



WASH Infrastructure Mapping

Yambio, Western Equatoria State

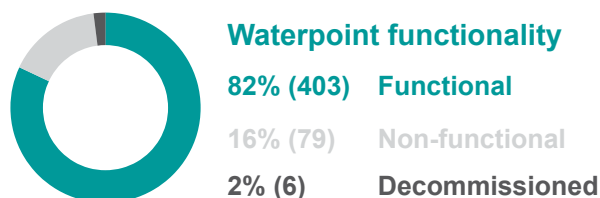
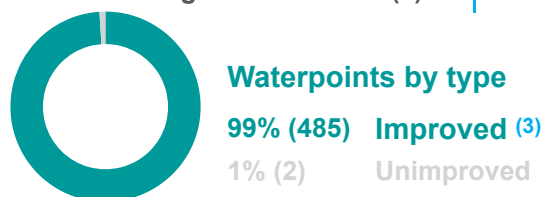
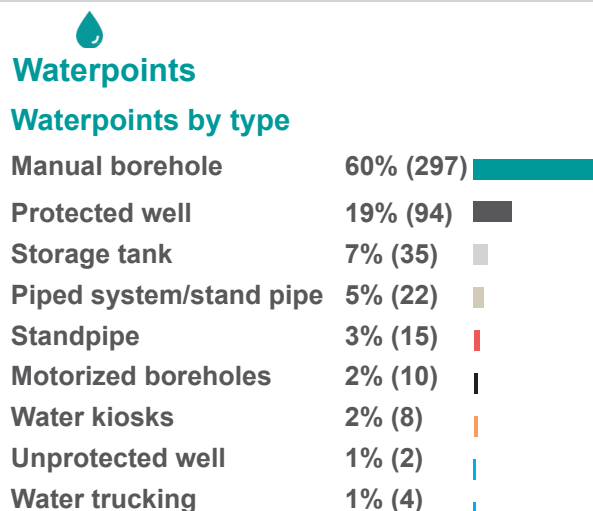
August 2021

Introduction

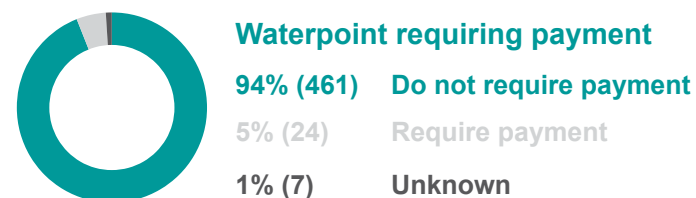
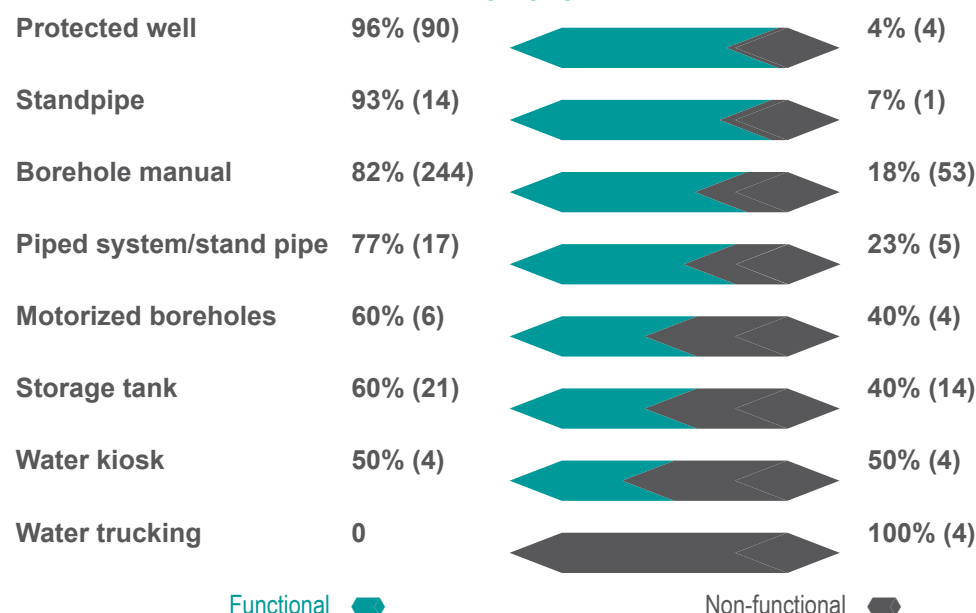
The dynamic and multi-faceted nature of the South Sudanese displacement crisis has created significant challenges for the delivery of humanitarian aid. Accessibility issues within South Sudan have impeded a systematic understanding of WASH needs in many areas of the country. This has created difficulties in establishing a clear and unambiguous system for prioritising the delivery of aid, thereby limiting the effectiveness of humanitarian planning and limiting the potential impact of donor funding. In order to fill this information gap, REACH in partnership with International Aids Service (IAS) conducted a WASH infrastructure mapping exercise in Yambio. Data collection took place on April 27th, 2021 and succeeded in mapping 3373 latrines and 492 waterpoints. Key findings are presented below in charts (pies & bars) and maps with figures in percentages (%) and numbers assessed enclosed in parenthesis next to each percentage value.

