

Research Terms of Reference

Water Sanitation and Hygiene (WASH) Market Monitoring

SSD2201

South Sudan

January 2022

Version 1

REACH Informing
more effective
humanitarian action

1. Executive Summary

| | | | | | | |
|---|---|---|-------------------------------------|--|-------------------------------------|-----------------|
| Country of intervention | South Sudan | | | | | |
| Type of Emergency | <input type="checkbox"/> | Natural disaster | <input checked="" type="checkbox"/> | Conflict | <input type="checkbox"/> | Other (specify) |
| Type of Crisis | <input type="checkbox"/> | Sudden onset | <input type="checkbox"/> | Slow onset | <input checked="" type="checkbox"/> | Protracted |
| Mandating Body/ Agency | [OCHA, WASH Cluster] | | | | | |
| IMPACT Project Code | 32ASW (ACTED code: 32EQM) | | | | | |
| Overall Research Timeframe (from research design to final outputs / M&E) | 01/12/2021 to 30/11/2022 | | | | | |
| Research Timeframe Add planned deadlines (for first cycle if more than 1) | 1. Pilot/ training: 02/03/2022 | | | 6. Preliminary presentation: NA | | |
| | 2. Start collect data: 07/03/2022 | | | 7. Outputs sent for validation: 11/04/2022 | | |
| | 3. Data collected: 11/03/2022 | | | 8. Outputs published: 15/04/2022 | | |
| | 4. Data analysed: 25/03/2022 | | | 9. Final presentation: NA | | |
| | 5. Data sent for validation: 28/03/2022 | | | | | |
| Number of assessments | <input type="checkbox"/> | Single assessment (one cycle) | | | | |
| | <input checked="" type="checkbox"/> | Multi assessment (more than one cycle) <i>WASH Market Assessment for South Sudan will take place once in every three months (4 times within the project period)</i> <ul style="list-style-type: none">First cycle of assessment will be from December 2021-March 2022Second cycle will be from April-June 2022Third cycle will be from July-September 2022Fourth cycle will be from October-November 2022 | | | | |
| Humanitarian milestones Specify what will the assessment inform and when | Milestone | | | Deadline | | |
| | <input checked="" type="checkbox"/> | Donor plan/strategy | 30/11/2022 | | | |
| | <input type="checkbox"/> | Inter-cluster plan/strategy | __/__/____ | | | |
| | <input checked="" type="checkbox"/> | Cluster plan/strategy | 30/11/2022 | | | |
| | <input type="checkbox"/> | NGO platform plan/strategy | __/__/____ | | | |

| | | | |
|--|--|---|--|
| e.g. The shelter cluster will use this data to draft its Revised Flash Appeal; | x | Other (Specify): South Sudan Market Based Programming | NA |
| Audience Type & Dissemination Specify <i>who will the assessment inform and how you will disseminate to inform the audience</i> | Audience type <input type="checkbox"/> Strategic <input checked="" type="checkbox"/> Programmatic <input checked="" type="checkbox"/> Operational <input type="checkbox"/> [Other, Specify] | | Dissemination <input checked="" type="checkbox"/> General Product Mailing (e.g. mail to NGO consortium; HCT participants; Donors) <input checked="" type="checkbox"/> Cluster Mailing (Education, Shelter and WASH) and presentation of findings at next cluster meeting <input type="checkbox"/> Presentation of findings (e.g. at HCT meeting; Cluster meeting) <input checked="" type="checkbox"/> Website Dissemination (Relief Web & REACH Resource Centre) <input type="checkbox"/> [Other, Specify] |
| Detailed dissemination plan required | x | Yes | <input type="checkbox"/> No |
| General Objective | This research aims to assess the availability and prices of core WASH items ¹ , market supply chain mechanism, restocking ability and current stock level of the traders in 13 counties identified by WASH cluster as being classified in Integrated food phase classification (IPC-2020) phase 3 and above in order to inform local procurements and the WASH Cluster Core pipeline ¹ to make evidence-based decisions on modalities and procurements of key WASH items necessary for lifesaving WASH activities. | | |
| Specific Objective(s) | <ul style="list-style-type: none"> Track availability and prices of key WASH items in the local markets in 13 priority counties Understand the market supply chain mechanisms and ability of traders to restock available key WASH items | | |
| Research Questions | 1.What are available core WASH items in the local market? 2.What are the prices of core WASH items in the local market in South Sudan? 3.Where do locally available core WASH items originate? 4.What is the approximate level of stock for each locally available core WASH items? 5.What are supplies chain mechanisms in the local market (i.e. traders resell items to other traders)? | | |
| Geographic Coverage | Following 13 counties were selected for the assessment as identified as key locations by the WASH cluster with being classified in phase 3 and above in the Integrated Food Phase Classification (IPC) in South Sudan in 2020 : Tonj East, Tonj South, Tonj North, Aweil South, Ayod, Pibor, Twic East, Duk, Fangak, Canal/Pigi, Nyirol, Luakpiny/Nasir, and Ulang | | |
| Secondary data sources | <ul style="list-style-type: none"> Joint Market Monitoring Initiative-JMMI South Sudan WASH Cluster Core Pipeline Stock List WASH Cluster Presence Map | | |
| Population(s) | <input type="checkbox"/> | IDPs in camp | <input type="checkbox"/> IDPs in informal sites |

¹ WASH core items are WASH items critical for life-saving responses during emergency. These are pre-positioned and managed through WASH cluster core pipeline and ready for supply to the implementing partners during their response in emergency. [Core pipeline](#) serves as one of key lifesaving response modalities in South Sudan through the provision of critical WASH items across the country, supporting partners in implementing timely and effective WASH interventions. In close coordination with WASH cluster, a total of thirty six (36) [core WASH items](#) of which thirty-four (34) of the items are individual items of different units and types and two of the items are kits composed of 23 single items.

| | | | | |
|---|--|--|---|---|
| <i>Select all that apply</i> | <input checked="" type="checkbox"/> | IDPs in host communities | <input checked="" type="checkbox"/> | IDPs [Other, Specify] |
| | <input type="checkbox"/> | Refugees in camp | <input type="checkbox"/> | Refugees in informal sites |
| | <input checked="" type="checkbox"/> | Refugees in host communities | <input type="checkbox"/> | Refugees [Other, Specify] |
| | <input checked="" type="checkbox"/> | Host communities | <input type="checkbox"/> | [Other, Specify] |
| Stratification <i>Select type(s) and enter number of strata</i> | <input type="checkbox"/> | Geographical #: County Population size per strata is known? <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> | Group #: Market Population size per strata is known? <input type="checkbox"/> Yes <input type="checkbox"/> No |
| | | | <input type="checkbox"/> | [Other Specify] #: __ Population size per strata is known? <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Data collection tool(s) | <input checked="" type="checkbox"/> | Structured (Quantitative) | <input type="checkbox"/> | Semi-structured (Qualitative) |
| | Sampling method | | Data collection method | |
| Structured data collection tool # 1 <i>Key Informant Interview tool</i> | <input checked="" type="checkbox"/> Purposive <input type="checkbox"/> Probability / Simple random <input type="checkbox"/> Probability / Stratified simple random <input type="checkbox"/> Probability / Cluster sampling <input type="checkbox"/> Probability / Stratified cluster sampling <input checked="" type="checkbox"/> Snowball sampling | | <input checked="" type="checkbox"/> Key informant interview (Target #): until minimum threshold of prices (4) ² is met for each item <input type="checkbox"/> Group discussion (Target #):_____ <input type="checkbox"/> Household interview (Target #):_____ <input type="checkbox"/> Individual interview (Target #):_____ <input type="checkbox"/> Direct observations (Target #):_____ <input type="checkbox"/> [Other, Specify] (Target #):_____ | |
| Target level of precision if probability sampling | N/A | | N/A | |
| Data management platform(s) | <input checked="" type="checkbox"/> | IMPACT | <input type="checkbox"/> | UNHCR |
| | <input type="checkbox"/> | [Other, Specify] | | |
| Expected output type(s) | <input type="checkbox"/> | Situation overview #: __ | <input type="checkbox"/> | Report #: Profile #: __ |
| | <input type="checkbox"/> | Presentation (Preliminary findings) #: __ | <input type="checkbox"/> | Presentation (Final) #: __ |
| | <input type="checkbox"/> | Interactive dashboard #: __ | <input type="checkbox"/> | Webmap #: __ |
| | <input type="checkbox"/> | [Other, Specify] #: __ | | |
| Access | <input checked="" type="checkbox"/> | Public (available on REACH resource center and other humanitarian platforms) | | |
| | <input type="checkbox"/> | Restricted (bilateral dissemination only upon agreed dissemination list, no publication on REACH or other platforms) | | |
| Visibility <i>Specify which logos should be on outputs</i> | REACH | | | |
| | Donor: OCHA | | | |
| | Coordination Framework: WASH Cluster | | | |
| | Partners: WASH Cluster and JMMI partners | | | |

