

FY2021 Simplified Ex-Post Evaluation Report of Japanese Grant Aid Project

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Duration of the Study: November, 2021 - February, 2023

Duration of the Field Study: May 3 - May 28, 2022

Country Name < The Project for Construction of a Health Science Institute in Nacala >
 The Republic of Mozambique



Location of the Project site
 (Source: Japan International Cooperation Agency (JICA))

The Constructed Health Science Institute Nacala

I. Project Outline

Background	<p>In Mozambique, the number of doctors, nurses, and midwives per 100,000 population in 2013 was 68.6, which was far below the African regional average of 115 and the 228 recommended by the World Health Organization (WHO). Therefore, the further increase in the number of necessary healthcare professionals remained a major issue. Particularly in Nampula Province located in the northern part of the country, which is the target area of this Project, the ratio of healthcare professionals to the provincial population was 1,468:1, which was lower than the national average (1,148:1) (2013). However, in the northern region of the country, there was only one Health Science Institute (Instituto de Ciências Saúde: ICS) - in Nampula City, where mid-level healthcare professionals were trained. Moreover, due to a lack of capacity of facilities, the annual number of trained personnel at ICS Nampula was only 260, falling short of the target number of 370, and there was a need to expand the training facilities to increase the number of mid-level healthcare professionals in the region.</p>			
Objectives of the Project	<p>The objective of this Project is to promote the training opportunities for mid-level healthcare professional by developing the Health Science Institutes (Instituto Ciências de Saúde: ICS) Nacala in Nacala city of Nampula Province, thereby contributing to improving the quality and quantity of healthcare professionals in Mozambique.</p>			
Contents of the Project	<ol style="list-style-type: none"> 1. Project Site: Nacala city, Nampula Province 2. Japanese side <ol style="list-style-type: none"> 1) Civil works and equipment procurement: Facility construction of ICS Nacala (Buildings for classrooms, administration & teachers, toilet facilities for teachers, auditorium, cafeteria, dormitories, teacher's house, guard house, electric room, connecting corridor, and water storage tank), and equipment procurement (Equipment for laboratories, equipment for library, classrooms and administrations, vehicles, etc.) 2) Consulting services: Detail design and construction supervision, guidance for initial operations and use by the contractors 3. Mozambican side: <ol style="list-style-type: none"> 1) Construction related items: Removal of existing facilities and others, infrastructure development (electricity, water, internet, etc.), boundary fence repairs, construction of gates for teacher's house, (after handover) purchasing of furniture, office supplies, tableware, fabric and others, gas cylinder installation and valve connections, etc. 2) Other procedures: Approval of a design, notification of the Project registration and others, procedures related to banks (B/A, issue of A/P, payment of commissions), tax exemption, assistance in obtaining residence permits, etc. for Japanese nationals related to the Project. 			
Implementation Schedule	E/N Date	October 2, 2015		
	G/A Date	October 2, 2015	Completion Date	August 31, 2018 (Date of completion of construction)
Project Cost	E/N Grant Limit / G/A Grant Limit: 2,121 million yen, Actual Grant Amount: 1,986 million yen			
Executing Agency	Department of Planning Cooperation, Ministry of Health			
Contracted Agencies	<p>Main Contractors: Dai Nippon Construction (Construction works), Nissei Trading Co., Ltd. (Equipment supplier) Main Consultants: Matsuda Consultants International Co., Ltd / INTEM Consulting, Inc. (JV) Agent: None</p>			

