

Country Name	Project on Promoting Sustainability in Rural Water supply, Hygiene and Sanitation in Niassa Province
Republic of Mozambique	

I. Project Outline

Background	<p>Since Niassa Province had not been the subject of large-scale assistance from development partners, construction of new water supply facilities had not progressed and Niassa was the only province in the country where the water supply rate was declining. Therefore, there was still high demand for rural water supply and sanitation projects.</p> <p>*At the time of ex-ante evaluation, the average water supply rate in Niassa Province was higher (69,8%) than the national average (50.9%). However, the actual population who did not access to safe water was believed to be larger. After the modification of calculation methods of water supply rate by the Government of Mozambique in 2013 (before: 1 water point = 500 people; after: 1 water point = 300 people), the rate in Niassa (36.45%) became lower than the national average (52.0%) .</p>										
Objectives of the Project	<p>Through (i) improving capacity of planning and preparation for water supply, sanitation and hygiene activities, (ii) constructing water points and latrines, (iii) enhancing capacity of operation and maintenance (O&M) of the water points in the target districts, (iv) improving hygiene behavior of the local residents in the target districts and (v) disseminating the know-how of the project to other districts and at the national level, the project aimed at improving water supply and sanitation in the target districts, thereby contributing to improvement of the water supply and sanitation in Niassa province.</p> <ol style="list-style-type: none"> Overall Goal: Improve the situation of water supply and sanitation in Niassa Province. Project Purpose: Improve the situation of water supply and sanitation in target districts through institutional capacity building of DPOPH/DAS and SDPIs. 										
Activities of the project	<ol style="list-style-type: none"> Project site: Mavago, Mandimba, Majune, and Muembe Districts in Niassa Province Main activities: Through (i) strengthening capacity of planning and preparation for water supply, sanitation and hygiene activities, (ii) construction of water points and latrines, (iii) enhancement of capacity of O&M of the water points in the targets districts, (iv) improvement of hygiene behaviour of the local residents in the target districts and (v) dissemination of know-how of the project to other district and at the national level. Inputs (to carry out 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: 10 persons</td> <td>1) Staff allocated: 29 persons</td> </tr> <tr> <td>2) Trainees received: 7 persons</td> <td>2) Office space for the Project</td> </tr> <tr> <td>3) Equipment: Vehicles, motorbikes, equipment and materials necessary for the project activities (spare parts for handpump, computer, generator, digital camera, GPS and others)</td> <td>3) Cost for project: Transportation/per diem of C/P and fuel for motorbikes, and other activity cost</td> </tr> </table> 			Japanese Side	Mozambique Side	1) Experts: 10 persons	1) Staff allocated: 29 persons	2) Trainees received: 7 persons	2) Office space for the Project	3) Equipment: Vehicles, motorbikes, equipment and materials necessary for the project activities (spare parts for handpump, computer, generator, digital camera, GPS and others)	3) Cost for project: Transportation/per diem of C/P and fuel for motorbikes, and other activity cost
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Project Period	March 2013-February 2017	Project Cost	(ex-ante) 771million yen, (actual) 894 million yen								
Implementing Agency	<ul style="list-style-type: none"> Ministry of Public Works and Housing (MOPH) /(National Directorate of Water Supply and Sanitation (DNAAS), formerly called DNA Provincial Directorate of Public Works, Housing and Water Resources (DPOPHRH), formally called DPOPH District Infrastructure and Planning Service (SDPI) in 4 Districts (Mavago, Mandimba, Majune, Muembe) 										
Cooperation Agency in Japan	Japan Techno Co., Ltd., IC Net Limited, Earth System Science Co., Ltd										

II. Result of the Evaluation

<Constraints on Evaluation>

- Due to the COVID-19 pandemic, it was not possible to visit sites and conduct interviews. Information was collected through questionnaires and telephone/on-line interviews.

<Special Perspectives Considered in the Ex-Post Evaluation >

- The status of continuation of the project effects at the time of ex-post evaluation were taken as the part of the verifiable indicators of the Overall Goal and the factors affecting the achievement levels of the verifiable indicators of the Overall Goal.

I 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. “National Rural Water Supply and Sanitation Program” (Programa Nacional Abastecimento de Água e Saneamento: PRONASAR) (2010-2015) was formulated under the framework of the Sector Wide Approaches (SWAPs) to improve the rural water and sanitation.

