited.

Appendix 3: Effects of Supportive Supervision by RHMTs

This ex-post evaluation study was implemented with an aim to assess the effects of supportive supervision. Under this study objective, the study team carried out hearing surveys³⁹ with PORALG, MOH, RHMTs in the five regions, two CHMTs and one RRH each from the five regions and basket funders. Based on the information collected, the study team analyzed the effects of SS from the following points of view; (1) Importance of RHMTs, (2) Capacity of RHMTs, and (3) Capacity/performance of CHMTs and RRHs, and, subsequently, concluded that SS visits by RHMTs to CHMTs and RRHs have only partially contributed to improvement of the managerial performance of CHMTs and RRHs.

(1) Perceptions towards the importance of RHMTs

The study team carried out hearing surveys with the CHMTs and RRHs in the five regions with regard to guidance provided by the RHMTs to them during the last SS visit before the ex-post evaluation study, and the level of importance that they attach to the RHMTs. The CHMTs and RRHs regard RHMTs as an organization to coordinate issues with the central government agencies. The CHMTs stated that they can function adequately without any involvement of the RHMTs in their activities although the RHMTs may assist them in some way or another when necessary. In other words, they do not have much regard for the RHMTs. Concerning the RRHs, they tend to overlook roles of the RHMTs. This is probably because some RHMTs are not able to conduct quarterly SS visits, as instructed, because of delays in budget disbursement or another assignment, and regarding the development of CCHP, CHMT members have knowledge about CCHPs at a level equal to, or even better than, RHMT members.

(2) Capacity of RHMTs

Although RHMTs have partially managed to maintain the capacity which they had built under the project, there is no assurance that they will be able to maintain such capacity in the future. Prior to the project, roles of RHMTs were not elaborated at all and no SS tools or reports were available. Thus, at the time of the ex-post evaluation, the interviewees from the five regions asserted that the capacity of RHMTs is “good” compared to the past. Further, the study team confirmed capacity of RHMTs to some extent; the strong leadership of the Mwanza RHMT, the capacity of the Dar es Salaam RHMT to coach CHMTs in the CCHP preparation, the good teamwork in the Pwani RHMT, and the capacity of Tabora RMHT to use the SS tools and file the results of SS visits. However, some CHMTs indicated that the capacity of RHMTs is not

³⁹ Because the number of interviewees was limited, there is a possibility that views of the interviewees do not represent those of project beneficiaries. In addition, there is concern indicated in “2.3 Constraints during the Evaluation Study.”

better than those of CHMTs. Further, not all of the five RHMTs carry out SS visits to RRHs in an effective manner. Some of the possible reasons why RHMTs are not able to execute their assignment appropriately are as follows. RHMTs are often assigned to tasks which are not within the scope of their assignment. Many RHMT members are not independent from RRHs. Because of the high staff turnover,⁴⁰ the RHMTs in nine out of the eleven regions from which the study team collected information have now few members who were directly trained by the project. Nevertheless, no system has been in place to transfer knowledge and skills from the trained members to newly assigned members, or to develop the capacity of current members. Consequently, RHMTs are not able to maintain their developed capacity.

The ultimate objective of the project was to improve health service delivery in regions under the decentralized system. It was anticipated that through the project, RHMTs promote the independent development of CHMTs and RRHs with the progress in decentralization, and improve health services in cooperation with CHMTs and RRHs. In spite of this project objective, what RHMTs are engaged in now is to carry out SS visits simply, and some RHMTs are not able to execute even quarterly SS visits. The capacity of RHMTs is too inadequate to achieve this project objective.

(3) Capacity/Performance of CHMTs and RRHs

The five regions were visited during the ex-post evaluation study and two CHMTs were selected from each region for the interview. Upon request from the study team, each RHMT selected one CHMT with good performance. One of the reasons why the capacity and performance of these CHMTs and RRHs is good is because competent members are collected at RHMTs in urban areas such as the Temeke RHMT in the Dar es Salaam region. On the other hand, the Dodoma RHMT and the Bahi CHMT and the Mwanza RHMT and RRH attributed their good performance to good “teamwork” and “leadership,” as well as their participation in the JICA technical cooperation project, “Project for Strengthening Hospital Management of Regional Referral Hospitals,” which started in 2015. None of them indicated SS visits by RHMTs as a main reason for their good performance and capacity.

⁴⁰ Please refer to Table 7 in “3.4 Sustainability.”

0. Summary

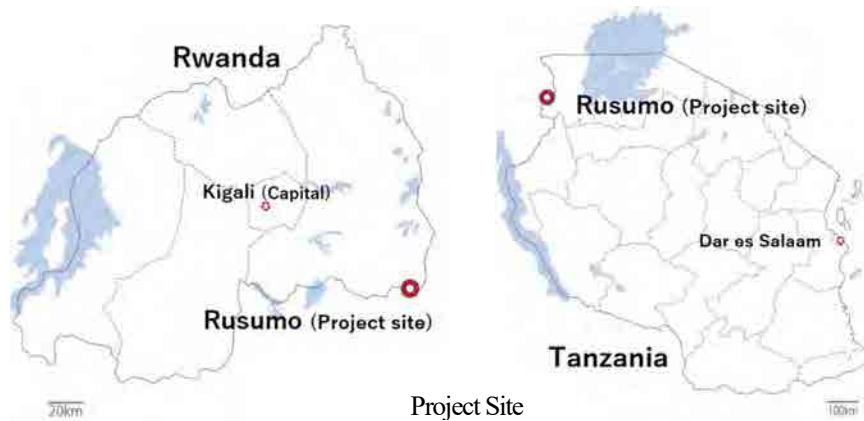
The objective of this project is to ease the traffic restrictions and facilitate the border-crossing procedures at the Rusumo border between Rwanda and Tanzania through the reconstruction of the Rusumo International Bridge and the construction of One Stop Border Post (hereinafter referred to as “OSBP¹”) facilities, thereby contributing to the smooth and stable logistics and distribution of goods along the Central Corridor.

Since the project was consistent with the national development policies and road/transport sector strategies of Rwanda and Tanzania and their development needs at the times of planning and ex-post evaluation, as well as Japan’s aid policy at the time of planning, its relevance is high. The outputs, such as the constructions of a bridge, roads, and border post facilities, had been produced as planned, and the project period and the project cost were both within the plan. Therefore, the efficiency is high. By reconstructing the Rusumo bridge, this project has eased gross weight and speed restrictions for travelling vehicles and enabled large trucks, which could not cross the bridge before, to pass through smoothly. Moreover, owing to the development of the OSBP facilities, the border-crossing procedures based on the OSBP system and the 24-hour operation of the OSBP facilities have been implemented by the time of ex-post evaluation. And the time necessary for customs and border-crossing procedures has been dramatically shortened, and the transportation cost for a cargo for a round trip between Dar es Salaam and Kigali has also been reduced as expected. Furthermore, due to the elimination of a bottleneck, the numbers of vehicles passing through the Rusumo border and the Central Corridor have substantially increased, and it has helped accelerate the development and improvement of the entire Central Corridor. Thus, the effectiveness and impact of the project are high. As for the operation and maintenance, no specific problem has been identified in terms of its technical aspect. However, there is a concern about the staffing level and operational budget for customs and immigration as their workloads at the OSBP facilities have been expanding along with the increasing traffic volume. In addition, X-ray scanners for cargo inspection, which were to be borne by the Rwandan and Tanzanian sides, have not been installed yet due to budgetary reasons. Therefore, the sustainability of the project is fair.