II. Result of the Evaluation

Summary

The Project was implemented with the aim to promote training opportunities for mid-level healthcare professionals by developing ICS Nacala in Nacala city of Nampula Province, thereby contributing to the improvement of the quality and quantity of healthcare professionals in Mozambique. Its purpose is in line with Mozambican development policy at the time of planning and the ex-post evaluation, which has emphasized the importance of ensuring the quantity and quality of healthcare professionals, development needs to develop ICSs and Japan's development cooperation policy. Indirect contribution by the JICA's technical cooperation project is confirmed and the Project is consistent with Goal 3 of the Sustainable Development Goals (SDGs). Therefore, its relevance and coherence are high. The outputs were as planned, and the Project cost was within the plan while the Project period exceeded the plan. Therefore, efficiency of the Project is high. Regarding the operation and effect indicators that were set at the time of planning, achieved the target regarding "the number of yearly graduates" in ICS Nacala was achieved. Meanwhile, in accordance with the Ministry of Health (MoH)'s policy of improving the quality of education, the number of courses being run has been narrowed down and other measures promoted. Therefore, "the number of courses for training mid-level healthcare professionals" and "the class hours per year for practical training and clinical practice training" remained at around 70% of the planned level. The facilities and laboratory equipment developed under the Project have enabled practical training closer to practice in addition to theory, contributing to an improved effective and efficient learning and working environments at ICS Nacala. The trainees and graduates from ICS Nacala, are also highly evaluated at the hospitals where they are received. It can also be said that there are few negative long-term social (including human rights and gender equality), environmental or economic impacts. Therefore, effectiveness and impacts of the Project are high. While no issues have been observed in the policy/system, institutional/organizational, and technical aspects, some issues have been observed in the financial aspects and the current status of operation and maintenance (O&M), and they are not expected to be improved/resolved. Therefore, sustainability of the Project effects is moderately low.

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

Overall Rating¹	B (Satisfactory)	Relevance & Coherence	③ ²	Effectiveness & Impact	③	Efficiency	③	Sustainability	②
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<Special Perspectives Considered in the Ex-Post Evaluation / Constraints of the Ex-post Evaluation>

- None

1 Relevance/Coherence

<Relevance>

- Consistency with the Development Policy of Mozambique at the Time of Ex-Ante and Ex-Post Evaluation

One of the pillars of *the National Development Strategy (2015-2035)* at the time of the ex-ante evaluation, "Human Resource Development," identified the improvement of health care standards as a priority area. *The Human Resource Development Plan in Health Sector (2008-2015)*, *the Accelerated Training Plan (Plano de Formação, (PF)) (2011-2015)*, and *the PF II (2013-2015)* provide specific human resource development plans to address the shortage of healthcare professionals. *The Human Resource Development Plan in the Health Sector (Plano Nacional de Desenvolvimento dos Recursos Humanos Para a Saude)(2016-2025)* at the time of the ex-post evaluation reflects the MoH's policy of improving the quality of education by directing that the standard number of students per class be reduced from 30 to 20, although the demand for healthcare professionals is very large. Since this Project aims to contribute to the improvement of the quality and quantity of healthcare professionals, it is consistent with Mozambican development policy.

- Consistency with the Development Needs of Mozambique at the Time of Ex-Ante and Ex-Post Evaluation

As described earlier in the "Background" section of the I. Project Outline, the shortage of healthcare professionals was an urgent issue to be improved in Mozambique at the time of the ex-ante evaluation. In particular, in the northern region, there was only one ICS in Nampula Province that trains mid-level healthcare professional, and ICS Nampula has been forced to run courses in excess of the appropriate number of courses to meet the demand for training healthcare professional in the northern region, in addition to the nationwide demand for training healthcare professionals. At the time of the ex-post evaluation, the number of healthcare professional remained below the level recommended by the WHO, and the demand for them and the roles, needs and expectations of ICS Nacala are still high. Based on the above, it is judged that this Project is consistent with the development needs of Mozambique.

- Appropriateness of Project Design/Approach

The operation and effect indicators, i.e., "the number of courses for training mid-level healthcare professionals" and "the class hours per year for practical training and clinical practice", were below the plan, however, this was due to the fact that the operations of ICS are being carried out in accordance with the MoH's policy. Therefore, it can be concluded that this is not because of the appropriateness of the Project design/approach.

<Coherence>

- Consistency with Japan's ODA Policy at the Time of Ex-Ante Evaluation

The Country Assistance Program for Mozambique (March, 2013) included the "Nacala corridor development and improvement program" and "the basic health improvement program" in the priority areas of "regional economic revitalization including corridor development" and "human development" respectively and defined the emphasis on social infrastructure development and expanding access to health services. *The JICA Country Analysis Paper for Mozambique* also states the importance of health sector support, and this

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

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

Project is consistent with these policies.

