

Country Name	The Project for Strengthening Pedagogical and Technical Skills of Health Personnel in Mozambique (ProFORSA II)
Republic of Mozambique	

I. Project Outline

Background	<p>In Mozambique, the shortage of health personnel was a serious problem due to the civil war, which lasted until 1992. “The National Human Resources Development Plan for Health (PNDRHS)” (2008-2015) was prepared in order to increase the number of health personnel. Regarding the quality of the health personnel to be trained, “the Project for Strengthening Pedagogical and Technical Skills of Teachers of the Health Training Institutes (HTIs) in Mozambique” (2012-2015) supported by JICA was implemented to improve the quality of education in training institutions through standardizing the curricula of the main priority specialized courses in training institutions, as well as introducing a mechanism for educational quality assurance and so on. On the other hand, after the completion of the technical cooperation project, there was a need for improvement not only in the classroom teaching at training institutions but also in the practical teaching in the exercise room and in leadership skills in hospital practice, as well as in the practical nursing skills of the current health professionals working in health/medical facilities (especially maternal and child health nurses). Therefore, a follow-up project using the teaching methods introduced by the technical cooperation project was requested.</p>												
Objectives of the Project	<p>Through strengthening the nucleus of in-service training at the central level and establishing it at the provincial level, strengthening the practice of humanized care for women and children at health facilities (HF) and enhancing in-service pedagogical training at HTIs with a main focus on Maternal and Child Health (MCH), and strengthening a system of monitoring and national educational assessment, the project aims at improvement of pedagogical and technical competence, particularly of humanized care for MCH, of teachers of HTIs and health personnel, thereby contributing to improving the quality of health care services at HFs.</p> <ol style="list-style-type: none"> Overall Goal: Quality of health care services at HF is improved. Project Purpose: Pedagogical and technical competency, particularly of humanized care on MCH, of teachers of HTIs and health personnel are strengthened. 												
Activities of the Project	<ol style="list-style-type: none"> Project site: Maputo and three pilot provinces (Inhambane, Zambezia, and Nampula) Main activities: (1) Reinforcement of the teaching methodology, learning assessment for the counterparts after the establishment of the central nucleus of In-service training, (2) Training for trainers of laboratory and pharmacy courses on teaching in interdisciplinary laboratories, (3) Implementation of the pretest of items as well as review of the strategy for the institutional assessment of HTIs and other. Inputs (to carry out the above activities) <table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">Japanese Side</td> <td style="width: 50%;">Mozambique Side</td> </tr> <tr> <td>1) Experts: 7 persons</td> <td>1) Staff allocated: 51 persons</td> </tr> <tr> <td>2) Trainees received: 30 persons</td> <td>2) Equipment: Printer and photocopy machine</td> </tr> <tr> <td>3) Training in the third country: 19 persons (Brazil)</td> <td>3) Facility and office: Project office and car parking space, training room</td> </tr> <tr> <td>4) Equipment: Vehicle, photocopy machine, PC.</td> <td>4) Local operation cost: traveling expenses, utilities and so on</td> </tr> </table> 			Japanese Side	Mozambique Side	1) Experts: 7 persons	1) Staff allocated: 51 persons	2) Trainees received: 30 persons	2) Equipment: Printer and photocopy machine	3) Training in the third country: 19 persons (Brazil)	3) Facility and office: Project office and car parking space, training room	4) Equipment: Vehicle, photocopy machine, PC.	4) Local operation cost: traveling expenses, utilities and so on
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Project Period	(ex-ante) May 2016 – April 2019 (36 months) (actual) May 2016 – May 2019 (36 months) ¹	Project Cost (Japanese side only)	(ex-ante) 280 million yen, (actual) 266 million yen										
Implementing Agency	National Directorate for the Training of Health Professionals (DNFPS), Ministry of Health (MoH)												
Cooperation Agency in Japan	Center for International Collaborative Research (CICORN) at Nagasaki University												

II. Result of the Evaluation**[Verification of Continuation Status of the Project Effects]**

The verifiable indicators 2 and 4 for the Project Purpose have the same content to be checked as the Overall Goal. Therefore, those indicators were verified as a part of the indicators for the Overall Goal.

