

KARAMOJA SMALL TOWNS & RURAL GROWTH CENTERS WATER SUPPLY & SANITATION PROJECT (KASTWSSP)

1.0 Introduction

Ministry of Water and Environment (MWE) through the Directorate of Water Development, Department of Urban Water and Sewerage Services, is implementing “Karamoja Small Towns and Rural Growth Centres Water Supply and Sanitation Project (KSWSSP). KSWSSP is a funding mechanism established by MWE to support water supply development and sanitation investment improvement in Small Towns and Rural Growth Centres in Karamoja region. KSWSSP is a 5-year project aimed at serving 400,000 Ugandans in Small Towns and Rural Growth Centres (STs/RGCs) of the Karamoja Region. The project will contribute to safe water supply and sanitation service level improvements planned to be achieved in 60 STs/RGCs as shown in Table below in the 8 Districts (Abim, Amudat, Nabilatuk, Napak, Nakapiripirit, Kotido, Kaabong and Moroto) in Karamoja Region.

KSWSSP started its operations on 1st July 2016/17 FY and its field office is located in Moroto town, Lorika road, senior quarters plot 21-23 Moroto Municipality.

KSWSSP focuses on the following core areas;

1. Water Supply: Supply piped water in RGCs and Small Towns through public, institutional and private connections.
2. Sanitation: Public, Institutional and Household sanitation facilities including hygiene education and promotion of innovative technologies
3. Environment: Source catchments protection including some targeted campaigns against bad environmental practices (bush burning) and advocating for good practices (forestation, agro-forestry, soil erosion control, etc).

The overall objectives of KSWSSP include;

- a) To improve the socio-economic situation and the opportunities for people living in Small Towns (STs) and Rural Growth Centres (RGC’s) targeted by the project through:
 - the provision of safe, adequate, reliable and accessible water supply
 - the promotion of sanitation facilities
- b) To improve general health conditions through the reduction of water borne diseases in the targeted RGCs and STs
- c) Empower communities in the targeted RGCs and STs through the nature of the management of the KSWSSP (decentralised, participatory, bottom up approach).
 - high degree of community organization as prerequisite for funding
 - Strong capacity building component for O&M of the installed facilities.

- d) To contribute to environmental protection through the use of appropriate technologies in water and sanitation interventions, such as renewable solar energy and ecological sanitation.
- e) To ensure that the gender issue is addressed in such a way that women are empowered and both sexes are involved as decision makers.

2.0 Current Projects

2.1 Amudat Town Water Supply System (Amudat District)

Feasibility studies, detailed designs and documentation for Amudat water supply system was completed by M/s BEC Engineers in the year 2015. Amudat water supply and Sanitation system has been designed for the year 2039 to serve the population of 8,652 in 15 villages of Word B, Lokrimo, Senior quarters in (Kalas word); Kukayim, Kakiken, Lochengenge, Kangoror, and Cheppordoch in Lochengenge Word; Lobrin, Woard A and Tingas village in Tingas Word; Jumbe, Kamkon, Kakres and Chomatangok in Jumbe Word Amudat Town Council. The project is being implemented by M/s Strakon Limited and internally supervised. As of December 2018, progress is at 87% and completion is slated for March 2019. Commencement date for Amudat water supply system was 25th May 2017 and Contract value is at UGX 1,933,516,064.

Scope of works for Amudat water supply system involves construction of 1No.Pump House, 5.6km transmission mains, 7.103km distribution mains, 215 service connections, 150m³ steel tank, 1No. Ecosan toilet, 1No. Pump attendant house, 1No. Chlorine dosing house.

Electro-mechanical works for Amudat water supply system are currently being implemented under Energy for Rural Transformation Project III – Water Component (ERT III). Scope of works for Amudat under ERT III include supply and installation of 84No. 240Wp solar modules, 11kW water pump, 15kW power inverter and associated electrical items.