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

The project was consistent with the development needs of Mozambique for the water supply as mentioned above (“Background”)

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

The project was consistent with Japan’s ODA policy to Mozambique. Human Resource Development including expanding access to safe water through developing of water supply facilities was one of the priority areas of ODA to Mozambique¹.

¹ ODA Databook 2012

<Evaluation Result>

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

2 Effectiveness/Impact

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

The Project Purpose was partially achieved. The reduction of the number of people affected by waterborne diseases in the target districts did not reach the target (Indicator 1). However, this indicator can increase or decrease due to different factor besides them such as food conservation methods, population behavior. The number of beneficiaries with access to water supply in the target districts achieved the target (Indicator 2), and capacity of DPOPH/DAS and SDPI improved (Indicator 3).

<Continuation Status of Project Effects at the time of Ex-post Evaluation>

The effects of the project such as the number of population with access to water supply, have partly continued after the project was completed. As mentioned above, the status of continuation of the project effects at the time of ex-post evaluation were taken as the part of the verifiable indicators of the Overall Goal and the factors affecting the achievement levels of the verifiable indicators of the Overall Goal.

<Status of Achievement for Overall Goal at the time of Ex-post Evaluation>

The Overall Goal was partially achieved. Concerning the indicator 1, the reduction by 5% of the number of people affected by waterborne diseases was not achieved as the number increases between 2016 and 2019, especially in the case of diarrhea. However, as mentioned above, other factors may influence the waterborne diseases. Concerning the indicator 2, there was 80% increase in the number population with access to water supply in the Niassa province from 2016 to 2019, and a lot more than 2% in each of the target district. Therefore, the indicator 2 was achieved. This resulted from the government's interventions in each target district as well as province through the construction of new water supply facilities in some towns, particularly in some health centers and secondary schools. Budget for the annual implementation plans of DPOPHRH and SDPI has been not consistent, though the budget secured has been mainly directed to the construction of new water points. Mandimba district secured more budget (due to the large population) and resulted in the highest number of new constructions. Nonetheless, the need for expansion was high, according to SDPI of Mandimba.

The target districts together with DPOPH were expected to transfer techniques to non-target districts. The technician from the Majune district were not able to transfer knowledge to other districts, on the other hand in the case of Mavago and Mandimba, the technicians shared knowledge on the National System for Water and Sanitation Information (SINAS). In the case of Muembe, the knowledge was shared to 4 different districts. The three manuals under the project have been utilized by the four districts to promote hygiene and sanitation and for the better maintenance of the facilities.

The target districts supported the activation of water committees: They have encouraged rational management of water fee, accountability and good leadership in order to ensure the sustainability of the water points (maintenance). However, in the district of Mandimba, due to the lack of transparency and conflicts within the water committee there was a decrease in the number of water committees from 33 in 2017 to 8 in 2019. To overcome the situation, the SDPI is revitalizing the water committees and trying to raise the awareness of the local communities about the importance of the water committees. DPOPHRH thinks using water fees to buy necessary spare parts, even when it is not urgently needed (stock) may reduce some community conflicts, especially lack of trust, and also prevent people from spending money for unrelated or unnecessary activities. Also, the water committees can avoid keeping money in cash at home (which is not safe).

Most of the facilities constructed/rehabilitated facilities under the project have been functioning and utilized after the project completed (96%), though some need to be repaired.

After-project status of the facilities constructed under the project

	Number of facilities functioning
Newly constructed 50 water points	49
Rehabilitated 65 water points	62
Constructed 20 school latrines	19

<Other Impacts at the time of Ex-post Evaluation>

According to SDPIs of the target districts, there was no negative impact on the natural environment.

There have been positive impacts related to gender. According to Mavago, Majune and Muembe districts, the project has contributed to the empowerment of women in the local communities, promoting the leadership and involvement of women in the management of water committees. In Mavago district, the project also has contributed to the reduction of the time that women need to find water, which is considered as another positive impact on gender. In Mandimba district, positive impacts on gender by the project were also reported. According to the SDPI, the design of school latrines took into consideration the privacy of girls as there was a separation inside the toilets, which secures each girl's own privacy when using the toilet.

SDPIs reported that the project had positive impacts on the natural environment as it contributed to reduce/eliminate open defecation practice in many communities of the target districts, improving the sanitation.

