# THE PROJECT FOR SUSTAINABLE RURAL WATER SUPPLY, SANITATION AND HYGIENE PROMOTION IN NIASSA PROVINCE, REPUBLIC OF MOZAMBIQUE

~IMPROVING THE CONDITION OF WATER SUPPLY AND SANITATION IN THE TARGET DISTRICTS BY STRENGTHENING THE CAPACITY OF PLANNING, SUPERVISION AND MONITORING OF THE PROVINCE AND DISTRICTS~

February 2017





### 1. Background and Challenges of the Project

Mozambique has shown political stability since the end of the sixteen years civil war in 1992. Since then, the Government of Mozambique and development partners have been engaged in the reconstruction of the basic infrastructures that were devastated.

In the rural water supply and sanitation sector, the MDG (Millenium Development Goals) has established to achieve the rate of 70 % of access to safe water and 50 % access to sanitation facilities for the fulfilment of the Millennium Development Goals (MDGs).

However, the access rate to safe water in the rural sector at the planning stage of the project was 29 %, and access to sanitation facilities was only 5 %, which was the lowest level compared with neighbouring countries. Thus, in order to



improve the situation of rural water supply and sanitation, the Government of Mozambique and the development partners under Sector-Wide Approach Programme (SWAP) have set the National Rural Water Supply and Sanitation Program (PRONASAR 2010-2015).

Moreover, Nacala Corridor, which starts at the Port of Nacala in the north of the country and stretches to Malawi and Zambia through the Provinces of Nampula and Niassa expects progress in the revitalization of economic activities and movement of goods, the reason why the Guidelines for co-operation of the Government of Japan sets the support for the development of the Economic Corridors as targets of utmost importance, being cantered in Nacala Corridor.

Due to the policy reform undertaken in 2013, the Government of Mozambique reviewed the beneficiary number per each water point to be 500 inhabitants instead of 300 inhabitants.

As a result of the new policy, the access rate to safe

water in rural area in Niassa Province dropped to 36.45%, which is much lower than the national average of 52%.

In view of the fact that since in Niassa there are no large-scale cooperation projects of other development partners, there are no construction works of new facilities under way, and Niassa is now the only one, among the ten Provinces of Mozambique, which shows downtrend in the rate of coverage of drinking water, thus persisting high demand for projects in the water and sanitation sector in rural areas, which is the reason why it took the Government of Mozambique to ask the Government of Japan for a Technical Cooperation Project.

# 2. Approach for Overcoming the Challenges

Based on the background above, this project aims to support the strengthening of the structure and capacity to implement projects by the National Directorate of Water Supply and Sanitation of the Ministry of Public Works, Housing and Water Resources (DNAAS / MOPHRH)<sup>1</sup>, Provincial Directorate of Public Works, Housing and Water Resources of Niassa (DPOPHRH - N) and District Services of Planning and Infrastructures (SDPI) based on the principles of PRONASAR.

Furthermore, during the implementation of the project activities in the target communities, measures will be taken into consideration so that even after the completion of the Project, the Mozambican side may continue to conduct sustainable activities to strengthen the operation and maintenance of water and sanitation facilities.

Based on the results of the baseline survey conducted in four Districts, we selected the target communities for a) construction of new water points, b) rehabilitation of existing water

<sup>1</sup> The name was changed to Direcção Nacional de Abastecimento de Água e Saneamento (DNAAS) / Ministério das Obras Públicas, Habitação e Recursos Hídricos facilities and strengthening of the Operation and Maintenance (OM) capacity in the community, c) Schools where CLTS activities will be conducted. In the project target communities, we will form Water and Sanitation Committees (CAS) through PEC (Community Participation and Education) activities. The framework of the project will be as follows.

#### [Overall Goal]

To improve the condition 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 DPOPHRH/DAS and SDPIs.