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

¹ The One Stop Border Post (OSBP) is a system that makes the border-crossing procedures, such as customs, quarantine, and immigration control, which used to be handled separately both at the entry and exit points, completed at once through jointly managing the procedures by two countries for the purpose of promoting the logistics and distribution of goods.

1. Project Description



Rusumo Bridge Built by the Project



OSBP Facilities Constructed by the Project

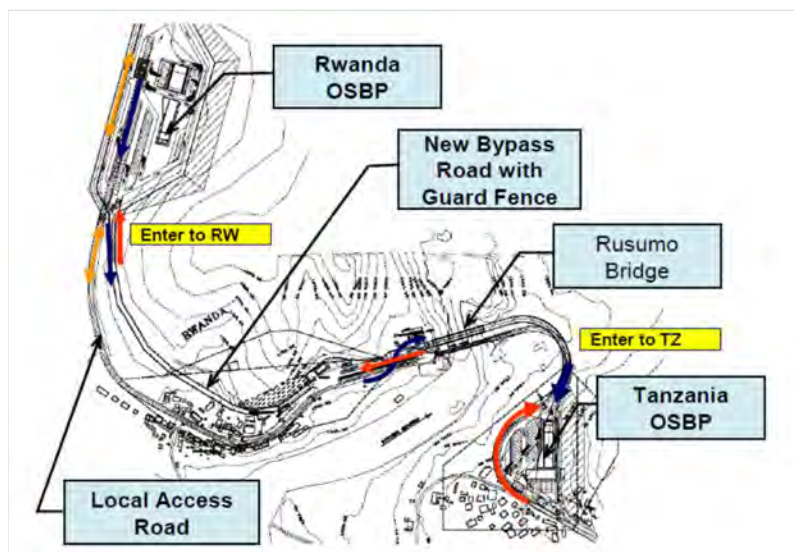
1. 1. Background

Rusumo, the target area of this project, is located at the border of Rwanda and Tanzania on the Central Corridor (total length of 1,463 km), which extends from the Port of Dar es Salaam in Tanzania to the Rwandan capital of Kigali. The Central Corridor is an economic corridor within the East African Community (hereinafter referred to as “EAC”) region, which rivals to the Northern Corridor connecting Kenya–Uganda–Rwanda. And it is an important alternative logistics route to the Northern Corridor particularly for a landlocked Rwanda.

At the time of planning, however, the Rusumo bridge that connects Rwanda and Tanzania had already been in use for nearly 40 years and its design load capacity was limited, as well. Thus, heavy trucks with a gross weight of more than 32 tons had to transport goods to Kigali via the Northern Corridor by running an extra distance of about 400km. Moreover, because the Rusumo bridge was a single lane, it had been chronically congested with travelling vehicles. Thus, it was urgently needed to replace the bridge to accommodate the increasing size of vehicles and the growing traffic volume. Furthermore, the Rusumo border post had limited parking spaces compared to its traffic volume and had a shortage of the personnel stationed. Consequently, it

had become to take a long time for customs and border-crossing procedures, and the dwell time of cargo trucks heading from Tanzania to Rwanda at the border had become exceeding 24 hours. Therefore, it had become a priority for both Rwanda and Tanzania to eliminate the bottleneck in the border and promote the logistics and distribution of goods along the Central Corridor by replacing the bridge and constructing and operationalizing the OSBP facilities at the Rusumo border post.

Against this background, the Government of Rwanda and the Government of Tanzania made requests to the Government of Japan in July 2007 and February 2009, respectively, for grant aid for the purpose of reconstructing the Rusumo bridge located at the border of Rwanda and Tanzania and developing the OSBP facilities.



Source: *Preparatory Survey Report* (Images of Rusumo Bridge, OSBP Facilities, and New Roads)

Figure 1. Project site location Map of Rusumo Bridge, Access Roads, and OSBP Facilities

1. 2. Project Outline

The objective of this project is to ease the traffic restrictions and facilitate the border-crossing procedures at the Rusumo border between Rwanda and Tanzania through the reconstruction of the Rusumo International Bridge and the construction of the OSBP facilities, thereby contributing to the smooth and stable logistics and distribution of goods along the Central Corridor².

² The Ex-Ante Evaluation Report states the objective of this project as “easing the traffic restrictions and facilitating the border-crossing procedures at the Rusumo border between Rwanda and Tanzania through the reconstruction of the Rusumo International Bridge and the construction of the OSBP facilities” and does not mention any impact. But the report lists as the qualitative effects of this project the leveling of the distribution of goods that had been over-dependent on the Northern Corridor and the contribution to smoother and more stable logistics throughout East Africa. Moreover, with regard to the higher goals and project objectives, the Preparatory Survey Report mentions that “the project is essential to ensure safe and swift cross-border cargo transportation.” Therefore, this evaluation regards “the smooth and stable logistics and distribution of goods along the Central Corridor” as the impact of this project.

Grant Limit / Actual Grant Amount	Tanzania (D/D): 40 million yen / 39 million yen Tanzania (Main Work): 1,860 million yen / 1,625 million yen Rwanda (D/D): 40 million yen / 39 million yen Rwanda (Main Work): 1,860 million yen / 1,625 million yen
Exchange of Notes Date / Grant Agreement Date	Tanzania (D/D): March 2011 / March 2011 Tanzania (Main Work): August 2011 / August 2011 Rwanda (D/D): March 2011 / March 2011 Rwanda (Main Work): September 2011 / September 2011
Executing Agency	Tanzania: Tanzania National Roads Authority (TANROADS) Rwanda: Rwanda Transport Development Agency (RTDA)
Project Completion	December 2014
Main Contractor	Daiho Corporation
Main Consultants	Chodai Co., Ltd. / Nippon Koei Co., Ltd (JV)
Basic Design	November 2009–October 2010
Related Projects	<p>Technical Cooperation Projects:</p> <p>Tanzania:</p> <ul style="list-style-type: none"> Project for the Comprehensive Transport and Trade System Development Master Plan (2011–2013) <p>Tanzania / Rwanda:</p> <ul style="list-style-type: none"> Project for Capacity Building for the Customs Administrations of the Eastern African Region (2007–2009) Project for Capacity Building for the Customs Administrations of the Eastern African Region (Phase 2) (2009–2013) Project on Capacity Development for International Trade Facilitation in the Eastern African Region (2013–2017) <p>ODA Loan Projects:</p> <p>Tanzania:</p> <ul style="list-style-type: none"> Arusha-Namanga-Athi River Road Development Project (2007–2014) Road Sector Support Project (2010–2013) Road Sector Support Project 2 (2013–2017) <p>Rwanda:</p> <ul style="list-style-type: none"> Rusumo-Kayanza Road Improvement Project (2016–) <p>Other International Organizations and Aid Organizations, etc.:</p> <p>Tanzania:</p> <ul style="list-style-type: none"> World Bank “Dar es Salaam Port Development Projects” (1979–) (Loan) World Bank “Integrated Roads Program Project” (1990–2004) (Loan) Danish International Development Agency (DANIDA) “Dar es Salaam-Mlandizi Road Upgrading Project” (1998–2001) (Grant aid) DANIDA “Chalinze-Melela Road Rehabilitation Project” (2001–2004) (Grant aid) African Development Bank (AfDB) “Shelui-Nzega Road Upgrading Project” (2003–2005) (Loan) AfDB “Nelson Mandela Road Improvement Project” (2003–2010) (Grant aid) European Development Fund (EDF) “Morogoro-Dodoma and Mandela Road Upgrading Project” (2004–2010) (Grant aid) World Bank “Singida-Shelui Road Improvement Project”

