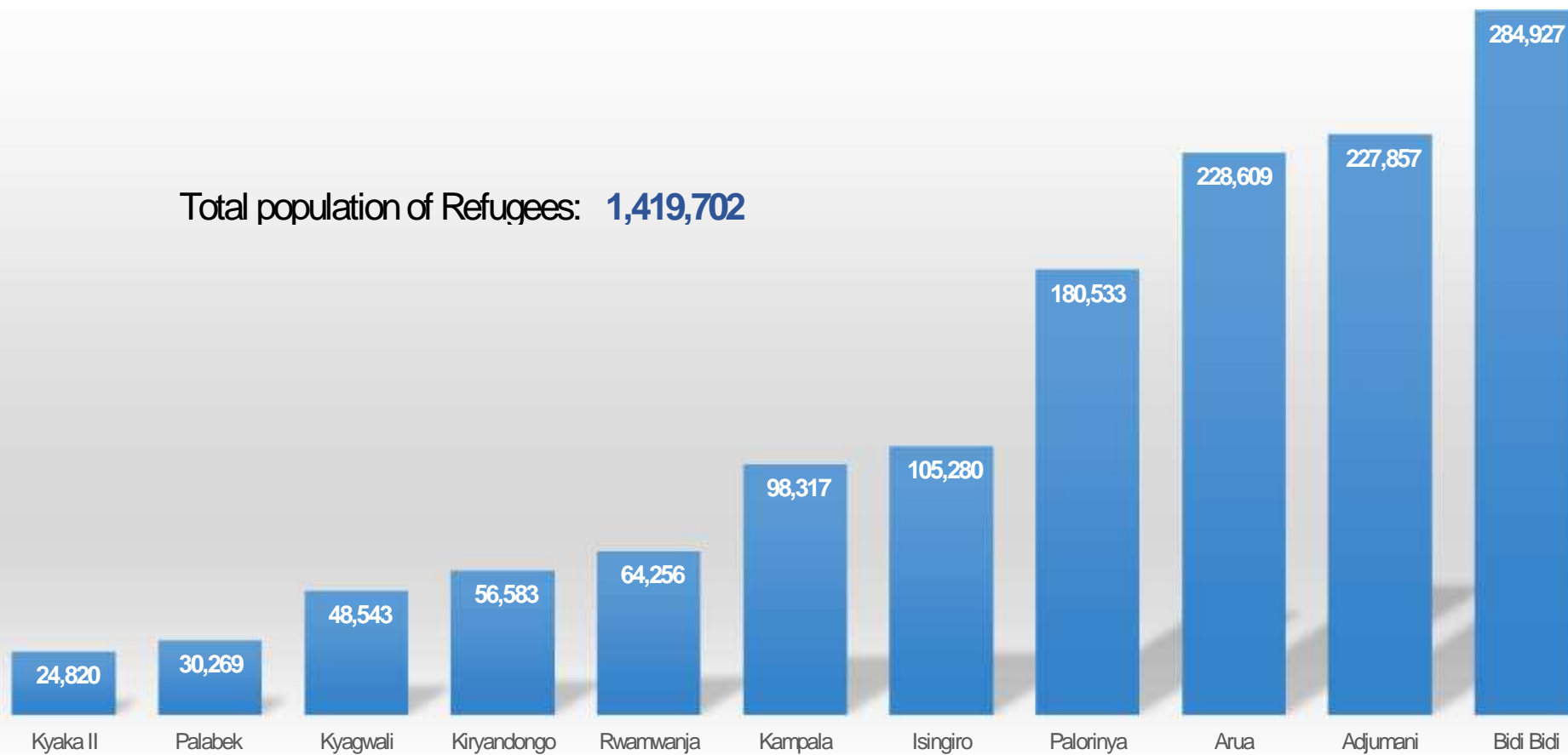# WASH in Uganda Refugee Settlements: Next Phase

