

Research Terms of Reference

Knowledge, Attitudes and Practices Survey, Ebola Outbreak

SSD2604

SOUTH SUDAN

June 2026

Version 1

REACH Informing
more effective
humanitarian action

1. Executive Summary

Country of intervention	South Sudan					
Type of Emergency	☐	Natural disaster	☐	Conflict	☐	Other (specify)
Type of Crisis	☐	Sudden onset	☐	Slow onset	X	Protracted
Mandating Body/ Agency	IMPACT HQ					
IMPACT Project Code	32BFG					
Overall Research Timeframe	01/06/2026 to 24/07/2026					
Research Timeframe	1. Data Analysis Plan (DAP) sent for validation: 24/06/2026		7. Frequency tables sent for validation: 13/07/2026			
	2. Pilot/training: 27/06/2026		8. Preliminary presentation: 14/07/2026			
	3. Start data collection: 29/06/2026		9. Report sent for validation: 21/07/2026			
	4. Data collected: 10/07/2026		10. Report published: 24/07/2026			
	5. Clean dataset sent for validation: 13/07/2026		11. Other (specify): __/__/____			
	6. Data analysis sent for validation: 13/07/2026					
Humanitarian milestones	Milestone				Deadline	
	X	Donor plan/strategy				
	X	Inter-sector plan/strategy				
	☐	PiN calculation / HNO			__/__/____	
	☐	IPC (Integrated food security Phase Classification)			__/__/____	
	X	Cluster plan/strategy				
	☐	NGO platform plan/strategy			__/__/____	
☐	Other (Specify):			__/__/____		
	Audience type		Dissemination			

Audience Type & Dissemination	☒ Strategic ☒ Programmatic ☐ Operational ☐ [Other, Specify]	☒ General Product Mailing (e.g. mail to NGO consortium; MOH and Donors) ☒ Presentation of findings to the RCCE cluster in Uganda. ☒ Website Dissemination (Relief Web & REACH Resource Centre)		
Stakeholder mapping	☒ Yes	☐	No	
General Objective	The main objective of this Knowledge, Attitudes and Practices (KAP) survey is to support Risk Communication and Community Engagement (RCCE) efforts for the Ebola Virus Disease (EVD) response in South Sudan. The assessment aims to generate timely evidence on behaviors, perceptions, and social dynamics influencing EVD transmission, as well as identify actionable opportunities for community engagement and behavior change among populations at heightened risk. The findings of this assessment will be used to tailor RCCE messaging to context-specific beliefs and behaviors; improve targeting of interventions toward high-risk and mobile populations; and, support coordinated, data-driven decision-making across partners in the Ebola response.			
Specific Objective(s)	Assess the level of knowledge of Ebola Virus Disease, including awareness of its signs and symptoms, modes of transmission and recommended preventive measures, among the general adult population in the urban centres of Yambio, Juba and Nimule. Examine attitudes and perceptions towards EVD and the EVD response, including trust in health information sources, perceptions of personal and community risk, acceptance of survivors, and confidence in response actors and interventions. Identify practices and behaviours related to EVD prevention and care-seeking, including health-information-seeking behaviour, adoption of preventive measures, burial and safe-burial intentions, and intended or actual care-seeking actions when symptoms occur. Explore how knowledge, trust, access to health information, and protective and care-seeking practices differ across population groups, in particular between highly mobile groups (such as traders and boda-boda riders) and women, who play a central role in household care and burial practices.			
Research Questions	What are the knowledge, attitudes and practices related to Ebola Virus Disease among the general population of high-risk urban centres in South Sudan? What is the level of knowledge of EVD among the populations of Yambio, Juba and Nimule? What are the attitudes and perceptions of these populations towards EVD and the EVD response, including trust in health information and risk perception? What practices and care-seeking behaviours are these populations adopting in relation to EVD prevention and response? How do knowledge, trust, access to EVD information, and care-seeking practices differ between population groups, particularly for women and highly mobile populations (e.g. traders) in the target towns?			
Geographic Coverage	Yambio Town (SS101005), Yambio County, Western Equatoria (SS) Northern Bari (SS010112), Juba, Central Equatoria Munuki (SS010111), Juba, Central Equatoria Juba Town (SS010105), Juba, Central Equatoria Rejaf (SS010113), Juba, Central Equatoria Gondokoro (SS010104), Juba, Central Equatoria Kator (SS010106), Juba, Central Equatoria			