The ERT component of the project is still in progress with civil works completed remaining the installation of the solar packages. The project is being implemented by ACC Accessories and supervised by Aster Intergro.



Senior M&E of ministry of water and environment chatting with D/CAO Amudat during the site inspection of Amudat piped water supply and sanitation project



Amudat reservoir with a capacity of 150m³ on a 15m steel tower



Participants during the training on water and sanitation in Amudat TC

2.2 Kacheri-Lokona Town Water Supply System (Kotido District)

Feasibility studies, detailed designs and documentation for Kacheri-Lokona water supply system was completed by M/s ILISO Consulting (Pty) Limited in the year 2015. It was designed for a population of 22,453 for the year 2040 for a coverage of villages of Loslang, Lokona, Namamoe, Naperu, Napwatapuli, and Poet at a demand of 743m³/day. M/s Palm Construction Company Limited was contracted to implement construction of Kacheri-Lokona water supply system at a Contract value of UGX 2,375,479,276. As of December 2018, progress is at 90% and completion is slated for 1st March 2019.

Scope of works for Kacheri-Lokona involves construction of 1No. Pump House, 3km transmission mains, 9.3km distribution mains, 200 service connections, 156m³ steel reservoir, 1No. water office, 1No. chlorine dosing house, 1No. guard house, 1No. ecosan toilet, 1No. institutional lined pit latrine for boys and girls. The water supply system also involves a solar package of 84No. 120Wp solar modules, 5.5kW water pump, 7.5kW power inverter and associated electrical items.



Kacheri water tank capacity of 156m^3 steel reservoir on an elevation of



Water Office Kacheri-Lokona



Joint monitoring team for Kotido district, Kacheri Sub County and Ministry of water and environment at water source in Kacheri



Production well Kacheri Lokona



Community training on sanitation and hygiene in Kacheri-Lokona Town Board

2.3 Improvement/Rehabilitation Works in Various Towns

KSWSSP has planned to undertake rehabilitation/improvement water works in towns of Orwamuge (Abim District), Morulem (Abim District), Kapedo (Kaabong District), Namalu (Nakapiripirit District), Nabilatuk (Nakapiripirit District), Alerek (Abim District) and Karenga (Kaabong District) currently managed by Karamoja Umbrella of Water and Sanitation. The works in these towns will include extension/expansion of piped network, installation of solar packages and other major improvement works.

2.4 Detailed Design of Water supply Systems

During Financial Year 2018/19, KSWSSP will undertake Feasibility and Detailed engineering design of piped water supply systems in seven (7) towns of Kalapata in Kaabong District, Lorengacora in Napak District, Lorengai in Nakapiripirit District, Karita in Amudat, Awach in Abim District, Kakingol and Nadiket all in Moroto District. Procurement to source a competent consultant is currently on-going.



Inspection of Nadiket water supply system that needs a revamp

2.5. Support to Karamoja Umbrella of Water and Sanitation (kUws)

KSTWSSP is supporting kUws with the supplies of pipes of various sizes, assorted fittings, transport i.e. motor vehicles and the training of the Water Supply and Sewerage Board (WSSB) members and the scheme operators.



Training of Water Supply and Sanitation Board members in Morulem in a bid to change the mind-set of the communities towards paying of water bills

3.0 Future Projects and challenges

KSWSSP is planning to undertake construction/rehabilitate water supply systems in 60 towns and to construct two (2) regional faecal sludge management (FSM) facilities in the Districts of Kotido and Nakapiripirit. However, these towns are so many as compared to the resource envelop. The region requires a well dedicated donor/funding to successfully overhaul the water supply systems and be able to start on the new facilities in Karamoja region. The project team is working on the attitude factor among the communities especially towards vandalism and willingness to pay for service connection and monthly water bills. This factor is affecting the sustainability of the water supply systems in some parts of the region. Further there is a challenge of limited underground water potential that the project is faced with where many parts of the region have dry wells.

