

Country Name	Strengthening of Water Associations and Community Development Project
Republic of Guatemala	

I. Project Outline

Background	<p>In Guatemala, approximately 1,400 water supply facilities were constructed in the rural areas from 1999 to 2003, and most of them were operated with the gravity flow system which used surface water as its source. However, owing to deforestation and agricultural development, surface water was being reduced, especially in the dry season, and it became difficult to secure a stable water source to improve water supply in the rural area. In such situations, needs for water supply facilities with groundwater as a source were increased. The Executive Unit of the Rural Aqueduct Program of the Institute of Municipal Development (Instituto de Fomento Municipal, Unidad Ejectora del Programa de Acueducto Rural, INFOM-UNEPAR) constructed 14 groundwater supply facilities by 2007. The water associations/committees which operate groundwater supply facilities needed to acquire know-how on collection of water tariff, financial management, facility maintenance, and so on, and INFOM-UNEPAR needed to strengthen its support system for these water associations/committees.</p>												
Objectives of the Project	<p>Through establishment of the training system on administration, operation and maintenance (AO&M) of the groundwater supply facilities and facilitation/training/assistance for water associations/committees in the pilot sites, the project aimed at improving the capacity of the 3 Regional offices of INFOM-UNEPAR (Huehuetenango Office, Central Region Office and Quetzaltenango Office) for support of the water associations/committees, thereby contributing to strengthening of their capacity for AO&M of the groundwater supply facilities.</p>												
	<p>1. Overall Goal: Strengthen the capacity of rural water associations/committees to administrate, operate and maintain groundwater supply facilities with the support of INFOM-UNEPAR. 2. Project Purpose: Improve the capacity of the 3 Regional offices of INFOM-UNEPAR (Huehuetenango Office, Central Region Office and Quetzaltenango Office) in order to support the water associations/committees that are responsible for AO&M of the groundwater supply facilities.</p> <p>Note: 1) Due to the restructuring within INFOM-UNEPAR in 2016, the Central Regional Office was dismissed and the Central Office is in charge of the water committees which were under jurisdiction of the Central Regional Office. 2) The community organization in AO&M of the water supply facility is named “association” or “committee” depending on its status in each municipality. Since the two have same functions related to AO&M, both are conveniently described as “committee” in this report.</p>												
Activities of the project	<p>1. Project site: 5 departments located in the western highland part of Guatemala (Sololá, Totonicapán, Quetzaltenango, Chimaltenango and Huehuetenango) 2. Main activities: Preparation of the training program for Central and Regional offices of INFOM-UNEPAR and training materials and manuals, conduct of the training for Central and Regional offices of INFOM-UNEPAR, On the Job Training (OJT) for the water committees in pilot sites, development of cases from the pilot sites, etc. 3. Inputs (to carry out above activities)</p> <table border="0"> <tr> <td>Japanese Side</td> <td>Guatemalan Side</td> </tr> <tr> <td>1) Experts from Japan: 12 persons</td> <td>1) Staff allocated: 75 persons</td> </tr> <tr> <td>2) Training in Japan and third country: 3 persons</td> <td>2) Land and facilities: Office space, training room, vehicles, etc.</td> </tr> <tr> <td>3) Equipment: water quality test kits, GIS servers, GPS, PC, etc.</td> <td>3) Operation cost for water and electricity, daily allowance and fuel for the counterpart personnel, etc.</td> </tr> <tr> <td>4) Operation cost for hiring local consultants, office rental, etc.</td> <td></td> </tr> </table>			Japanese Side	Guatemalan Side	1) Experts from Japan: 12 persons	1) Staff allocated: 75 persons	2) Training in Japan and third country: 3 persons	2) Land and facilities: Office space, training room, vehicles, etc.	3) Equipment: water quality test kits, GIS servers, GPS, PC, etc.	3) Operation cost for water and electricity, daily allowance and fuel for the counterpart personnel, etc.	4) Operation cost for hiring local consultants, office rental, etc.	
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Project Period	March 2010 to June 2013	Project Cost	(ex-ante) 350 million yen, (actual) 352 million yen										
Implementing Agency	Institute of Municipal Development (INFOM)												
Cooperation Agency in Japan	Kokusai Kogyo Co. Ltd., Japan Techno Co. Ltd.												