▪ Internal Coherence

At the time of ex-ante evaluation, there were no other specific projects which were scheduled to be collaborated or coordinated with; however, JICA has provided technical cooperation in human resource development of the health sector in Mozambique for years. For example, ICSs in Mozambique have utilized the curricula which were revised through “the Project for Strengthening Pedagogical and Technical Skills of Teachers of Health (2012-2016),” which supported standardization of curricula and instructional manuals and capacity building of teaching methods with the aims of ensuring the quality of human resource development in the health sector although the project was completed when this Project started. In addition, the director and several other teachers at ICS Nacala have participated in the project’s training (teaching methods, etc.). According to the director of ICS Nacala, the outcomes of the project continue to be utilized at ICS Nacala, thereby indirectly contributing to the achievement of the Project’s goal in terms of improving the quality of human resource development.

▪ External Coherence

Since the establishment of ICS Nacala, there have been no projects supported by Japanese agencies other than JICA or other organizations related to ICS Nacala. Therefore, there is no collaboration or duplication with other projects, and there is no indication that any practical adjustments were made. In relation to the international framework, this Project is consistent with the SDGs “Goal 3: Good Health and Well-being for All” from the perspective of contributing to improving the quality and quantity of healthcare professionals in Mozambique by promoting the training of mid-level healthcare professionals.

<Evaluation Result>

In light of the above, the relevance of the project is high³.

2 Effectiveness/Impact⁴

<Effectiveness>

- Qualitative effect

“The number of yearly graduates” of ICS Nacala, which was set as the quantitative effect of this Project, has reached the target number. On the other hand, “the number of courses for training mid-level healthcare professionals” and “class hours per year for practical training and clinical practice training” in ICS Nacala were about 70% of the target values. As the MoH determines the implementation courses to be opened by each ICS based on its budget and needs, ICS does not have the right to determine them. Therefore, the direct reason why the number of courses operated was lower than planned was that the number of courses determined by the MoH was lower than planned. Meanwhile, as noted in the section on Relevance, the MoH is committed to improving the quality of education and tends to operate fewer courses and teach fewer students than in the past. Therefore, the number of courses operated at ICS Nacala was below the target due to the influence of the MoH’s policy, and it should be considered that this was the result of measures taken in accordance with this policy. Moreover, the number of hours for practical training and clinical practice training is specified by the curricula, and ICS Nacala has been conducting training in accordance with the curricula. However, the number of hours for practical training and clinical practice training is also affected by the number of courses operated, and the fact that the number of courses which operated less than planned is considered a reason why it did not reach the target value. In addition, to confirm the quality of education, the graduation rate at ICS Nacala was confirmed as a reference indicator, and the rate in 2021 was 82%. At the time of planning, approximately 15% of the students were assumed to fail to graduate each year⁵. Therefore, it can be described as an appropriate situation.

- Qualitative effect: Improvement of learning environment for students and working environment for teachers

By utilizing the facilities and laboratory equipment developed under the Project, ICS Nacala is able to provide rich exercises and practical training, as well as effective and efficient classes.

< Learning environment students >

ICS Nacala is equipped with the necessary laboratory and laboratory equipment to conduct the practical training and clinical practice training as specified in the curriculum, and the required number of hours of practical training and clinical practice training are conducted based on the curriculum defined for each course. According to the students of ICS Nacala, after learning theory in a classroom, practical learning through models and experiments contributes to a better understanding of what they are learning. It was also confirmed through interviews⁶ that students are very satisfied with the quality of classes conducted in a laboratory equipped with facilities and equipment, and with the learning environment that offers comfortable study facilities.

<Working environment for teachers>

ICS Nacala has an environment that makes it possible to conduct classes efficiently and effectively. For example, the laboratory equipment allows students to visually demonstrate realistic situations. By utilizing the projectors installed in all classrooms to project materials, printing works have been eliminated, thereby contributing to saving time and cost. In addition, since the copy machine in ICS Nacala is only for black and white, it contributes to improving the quality of classes by, for example, projecting onto a projector and showing conditions (such as the color of medicines) that are closer to reality, thereby enabling easier and more effective explanations to students. In the interviews⁷, teachers at ICS Nacala answered that it provides the most favorable working environment for teachers in Mozambique, with teacher’s rooms for each course, a workroom, a printing room, and other spaces necessary for class preparation.