	(2005–2007) (Loan) • EDF “Isaka-Lusahunga Road Upgrading Project” (2007–2008) (Grant aid) • AfDB “Singida-Minjingu Road Upgrading Project” (2009–2010) (Loan) • AfDB “Namanga OSBP Construction Project” (2011–2012) (Loan) • International Development Association (IDA) “Taveta OSBP Construction Project” (2011–2012) (Loan) • IDA “Lunga-Lunga OSBP Construction Project” (2011–2012) (Loan) • IDA “Mutukula OSBP Construction Project” (2011–2012) (Loan) • IDA “Ishibania OSBP Construction Project” (2011–2012) (Loan) Rwanda: • EDF “Kigali-Kayanza Road Upgrading Project” (2005)
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2. Outline of the Evaluation Study

2. 1. External Evaluator

Tomoyuki Sho, IC Net Limited

2. 2. Duration of Evaluation Study

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

Duration of the Study: November 2017 – December 2018

Duration of the Field Study: March 1 – 28, 2018; June 27 – July 11, 2018

3. Results of the Evaluation (Overall Rating: A³)

3. 1. Relevance (Rating: ③⁴)

3. 1. 1. Consistency with the Development Plans of Rwanda and Tanzania

At the time of planning, Tanzania's national development policy documents *Tanzania Development Vision 2025* (formulated in 1999) and *National Strategy for Growth and Reduction of Poverty* (NSGRP) (formulated in 2005) listed the expansion of infrastructure projects related to road network construction as a priority objective for promoting the growth of the economy and development across regions. The country's development strategy document for the transport sector *10 Year Transport Sector Investment Program* (TSIP) (formulated in 2008) also prioritized the strengthening of the development and maintenance of international trunk roads. Similarly, Rwanda's development policy documents *Rwanda Vision 2020* (formulated in 2000) and *Economic Development and Poverty Reduction Strategy* (EDPRS) (formulated in 2007) mentioned that developing transport infrastructure is essential for the growth of the economy and ranked the improvement of international roads and the construction of road network as a high priority in the road sector. Besides, the

³ A: Highly satisfactory, B: Satisfactory, C: Partially satisfactory, D: Unsatisfactory

⁴ ③: High, ②: Fair, ①: Low

country's development strategy document for the transport sector *Transport Sector Policy* (formulated in 2008) stressed the importance of improving the national road connectivity and the connectivity with neighboring countries, and mentioned the development of regional roads, including the Rusumo bridge, and the plan of developing OSBP facilities in Rusumo as priority programs. Furthermore, EAC has been undertaking initiatives for improving cross-border transport mobility and reducing transportation cost, and it aimed at the introduction of OSBP in 15 sites, including the Rusumo border, at the time of planning.

Even at the time of ex-post evaluation, Tanzania's *Five Year Development Plan* (FYDP II) (formulated in 2016) places priority on expanding the infrastructure projects, and the *5th Five-Year Strategic Plan* (formulated in 2018) of the Tanzania National Roads Agency (hereinafter referred to as "TANROADS") lists the improvement of the road section between Lusahunga and Rusumo on the Central Corridor as one of the strategic projects. Likewise, in Rwanda, the draft transport sector strategic plan (drafted in 2018) for the *National Strategy for Transformation* (NST), which is under development, continues to regard the construction of OSBP facilities as a priority for reducing border post crossing time and promoting regional transport and cross-border trade facilitation.

In light of the above, this project is consistent with the development policies and road/transport sector strategies of Rwanda and Tanzania.

3. 1. 2. Consistency with the Development Needs of Rwanda and Tanzania

At the time of planning, there were security concerns about the aging Rusumo Bridge, which was built in 1972. And because it was a single lane, the traffic flow was restricted and thus the areas around the bridge were always congested with travelling vehicles. In addition, due to a limited design load capacity, any large truck with a gross vehicle weight of more than 32 tons had to travel through the Northern Corridor rather than the Central Corridor to head for Rwanda. Therefore, to cope with the increasing size of vehicles and the growing traffic volume, replacing the bridge was an urgent issue. Moreover, whereas the vehicle passing through the Rusumo border needed to complete the customs and border-crossing procedures separately both at the Rwandan side and the Tanzanian side, the Rusumo border post had limited parking spaces relative to its traffic volume and had a shortage of the assigned staff, resulting in a long time for the customs and border-crossing procedures. Consequently, the dwell time of cargo trucks heading from Tanzania to Rwanda at the border is believed to have exceeded 24 hours. Thus, there was an expectation that the construction and operationalization of the Rusumo OSBP facilities, together with the reconstruction of the bridge, would resolve the bottleneck at the border post.

Even at the time of ex-post evaluation, traffic volume has significantly increased since the elimination of the bottleneck. Thus, the needs for the expansion and improvement of the border post facilities and connecting roads to Rusumo continue to exist. At the same time, this project has been mutually complemented with the Kigali-Kayanza Road Improvement Project (2005) by the European Development Fund (EDF), the Rusumo-Kayanza Road Improvement Project (2006-) with the Japanese ODA loan, as well as the efforts to introduce OSBP within the EAC region, and so on. It is confirmed that there have existed good coordination and a clear

division of roles with other donors and projects.

In light of the above, this project is consistent with the development needs of Rwanda and Tanzania.

3. 1. 3. Consistency with Japan's ODA Policy

The *Yokohama Action Plan* (formulated in 2008) of the 4th Tokyo International Conference on African Development (TICAD) declared a policy to support the promotion of trade through expanding regional infrastructure and a goal of promoting OSBP assistance in Sub-Saharan Africa. Also, at the time of planning, the *Country Assistance Program for Tanzania* (formulated in 2008) stated a focus on assistance in the transport sector such as road, and promised to work actively on the facilitation of international traffic within the surrounding areas. Moreover, *ODA Country Data Book 2009* promises to carry out “the improvement of economic infrastructure in Rwanda both on the construction of physical infrastructure and the provision of technical assistance, while focusing on the road/transport and energy fields.”

Therefore, consistency between the project and Japan's ODA policy is high.

In light of the above, this project is highly relevant to the development policies and development needs of Rwanda and Tanzania, as well as Japan's ODA policy. Thus, its relevance is high.

3. 2. Efficiency (Rating:③)

3. 2. 1. Project Outputs

Table 1 shows the actual outputs of this project. Apart from 25 design changes, the outputs such as a bridge, access roads, and border post facilities, have been constructed and procured as planned. The design changes were done appropriately as adjustments to the situations on the ground or compliances with the local regulations by means of responding requests for design improvement made by the Rwandan and/or Tanzanian side, such as cases in the additional installments of sidewalks and drainage ditches.