² 1-2 marketplaces per county will be assessed. Based on REACH experience on JMMI, from 36 (34 single items and 2 kits) core items to be monitored in the markets, a minimum of four (4) prices per item will be assessed to ensure the quality and consistencies in the data. However, 4 prices per items does not necessarily mean 4 vendors unless all vendors sell similar items which may be less likely for WASH items. In order to ensure that a minimum of 4 quotations per item is achieved, a simple item checklist will be provided to enumerator. The checklist will contain the list of all items to be monitored then a trader will be asked to confirm the availability of item in the market and the enumerator will continue to mark the item available and then check a box in a range of four boxes under corresponding four number which indicate the number of trader interviewed per item. Assuming all items are available in the market, a minimum of 144 and a maximum of 288 quotations for 36 items (i.e. 34 single items and 2 kits composed of 23 single items) will be collected per location. However, number of traders to be interviewed per each market place will depend on the availability of each item. If each trader sells different items in the markets, then the number of quotations for all items will indicate number of traders interviewed since a trader will be interviewed per item sold in the market.

2. Rationale

2.1 Background

In the past years, South Sudan has continued to experience historical levels of severe and extreme humanitarian conditions mainly driven by climatic shocks (i.e. recurrent flooding) and sub national violence. This severe humanitarian situation has culminated in mass displacement and high multi-sectoral needs across the states, which has grossly aggravated the humanitarian needs in the affected areas. As a result, an estimated 8.3 million people in South Sudan were in need of humanitarian assistance in 2021³. In addition, this has negatively impacted living standard and wellbeing of an estimated 5.9 million people due to inadequate access to clean water, sanitation and poor hygiene practices in 2021 and a raise of 6 million people per year is anticipated for the coming 2022 and 2023⁴. Consequently, the decreased level of access to resources, logistical constraints due to rainy season road blockage, limited access and the uncertainty in the availability and prices of key WASH items in the local markets has impacted the ability for humanitarian agencies to respond to humanitarian needs in an efficient, effective and timely way.

There is currently no comprehensive and monitoring of the WASH items in South Sudan coordinated with the WASH cluster and gaps remain in term of items monitored as well as on geographical coverage of the monitored items. Absence of items monitoring- mechanism in the market affect the understanding of market dynamic such as current price, availability of items and current stock level, which in turn hamper the market based programming (the modalities for humanitarian responses) for humanitarian actors in responding to urgent lifesaving assistance. [The Core Pipeline \(CP\)](#) managed by UNICEF and IOM, serves as one of key lifesaving response modalities in South Sudan through the provision of critical WASH items across the country, supporting partners in implementing timely and effective WASH interventions. The core pipeline is restocked with different modalities including internationally imported WASH items based on the framework agreements signed with established suppliers. Any reduction in the stock levels in the core pipeline is likely to delay humanitarian responses. In order to improve efficient, effective and timely humanitarian responses, humanitarian agencies need to integrate market based programming that either use, support or develop local market system⁵. In an effort to inform cash-based interventions and better understand market dynamics in South Sudan, the [Joint Market Monitoring Initiative \(JMMI\)](#) was created by the South Sudan Cash Working Group (CWG) in August 2019. The initiative is guided by the JMMI Technical Working Group (JMMI-TWG), led by REACH and supported by the CWG members. The JMMI aims to track the Multi-Sectoral Survival Minimum Expenditure Basket (MSSMEB) across all assessed locations on a monthly basis. For WASH specific items, JMMI only track the price and availability of soap bars (200gm) and jerry cans (20L), and prices for water (20L) for only Juba city⁶. In this assessment, soap and jerry can will only be monitored in locations where there is no current JMMI partners (i.e. Ayod, Twic East, Duk, Canal/Pigi and Nyirol), however; since JMMI data monitor water price for Juba (not in the priorities locations), this item will remain in the item list for all 13 counties to be monitored.

This leaves a gap of monitoring of the availability and prices of core WASH items as well as lack of information of local trader's stock level and their ability to restock core WASH items. This information gap may severely affect efficient, effective, and timely humanitarian responses to life saving WASH activities. As a result, humanitarian actors often depend on unreliable and delayed international market supplies, which is expensive and causes delays in the humanitarian responses. In order to support WASH cluster and its partners make evidence-based decisions regarding modalities and procurements (including local & core pipeline procurement) of key WASH items necessary for life saving WASH activities. REACH will in collaboration with South Sudan WASH cluster conduct WASH Market Monitoring in 13 counties as identified as key locations by the WASH cluster with being classified in phase 3 and above in the Integrated Food Security Phase Classification (IPC) in South Sudan in 2020.

2.2 Intended impact

REACH in collaboration with the WASH Cluster and its partners will collect market data such as availability, prices and restocking level of key WASH items in Tonj East, Tonj South, Tonj North, Aweil South, Ayod, Pibor, Twic East, Duk, Fangak, Canal/Pigi, Nyirol, Luakpiny/Nasir, and Ulang. This market information will aid affected communities, WASH cluster partners

³ [South Sudan Humanitarian Need Overview 2021](#)

⁴ [South Sudan Humanitarian Need Overview 2021](#)

⁵ [Market-Based Programming in WASH](#)

⁶ [JMMI-Dashboard](#)

and other humanitarian actors in responding to life saving WASH needs and help the WASH cluster in integrating local markets in its response modalities in South Sudan.⁷

3. Methodology

3.1 Methodology overview

The methodology for this exercise is similar to the Joint Market Monitoring Initiative (JMMI), successfully run by REACH across South Sudan, only with a few differences. While the methodology, including how this exercise differs from the JMMI, will be described below, please see the [ToR for the JMMI](#) for further details.

Using a structured interview guide, REACH will monitor the availability, prices and current stock of key WASH items in Tonj East, Tonj South, Tonj North, Aweil South, Ayod, Pibor, Twic East, Duk, Fangak, Canal/Pigi, Nyirol, Luakpiny/Nasir, and Ulang counties as well as the ability of local traders to restock each items, and the duration of how long their current stock level is expected to be sufficient. Key informants will be local traders selling the WASH items of interest for this exercise (see *item list under section 3.4*) who will be purposively selected in each location using a snowball sampling approach to identify traders selling the items of interest. Key secondary data sources such as South Sudan WASH Cluster Core Pipeline Stock Lists, South Sudan Joint Market Monitoring Initiative Dashboard, [South Sudan WASH Cluster Presence Maps](#) were used to establish an items list, to understand prior market dynamic and partners presence. One or two marketplaces per county will be identified. Since most of the core WASH items to be monitored are non-consumable and the monthly price variation is expected to be less significant, data will be collected every three months. This will enable us to compare the variation of prices, availability, restocking and expected duration of the current stock level of each core WASH item across marketplaces and locations over a year.

Quarterly factsheet for each cycle will be produced with detailed prices, availability, restocking capacity and estimated duration of current stock level of each item.

Below are the planned rounds of data collection cycles.

- *First cycle of assessment will be from December 2021-March 2022*
- *Second cycle will be from April-June 2022*
- *Third cycle will be from July-September 2022*
- *Fourth cycle will be from October-November 2022*

3.2 Population of interest

The WASH market monitoring exercise will be conducted in one or two markets in each of the following counties: Tonj East, Tonj South, Tonj North, Aweil South, Ayod, Pibor, Twic East, Duk, Fangak, Canal/Pigi, Nyirol, Luakpiny/Nasir, and Ulang. These locations were identified in consultation with the WASH cluster. Based on [Integrated Food Security Phase Classification \(IPC\)](#) analysis for South Sudan in 2020, these counties were projected to fall in emergency (IPC phase 4) and crisis (IPC phase 3) in 2021, with exception of Pibor that was classified under catastrophe (IPC phase 5) in 2021⁸.

