



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.

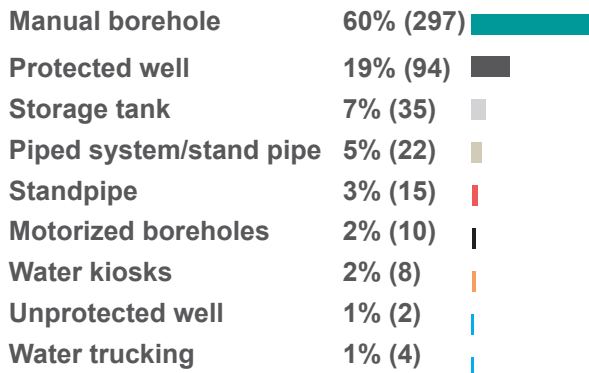
Methodology

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](#).

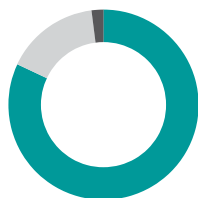


Waterpoints

Waterpoints by type

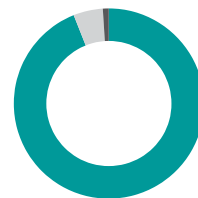
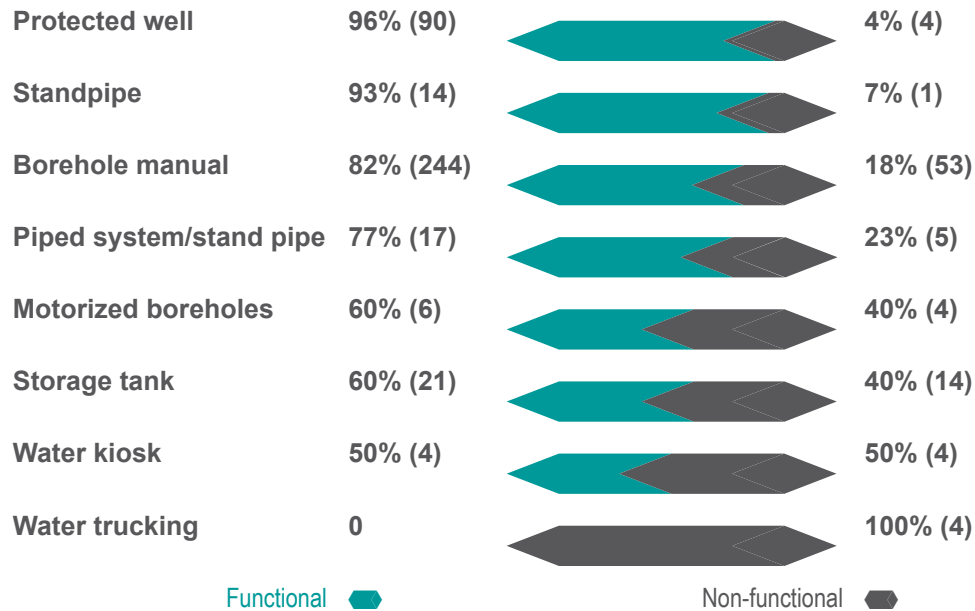


Waterpoints by type
99% (485) Improved (3)
1% (2) Unimproved



Waterpoint functionality
82% (403) Functional
16% (79) Non-functional
2% (6) Decommissioned