Table 1. Actual Construction of Facilities and Procurement of Equipment

Facility		Specification
New Rusumo International Bridge	Road Class	National Highway
	Design Speed	50km/hr
	Road Width Configuration	1.5m+0.5m+2×3.25m+0.5m+1.5m=10.5m
	Total Length	Total Length 80.0m
	Type of Superstructure	Simple Composite Steel Box Girder (Use of Atmospheric Corrosion-resistant Steel)
	Type of Substructure	Reversed T-type Abutments
	Type of Concrete Slab	RC Slab
	Pavement Structure	Asphalt Paving (Main Road: 8cm, Sidewalk: 4cm)
	Live Load Conditions	B Live Load (Specifications for Highway Bridges); NA+45NB (SATCC)
New Access Road Pavements on OSBP	Pavement Specifications	Standard Concrete Pavement (Width: 15cm)
	Design Traffic Volume	T<250 vehicles/day
	Total Length	about 2,000m

Premises	Road Width	9.5m (Main Road: 3.5m×2, Shoulder: 1.25m×2)
OSBP Facilities	Total Area • Administration Building • Verification Storage • Control Shed • Guard House • Equipment - PCs and Peripheral Equipment - Emergency Generator - Forklift - Internal Telephone System	Rwanda-side: 2.6ha, Tanzania-side: 1.4ha • Rwanda-side: 1,116m ² , Tanzania-side: 1,116m ² • Rwanda-side: 1,408m ² , Tanzania-side: 547m ² • Rwanda-side: 560m ² , Tanzania-side: 330m ² • Rwanda-side: 63m ² , Tanzania-side: 54m ² - Rwanda & Tanzania: 20 pcs each - Rwanda & Tanzania: 1 each - Rwanda & Tanzania: 1 each - Rwanda & Tanzania: 1 set (25 telephones) each

Sources: Materials provided by JICA, site visits, face-to-face interviews and questionnaire surveys

With regard to the quality of the outputs, although a damage stemming from a slope erosion of a retaining wall occurred at the OSBP facilities at the Tanzanian side during the defect liability period, it has properly repaired. However, only the section of the slope considered to have a high risk of landslide had become a subject of protection (by mortar spraying), and at the time of ex-post evaluation, a section of the slope that was not a subject of protection has partially collapsed and left unattended. In addition, partial erosion and cracks in a concrete pavement have occurred at a corner of the parking lot because a part of the parking lot where an X-ray scanner for cargo inspection was planned to be installed had not been paved with concrete. Moreover, a capacity shortage of emergency power generators has caused a problem. No other specific quality problem has been found⁵.

3.2.2. Project Inputs

3.2.2.1. Project Cost

Because data on the actual project cost borne by the Rwandan side and the Tanzanian side could not be obtained except some partial data⁶, the project cost has been evaluated using the cost borne by the Japanese side only. The actual cost turned out to be 88% of the plan (see Table 2).

⁵ Some officials, however, pointed out that safety measures such as firefighting measures at the OSBP facilities and the construction of sidewalks had been inadequate because of a limited budget and a resulting focus on a simple design. In particular, some have complained that fire hydrants and adequate firefighting equipment have not been put at the OSBP facilities. According to the officials, no clear standards for the installation of firefighting equipment were in place at the OSBP facilities at the time of planning.

⁶ According to interviews with the officials from the executing and related agencies, the matters borne by the Rwandan and Tanzanian sides (environment impact assessment (EIA), land acquisition, banking arrangement (B/A), and authorization to pay (A/P)) have been carried out as planned. (The actual EIA expenses borne by Rwanda is USD 69,000, compared to the budgeted amount of USD 75,000. Data on other actual amounts could not be obtained.)

Table 2. Planned and Actual Project Costs

(Unit: million yen)

	Plan	Actual	As Percentage of the Plan (%)
Total Project Cost	3,920	--	--
Cost borne by Japanese side	3,800	3,330	87.6
(Main Work)	3,720	3,251	87.4
Construction cost	--	3,012	--
Equipment cost	--	33	--
Design and supervision cost	--	206	--
(Detailed Design)	80	79	98.8
Cost borne by Rwandan side and Tanzanian side	120	--	--

Source: Materials provided by JICA

As for the reasons why the actual cost had fallen well within the planned cost, officials from the executing and related agencies cited a relatively cheap bidding price by the contractor⁷, effective project management, etc⁸. In light of the above, the project cost was within the plan.

3. 2. 2. 2. Project Period

As shown in Table 3, the actual project period was three months shorter than the planned period (93% of the plan). According to interviews with the officials from the executing and related agencies, the factors such as the speedy drawing-up of the detailed design and its implementation, smooth procurement, and the proper project monitoring and prompt attentions to potential problems by the executing agencies and the construction consultant, all contributed to a reduction in the project period. In short, the project period was within schedule.

Table 3. Planned and Actual Project Periods

Plan		Actual		As Percentage of the Plan
March 2011 (signing of D/D contract ⁹) – July 2014 (completion)	41 months	November 2011 (signing of D/D contract) – December 2014 (completion)	38 months	—3 months 92.7%

Source: Materials provided by JICA

In light of the above, both the project cost and project period were within the plan, and the efficiency of the project is high.

⁷ Since more than one contractors bid, the principle of competition worked and the bidding price became relatively cheaper than the expected one.

⁸ In addition, foreign exchange affected it.

⁹ According to the Ex-Ante Evaluation Report, the planned period was for 41 months. But the report does not indicate the starting point. The time schedule of the Preparatory Survey Report, on the other hand, shows a 40-month period with the signing of D/D contract as its starting point. Thus, by adopting the latter and counting both months at the start and end of the period, this evaluation assumes that the planned period was 41 months. The construction completion date is regarded as the completion of the project.

The OSBP facilities have been operating smoothly by the time of ex-post evaluation. Yet, after completion of this project, the introduction of the border-crossing procedures based on the OSBP system had to be wait until March 2016 (officially in April), and the 24-hour operation of the OSBP facilities began in October 2017. The primary causes for the delays are the lagged supply of electricity and purchase of furniture such as desks and chairs at the Tanzanian side, and it also took time to secure staff accommodation facilities at Tanzania side. Moreover, because the OSBP facilities started using the water source which had been utilized by the local community, an incident broke out in which the disgruntled local residents sabotaged the water distribution lines to the OSBP facilities, which delayed the operationalization of the OSBP system. Finally, given that the executing agencies of this project were road agencies, sometimes it became less clear which executing and related agencies to take leading roles at the stages of introducing the OSBP system, and thus it took a fair amount of time to coordinate among the stakeholders. Still, at the Rwandan side, the preparation for introducing the OSBP system had been completed by February 2015.

3. 3. Effectiveness and Impacts¹⁰ (Rating:③)

3. 3. 1. Effectiveness

3. 3. 1. 1. Quantitative Effects (Operation and Effect Indicators)

At the time of planning, five quantitative indicators were selected for measuring the effectiveness of this project, and their targets were set (see Table 4). But many of those indicators and targets were not clearly or appropriately defined for measuring the effects of this project, and thus it was not possible to use many of them in their originals. To address the issue, this evaluation has selected alternative indicators.