1 Relevance/Coherence**[Relevance]**

<Consistency with the Development Policy of Mozambique at the Time of Ex-Ante Evaluation >

The project was consistent with the development policy of Mozambique at the time of ex-ante evaluation such as “Health Sector Strategic Plan (PESS)” (2014-2019) aiming at increasing access to and utilization of health services and improving quality as well as strengthening health systems. In addition, the National Plan of the Human Resources for Health (PNDRHS), which sets out a detailed health human resources development plan, continues from 2016 to 2025 as in the second phase and continues to significantly improve the human resources training system and management capacity, increasing the number of intermediate and advanced level health personnel over the said decade.

<Consistency with the Development Needs of Mozambique at the Time of Ex-Ante Evaluation >

¹ Although the project period at the ex-ante evaluation is counted in months, the actual project period is counted in days.

The project was consistent with the development needs of Mozambique at the time of ex-ante evaluation to improve the classroom teaching at training institutions, the practical teaching in the exercise room and the leadership skills in hospital practice, and the practical nursing skills of the current health professionals working in health and medical facilities.

<Appropriateness of Project Design/Approach>

The project design/approach was appropriate. No problem attributed to the project design/approach was confirmed.

<Evaluation Result>

In light of the above, the relevance of the project is ③².

[Coherence]

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

The project was consistent with the "Japan's Country Assistance Program for Mozambique" (2013) at the time of ex-ante evaluation. It is to address "human development", as one of the important areas. In addition, under the cooperation program "Basic Health Improvement", JICA focused on developing health human resources and improving the quality of health care by establishing and strengthening an in-service training system for teachers and health professionals in health personnel training institutions.

<Collaboration/Coordination with JICA's other interventions>

Any collaboration/coordination between the project and JICA's other intervention was not clearly planned at the time of ex-ante evaluation or during the project period.

<Cooperation with other institutions/ Coordination with international framework>

Any cooperation/coordination with other institutes was not clearly planned at the time of ex-ante evaluation or during the project period.

<Evaluation Result>

In light of the above, the coherence of the project is ②.

[Evaluation Result of Relevance/Coherence]

In the light above, the relevance/coherence of the project is ③.

2 Effectiveness/Impact

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

At the time of project completion, the Project Purpose was achieved as planned. In-service trainings were carried out in a total of 18 health units and training institutions of the 3 pilot provinces with didactic materials produced by the project. In addition, training sessions were conducted for qualified trainers³ from 10 HF's at the Science Institute of Tete and Maputo (Indicator 1). A total of 1,270 tutors⁴ and nurses of MCH at 78 HF's received technical trainings and practical trainings of humanized care practices on MCH (Indicator 2). By the end of December 2018, 54 full time teachers (61.4%) of MCH course at HTIs had participated in pedagogical and technical training with the training package developed by the project (Indicator 3). The National Educational Assessments was carried out in December 2018 after conducting the pre-test for the 6 priority courses (Indicator 4).

<Continuation Status of Project Effects at the Time of Ex-Post Evaluation>

By the time of the ex-post evaluation, the project effects have been continued. The pedagogic and technical trainings have been conducted in the three pilot provinces by manuals developed by the project. Although the proportion of full-time teachers attending the training was temporarily low due to the pandemic of COVID-19 in 2019 (38.7%), it has improved and remained high since 2020 (77.0%) because of the introduction of online trainings.