	Nimule (SS020704), Magwi County, Eastern Equatoria					
Secondary data sources	REACH Regional Ebola-2026 Mobility-and-health-vulnerability Brief 29052026.pdf WHO Weekly Situation Update on Ongoing Health Emergency Events in South Sudan Reuters, WHO says suspected Ebola cases drop to 116 after hundreds ruled out					
Population(s)	☐	IDPs in camp	☐	IDPs in informal sites		
	☐	IDPs in host communities	☐	IDPs [Other, Specify]		
	☐	Refugees in settlements	☐	Refugees in informal sites		
	☐	Refugees in host communities	☐	Refugees in urban areas		
	X	Host communities	☐	[Other, Specify]		
Stratification	X	Geographical #: 3 Population size per strata is known? ☐ Yes x No	☐	Group #: ___ Population size per strata is known? ☐ Yes ☐ No	☐	[Other Specify] # Population size per strata is known? ☐ Yes ☐ No
Data collection tool(s)	x	Structured (Quantitative)		x	Semi-structured (Qualitative)	
	Sampling Method			Data Collection Method		
Structured data collection tool # 1	☐ Purposive ☐ Probability / Simple random ☐ Probability / Stratified simple random x ☐ Probability / Cluster sampling ☐ Probability / Stratified cluster sampling ☐ [Other, Specify]			☐ Key informant interview (Target #):_____ ☐ Group discussion (Target #): 6 ☐ Household interview (Target #):_____ x ☐ Individual interview (Target #): 960 ☐ Direct observations (Target #):_____ ☐ [Other, Specify] (Target #):_____ 		
Semi-structured data collection tool (s) # 1	x Purposive ☐ Snowballing ☐ [Other, Specify]			☐ Key informant interview (Target #):_____ ☐ Individual interview (Target #):_____ x ☐ Focus group discussion (Target #): 6 ☐ [Other, Specify] (Target #):_____ 		
Target level of precision if probability sampling	_95% level of confidence			_8+/- % margin of error		
Disaggregation by gender and age	Gender			Age		
	☐	Yes		☐	Yes	
	☐	No		☐	No	
Data management platform	X	IMPACT		☐	UNHCR	
Data collection level:	X	Individual		☐	Household	
	☐	Settlement		☐	Other (specify): _____	
Exepcted output type	☐	Situation overview #: __	x	Report #: 1	☐	Profile #: __
	x	Presentation (Preliminary findings) #: 1	x	Presentation (Final) #: 1	☐	Factsheet #: __
	☐	Interactive dashboard #: _	☐	Webmap #: __	☐	Map #: __
Access	x	Public (available on REACH resource center and other humanitarian platforms)				
	☐	Restricted (bilateral dissemination only upon agreed dissemination list, no publication on REACH or other platforms)				
Visibility	REACH					
	Donor: UKAid					
	Coordination Framework: N/A					
	Partners: N/A					

2. Rationale

2.1 Background

South Sudan faces an elevated and sustained risk of Ebola Virus Disease (EVD) importation, driven by an active outbreak in the Democratic Republic of Congo (DRC) and confirmed cross-border transmission into Uganda. As of mid-June 2026, 676 confirmed cases and 136 confirmed deaths, with transmission spanning 26 health zones across three provinces.¹ Uganda has recorded 19 confirmed cases linked to this outbreak, including 14 imported and 5 locally acquired cases.² In addition to sharing long, porous borders with both DRC and Uganda, these affected areas in DRC and Uganda also form part of a major mobility corridor that regularly sees cross-border movements into South Sudan, making containment challenging.³ This movement is driven by trade, family ties, health-seeking, seasonal livelihoods, and displacement, much of it occurring through informal routes that bypass formal screening points.⁴ South Sudan also has a documented history of indigenous EVD outbreaks (1976, 1979, and 2004), underscoring that the risk is not exclusively importation-dependent.⁵

The current threat occurs against a backdrop of severe humanitarian pressure. Ongoing conflict, displacement, and the Sudan crisis continue to strain health system capacity. A self-assessed readiness evaluation conducted in early June 2026 found that RCCE preparedness stood at only 25, with key gaps including limited functionality of community feedback mechanisms such as the recently re-launched national hotline and community feedback platform and a lack of effective mechanisms to counter the spread of rumours, underscoring the urgency of targeted community engagement grounded in current knowledge and attitudes.⁶ In addition, the last systematic evidence base on EVD knowledge, attitudes, and practices (KAP) in South Sudan dates to June 2019, when UNICEF conducted a household survey across ten high-risk counties in Greater Equatoria. Key findings from this study remain relevant as baseline, highlighting relatively high rates of awareness, but consistently low rates of translating such awareness into protective behaviours.⁷

Against this context, REACH is conducting a rapid Knowledge, Attitudes and Practices (KAP) survey to generate timely, actionable evidence on community understanding of EVD, perceptions of risk, trust in health information sources, and preventive and care-seeking behaviour in high-risk areas. This assessment has been discussed with and endorsed by the RCCE pillar and is designed to serve a dual function. Firstly, to provide RCCE partners with rapid, sentiment-level findings to inform the immediate tailoring of messaging and community engagement activities, and secondly, to serve as a point of entry for a more comprehensive UNICEF-led KAP study planned for a subsequent phase.

The assessment is conducted in alignment with parallel REACH KAP surveys in Uganda and DRC, using a shared methodology adapted from the CDC and RTI International Ebola KAP Survey toolkit, enabling regional comparability of findings across the three affected countries.⁸

2.2 Intended impact

The findings from this Knowledge, Attitudes and Practices (KAP) survey aim to support Risk Communication and Community Engagement (RCCE) partners, health authorities, and humanitarian stakeholders involved in the Ebola Virus Disease (EVD) response in South Sudan. The assessment will generate evidence on community knowledge, perceptions,

¹ [WHO, Weekly Situation Update on Ongoing Health Emergency Events in South Sudan, 19 June 2026](#)

² Ibid.

³ [UNICEF, Ebola Virus Disease \(EVD\) Emergency Response and Preparedness, May 2026](#)

⁴ [SSHAP Key Considerations: Cross-Border Dynamics between South Sudan and DRC \(2019\)](#)

⁵ UNICEF South Sudan Ebola Risk Communication and Community Engagement Strategy (2023)

⁶ RCCE Pillar Meeting Minutes, 2 June 2026

⁷ Formative Study on Knowledge, Attitudes and Practices in Relation to Ebola Virus Disease (EVD) In South Sudan UNICEF 2019

⁸ [Guide to Adapting and Using Knowledge, Attitudes, and Practices \(KAP\) Surveys for Public Health Eme...](#)

attitudes, and behaviours related to Ebola, enabling stakeholders to design and implement more effective, context-specific interventions aimed at reducing transmission risks.