Table 4. Quantitative Indicators for Effectiveness

Indicator	Baseline (2010)	Target (2017) [Three years after project completion]
Restriction on maximum axle load for the vehicle passing through the Rusumo bridge (t)	8	20
Speed limit for the vehicle passing through the Rusumo bridge (km/h)	5	30
Number of customs/border-crossing procedures (entry points)	5	2
Time to complete border-crossing procedures (hrs) ^(*)	Approximately 14	Approximately 5 – 10
Transportation cost (for a round trip between the Port of Dar es Salaam and Kigali) (USD/40-foot container)	3,130 (2008)	3,050 Reduction of approximately USD 1.8 million per year

Source: Materials provided by JICA

*Note: According to the Preliminary Survey Report, the introduction of the OSBP system was expected to shorten the border-crossing procedures and thus relieve traffic congestion at the parking spaces through conducting border-crossing examination only at the entry side. In particular, a time reduction was anticipated by consolidating the customs procedures for large vehicles heading from Tanzania to

¹⁰ Sub-rating for Effectiveness is to be made with consideration of Impact.

Rwanda, which had previously been done at the Rusumo border and at the dry port in Kigali. Although this indicator is referred to as “Time to complete a round trip” in the Ex-Ante Evaluation Report, the name of the indicator has been modified to the time to complete border-crossing procedures in this evaluation to make it fit in the way it is described; that is, the time necessary to complete border-crossing procedures for large trucks “heading from Tanzania to Rwanda.”

With respect to the indicator “Restriction on maximum axle load for the vehicle passing through the Rusumo bridge,” restrictions on the single-axle load, double-axle load, and triple axle road have been revised to 10 tons, 18 tons, and 24 tons, respectively, after completion of the project, in accordance with the EAC’s overloading regulations. As long as the single and double axles are concerned, therefore, the easing of the axle load restriction to the target of 20 tons has not been achieved. Yet, according to the face-to-face interviews with the officials from the executing and related agencies, the primary causes that prevented large trucks from passing through the Rusumo bridge at the time of planning were restrictions on gross vehicle weight (32 tons), as well as chronic congestion stemming from the one-lane bridge and security concerns due to its aging. It has nothing directly to do with the axle load restriction. At the time of ex-post evaluation, the restriction on the gross vehicle weight has been relaxed to 56 tons due to the increased design load capacity of the Rusumo bridge. Subsequently, it has become possible for four large trucks to pass through at the same time, and this has greatly contributed to the elimination of the bottleneck at the border post (see Table 5). Therefore, after reinterpreting this indicator as “restriction on gross vehicle for the vehicle passing through the Rusumo bridge,” this evaluation has concluded that its target has been achieved.

Table 5. Restriction on Gross Vehicle Weight for the Vehicle Passing through the Rusumo Bridge and Design Load Capacity

(Unit: ton)

Indicator	Baseline (2010)	Actual (2018)
Restriction on gross vehicle weight for the vehicle passing through the Rusumo bridge	32	56
Design Load Capacity of the Rusumo bridge	80	Approximately 200

Sources: Site visits, face-to-face interviews, and questionnaire surveys

With regard to the indicator “Speed limit for the vehicle passing through the Rusumo bridge (km/h),” it is confirmed that a speed limit of 40km/h has been achieved at the time of ex-post evaluation, exceeding the target of 30km/h.

Table 6. Speed Limit for the Vehicle Passing through the Rusumo Bridge

(Unit: km/hour)

Indicator	Baseline (2010)	Target (2017) [Three years after project completion]	Actual (2018)
Speed limit for the vehicle passing through the Rusumo Bridge	5	30	40

Sources: Site visits, face-to-face interviews, and questionnaire surveys

Regarding the indicator “Number of customs/border-crossing procedures (entry points),” its definition is unclear. Despite the interviews with the officials from the executing and related agencies, it has not become obvious which procedures or entry points the baseline value of “5” and the target value of “2” have counted¹¹. Yet, as mentioned above, the border-crossing procedures based on the OSBP system were introduced in March 2016, and the 24-hour operation of the OSBP facilities began in October 2017. The site visits and interviews also confirmed that customs and border-crossing procedures have been consolidated into the OSBP facilities at Rwanda and Tanzania sides, and they have been operating smoothly as originally planned (see Photos 1 and 2). Thus, although this evaluation has not adopted the indicator, the project outcome, which the indicator was supposed to measure, is judged to have been achieved.



Photo 1. OSBP Facilities—Administration Building



Photo 2. OSBP Facilities—Control Shed, Guard House

With regard to the indicator “Time to complete border-crossing procedures,” no record was available as to under which conditions and assumptions, the baseline and target values had been measured and selected. Since actual data measured immediately after completion of the project were not available either, it was not possible to check directly the extent to which the target of the indicator has been accomplished. Still, according to the time measurement survey conducted by the technical cooperation “Project on Capacity Development for International Trade Facilitation in the Eastern African Region,” the average dwell time at the Rusumo border post for the cargo truck heading from Tanzania to Rwanda had decreased by 73% between August 2014 and February 2017 (the median decreased by 68%). Considering that during the same period, the project completed in December 2014 and the operationalization of the OSBP facilities started in March 2016, it is reasonable to assume that the project has significantly contributed to those reductions in the dwell times¹².

¹¹ It may have been the case that a total of five locations, being composed of those for customs procedures (2) and immigration procedures (2) at both the Rwandan and Tanzanian sides, as well as that for customs procedures at the dry port in Kigali (1), had been expected to be consolidated into two locations at the OSBP facilities. But, according to the officials, making the baseline “5” is not consistent with the reality of the situation because the border-crossing procedures also include quarantine, security clearance, and others.

¹² However, the Single Customs Territory (SCT) system commenced at the Port of Dar es Salaam in July 2014 and subsequently rolled out to enable uniform processing of the pre-arrival declaration and customs clearance of cargo. The posterior data is likely to have reflected those effects, as well. On the other hand, as of August 2014, large parking spaces had already been constructed by this project, whereas as of February 2017, the 24-hour operation of the OSBP facilities had not started yet. Therefore, there is a possibility that project effects on the reduction in the time to complete border-crossing procedures are actually larger than this before-after data comparison suggests.

Table 7. Cargo Dwell Time at the Rusumo Border Post

Indicator	(Unit: hours/minutes)		
	August 2014	February 2017	Rate of change (%)
Cargo dwell time at the Rusumo border post, heading from Tanzania toward Rwanda: Average	8h42m	2h20m	-73%
Cargo dwell time at the Rusumo border post, heading from Tanzania toward Rwanda: Median	5h1m	1h36m	-68%

Source: JICA Project on Capacity Development for International Trade Facilitation in the East African Region, *Endline Time Measurement Survey at Rusumo Border Crossing – Final Report* (May 2017).

Similarly, the data from the Central Corridor Transit Transport Facilitation Agency (hereinafter referred to as "CCTTFA") indicate that the average border crossing time at the Rusumo border post for trucks had declined by 59% from 1.70 hours to 0.69 hours between 2015 and 2016¹³. The interviews with the drivers of large trucks carried out at the Rusumo border post also confirmed that the time to complete border-crossing procedures had been dramatically reduced after completion of the project. On a side note, the average border crossing time of 0.69 hours at the Rusumo OSBP is significantly shorter than that of 2 hours at the Mutukula OSBP (Uganda/Tanzania border) and that of 2.27 hours at the Kobero/Kabanga OSBP (Burundi/Tanzania border)¹⁴.