³ Relevance is ③, coherence is ②.

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

⁵ Source: Preparatory survey report

⁶ Four group interviews were conducted with 18 students (12 male and six female) during the site survey.

⁷ Individual interviews were conducted with six teachers (three male and three female) during the site survey.

<Impact>

The impact of the Project was assumed to contribute to improvement of the quality and quantity of healthcare professionals in Mozambique. At the time of the ex-post evaluation, the ratio of graduates of ICS Nacala to the total number of mid-level healthcare professional in the country was 0.6%⁸, and 13%⁹ compared to the total number of graduates of ICSs nationwide. At this stage, with only 168 graduates from ICS Nacala, it is difficult to judge its contribution to improving the quality and quantity of healthcare professionals in the country, but it is expected to gradually increase its contribution in the future. In addition, the hospitals where trainees learn or graduates work have given high marks to the medical services provided by the interns and graduates of ICS Nacala, as well as to the efforts of ICS Nacala to improve its operations. For example, according to healthcare professionals at the hospitals that accept student interns, students of ICS Nacala have sufficient practical knowledge and are able to handle actual treatment without confusion. Moreover, at the hospital where graduates from ICS Nacala work, it was also reported that the graduates provide healthcare services that serve as a model for other healthcare professionals. For example, they proactively explain oral care to patients experiencing dental pain, informing them how to brush their teeth, frequency and timing of brushing and so on, rather than providing only treatment. Accordingly, they serve as a model to other healthcare professionals. The hospital conducts annual evaluations¹⁰ of healthcare professionals in each department, and graduates of ICS Nacala have had very good results. Thus, it can be said that the degree of the contribution by the Project to improving the quality and quantity of health personnel has been confirmed, albeit on a limited scale.

No negative impact on the natural environment was observed by the implementation of the Project¹¹. ICS Nacala also answered that no negative impact has occurred, and the measures specified at the time of planning for items to be complied with, such as dust and noise, were properly implemented. In addition, no land acquisition or resettlement occurred. It is also confirmed with ICS Nacala that there is no negative long-term social (including human rights and gender equality) or economic impact.

<Evaluation Result>

Therefore, the effectiveness/impact of the Project is high.

Quantitative Effects

Table 1 Operation and Effect Indicators of This Project

Indicators	Baseline 2014 Baseline Year	Target 2021 3 Years after Completion	Actual 2018 Completion Year	Actual 2019 1 Year after Completion	Actual 2020 2 Years after Completion	Actual 2021 3 Years after Completion
Number of yearly graduates	0	128	0	0	0	168
Number of courses for training mid-level healthcare professionals	0	14 → 11 ^{Note 1}	0	7	8	8
Class hours per year for practical training and clinical practice training	0	10,634 → 8,349 ^{Note 2}	0	9,976	7,673	5,882
(Reference) Graduation rates (%)	—	—	—	—	—	82%

Source: Ex-ante evaluation, the preparatory survey report, questionnaire answers, interview with Ministry of Health and ICS Nacala

Note1: The number of courses to be operated in 2021 listed in the ex-ante evaluation report was 14 courses. However, according to the MoH and ICS Nacala, the target indicated at the time of planning was 11 courses, and the defect inspection report also stated that the number of courses planned was 11; hence the target value for evaluation is revised to 11 courses.

Note 2: The 10,634 hours would be the number of class hours calculated based on the assumption that 14 courses were operated. If the number of courses operated is 11, the number of hours is less than 10,634. Although the ratio of practical training and clinical practice training varies from course to course, as a rough guide, assuming an average of 759 hours per course, it would be approximately 8,349 hours for the 11 courses.

3 Efficiency

The actual output of the Project was generally as planned (as described in “I. Outline of the Project”). Although there were changes in facility specifications, etc., there were no changes that would affect the Project effectiveness. On the items covered by the Mozambican side, all have been implemented, although there were delays in internet connection and tax refunds.