The collected data will inform RCCE strategies and operational planning by identifying knowledge gaps, misconceptions, levels of trust in health information sources, care-seeking behaviours, and barriers to the adoption of recommended preventive measures among populations residing in high-risk settlements. Findings will also support the targeting of communication and community engagement activities towards populations and geographic areas found to be at heightened risk of Ebola transmission. Furthermore, the assessment will provide a timely evidence base to strengthen coordination among response actors and promote data-driven decision-making throughout the outbreak response. By identifying factors that influence community behaviours and perceptions, the survey will contribute to improving the effectiveness of public health messaging, increasing community trust and participation in response activities, and enhancing overall preparedness and response efforts among populations in high-risk areas in South Sudan.

3. Methodology

3.1 Methodology overview

The planned assessment will employ a primarily quantitative approach using a standardized Knowledge, Attitudes and Practices (KAP) questionnaire adapted from the Ebola KAP Survey toolkit developed by the Centre for Disease Control and Prevention (CDC) and RTI International.⁹ In addition to the quantitative questionnaire, REACH will be conducting a small number of qualitative Focus Group Discussions in one of the target areas to provide a deeper understanding of community perceptions and attitudes. The assessment is designed to generate evidence on community knowledge, perceptions, attitudes, and behaviours related to Ebola Virus Disease (EVD) among refugee populations residing in areas at heightened risk of transmission.

Individual Surveys

Data collection will be conducted through in-person interviews in three towns:

- Yambio in Western Equatoria
- Juba in Central Equatoria
- Nimule in Magwi County, Eastern Equatoria

All three sit at or beside locations designated as high-risk Points of Entry for EVD by the National Public Health Institute, reflecting their exposure to cross-border movement from the Democratic Republic of the Congo and Uganda and, in Juba, to international air traffic.¹⁰ Enumerators will administer a structured questionnaire programmed in KoboToolbox on mobile devices, working offline and syncing when connectivity allows. In-person collection was selected because no population register or household sampling frame exists for these towns, making remote or registry-based sampling infeasible.

Because South Sudan has had no census since 2008 and no current household frame exists for these urban areas, the assessment uses an area-based design that combines probability-proportional selection of survey segments with systematic household selection within those segments, rather than a registry-drawn random sample. Segments are drawn with known, population-proportional probabilities from a delineated frame, while household selection within each segment is systematic but not based on a full dwelling listing, so that the design is probability-based at the segment stage and approximate at the household stage. The design is intended to produce evidence that is broadly representative of each town's adult population on observable demographic characteristics, subject to the limitations set out below (see Section 3.6). Results are reported per town rather than pooled into a single national estimate.

The questionnaire covers the key thematic areas of Ebola preparedness and response, including sources of health information, trust in health information, knowledge of Ebola, modes of transmission, preventive measures, signs and symptoms, care-seeking behaviour, vaccine acceptance, and perceptions of the Ebola response. Following data

⁹ [Guide to Adapting and Using Knowledge, Attitudes, and Practices \(KAP\) Surveys for Public Health Emergencies | NCEZID | CDC](#)

collection, data will undergo cleaning and analysis to produce frequency tables and descriptive statistics on key indicators, disaggregated by town and by respondent sex and age group. Findings will be disseminated through presentations and briefing materials tailored to Risk Communication and Community Engagement (RCCE) partners, health actors, and coordination mechanisms, as well as a through a report summarizing key insights from the assessment published on the IMPACT Initiatives Repository.

3.2 Population of interest

Individual Surveys

The population of interest is the adult host community aged 18 and over residing in the built-up urban areas of Yambio, Juba and Nimule. Given that the quantitative survey tool includes questions to be answered at the individual level and not for the entire household, the household will be used only for the selection of respondents. Within each household the eligible adult whose birthday occurred most recently is selected, which gives each adult present at the dwelling an approximately equal chance of selection and avoids over-representing whoever is first encountered. For limitations arising from this method, see [section 3.6](#).

It should be noted that the three towns are urban centers within larger, predominantly rural counties, so the assessment represents these urban populations rather than the counties as whole. For an overview of the estimated population of the target areas, please refer to Table 2 below.

Focus Group Discussions

FGD participants will be asked to answer questions related to local perceptions and beliefs of EVD and health information, as well as mobility across the border and within South Sudan. As such, and following initial conversations with EVD response actors, there is a particular interest in populations that regularly move across the border and within South Sudan, e.g. traders and boda-boda drivers. At the same time, RCCE feedback loops suggest that EVD messaging may disproportionately reach men, leaving women less likely to encounter it despite their central role in household care and burial practices, with similar trends observed during a previous outbreak in DRC.¹¹ Group composition therefore aims to capture both of these perspectives, ensuring that highly mobile groups and women are represented, so that the discussions surface differences in awareness, trust and access to health information across these populations rather than the views of the most easily reached groups alone.

3.3 Secondary data review

Sources that will inform tool design and triangulation of findings include:

- [Guide to Adapting and Using Knowledge, Attitudes, and Practices \(KAP\) Surveys for Public Health Emergencies | NCEZID | CDC](#).
- [WHO, Weekly Situation Update on Ongoing Health Emergency Events in South Sudan, Week 24, 19 June 2026](#)
- [UNICEF, Ebola Virus Disease \(EVD\) Emergency Response and Preparedness, May 2026](#)
- [SSHAP, Key Considerations: Cross-Border Dynamics between South Sudan and DRC, 2019](#)
- UNICEF South Sudan Ebola Risk Communication and Community Engagement Strategy, 2023
- RCCE Pillar Meeting Minutes, 2 June 2026
- UNICEF, Formative Study on Knowledge, Attitudes and Practices in Relation to Ebola Virus Disease (EVD) in South Sudan, 2019
- [CARE International, Gender Analysis: Prevention and Response to Ebola Virus Disease in the Democratic Republic of Congo, 2020](#).