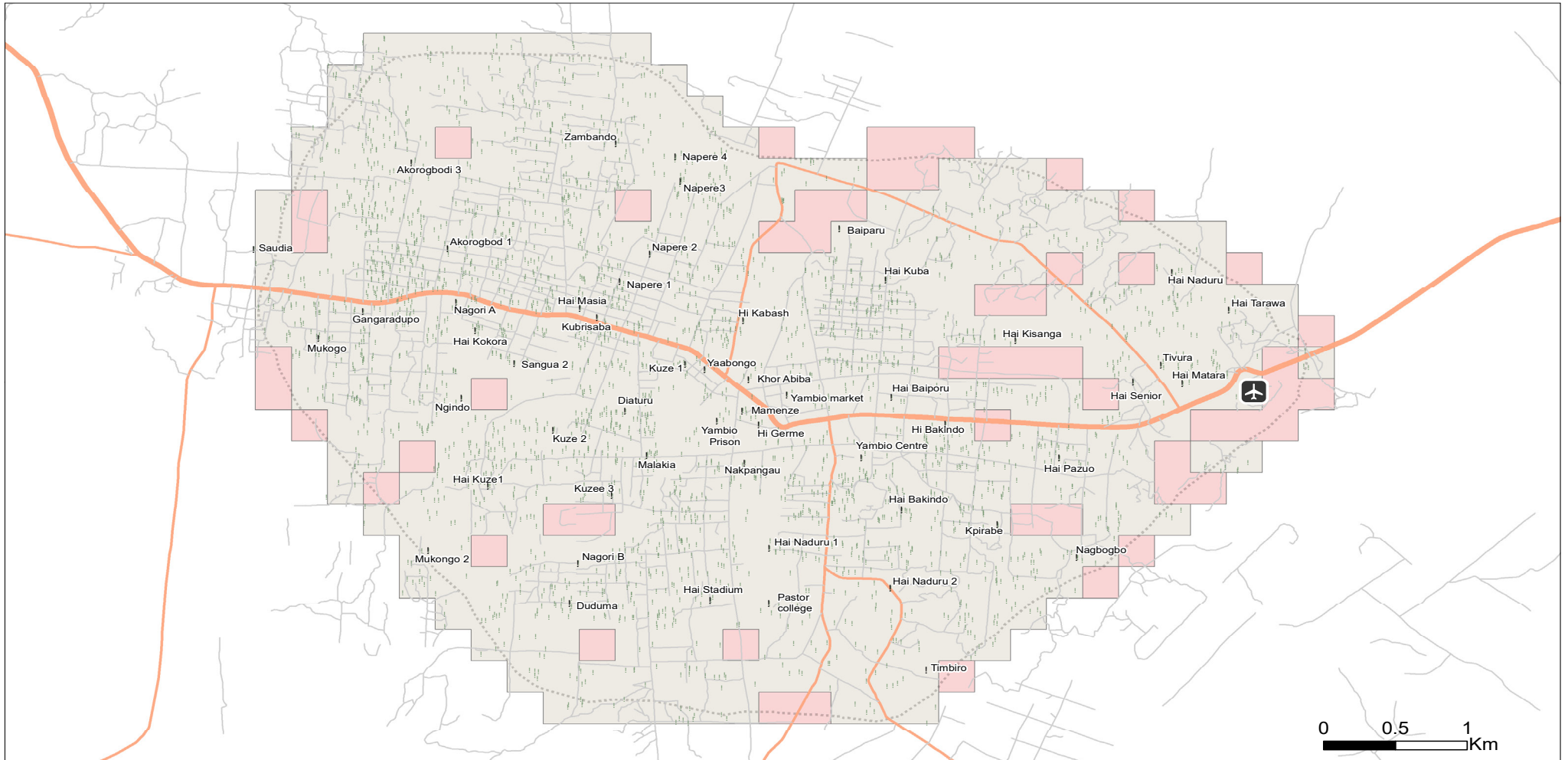
Improved waterpoints functionality by type



Waterpoint requiring payment
94% (461) Do not require payment
5% (24) Require payment
1% (7) Unknown