<Evaluation Result>

Therefore, the effectiveness/impact of the project is fair.

Achievement of Project Purpose and Overall Goal

Aim	Indicators	Results								
(Project Purpose) Improve the situation of water supply and sanitation in target districts through institutional capacity	Indicator 1: Reduction by 10% of the number of people affected by waterborne diseases in the target Districts.	Status of the achievement: not achieved (Project completion)								
		2013			2015			Percentage Change		
		Diarrhea	Dysentery	Cholera	Diarrhea	Dysentery	Cholera	Diarrhea	Dysentery	Cholera
		Mavago	1,381	213	0	1,908	374	0	38%	76%
Muembe	2,935	390	0	2,591	409	0	-12%	5%	0%	

building of DPOPH/DAS* and SDPIs. *Departamento de Água e Saneamento (Water and Sanitation Department)		Majune	2,225	658	0	4,346	703	1	95%	7%	100%
		Mandimba	7,152	1,999	0	6,410	1,288	0	-10%	-36%	0%
		Total in 4 Districts	13,693	3,260	0	15,255	2,774	1	11%	-15%	100%
		Province	77,683	15,501	468	97,062	16,365	1,080	25%	6%	131%
		Source: Provincial Directorate of Health (Ex-post Evaluation) Refer to the Overall Goal below.									
	Indicator 2: Increase of 33,600 beneficiaries with access to water supply in the target Districts.	Status of the achievement: achieved (Project completion) - A total of 115 water supply facilities were available, including 50 deep well water supply facilities with new hand pumps and 65 rehabilitations of existing hand pumps. - No. of Beneficiaries: 115 water points x 300 people = 34,500 people have access to safe water. (Ex-post Evaluation) Refer to the Overall Goal below.									
	Indicator 3: Improve capacity of DPOPH/DAS and SDPIs in evaluation test.	Status of the achievement: achieved (Project completion) The capacity of the staff of DPOPHRH/DAS and SDPI was evaluated based on pre-defined capacity check list. In the mid-term assessment, it is considered that 80% of the targeted level was achieved. (Ex-post Evaluation) Refer to the Overall Goal below.									
(Overall Goal) Improve the situation of water supply and sanitation in Niassa Province.	Indicator 1: Reduction by 5% of the number of people affected by waterborne diseases in Niassa Province.	(Ex-post Evaluation) not verified Waterborne diseases in Niassa Province									
			2016	2017	2018	2019	Change from 2016 to 2019				
		Diarrhea	57339	52282	72640	74333	30%				
		Dysentery	12604	15154	12834	10957	-13%				
		Cholera	79	2	10	8	-90%				
		Source: Provincial Directorate of Health (DPS) Waterborne diseases in Mavago									
			2016	2017	2018	2019	Change from 2016 to 2019				
		Diarrhea	1329	1327	1782	2222	67%				
		Dysentery	174	209	291	338	94%				
		Cholera	0	0	0	0	-				
		Source: District Service of Health, Women and Social Welfare (SDSMAS) Mavago Waterborne diseases in Mandimba									
			2016	2017	2018	2019	Change from 2016 to 2019				
		Diarrhea	6689	5460	4825	5568	-17%				
		Dysentery	1242	1075	847	681	-45%				
		Cholera	0	0	0	0	-				
		Source: District Service of Health, Women and Social Welfare of Mandimba Waterborne diseases in Majune									
			2016	2017	2018	2019	Change from 2016 to 2019				
		Diarrhea	2795	2576	2123	3086	10%				
		Dysentery	506	588	417	480	-5%				
		Cholera	0	0	0	0	-				
		Source: SDSMAS Majune Waterborne diseases in Muembe									
			2016	2017	2018	2019	Change from 2016 to 2019				
		Diarrhea	2888	1600	1648	1488	-48%				
		Dysentery	384	236	232	205	-47%				
		Cholera	0	0	0	0	-				
		Source: SDPI Muembe (Ex-post Evaluation) achieved Population with access to water supply									
			2016	2017	2018	2019	Change from 2016 to 2019				
		Niassa Province as a whole	370,000	490,475	626,936	667,586	80.4%				
		Muembe	15,600	16,800	17,100	18,000	15.4%				
		Majune	24,596	24,596	26,897	26,897	9.4%				