¹¹ [CARE International, Gender Analysis: Prevention and Response to Ebola Virus Disease in the Democratic Republic of Congo, 2020](#).

3.4 Primary Data Collection

Primary data collection will take place over 2 weeks, between 29 June and 12 July 2026. Data collection will take place in Yambio, Juba and Nimule. In Yambio and Nimule, there will be both qualitative and quantitative data collection, while in Juba data collection will only be quantitative.

Individual Surveys:

The quantitative dimension of this assessment aims to assess EVD knowledge, beliefs and attitudes for individuals, but will use the household as entry point for sampling.

Since there are no recent population figures for South Sudan or the target towns, and because urban areas in the target towns do not neatly align with available administrative boundaries, the surveys will be conducted using a gridded population sampling combined with a systematic walking protocol, as well as using the last-birthday method to select respondents within a household.

At the first stage, the gridded population sampling will follow the steps outlined below:

- The built-up extent of each of the three towns will be delineated manually on satellite imagery in Google Earth Engine, producing one boundary polygon per town that defines the sampling area.
- Each polygon will then be overlaid with 1) a grid of equally sized, non-overlapping square cells, and 2) a population estimate raster (WorldPop 2020 constrained 100m), resulting in a population estimate for each square cell. Given different population densities and practical field access, for example in planned versus unplanned neighbourhoods, the sizes of the grid, i.e. the square cells will be set separately for each town to account for field capacity. The total number of square cells per town grid will therefore depend on the size of the urban area of each town, as well as the size of the square cells.
- For each town, the specific square cells to be covered by the survey will then be selected systematically with probability proportional to size, using the population estimates for all squares for which the center point falls into the delineated target areas. For this, each square cell is assigned a measure of size equal to its estimated population (as per Worldpop raster), meaning that more densely populated squares are more likely to be selected. The number of square cells to be selected was set to account for field capacity and to ensure that all selected cells can reasonably be covered within the data collection period, with a target of 40 interviews per square in Yambio and Nimule; and 20 interviews per square in Juba.

The table below provides an overview of the outcome of this gridded method for each of the target locations:

Table 1: Overview of gridded sampling approach

	Polygon Area	Square cell size	# of populated squares within area	# of selected squares	# of target interviews per square
Yambio	47.1 km ²	1.668 km ²	28	8	40
Juba	251 km ²	0.690 km ²	324	16	20
Nimule	9.7 km ²	1.030 km ²	10	8	40

Note: Square sizes and targets were set to account for field capacity, with populated squares in Juba being far more densely populated than in the other target locations, and the city being far more extensive. To avoid overstating results from only a small number of squares, the number of target squares was doubled in Juba.

Figure 1: Selected squares in Juba. Note that the outline for Juba spans multiple payams (see Table 2)

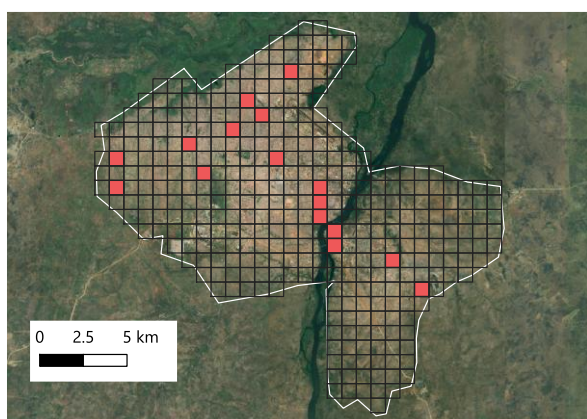


Figure 2: Selected squares in Nimule

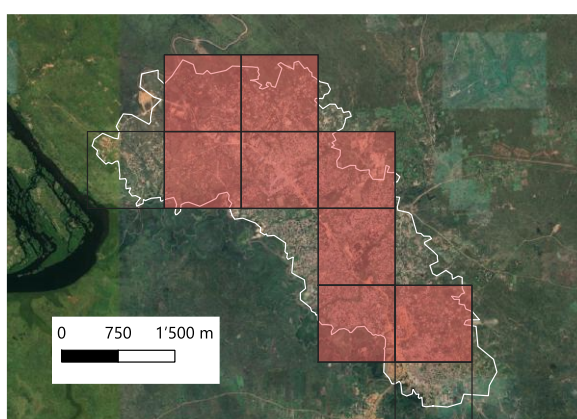
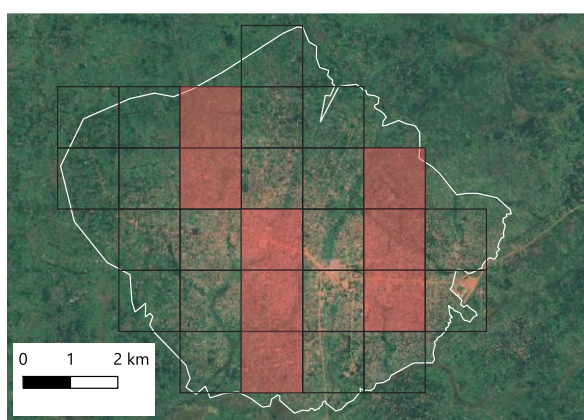


Figure 3: Selected squares in Yambio



At the second stage, i.e. within the selected square cells, enumerators will follow a systematic walking protocol. Each segment will be defined by its boundary outline and a center point (see Figure 2). The assessment team will provide enumerators with a labelled satellite screenshot (identifying key landmarks) and lead enumerators to their assigned segments. Because the precise center point may not be directly reachable by road, enumerators will not be required to begin at an exact coordinate. Rather, they will establish a recognizable starting point at or near the edge of the segment, record the nearest landmark, and apply a systematic walking protocol: counting the dwellings within the segment outline, setting the skip interval as the count divided by the household target for that segment, and continuing with a consistent sweep of the area until the segment target is met. Only one interview will be conducted per household, and where enumerators share a segment on a specific day during data collection (e.g. in Yambio or Nimule), segments will be divided into non-overlapping portions on arrival.