<Status of Achievement of the Overall Goal at the Time of Ex-Post Evaluation>

At the time of ex-post evaluation, the Overall Goal has been mostly achieved as planned. In-service training with manuals prepared by the project has been disseminated to other provinces aside from three pilot ones and has been conducted in 8 of 11 provinces. For the rest of provincial nucleus, in-service trainings have not done yet because of the budget constrain and the pandemic of COVID-19. In addition, they have not had adequate equipment for conducting online training.(Indicator 1). A total of 2,500 nurses and tutors from more than 40 HF's have taken the technical trainings. There were at least three trainings in Inhambane for neighboring health facilities (Massinga, Homoine, and Morrumbene districts) and two trainings in Zambezia (Alto Mulocue and Milange districts) at the ex-post evaluation. Also, the humanized care on MCH has been practiced at their HF's (Indicator 2). Nearly 80 % of full-time teachers have taken pedagogical and technical trainings, with the exception of 2019. Although the number of supervisors of MCH who attended training remains low, it has gradually improved (Indicator 3). In 2022, the National Educational Assessment and the pre-test for it in 2023 took place. The drop rate of the 6 prioritized courses was less than 9%, which means that almost all students acquire adequate knowledge of each course (Indicator4).

<Other Impacts at the Time of Ex-Post Evaluation>

No negative impact on natural environment was observed.

<Evaluation Result>

In light of the above, the effectiveness/impact of the project is ③.

Achievement of Project Purpose and Overall Goal

Aim	Indicators	Results	Source
(Project Purpose) Pedagogical and technical competency,	Indicator 1 In-Service training with elaborated manuals by the Project is conducted at three (3) Provincial Nucleus of	Status of the Achievement (Status of the Continuation): achieved as planned (continued) (Project Completion) - In-Service training was carried out at 18 health units and training	Project completion report

² ④ : very high, ③ : high, ② : moderately low, ① : low

³ The Ministry of Health names those dispatched from the University of São Paulo as Advanced Trainers (AT), those belonging to the Ministry of Health as Training Trainers (ToT), and those belonging to local health facilities and who have completed training courses as Qualified Trainers (QT). have completed a training course as trainers and classifies them as Qualified Trainers (QT), Trainers of Trainers (ToT), and Advanced Trainers (AT).

⁴ Tutors include some teachers but are basically health professionals working in health facilities (e.g., breastfeeding nurses, general nurses). They provide technical practice and support to students participating in internships.

