Summary of Terminal Evaluation

I. Outline of the Project		
Country: Republic of Zambia		Project title: The Project for Support in National Roll-out of Sustainable Operation and maintenance Programme (SOMAP3)
Issue/Sector: Water Resource and Disaster management – Rural water supply		Cooperation scheme: Technical Cooperation
Division in charge: Global Environment Department		Total cost: JPY 200 million.
Period of Cooperation	(R/D): June 29, 2011 September 15, 2011 – February 15,2016 Four years and six months	Partner Country's Implementing Organization: Ministry of Local Government and Housing (MLGH) Department of Housing and Infrastructure Development (DHID),
		Supporting Organization in Japan: Japan Techno Co., Ltd.

Related Cooperation:

【JICA】

[Technical Cooperation Project]

- Sustainable Operation and Maintenance Project for Rural Water Supply (SOMAP1,2005 - 2007)
- Sustainable Operation and Maintenance Project for Rural Water Supply Phase 2 (SOMAP2, 2007 - 2010)

[Grant Aid Project]

- The Project for the Groundwater Development in Luapula Province (Phase 1, 2008 – 2010, Phase 2, 2011 – 2014, Phase 3 2015 - Underway)

【Other cooperation partners' projects which include rolling-out SOMAP O&M model in their support】

- AfDB : National Rural Water Supply and Sanitation Programme (NRWSSP, 2006 – 2015)
- UNICEF : Water Sanitation and Hygiene Education (WASHE) Support (2006 - 2015)
- GIZ: Reform of the Water Sector (2013 – 2015)
- KfW: KfW Phase1(2013 – 2015)
- USAID: WASH in School (2009 – 2013)
- DANIDA : Water Sector Programme Support (WSPS) II,(2012 – 2013) , etc.

1. Background of the Project

In Zambia, approximately 50% of the rural population have access to safe water (as of 2011), and improvement of the rural water supply sector is still an important development issue. The Japanese government has been assisting in the construction of borehole-well water-supply facilities fitted with hand pumps under the grant aid project, and has contributed to the improvement in rural Zambians' access to safe water. However, operation and maintenance (O&M) systems of rural water-supply facilities, including borehole wells fitted with hand pumps, are vulnerable. For sustainable usage of such facilities, the establishment and strengthening of the O&M system is required.

Under these circumstances, receiving a request from Zambian Government, the Japanese government supported the implementation of the Sustainable Operation and Maintenance Project for Rural Water Supply

(SOMAP 1, 2005–2007), which was designed to establish and strengthen the O&M systems of rural water-supply facilities. SOMAP 1 pilot activities were conducted in the Monze district in Southern Province and the Mumbwa district in Central Province. SOMAP 1 established the SOMAP O&M model, which is a set of guideline activities necessary for introducing and implementing O&M in rural water supplies (e.g., clarification of the roles and responsibilities of each stakeholder and conducting community sensitisation), and developed the National Guidelines for Sustainable Operation and Maintenance of Hand Pumps in Rural Areas (2007). Since the SOMAP 1 pilot activities resulted in a drastic reduction in the downtime of water-supply facilities, the Zambian Government adopted the national guidelines and introduced the O&M component, which was one of eight components in the National Rural Water Supply and Sanitation Programme (NRWSSP) (2006–2015). In order to implement NRWSSP, the Zambian Government requested the implementation of a technical cooperation project for the purpose of refining the O&M model and to introduce the model in other provinces (except for Central Province where other cooperation partners are supported). Based on this request, SOMAP 2 (2007–2010) was established in order to refine the model through the development of manuals, to introduce the model in four districts (Chibombo, Kapiri Mposhi, Mkushi, and Serenje Districts) of Central Province, and to implement the basic principal of O&M in districts where UNICEF and African Development Bank (AfDB) were conducting rural water supply projects. As a result of SOMAP 2, outputs confirmed that the operation rate of borehole wells in the target areas in Central Province rose to over 80%.