Within each household, enumerators will invite the eligible adult with the most recent birthday to participate and complete the survey.

The table below provides an overview of the survey targets for each town at the Payam (Adm3) level.

Table 2: Survey targets per location

Target location	Payam	P-code	Est. population in target area	Selected squares	Planned interviews
Yambio	Yambio	SS101005	66,035	8	320
Juba	Northern Bari	SS010112	147,866	7	140
	Munuki	SS010111	74,161	2	40

	Juba Town	SS010105	41,717	1	20
	Rejaf	SS010113	38,750	2	40
	Gondokoro	SS010104	28,999	2	40
	Kator	SS010106	20,228	2	40
Nimule	Nimule	SS020704	133,824	8	320

Note: Population figures are modelled estimates from the WorldPop raster clipped to the delineated urban boundary of each town. As Worldpop provides estimates only, it cannot be treated as population count. Similarly, segments may be adjusted to avoid sending enumerators to areas where population estimates prove to make enumeration unfeasible within the data collection period (e.g. where satellite imagery and actual population density do not align).

Because squares are selected with probability proportional to their estimated population, and because each square cell then receives the same number of interviews irrespective of its population, a household in a densely populated square has a higher probability that its square is selected, but a correspondingly lower probability of being selected within it. The reverse holds for a sparsely populated cell. As a result of this, the product of the two probabilities is constant and the design therefore self-weighting at the household level within the delineated area of each town.

However, a drawback from this design is that the selection of specific squares, i.e. clustering data collection in small areas widens the effective margin of error at town level, and the data therefore support town-level estimates and disaggregation by sex and broad age group rather than fine sub-group analysis. Further limitations arising from this design are described in Section 3.6.

Enumerators will be recruited and trained by REACH prior to data collection. Training will cover the objectives of the assessment, questionnaire content, interview techniques, ethical considerations, informed consent procedures, and the use of Kobo for mobile data collection. Enumerators will be provided with phones equipped with the Kobo questionnaire.

Focus Group Discussions

A total of six FGDs will be conducted, of which three in Yambio and three in Nimule, to interpret and add depth to the quantitative findings, particularly on the topics least explicable from survey percentages alone, such as burial practice, cross-border behaviour, rumours, and care-seeking.

Locally-hired community mobilisers will assist the Senior Assessment Officer (SAO) in identifying individuals willing to take part in person. FGD participants will be selected purposively rather than randomly, as the aim is not representativeness, which the individual surveys provide, but reaching the people whose perceptions and practices matter most for outbreak containment.

Given the central interest in highly mobile populations from RCCE actors, the field team will aim to identify FGD participants that regularly cross the border or transport people and goods, such as traders or boda-boda (motorcycle taxi) riders. In line with standard practice and considering that women may face heightened exposure due to social roles, FGDs will also be conducted with women. While the women's group reaches women as primary household carers and information-receivers, where possible, the women's group will include women engaged in cross-border trade, so that the specific vulnerabilities of female traders are represented without expanding the number of groups. Additionally, where group size and participant availability allow, groups may be further separated by age so that younger and older adults can speak freely, though this will not be possible in every location given the limited number of discussions.

Table 3: Target for FGD per location

Location	# of FGD with traders	# of FGD with boda-boda riders	Women (incl. cross-border traders where possible)
Nimule	1	1	1
Yambio	1	1	1
Total	2	2	2

While no target has been set for conducting KII, where feasible, the team will also seek input from individuals with a strong understanding of the broader situation in South Sudan and the assessment areas. Key informant interviews will be conducted depending on field team capacities will allow and serve to contextualise and triangulate the individual survey and FGD findings rather than to answer a discrete research question. Informants will be selected purposively and may include traders, including women traders, health workers, local authorities, community and religious leaders and humanitarian staff operating in the assessment areas, approached on the basis of their experience and knowledge of the local context, including health, population movement and community dynamics. Between these groups, the team will aim to identify a set of informants that spans a diversity of profiles to capture perspectives across local and sub-national levels or cross-regional dynamics.

Data collection field teams

Data will be collected by a team of experienced REACH staff. The team will comprise one REACH SAO and one REACH Field Officer (FO) for Juba and Yambio, and one REACH SAO and Field Officer for Nimule. Additionally, the team will be supported by one field supervisor and between 8 and 12 enumerators per location, hired locally.

While there is no current case of EVD in South Sudan, in-person data collection in the target locations may pose a risk of infection to enumerators and involved staff. To mitigate this risk, enumerators and REACH staff will be provided with hand sanitizer both during the training and on all data collection days. Enumerators will also be given the option of wearing face masks.

Several trainings will be conducted prior to data collection exercises. First, the FO will receive a half-day in-person training in Juba from the SAO – aiming to provide i) a deep-dive on the assessment's objectives; ii) create a thorough and practical understanding of the sampling strategy and tools; and iii) provide a refresher training on good practices for qualitative data collection and ethical considerations. Second, all locally-hired staff will receive a one-day training in the target locations – aiming to provide a robust understanding of the assessment's objectives and data collection tools, including their translation into the local language.