Jane Maonga - WASH Sector Coordinator, UNHCR Uganda

Refugee Population: As of 25 September 2017

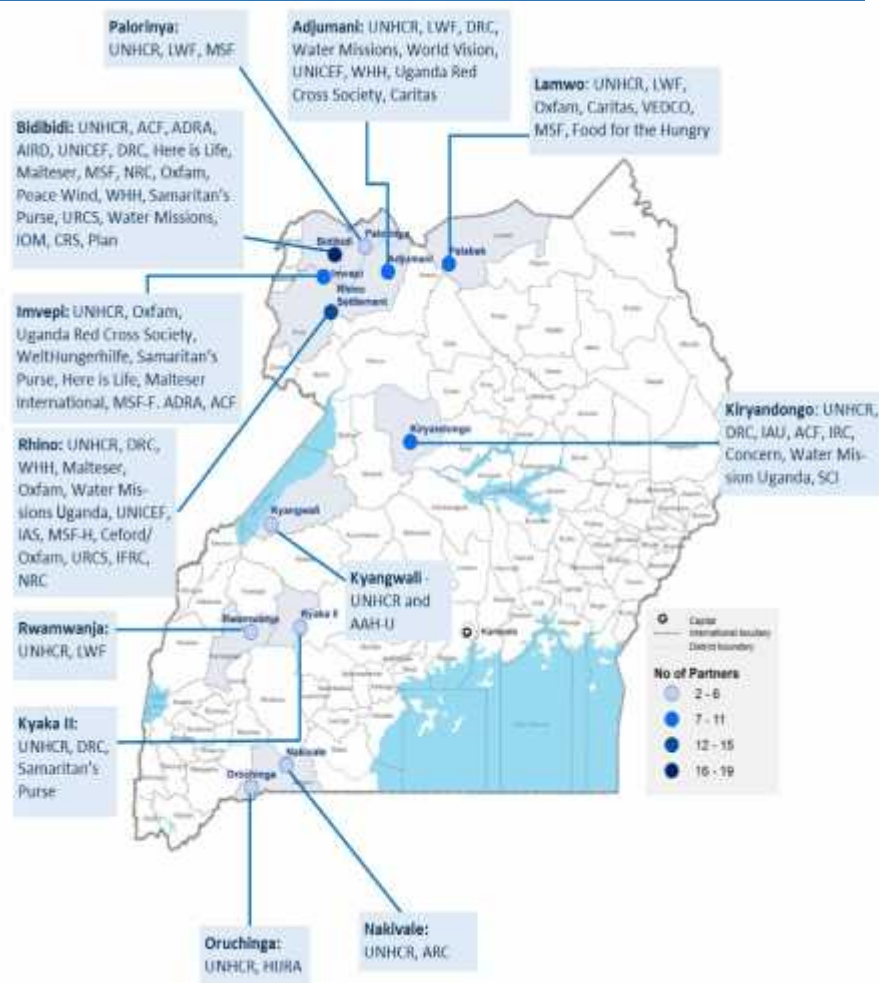Total population of Refugees: **1,419,702**

Location	Population
Kyaka II	24,820
Palabek	30,269
Kyagwali	48,543
Kiryandongo	56,583
Rwamwanja	64,256
Kampala	98,317
Isingiro	105,280
Palorinya	180,533
Arua	228,609
Adjumani	227,857
Bidi Bidi	284,927

WASH Partnerships / Coordination

Sector Coordination: National WASH sector platform established - 39 partners active. Next step: Need for <u>meaningful representation</u> - at national and district levels (planning, monitoring, quality control). Draft MoU with MoWE

Role of National/ Local NGOs: Usually conversant with national policies + community engagement but only 4 out of 39 WASH partners are National NGOs.

Partnerships: WASH partner mapping done to understand relevant WASH stakeholders involved in long-term WASH efforts in refugee-hosting areas. Process led by MoWE, UNHCR, UNICEF, and USAID - Mapping efforts should also include: WASH partner capacities/ funding/ activities/ private sector actors.

