conducted by Uganda Office: June 2019

Country Name	**The Project for Provision of Improved Water Source for Resettled Internally Displaced Persons in Acholi Sub-Region**
Republic of Uganda	

I. Project Outline

Background	Acholi sub-region, located in northern Uganda, was considered as a less developed area in terms of infrastructure due to the civil war over 20 years since the 1980s. The people who lived in these areas had to evacuate into the IDP (Internally Displaced Person) camps established at the district capitals away from their villages and to stay in the camps long time under the assistance of the government and various donors. After the war ended in 2007, the IDPs started to return to their villages from the IDP camps, and most of the IDPs returned to the villages where they had lived before the civil war. During the civil war, various social infrastructures such as water supply facilities were constructed intensively in the IDP camps, while no infrastructure was provided for the villages where no villagers lived. The poor situations and the shortage of the infrastructures necessary for IDP's resettlement were considered to be the serious constraints in the area.			
Objectives of the Project	To improve the water supply conditions in seven districts in Acholi sub-region in Uganda through the construction of water supply facilities and procurement of equipment for repair of water supply facilities, thereby contributing to the improvement of the living environment for resettlement of IDPs.			
Contents of the Project	1. Project Site: Acholi sub-region composed of 7 districts (Agago, Amuru, Kitgum, Gulu, Lamwo, Pader, Nwoya) 2. Japanese side: Provision of grant necessary for the followings. (1) Facilities: Construction of deep boreholes with hand pump (75 sites), construction of piped water supply facilities with solar power generation facilities (6 Rural Growth Centres (RGCs)) (2) Equipment: Procurement of truck-mounted service rig (service truck) (1 set), procurement of hand pump repair tools (73 sets including fishing tools) (3) Technical assistance (soft component of Grant Aid): (i) Empowerment of target villages for establishing Water and Sanitation Committees (WSCs) and proper operation and maintenance (75 WSCs and 6 RGCs), (ii) Training of hand pump mechanics (HPMs) (219 Hand Pump Mechanics (HPMs) in 73 subcounties in 7 districts) *The scope of the project was reduced due to exchange rate fluctuations, i.e., depreciation of yen, and the number of construction sites (villages) of deep boreholes was decreased from 116 at the time of ex-ante evaluation to 75. Also, various modifications were made in the design of facilities. 3. Ugandan side: Proper land preparation for new water supply facilities; installation of necessary facilities such as fences around hand pump and electric power lines, if necessary; provision of storage and operator of service rig; assignment of operators necessary for operation and maintenance of water supply facilities, etc.			
Project Period	E/N Date	July 4, 2013	Completion Date	July 20, 2015 (completion of soft-component activities)
	G/A Date	July 4, 2013		
Project Cost	E/N Grant Limit / G/A Grant Limit: 973 million yen, Actual Grant Amount: 973 million yen			
Executing Agency	Directorate of Water Development (DWD), Ministry of Water and Environment (MoWE) (District local governments of the respective seven districts. These seven districts through their respective District Water Office (DWO) are in charge of operation and maintenance of the facilities to be constructed under the project.)			
Contracted Agencies	Main Consultant: TEC International Co., Ltd. and OYO International Corporation (Consortium) Main Contractor: Nissaku Co., Ltd.			

II. Result of the Evaluation

1 Relevance

<Consistency with the Development Policy of Uganda at the Time of Ex-Ante and Ex-Post Evaluation>

"The National Development Plan" (NDP, 2010/11 – 2014/15) and "The Second National Development Plan" (NDP-II, 2015/16 - 2019/20) set the target to increase the national average of rural safe water coverage. Regarding refugee treatment, NDP-II set the objective and strategic intervention to promote Water, Sanitation and Hygiene (WASH) humanitarian preparedness and response especially in settlements for poor communities, refugees and displaced persons in rural water supply and sanitation sector.

<Consistency with the Development Needs of Uganda at the Time of Ex-Ante and Ex-Post Evaluation >

At the time of ex-ante evaluation, there was a need for improvement of rural water supply in Acholi Sub-region as mentioned in "Background" above. To the time of ex-post evaluation, the Ugandan government has handled refugee emergency, and Uganda has been hosting more than 1.5 million refugees (mostly from South Sudan) as of August 2018. Those people live in settlements in West Nile and Acholi Sub-region and it seems difficult for them to return their country soon under the current situation.

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

One of the four priority areas of Country Assistance Policy for Uganda (2012) is assistance for peace building in the northern area, and another is assistance for the improvement of the living environment including water supply.