Since the outputs of this assessment will inform humanitarian responses on local procurements and core pipeline on response modalities, the population in these counties will benefit from the assessment. The assessment will primarily focus on markets where goods destined for the smaller markets in the county pass through. The selection of markets to be assessed will be based on the relevant importance of each market to the movement of goods within its county, but also on the ability of the assessment team to access relevant key informants within the market.

Local WASH market traders (retailers and wholesaler selling items directly to customers) will be purposively selected. This assessment will directly target retailers. However, wholesalers will be targeted only if they also directly sell WASH items to customers whereby only the retail prices of the items will be recorded. Using snowballing method, the interviewed trader will be asked to identify or recommend other trader selling similar items in the same marketplace then the same process will continue until the minimum threshold for each item is obtained. Information on availability and prices of core WASH items, approximate stock level and the estimated duration of the current stock level will be monitored at market level by each key informant. The results on availability of items, median prices of each item per marketplace per location, approximate stock

⁷ [South Sudan WASH Cluster Strategies 2022-23](#)

⁸ [South Sudan IPC projections](#)

level and estimated duration of current stock level of each item will be compared across marketplace, locations and over a period of time to see the seasonal fluctuation on item availability, restocking capacity of local traders and prices over time.

3.3 Secondary data review

Key Secondary Data Sources Include:

- **South Sudan WASH Cluster Core Pipeline Stock Lists:** to establish items list for key WASH items that are available in the South Sudan WASH Cluster core pipeline stock list.
- **South Sudan Joint Market Monitoring Initiative Dashboard:** used to check the information availability for certain WASH items already included in JMMI data collection processes and used as a basis for understanding market condition and for structuring tool for WASH market assessment⁹. WASH items such as soap bar (200g), jerry can (20L) and water (20L) that are already monitored in JMMI data, will be only monitored in locations which are not in JMMI geographical coverage.
- **South Sudan WASH Cluster Presence Maps:** used to identify the presence of WASH cluster partners in the priority locations.
- **South Sudan [Integrated Food Security Phase Classification \(IPC\)](#) 2021 projections:** to identify counties classified as emergency (IPC phase 4) and crisis (IPC phase 3)¹⁰

3.4 Primary Data Collection

In order to achieve activities outlined in this terms of reference (ToR), REACH will monitor WASH markets in 13 counties as described above. Partner will be identified with support from the WASH clusters as well as via existing partnerships with the JMMI. Data collection will be conducted through physical visits or through remote interviews with key informants such as local traders selling WASH items. Key informants will be asked if each type of item is available in local market, how much it costs, where it originates, and whether they are doing wholesale. Additionally, key informants will be asked for the approximate levels of stocks for each type of item, and whether they are sold by an established supplier, to ascertain whether items are available on an ad hoc basis, or whether there is a more established supply mechanism.

Key Informants will be selected purposively, using a snowballing approach. Key informants (traders) must be selling WASH item will be prioritizing for the interviews and using the snowballing method, interviewed trader will be asked to identified another trader selling similar WASH items. The same snowballing process will continue until the minimum of four (4) traders for each item is achieved. To ensure consistencies and quality in the data, the same Key informants will be interviews for each round of data collection cycle. However, if enumerator suspect Key Informants of falsifying responses in the hope for humanitarian responses, the enumerator will avoid that Key informant and look for others to replace them. As mentioned opposed to the JMMI, data will be collected four times (quarterly) throughout the project, in order to monitor availability and prices over time. The first round of data collection cycle will start in February 2022.

REACH will draw upon WASH Cluster partners based in each county of interest to support with data collection. In order to ease data collection process and increase data quality, REACH will also request JMMI partners with prior market data collection experience with JMMI monthly data collection, to support. However, where remote access is complicated due to a lack of access to a phone network, and where REACH does not have a physical presence or pre-existing data collection partners (i.e. JMMI partners) WASH cluster partners will be asked to support on data collection. Where sufficient remote access is available (i.e. mobile network and internet access) to make contact with key informants and market traders remotely, WASH Cluster partners may be asked to provide contact details of relevant key informants (traders) in each market, and to make the initial introduction.

Composition of core WASH items.

REACH has in close collaboration with South Sudan WASH cluster agreed on a total of 36 core WASH items of which 34 of the items are single items of different units and types (*table 1. below*) and 2 are kits (*table 2. below*) of various items compositions to be monitored in the local market. However, these items may be subject to change based on requests from the WASH cluster.

⁹ [JMMI Dashboard](#)

¹⁰ [South Sudan IPC projections](#)

Table 1. Composition of core WASH Items-Single items

| Category | S/No. | Item | Unit |
|-------------------|-------|---|-----------------------------|
| Hygiene (HYG) | 1 | Soap bar (laundry) | 200gm |
| Hygiene (HYG) | 2 | Ebrik-short (handwashing) | Piece,small size |
| Hygiene (HYG) | 3 | Ebrik-tall (anal cleansing) | Piece, large size |
| Hygiene (HYG) | 4 | Reusable sanitary pad | Piece, 10 inch |
| Sanitation (SAN)) | 5 | Facemask-surgical | piece |
| Sanitation (SAN)) | 5 | Facemask-N95 | piece |
| Sanitation (SAN)) | 6 | Latrine slab | Plate (120x80x5.5cm) |
| Sanitation (SAN)) | 7 | Tarpauline sheet | (4mx5m pieces) |
| Sanitation (SAN)) | 8 | Heavy duty gloves | Pair |
| Sanitation (SAN)) | 9 | Gumboots | Pair, 24cm length |
| Water (WAT) | 10 | Aqua tabs | (Strip,67mg tabs) |
| Water (WAT) | 11 | PuR sachet | (Sachet,4g) |
| Water (WAT) | 12 | Filter cloth | (Piece, 1mx1m) |
| Water (WAT) | 13 | Plastic bucket with tap and lid | Piece,20L |
| Water (WAT) | 13 | Plastic bucket with lid but without tap | Piece,20L |
| Water (WAT) | 14 | Plastic jerry can | Piece (20L) |
| Water (WAT) | 15 | Cylinder Assembly | Piece (63.5mm diameter) |
| Water (WAT) | 16 | Riser Pipe | Piece (3m length) |
| Water (WAT) | 17 | Connecting rod | Piece (3m length) |
| Water (WAT) | 18 | Head assembly | Piece (126x22x28cm) |
| Water (WAT) | 19 | Water tank Assembly | Piece (47x19x26cm) |
| Water (WAT) | 20 | Pedestal stand | Piece (90x17x20cm) |
| Water (WAT) | 21 | Fishing tools | Set (1m length) |
| Water (WAT) | 22 | Submersible borehole pump | Piece (5m3) |
| Hygiene (HYG) | 23 | Cotton towel (bathing) | piece (27x52 inch) |
| Hygiene (HYG) | 24 | Toothpaste tube | piece (130g) |
| Hygiene (HYG) | 25 | Tooth brush | piece (7.5 inch) |
| Hygiene (HYG) | 26 | Hair comb | piece (17.5cm) |
| Hygiene (HYG) | 27 | Nylon ropes | roll (3mm thick,50m length) |
| Hygiene (HYG) | 28 | Razor blade | box (5 blades) |
| Hygiene (HYG) | 29 | Safety pin | piece (37mm) |
| Hygiene (HYG) | 30 | Solar torch | piece (7 inch length) |
| Sanitation (SAN)) | 31 | Shovel | Piece (99cm length) |
| Sanitation (SAN)) | 32 | Pickaxe | Piece (370mm length) |
| Sanitation (SAN)) | 33 | Steel bucket | (piece, 16L) |
| Sanitation (SAN)) | 34 | Digging bar | Piece (60x1inch) |