II. Result of the Evaluation

<Special perspectives considered at the ex-post evaluation>

- The Overall Goal is to strengthen the capacity of water committees in the rural areas. There were 92 water committees in rural areas in the country at the time of the terminal evaluation. However, as the list of the water committees has not been revised since the project completion, the exact number of the committees could not be confirmed at the ex-post evaluation. Due to the time and resource constraints at the ex-post evaluation, 12 pilot sites and one non-pilot sites were visited. Besides, some information could be collected from four more non-pilot committees via INFORM-UNEPAR.

1 Relevance

<Consistency with the Development Policy of Guatemala at the time of ex-ante evaluation and project completion>

As access to water and operation and maintenance of water facilities are prioritized in “the National Plan of the Public Services of Drinking Water and Sanitation” (2008-2011) and “the Government Plan 2012-2016,” the project was relevant with the development

policies of Guatemala at the time of the ex-ante evaluation and project completion.

<Consistency with the Development Needs of Guatemala at the time of ex-ante evaluation and project completion >

Groundwater supply facility requires maintenance which is technically more advanced and expensive compared to conventional gravity water supply system, and there were needs for capacity development of the water committees on AO&M and also of INFOM-UNEPAR on how to support these water committees at the time of the ex-ante evaluation and project completion.

<Consistency with Japan's ODA Policy at the time of ex-ante evaluation>

Based on the policy dialogue between the Government of Guatemala and ODA Task Force, one of the priority areas for assistance was confirmed as "rural development"¹. Thus, the project was consistent with Japan's ODA policy at the time of the ex-ante evaluation.

<Evaluation Result>

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

2 Effectiveness/Impact

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

The Project Purpose was partially achieved by the project completion. More staff of the Central and Regional offices were trained on support for the water committees than planned, but two thirds of them left the office before the project completion due to the administrative change (Indicator 1). With support of trained staff of INFOM-UNEPAR in the pilot sites, the period of out-of-service water facility was reduced (Indicator 2). Among the 14 pilot water committees, 11 committees developed its AO&M plan of the water supply facility but none of them did not update it (Indicator 3), because they did not keep data of saving funds and quantity of pumping water, and five committees could not collect necessary AO&M fund (Indicator 4) as some members were against the increase in the fees. The average rate of report submission from the pilot 14 committees was 41% against the planned 80% (Indicator 5), because some committees did not make reports. Another reason is that the staff of the Regional Offices did not have sufficient time or transportation to collect the reports.

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

The project effects have partially continued. In the project, 17 and 16 personnel of the Central and Regional Offices, respectively, were trained, and among them, two and four personnel have remained at the time of the ex-post evaluation. Besides, one personnel of the Regional Office of Huehuetenango were trained after the project completion. Because of the administrative change in 2016, many officials were replaced. Training of new staff on supporting water committees is not prioritized by the new authority of INFOM, and therefore, only one person was newly trained in the Regional Office of Huehuetenango. Among the 14 pilot water committees, 11 have its AO&M plan and nine committees have revised it. Those which have not revised the plan have operated the water supply facility without documents but only based on the experience. Successful examples of AO&M include a committee which purchased an IT equipment to read the meter and show the charge fee on the display (Pacorrall of Chimaltenango). Another committee has a space in the municipality office for collecting fees and receiving requests or complaints from the users (Los Encuentros de Sololá). On the other hand, among the 12 visited pilot water committees, two did not provide water services for more than five months because they were not able to repair the broken facility due to the budget shortage². While the water supply facility was broken, these water committees bought water from other communities or got water from facilities other than that of the project in the site. Including these water committees, four water committees have faced financial difficulties: high cost of repair and insufficient fee collection.