Humanitarian (WASH) Donors: ECHO, DFID, BPRM/USAID, DANIDA, SIDA, BMZ, ADA, LEGO, others

Palorinya: UNHCR, LWF, MSF

Adjumani: UNHCR, LWF, DRC, Water Missions, World Vision, UNICEF, WHH, Uganda Red Cross Society, Caritas

Lamwo: UNHCR, LWF, Oxfam, Caritas, VEDCO, MSF, Food for the Hungry

Bidibidi: UNHCR, ACF, ADRA, AIRD, UNICEF, DRC, Here is Life, Malteser, MSF, NRC, Oxfam, Peace Wind, WHH, Samaritan's Purse, URCS, Water Missions, IOM, CRS, Plan

Imvepi: UNHCR, Oxfam, Uganda Red Cross Society, WeltHungerhilfe, Samaritan's Purse, Here is Life, Malteser international, MSF-F, ADRA, ACF

Kiryandongo: UNHCR, DRC, IAU, ACF, IRC, Concern, Water Mission Uganda, SCI

Rhino: UNHCR, DRC, WHH, Malteser, Oxfam, Water Missions Uganda, UNICEF, IAS, MSF-H, Ceford/ Oxfam, URCS, IFRC, NRC

Kyangwali - UNHCR and AAH-U

Rwamwanja: UNHCR, LWF

Kyaka II: UNHCR, DRC, Samaritan's Purse

Oruchinga: UNHCR, HIJRA

Nakivale: UNHCR, ARC

No of Partners
- 2 - 6
- 7 - 11
- 12 - 15
- 16 - 19

Water Supply and Local realities

Water Coverage: 73% of the refugee population in Uganda gets water through sustainable water systems (handpumps, motorized boreholes, piped schemes). Minimum daily water requirements is 24,880m³ (UNHCR standard: 20l/p/d).

Currently **19,276m³** water supplied per day - an average of **16 l/p/d**. 27% of the water supplied to the refugees (5,232m³/day) is delivered through (costly) water trucking.

Host community support: Currently ranges between 3% - 5% for WASH in West Nile; and an average of 20% for other region.

SDGs: Water coverage for some of the refugee-hosting districts is below the national average - refugee influxes further broaden these gaps.

Current Latrine Coverage: **36%**. Urgent need **faecal sludge management** especially for Institutional latrines.

District	Total Population	Access	Functionality
Adjumani	240,948	94%	90%
Arua	851,547	77%	86%
Hoima	647,083	59%	84%
Isingiro	546,344	38%	97%
Kamwenge	470,683	78%	84%
Kiryandongo	291,975	71%	84%
Kyenjojo	473,120	75%	77%
Lamwo	139,055	95%	78%
Moyo	125,582	95%	81%
Yumbe	564,903	46%	80%

Water Trucking: Understanding the problem

Continuous influx: 345,600 people rely of water trucking for water needs currently - not including new influx estimated at 500-1000 people per day.

Settlement patterns: Population settlement has not taken into consideration water availability. Attitude: "Water should follow people".

Design deficiencies: Design models are guided by population/ demand projections - but more people are settled than those planned for. Many of the systems have good yield but not optimized in the design which limits expansions. Under-costing: Water systems designed based on funding.

Groundwater potential unknown: There is a 50% - 60% drilling success rate in West Nile region - not all drilling activities result in finding water.

Funding: Minimum investments were made initially towards sustainable water supply options in the early phase of the emergency - including the development of readily available surface water sources.
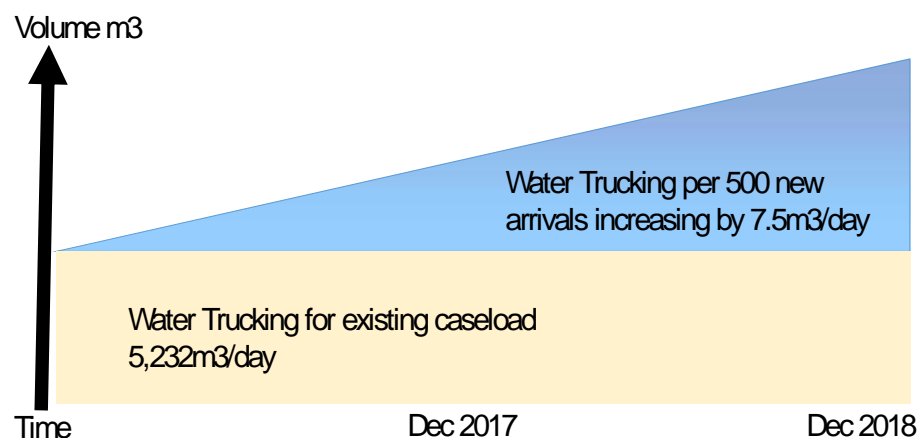
Slow response: Rate at which WASH partners are developing water systems is slow dues to staffing, procurement, funding delays.