Table 2. Composition of core WASH items-kits

| Category | S/N | Kit's contents | Unit |
|--------------------|----------|--------------------------|----------------------|
| Water (WAT) | 1 | Standard tool kit | kit |
| Water (WAT) | 1 | hammer | piece (330mm length) |

| | | | |
|--------------------|----------|--------------------------------|---------------------------|
| Water (WAT) | 2 | pressurized Oil can | piece (0.25L) |
| Water (WAT) | 3 | Wire brush with wooden handle | piece (10 inch) |
| Water (WAT) | 4 | Grease box | piece (200g) |
| Water (WAT) | 5 | Spirit level | piece (610mm) |
| Water (WAT) | 6 | Adjustable spanner | piece (250mm) |
| Water (WAT) | 7 | Die set (G.I) | piece (32mm threads) |
| Water (WAT) | 8 | Pipe wrench | piece (450mm) |
| Water (WAT) | 9 | Button die set | piece (12mm) |
| Water (WAT) | 10 | Hacksaw spare blades | piece (300mm blade) |
| Water (WAT) | 11 | Hacksaw | piece (12 inch length) |
| Water (WAT) | 12 | Open jaw spanner | piece (M17xM19) |
| Water (WAT) | 13 | Flat file | piece (250mm) |
| Water (WAT) | 14 | Screw driver | piece (250mmx8mm) |
| Water (WAT) | 2 | Special tool kit | kit |
| Water (WAT) | 15 | Self-locking clamp | piece (32mm threads) |
| Water (WAT) | 16 | Water tank lifter | piece (6m) |
| Water (WAT) | 17 | Bearing pressing/mounting tool | piece (250mm length) |
| Water (WAT) | 18 | Rod coupling spanner | piece (8 inch) |
| Water (WAT) | 19 | Connecting rod lifter | piece (0.5 inch length) |
| Water (WAT) | 20 | Handle axle punch | piece (15mm) |
| Water (WAT) | 21 | Chain coupler supporting tool | piece (0.5 inch diameter) |
| Water (WAT) | 22 | Crank spanner | piece (M17xM19) |
| Water (WAT) | 23 | Pipe lifting spanner | piece (32mm) |

REACH will use a structured interview guide to collect the data needed. The tool will be uploaded into REACH kobo server exclusively accessed only REACH WASH Assessment Officer to ensure data are well protected. Partners will be given access right to download the form from the kobo server for data collection and upload surveys onto the server. To ensure consistency and quality of the data, one to two markets per county will be assessed and enumerator collecting data will be instructed to collect data on each item until the minimum threshold of four (4) quotations is achieved for an item. In order to ensure that enumerator achieved a minimum threshold required for an item, a simple checklist of all items monitored will be provided to enumerators. REACH will provide a training and guidance to participating partners (i.e. WASH cluster and JMMI) member. Partner training will last for approximately one day after which data collection will commence immediately. Data collection is estimated to take around one day to two days per quarter.

3.5 Data Processing & Analysis

In order to effectively scale up the initiative and to efficiently process the collected data, data will be collected through mobile devices using the [Kobo-collect](#) application. A new and updated form will be uploaded every three months to the designated REACH kobo server account. Data collecting partners will have access to the account to download the Kobo form and upload all completed surveys. They will use the Kobo form to interview traders and record their responses using the [Kobo Collect](#) android offline mobile app on their phones. All data needs to be uploaded via kobo collect by the end of the data collection period. First round data collection will start in early March and partners will be given a week to submit their data onto designed kobo server. No paper form submissions will be accepted. However, a separate checklist form will be given to enumerators to fill in for each trader surveyed in order to track number of interviews per item for each marketplace. Questionnaires will collect data on the following indicators:

- Availability of items
- Prices of items in South Sudanese Pound (SSP)
- Current ability of trader to restock each item
- Restocked in the last 30 days
- Estimated stock level in days (assuming no restocking and normal demand)
- Availability expectations

- Change in price expectation
- Locations of items (sourcing)

After data collection process is completed, data cleaning will be conducted following the [IMPACT minimum standards](#) for quantitative data processing. Once the data checking and cleaning is completed, answers has been standardized, and anonymized, data will be aggregated to location level as the data will be collected at key informant level. In order to aggregate data from trader level to location level, the following aggregation logical steps as also outlined in [JMMI TOR](#) will be followed:

Availability:

- if an item is normally available from at least one surveyed trader, it is considered available in the location.
- Else: If an item is not normally available from any surveyed trader, but is limitedly available from at least one trader, it is considered limitedly available in the location.
- Else: If an item is not available from any surveyed trader, it is considered unavailable in the location.

Prices: Using prices collected from individual traders, the median prices will be calculated for each item per assessed marketplace.

Stock levels: For each item, the median stock level across all traders in the marketplace is calculated

Ability to restock: If at least one trader is able to restock an item, the marketplace aggregate will be “yes”, else “no” (if the item is normally sold at all from the stock and the trader is not able to restock during the time of assessment).

Restocked in the last month: If at least one trader restocked an item in the last month, the marketplace aggregate will be “yes”, else “no”.

Restock duration: The median restock duration across all traders in the marketplace is calculated for all core WASH items across all locations.

Location of suppliers: The most commonly named location is taken as the location of the marketplace’s supply market.

Price expectations (3 months): Price expectations are defined categorically (increase, decrease, no change) based on the following logic:

- If at least two surveyed traders expect a price increase while at least two surveyed traders expect a price decrease, the overall expectation in the location will be “no consensus”.
- Else: If at least two surveyed traders expect a price increase, the overall expectation in the location is “increase”.
- Else: If at least two surveyed traders expect a price decrease, the overall expectation in the location is “decrease”.
- Else: If at least two surveyed traders expect no price change, the overall expectation in the location is “no change”.
- Else: If data on price expectations were collected, but none of the above apply, the modal answer will be “no consensus”.

Therefore, once data aggregation is finished, R and other analysis tools (e.g. excel) will be used for data analysis. The data analysis output will be used for production of factsheet.

4. Key Ethical Considerations and Related Risks

The proposed research design meets / does not meet the following criteria:

| <i>The proposed research design...</i> | <i>Yes/ No</i> | <i>Details if no (including mitigation)</i> |
|--|----------------|---|
| ... Has been coordinated with relevant stakeholders to avoid unnecessary duplication of data collection efforts? | Yes | |
| ... Respects respondents, their rights and dignity (<i>specifically by: seeking informed consent, designing length of survey/ discussion while being considerate of participants’ time, ensuring accurate reporting of information provided</i>)? | Yes | |
| ... Does not expose data collectors to any risks as a direct result of participation in data collection? | Yes | |

| | | |
|--|-----|---|
| ... Does not expose respondents / their communities to any risks as a direct result of participation in data collection? | No | Metadata such as KI phone number and GPS coordinates for market place will be collected which can potentially expose respondents to potential targets by local robbers when exposed by identifying market place. However, while this data will be collected, all datasets will be anonymized (with all personally identifiable information deleted) prior to being made accessible to the public. Also, the data for these personally identifiable information will be only accessed by REACH management staff and partners who want access to the raw data that was collected by their enumerators only. Furthermore, as the data collection process will involve close physical contact between enumerator and key informant which might be a possible exposurer to the risk of Covid-19 transmission, all Covid-19 protocols such as wearing facemask, maintain physical distant and sensitizing hands will be observed. |
| ... Does not involve collecting information on specific topics which may be stressful and/ or re-traumatizing for research participants (both respondents and data collectors)? | Yes | |
| ... Does not involve data collection with minors i.e. anyone less than 18 years old? | Yes | |
| ... Does not involve data collection with other vulnerable groups e.g. persons with disabilities, victims/ survivors of protection incidents, etc.? | Yes | |
| ... Follows IMPACT SOPs for management of personally identifiable information ? | Yes | |

5. Roles and responsibilities

Table 3: Description of roles and responsibilities

| Task Description | Responsible | Accountable | Consulted | Informed |
|-------------------------|--------------------|--------------------|--|---|
| Research design | Assessment Officer | Research Manager | Cash and Market Assessment Officer, Research Unit (HQ), WASH Cluster, Research | Country Coordinator, data collection partners |

| | | | | |
|---|---|------------------|---|--|
| | <i>Design & Data (RDD) Unit</i> | | | |
| <i>Supervising data collection</i> | Assessment Officer, Data collection partners | Research Manager | Country Coordinator | Donors, Research Unit (HQ), WASH Cluster |
| <i>Data processing (checking, cleaning)</i> | Assessment Officer | Research Manager | Research Unit (HQ), Data collection partners, Research Design & Data (RDD) Unit | Donors, Country Coordinator |
| <i>Data analysis</i> | Assessment Officer | Research Manager | Research Unit (HQ), Data collection partners, Research Design & Data (RDD) Unit | Donors, Country Coordinator |
| <i>Output production</i> | Assessment Officer | Research Manager | Research Unit (HQ), Data collection partners, Research Reporting (RR) Unit | Data collection partners, Donors, Country Coordinator |
| <i>Dissemination</i> | Assessment Officer | Research Manager | Country Coordinator, Research Department (HQ) | Data collection partners, Donors, WASH Cluster |
| <i>Monitoring & Evaluation</i> | Assessment Officer | Research Manager | Country Coordinator, WASH Cluster, Research Department (HQ) | Donors |
| <i>Lessons learned</i> | Assessment Officer | Research Manager | Country Coordinator, Data collection partners, Donors | WASH Cluster, Research Unit (HQ), Research Department (HQ) |