Since SOMAP 1 and SOMAP 2 and the introduction of the SOMAP O&M model have had a significant impact in improving the rural water situation, the Zambian Government requested the implementation of the Project for Support in the National Roll-Out of a Sustainable Operation and Maintenance Programme (SOMAP 3) (hereinafter referred to as 'the Project'). The purpose of this was to further improve the operation rate of rural water supply facilities by introducing SOMAP O&M models across the entire country. Receiving the request, the Project was initiated in October, 2011 and scheduled to be conducted for four years and six months, until February, 2016.

2. Project Overview

The Project is to aim at increasing of operation rate of rural water supply facilities, and to contribute to improving access to safe water for rural residents through capacity strengthening of MLGH / DHID and implementation of the SOMAP O&M model in NRWSSP target districts.

(1) Overall Goal

The proportion of rural residents who have access to safe and accessible water supply is increased

(2) Project Purpose

Operation rate of the rural water supply facilities is improved.

(3) Outputs

[Output 1]

Capacity of MLGH / DHID on O&M component is strengthening.

[Output 2]

The SOMAP O&M model is implemented in NRWSSP target districts.

[Output 3]

The SOMAP O&M model is implemented in Mansa, Milenge, Mwense and Nchelenge Districts in Luapula Province under the Project's direct support

(4) Inputs

Japanese side:

Dispatch of short term Experts: 10 experts. (A total of 109.77 M/M. 0.13M/M out of the total M/M was burdened by Japan Techno Co., Ltd.) [3]

Equipment: As of the Terminal Evaluation, JPY million was input for equipment procurement.

Local cost expense: Approximately 2 hundred million.

Total Cost: JPY 207 million (by the end of June 2015)

Zambian side:

Assignment of counterpart personnel, provision of facilities, and local cost (on activities for workshops, trainings and monitoring)

II. Terminal Evaluation Team

Name	Mission Responsibility	Organization
[Japanese Side]		
Mr. Akihiro Miyazaki	Leader	Director, Water Resources Team 2, Water Resources Group Global Environment Department, Japan International Cooperation Agency (JICA) HQ
Mr. Yuto Yanagawa	Evaluation Planning	Staff, Water Resources Team 2, Water Resources Group Global Environment Department, JICA HQ
Mr. Takayuki KURITA	Evaluation Analysis	Consultant, ICONS Inc.
[Zambian Side]		
Mr. Ulanda Nyirenda	Representative of Zambian side	Senior Engineer – Rural Water Supply and Sanitation, DHID

Period of the Evaluation	7 to 29 July, 2015	Type of Evaluation: Terminal Evaluation

III. Results of Review

1. Summary of Achievements

(1) Achievement extent of Output 1 (Strengthening the capacity of MLGH (Ministry of Local Government and Housing)/DHID (Department of Housing and Infrastructure Development) relating to O&M Components)

The C/P in charge of components in DHID prepares and revises O&M work plans annually. However, as it requires a considerable amount of time for DHID to process budget requests and for the Ministry of Finance to disburse a budget, implementation and monitoring of the work plans are occasionally delayed.

(2) Achievement extent of Output 2 (Implementation of SOMAP O&M in NRWSSP target districts)

In relation to Output 2, as MIS (Management Information System) has not been functioning, the Project conducted a questionnaire survey, which was distributed by email to all targeted districts, in order to understand the current status of rural water-supply facilities (the total number of targeted districts is 93). The Project has been analysing this data since the beginning of June. The Terminal Evaluation Team indicated the extent of the achievements of the Project based on the results of this survey.