The indicator "Transportation cost (for a round trip between the Port of Dar es Salaam and Kigali)" is not clear on its definition, and thus it was not possible to know which specific expenditure items have been included in the baseline and target values. Since actual data measured immediately after completion of the project were not available either, this evaluation has examined the trend of a similar indicator's available data as an alternative measure. Table 8 shows that the average transportation cost for moving a 40-foot container from Dar es Salaam to Kigali¹⁵ had dramatically decreased from USD 3,700 in January 2016 to USD 2,700 in December 2016. Particularly, the transportation cost dropped sharply after March 2016 once the OSBP system started operating.

Table 8. Average Transportation Cost for Moving a 40-foot Container from Dar es Salaam to Kigali

	(Unit: USD)											
	2016 Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Transportation Cost	3,700	3,800	3,800	3,500	3,000	3,000	3,000	3,000	2,800	2,800	2,800	2,700

Source: CCTTFA, *Central Corridor Performance Monitoring Report 2016* (April 2017).

According to the analysis done by a CCTTFA expert, the transportation cost is strongly influenced by the supply and demand of freight cargo transportation at the Port of Dar es Salaam, and the operationalization of the Rusumo OSBP is estimated to have contributed to an approximately USD 200 reduction in the cost at

¹³ Source: CCTTFA, *Central Corridor Performance Monitoring Report 2016* (April 2017).

¹⁴ Ibid.

¹⁵ It includes the cost of returning empty containers to Dar es Salaam but excludes terminal charges at the Port of Dar es Salaam and customs duties at Rusumo (about USD 400 in total).

maximum¹⁶. Still, this is greater than the USD 80-reduction in transportation cost per container expected at the time of planning. Thus, this project is judged to have made a certain contribution to the reduction of the transportation cost, as originally expected

In sum, it is recognized that the constructions of the international bridge and the OSBP facilities have helped ease the traffic restrictions and facilitate the customs and border-crossing procedures. As a result, the time to complete the border-crossing procedures has been dramatically reduced and the transportation cost has also been dropped.

3.3.1.2. Qualitative Effects (Other Effects)

See the "Impacts" section.

3.3.2. Impacts

3.3.2.1. Intended Impacts

At the time of planning, the following three indicators were selected as qualitative measures for the indirect effects of this project. Since those qualitative measures are all concerned with the effects on a regional scale and of medium to long-term, this evaluation has treated them as impact indicators.

- Due to the elimination of bottlenecks, such as the restrictions on traffic volume on the aging Bridge and cumbersome border-crossing procedures, the development and improvement of the entire Central Corridor (e.g., Port of Dar es Salaam, roads) will be accelerated.
- Due to the elimination of bottlenecks and the more efficient border-crossing procedures, a large number of vehicles using the Northern Corridor will switch to the more cost-competitive Central Corridor. This will make the distribution of traffic volume, which is currently concentrated in the Northern Corridor, more balanced, and consequently will make possible the smooth and stable logistics and distribution of goods throughout East Africa.
- For Rwanda, a reliable alternative route to the Northern Corridor will make possible the smooth and stable logistics and distribution of goods.

This evaluation has examined the development outcomes of those impacts using administrative data and through the interviews with the officials from the executing and related agencies in both Rwanda and Tanzania, as well as the owners, managers, and truck drivers of the transportation/business companies that have been using the Central Corridor (between Dar es Salaam and Kigali).

(1) Development and Improvement of the Central Corridor as a Whole

While the project was under way, the Single Customs Territory (hereinafter referred to as "SCT") system

¹⁶ A shipper who signs a contract with a carrier (transporter) has agreed to pay an extra USD 200 per day every day the unloading of the container from a truck is delayed after arriving at the destination. According to a survey conducted by the CCTTFA, the expense equivalent to this one day has been saved after completion of the project, contributing to a reduction in the transportation cost.

started to be introduced to the Port of Dar es Salaam in July 2014 and enabled uniform processing of the pre-arrival declaration and customs clearance of cargo. This, coupled with the elimination of the bottlenecks in Rusumo, has contributed to the accelerated development and improvement of the entire Central Corridor including the Port of Dar es Salaam. In the past several years alone, a new investment of approximately USD 600-million has been initiated at the Port of Dar es Salaam to modernize the port facilities¹⁷, and at the Rwandan side, the aforementioned ODA loan project “Rusumo-Kayonza Road Improvement Project” had been implemented. Approximately 95% of the road network along the Central Corridor has already been paved with asphalt, and a plan to improve the road section between the Nyakanazi-Rusumo at the Tanzania side, which is in a poor condition, has been under way through a multi-donor fund led by the African Development Bank. A large majority of the managers and truck drivers who work for the transport/warehouse/customs services companies in Dar es Salaam have also spoken highly of the contribution of the improved Central Corridor infrastructure on the more efficient transportation and enhanced security¹⁸. On a side note, the average transit time from Dar es Salaam to Kigali was 3.76 days in 2016¹⁹.

(2) Smooth and Stable Distribution of Goods throughout East Africa through the Balanced Distribution of Traffic Volume and Logistics

According to the data from the Northern Corridor Transit Transport Coordination Authority (hereinafter referred to as "NCTTCA"), Rwanda's exports and imports through the Port of Mombasa declined significantly from 2015 to 2016, whereas those through the Port of Dar es Salaam increased (see Table 9). One possible cause would be that the elimination of bottleneck and the streamlined customs/border-crossing procedures have helped shift the distribution of goods from the Northern Corridor to the Central Corridor²⁰.

Table 9. Exports and Imports of Rwanda by Port over Time

(Unit: dead weight tonnage)				
	Port	2015	2016	Change
Exports	Dar es Salaam	19,847	22,348	12.6%
	Mombasa	18,109	13,741	-24.1%
Imports	Dar es Salaam	819,935	840,292	2.5%
	Mombasa	273,815	180,281	-34.2%

Source: NCTTCA, *Northern Corridor Transport Observatory Report, 10th Issue* (May 2017).

Data on the number of trucks passing through the Rusumo border per day also show an 81% increase from

¹⁷ Source: CCTTFA, *Central Corridor Performance Monitoring Report 2016* (April 2017).

¹⁸ The total number of respondents was 24, of which nine were the managers of the transportation/warehouse/customs services companies, one was an employee of the transportation company, and 14 were truck drivers. They were all males. On average, the truck drivers have worked as a driver for 15.8 years (minimum four years, maximum 35 years), the average number of employees of the transportation/warehouse/customs services companies is 226 (minimum 10 persons, maximum 600 persons). The samples of those face-to-face interviews, however, were not selected randomly based on a probability mechanism. The sample size is also limited. Therefore, those survey results should be treated only as secondary reference information.

¹⁹ Source: CCTTFA, *Central Corridor Performance Monitoring Report 2016* (April 2017). The transit time has increased in recent years due to the stricter enforcement of speed limit regulations in Tanzania.

²⁰ According to a Japanese company located in suburban Kigali, its transport cost per 20-foot container was reduced by about USD 200-300 after having changed the transport route for export goods from the Northern Corridor to the Central Corridor in the latter half of 2016.