While this Project was planned to cost 2,289 million yen (2,121 million yen on the Japanese side, 168 million yen on the Mozambican side), the actual Project cost was 2,101 million yen (1,986 million yen on the Japanese side, 115 million yen on the Mozambican side), within the plan (87% of the original plan: 94% of the plan on the Japanese side and 68% of the plan on the Mozambican side). The difference between the planned and actual amount borne by the Japanese side was due to exchange rate fluctuations and bidding prices. The amount to be borne by Mozambique was also within the plan in yen terms due to exchange rate fluctuations.

The Project period was 34 months (126% of the plan), exceeding the plan of 28 months. The reasons were that the method of obtaining work permits was changed at the bidding stage, requiring more days than planned to prepare the necessary documents, and that the construction period was extended due to the deterioration of the Mozambican economy in 2016, which adversely affected the local subcontractor’s cash flow and procurement of materials and labor.

<Evaluation Result>

In light of the above, while the Project costs was within the plan, Project period exceeded the plan. Therefore, efficiency of the Project is high.

⁸ Ratio of 168 graduates of ICS Nacala to 28,169 mid-level healthcare professionals in Mozambique. Source: Questionnaire answers, MoH *Relatorio Annual 2020*

⁹ The ratio of 168 graduates of ICS Nacala to the 1,344 yearly graduates of healthcare professionals of ICSs in Mozambique. Source: Questionnaire answers, MoH *Relatorio Annual 2020*

¹⁰ The evaluation criteria cover a wide range of items including punctuality, responses to colleagues and patients, personal appearance, contribution to teamwork, knowledge sharing with the others in addition to professionalism.

¹¹ The guideline for environmental and social considerations applied to this Project is the *JICA Guidelines for Confirmation of Environmental and Social Considerations* (formulated in April 2010), and the environmental category falls into C.

4 Sustainability

• Policy/Systems

In response to the shortage of human resources in the health sector, *The Accelerated Training Plan (Plano Acelerado de Formação de Téc. Especializados)* is being implemented in 2022. The plan indicates the number of graduates to be targeted in each ICS and the fields in which they should specialize to respond promptly to the need to improve the shortage of human resources. As for ICS Nacala, the target is indicated to produce a total of 108 graduates between 2023 and 2025. Although this number is lower than the one of ICS Nacala in 2021, it reflects the policy of MoH for improving quality and ensuring the production of human resources.

• Institutional/Organizational Aspect

At the time of the ex-ante evaluation, ICS was under the jurisdiction of the MoH, but due to the decentralization policy, it was transferred to the Provincial Health Department (ISC Nacala is under the Nampula Province) at the time of the ex-post evaluation. Meanwhile, the MoH is the owner of the facilities and equipment, and the courses offered each year are decided by the MoH, and ICSs have no authority to make those decisions. ICSs are in charge of and conduct the day-to-day O&M activities of the facilities and equipment, and 75 personnel are assigned at ICS Nacala, as shown in Table 2. According to ICS Nacala, there is currently no excess or shortages of staffing, but if the courses are opened as planned, at least four teachers will be needed per course, and the required number of teachers will need to be allocated. In case of an increase in the number of courses opened, ICS Nacala has prepared and already submitted a proposal to the Provincial Service of Health to allocate five additional teachers. In terms of the institutional aspect of the O&M in the Project, the supervision and reporting systems are clear, and there are currently no excesses or shortages of personnel, therefore, it is judged that there are no major problems.

Table 2 The Number of Staff and Teacher at ICS Nacala

	As of planning	As of ex-post evaluation
Director/deputy director	3	3
Full time teacher	48	36
Staff in administrative section	20	11
Staff in Service Section	29	25
Total	100	75

Source: Documents provided by ICS Nacala

• Technical Aspect

In the Project, instruction and training in the O&M of facilities and equipment (daily inspections, cleaning and adjustment, response to minor malfunctions, etc.) were conducted. In addition, when problems occur that cannot be addressed technically, the MoH as well as the Provincial/District Service of Health provide support; hence, there are no technical concerns. However, the contract with the IT expert expired in 2021 and a new assignment is needed. Problems have occurred with WIFI setting and internal system breakdowns. While the WIFI system has been partially restored with the support of the MoH and the Provincial Service of Health, the internal system is still out of order at the time of ex-post evaluation. Furthermore, ICS Nacala conducts regular in-school refresher training for teachers to maintain and enhance their capacity. The O&M manuals have also been deployed and are being referred to and utilized as appropriate. Therefore, at the time of the ex-post evaluation, shortage of technical capacity for the O&M of facilities and equipment has not occurred, except for absence of IT specialists.