It was found that four out of five indicators were not achieved, the exception being indicator 2-5 ‘Training and allocation of APM’ which is difficult to assess. Regarding Indicator 2-1 ‘Preparation and

[3] A total of M/M incudes M/M until the completion of the Project.

annual review of The District O&M Action Plan in each district', 71 districts incorporated the rehabilitation plan in their district RWSS annual work plan. Regarding Indicator 2-2, the Project gave advice on the revision of NRWSSP's M&E (Monitoring & Evaluation) framework. Moreover, the Project made recommendations to MLGH concerning monitoring items, tools to collect, and how to analyse data. However, MIS is still under development. Regarding Indicator 2-3, the collocating rate of community contributions exceeded 60% in only 10% of the districts. In regard to Indicator 2-4, 45% of the districts have a spare parts shop. For Indicator 2-5, as the sufficient number of APMs is not defined, it is difficult to assess the extent of the achievement in this regard.

(3) Achievement extent of Output 3 (Implementation of SOMAP O&M in four districts of Luapula Province under direct support from the Project)

Three of five indicators have been achieved. Although the collection rate of O&M (Indicator 3-3) has not reached its target value, other indicators, such as Indicator 3-1 'Preparation and annual review of the District O&M Action Plan at each district', Indicator 3-2 'Update of the district database based on reports from V-WASHEs and APMs at each district', and Indicator 3-4 'Keeping sales records of spare parts shops', were achieved.

In regard to Indicator 3-5 (The proportion of water supply facilities repaired by APMs), although the rate is high, there is no baseline figure. Therefore, it is difficult to assess the increase in the proportion of water supply facilities repaired by APMs.

2. Summary of Evaluation Results

(1) Relevance: High.

In rural areas of Zambia, the percentage of the population with access to a safe water supply is still 60% (as of 2012)[4]. This is significantly low as a result of inadequate O&M systems in water-supply facilities. Therefore the Project, which aims to increase the operation rate of rural water-supply facilities, conforms to the requirements of the Zambian people.

The Zambian government formulated an overarching development policy, 'the Vision 2030', and its mid-term development policy, 'the Draft Revised Sixth National Development Plan' (2013–2016). Through these initiatives, the Zambian Government is aiming to improve access to sustainable safe water supplies. Thus, the Project has a strong relevance to Zambian policies.

In the Country Assistance Policy for the Republic of Zambia (revised in June, 2014), the Japanese government set a strategic policy, 'next generation human-resource development of a healthy and high quality' as one of the priority items. In this policy, the Japanese government formulated a programme to improve access to safe water supplies and sanitation through strengthening the capacity of the O&M systems of water-supply facilities. Moreover, since 1985, the Japanese government has been providing assistance to Zambia in the rural water supply and sanitation sector through various cooperation schemes. Thus, the relevance to Japanese ODA policies is high.

(2) Effectiveness: Medium

Regarding the achievement status and prospect of accomplishing the Project's purpose, as of the Terminal Evaluation, MIS was still under development and it was impossible to assess the current status without the data provided by MIS. Thus, the Terminal Evaluation team assessed whether the Project's purpose had been achieved by utilising the results of a questionnaire survey conducted by the Project.

Indicator 1, 'operation rate of rural water supply facilities', was 76.2% as of March, 2015 and this value has not reached the target value defined in the Indicator. In order to achieve this, O&M activities shall be further promoted at community level and spare parts shall be also restocked consistently under the strong initiatives of MLGH.

Indicator 2, 'down time of rural water supply facilities', has been achieved in 53% of the districts as of March, 2015. Indicator 2 is considered to be difficult to achieve in its entirety by the completion of the

[4] Source: Draft Revised Sixth National Development Plan 2013-2016

Project.

Indicator 3, 'incorporating the rehabilitation of a rural water supply facility', has been achieved in 76% of the districts. As previously mentioned, most of the districts that have not incorporated the rehabilitation plan are newly established ones. Thus, this achievement percentage is expected to increase if further orientations are conducted in such districts.

Regarding the Important Assumption, according to NRWSSP, water supply points construction and rehabilitation of existed water point plans to be implemented. Although actual achievement on these activities were not available, the component expects to be achieved only half of the plan eventually.