particularly of humanized care on Maternal and Child Health (MCH), of teachers of the Health Training Institutes (HTIs) and health personnel are strengthened.	Training.	<p>institutions of the 3 pilot provinces with didactic materials produced by the project.</p> <ul style="list-style-type: none"> - Training sessions were conducted for qualified trainers from 10 HF's at the Science Institute of Tete and Maputo. <p>(Ex-Post Evaluation)</p> <ul style="list-style-type: none"> - The pedagogic and technical trainings have been continuously conducted by using developed manuals in 3 pilot provinces. 	
	Indicator 2 More than 280 tutors and nurses of MCH at HF's received technical training and conducts practices of humanized care on MCH at their HF's based on the received training.	<p>Status of the Achievement (Status of the Continuation): achieved as planned (continued) (Project Completion)</p> <ul style="list-style-type: none"> - 1,270 tutors and nurses of MCH at 78 HF's received technical training and conducted practices of humanized care (e.g., training on prenatal and postpartum care) on MCH at their HF's based on the received training. <p>(Ex-Post Evaluation)</p> <ul style="list-style-type: none"> - Refer to Indicator 2 of the Overall Goal. 	Project completion report
	Indicator 3 More than 50 % of full time teachers of MCH course of HTIs received pedagogical and technical training and conducts training of humanized care on MCH at their HTIs based on the didactic materials developed by the Project.	<p>Status of the Achievement (Status of the Continuation): achieved as planned (continued) (Project Completion)</p> <ul style="list-style-type: none"> - By the end of December 2018, 54 (61.4%) full time teachers of MCH course of HTIs had participated in pedagogical and technical training such as ToT with the training package developed by the project. <p>(Ex-Post Evaluation)</p> <ul style="list-style-type: none"> - Although the number of full-time teachers attending training was temporarily low due to the pandemic of COVID-19 in 2019 (38.7%), it has improved and remained high since 2020 (77.0%) because of the introduction of online trainings. 	Project completion report
	Indicator 4 The National Educational Assessment of the six (6) prioritized technical courses are conducted with revised items by Project.	<p>Status of the Achievement (Status of the Continuation): achieved as planned (continued) (Project Completion)</p> <ul style="list-style-type: none"> - The national educational evaluation was carried out in December 2018 for the 6 priority courses using pre-tested and approved items from the item bank. <p>(Ex-Post Evaluation)</p> <ul style="list-style-type: none"> - Refer to Indicator 4 of the Overall Goal 	Project completion report
(Overall Goal) Quality of health care services at Health Facilities (HF) is improved	Indicator 1 In-Service Training with manuals prepared by the Project is conducted at all Provincial Nucleus of In-Service Training.	<p>Status of the Achievement: mostly achieved as planned (Ex-Post Evaluation)</p> <ul style="list-style-type: none"> - In-service training with manuals prepared by the Project has been disseminated to other provinces aside from the pilot ones and has been conducted in 8 of 11 province. - For the rest of provincial nucleus, in-service training has not done yet because of the budget constrain and the pandemic of COVID-19. In addition, they have not had adequate equipment for conducting online training. 	Questionnaire to DNFPs
	Indicator 2 Nurses and tutors of more than 30 HF's receive technical training and conduct practices of humanized care on Maternal and Child Health (MCH) at their HF's.	<p>Status of the Achievement: achieved as planned (Ex-Post Evaluation)</p> <ul style="list-style-type: none"> - 2,500 nurses and tutors from more than 40 HF's have taken the technical training. - There were at least three trainings in Inhambane for neighboring health facilities (Massinga, Homoine, and Morrumbene districts) and two trainings in Zambezia (Alto Mulocue and Milange districts). - Humanized care such as prenatal and postnatal care on MCH has been practiced at their HF's. 	Questionnaire to DNFPs
	Indicator 3 All full-time teachers and supervisors of MCH course receive pedagogical and technical training and conduct trainings of humanized care on MCH at their Health Training Institutes (HTIs).	<p>Status of the Achievement: partially achieved (Ex-Post Evaluation)</p> <ul style="list-style-type: none"> - Nearly 80 % of full-time teachers have taken pedagogical and technical trainings, with the exception of 2019. - Although the number of supervisors of MCH who attended training remains low, it has gradually improved 	Questionnaire to HTI
	Indicator 4 More than 90% of students of six (6) prioritized technical courses (Medical Technician, Nursing, MCH, Laboratory Technician, Pharmacy Technician and	<p>Status of the Achievement: achieved as planned (Ex-Post Evaluation)</p> <ul style="list-style-type: none"> - In 2022, the National Educational Assessment and the pre-test for it in 2023 took place. The completion rate of 6 prioritized courses was more than 90%, which means that almost all students acquired 	Questionnaire to DNFPs

Preventive Medicine and Sanitation Environment Technician (PMSET)) achieve the adequate knowledge at National Educational Assessment	adequate knowledge of each course.	
	Priority courses	Completion rate (%)
	Medical Technician	92
	Nursing	93
	MCH	99
	Laboratory Technician	100
	Pharmacy Technician	100
Preventive Medicine and Sanitation Environment Technician (PMSET)	100	

3 Efficiency

Both the project cost and the project period within the plan (the ratio against the plan: 95 % and 100%, respectively) because of the partial usage of inexpensive external resources for dissemination activities.

	Project Cost (Japanese side only, yen)	Project Period (months)
Plan (ex-ante)	280 million yen	36 months
Actual	266 million yen	36 months
Ratio (%)	95 %	100 %

Outputs were produced as planned. In the light above, the efficiency of the project is ④.

4 Sustainability

<Policy Aspect>

Following the preceding NPHHRD (2008-2015), the current NPHHRD (2016-2025) has upheld four pillars: “Increasing the availability and equity of health personnel”, “Retaining the health personnel at the primary health care level”, “Improving the satisfaction, competency of health personnel to provide qualified humanized care” and, “Improving the legal and institutional Human Resources Management in the health sector.” In addition, the "Five-Year Strategic Plan for the Health Sector" (2020-2024) states that human resources in the health sector are a valuable asset for the country and the need to retain acquired competencies through training, as well as emphasizes the importance of the MoH to achieve it.