Emergency Water Supply: Status

Region	Settlement	Date of Establishment	Water Trucking (in m3)	Proportion of water supplied via trucking
West Nile/ North	Adjumani	1990/ 2012/ 2016	60	2%
	Rhino	1990/ 2016/ 2017	472	38%
	Imvepi	2017	1350	81%
	Palorinya	2016	1264	40%
	Bidibidi	2016	1742	46%
	Palabek	2017	184	38%
Mid-West	Kyangwali	1960	40	3%
	Kiryandongo	1990	0	0%
South West	Nakivale	1960	64.3	4%
	Oruchinga	1961	5.8	2%
	Rwamwanja	1964	20	2%
	Kyaka	1983	30	5%
	Total		**5232.16**	**27%**

Co-relation between: Time of existence of the settlement; rate of refugee influx; rate of construction of water systems; and reliance on and/ or exit from costly water trucking

Volume m3

Water Trucking per 500 new arrivals increasing by 7.5m3/day

Water Trucking for existing caseload 5,232m3/day

Time — Dec 2017 — Dec 2018

Quick Actions:

Management of trucking: Handover to partners; and/or a Project management team

Contracts: Renegotiating service contracts (estimates savings: USD 1.25M)

Accelerate transition construction of (lower cost) long term water supply solutions

Settlement patterns: Continuous advocacy with OPM to consider water availability

Procurement of water bowsers: Two per location - to cut cost of trucking

Issues to Consider: Sustainable Water Supply Systems:

Ground Water: Abstraction permits required for drilling operations - met partially. The sustainability of groundwater abstraction to be monitored with support from Directorate of Water Resources Management.

Additional resources: 3 Hydrogeologists to support drilling operations and ground water monitoring efforts.

Water Supply systems: Shift from point source to piped/ motorized water schemes - broader coverage both in area and population.

Requirements: Water systems designs to be approved by the MoWE - Design review Committee, for quality assurance. A fast-tracked procedure will be considered for refugee settlements to allow partners to move quickly from design to implementation.
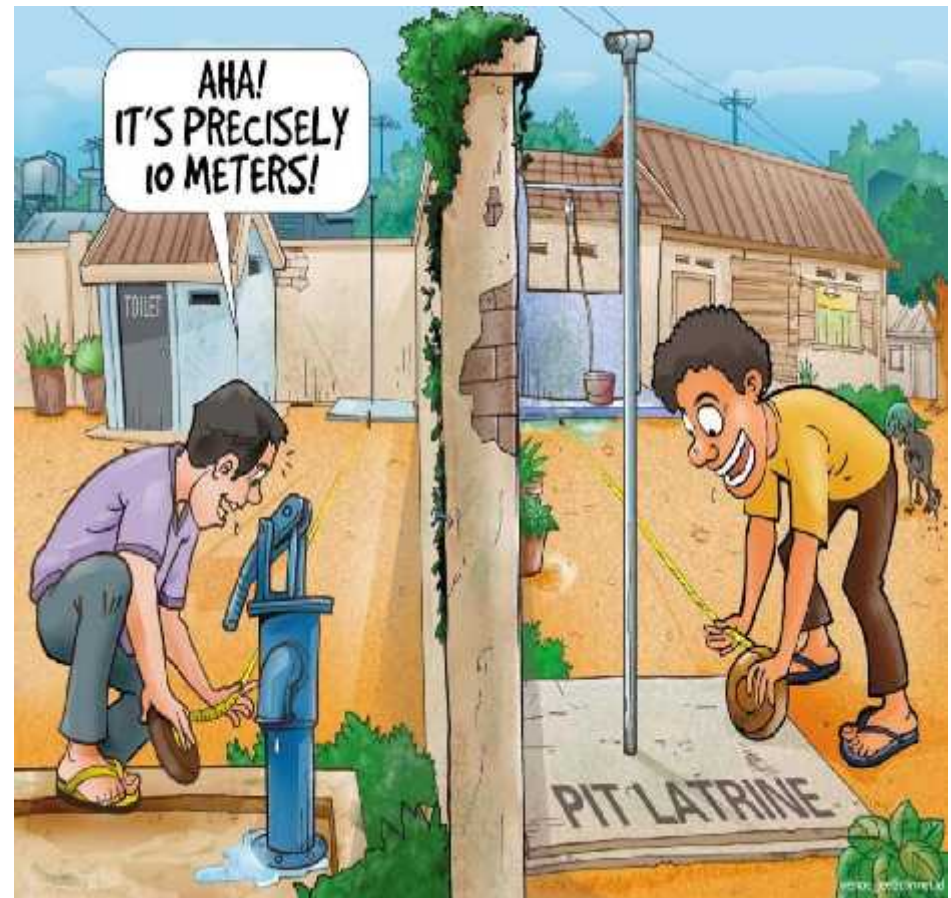
Operation and Maintenance Framework