<Evaluation Result>

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

2 Effectiveness/Impact

<Effectiveness>

The objective of the project was achieved. As the quantitative effects, access to (Indicator 1) and coverage of (Indicator 2) quality water greatly improved in all target districts by utilization of the boreholes and piped water supply facilities constructed by this project as well as those constructed/rehabilitated by the government/MoWE. According to field surveys by a JICA expert (MoWE Advisor in Operation and Maintenance for Water Supply Facility), 68 out of the 75 boreholes constructed under this project were in use as of March 2018. The service truck (service rig) continued to be effectively used for rehabilitation of the boreholes. In FY2016/17, total 71 boreholes in the six districts were rehabilitated using the service truck.[1] As for the piped water supply facilities, the field survey by the ex-post evaluator found that they are also in use in all six RGCs, while some of the public taps are not functional (see "Current Status of Operation and Maintenance" below). In Unyama subcounty in Gulu district, the piped water supply facility was transferred from the subcounty to National Water Sewerage Corporation (NWSC) in 2016. Since then, NWSC has upgraded the water supply facility by establishing more than 300 other water points from the piped water supply facilities up to September 2018, which has further increased the served population and coverage.

Regarding the qualitative effects, to a large, the effects of the soft component are evidenced through the active WSCs. Despite a few managerial challenges (see "Institutional Aspect" below), most of the WSCs are functional and continue to attract the attention of the DWOs to build their capacities.

<Impact>

The living environment and life have greatly improved: according to the DWOs in five out of the seven target districts interviewed, the prevalence of water borne diseases has greatly gone down, i.e., the average reduction rate is 45% between 2015 and 2018.[2] At the same time, the DWOs in all target districts acknowledged that the workload of women, especially when it comes to water fetching, has greatly gone down as they no longer have to move long distances to fetch water, in addition to being supported by men, which was not the case before the project. Also, the DWO in Gulu reported that women could now also engage in other economic and productive activities to improve their livelihoods and that of their families.

As another positive social impact, not only have new enterprises like brick making come up but also new small markets have developed around the water facilities thus boosting employment and income generation for the local communities. As a negative impact, on the other hand, in some cases like Agago district, there was a rapid and uncontrolled migration of IDPs to vacant lands in areas where water facilities were established, which have led to massive land-related conflicts in the district. Given the use of solar energy, there was no negative impact on the natural environment.

<Evaluation Result>

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

Quantitative Effects

Indicators	Baseline 2011 Baseline Year	Target 2018 3 Years after Completion	Actual 2018 3 Years after Completion
Indicator 1: Number of served population (persons)	735,268	779,518	1,436,483
Indicator 2: Water supply coverage (%) (Indicator 1 / total population)	58.9	62.5	89.0

Source: Preparatory Survey Report; field surveys by the JICA expert (JICA document); interviews with DWOs

3 Efficiency

Both the project cost and the project period were as planned (ratio against the plan: 100% for both). Regarding the Outputs, however, the number of the sites for deep boreholes was reduced from 116 to 75 as mentioned in "Contents of the Project" above. If applying the adjusted planned cost, which is roughly calculated at 833 million yen by deducting the construction cost for the cancelled 41 sites, the ratio against the plan is adjusted to 117%. Therefore, the efficiency of the project is fair.

4 Sustainability

<Institutional Aspect>

The responsible organizations for operation and maintenance (O&M) of the project are as follows:

- Service truck: The DWO in Gulu owns the equipment and conducts O&M.
- Hand pump repair tools: Subcounties own the equipment and conduct O&M.
- Piped water supply facilities except for in Unyama (where the facility was transferred to NWSC): Under monitoring and supervision by the DWOs, subcounties are responsible for O&M through the Water Supply and Sanitation Boards (WSSBs). Maintenance of the facilities is entrusted to private Scheme Operators (SOs), and the Umbrella Organization[3] in Northern Uganda (UO_NU) provides technical support in some RGCs.
- Deep boreholes with hand pump: Under monitoring and supervision by the DWOs and subcounties, WSCs are responsible for O&M and entrust repair of hand pumps to private HPMs.
- At MoWE, The Technical Support Unit (TSU) of the Rural Water Supply and Sanitation Department under the Directorate of Water Development (DWD) is in charge of support for DWOs at local governments. Generally, MoWE has strengthened the capacity and mandate of entities like the TSU and UOs to ensure O&M services of water facilities.

The number of staff is sufficient for the service rig (two DWO Gulu staff) but insufficient regarding the deep boreholes with hand pump (DWO officers ranging from two to five officials and 23 to 66 HPMs per district) to extend technical services in the whole jurisdiction area according to each organization. The DWOs are increasingly engaging HPMs in water-related activities to prevent them from moving to

[1] The service truck was never used until March 2016 due to lack of utilization planning and training for utilization; JICA expert facilitated discussions for utilization and trainings.

[2] On the other hand, a 32.9% and 0.6% increase for eye and skin-related diseases, respectively, were reported in Kitgum (year unknown); a 28% increase in diarrhea cases was reported in Pader (year unknown).

[3] An Umbrella Organization is a semi-private agency for back-up support of O&M for Small Towns and RGCs.

other jobs unrelated to the water sector. The WSCs established under this project are still in existence and functioning despite some weaknesses.[4] On the other hand, WSSBs in four out of the five target RCGs are not functional to manage, operate and undertake repair at the time of ex-post evaluation. The subcounties or UO_NU undertake/support O&M of the piped water supply facilities. To improve the situation, more subcounties are considering joining the UO_NU or transferring the O&M task to NWSC.