(3) Efficiency: Medium

Necessary inputs (such as the dispatch of Japanese experts and equipment procurement) required to conduct the Project activities have been allocated as planned and the input are adequate qualitatively and quantitatively. The Project activities have been conducted effectively by making the most of resources from the Zambian side and by collaborating with other cooperating partners.

However, due to delays in budget disbursement, some activities were not conducted as planned. The Project Team conducted orientations and workshops for officials newly assigned in Provincial DHIDs, and the skills of the officials have been improved. On the other hand, the amount of work for the Project Team was increased for implementation of these guidance. Those circumstances negatively affected the efficiency of the Project.

(4) Impact: Not assessed

With the absence of a functioning MIS, reliable data is not available as of the Terminal Evaluation. Under such a circumstance, it is difficult to assess whether the overall goal will be achieved.

Regarding the other impacts of the Project, the following points were highlighted as positive impact: 1) although the Project focused on capacity development at national and provincial level, the capacity to conduct activities related to O&M has been improved at district and community levels through the Project activities, 2) other cooperating partners have deepened their understanding in the importance of O&M in water supply facilities and, consequently, have involved O&M components in their support activities, 3) it has been easy to access safe water in rural area. Consequently, children's educational opportunities have been increased, and the water drawing labor of women has decreased. In addition to these impacts, the number of cases of water-borne diseases has decreased.

(5) Sustainability

Policy aspects:

Zambian policy 'Vision 2030', 'the Draft Revised Sixth National Development Plan' and other relevant policies detailed the necessity of improving rural water supply facilities' O&M systems. Thus, there is no foreseeable change in Zambian policy.

Financial Aspects:

Major sections of SOMAP budgets depend on assistance from other cooperating partners. It is expected to secure budget for the activity implementation. On the other hand, it is difficult to secure funding from Zambia's own budget. In the future, the government of Zambia should secure an adequate budget for SOMAP.

Organisational Aspects:

Although Japan has supported the improvement of the rural water-supply system for a considerable period of time through SOMAP 1 and 2, counterparts of previous SOMAPs were not involved in the Project as counterparts of the Project. Moreover, during the Project, DHID officials in charge of the O&M component were transferred twice. The Project conducted guidances to the newly assigned officials each time. These circumstances made it difficult to accumulate knowledge in the organisation.

However, positions relating to conducting the O&M component were filled after the mid-term review. In addition, counterparts of the Project have been employed as full-time staff. At provincial level, a provincial DHID office was established in each province and a sufficient number of officials have been allocated. At district level, RWSS positions have been filled.

Technological Aspects:

Counterparts of previous SOMAPs do not participate in the Project activities as counterparts. However, the Project is establishing a system to afford the smooth dissemination of technology through developing guidelines and manuals.

The Project delivered necessary copies of its manuals and guidelines to stakeholders (such as provinces and other relevant cooperating partners). Moreover, the Project releases the manuals and guidelines electronically on its website.

Preparation of the work plan (at national level), planning and implementation of the work plan (at provincial and district levels), and improving the capacity of human resources have been developed as a result of the Project activities at each level.

3. Factors that Promoted Realization of Effects

(1) Factors Relevant to Planning

None.

(2) Factors Relevant to the Implementation Process

Through the Project, Zambian Government and other cooperation partners have addressed O&M component. Consequently, DHID has requested a budget of amounting to approximately 10 million kwacha to Ministry of Finance.

4. Factors that impeded realization of effects

(1) Factors Relevant to Planning

None**.**

(2) Factors Relevant to the Implementation Process

- Due to late budget disbursement, some Project activities were delayed.
- Water supplied from India Mark II, which accounts for 70-80% of the water supply facilities in the districts of Luapula Province, contains much iron. Thus, the water is not suitable for drinking and there are some cases that the residents in communities refuse the payment of water.

5. Conclusion

The Project has been implemented with a strong ownership by the Zambian Government based on PDM version 3. The roll-out approach of SOMAP O&M systems provided a positive effect, especially in Luapula Province where the Project provided direct support. The Project contributed to improving the capacity of human resources at each level (national, provincial, and district).