Responsible: the person(s) who executes the task

Accountable: the person who validates the completion of the task and is accountable of the final output or milestone

Consulted: the person(s) who must be consulted when the task is implemented

Informed: the person(s) who need to be informed when the task is completed

5. Data Analysis Plan

KEY INFORMANT INTERVIEW TOOL

| Research questions | IN # | Data collection method | Indicator group / sector | Indicator / Variable | Questionnaire Question | Instructions | Questionnaire Responses | Data collection level | Sampling | Disaggregation variable(s) |
|--------------------|---------|------------------------|--------------------------|-----------------------------|--|--------------|--|-----------------------|-----------|----------------------------|
| 1. N/A | A.1.1. | KI Interview | Key characteristics | Enumerator ID | Enumerator ID: | enter number | | KI | Purposive | |
| | A.1.2. | KI Interview | Key characteristics | partner organization | Partner organization: | Select one | list of participating partner organizations | market | Purposive | |
| | A.1.3. | KI Interview | Key characteristics | location | State: | Select one | Admin list of states | market | Purposive | county; city, market place |
| | A.1.4. | KI Interview | Key characteristics | location | County: | Select one | Admin list of counties | market | Purposive | city; market place |
| | A.1.5. | KI Interview | Key characteristics | location | City/village: | Select one | Admin list of cities | market | Purposive | market place |
| | A.1.6. | KI Interview | Key characteristics | market place | Marketplace: | Select one | Admin list of market place | market | Purposive | |
| | A.1.7. | KI Interview | Key characteristics | type of trader | Type of trader/key informant: | Select one | retailer, wholesaler, both (wholesaler & retailer), other | KI | Purposive | market place |
| | A.1.8. | KI Interview | type of trader | wholesaler | Do you sells these WASH items directly to customers? | select one | yes, no (for wholesaler selling items directly to customers) | KI | Purposive | market place |
| | A.1.9. | KI Interview | Key characteristics | gender of trader | Gender of trader/key informant: | Select one | Male, Female | KI | Purposive | |
| | A.1.10. | KI Interview | Key characteristics | Country of origin of trader | Country of origin of trader / key informant: | Select one | Admin list of Countries | KI | Purposive | county; market place |

| | | | | | | | | | | |
|---|---------|--------------|---------------------|----------------------|--|-----------------|---|--------|-----------|------------------------------|
| | A.1.10. | KI Interview | Key characteristics | consent note | <p>Hello, my name is_____.</p> <p>I am working on behalf of REACH Initiative, South Sudan. I am conducting interviews with traders to better understand Water Sanitation & Hygiene markets in South Sudan. I would like to ask you some questions about availability & prices of certain items. Any information you provide will not be used to identify you. Responses are voluntary and you can choose to stop the interview, or not answer questions, at any time. However, we hope you will participate since your views are important. Do you agree to participate in this interview?</p> | | | | | |
| 2. What are available core WASH items in the local market? | B.2.1 | KI Interview | WASH items | Availability of item | Which of the following core WASH item are you selling this week? | select multiple | list of all core wash items+this trader does not sell any of the listed items | market | Purposive | item (product); market place |
| | B.2.2 | KI Interview | hygiene item | Availability | How would you describe the current availability of soap bar 200g in this marketplace? | Select one | widely available; Limited availability (only in small quantities or by a small number of traders); unavailable; | market | Purposive | item (product); market place |
| | B.2.3 | KI Interview | hygiene item | Availability | How would you describe the current availability of facemasks in this marketplace? | Select one | widely available; Limited availability (only in small quantities or by a small number of traders); unavailable; | market | Purposive | item (product); market place |
| | B.2.4 | KI Interview | hygiene item | type | Which type of facemask is sells in this marketplace? | select multiple | surgical facemask, N95 facemask | market | Purposive | item (product); market place |
| | B.2.5 | KI Interview | hygiene item | Availability | How would you describe the current availability of ebriks in this marketplace? | Select one | widely available; Limited availability (only in small quantities or by a small number of traders); unavailable; | market | Purposive | item (product); market place |

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|--------|--------------|-------------------------------|--------------|---|-----------------|---|--------|-----------|------------------------------|
| B.2.6 | KI Interview | hygiene item | type | Which type of ebrik is sells in this marketplace? | select multiple | short ebrik for handwashing;tall ebrik for toilet use | market | Purposive | item (product); market place |
| B.2.7 | KI Interview | hygiene item | Availability | How would you describe the current availability of re-usable sanitary pads (10 inch piece) in this marketplace? | Select one | widely available; Limited availability (only in small quantities or by a small number of traders); unavailable; | market | Purposive | item (product); market place |
| B.2.8 | KI Interview | latrine materials | Availability | How would you describe the current availability of latrine slabs (plastic nagmagic) in this marketplace? | Select one | widely available; Limited availability (only in small quantities or by a small number of traders); unavailable; | market | Purposive | item (product); market place |
| B.2.9 | KI Interview | latrine materials | Availability | How would you describe the current availability of tarpaulin sheets (4mx5m) in this marketplace? | Select one | widely available; Limited availability (only in small quantities or by a small number of traders); unavailable; | market | Purposive | item (product); market place |
| B.2.10 | KI Interview | personal protective materials | Availability | How would you describe the current availability of heavy duty gloves (pair) in this marketplace? | Select one | widely available; Limited availability (only in small quantities or by a small number of traders); unavailable; | market | Purposive | item (product); market place |
| B.2.11 | KI Interview | personal protective materials | Availability | How would you describe the current availability of gumboots (pairs of 24cm length) in this marketplace? | Select one | widely available; Limited availability (only in small quantities or by a small number of traders); unavailable; | market | Purposive | item (product); market place |
| B.2.12 | KI Interview | household water treatment | Availability | How would you describe the current availability of aquatabs strip (67mg tabs) in this marketplace? | Select one | widely available; Limited availability (only in small quantities or by a small number of traders); unavailable; | market | Purposive | item (product); market place |
| B.2.13 | KI Interview | household water treatment | Availability | How would you describe the current availability of PUR Sachets (4g) in this marketplace? | Select one | widely available; Limited availability (only in small quantities or by a small number of traders); unavailable; | market | Purposive | item (product); market place |

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|--------|--------------|---------------------------|----------------|---|-----------------|---|--------|-----------|---------------------------------|
| B.2.14 | KI Interview | household water treatment | Availability | How would you describe the current availability of filter cloths (1mx1m piece) in this marketplace? | Select one | widely available; Limited availability (only in small quantities or by a small number of traders); unavailable; | market | Purposive | item (product); market place |
| B.2.15 | KI Interview | household water storage | Availability | How would you describe the current availability of plastic buckets (20L) in this marketplace? | Select one | widely available; Limited availability (only in small quantities or by a small number of traders); unavailable; | market | Purposive | item (product); market place |
| B.2.16 | KI Interview | household water storage | type of bucket | Which type of plastic bucket is sells in this marketplace? | select multiple | bucket with lid and tap (20L);bucket with lid without tap (20L);other | market | Purposive | item (product); market place |
| B.2.17 | KI Interview | household water storage | Availability | How would you describe the current availability of plastic jerrycan (20L) in this marketplace? | Select one | widely available; Limited availability (only in small quantities or by a small number of traders); unavailable; | market | Purposive | item (product); market place |
| B.2.18 | KI Interview | household water storage | type | Which type of plastic jerrycan is sells in this marketplace? | select multiple | collapsible jerrycan (20L);non-collapsible Jerry can (20L) | market | Purposive | item (product); market place |
| B.2.19 | KI Interview | handpump spare parts (SP) | Availability | How would you describe the current availability of cylinder assembly (63.5mm) in this marketplace? | Select one | widely available; Limited availability (only in small quantities or by a small number of traders); unavailable; | market | Purposive | item (product); market place |
| B.2.20 | KI Interview | handpump spare parts (SP) | Availability | How would you describe the current availability of riser pipe (3m length) in this marketplace? | Select one | widely available; Limited availability (only in small quantities or by a small number of traders); unavailable; | market | Purposive | item (product); market place |
| B.2.21 | KI Interview | handpump spare parts (SP) | Availability | How would you describe the current availability of connecting rod (3m length) in this marketplace? | Select one | widely available; Limited availability (only in small quantities or by a small number of traders); unavailable; | market | Purposive | item (product); market place |