<Technical Aspect>

The interviews with the DWOs in all target districts confirmed that most of the DWO personnel are technically competent to ensure continuity of project achievements, as they were at sufficient level of understanding of their roles on O&M with experiences and knowledge through the field work. At the level of each facility, it seems that most operators have technical capacities for O&M, as they have been running and repairing most of the schemes since commissioning. DWOs have undertaken to extend refresher training to officers at subcounty level as well as SOs to boost their technical capacities. No problem was found on the technical capacities of NWSC.

<Financial Aspect>

Budgetary allocations in varying amounts have consistently been allocated to relevant MoWE departments and DWOs to ensure functionality of systems necessary to ensure water supply in the target districts. On the other hand, from the field surveys by the JICA expert and the ex-post evaluator, it seems that water fees are not properly collected or are unaccounted for by some WSSBs and WSCs. For example, it was reported from Pader district that unwillingness of the community to regularly pay water fees has limited maintenance of the scheme. To address this issue, Pader DWO drafted an ordinance for usage and maintenance of water facilities and were organizing sensitization meetings to increase the community's awareness of the essence of user fees.

Budget and expenditure for rural water supply

	2014	2015	2016	2017	2018
MoWE (unit: billion UGX)					
Total budget of MoWE	672.03	727.81	857.8	1,726.67	n/a
Budget for rural water development (including external funding)	46.37	60.37	83.14	52.76	n/a
Expenditure for rural water development	44.31	46.8	56	48.1	n/a
DWO (average among the seven target districts) (unit: UGX)					
Budget	599,098,185	296,974,841	304,724,364	345,448,167	599,098,185
Expenditure	572,026,472	263,547,444	293,897,440	n/a	572,026,472

Source: Sector Performance Report 2015-2018; interviews with DWOs

<Current Status of Operation and Maintenance>

The service rig is in a fair condition – fair in the sense that despite its general good condition, depreciation is evident. Regarding the deep boreholes with hand pumps, some problems were found in seven out of the 75 sites: leakage at pipes (2 sites), broken materials inside the borehole (4 sites), broken rod (1 site), and broken cylinder (1 site). For some of them, the DWO or subcounty has started or is planning procurement of spare parts. The field survey by the JICA expert found that while only twelve sites have O&M plans, each borehole or hand pump has been repaired 0-3 times by WSCs. Also, each district received repairs by contractor who are usually HPMs and in few cases private companies, 0-7 times. As for the piped water supply facilities, some problems were found in four out of the six schemes: 10 out of 53 public taps are spoiled and not functional, some more taps are functional but have minor problems, and a submergible pump has been down (cause being investigated). Except for the scheme in Unyama where NWSC handles all O&M properly, there is no O&M plan developed for the piped water supply facilities. However, District water officers and subcounty officials will support the formulation and implementation of O&M plans as a part of their accountability.

<Evaluation Result>

Therefore, the sustainability of the project effect is fair.

5 Summary of the Evaluation

The project achieved the objective of improving the water supply conditions in the target districts through the deep boreholes with hand pump and the piped water supply facilities, which contributed to the improvement of the living environment of the community. Some problems were found in the institutional and financial aspects such as insufficient workforce and budget for O&M, while no problem was found in the technical skills among related organizations. As for the efficiency, the project cost was not proportional to the reduction of the number of sites for deep boreholes with hand pump. Considering all of the above points, this project is evaluated to be satisfactory.

III. Recommendations & Lessons Learned

Recommendations to the Executing Agency:

1. The capacity for O & M is limited by limited budget and personnel allocations. There is need for the MoWE and district local governments/DWOs to not only increase budget allocations but also recruit more technical personnel to support the O & M function
2. There is need for increased technical support especially to the WSCs as the established grass-root structures for ensuring sustainability.

Lessons Learned for JICA:

1. Strengthening of grass-roots structures pre and post-handover of project is key. In essence, capacity building through the follow-up cooperation scheme after handover is desirable. There is always need for follow-up and guidance on the implementation of set plans by the beneficiary communities.

[4] For example, according to the field survey by the JICA expert in 2017 and 2018, 44 out of the 74 surveyed WSCs could answer the question about the amount of savings, which implies that these 44 WSCs collect water fees. Also, the same survey found that some WSCs in Lamwo district was not functioning to repair the broken hand pump.

Water service rig stationed at Gulu Engineering unit is in good condition and continues to be utilized in the different districts of Acholi sub-region.

Utilization of borehole at Te-Cwao in Agago district

Borehole utilization at Guria North, Lamwo district

Solar Panels installed in Corner Kilak (the power systems inspected seemed to be in good condition)

Distribution pipes in Corner Kilak are intact