

Research Terms of Reference

Assessment of Hard-to-Reach Areas (H2R)

SOM1901

Somalia

31/10/2021

V3

REACH Informing
more effective
humanitarian action

1. Executive Summary

Country of intervention	Somalia		
Type of Emergency	<input checked="" 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	Office for the Coordination of Humanitarian Affairs (OCHA), Inter Cluster Coordination Group (ICCG)		
IMPACT Project Code	27ANW 4E5		
Overall Research Timeframe (from research design to final outputs / M&E)	01/05/2020 to 30/04/2022		
Research Timeframe	1. Pilot/ training: 25/11/2021	6. Start output drafting: 15/01/2022	
	2. Start collect data: 30/11/2021	7. Outputs sent for validation: 25/01/2022	
	3. Data collected: 31/12/2021	8. Outputs published: 07/02/2022	
	4. Data analysed: 07/01/2022	9. Final presentation: 15/02/2022	
	5. Data sent for validation: 07/01/2022		
Number of assessments	<input type="checkbox"/> Single assessment (one cycle) <input checked="" type="checkbox"/> Multi assessment (more than one cycle) The assessment will be carried out three times per year (November 2021, April 2022 and August 2022)		
Humanitarian milestones <i>Specify what will the assessment inform and when</i> <i>e.g. The shelter cluster will use this data to draft its Revised Flash Appeal;</i>	Milestone	Deadline	
	<input checked="" type="checkbox"/> Somalia Humanitarian Fund (SHF) Allocations	01/03/2021 and 01/09/2021	
	<input checked="" type="checkbox"/> Humanitarian Needs Overview (HNO)	15/10/2022	
	<input type="checkbox"/> Cluster plan/strategy	__/__/__	
	<input type="checkbox"/> NGO platform plan/strategy	__/__/__	
	Audience type	Dissemination	

Audience Type & Dissemination <i>Specify who will the assessment inform and how you will disseminate to inform the audience</i>	<input checked="" type="checkbox"/> Strategic <input checked="" type="checkbox"/> Programmatic <input type="checkbox"/> Operational <input type="checkbox"/> [Other, Specify]		<input checked="" type="checkbox"/> General Product Mailing (e.g. mail to NGO consortium; HCT participants; Donors) <input type="checkbox"/> Cluster Mailing (Education, Shelter and WASH) and presentation of findings at next cluster meeting <input checked="" 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	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/> No
General Objective	To inform humanitarian planning and operations by providing information on needs, displacement dynamics, and access to services in hard-to-reach settlements in South Central Somalia where physical access and process of humanitarian actors is restricted or impossible due to insecurity.		
Specific Objective(s)	<ul style="list-style-type: none"> • To provide an overview of multi-sectoral needs and vulnerabilities of internally displaced persons (IDPs) and non-displaced populations living in hard-to-reach areas. • To provide up-to-date information on services accessible to households in the hard-to-reach areas to inform advocacy and the humanitarian response. 		
Research Questions	<ul style="list-style-type: none"> • What are the needs and coping strategies of the populations in hard-to-reach areas regarding Food Security and Livelihoods, Health, Shelter/Non-food items, Water, Sanitation and Hygiene, Education and Protection? • What are the factors that contribute to displacement from the hard-to-reach areas? • To which services and types of humanitarian assistance, if any, do populations in hard-to-reach areas have access? • What are the constraints to access to services and assistance? • Where do people living in the hard-to-reach areas access services? 		
Geographic Coverage	Regions of Bakool, Bay, Gedo, Lower Juba, Lower Shabelle, Middle Juba and Middle Shabelle		
Secondary data sources	<ul style="list-style-type: none"> • PRMN (Protection and Return Monitoring Network) • CCCM Cluster settlement verifications • Detailed Site Assessment (DSA) • Joint Multi-Cluster Needs Assessment (JMCNA) • IOM DTM (Displacement Tracking Matrix) • Somalia Water and Land Information (SWALIM) 		
Population(s)	<input type="checkbox"/>	IDPs in camp	<input checked="" type="checkbox"/> IDPs in informal sites