Methodology

Using a GIS software, a polygon covering the municipal area was created and subdivided into grids squares of 250 meters of side length. Each of the resulting 466 square grids was assigned to a team of 20 enumerators to map and assess existing WASH infrastructure. GPS points were recorded also for grids where no WASH infrastructure data was identified. Enumerators were trained to use mobile applications ([MapsMe](#) and [Kobo](#)) that allowed them to georeference data collected, as well as to independently test water quality through hydrogen sulfide (H₂S) tests. For grids that could not be physically assessed through direct observation (due to lack of access) participatory mapping was conducted. As a result, 88% coverage was achieved (411/466 grids). Further details on the methodology and data collection tools can be found in the [Terms of Reference](#).



Improved waterpoints functionality by type



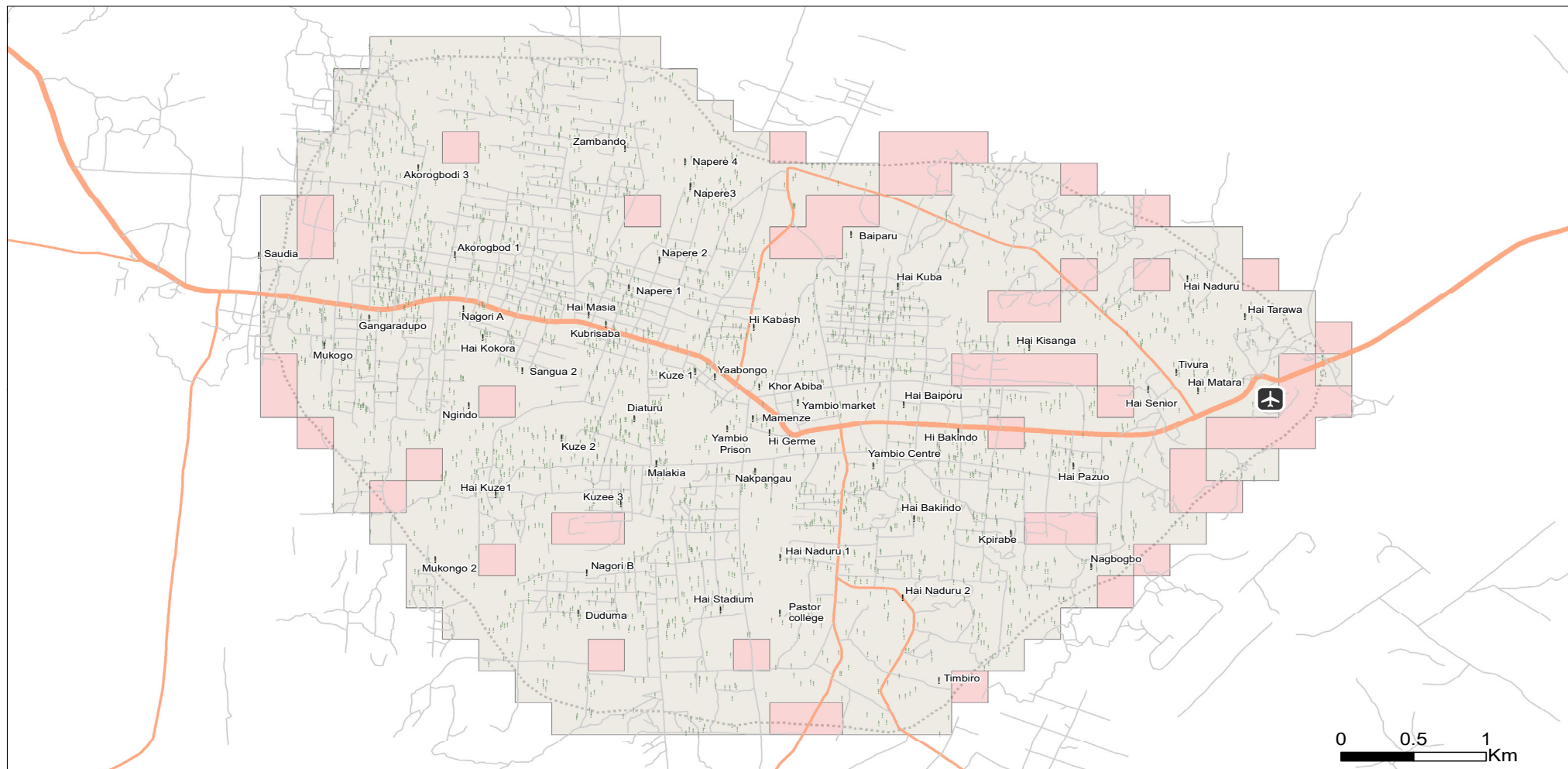


WASH Infrastructure Mapping

Yambio, Western Equatoria State

August 2021

Yambio Assessment Coverage Map



Assessed areas (0.25Km²): 466 assessed

Observed inhabited areas (411)

No infrastructure observed (55)

Assessed WASH Infrastructure (2,861)



Yambio Town extent



Airport

Reported referred area name

Roads

Primary

Secondary

Tertiary

Infrastructure: REACH (2021)

Roads: OpenStreetMap Contributor (2021), REACH (2021)

Coordinate System: WGS 1984 UTM Zone 36N

File: REACH_SSD_Map_WASH_infra_Yambio_Town_Assessment_Coverage_July2021

Contact: south.sudan@reach-initiative.org

Note: Data, designations and boundaries contained on this map are not warranted to be error-free and do not imply acceptance by the REACH partners, associates, donors mentioned on this map.


Funded by:

[illegible]

- Yes (326)
- No (50)
- Decommissioned (6)

Observed inhabited areas (411)

No infrastructure observed (55)

 Airport
Reported referred area name

- Primary
- Secondary
- Tertiary

Note: Data, designations and boundaries contained on this map are not warranted to be error-free and do not imply acceptance by the REACH partners, associates, donors mentioned on this map.