Operation and Maintenance: Cost of maintaining a water supply system in the refugee settlement = USD 12,000 - USD 30,000 a year. For 130 motorized BHs/ piped water schemes expected to be completed by the end of the year, it will cost USD 1.5 - USD 3.9 Million per year to maintain. For how long can this be sustained?

Free water? Experience from South-west shows that payment for water is possible (UGX500-2,000/month) . Required: Formulation of O&M strategy with MoWE support - for clarity on when/ how/ who to pay. Linkage to access to income/ livelihood opportunities

Water Management Structures Water user committees in some settlements - but community-based management structures only recommended for point water sources - not for piped water or motorized systems. Required: Formal governance structures, including a gazetted Water Authority and a contracted scheme operator with oversight by the Regulation Dept. Umbrella organization proposed in W. Nile
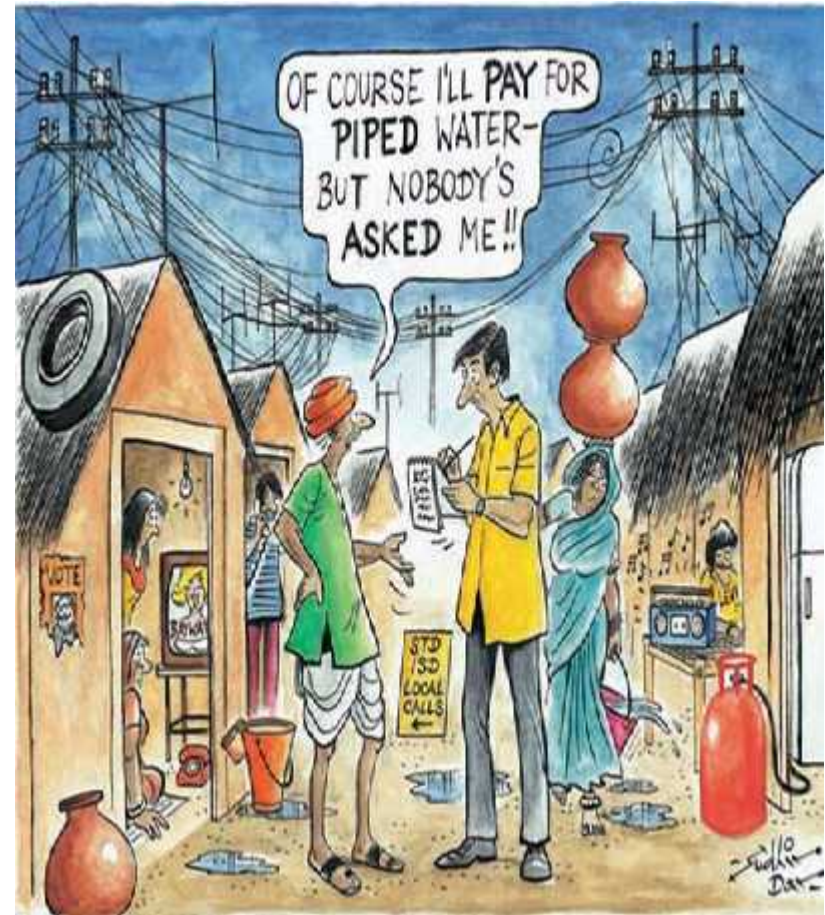
Integrated Water Resource Management

Ground water resource: Potential unknown. Concerns about the high rates of abstraction, drying wells in refugee settlements and neighbouring areas.