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

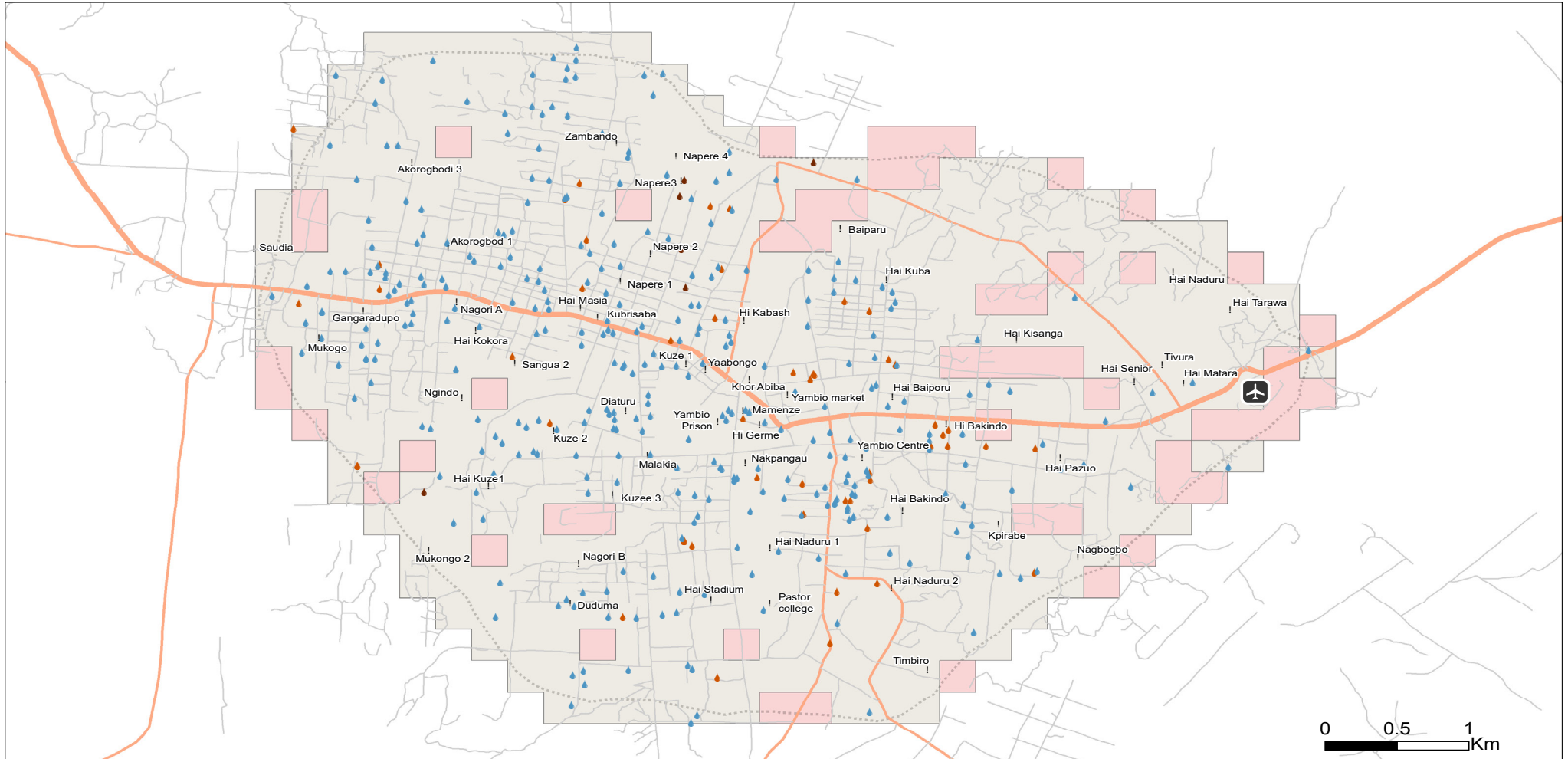
Infrastructure: REACH (2021)
 Roads: OpenStreetMap Contributor (2021), REACH (2021)
 Coordinate System: WGS 1984 UTM Zone 36N
 File: REACH_SSD_Map_WASH_Infra_Yambio_Town_Assessment_Coverage_July2021
 Contact: south.sudan@reach-initiative.org

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:



Yambio Waterpoints functionality Map



Water points functionality

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

Assessed areas (0.25Km²): 466 assessed

- Observed inhabited areas (411)
- No infrastructure observed (55)
- Yambio Town extent
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- ! Reported referred area name

