WASH in Uganda Refugee Settlements: Next Phase

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Refugee Population: As of 25 September 2017

Total population of Refugees: 1,419,702
**WASH Partnerships / Coordination**

**Sector Coordination:** National WASH sector platform established - 39 partners active. Next step: Need for meaningful representation - 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
**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.
Water Trucking: Understanding the problem

**Continuous influx**: 345,600 people rely on 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 due to staffing, procurement, funding delays.
### Emergency Water Supply: Status

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

**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

**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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