- 1. Improve the capacity of planning and preparation for water supply, sanitation and hygiene activities in the target districts.
- Construct new water points and latrines for school in the target district.
- Enhance the capacity of operation and maintenance (O & M) of water points in the target Districts.
- 4. Improve hygiene behavior of the local residence in the target Districts.
- Disseminate and share the know-how and the lessons learned from the project with stakeholders of provincial and national level.

The Project implementation structure is shown in Figure 1. The responsibilities of each member are indicated in the following table.

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Responsible	Institution			
Project Manager	National Director, DNAAS/ MOPHRH			
Administrative Manager	Head of the Department of Water Supply and Sanitation, DNAAS/MOPHRH			
Project Executive Manager	Provincial Director, DPOPHRH-Niassa			
Project Technical Manager	Head of the Department of Water and Sanitation, DPOPHRH-Niassa			
Counterpart (C/P)	DAS/ DPOPHRH Staff, SDPI Staff from the 4 target Districts			

(MOPHRH) due to the organizational reform in December 2015.

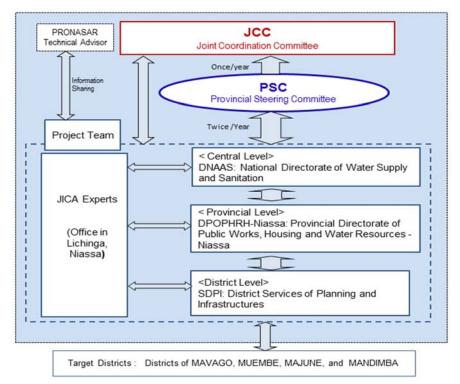


Fig. 1 Project Implementation Structure

The Project is being implemented based on the following guidelines.

#### (1) Ensuring Sustainability and Sense of Ownership by Mozambican side

It is expected that the counterpart bodies will have the ability and structure to achieve the overall goal on their own efforts. To ensure sustainability and sense of ownership of the counterpart personnel, the project activities will be carried out jointly, thus engendering mutual trust seeking to develop activities and operating methods that promote early active utterance of opinion during meetings/ discussions and preparation/presentation of reports by self-effort.

#### (2) Cooperation with PRONASAR

PRONASAR is established as the national program on rural water and hygiene and sanitation field in Mozambique, which is the program constitutes specific policies to achieve the goal determined in PESA-ASR and describe usage of the sector common fund, roles of stakeholders of the central and Provincial

governments, private sector and NGOs etc., operation of practicing rural water and hygiene and sanitation programs and monitoring methods.

This Project aims to execute capacity building for implementing rural water and sanitation program according to the operation determined in PRONASAR, utilizing the outputs from the Zambezia Technical Cooperation Project.

Construction of new water facilities, operation and manintenance, promotion of hygienen and sanitation are carried out basically with oprations in PRONASAR.

Also, althogh PRONASAR expects Spare Parts Supply Chain is served by the private sector, there some issues that spare parts shops are not profitable in the area far from city according to experiences from the Zambezia Technical Cooperation Project and any other similar projects.

So, Spare Parts Supply Chain aims to be established as the unifom in the entire Niassa Province in cooperation with the other donors, Provincial DAS, District SDPI, area pump artizan and shops.

### (3) Coordination with Mozambique relevant bodies

The entities and persons involved in this project are quite diverse, namely DNAAS, DPOPHRH; SDPIs and the communities, schools and health centres of the target Districts, where hygiene promotion activities will be conducted in addition to those who are responsible for health and education sectors in the province and Districts, among others.

In order to ensure smooth coordination, Provincial GAS (Water and Sanitation Working Group) was been revived thus enabling the efficient sharing of information.

#### (4) Coordination with Other Donors

In Niassa Province, the Swiss Agency for Development and Cooperation (SDC) and Water Aid have actively supported the water and sanitation sector. Therefore, the project will include sharing information with other development partners through Provincial GAS meetings, thus seeking to generate the synergistic effect by mutual application of acquired knowledge and challenges overcome.

#### (5) Private Consulting Companies

In Mozambique, privatization is accelerated, on the other hand, there is lack of the number of private resources and their capacity in local areas far from main cities, similar to Niassa Province.