Roads

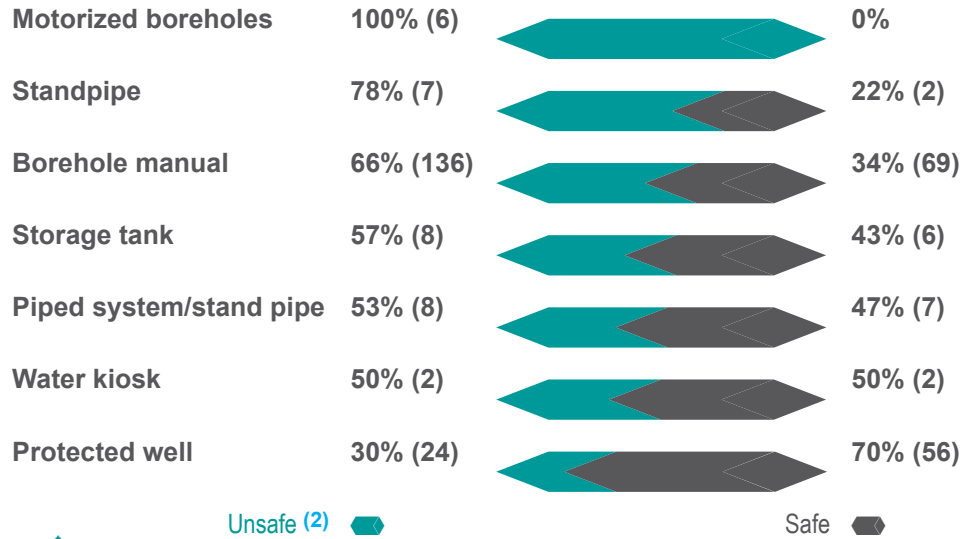
- Primary
- Secondary
- Tertiary

*Infrastructure: REACH (2021)
 Roads: OpenStreetMap Contributor (2021), REACH (2021)
 Coordinate System: WGS 1984 UTM Zone 36N
 File: REACH_SSD_Map_WASH_Infra_Yambio_Town_Water_Points_Functionality_July2021
 Contact: south.sudan@reach-initiative.org*

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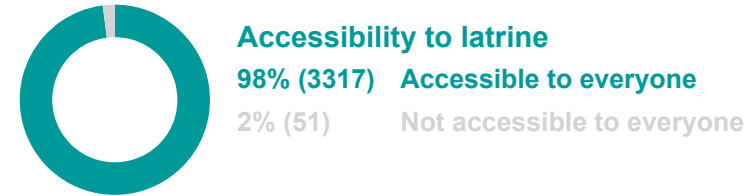
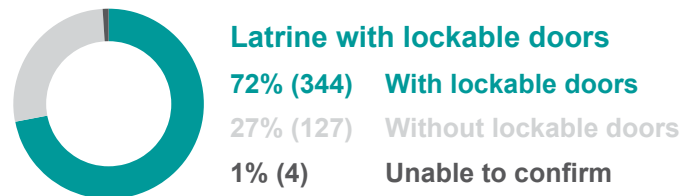


Improved waterpoints type with water quality test results

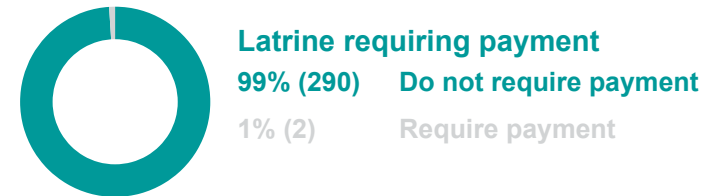
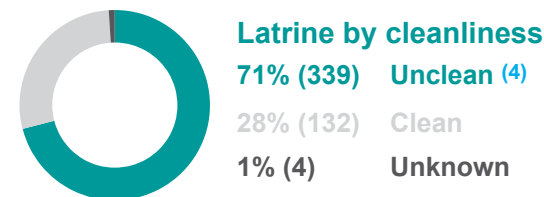
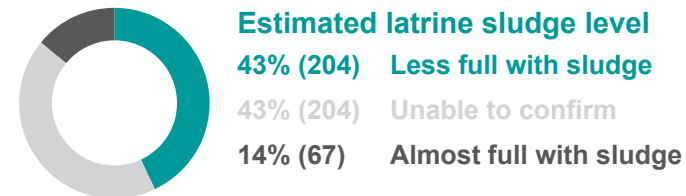
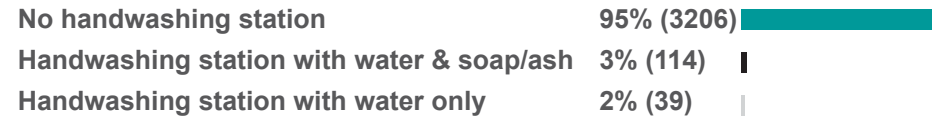


Sanitation

Latrine by type



Functional handwashing station at latrine



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)