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|--------|--------------|---------------------------|------------------|--|-----------------|---|--------|-----------|---------------------------------|
| B.2.22 | KI Interview | handpump spare parts (SP) | Availability | How would you describe the current availability of head assembly in this marketplace? | Select one | widely available; Limited availability (only in small quantities or by a small number of traders); unavailable; | market | Purposive | item (product); market place |
| B.2.23 | KI Interview | handpump spare parts (SP) | Availability | How would you describe the current availability of water tank assembly in this marketplace? | Select one | widely available; Limited availability (only in small quantities or by a small number of traders); unavailable; | market | Purposive | item (product); market place |
| B.2.24 | KI Interview | handpump spare parts (SP) | Availability | How would you describe the current availability of pedestal stand in this marketplace? | Select one | widely available; Limited availability (only in small quantities or by a small number of traders); unavailable; | market | Purposive | item (product); market place |
| B.2.25 | KI Interview | hygiene item | availability | How would you describe the current availability of standard tool kit items in this marketplace? | select multiple | list of standard tool kit items | market | Purposive | item (product); market place |
| B.2.26 | KI Interview | hygiene item | selling modality | What is the standard unit you use to sell standard tool kit items? | select multiple | individual item;package (kit) | market | Purposive | item (product);market place |
| B.2.27 | KI Interview | hygiene item | availability | How would you describe the current availability of special tool kit items in this marketplace? | select multiple | list of special tool Kit items | market | Purposive | item (product); market place |
| B.2.28 | KI Interview | hygiene item | selling modality | What is the standard unit you use to sell special tool kit items? | select multiple | individual item;package (kit) | market | Purposive | item (product);market place |
| B.2.29 | KI Interview | hand pump toolkit (TK) | Availability | How would you describe the current availability of fishing tool (1m length) in this marketplace? | Select one | widely available; Limited availability (only in small quantities or by a small number of traders); unavailable; | market | Purposive | item (product); market place |
| B.2.30 | KI Interview | water pumps (WP) | Availability | How would you describe the current availability of submersible borehole pumps (5m3) in this marketplace? | Select one | widely available; Limited availability (only in small quantities or by a small number of traders); unavailable; | market | Purposive | item (product); market place |

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|--------|--------------|---------------|--------------|--|------------|---|--------|-----------|---------------------------------|
| B.2.31 | KI Interview | Hygiene (HYG) | Availability | How would you describe the current availability of cotton towel (bathing) in this marketplace? | Select one | widely available; Limited availability (only in small quantities or by a small number of traders); unavailable; | market | Purposive | item (product); market place |
| B.2.32 | KI Interview | Hygiene (HYG) | Availability | How would you describe the current availability of toothpaste tube (130g) in this marketplace? | Select one | widely available; Limited availability (only in small quantities or by a small number of traders); unavailable; | market | Purposive | item (product); market place |
| B.2.33 | KI Interview | Hygiene (HYG) | Availability | How would you describe the current availability of tooth brush (7.5 inch) in this marketplace? | Select one | widely available; Limited availability (only in small quantities or by a small number of traders); unavailable; | market | Purposive | item (product); market place |
| B.2.34 | KI Interview | Hygiene (HYG) | Availability | How would you describe the current availability of hair comb (17.5cm length) in this marketplace? | Select one | widely available; Limited availability (only in small quantities or by a small number of traders); unavailable; | market | Purposive | item (product); market place |
| B.2.35 | KI Interview | Hygiene (HYG) | Availability | How would you describe the current availability of nylon rope (3mm thick, 50m roll) in this marketplace? | Select one | widely available; Limited availability (only in small quantities or by a small number of traders); unavailable; | market | Purposive | item (product); market place |
| B.2.36 | KI Interview | Hygiene (HYG) | Availability | How would you describe the current availability of razor blades (5 blades box) in this marketplace? | Select one | widely available; Limited availability (only in small quantities or by a small number of traders); unavailable; | market | Purposive | item (product); market place |
| B.2.37 | KI Interview | Hygiene (HYG) | Availability | How would you describe the current availability of safety pin (37mm length) in this marketplace? | Select one | widely available; Limited availability (only in small quantities or by a small number of traders); unavailable; | market | Purposive | item (product); market place |

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|--|--------|--------------|-------------------|--------------|---|--------------|---|--------|-----------|---------------------------------|
| | B.2.38 | KI Interview | Hygiene (HYG) | Availability | How would you describe the current availability of solar torch (7 inch length) in this marketplace? | Select one | widely available; Limited availability (only in small quantities or by a small number of traders); unavailable; | market | Purposive | item (product); market place |
| | B.2.39 | KI Interview | Sanitation (SAN)) | Availability | How would you describe the current availability of shovel (99cm length) in this marketplace? | Select one | widely available; Limited availability (only in small quantities or by a small number of traders); unavailable; | market | Purposive | item (product); market place |
| | B.2.40 | KI Interview | Sanitation (SAN)) | Availability | How would you describe the current availability of pickaxe (370mm length) in this marketplace? | Select one | widely available; Limited availability (only in small quantities or by a small number of traders); unavailable; | market | Purposive | item (product); market place |
| | B.2.41 | KI Interview | Sanitation (SAN)) | Availability | How would you describe the current availability of steel bucket (16L) in this marketplace? | Select one | widely available; Limited availability (only in small quantities or by a small number of traders); unavailable; | market | Purposive | item (product); market place |
| | B.2.42 | KI Interview | Sanitation (SAN)) | Availability | How would you describe the current availability of digging bar (60x1inch) in this marketplace? | Select one | widely available; Limited availability (only in small quantities or by a small number of traders); unavailable; | market | Purposive | item (product); market place |
| | C.3.1 | KI Interview | hygiene item | price | What is the price of soap bar 200g in SSP? | enter number | | market | Purposive | item (product); market place |
| | C.3.2 | KI Interview | hygiene item | price | What is the price of type of facemask in SSP? | enter number | | market | Purposive | item (product); market place |
| | C.3.3 | KI Interview | hygiene item | price | What is the price of type of ebrik in SSP? | enter number | | market | Purposive | item (product); market place |
| | C.3.4 | KI Interview | hygiene item | price | What is the price of re-usable sanitary pads (10 inch) in SSP? | enter number | | market | Purposive | item (product); market place |
| | C.3.5 | KI Interview | latrine materials | price | What is the price of a plate of latrine slab (nagmagic) in SSP? | enter number | | market | Purposive | item (product); market place |
| | C.3.6 | KI Interview | latrine materials | price | What is the price of a piece of tarpaulin sheet (4mx5m) | enter number | | market | Purposive | item (product); market place |

| | | | | | | | | | |
|--------|--------------|-------------------------------|-------|--|--------------|--|--------|-----------|------------------------------|
| C.3.7 | KI Interview | personal protective materials | price | What is the price of a pair of heavy duty gloves in SSP? | enter number | | market | Purposive | item (product); market place |
| C.3.8 | KI Interview | personal protective materials | price | What is the price of a pair of gumboots (24cm length) in SSP? | enter number | | market | Purposive | item (product); market place |
| C.3.9 | KI Interview | household water treatment | price | What is the price of aquatabs strip (67mg tabs) in SSP? | enter number | | market | Purposive | item (product); market place |
| C.3.10 | KI Interview | household water treatment | price | What is the price of PuR sachet (4g) in SSP? | enter number | | market | Purposive | item (product); market place |
| C.3.11 | KI Interview | household water treatment | price | What is the price of a piece of filter cloths (1mx1m) in SSP? | enter number | | market | Purposive | item (product); market place |
| C.3.12 | KI Interview | household water storage | price | What is the price of type of bucket (20L) in SSP? | enter number | | market | Purposive | item (product); market place |
| C.3.13 | KI Interview | household water storage | price | What is the price of type of Jerrycan (20L) in SSP? | enter number | | market | Purposive | item (product); market place |
| C.3.14 | KI Interview | handpump spare parts (SP) | price | What is the price of a piece of cylinder assembly (63.5mm) in SSP? | enter number | | market | Purposive | item (product); market place |
| C.3.15 | KI Interview | handpump spare parts (SP) | price | What is the price of a piece of a riser pipe (3m length) in SSP? | enter number | | market | Purposive | item (product); market place |
| C.3.16 | KI Interview | handpump spare parts (SP) | price | What is the price of a piece of head assembly in SSP? | enter number | | market | Purposive | item (product); market place |
| C.3.17 | KI Interview | handpump spare parts (SP) | price | What is the price of a piece of water tank assembly in SSP? | enter number | | market | Purposive | item (product); market place |
| C.3.18 | KI Interview | handpump spare parts (SP) | price | What is the price of a piece of pedestal stand in SSP? | enter number | | market | Purposive | item (product); market place |
| C.3.19 | KI Interview | hand pump toolkit (TK) | price | What is the price of standard tool kit items in SSP? | enter number | | market | Purposive | item (product); market place |
| C.3.20 | KI Interview | hand pump toolkit (TK) | price | What is the price of special tool kit items in SSP? | enter number | | market | Purposive | item (product); market place |
| C.3.21 | KI Interview | hand pump toolkit (TK) | price | What is the price of fishing tools (1m length) in SSP? | enter number | | market | Purposive | item (product); market place |
| C.3.22 | KI Interview | water pumps (WP) | price | What is the price of submersible borehole pumps (5m3) in SSP? | enter number | | market | Purposive | item (product); market place |