Data collection tools

Quantitative data collection approach will be done using a structured Knowledge, Attitudes and Practices (KAP) questionnaire adapted from the standardized Ebola KAP Survey toolkit developed by the CDC and RTI International to match RCCE priorities and the SSD context.

All qualitative tools (three FGD tools and a key informant interview tool) will be semi-structured. Each tool consists of questions, sub-questions and probes related to the assessment's specific objectives and research questions. Different tools have been developed for the different target populations and data collection exercises. For a detailed description of the questions asked, and of how the information captured will help answer each research (sub-)question, please see the Data Analysis Plan (DAP) (available upon request).

For the **Focus Group Discussions (FGDs)**, three different semi-structured tools will be used:

- **Traders / cross-border traders:** these FGDs focus on people whose livelihoods involve frequent movement across the border. Discussions centre on movement and crossing patterns, knowledge and beliefs about Ebola, how a suspected case would be detected and reported, and how information reaches a highly mobile population.
- **Boda-boda riders:** to capture the perspective of high-mobility connectors who move continuously and meet many people, separate FGDs will be conducted with motorcycle-taxi riders, focusing on their daily movement, where they and their passengers get information, detection and reporting of sickness, and the channels that reach riders.
- **Women:** this tool gathers insights from women as primary household carers and information-receivers, focusing on daily life, how households respond when someone falls ill, where women obtain and whom they trust for health information, and knowledge, beliefs and care-seeking around Ebola.

The **Key Informant Interview (KII)** tool is a short, flexible guide for opportunistic interviews with well-placed individuals such as health workers, officials, community or religious leaders and humanitarian staff. It is deliberately loosely structured, and interviewers will be given autonomy to select and adapt the questions that suit the person and the discussion, allowing informants to speak to their own vantage point on the situation, community knowledge and attitudes, trusted sources of information, barriers to care-seeking, and preparedness gaps.

While the data collection tools are in English, they will be translated by the field teams into the preferred language during the interview as needed (e.g. Zande, Acholi, Juba Arabic or others). The SAO/FO will take detailed notes during each data collection exercise using laptops and/or notebooks. Field teams will not collect or record any Personally Identifiable Information (PII) that is not included in the Data Management Plan.

Data collection monitoring

The SAO will closely monitor data collection throughout the various phases of the research cycle. Through daily check-ins with the rest of the field team, the SAO will ensure the tools are effective, flow well, and are sensitive to the context, and to ensure that other considerations for informative and respectful qualitative data collection exercises are implemented. Should any issues occur, the SAO will amend the tools as necessary. Depending on field team capacity, transcripts of each data collection exercise will be prepared as soon as possible after the exercise, along with the accompanying debrief forms. In every data collection exercise, the guiding principles of informed consent, 'do-no-harm', confidentiality and respect will be adhered to. Any issues arising shall be reported immediately to the SAO.

3.5 Data Processing & Analysis

Individual Surveys:

Data Cleaning: Data cleaning procedures will be conducted in accordance with IMPACT's data quality standards and the Minimum Standard Data Cleaning Checklist. Data submitted through Kobo will be reviewed on a daily basis throughout the data collection period to identify and address any quality concerns in a timely manner. The assessment and data teams will monitor incoming data for completeness, consistency, and adherence to sampling targets. Daily checks will include verification of survey completion rates, review of survey duration, identification of missing values, and detection of logical inconsistencies not captured by built-in questionnaire constraints. Any surveys flagged during the cleaning process will be reviewed and, where necessary, clarified with the responsible enumerator or supervisor. All modifications made during data cleaning will be documented in a cleaning log to ensure transparency and traceability throughout the process.

Data cleaning will be conducted using R-based scripts and manual verification procedures. Attention will be paid to data quality during the initial stages of data collection to ensure that any systematic issues are identified and corrected promptly.

Data Analysis: Following completion of data cleaning and validation, a final clean dataset will be produced for analysis. Data analysis will focus on generating descriptive statistics and frequency tables related to key indicators covering Ebola

knowledge, attitudes, perceptions, information sources, trust in health information, preventive behaviours, and care-seeking practices.

Analysis will be conducted using R Studio software. Results will be disaggregated by relevant geographic strata, including settlement and districts where appropriate, to facilitate comparison across locations and population groups. Statistical outputs will be generated in accordance with the assessment's sampling design and level of representativeness.

The findings will be synthesized into analytical outputs tailored to the needs of Risk Communication and Community Engagement (RCCE) partners, health authorities, and other response stakeholders. Outputs will include summary tables, presentations, and briefing materials designed to support evidence-based decision-making, improve targeting of communication interventions, and strengthen Ebola preparedness in South Sudan.

Qualitative components

Data processing and analysis will be performed in line with IMPACT's Minimum Standards Checklist for semi-structured data collection tools. As soon as possible after the data collection exercise, transcripts will be written up in English in a digital Microsoft Word document. The SAO shall organise and save all transcripts on the REACH SharePoint space, under password protection. Throughout this process, the SAO will maintain a data tracker to ensure all planned research activities are completed. All the data will be handled in strict accordance with IMPACT's Standard Operating Procedures (SOPs) on the Management of Personally Identifiable Information to safeguard privacy and anonymity of the participants.

All data will be analysed using a Data Saturation and Analysis Grid (DSAG). The DSAGs comprise three "layers" of analysis: Discussion Topics, Discussion Sub-Topics, and Data Points. Discussion Topics are based on questions in each qualitative tool. Discussion Sub-Topics and Data Points will be created using an inductive approach, based on the themes emerging from transcripts. If time allows, qualitative data may also be entered into MAXQDA for further thematic analysis, allowing for identification, analysis and reporting of patterns within data.