In such background, following the provisions of PRONASAR, we will work also considering the need to address, whenever possible, the capacity development of local private resources to ensure sustainability of the projects of rural water supply and sanitation.

## (6) Sustainable Implementation Program Structure

PRONASAR's implementation structure on operation and maintenance and hygiene and sanitation for water facilities which needs secure budgets continuously because the

structure use many private resources, for example, private consultants for PEC activities.

Therefore, now much of fund on operation and maintenance and hygiene and sanitation for water facilities rely upon one from donors' fund including PRONASAR common fund.

Devices to utilize Mozambique budgets or common fund are considered from step of implementation of the Project in order to sustain improvement of water and hygiene and sanitation in Niassa Province.

#### (7) Construction of Water Sources

50 water sources will be constructed by the local contractors as part of technology transfer to improve the capacity of DPOPHRH and SDPIs staff in planning and management of construction of water sources.

The design and supervision of works will also be done by local contractors to be hired, who will prepare the tender documents and the project design, supervise the construction works, while ensuring technological transfers to the counterparts during every phase of this process, at the same time.

The construction of water sources is premised on the prior consolidation of structure of operation/maintenance centred in the target community through PEC activities. Therefore, PEC Zonal activities shall start in the first year.

# (8) Rehabilitation of Existing Water Sources

Rehabilitation of non-operational hand pumps will be done by local contractors in respective districts subject to hire local mechanics trained by the Project. This will enable the local mechanics to maintain and improve their repair skill of hand pump.

A part of spare parts to be used for the rehabilitation work shall be purchased at the spare parts shop established in the district in order to stimulate the supply chain of spare parts.

# (9) Construction of Latrines and Hand washing

For the selection of targets schools, enough consideration about the degree of accessibility to drinking water was taken into account. Above all, construction of new borehole with hand pump or existing borehole shall be preconditions and hand washing facilities are accompanied with latrine to be constructed in this Project in consideration with handicapped persons or rural culture.

#### (10) Zone PEC

Following the guidelines of PRONASAR, the scaling up of PEC activities will be made by outsourcing to local consulting companies. The Project will seek to improve water and sanitation conditions, involving and sensitizing the community through PEC activities. Following the procedures of PRONASAR, Zone PEC approach, covering a certain area selected, rather than taking the entire community as a unit will be adopted.

#### (11) Activities to Improve Hygiene Habits

Through construction of latrines and conducting hygiene and sanitation education as part of CLTS (Community Led Total Sanitation) activities in the schools located in the vicinity of the communities where the activities are being developed to eradicate open defecation, we will promote improvement of hygiene habits (elimination of open defecation) of the entire population by raising awareness of children about sanitation and hygiene. For the communities that will become ODF (open defecation free), we will promote piloting of improved experimental latrines will be made.

### (12) Capacity Building of DPOPH and SDPIs

Based on PRONASAR, the specific roles of the province, Districts and communities will be clarified to provide for the consistent organizational strengthening for each institution. The courses required for the training of Provincial / District staff have been assigned to CFPAS, in order to unify the level of training

nationwide.

#### (13) Scaling up to Other Districts

The knowledge and experiences gained through the activities of this project will be compiled in the form of manuals, which will be shared with relevant agencies through Provincial GAS, and it is expected that after completion of the project, the outputs will also be shared with other Districts. Thus, the Districts are encouraged to participate in Provincial GAS, as well as in future activities of the Project.

# 3. Practical Results of the Approach

#### (1) Hosting PSC Meetings

During the Project period, PSC (Provincial Steering Committee) was organized eight times in total in Lichinga. In those meetings, the Districts shared their progress of project activities such as PEC activities, construction of water supply facilities, construction of school latrines, establishment of supply chain of spare parts and SINAS.

#### (2) Publicity of Activities

The following publicity activities were carried out during the Project period:

- Published advertisement of the Project into AGUA seven times, which is the specialized magazine for water and sanitation in Mozambique.
- Supported updating website for the Provincial GAS and publish project news.
- Invite TV stations and radio stations to PSC and JCC, and project activities were broadcasted in national news as a JICA project.