However, some activities were not conducted as planned as a result of delayed budget disbursement. As of the Terminal Evaluation, three indicators of the Project's purpose were not fully achieved according to the results of a questionnaire survey conducted by the Project Team. Completion of MIS is necessary in order to assess the extent of the achievement of the Project's purpose.

6. Recommendations

(1) Timely budget disbursement for O&M activities

The Zambian Government should provide full effort to disburse the budget on O&M activities to the districts in a timely and consistent manner. Some activities of the Project have not been conducted as planned due to delay of the budget disbursement. Through the interview, the Team found out that the districts requested budget for O&M activities, however, the Ministry of Finance takes much longer time than usual to disburse the budget. That is why the Project could not transfer sufficient capacity building on SOMAP model implementation in districts.

(2) Specific and robust data source for the Means of Verification for the Overall Goal

The Team requests the Project to specify the means of verification to measure the Overall Goal. PDM version.3 puts "Statistics conducted by the Government of Zambia" as the means of verification for the indicator. However, there are several governmental statistics data to measure the "access to safe water" and each data differ in number. It is essential for the Project to indicate specific and robust data source to measure the Overall goal.

(3) Completion of the Management Information System (MIS)

The completion of the MIS is crucial not only for the measurement of the Project Overall Goal, but also for MLGH's operations as a whole. There is a strong need to be established MIS at the earliest. The Team recommends that MLGH should proactively involve cooperating partners (including the Project) in the MIS development process, especially when determining appropriate indicators and monitoring components.

(4) Proactive cooperation for the implementation of the NRWSSP2

On the process of formulating the Work Plan of NRWSSP2, MLGH has to evaluate and analyse the achievement and lessons through the implementation of previous NRWSSP. The Team recommends that MLGH should proactively involve cooperating partners (including the Project) in the NRWSSP2 development process.

(5) Additional efforts to assure the project output

Due to the facts that the budgets delivered from Zambian Government did not meet the requests on conducting O&M activities by the districts, and the number of NRWSSP target districts increased dramatically from 64 to 93, some of the project activities could not completed as planned. In order to assure the project outputs, and achieve the Project purpose, the team recommends that the additional efforts should be provided, such as spare part management, technical advice on hand pumps, and support for institutional process.

(6) Project Extension

The Team recommends that the project should extend the project period within one year, in order to assure the project purpose, and reach the overall goal. The Project is able to conduct additional efforts mentioned above with extension period.

7. Lessons Learned

(1) PDM Design

The Project conducted a variety of activities on SOMAP O&M model from central to community level. That is why it is difficult to explain the Project concept in a PDM and the Terminal Evaluation Team faces difficulties to understand whole vision of the Project from PDM version.3. So that the Project should have described clearly the relation between outputs and the Project Purpose., and also explained the linkage between Overall Goal and outputs in PDM. In addition to that, the Project should show clear indicators in order to check and evaluate outputs.

(2) Involving other cooperating partners

In order to fulfill the Project Purpose and Overall Goal, other cooperating partners have to participate strongly in SOMAP O&M, and contribute to the goal. It means that the Project Purpose and Overall Goal are not able to meet without their contribution on SOMAP O&M. So that the Project Purpose and Overall Goal should have been established with considering the condition without other cooperating partners' commitment.

(3) Pilot site selection

The Project has transferred the technology on O&M directly to the districts in Luapula Province as pilot site, in order to contribute to Output3. However, the distance between Luapula and Lusaka makes difficult to conduct technology transfer from perspective of efficient project implementation.

(4) Activities with Government budget

Although some activities were scheduled to be conducted with budget from Zambian Government, the Project did not conduct some activities because of delay of budget disbursement. From this circumstance, the terminal Evaluation Team understands the difficulty to conduct Project activities with government budget under time constrain such project type of cooperation.

8. Follow-up Situation

(Not applicable)