Once interview transcripts and enumerator debrief forms have been translated from the local language into English, processing and analysis will result in the following data and analysis to be shared with IMPACT HQ: 1) Enumerator debrief forms, 2) Finalized transcripts in Word document format, 3) a completed DSAG and 4) a completed Method Report (with the DSAG), summarizing data collection and analysis methods used.

Note: Due to capacity limitations during the data collection, no Key Informant Interviews were conducted despite the tools being described here. As a result of this, all qualitative information in the outputs results from FGDs only.

3.6 Limitations

The findings should be read in light of the following limitations, which arise mainly from the absence of a current household sampling frame and from the practical constraints of fieldwork:

- **Quantitative component:**
 - Because the population of interest within the targeted areas does not live in areas fully aligned with administrative boundaries, most notably in Juba where urban areas stretch across multiple payams (adm3), the targeted areas were delineated manually on satellite imagery. As a result, target areas should be considered to have been selected purposively, and findings should only be considered to represent the adult urban population of the assessed areas, and not for any of the counties or payams in which data collection takes place as such.
 -
 - Squares to be covered during the data collection were selected randomly based on fixed parameters, but square size was determined based on estimated field capacity. In addition to this, squares may fall on areas that are

sparsely populated, are inaccessible or insecure and may need to be substituted in practice, further limiting the strength of the gridded design.

- Population figures used for the sampling method described above rely on modelled population estimates and may not be accurate for the targeted areas. While the method only uses these estimates for selecting target squares in each town, the sampling method's self-weighting design is effectively limited by the accuracy of the estimates in the target areas.
- Similarly, the self-weighting property of the design holds true only at the household level, with the majority of the survey's indicator targeting individual respondents. While it is unclear to what extent EVD knowledge depends on intra-HH exposure and demographic factors, the probability of any individual household member to be selected is lower for households with more household members, meaning that individual-level indicators may over-represent adults in smaller households and under-represent adults in larger households. Survey results will be checked against demographic factors to estimate a potential skewing of individual-level results and its likely direction.
- At the household level, respondent selection relies on the last-birthday method to reduce a bias towards adult household members likely to be at home during the data collection period. The last-birthday method will be covered during enumerator training, but its correct application risks erosion in practice, and enumerators may default to interviewing the first available respondents at the household level.
- **Qualitative component:** Given the purposive selection of focus group participants, all qualitative findings are indicative and not statistically generalisable to the wider population. While the approach cannot guarantee that the experience of every (vulnerable) group is captured, stratifying the groups by gender helps ensure a wider range of perspectives is heard. As interviews will not be audio-recorded, transcripts will resemble detailed notes, and because some discussion will be translated from the local language during the session by the translator or note-taker, some detail may be lost or responses abbreviated; to mitigate this the team will review transcripts for translation errors or gaps and follow up promptly with Field Officers (FOs) to correct or recover data where possible. Participants may also give socially desirable responses or withhold information for fear of judgment or stigma, which can skew the picture of their needs and experiences.
- **Timeliness and comparison** In a rapidly evolving context, the findings reflect research design prior to an outbreak in South Sudan, with data collected in July 2026 and should be read within that timeframe; the team will minimise the gap between collection and publication, though the broad trends and insights remain relevant for response planning in case of an outbreak in South Sudan.

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 (specifically by: seeking informed consent, designing length of survey/ discussion while being considerate of participants' time, ensuring accurate reporting of information provided)?	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?	Yes	

... Does not involve collecting information on specific topics which may be stressful and/or re-traumatising for research participants (both respondents and data collectors)?	No	Some questions, though formulated to be as respondent friendly as reasonably possible, have the potential for triggering emotional responses from respondents given that Ebola Virus is still spreading and some people have lost loved ones to it. Senior Field Officers will train enumerators to explain to respondents that they are able to take a break, skip questions, or discontinue the interview altogether. The tool will also include the contact number for any referrals.
... Does not involve data collection with minors i.e. anyone less than 18 years old?	No	Only adults will be interviewed.
... Does not involve data collection with other vulnerable groups e.g. persons with disabilities, victims/ survivors of protection incidents, etc.?	No	As sampling is random, respondents will not be screened for such characteristics.
... Follows IMPACT SOPs for management of personally identifiable information?	Yes	

5. Roles and responsibilities

Task Description	Responsible	Accountable	Consulted	Informed
<i>Research design</i>	AO	AO	Sectoral Working groups, RCCE, UNICEF, CC, Field staff, HQ, RM	UNICEF, HQ, RCCE, NPHI
<i>Supervising data collection</i>	AO/Field Staff	AO	RM, SGISO, SDO, Field Coordinator,	CC
<i>Data processing (checking, cleaning)</i>	AO/SGISO/SDO/Field Staff	AO	RM/HQ	
<i>Data analysis</i>	SGISO/SDO	AO	RM/HQ	HQ
<i>Output production</i>	AO	AO	RM/CC	HQ
<i>Dissemination</i>	AO	AO	RM/CC	HQ

Monitoring & Evaluation	AO	AO	RM/CC	HQ
Lessons learned	AO	AO	RM/CC/HQ	Mission-level

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

6. Data Analysis Plan

Attached as a separate document, found [here \(quantitative\)](#) and [here \(qualitative\)](#).