Through these publicity activities, the Project activities became widely known by stakeholders in water supply and sanitation sector in the country.



Advertisement of the Project published in the specialized magazine "AGUA" in June 2016 number.

# (3) Reactivation of Provincial GAS (Output 1)

Since it was reactivated in April 2013, the Provincial GAS (Water and Sanitation Working Group) has 14 member institutions and its regular meeting has been held every month. The topics and issues are picked up to be discussed and shared with member institutions working in water and sanitation sector in the Province such as international organization, cooperation partners, Provincial Directorate of Environmental Action, Provincial Directorate of Health, Provincial Directorate of Education, NGOs, etc.

In 2015, National GAS meeting was held in Niassa Province in October 29<sup>th</sup> and 30<sup>th</sup>, and 80 people participated from the Ministry, DPOPHRH of other provinces, donors, international organization and NGOs etc. Some activities being implemented by the Project were presented and a project site was visited during the meeting. The experience and good-practises shared by the Project were highly esteemed by the participants.



Project Site Visit during National GAS Meeting

### (4) Construction of Water Supply Facility (Output 2)

32 water supply facilities for communities and 18 for schools, in total 50 facilities were constructed. The allocation of the facilities in each district is; 12 in Mavago, 13 in Muembe, 12 in Majune and 13 in Mandimba.

As previously stated, following the guidelines of PRONASAR, before and after the construction of water points, Water and Sanitation Committees were established / reactivated through PEC activities in the target communities.



Borehole with hand pump constructed by the Project

### (5) Construction of School Latrines (Output 2)

School latrines with hand wash facilities were constructed in 20 schools in the four target districts. These latrines were constructed under contract with local construction companies located in each District. The local construction companies were decided to be used due to the strong request from District SDPIs on improving the capacity of those local companies. Under the close supervision and careful instructions by local supervisors contracted with

the Project, the construction works were carried out prioritizing safety, quality and schedule control.

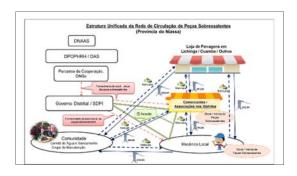


Constructed School Latrine

Design of the school latrines which gives consideration to gender issues and Islamic cultural background of majority of people in the Province is appreciated and shared widely with stakeholders in the sector.

#### (6) Establishment of Unified Spare Parts Supply Chain in the Niassa Province (Output 3)

In order to secure the sustainability of the structure if Spare Parts Supply Chain, the Project established unified structure of supply chain of spare parts as a whole Province by involving not only four target districts but also all relevant stakeholders working in the Province.



Unified Structure of Spare Parts Supply Chain in Niassa Province

activities for determining the quantity of initial stock, calculation of selling price of spare parts, procurement and delivery of initial stock to local venders, training on sales management of spare parts for local venders etc. have been conducted, and the sales of spare parts sarted in December 2015 in all seven districts supported by the Project.

The project also has been organizing provincial joint workshops twice a year to share the progress and experience with all districts and stakeholders in the Province in order to establish the unified structure at the province level. This approach contributed to spread the know-how of the relevant activities to the districts supported by other cooperating partners and promote the progress at the provincial level.



Spare Parts Shop in Muembe District

- (7) Training on planning, implementation and monitoring and evaluation for improvement of water supply and sanitation in the Province and the target Districts (Output 3)
- i) National Information System for Water and Sanitation (SINAS)

The Project supported, in addition to the four target districts, three districts which do not have cooperating partner and also two districts which are supported PRONASAR since it is important to establish SINAS simultaneously in all 16 districts in the Province for its smooth and sustainable operation. Trainings and supports necessary for operation of SINAS such as data collection, data entry and update, and monitoring, etc. conducted targeting stakeholders at each administrative level.



