Water and Sanitation Profile: South Sudan

September - November 2017



Overview

Since December 2016. REACH has conducted a remote assessment of settlements using its "Area of Knowledge" (AoK) methodology to address information gaps impeding the humanitarian response in South Sudan. Each month REACH collects sector-specific data from Key Informants (KIs), either by in-person interviews with people who have recently been displaced from or have travelled to their settlement, or through phone calls to people who are still living in the settlement. Throughout 2017, REACH continued to increase the county-level coverage of AoK, from two to seven of South Sudan's ten states, including Greater Upper Nile, Greater Equatoria and Western Bahr el Ghazal.

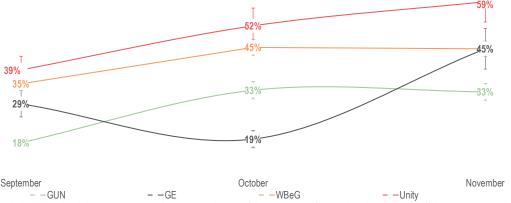
The information presented in this Water and Sanitation Profile highlights the broad trends found in the assessed settlements between September and November 2017. In total 5.268 KIs from 1.701 settlements in over 54 counties were interviewed and eight Focus Group Discussions conducted in October and November, 2017.1

AoK data is collected using purposive sampling, and therefore trends presented in this profile, unless stated otherwise, should considered to be indicative rather than representative of the geographic areas covered.

Key Findings

From September to November 2017, only 28% of assessed settlements reported being

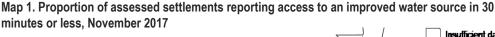
Figure 1. Proportion of assessed settlements that reported an unimproved (unprotected dug well or unprotected spring) or surface water (swamp, pond, river) source as the main water source, accessible in 30 minutes or less, by region

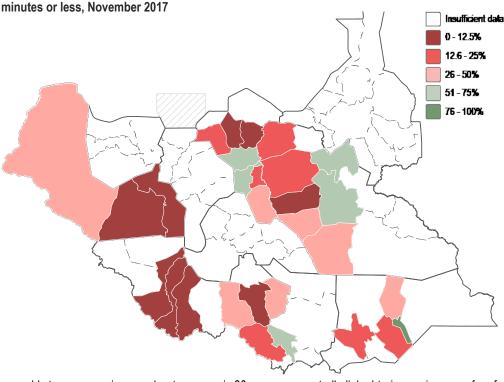


The bars around each data point represent the inter-quartile range of the proportions of assessed settlements in each of the counties covered in that region.

Footnotes

1. Two FGDs were conducted in October in Bor, Jonglei State with new arrival from the Greater Equatoria region. Six FGDs were conducted in early November in Tambura County, Western Equatoria State.





able to access an improved water source in 30 minutes or less.

- From September to November 2017, on average 61% of assessed settlements reported that the entire settlement was practicing open defecation.
- Unity State had the lowest proportion of assessed settlements reporting access to latrines and to an improved water source.

reportedly linked to increasing use of surface water during the rainy season and destruction of boreholes as a result of insecurity.

Malaria was consistently reported to be the most common vector-borne health concern.

Access to Water

Between September to November 2017, an increasing proportion of assessed settlements



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across the country reported an unimproved or surface water source to be their main source of water (Figure 1). This was most pronounced in Greater Upper Nile (GUN), in Unity State in particular. In Unity State, the proportion of assessed settlements that reported their main source of water was an unimproved source rose from 39% in September to 59% in November, as settlements that reported their water was from an improved sources declined (Map 1).

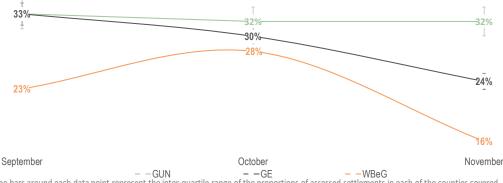
The increase in use of unimproved or surface water sources was most prominent in assessed settlements in Rubkona, Guit and Leer Counties. Assessed settlements in these counties reported an increased use of swamps as their primary water source (from 46% in September to 70% in November). While consuming water from swamps is common during and towards the end of the rainy season (May to November) in Unity State, the rise in consumption of water from unimproved or surface water sources may also be linked to insecurity in central Unity State over the past few months, in which armed groups reportedly

destroyed boreholes.¹ Destruction of boreholes in conflict-affected areas may also have contributed to GUN having the highest proportion of assessed settlements country wide that reported not having access to a borehole (Figure 3).

Western Bahr el Ghazal (WBeG) had the lowest proportion of assessed settlements that reported an improved water source was their main source of water throughout the reporting period (Figure 2). From September to November a lower proportion of assessed settlements reported an improved water source as their main source of water, as the use of unprotected wells as the main water source increased (25% of assessed settlements in September to 35% in November). A KI clarified that sticks typically cover these wells as opposed to a method that can be sealed, therefore leaving wells more likely to be or become vector breeding sites.