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

The Overall Goal has been partially achieved. The Central Office has sustained the list of water committees which use groundwater facilities developed during the project period. The list has been shared with the Regional Offices but not the municipalities due to lack of the responsible personnel. The list has not been revised since the project completion because of the manpower shortage (Indicator 1), but the Central Office plans to review the list by February 2018, according to INFOM-UNEPAR. INFOM-UNEPAR did not develop any official plan to diffuse the project experience to other sites after the project completion, and therefore, training on the AO&M methodology developed by the project has been limited. Training was given to only seven personnel of the Regional Offices of Zacapa, Cobán and Petén, where the methodology has been shared with in five non-pilot sites. In those sites, no suspension for more than 60 days in provision of ground water has been reported (Indicator 2). After the list is revised, INFOM-UNEPAR plans to conduct information sharing between the pilot committees and other committees and training on AO&M for the new committees. Regarding the fund management of the non-pilot water committees, no financial data was not collected from the surveyed five non-pilot committees. In the visited non-pilot committee, the accounting book could not be directly observed, though the interviewed members answered that the fund has been increasing (Indicator 3).

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

Women's participation and empowerment have been promoted through activities of water committees. Concretely, women did not used to participate in community projects, but since the committee was organized they have come to take important positions in the committee such as vice president, secretariat and treasurer in nine of the 12 visited committees. This is considered attributed to the fact that women's participation was a requirement of organizing the water committee in the project. According to the interviewed committee members, they have realized the importance of including women as they are frequent water service users.

<Evaluation Result>

In light of the above, the Project Purpose was partially achieved and the effects have partially continued. The Overall Goal has been partially achieved, but a positive impact related to empowerment of women was confirmed. Therefore, the effectiveness/impact of the project is fair.

Achievement of the Project Purpose and Overall Goal

Aim	Indicators	Results
(Project Purpose) Improve the capacity of the	1. All staff of the INFOM-UNEPAR central office and the 3 Regional	Status of achievement: <u>Partially achieved</u> ; (Partially continued). (Project Completion)

¹ Ministry of Foreign Affairs (2010) "ODA Databook 2009."

² In the two sites, it cost 12,000 QTQ and 130,000 GTQ for the repair, respectively, and both water committee paid it with support from the municipality.