80 vehicles in 2012 to 145 units in 2016²¹, and corroborate that the number of vehicles using the Central Corridor has been increasing. The customs collection at the Rwandan side of the Rusumo border post had increased by about 50% from 2014/15 to 2016/17, and the collection at the Tanzanian side had increased more dramatically than that²².

(3) Smooth and Stable Logistics and Distribution of Goods in Rwanda

In the global ranking of the World Bank's Logistics Performance Index (hereinafter referred to as "LPI"), Rwanda made a big leap from the 151th place in 2010 to the 62nd in 2016 and to the 57th in 2018 (see Table 10). A part of Rwanda's significantly improved performance in logistics may be attributable to Rwanda's stabilized smooth logistics through the development and improvement of the Central Corridor²³.

Table 10. Rwanda's Ranking in the World Bank's Logistics Performance Indicators Index (LPI)

	2010	2012	2014	2016	2018
Global Ranking	151	139	80	62	57
LPI Score	2.04	2.27	2.76	2.99	2.97
Customs	1.62	2.19	2.50	2.93	2.67
Infrastructure	1.62	1.88	2.32	2.62	2.76
International Shipments	2.88	2.27	2.78	3.05	3.39
Logistics Competence	1.85	2.06	2.64	2.87	2.85
Trucking & Tracing	1.99	2.39	2.94	3.04	2.75
Timeliness	2.05	2.76	3.34	3.35	3.35

Source: World Bank LPI (2018)

In short, the development and improvement of the Central Corridor has been accelerated and the number of vehicles using the Central Corridor has relatively increased. At the same time, Rwanda's performance in logistics has been getting better. Through eliminating the bottlenecks and streamlining customs/border-crossing procedures in Rusumo, this project is considered to have contributed to those positive outcomes of the impacts.

3.3.2.2. Other Positive and Negative Impacts

(1) Impacts on the Natural Environment

Through the face-to-face interviews and questionnaire surveys with the officials from the executing and related agencies, no permanent negative impact of this project on the natural environment has been confirmed. The Rwandan side conducted the Environmental Impact Assessment (hereinafter referred to as "EIA") in May 2011 and approved the plan in January 2012. To minimize any undesirable environmental effects during

²¹ Data provided by Rwanda Transport Development Agency (RTDA).

²² No specific figures are disclosed in this report as they are internal data.

²³ Press release of the World Bank report *Connecting to Compete 2016: Trade Logistics in the Global Economy* (2016) (<http://webcache.googleusercontent.com/search?q=cache:http://www.worldbank.org/ja/news/press-release/2016/06/28/germany-tops-2016-logistics-performance-index>) remarks that "for the first time in the history of the *Connecting to Compete* reports, landlocked countries are no longer automatically disadvantaged, as shown by the performances of both Rwanda and Uganda, which benefit from regionally coordinated efforts to improve trade corridors."

the construction period, they have also taken mitigation measures and carried out monitoring activities as planned²⁴. It has also been confirmed that the Tanzanian side had taken the appropriate steps, which were in line with the mitigation measures set through the EIA, although no specific document and data related to the EIA have been provided.

(2) Land Acquisition and Resettlement

Rwanda and Tanzania both formulated the Resettlement Action Plan (RAP) and implemented land acquisition and resettlement as planned, in accordance with their respective laws. In Tanzania, 48 households were compensated for land acquisition and resettlement, whereas 25 households were compensated in Rwanda²⁵. One of the residents in Rwanda, who had received compensation, subsequently filed a lawsuit complaining the amount of the compensation. However, the court ruled that the amount of the compensation had been adequate. In the meanwhile, it is now possible for the residents who live around the border post to go back and forth across communities using a border pass (rather than a passport) to cross borders. This was made possible to minimize any impact of tightening border control on dividing the communities. According to the officials from immigration and the police, the residents have stopped complaining against the tightened border control, because crackdowns on illegal border-crossing and smuggling activities dramatically reduced crime.

(3) Effects on Poverty Reduction in the Neighboring Areas

Regarding the effects of the project on poverty reduction, group discussions and face-to-face interviews with shop owners and shop clerks of roadside groceries, food stands, clothing stores, general stores, and such had been conducted at Rwanda side in the town of Kirehe, which borders the Rusumo border, and in the regional city of Kayonza, which is located in the middle point between Rusumo and Kigali²⁶. The surveys assessed changes in the variety and prices of goods being distributed, as well as employment opportunities and others, before and after the project. Yet, except for the perception that traffic volume has increased, no other specific trends on the variety of goods, prices, employment opportunities, and such have been confirmed.

(4) Synergy with Technical Cooperation Projects

This project had no training component for capacity building. However, through the separately implemented technical cooperation projects of the “Project for Capacity Building for the Customs Administrations of the Eastern African Region” (2007–2009), the “Project for Capacity Building for the Customs Administrations of the Eastern African Region (Phase 2)” (2009–2013), and the “Project on Capacity Development for International Trade Facilitation in the Eastern African Region” (2013–2017),

²⁴ Specifically, mitigation measures, such as minimizing oil spillage, requiring workers to wear personal protective equipment, marking site boundaries clearly, cleaning fully furnished toilets routinely, and spreading water regularly to minimize dust, had been taken.

²⁵ The total amount was approximately 286 million Tanzanian shillings and 124 million Rwandan francs, respectively.

²⁶ The total number of respondents was 15, of which seven persons were in Kirehe and eight persons in Kayonza, 11 males and four females. By age group, five were in their 20's, four were in their 30's, four were in their 40's, and two were in their 50's.

capacity development has been carried out for both Rwandan and Tanzanian officials working at customs and immigration at the Rusumo border facilities. According to the interviews with the officials from the related agencies, the training programs provided by the technical cooperation projects have helped improve the operational capacity of the OSBP staff, which had been an issue when introducing the OSBP system. Thus, they are found to have played a complementary role to this project.

Summarizing effectiveness and impact, this project helped relax traffic restrictions on the bridge and enabled large trucks to pass through, with regard to effectiveness. Moreover, the introduction of the OSBP system and the 24-hour operation of the OSBP facilities significantly reduced the time to complete border-crossing procedures. The transportation cost between Dar es Salaam and Kigali also declined as expected. Furthermore, with regard to impacts, the development and improvement of the Central Corridor has been accelerated, and the number of vehicles using the Central Corridor has increased accordingly. At the same time, Rwanda's performance in logistics has improved. Therefore, the effectiveness and impact of the project are high.

3.4. Sustainability (Rating: ②)

3.4.1. Institutional / Organizational Aspect of Operation and Maintenance

In this project, there are a number of executing and related organizations that have been involved in its operation and maintenance. TANROADS is responsible for the maintenance of the bridge and roads at Tanzania side, whereas Rwanda Transport Development Agency (hereinafter referred to as "RTDA") is responsible for that at Rwanda side. In addition, the operation and routine maintenance of the OSBP facilities at Tanzania side is done by the organizations that make use of the facilities, such as the Tanzania Revenue Authority (TRA) and the Immigration Department, whereas the operation and management of the OSBP facilities at Rwanda side is taken care of by the organizations such as the Rwanda Revenue Authority (hereinafter referred to as "RRA") and the Directorate General of Immigration and Emigration (hereinafter referred to as "DGIE").