Assessed settlements in Western Equatoria reported the largest decrease in access to an improved water sources in the Greater Equatoria region (GE). While 67% of assessed settlements

Figure 2. Proportion of assessed settlements that reported an improved water source (a borehole, tapstand, water yard) as the main water source, in 30 minutes or less by region



The bars around each data point represent the inter-quartile range of the proportions of assessed settlements in each of the counties covered in that region.

Figure 3: GUN access to a borehole (left) and borehole functionality (right)³



Figure 4: WBeG access to a borehole (left) and borehole functionality (right)

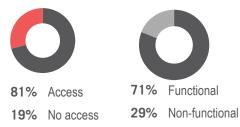


Figure 5: GE access to a borehole (left) and borehole functionality (right)



reported a borehole as their primary source of water in October, only 23% reported the same in November. At the same time, the proportion of settlements that reported swamps as their main source of water jumped from 5% in October to 31% in November. FGD respondents reported low levels of access to boreholes (Figure 5) is in part because they were destroyed during conflict and an influx of

Figure 6. Proportion of assessed settlements reporting malaria as a health problem by region

3	Sept	Oct	Nov
Greater Equatoria	53%	52%	86%
Greater Upper Nile	83%	74%	86%
Western Bahr el Ghazal	75%	73%	76%
All assessed settlements	72%	74%	86%

IDPs over-stressed existing water infrastructure in the settlements.⁴

Swamps and other surface water and unimproved sources not only expose people to waterborne illnesses like typhoid and cholera, but are also likely to be vector breeding sites; increasing the collection of water from these sites may increase the risk of contracting malaria. Eighty-six percent of assessed settlements countrywide reported malaria as the primary health concern in November 2017 (Figure 6). Health actors noted malaria is still the primary cause of death in South Sudan.⁵

Latrine Use

From September to November 2017, the average proportion of assessed settlements that reported all people used latrines was 1% (Figure 7). Throughout the reporting period, GUN had the largest proportion of assessed settlements reporting that no one used a latrine (74%), indicating that open defecation was the most common practice. Open defecation was the highest in Unity State; where 93% of assessed settlements reported no one in the settlement used a latrine. Unity State also had the highest proportion of assessed settlements reporting cholera was a major health concern. This may be linked to the similarly high proportions



^{2.} REACH. Situation Overview: Unity State, South Sudan. July-August 2017

^{3.} Figures 4, 5, and 6 address the functionality of boreholes that KIs have access to. It does not address all boreholes in assessed settlements.

^{4.} REACH. Situation Overview: Greater Equatoria, South Sudan. October 2017

^{5.} WHO. South Sudan's malaria toll highlights disease burden in war-torn nation. September 2017

of settlements that reported surface water as their primary water source. A high proportion of assessed settlements reporting no access to latrines may contribute to poor sanitation practices. This, combined with the limited reported access to improved water sources, increases the likelihood of water-borne diseases as seen in the proportion reporting diarrhoea and cholera as health problems (Figures 8 and 9).

Conclusion

Water and sanitation conditions declined across assessed areas in South Sudan between September and November 2017, with the use of unimproved water sources increasing across all assessed regions. The decline was most severe in WBeG and Western Equatoria, sites of recent conflict, where the use of improved water sources accordingly fell as water sources were reportedly destroyed or were inaccessible due to insecurity.

Even in more secure areas of the country, clean water was often unavailable due to a lack of infrastructure.

Sanitation continued to be a problem in South Sudan. As a result of displacement and a population seeking shelter in the bush and swamps due to insecurity, the risk of contamination of water sources, and the spread of life-threatening diseases like cholera and typhoid may increase. In addition, many surface water sources are breeding grounds for mosquitoes, heightening the risk of malaria, the largest health problem consistently reported since REACH started data collection in December, 2016. As water and sanitation conditions continue to deteriorate, the risks of life-threatening diseases are likely to rise.

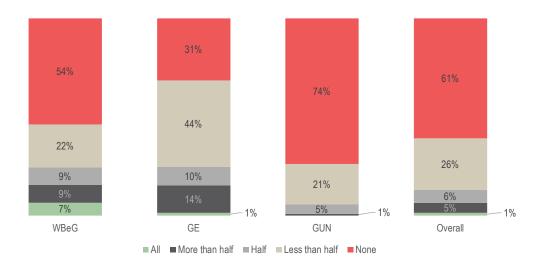
Figure 8. Proportion of assessed settlements reporting diarrhoea as a health problem by region

	Sept	Oct	Nov
Greater Equatoria	24%	17%	36%
Greater Upper Nile	32%	22%	30%
Western Bahr el Ghazal	44%	50%	32%
All assessed settlements	28%	23%	30%

Figure 9. Proportion of assessed settlements reporting cholera as a health problem by region

egion	Sept	Oct	Nov
Greater Equatoria	3%	6%	4%
Greater Upper Nile	12%	14%	20%
Western Bahr el Ghazal	4%	1%	2%
All assessed settlements	9%	10%	11%

Figure 7. Average proportion of assessed settlements where each share of the population reportedly used a latrine, September-November 2017



About REACH

REACH facilitates the development of information tools and products that enhance the capacity of aid actors to make evidence-based decisions in emergency, recovery and development contexts. All REACH activities are conducted through interagency aid coordination mechanisms.

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