		Mandim	63,000	68,000	69,000	73,000	15.9%
		Mavago	13,200	15,600	14,100	15,300	15.9%
	Supplementary information 1 as a factor to the Indicator 2:	Supplementary information as a factor for the indicator 2: Number of water points newly constructed* (*No latrines were newly constructed)					
			2016	2017	2018	2019	
		Niassa Province as a whole	103	42	72	106	
		Muembe	1	0	0	2	
		Majune	5	1	0	0	
		Mandim	3	0	3	13	
		Mavago	5	1	0	0	
		Number of water points rehabilitated					
			2016	2017	2018	2019	
		Niassa Province as a whole	110	1	28	68	
		Muembe	1	1	0	0	
		Majune	20	6	7	1	
		Mandim	20	0	8	3	
		Mavago	10	0	0	0	

Source: DPOPHRH and SDPIs at the target districts

3 Efficiency

Although the project period was as planned (the ratio against the plan: 100%), the project cost slightly exceeded the plan (the ratio against the plan: 116%). The outputs were produced as planned. Therefore, the efficiency of the project is fair.

4 Sustainability

<Policy Aspect>

There have been plans and policies in national level such as the Government's Five-year Plan (PQG) (2020-2024), and plan in district level such as District Development Plan (2018-2029) (PDD) which aim to promote construction of water supply systems and latrines that can support the dissemination of the projects outcomes.

< Institutional/Organizational Aspect>

There has been no change in the organizational structure of the implementing agencies to promote the outcomes of the project, and it is reported that it has been functioning well. The number of staff at the target districts have been sufficient, except in Muembe district due to insufficient budget. DPOPHRH reports that the number of staff has been insufficient.

<Technical Aspect>

The staff at DPOPHRH and the target districts sustained necessary skills and knowledge. In concern to the manual, they were sent to four districts and they are using the manual to improve sanitation and water facilities.

<Financial Aspect>

DPOPHRH could secure the budget to implement activities and to monitor facilities after the project, by using regular budget (The budget of personnel expenses is excluded). As mentioned above, the budget for the annual implementation plans has been inconsistent in the target district. Majune district stated that it had secured budget for the related activities. However, it is not defined when the budget will be available and how much; nonetheless, according to SDPI of Majune, the budget will come from the District Investment Fund. Other target districts did not secure budget because of insufficient/lack of specific budget designated only for the continuation of project activities.

Budget for the annual implementation plans

(Unit: MT)

	2016	2017	2018	2019
DPOPHRH	26,811,000	37,126,518	39,356,159	22,356,159
Mavago	0	450,000	1,800,000	0
Mandimba	2,250,000	2,250,000	2,250,000	2,250,000
Majune	2,250,000	0	450,000	0
Muembe	300,000	0	0	390,000

<Evaluation Result>

In light of the above, problems have been observed in terms of the institutional/organizational and financial aspect. Therefore, the sustainability of the effectiveness through the project is fair.

5 Summary of the Evaluation

The project partially achieved the Project Purpose, as the number of beneficiaries with access to water supply in the target districts increased and capacity of the implementing agencies improved while the reduction in the number people affected by waterborne diseases in the target districts did not attain the target. The Overall Goal has been partially achieved, as the population with access to water supply in the Niassa province attained the target, while the reduction in the waterborne diseases did not. As for the sustainability, the problems in the financial aspect have been observed. As for the efficiency, the project cost slightly exceeded the plan.

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

III. Recommendations & Lessons Learned

Recommendations for Implementing Agency (SDPIs and members of water committees):

- It is important to find a sustainable way to manage water committees in order to ensure, continuously, the maintenance of water points through the local communities' initiatives or interventions; for example, using water fees to buy necessary spare parts, even when it is not urgently needed (stock), so that the water committees can avoid keeping money in cash at home (which is not safe). This system may also reduce some community conflicts, especially lack of trust, and also prevent people from spending money for unrelated or unnecessary activities.

Lessons Learned for JICA:

- The indicator 1 for the Project Purpose and the Overall Goal were influenced by different factors beside the achievement of the project such as food conservation methods, population behavior. Therefore, it was not possible to make a direct correlation with the project outcomes and the indicator. At the time of project formulation, the selection of the indicator that can be influenced by factor more significantly than the outcomes of the project should be avoided.



Local community can access to safe water through water points constructed under the project



Sanitation in primary schools is improved through school latrines constructed under the project