| | | | | | | | | | | |
|--|--------|--------------|---------------------------|---------------|---|-----------------|---------------------|--------|-----------|------------------------------|
| | C.3.23 | KI Interview | handpump spare parts (SP) | price | What is the price of a piece of connecting rod (3m length) in SSP? | enter number | | market | Purposive | item (product); market place |
| | C.3.24 | KI Interview | Hygiene Items (HY) | price | What is the price of a piece of cotton towel (bathing) in SSP? | enter number | | market | Purposive | item (product); market place |
| | C.3.25 | KI Interview | Hygiene Items (HY) | price | What is the price of a piece of toothpaste tube (130g) in SSP? | enter number | | market | Purposive | item (product); market place |
| | C.3.26 | KI Interview | Hygiene Items (HY) | price | What is the price of a piece of tooth brush (7.5inch) in SSP? | enter number | | market | Purposive | item (product); market place |
| | C.3.27 | KI Interview | Hygiene Items (HY) | price | What is the price of a piece of hair comb (17.5cm) in SSP? | enter number | | market | Purposive | item (product); market place |
| | C.3.28 | KI Interview | Hygiene Items (HY) | price | What is the price of a roll of nylon rope (50m) in SSP? | enter number | | market | Purposive | item (product); market place |
| | C.3.29 | KI Interview | Hygiene Items (HY) | price | What is the price of a box of razor blades (5 blades box) in SSP? | enter number | | market | Purposive | item (product); market place |
| | C.3.30 | KI Interview | Hygiene Items (HY) | price | What is the price of a piece of safety pin (37mm) in SSP? | enter number | | market | Purposive | item (product); market place |
| | C.3.31 | KI Interview | Hygiene Items (HY) | price | What is the price of a piece of solar torch (7inch length) in SSP? | enter number | | market | Purposive | item (product); market place |
| | C.3.32 | KI Interview | Latrine Materials (LA) | price | What is the price of a piece of shovel (99cm length) in SSP? | enter number | | market | Purposive | item (product); market place |
| | C.3.33 | KI Interview | Latrine Materials (LA) | price | What is the price of a piece of pickaxe (370mm length) in SSP? | enter number | | market | Purposive | item (product); market place |
| | C.3.34 | KI Interview | Latrine Materials (LA) | price | What is the price of a piece of steel bucket (16L) in SSP? | enter number | | market | Purposive | item (product); market place |
| | C.3.35 | KI Interview | Latrine Materials (LA) | price | What is the price of a piece of digging bar (60x1inch) in SSP? | enter number | | market | Purposive | item (product); market place |
| 4. Where do local traders source core WASH items? | D.4.1 | KI Interview | Hygiene Items (HY) | supply chains | Where is your main supplier of hygiene items like soap, facemask, ebrik, cotton towel, toothpaste, tooth brush, hair comb, rope, razor blades, safety pins and solar torch located? | select multiple | list of marketplace | market | Purposive | item (product); market place |

| | | | | | | | | | | |
|--|-------|--------------|-------------------------------|---------------|--|------------------|---|--------|-----------|------------------------------|
| | D.4.2 | KI Interview | Latrine Materials (LA) | supply chains | Where is your main supplier of latrine construction materials like latrine digging materials, latrine slabs and tarpauline (6mx4m) sheet | select multiple | list of marketplace | market | Purposive | item (product); market place |
| | D.4.3 | KI Interview | personal protective materials | supply chains | Where is your main supplier of personal protective materials like heavy duty gloves and gumboots | select multiple | list of marketplace | market | Purposive | item (product); market place |
| | D.4.4 | KI Interview | household water treatment | supply chains | Where is your main supplier of household water treatment like aquatabs strip, PuR sachet and filter cloths | select multiple | list of marketplace | market | Purposive | item (product); market place |
| | D.4.5 | KI Interview | household water storage | supply chains | Where is your main supplier of household water collection and storage like water buckets and jerrycans | select multiple | list of marketplace | market | Purposive | item (product); market place |
| | D.4.6 | KI Interview | handpump spare parts (SP) | supply chains | Where is your main supplier of handpump spare parts and kits for India mark handpump like cylinder assembly, riser pipe, head assembly, water tank, fishing tool, pedestal stand, standard tool kit and special tool kit | select multiple | list of marketplace | market | Purposive | item (product); market place |
| | D.4.7 | KI Interview | Generator | supply chains | Where is your main supplier of submersible borehole water pump | select multiple | list of marketplace | market | Purposive | item (product); market place |
| 5.What is the approximate level of stock for each locally available core WASH items | E.5.1 | KI Interview | Hygiene Items (HY) | re-stock | Are you able to restock hygiene items at the moment? (select items that you are able to restock at the moment) | select multiple | list of hygiene items | market | Purposive | item (product); market place |
| | E.5.2 | KI Interview | Hygiene Items (HY) | re-stock | Did you restock hygiene items in the past month?(select items that you restock in the past month) | seleect multiple | list of hygiene items | market | Purposive | item (product); market place |
| | E.5.3 | KI Interview | Hygiene Items (HY) | stocks | how long will your current stock of hygiene items last?(consider the item with larger stock level) | Select one | days;weeks;months | market | Purposive | item (product); market place |
| | E.5.4 | KI Interview | Hygiene Items (HY) | stocks | How many unit of time will your current stock of hygiene items last? | number | number of days;number of weeks;number of months | market | Purposive | item (product); market place |

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|--|--------|--------------|-------------------------------|----------|--|-------------------|---|--------|-----------|------------------------------|
| | E.5.5 | KI Interview | Latrine Materials (LA) | re-stock | Are you able to restock latrine construction materials at the moment? (select items that you are able to restock at the moment) | select multiple | list of latrine construction materials | market | Purposive | item (product); market place |
| | E.5.6 | KI Interview | Latrine Materials (LA) | re-stock | Did you restock latrine construction materials in the past month?(select items that you restock in the past month) | selelect multiple | list of latrine construction materials | market | Purposive | item (product); market place |
| | E.5.7 | KI Interview | Latrine Materials (LA) | stocks | how long will your current stock of latrine construction materials last?(consider the item with larger stock level) | Select one | days;weeks;months | market | Purposive | item (product); market place |
| | E.5.8 | KI Interview | Latrine Materials (LA) | stocks | How many unit of time will your current stock of latrine construction materials last? | number | number of days;number of weeks;number of months | market | Purposive | item (product); market place |
| | E.5.9 | KI Interview | personal protective materials | re-stock | Are you able to restock personal protective materials at the moment? (select items that you are able to restock at the moment) | select multiple | list of personal protective materials | market | Purposive | item (product); market place |
| | E.5.10 | KI Interview | personal protective materials | re-stock | Did you restock personal protective materials in the past month?(select items that you restock in the past month) | selelect multiple | list of personal protective materials | market | Purposive | item (product); market place |
| | E.5.11 | KI Interview | personal protective materials | stocks | how long will your current stock of personal protective materials last?(consider the item with larger stock level) | Select one | days;weeks;months | market | Purposive | item (product); market place |
| | E.5.12 | KI Interview | personal protective materials | stocks | How many unit of time will your current stock of personal protective materials last? | number | number of days;number of weeks;number of months | market | Purposive | item (product); market place |
| | E.5.14 | KI Interview | household water treatment | re-stock | Are you able to restock household water treatment items at the moment? (select items that you are able to restock at the moment) | select multiple | list of household water treatment items | market | Purposive | item (product); market place |
| | E.5.15 | KI Interview | household water treatment | re-stock | Did you restock household water treatment items in the past month?(select items that you restock in the past month) | selelect multiple | list of household water treatment items | market | Purposive | item (product); market place |