Catchment-based model: Principle: Water has no administrative boundaries - host and refugee populations get water from the same catchment areas. The refugee settlements in Uganda fall under 3 out of the 4 water catchment management zones.

Water and Sanitation Master Plan: Process led by MoWE and UNHCR. Plans to have lean and focussed plans in the refugee-hosting community context. Resources: MoWE - Guidelines for Water and Sanitation Master plans; UNHCR - IWRM consultant; and initial inputs UNOPs (feasibility study, detailed designs)
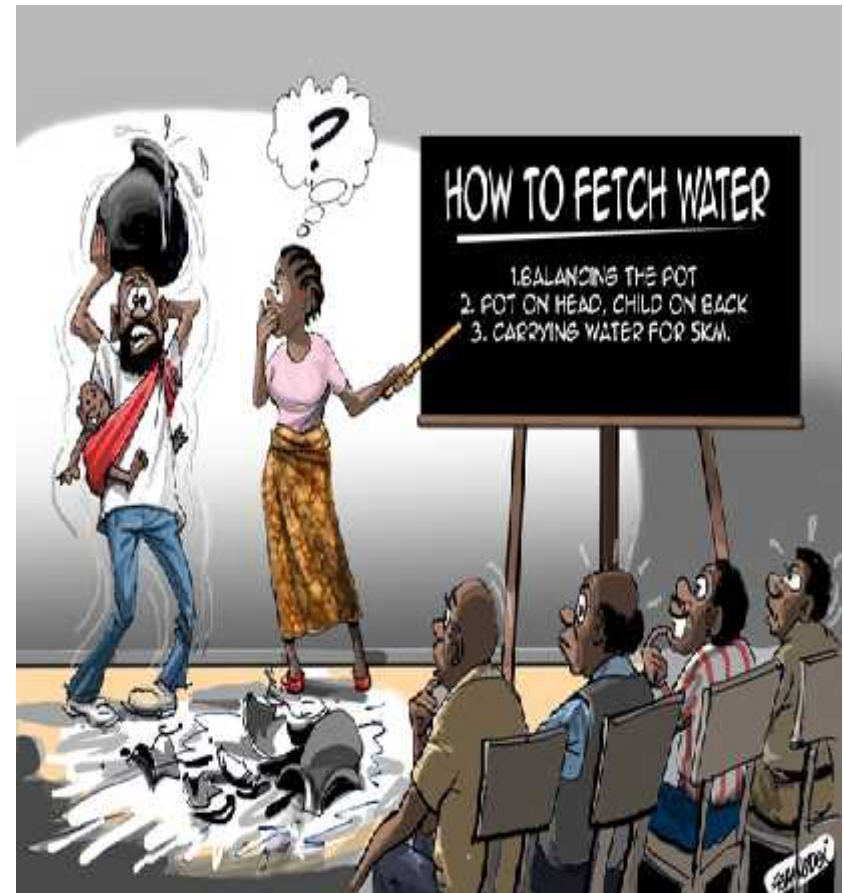
Guidelines: **Water and Sanitation Master plans:**

- **Assess water resource side**, based on available data and information within and outside MWE and identify gaps, adopt a catchment based management approach

- **Project demand** for water supply and small scale productive purposes for the coming 5-10 years

- **Map** available and future infrastructure / support and identify geographic and thematic gaps

- Sketch **options** for camps / potential areas for extensions of camps

- Sanitation service provision along **faecal sludge management chain**

Technical capacity for sustainable WASH solutions

District Water office: Low capacity to manage complex water supply networks in the refugee settlements - or expand to local communities. Technical skills development; additional staffing; data/ monitoring; Additional resources (e.g. transport, communication). Umbrella organization proposed for West Nile (ongoing discussions with MoWE)

Handover of water systems: More capable national structures/ entity to manage water supply systems in future e.g. Nakivale water scheme handover plans to National Water Services ongoing.

Capacity in sustainable approaches: Enhance WASH partner capacity in: solar technology, integrated water resource management, etc. MoU with Makerere (in draft), Private sector actors - some efforts to augment capacity in motorized solar-powered water systems

Thank You.

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