As for the operation and maintenance of the bridge and roads, the executing agencies both at the Rwandan and Tanzanian sides have had adequate manpower, and no problems have been found. For the maintenance of the Rusumo bridge, TANROADS and RTDA have been making inspections on a regular basis. And the system is in place so that if any problem is found, it is jointly dealt with and the cost is also split between the two sides. As for the operation and maintenance of the OSBP facilities, on the other hand, the number of the staff working for customs and immigration control at the Tanzanian side tends to be in short supply because their workloads have expanded along with the rapidly increased traffic volume. Although the manpower situation has been getting tight at the Rwandan side as well, no specific problem on organizational structure or staffing level has been confirmed at the time of ex-post evaluation. The number of RRA staff increased from nine persons (2013/14) to 16 persons (2018), whereas that of DGIE increased from six persons (2014) to 13 persons (2018).

3.4.2. Technical Aspect of Operation and Maintenance

No technical problems have been found for the executing and related agencies of both countries on the operation and maintenance of the Rusumo bridge, access roads, and OSBP facilities. Both TANROADS and RTDA have sufficient numbers of qualified professional engineers. No technical difficulties have occurred in the maintenance of the bridge, either.

For the offering of in-house training, the executing and related agencies depend heavily on donor support, and the passing of necessary skills has been done primarily through on-the-job training (OJT). As mentioned above, the training programs provided by the technical cooperation projects have helped improve the operational capacity of the staff working for customs and immigration controls, and others. The operation manuals and built drawings provided by the Japanese construction consultant and construction contractor have been made use of by the executing and related agencies.

3.4.3. Financial Aspect of Operation and Maintenance

Both TANROADS and RTDA have secured adequate budget for the operation and maintenance of the bridge and roads, and no specific problems have been identified. With regard to the operation and maintenance of the OSBP facilities, TRA and the Immigration Department have had minor budget issues on staffing, as their workloads have expanded along with a dramatic increase of traffic volume. Also, the budget necessary for arranging the housing and commuting minibuses for the staff working at the border post is rather in short supply²⁷. As mentioned, Tanzania's customs collection at the Rusumo border post has sharply increased from 2014/15 to 2016/17, even compared to that of the Rwandan side. The rapidly expanding workload at the Tanzanian side after the introduction of the OSBP system may be one of the factors that have caused its relative shortage of manpower and funding.

3.4.4. Status of Operation and Maintenance

Through the site visits and interviews, it has been confirmed that those constructed and procured by this project, such as the bridge, the OSBP facilities, and the access roads, have been utilized as originally planned. The border-crossing procedures based on the OSBP system was introduced in March 2016 (officially in April 2016), and the 24-hour operation of the OSBP facilities began in October 2017, as described earlier.

Most recommendations made by the Japanese side for the maintenance of facilities at the time of planning and during the defect liability period, have been carried out by the executing agencies of both Rwanda and Tanzania. (Though, the frequencies of maintenance tasks to be conducted and such have been determined flexibly by respecting the judgment of the workers who are familiar with the circumstances in the field.) On the other hand, X-ray scanners for cargo inspection have not been installed at the border post of neither Rwanda nor Tanzania side, primarily due to budgetary reasons²⁸. Since both TRA and RRA officials are aware

²⁷ The detailed personnel and financial data at the customs and immigration control of the Rusumo border facilities could not be obtained from the agencies concerned of both countries as they are internal information.

²⁸ Since the introduction of the Single Customs Territory (SCT) at the Port of Dar es Salaam, the number of cargoes needed to be inspected at the Rusumo border post has been decreased. This may have somehow reduced priority on the installation of the X-ray scanners.

of the importance of using X-ray scanners, they should be installed at the earliest possible time.

In light of the above, there are some minor problems on the institutional and financial aspects of the operation and maintenance of this project, as well as its status. Therefore, sustainability of the project effects is fair.

4. Conclusion, Lessons Learned and Recommendations

4.1. Conclusion

The objective of this project is to ease the traffic restrictions and facilitate the border-crossing procedures at the Rusumo border between Rwanda and Tanzania through the reconstruction of the Rusumo International Bridge and the construction of the OSBP facilities, thereby contributing to the smooth and stable logistics and distribution of goods along the Central Corridor.

Since the project was consistent with the national development policies and road/transport sector strategies of Rwanda and Tanzania and their development needs at the times of planning and ex-post evaluation, as well as Japan's aid policy at the time of planning, its relevance is high. The outputs, such as the constructions of a bridge, roads, and border post facilities, had been produced as planned, and the project period and the project cost were both within the plan. Therefore, the efficiency is high. By reconstructing the Rusumo bridge, this project has eased gross weight and speed restrictions for travelling vehicles and enabled large trucks, which could not cross the bridge before, to pass through smoothly. Moreover, owing to the development of the OSBP facilities, the border-crossing procedures based on the OSBP system and the 24-hour operation of the OSBP facilities have been implemented by the time of ex-post evaluation. And the time necessary for customs and border-crossing procedures has been dramatically shortened, and the transportation cost for a cargo for a round trip between Dar es Salaam and Kigali has also been reduced as expected. Furthermore, due to the elimination of a bottleneck, the numbers of vehicles passing through the Rusumo border and the Central Corridor have substantially increased, and it has helped accelerate the development and improvement of the entire Central Corridor. Thus, the effectiveness and impact of the project are high. As for the operation and maintenance, no specific problem has been identified in terms of its technical aspect. However, there is a concern about the staffing level and operational budget for customs and immigration as their workloads at the OSBP facilities have been expanding along with the increasing traffic volume. In addition, X-ray scanners for cargo inspection, which were to be borne by the Rwandan and Tanzanian sides, have not been installed yet due to budgetary reasons. Therefore, the sustainability of the project is fair.

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

4. 2. Recommendations

4. 2. 1. Recommendations to the Executing Agency

None

4. 2. 2. Recommendations to JICA

None

4. 3. Lessons Learned

Selecting Indicators for Evaluation through the Collaboration with the Executing Agencies

Many of the indicators for quantitative effects, set at the time of planning for measuring effectiveness, were not appropriate nor clearly defined, and thus could not be used for the ex-post evaluation. In addition, the officials from the executing and related agencies, even those project engineers who had engaged in the project from the planning stage, had not been involved in the selection of those evaluation indicators. The officials even did not recognize that those indicators had been selected. Therefore, when setting the evaluation indicators at the time of planning, it should have been fully discussed and agreed with the officials from the executing and related agencies as to whether the selection of the indicators and the setting of their targets are appropriate, and their definitions must have been made clear and specific as needed. Moreover, the rationales, logic, and assumptions made when selecting the indicators and settings of their targets should have been documented for future reference in order to make the indicators useful for the ex-post evaluation.

Implementing a Technical Cooperation Project or a Training Component for Capacity Building for a Similar Project for the Development of OSBP Facilities

Although the project had no training component for capacity building, capacity development for both Rwandan and Tanzanian officials working at customs and immigration at the Rusumo border facilities has been carried out through the separately implemented technical cooperation projects. For any project for the development of OSBP facilities, it is essential to train the officials concerned to become familiar with OSBP guidelines and manuals and master the operating procedures necessary for running the OSBP system, which must go far beyond just building facilities and procuring equipment. The technical cooperation projects have played that important complementary role in this project. When implementing a similar project for the development of OSBP facilities in the future, therefore, it is desirable to carry out a similar technical cooperation project or a training component for capacity building.