Select all that apply	<input checked="" type="checkbox"/>	IDPs in host communities	<input type="checkbox"/>	IDPs [Other, Specify]
	<input type="checkbox"/>	Refugees in camp	<input type="checkbox"/>	Refugees in informal sites
	<input type="checkbox"/>	Refugees in host communities	<input type="checkbox"/>	Refugees [Other, Specify]
	<input checked="" type="checkbox"/>	Host communities	<input type="checkbox"/>	[Other, Specify]
Data collection tool(s)	<input checked="" type="checkbox"/>	Structured (Quantitative)	<input checked="" type="checkbox"/>	Semi-structured (Qualitative)
	Sampling method		Data collection method	
Structured data collection tool # 1 <i>Select sampling and data collection method and specify target # interviews</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 type="checkbox"/> [Other, Specify]		<input checked="" type="checkbox"/> Key informant interview (Target #): 1200 ¹ (minimum 2 KIs per settlement) <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 #): ____	
Semi-structured data collection tool (s) # 1 <i>Select sampling and data collection method and specify target # interviews</i>	<input checked="" type="checkbox"/> Purposive <input type="checkbox"/> Snowballing <input type="checkbox"/> [Other, Specify]		<input type="checkbox"/> Key informant inter.view (Target #): ____ <input type="checkbox"/> Individual interview (Target #): ____ <input checked="" type="checkbox"/> Focus group discussion: (Target #): 12 sessions (Mogadishu 4 sessions, Baidoa 4 sessions and Kismayo 4 sessions) <input type="checkbox"/> [Other, Specify] (Target #): ____	
Target level of precision if probability sampling	NA		NA	
Data management platform(s)	<input checked="" type="checkbox"/>	IMPACT	<input type="checkbox"/>	UNHCR
	<input type="checkbox"/>	[Other, Specify]		
Expected output type(s)	<input checked="" type="checkbox"/>	Situation overview #: 3	<input type="checkbox"/>	Report #: __
	<input type="checkbox"/>	Presentation (Preliminary findings) #: __	<input checked="" type="checkbox"/>	Presentation (Final) #: 1
	<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: USAID			
	Coordination Framework: NA			
	Partners: OCHA			

2. Rationale

2.1 Background

Somalia's prolonged humanitarian crisis is characterized by ongoing conflicts, climate-related shocks, infectious disease outbreaks and weak social protection mechanisms. Since the beginning of 2020, three additional shocks have contributed

¹ A team of 24 enumerators will be collecting data for 12 days in each of the 359 sites. At a planned rate of 4 interviews per day.

to a deterioration of humanitarian conditions: extensive floods, desert locust infestations, and the COVID-19 pandemic. These compounding shocks have exacerbated humanitarian needs among a population already living under the strain of widespread poverty and decades of armed conflict and insecurity.² The lasting presence of armed groups in particular areas of South-Central Somalia and logistical constraints create gaps in timely information about the needs of the populations in those regions. Whereas the humanitarian organisations can access few urban centres, the biggest parts of those regions, predominantly rural, are hard-to-reach areas.

Decades of conflict, recurrent climate shocks, disease outbreaks and increasing poverty are devastating the people of Somalia. Despite progress in recent years, the compounding impacts of these shocks continue to erode coping strategies and undermine resilience against future crises. Conflict and insecurity have forced hundreds of thousands of people to flee their homes in 2021 and are expected to remain key drivers of displacement in 2022. Conflict-induced shocks exacerbate the humanitarian situation of both IDP and host communities, with increased numbers of children married earlier as a coping strategy. Humanitarian access is hampered by ongoing hostilities and movement and security restrictions.³

The south and central regions host the largest proportion of IDPs; an estimated 1.4 million of the approximately 2.95 million IDPs in Somalia reside in this part of the country. The majority of IDPs were displaced due to drought and conflict/insecurity⁴. In addition, security and logistical constraints limit the data available on population needs in these territories. The overcrowding of IDP sites exacerbates risks of fire, flooding, gender based violence (GBV) and child rights violations, and disease outbreaks/COVID-19 transmission. Such conditions have unequal ramifications on some vulnerable IDP populations, as essential services may be in inaccessible locations or areas perceived as dangerous for some population groups. Hence, the limited facilities and services in the accessible regions could complicate the needs and vulnerabilities.