Location Map of Boreholes Created in GIS Training

#### ii) Capacity Building for Counterpart

Targeting the Project counterparts in DPOPHRH/DAS and SDPI in the four districts, various trainings for capacity building were conducted. Based on the road map elaborated by Japanese expert, necessary trainings to strengthen their administrative capacity, starting from basic skills for computer up to skills to prepare district annual budget and action plan, were carried out through the Project period.

As a result of those trainings, the capacity assessment conducted at the end of the project showed great improvement of their knowledge and skills compared to the beginning of the project.

評価クライテリア		Rating by th	Rating by the counterparts		Rating by head of DAS and PROSUAS	
評価対象者	州・郡カウンタパート平均	After the Project Nov 2016	Before the Projecto Mar 2013	After the Project Nov 2016	Before the Project Mar 2013	
A 改策に関する知識	: To uderstand the national policy and project principle	4.1	3.5	4.1	2.8	
B 活動計画立案	: To make activity plan under the consideration of several issues		3.4	4.2	2.7	
C リソース管理	: To develop the effective cooperation with other staffs in the activities		3.0	4.1	2.9	
D 調整	: To solve any conflicts based on the information sharing with others	4.4	3.8	4.1	3.1	
E コーチング/指導	チング/指導 : To instruct activities for district people and motivate them for works		4.0	4.2	2.9	
モニタリング / データ分析 :To monitor the progress regularly and analyze the data collected		4.1	3.6	4.0	2.8	
G フォローアップ	アップ : To adjust the plan as follow up based on the result of monitoring		3.5	4.0	3.0	
H 報告書作成	: To report the situation and activities results to share the information		3.5	4.2	2.7	
J ブレゼンテーション能力	レゼンテーション能力 : To explain the situation and issues correctly to share the experience		3.3	4.3	2.6	
K 時間管理	: To catch up with a delay or overdure of the activities	4.0	3.3	3.8	2.6	
	Time Management Security Planning Presentation Report writing H  Coordination Follow-up  Coordination Follow-up  Monitoring/Sta Analysis					

Result of Capacity Assessment of C/Ps

#### (8) Improvement of Hygiene and Sanitation Activities in the target District (Output 4)

i) Community-Led Total Sanitation (CLTS) and Open Defecation Free (ODF)

The CLTS was implemented in the target communities for the purpose to achieve the ODF in more than 60 communities by the end of the Project implementation period. The ODF evaluation was conducted by external institution in Niassa Province in November 2015 and October 2016, and 72 communities were declared to achieve the ODF.

ii) Orientation for Operation and Maintenance of school latrines with hand-wash facilities

Orientation training was conducted for all students and teachers in the target schools to teach how to use and maintain the constructed latrines. Operation and Maintenance Manual was elaborated utilizing efficient visual materials such as illustration to be used during the training so that the students, who have never used such facility before, can easily understand the contents.

Each of the students entered into the facility and confirmed what they had learned during the lecture.



Students waiting in line for their turn to learn how to use the latrine



Operation and Maintenance Manual of School Latrine

#### (9) GAS-Niassa Web Site (Output 5)

Provincial GAS meeting is held every month and its report, agenda, news etc. are posted on the web site of GAS Niassa. The information is updated regularly by the member institutions and being utilized as a tool of information sharing and publishing.



(https://sites.google.com/site/gtasniassa/home)

### (10) Training Courses in Other Country / Province

As part of technology transfer / Capacity Building, with the aim of exchanging experience in construction, operation and maintenance of rural water supply facilities, trainings were held abroad (In Brazil) in the first project year, in Zambezia Province in the second project year, in Manica Province in the third project year, and in Cabo Delgado Province in the fourth project year.

4. Good Practice and Lessons
Learnt during the
Implementation of the
Project

#### (1) Capacity Building of Counterparts

The capacity of the counterparts both at provincial and district level was successfully strengthened by carrying out 'custom made' trainings designed based on capacity level assessment and request from counterparts. The trainings were conducted as the following cycle;

- 1. Assessment of the capacity level of each counterpart. (It is important to understand what their weak points are.)
- 2. Planning of the trainings according to their capacity level. (Custom made training)
- 3. Conduct the trainings.
- 4. Observation of the reaction and outcome (to be creative to increase motivation of the trainees)
- 5. Feedback and designing of next training.