7. Data Management Plan

Administrative Data			
Research Cycle name	SSD2604 Ebola – Knowledge, Attitudes and Practices		
Project Code	32BFG		
Donor	IMPACT HQ		
Project partners	MOH, UNICEF, RCCE partners.		
Research Contacts	Joris Gaster – joris.gaster@impact-initiatives.org Cyrillo Mohinigamu - cyrillo.mohinigamu@reach-initiative.org		
Data Management Plan Version	Date: 24/06/20262026	Version: 1	
Related Policies	IMPACT Data Protection SOPs IMPACT Minimum Standards for Qualitative Data Processing		
Documentation and Metadata			
What documentation and metadata will accompany the data? <i>Select all that apply</i>	☒	Data analysis plan	☒ Data Cleaning Log, including: ☒ Deletion Log ☒ Value Change Log
	☐	Code book	☐ Data Dictionary
	☐	Metadata based on HDX Standards	☐ [Other, Specify]
Ethics and Legal Compliance			
Which ethical and legal measures will be taken?	☒	Consent of participants to participate	☒ Consent of participants to share personal information with other agencies
	☐	No collection of personally identifiable data will take place	☒ Gender will be considered
	☒	All participants reached age of majority	☐ [Other, Specify]
Who will own the copyright and Intellectual Property Rights for the data that is collected?	IMPACT		
Storage and Backup			
Where will data be stored and backed up during the research?	☒	IMPACT/REACH Kobo Server	☐ Other Kobo Server: <i>[specify]</i>
	☐	IMPACT Global Physical / Cloud Server	☒ Country/Internal Server
	☐	On devices held by REACH staff	☐ Physical location
	☐	[Other, Specify]	
Which data access and security measures have been taken?	☒	Password protection on devices/servers	☒ Data access is limited to <i>Assessment Officer, Senior Data Officer</i>
	☐	Form and data encryption on data collection server	☐ Partners signed an MoU if accessing raw data

	☐ [Other, Specify]				
Kobo Access Rights					
Kobo Access	Person	Account Name			
View Form	IMPACT Staff	kobo.impact-initiatives.org			
View and Edit Form	IMPACT Data Officers	Kenya Alison Frazer			
View Form and Submit Data	IMPACT Enumerators	enumuga			
Download Data	IMPACT Data Officer	Kenya Alison Frazer - kenya.alison@reach-initiative.org			
Raw Data Access Rights					
Raw Data Access	Reason	Person			
Access	Conduct daily centralized checking of data	Kenya Alison Frazer, Data Officer			
Access	GIS: Maps using GIS points	Denis Abi, GIS Specialist			
Preservation					
Where will data be stored for long-term preservation?	☐ IMPACT / REACH Global Cloud / Physical Server	☐	OCHA HDX		
	☒ REACH Country Server	☐	[Other, Specify]		
Data Sharing					
Will the data be shared publicly?	☒ Yes	☐	No, only with mandating agency / body		
Will all data be shared?	☐ Yes	☒	No, only anonymized/ cleaned/ consolidated data will be shared		
	☐ No, [Other, Specify]				
Where will you share the data?	☒ REACH Resource Centre	☐	OCHA HDX		
	☒ Humanitarian Response	☐	[Other, Specify]		
Data protection risk assessment					
Have you completed the Indicators Risk Assessment table below?	☒ Yes	☐	No, no information that potentially allows identification of individuals is to be collected.		
Risk indicator	Type of identification risk	Disclosure implications	Benefits	Class	Required mitigation
Knowledge, attitudes, and perceptions regarding Ebola	Sensitive survey response	May expose personal beliefs, misconceptions, or opinions about health	Supports development of targeted RCCE messaging and community	Medium	Ensure anonymity of responses; report only aggregated findings; limit

		authorities and response activities	engagement strategies		access to raw datasets.
Responsibilities					
Data collection	Senior Assessment Officers (SAO) <i>Joris Gaster</i> <i>Cyrillo Mohinigamu</i> Senior Field Officers (SFO) <i>Diing Kuol Maluk</i> <i>Samuel Marle Musa</i>				
Data cleaning	<i>Kenyi Alison Frazer - kenyi.alison@reach-initiative.org</i>				
Data analysis	<i>Kenyi Alison Frazer - kenyi.alison@reach-initiative.org</i>				
Data sharing/uploading	<i>Kenyi Alison Frazer - kenyi.alison@reach-initiative.org</i>				

8. 8. Monitoring and 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	X Yes
		# of downloads of x product from Relief Web	Country request to HQ		X Yes
		# of downloads of x product from Country level platforms	Country team		☐ Yes
		# of page clicks on x product from REACH global newsletter	Country request to HQ		☐ Yes
		# of page clicks on x product from country newsletter, sendingBlue, bit.ly	Country team		X Yes
		# of visits to x webmap/x dashboard	Country request to HQ		☐ Yes
IMPACT activities contribute to better program implementation and coordination of the	Number of humanitarian organisations utilizing IMPACT services/products	# references in HPC documents (HNO, SRP, Flash appeals, Cluster/sector strategies)	Country team	Reference_log	
		# references in single agency documents			

humanitarian response					
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_Feedback and Usage_Survey template	<i>Informal tracking through feedback from agencies, stakeholders, donor(s), working groups, following output dissemination, presentations</i>
		Perceived usefulness and influence of IMPACT outputs			
	Number of humanitarian documents (HNO, HRP, cluster/agency strategic plans, etc.) directly informed by IMPACT products	Recommendations to strengthen IMPACT programs			
		Perceived capacity of IMPACT staff			
		Perceived quality of outputs/programs			
		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	☐ Yes
		# of organisations/clusters inputting in research design and joint analysis			X Yes
		# of organisations/clusters attending briefings on findings;			X Yes