3 Regional offices of INFOM-UNEPAR (Huehuetenango Office, Central Region Office and Quetzaltenango Office) in order to support the water associations/ committees that are responsible for administration, operation and maintenance of the groundwater supply facilities.	offices in charge of supporting the water associations/ committees will receive training by the end of the project (Baseline: 0 staff, target: 10 staff in UNEPAR central office and 12 staff in the Regional offices).	- 17 staff of the Central office and 16 of the 3 Regional offices received training. However, 6 and 5 staff, respectively, remained working as of May 2013, and no training was given to the new staff. (Ex-post Evaluation) - In the Central office, among 6 staff who were at the project completion, 2 have continued working. No new staff was trained. - In the Regional offices, among 5 staff who were at the project completion, 4 have continued working. One new staff was trained.
	2. Improve performance of personnel in identifying trouble, planning for repairs and repairing defects in water supply facilities; and consequently reduce the number of consecutive days which water supply facilities—at the 14 pilot sites—are out of service in the event of a breakdown by the end of the project (Baseline: 90days, target: less than 60 days).	Status of achievement: <u>Achieved (Continued)</u> . (Project Completion) - The largest number of the consecutive days which water supply facilities were out of service in the event of a breakdown was 216 days. In the last six months before the project completion, the number was reduced to 5 days. (Ex-post Evaluation) - Among the 12 visited target sites, there have not been breakup of the water supply facilities for the last one year at 10 sites. However, in El Sitio, the facility has been out of service for more than 5 months as of July 2017. In Chacarita, the facility was out of service from January 2014 to February 2017.
	3. Water associations/ committees of the 14 pilot sites are to update the administration, operation and maintenance plans of groundwater supply facilities with the assistance of INFOM-UNEPAR Regional offices by the end of the project (Baseline: central office 0/7, Quetzaltenango 0/4, Huehuetenango 0/3, target: central office 7/7, Quetzaltenango 4/4, Huehuetenango 3/3).	Status of achievement: <u>Not achieved (Partially continued)</u> . (Project Completion) - 11 out of the 14 pilot water committees developed the plan of AO&M of groundwater supply facilities (4/7 under the Central office, 3/3 under Huehuetenango, 4/4 under Quetzaltenango), but they did not update the plan. (Ex-post Evaluation) - Among the 14 pilot water committees, 12 have developed AO&M plans of groundwater supply facilities and 11 have updated it.
	4. Increase the fund of water associations/ committees of 14 pilot sites to desired amount in order to achieve financial sustainability of their services by the end of the project (Baseline & target: set for each).	Status of achievement: <u>Not achieved (Partially continued)</u> . (Project Completion) - Comparing the planned figure and achievement in April 2013, the fund of water associations/committees reached the targeted figure in 5 among the 14 sites. (Ex-post Evaluation) - Among the 12 visited water committees, 7 answered at the ex-post evaluation that they have sustained the sufficient fund to conduct their activities.
	5. Water associations/ committees in 14 pilot sites submit the record of administration, operation and maintenance in the proper format and in a timely manner prepared by INFOM-UNEPAR to Regional offices (Baseline: 0%, target: 80%).	Status of achievement: <u>Partially achieved (Partially continued)</u> . (Project Completion) - The average rate of submission of the record during the period from May 2012 to April 2013 was 41%. (Central office: 46%, Quetzaltenango: 23%, Huehuetenango: 54%). (Ex-post Evaluation) - Among the 14 pilot water committees, 10 have submitted the record to the Regional offices in the proper format more than every two months.
(Overall goal) Strengthen the capacity of rural water associations/ committees to administer, operate and maintain groundwater supply facilities with the support of INFOM-UNEPAR.	1. Make a list of water associations/ committees using groundwater supply facilities under the jurisdiction of INFOM-UNEPAR Regional offices; the list must be shared and updated by central and Regional offices of INFOM-UNEPAR and municipalities (Baseline: non-existent, target: share and update list every month).	Status of achievement: <u>Partially achieved</u> . (Ex-post Evaluation) - The Central Office has a list of the committees which have groundwater service, but it has not been updated. The list has been shared with Regional offices but not municipalities.
	2. Improve the operational status of rural groundwater supply facilities throughout the country that INFOM-UNEPAR supports (Reduce the days of water supply suspension in the event of a breakdown) (Baseline: 172 days, target: 60 days).	Status of achievement: <u>Achieved</u> . (Ex-post Evaluation) - In five non-pilot sites visited at the ex-post evaluation, not more than 60-day suspension of the groundwater service has been reported.
	3. Increase the fund with regard to activities of water associations/ committees. (Baseline: non-existent, target: NA).	Status of achievement: <u>Not verified</u> . (Ex-post Evaluation) - No financial data could be confirmed from the five surveyed non-pilot committees.

Source: Project Completion Report, water committees, INFOM-UNEPAR.

3 Efficiency

The project period was as planned, but the project cost slightly exceeded the plan (ratio against the plan: 100% and 101%, respectively). Therefore, the project efficiency is fair.

4 Sustainability

<Policy Aspect>

Water provision is prioritized in the national development plans: “K’atun 2032” (2014-2032) and “Rural Agenda” (2016-2020). The “National Water Policy and its Strategy” which is still effective at the time of the ex-post evaluation, one of the development strategies related to water and sanitation is described as improvement of capacity on AO&M of drinking water and sanitation services.

<Institutional Aspect>

AO&M Unit was created in INFOM-UNEPAR during the project period. However, it is positioned as only part of a program, not institutionalized unit. The number of the staff is 2, which is not sufficient, according to the unit coordinator. In the Regional Offices of Huehuetenango and Quetzaltenango, there are 2 and 2 staff, respectively (1 social promoter and 1 engineer). The staff number is less than the ones during the project period and they have to conduct duties other than UNEPAR, and therefore it is not sufficient to conduct training, monitoring and technical support for the water committees. The Regional Offices monitor works of the water committees once or twice a year, much less than before (every month). At the community level, the number of the water committee members vary among the visited 12 committees (7-12). Each has necessary positions such as president, secretary and treasurer and the number is sufficient for AO&M of the water facility, according to the interviewed members. In some committees, positions are rotated to promote users’ participation and committee’s transparency.