• Financial Aspect

The budget for the O&M of ICS is normally allocated by the central government (Ministry of Finance) through the Provincial Finance Department. The personnel cost equivalents are managed by the Provincial Service of Health and paid directly to the teachers and staff as salaries. However, at the time of the ex-post evaluation, ICS Nacala has not been yet registered in the national registration system (State Property Registration Document), which is required for budget allocation, and no budget has been allocated by the government since its establishment. According to the MoH, at the time of the opening of ICS Nacala, the budgeting process did not proceed as usual due to the unfavorable economic situation in Mozambique, as well as the spread of COVID-19. Therefore, the budget for ICS Nacala has been allocated by the Nampula District Service of Health within its limit for operation until the time of the ex-post evaluation, and the O&M cost (2,091,000 meticals (Mt)) in 2021, excluding personnel expenses, are lower than the amount estimated at the time of planning (4,708,000 Mt)¹², meaning shortfall of the budget (see Table 3). The problem of budget shortfalls has also been noted in other ICSs in the country, including ICS Nampula, ICS Maputo, and ICS Quelimane. While the problem of budget shortfalls is not limited to the MoH, but is similar for other Ministries as well, the MoH plans to propose a specific plan for training to development partners to receive support.

As mentioned above, ICS Nacala has not been registered in the national system and is not getting the budget that should have been allocated. Since the process of registration in the national system is under the responsibility of the Ministry of Finance and is a matter outside the control of the MoH and ICS Nacala, it is not possible to determine when the registration will be completed. Therefore, ICS Nacala currently needs to operate on a limited budget distributed by the District Service of Health, and the future plan is not clear, which is a concern for the future operation.

Table 3 The O&M Cost of ICS Nacala

(Unit: Thousand Mt)

Item	Plan	Actual			
		2019	2020	2021	2022 ^{Note 1}
Personnel expense (full time and part time staff)	27,077	N.A.	N.A.	N.A.	18,742
Operating cost (water, electricity, gas, fuel)	2,064	816	1,083	1,049	1,550
Communication cost	385	60	0	37	209
Maintenance cost of the facilities	1,669	125	0	102	405
Maintenance cost of the equipment	590	50	85	903	1,560
Total	31,784	1,052	1,168	2,091	22,467

Source: Preparatory survey report, questionnaire answers

Note 1: The O&M cost for 2022 shows when ICS Nacala is registered in the national system.

Note 2: Totals may not sum due to rounding.

¹² Though personnel expenses are paid by the Provincial Service of Health, the amount could not be obtained from ICS Nacala or the Provincial Service of Health; thus, the O&M cost is shown excluding personnel expenses.

- Social and Environmental Aspect

No specific risks were assumed at the time of planning. It was also confirmed with the executing agency that there are also no specific risks envisaged for the future.

- Preventative Measures to Risk

At the time of planning of this Project, the following risks were assumed: (1) the risk that buses would have trouble transporting students to and from the training sites due to inadequate capacity and maintenance, and (2) the risk that the Project period would be affected by the time required for the refund procedures for value-added tax and import duties on the procurement of materials, equipment, and services. Regarding (1), there were no cases in ICS Nacala where a lack of buses posed a risk to transfers, and records of regular operational inspections of the buses were also confirmed during the site survey. Regarding (2), the procedure proceeded as initially planned although there was a delay, and the refund was completed without any problems. Therefore, it can be said that no particular problems have occurred with the risks assumed at the time of planning.