<Institutional/Organizational Aspect>

The Department of In-service Training was reorganized, separating the Scholarship and Continuation of Studies Unit, the Medical Residency Unit, and the Health Professional Development Unit from the department. Meanwhile, the Educational Technology Unit and Distance Learning Unit were created and added to the Department of In-service Training. Although reorganization has taken place, the operations have been well taken over and it hasn't directly affected the promotion and dissemination of the system, model, and activities. As for a provincial level, Provincial Health Service (SPS) was established in 2019 and SPS has taken over some of the Provincial Health Directorate (DPS)'s roles.

Although the number of staff in the departments of DNFPS related to the project has remained stable and DNFPS' personnel involved in the project remains in place, the new Mozambican policy restricts the recruitment of new staff.

<Technical Aspect>

No internal training of the DNFPS has been provided, but most staff have actively gained experience and new knowledge by attending conferences on the health sector and publishing research papers in collaboration with Brazilian experts. Furthermore, all manuals produced and most of the equipment provided by the project remain in use at the provincial nucleus of in-service training.

<Financial Aspect>

DNFPS has not secured the sufficient financial resources to cover all districts in the country for the activities because no national budget has been allocated to DNFPS. On the other hand, DNFPS has made efforts to obtain outside resources such as U.S. Agency for International Development (USAID). With funding from USAID, the JICA's model has been disseminated to two provinces: Nampula (all districts) and Zambezia (Mocuba, Gile, Pebane, Ile, Gurue and Alto Mulocue districts).

<Environmental and Social Aspect>

No issue on environmental and social aspects has been observed, and it has not been necessary to take any countermeasures.

<Evaluation Result>

In light of the above, some problems have been observed in terms of the financial aspects of the implementing agency. Therefore, the sustainability of the project effects is ②.

5 Summary of the Evaluation

The project achieved Project Purpose of strengthening pedagogical and technical competency, particularly of humanized care on MCH, of teachers in HTIs and health personnel and Overall Goal of improving the quality of health care services at HF as planned. As for sustainability, while the policy support has been obtained, some problems have been observed in terms of the financial aspects of the implementing agency that have not been able to secure a sufficient budget from the country.

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

III. Recommendations & Lessons Learned

Recommendations for Implementing Agency:

- There was a reorganization and SPS was established after the project completion. SPS has taken over some of the DPS roles, in particular a part of health facility's operation and management. However, with some overlap in roles between the DPS and SPS, DNFPS should work closely with them on the direction of the dissemination model to streamline the work.

- The budget for In-service training has not been allocated to DNFPS since the project completion. On the other hand, DNFPS has made efforts to obtain external resources such as USAID. While DNFPS continues to do it for the activities of In-service trainings and its dissemination of activities to other provinces, DNFPS needs to negotiate with the Ministry of Economy and Finance to secure the budget for the continued and stable implementation of activities.
- Basically, the necessary equipment for in-service training is owned by the 18 HFs, all of which are district hospitals, and is not freely available to the District Health Service in charge of managing, coordinating, and implementing In-service training, which limits its scale-up. Therefore, the implementing agency should coordinate with 18 HFs so that the District Health Service can use the equipment for In-service training.

Lessons Learned for JICA:

- The JICA managed the project cost and period very well by sharing their usage with the implementing agency the use of the project cost and the progress of the project and developing the annual plan. For proper management of the project, it is essential for JICA to communicate regularly and frequently with the implementation agency and to build a good relationship.
- After the project completion, implementing agencies may not be able to continue their efforts due to financial difficulties. Therefore, it is important to consider the project contents at the time of the project design with an eye toward the difficulties. Specifically, JICA finds it useful to incorporate relatively inexpensive online training and hybrid classes into future projects wherever possible.
- Since Human Resources for Health is a cross-cutting issue in the health sector, and it is important to ensure continuity and sustainability after the completion of the project, it is necessary to consider the Project Design from the beginning of planning, involving the upper managing directors of the Ministry of Health, departments related to human resources for health and in-service training, and other Development Assistance Organizations.



Qualified trainer's interview at Chicumbane HF



Main entrance of Angoche Rural Hospital