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|--|--------|--------------|---------------------------|----------|---|-------------------|--|--------|-----------|------------------------------|
| | E.5.16 | KI Interview | household water treatment | stocks | how long will your current stock of household water treatment items last?(consider the item with larger stock level) | Select one | days;weeks;months | market | Purposive | item (product); market place |
| | E.5.17 | KI Interview | household water treatment | stocks | How many unit of time will your current stock of household water treatment items last? | number | number of days;number of weeks;number of months | market | Purposive | item (product); market place |
| | E.5.19 | KI Interview | household water storage | re-stock | Are you able to restock household water collection and storage items at the moment? (select items that you are able to restock at the moment) | select multiple | list of household water collection and storage items | market | Purposive | item (product); market place |
| | E.5.20 | KI Interview | household water storage | re-stock | Did you restock household water collection and storage items in the past month?(select items that you restock in the past month) | selelect multiple | list of household water collection and storage items | market | Purposive | item (product); market place |
| | E.5.21 | KI Interview | household water storage | stocks | how long will your current stock of household water collection and storage items last?(consider the item with larger stock level) | Select one | days;weeks;months | market | Purposive | item (product); market place |
| | E.5.22 | KI Interview | household water storage | stocks | How many unit of time will your current stock of household water collection and storage items last? | number | number of days;number of weeks;number of months | market | Purposive | item (product); market place |
| | E.5.24 | KI Interview | handpump spare parts (SP) | re-stock | Are you able to restock handpump spare parts and kit items at the moment? (select items that you are able to restock at the moment) | select multiple | list of handpump spare parts and kit items | market | Purposive | item (product); market place |
| | E.5.25 | KI Interview | handpump spare parts (SP) | re-stock | Did you restock handpump spare parts and kit items in the past month?(select items that you restock in the past month) | selelect multiple | list of handpump spare parts and kit items | market | Purposive | item (product); market place |
| | E.5.26 | KI Interview | handpump spare parts (SP) | stocks | how long will your current stock of handpump spare parts and kit items last?(consider the item with larger stock level) | Select one | days;weeks;months | market | Purposive | item (product); market place |

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|--|--------|--------------|---------------------------|----------|---|-------------------|---|--------|-----------|------------------------------|
| | E.5.27 | KI Interview | handpump spare parts (SP) | stocks | How many unit of time will your current stock of handpump spare parts and kit items last? | number | number of days;number of weeks;number of months | market | Purposive | item (product); market place |
| | E.5.29 | KI Interview | Generator | re-stock | Are you able to restock submersible borehole water pump at the moment? | select one | yes,no | market | Purposive | item (product); market place |
| | E.5.30 | KI Interview | Generator | re-stock | Did you restock submersible borehole water pump in the past month? | selelect multiple | yes,no | market | Purposive | item (product); market place |
| | E.5.31 | KI Interview | Generator | stocks | how long will your current stock of submersible borehole water pump last? | Select one | days;weeks;months | market | Purposive | item (product); market place |
| | E.5.32 | KI Interview | Generator | stocks | How many unit of time will your current stock of submersible borehole water pump last? | number | number of days;number of weeks;number of months | market | Purposive | item (product); market place |
| | E.5.33 | KI Interview | KI | other KI | Do you know any other trader that sells similar WASH items in this marketplace? | Select one | yes,no | KI | Purposive | |

7. Monitoring & Evaluation Plan

| IMPACT Objective | External M&E Indicator | Internal M&E Indicator | Focal point | Tool | Will indicator be tracked? |
|---|---|--|-----------------------|---|---|
| Humanitarian stakeholders are accessing IMPACT products | Number of humanitarian organisations accessing IMPACT services/products Number of individuals accessing IMPACT services/products | # of downloads of x product from Resource Center | Country request to HQ | User_log | <input checked="" type="checkbox"/> Yes |
| | | # of downloads of x product from Relief Web | Country request to HQ | | <input checked="" type="checkbox"/> Yes |
| | | # of downloads of x product from Country level platforms | Country team | | <input type="checkbox"/> Yes |
| | | # of page clicks on x product from REACH global newsletter | Country request to HQ | | <input type="checkbox"/> Yes |
| | | # of page clicks on x product from country newsletter, sendingBlue, bit.ly | Country team | | <input checked="" type="checkbox"/> Yes |
| | | # of visits to x webmap/x dashboard | Country request to HQ | | <input type="checkbox"/> Yes |
| IMPACT activities contribute to better program implementation and coordination of the humanitarian response | Number of humanitarian organisations utilizing IMPACT services/products | # references in HPC documents (HNO, SRP, Flash appeals, Cluster/sector strategies) | Country team | Reference_log | WASH Cluster report Cash Working Group report South Sudan Market based Programming report |
| | | # references in single agency documents | | | |
| Humanitarian stakeholders are using IMPACT products | Humanitarian actors use IMPACT evidence/products as a basis for decision making, aid planning and delivery | Perceived relevance of IMPACT country-programs | Country team | Usage_Feed back and Usage_Survey template | National REACH usage survey |
| | | Perceived usefulness and influence of IMPACT outputs | | | |
| | | Recommendations to strengthen IMPACT programs | | | |
| | | Perceived capacity of IMPACT staff | | | |
| | | Perceived quality of outputs/programs | | | |

| | | | | | |
|---|--|---|--------------|----------------|-------|
| | Number of humanitarian documents (HNO, HRP, cluster/agency strategic plans, etc.) directly informed by IMPACT products | Recommendations to strengthen IMPACT programs | | | |
| Humanitarian stakeholders are engaged in IMPACT programs throughout the research cycle | Number and/or percentage of humanitarian organizations directly contributing to IMPACT programs (<i>providing resources, participating to presentations, etc.</i>) | # of organisations providing resources (i.e.staff, vehicles, meeting space, budget, etc.) for activity implementation | Country team | Engagement_log | x Yes |
| | | # of organisations/clusters inputting in research design and joint analysis | | | x Yes |
| | | # of organisations/clusters attending briefings on findings; | | | x Yes |

A. Key events and planning dates.

| Timing | Internal planning dates | External milestones |
|----------|---|---|
| January | <ul style="list-style-type: none"> Finalize ToR DAP Tools Partners identification | |
| February | First round <ul style="list-style-type: none"> Data collection | |
| March | <ul style="list-style-type: none"> Data analysis begin Outputs production | Cleaned datasets and outputs (factsheets) for first cycle data collection shared with WASH cluster |
| April | Second round data collection <ul style="list-style-type: none"> Data collection | |
| May | Second round <ul style="list-style-type: none"> Data analysis begin Outputs production | |
| June | | Cleaned datasets and outputs (factsheets) for second cycle data collection shared with WASH cluster |
| July | Third round <ul style="list-style-type: none"> Data collection | |

| | | |
|-----------|--|---|
| August | Third round <ul style="list-style-type: none"> • Data analysis begin • Outputs production | |
| September | | Cleaned datasets and outputs (factsheets) for third cycle data collection shared with WASH cluster |
| October | Fourth round <ul style="list-style-type: none"> • Data collection | |
| November | Fourth round <ul style="list-style-type: none"> • Data analysis begin • Outputs production | Cleaned datasets and outputs (factsheets) for fourth cycle data collection shared with WASH cluster |
| December | | Outputs for all rounds data collection cycles shared with WASH clusters and donors |

B. Dissemination Plan

| products | Audience | Message/activity | Communications channel | Materials needed | Person responsible | Supporting staff |
|--|--|---|---|---|-------------------------|---|
| Cleaned datasets and factsheets shared WASH cluster and its partners | WASH Cluster and its partners | Communicating the outputs (Availability, prices, restocking ability and estimated stock level) to WASH cluster and WASH cluster TWG | Email or presentation at WASH cluster monthly meeting | Links to TOR and outputs links at REACH Resource center | WASH Assessment Officer | Sector Unit Research Manager, Country Coordinator |
| findings for all of rounds assessment (factsheets) | All Audiences – NGOS, donors and government entities | REACH information is available to all humanitarian actors and the general public. REACH information can be found on our resource Centre | Dissemination Email | Published Report (link to Resource Center) | WASH Assessment Officer | Sector Unit Research Manager, Country Coordinator |