<Technical Aspect>

The staff of the Regional Offices of Huehuetenango and Quetzaltenango who are in charge of training have sufficient knowledge on training themes, as they have 5-10 year working experience in the groundwater field and also they receive technical support from the technician of the Central Office upon necessity. According to the manager of these offices, they have sufficient knowledge also for monitoring and repair of the water supply facilities. For expansion of the project experience, INFOM trained the staff of the Regional Offices of Zacapa, Cobán and Petén on the AO&M methodology developed by the project and has a plan to restart training for the staff of Petén, Verapaces, Zacapa and Quiché in 2017. Training materials developed by the project have been utilized. At the community level, the technicians of the Regional Offices judge that the water committee members have sufficient knowledge and skills for AO&M of the water supply facility, as very few facilities have been broken up due to inappropriate AO&M so far. The committee board members are changed every two years and when new members are selected, training is given to them.

<Financial Aspect>

The budget sources of INFOM-UNEPAR are allocation from the central government via the Ministry of Public Finance and the National Fund. Every year since 2013, 987 thousand GTQ have been disbursed at INFOM-UNEPAR. Regarding the Regional Offices, for example, at the Regional Office of Quetzaltenango, the budget has increased from 627,028 GTQ in 2013 to 830,638 GTQ in 2016, but the disbursement ratio has been on a decreasing trend, because the planned activities including training and monitoring were not implemented due to the manpower shortage. At the community level, seven of the 12 visited committees answered that they have sustained sufficient budgets to conduct their activities.

<Evaluation Result>

In light of the above, some problems have been observed in terms of the institutional and financial aspects of the related organizations. Therefore, the sustainability of the effectiveness through the project is fair.

5 Summary of the Evaluation

Through the project activities, the Project Purpose was partially achieved and the effects have partially continued. Concretely, INFOM-UNEPAR improved its technical capacity for training and monitoring of the water committees. With support of the Regional Offices, some pilot water committees have improved AO&M of the water supply facilities. However, since the project completion, due to the personnel and budget shortage, functions of the target Regional Offices have been limited, water services have been suspended in two pilot sites. The project experience has been shared with other Regional Offices. Regarding the sustainability, both the Central and Regional Offices lack budget and personnel to sufficiently conduct activities for monitoring and training of the water committees. 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:

- It is recommended to the Regional Offices of Huehuetenango and Quetzaltenango to coordinate duties of the social promoter in order to secure more time for monitoring of the target sites. Good practice in AO&M of the water facilities are worthy of being shared with other water committees, such as experiences of the committees of Parracol and Los Encuentros (Clearly visible display of the meter with IT equipment, space in the municipality office for collecting fees and receiving requests or complaints from the users, etc.).
- Related to monitoring of the water associations, if the number of the personnel in charge is not sufficient, it is also recommended to the Regional Offices of Huehuetenango and Quetzaltenango to understand the situation of AO&M of water supply facilities by mobile phone and to make a visit to the site where a serious problem arises.

Lessons learned for JICA:

- The project aimed at improving capacity of the three Regional Offices of INFOM-UNEPAR for supporting water committees (Project Purpose), in order to strengthening capacity of water committees in the country for AO&M of the groundwater supply facilities (Overall Goal). However, INFOM-UNEPAR has not developed any diffusion plan to other regions and capacity building of the personnel has been limited, due to the two administrative changes and personnel turnover. In the countries where administrative changes can bring personnel changes, it is difficult to expect that the project experience would be extended by a new administration. In such countries, it is necessary to prepare a feasible diffusion plan during the project period.



Groundwater supply facility of San José Chicalquix of Quetzaltenango



Interview with water committee members of El Llano of Chimaltenango