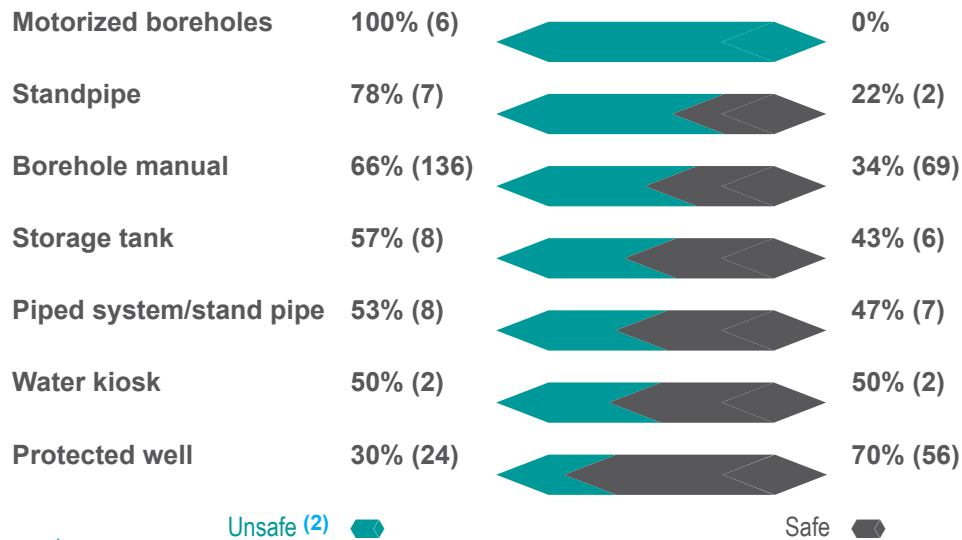


WASH Infrastructure Mapping

Yambio, Western Equatoria State

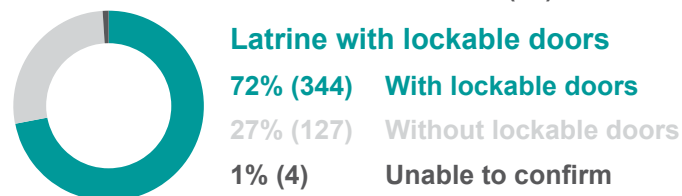
August 2021

Improved waterpoints type with water quality test results



Sanitation

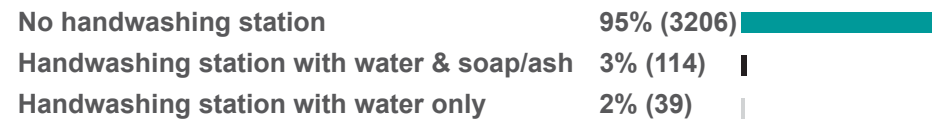
Latrine by type



Accessibility to latrine

98% (3317) Accessible to everyone
2% (51) Not accessible to everyone

Functional handwashing station at latrine



Estimated latrine sludge level

43% (204) Less full with sludge
43% (204) Unable to confirm
14% (67) Almost full with sludge



Latrine by cleanliness

71% (339) Unclean (4)
28% (132) Clean
1% (4) Unknown



Latrine requiring payment

99% (290) Do not require payment
1% (2) Require payment

Footnotes

- () numbers in parenthesis indicate number of facilities assessed
- A water point is **unsafe** to drink when it is contaminated by faecal matter (e.g. H2S test result turn black) and a water point is **safe** to drink when it is free from faecal contamination (e.g. H2S test result do not turn black) (WHO,2017)
- Improved** water source is the water source that, by its nature of its design and construction is likely to be protected from faecal contamination (e.g. boreholes, protected wells, storage tanks, water kiosks and piped systems) and **Unimproved** water source is the water source that is likely to be contaminated by faecal matter (e.g. unprotected well, unprotected springs, unequipped borehole etc) (JMP,2020)
- A latrine was considered unclean when faeces were found on it(JMP,2020).
- A communal/institutional latrine refers to latrines found in public areas such as NGOs compounds, schools, churches/mosques etc. (JMP,2020)
- A family latrines refer to latrines used by a particular household with full latrine ownership, construction and maintenance (JMP,2020)
- Shared latrines refer to those used by a number of households, who are all responsible for care and maintenance (JMP,2020)