- Current Status of Operation and Maintenance

The utilization and maintenance of the facilities that have been developed is very good excepting some facilities which have not been utilized (the student dormitory, cafeteria buildings, internal and WIFI systems). The student dormitory has been unused since the establishment of ICS Nacala, and the cafeteria building is not regularly used except for events, which are rarely held. This is because food, utilities, and other operating expenses could not have been secured. The situation of student dormitories is almost the same in ICSs nationwide, and ICS Nacala has informed students of the unavailability of student dormitory at the time of application not to affect their convenience. The use of some equipment (microscopes, spectrophotometers, centrifuges, dental chairs, etc.) for practical trainings is limited due to lack of budget or difficulty in obtaining the necessary reagents. Parts and consumables were to be purchased through an agent list prepared by the Project. However, in Mozambique, public institutions are required to purchase from agents that win competitive bids, excepting general consumables, by the national procurement system. Thus, the prepared agent list is not utilized. In addition, the MoH has indicated a concern: the necessary parts and other items may not be available if the agents which win the bidding do not handle the products. Furthermore, some opinions on difficulties are raised for ICS Nacala alone to handle parts and consumables that are not available in Mozambique, due to the complicated procedures involved in international bidding. While some items have not been addressed due to budget shortfalls, periodic cleaning, facility repairs, and periodic inspections of facilities are being appropriately conducted.

As mentioned above, the facilities and equipment are maintained in good condition, and the planned maintenance activities are being carried out appropriately with some exceptions. On the other hand, issues were identified such as the student dormitory, cafeteria building, and IT system not being used due to budget shortfalls, and some laboratory equipment being only partially utilized due to budget and reagents shortages.

<Evaluation Result>

Therefore, the sustainability of the Project effect is slightly low.

III. Recommendations & Lessons Learned

- Recommendations to Executing Agency

(1) Working for registration in the system necessary for budget allocation

Registration to the national system required for budget allocation has not been completed for ICS Nacala. Accordingly, the planned O&M costs have not been allocated, and the program is operating on a limited budget allocated by the District Service of Health of Nampula Province. This has resulted in problems such as the inability to purchase the necessary reagents for practical lessons and the inability to conduct practical lessons using the laboratory equipment. The Nampula Provincial Service of Health needs to urge the government to request approval as soon as possible to secure the budget for the next fiscal year, and to regularly monitor its progress. The MoH is also required to assist in lobbying the government, if necessary, and cooperate in completing its registration.

(2) Measures related to the procurement system for future

Some laboratory equipment is not fully utilized for practical lessons due to lack of reagents. The main reason is the lack of budget, however, public institutions in Mozambique are required to use agents in accordance with the procurement system specified by the government. Therefore, the agent list prepared by the Project is not utilized, and when parts necessary for repairing the facility are procured from overseas, international bidding is required, which makes the procedure more complicated, and the time required longer than usual. Since it may be difficult for ICS Nacala to deal with the situation alone if an agent is only available in Maputo or if international bidding is required, it is preferable that the MoH and the Nampula Provincial Service of Health support procurement operations as needed, including the use of agent list and international bidding procedures, to facilitate the smooth purchase of parts and supplies.

- Recommendations to JICA: None

- Lessons Learned

Project formation and securing the sustainability based on the target country's various systems including budget and procurement processes

In ICS Nacala, registration in the national registration system, which is necessary for the budget allocation, has not been completed as of the time of ex-post evaluation, and the budget has not been allocated by the government. In addition, since agents for purchasing parts

and supplies are determined based on the national procurement system, the agent list provided is not fully utilized and this could possibly cause problems in the future. Since the budget allocation and procurement systems of the target country will affect sustainability, executing agencies, experts involved in project formation, and other related parties should fully consider whether or not the target country's systems will affect sustainability after the Project completion. Therefore, as in the case of this Project, if the target country's system may affect the budget allocation and purchase of consumables after the Project is completed, it is necessary to discuss measures with the government in advance to minimize the risks. For example, it is desirable to organize the suppliers of O&M of facilities and materials and consumables to be provided in the Project at the Project formation and implementation stage, fully taking into account the procurement system of the target country, and to confirm whether procurement is actually possible under the system of the target country. In addition, if any necessary precondition exists on budget allocation, it is also advisable to set deadlines in the agreement document to ensure that they are adhered to.

IV. Non-Score Criteria

- Performance
 - Objective Perspective
None
- Additionality
None



Inside a Classroom



Room for Practical Lessons



Building for Classrooms