As countermeasure of personnel transfer of the counterparts to other districts, the counterparts at technician level were more focused than directors, which contributed in setting the outcomes of the trainings in the respective districts and ensure the sustainability of the Project activities.

#### (2) Peer Learning among Counterparts

At the final stage of the Project, a training approach intended for technicians from different districts to teach one another was introduced. These trainings included visits to share experiences among districts, visits to other districts to share good practices, gain insight about the learning level of a fellow technician from another district, and see how they use the acquired knowledge; these serve as motivation for self-improvement.

Set this environment assigning importance to companionship among counterparts and simultaneously showing them how their colleagues from other districts use the acquired knowledge, also create a somewhat spirit of rivalry, but in a good sense, this will result in a boosted motivation and portrayal of spontaneity for self-improvement.

# (3) Utilization and Capacity Building of Local Private Companies

In the Project, local private companies based in Niassa Province were contracted for the implementation of PEC activities, construction of boreholes with hand pumps, and construction of school latrines. During the implementation / construction period, the Project supervised their activities and provided necessary technical advice and support as a part of capacity building. Although there had been a lot of room for improvement in their implementation skills at the beginning, due to close supervision by the Project, these activities were successfully completed. Thus it can be said that the utilization as well as capacity building of the local resources are very effective as the enhanced skills and knowledge shall be given back to the local society in the Province.

#### (4) Hygiene and Sanitation Promotion

The approach used to promote sanitation, in this Project, not only was it through SANTOLIC, but also through PHAST in a flexible manner, depending on the conditions of the target community. Moreover, in cases where the community leader and the Water and Sanitation Committee showed manifest interest to attain LIFECA, they did not await the Project's initiative, but they took actions based on self-initiative by visiting community families and trying to improve sanitation conditions.

With regard to assessment of LIFECA, aiming at improving the competence of examiners, Province-level workshops were carried out to standardize the assessment approach so that every assessment carried out by any examiner bears similar results. In the workshop targeting examiners, real life situations were discussed in details to establish an unbiased assessment.

#### (5) Establishment of Unified Structure of Spare Parts Supply Chain

In the spare parts sales system, for the vendor at the district centre, a trustworthy local dealer was selected, for the vendor at Administrative Post level, a local mechanic known by the community was chosen. The sales system was conceived basing on the supply and demand of market principles.

After detailed explanation to the spare parts' vendors about the objective of this activity, which is not simply a mare business activity, but also one that entails a social component aimed at improving the sanitation situation in the communities, the vendors started to show a more receptive and collaborative attitude.

One of the reasons that led to the functioning of this structure was the good relationship developed between the dealer, the local mechanics, SDPI's technicians, Project members, where most improvement ideas suggested by the dealers were accepted and materialized by the Project and by stakeholders.

# (6) Cooperation between the Project and JOCV

Two JICA volunteers are assigned to the Project implementing institution which is the DPOPHRH/DAAS. These young volunteers have been actively accompanying and participating in the execution of the Project, where they had the opportunity of enhancing the knowledge about water supply and sanitation. After completion of the Project, jointly with counterpart technicians, the volunteers have been doing post-project monitoring work in the communities.

As clearly evidenced, taking advantage of the Technical Cooperation characteristics and those of the volunteers, with active coordination between both parts, the chance for

sustainable Technical Cooperation results may be enhanced.

(Project period: January/2013 to February/2017)

#### References:

Final Report of the Project for the Sustainable Rural Water Supply, Sanitation and Hygiene Promotion in Rural Zambezia Province, Japanese International Cooperation Agency (JICA)/Japan Techno Co., Ltd., 2011

National Program for Rural Water and Sanitation, National Directorate of Water, 2009

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