3.1 Future Projects

KSWSSP is planning to undertake construction/rehabilitate water supply systems in unserved towns of 60 towns (Table 1). Furthermore, KSWSSP is also planning to construct two (2) regional faecal sludge (FS) management facilities in the Districts of Kotido and Nakapiripirit. The sanitation services is very poor. There is no faecal sludge treatment plant in the region.

Table 1: Planned Towns under KSWSSP

No.	District	ST/RGC	Estimated Population	Required Action	
1	Abim	Abim TC	14,200	Expansion/Rehab	
2		Orwamuge RGC	9,130	Expansion/Rehab	
3		Alerek (Otumpili)	6,056	Expansion/Rehab	
4		Aloyoroit	9,520	New system	
5		Rogom	4,427	New system	
6		Oreta	3,882	New system	
7		Aremo	8,712	New system	
8		Atunga	6,076	New system	
9		Kanu	5,239	New system	
10		Awach-Oporoth	8,542	New system	
11	Amudat	Loroo	8,259	Expansion	
12		Karita	2,208	Improvement	
13		Amudat TC	12,000	New system	
14		Komaret GFS	1,873	New system	
15		Achorichor	5,082	New system	
16		Cheptapoyo	2,554	New system	
17		Loborokocha	3,256	New system	
18		Katabok	2,852	New system	
19		Lokales	3,672	New system	
20		Alakas	2,474	New system	
21	Kaabong	Kaabong TC	16,183	Expansion	
22		Kapedo	4,204	Extension	
23		Kapalata	4,822	Expansion	
24		Kathile	5,445	Improvement	
25		Lochom	2,097	New system	
26		Lolelia	1,903	New system	
27		Kawalakol	3,598	New system	
28	Kotido	Kotido TC	30,000	Expansion	
29		Kanawat RGC	8,945	Expansion	

No.	District	ST/RGC	Estimated Population	Required Action	
30		Rengen RGC	7,657	Expansion	
31		Panyangara RGC	4,765	Rehabilitation	
32		Lokitalaebu RGC	6,291	Expansion/ Rehab	
33		Nakapelimoru RGC	6,645	New system	
34		Losilang	3,743	New system	
35		Kokoria	2,889	New system	
36		Loposa (Napumpum)	8,655	New system	
37	Moroto	Moroto Municipality	40,000	Expansion	
38		Kakingol GFS	2,757	Rehabilitation	
39		Nadiket GFS	3,736	New system	
40		Nadunget	2,373	New system	
41	Napak	Kangole RGC	8,000	Expansion	
42		Mantany RGC	7,974	Expansion	
43		Iri-Kodet GFS	16,350	Expansion	
44		Michoko	8,073	Rehabilitation/Exp	
45		Kodike	9,432	Rehabilitation/Exp	
46		Lorengecora TC	6,103	New system	
47		Lokitidet RGC	3,946	New system	
48		Lokopo RGC	4,245	New system	
49		Lotome RGC	4,635	New system	
50	Nakapiripirit	Karinga GFS	4,000	Expansion	
51		Nabilatuk RGC	8,180	Expansion	
52		Moruita RGC	1,595	Extensions	
53		Tokora RGC	4,000	Expansion	
54		Lorengeduart RGC	5,425	Expansion	
55		Lokplum RGC	5,834	Expansion	
56		Loregae RGC	4,244	New system	
57		Lorigai	4,322	New system	
58		Kaiku	4,026	New system	
59		Lolachat	4,524	New system	
60		Lemusi	3,366	New system	

Table 2: Proposed FS Treatment Facility for Karamoja Region

Region	Cluster	Towns Served	Distance Proposed to Site (km)	Town Population, as at 2013
Karamoja	Kotido	Kotido	0.0	24,400
	Nakapiripirit	Nakapiripirit TC	0.0	4,600

		Amudat TC	40.0	5,322
		Namalu TB	30.0	4,669
<i>(Source: National Faecal Sludge Assessment for Small Towns in Uganda, 2013)</i>				