From a conflict dynamic, non-state armed groups and clan conflict driven, perspective Lower Shabelle is the most complex region in the South West state, according to security expert.⁵ The Lower Shabelle administrative region had the highest number of security incidents in all of Somalia in both 2020 and the first half of 2021, according to Armed Conflict Location and Event Data project (ACLED)⁶; it also had the highest total number of fatalities in 2020 and the second highest total number of fatalities in the first half of 2021. The Lower Shabelle was regarded to be the common region of origin of IDPs living in the IDP sites in Somalia according to the DSA 2021. In Jubaland, 200-liter barrel cost about USD \$14 as water pans which were the main source of water in the area dried up. As a result of the ongoing situation, water is trucked from locations 60 kilometres away for communities in Burgabo village in Jubaland. In Lower Shabelle region of South West State, authorities and partners have reported that a 200-litre barrel of water currently costs around \$4.5, a 20% increase compared to prices in December 2020.⁷ Furthermore, while much of the country is facing atypically dry conditions, riverine areas and some northern coastal areas are still recovering from the impacts of extensive floods and Cyclone Gati (Cyclone Gati made a landfall in Bari region of Puntland on 22 November, affecting 120,000 people across Bari region in Puntland of whom 42,100 people were temporarily displaced. Nine people were killed by the cyclone besides loss of livelihood assets, death of livestock, damaged buildings and infrastructures, damage to farms and fishing equipment).⁸ In the Shabelle and Juba riverine areas in the South, the deyr season rainfall, which starts in late September and ends in December, brought a third consecutive season of heavy rain locally and in the upper river catchments in the Ethiopian highlands that expanded the existing flood extent and caused extensive damage to crops and feeder roads.⁹

² https://reliefweb.int/sites/reliefweb.int/files/resources/20200903_HNO_Somalia.pdf

³ <https://reliefweb.int/report/somalia/2022-somalia-humanitarian-needs-overview>

⁴ https://reliefweb.int/sites/reliefweb.int/files/resources/RB_Situations_Somalia_210831.pdf

⁵ https://www.ecoi.net/en/file/local/2060582/2021_09_EASO_COI_Report_Somalia_Security_situation.pdf

⁶ <https://acleddata.com/dashboard/#/dashboard>

⁷ United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA), Somalia Situation Overview, April 2021. See [here](#).

⁸ [Somalia Cyclone Gati \(As of 13 December 2020\)](#)

⁹ [Consecutive seasons of below-average rainfall likely to lead to widespread Crisis \(IPC Phase 3\) outcomes](#)

From January to August of 2021, the Protection Return Monitoring Network (PRMN) reported conflict as the main driver of displacement, with over 413,000 displacements countrywide. Conflict and insecurity prevail in certain parts of the country, particularly in south and central Somalia, and results in particular protection challenges including: physical attacks and threat to life, arbitrary arrest and detention, kidnapping, sexual assault, child recruitment, amongst others. This situation is exacerbated by the limited availability of basic services, weakened governance, negative social norms, and persistent marginalization.¹⁰

Information gap:

The goal of the assessment is to draw attention to the severity of the needs in hard-to-reach regions, and to demonstrate that if the situation is not monitored, it may deteriorate even worse especially taking into account the limited humanitarian interventions available for those areas. Despite the fact that different humanitarian actors have done ad hoc sectoral assessments in various parts of the South Central regions, research that would give a regular multi-sectoral overview of the humanitarian situation in those areas has so far been lacking. A need for more accurate information from these locations has been expressed by cluster partners, who have urged for more accurate information from these areas to be used for planning and advocacy.

The conflicts/ insecurity and climate shocks tend to be the major drivers for displacement in Somalia. In July 2021, the PRMN reported 43,000 new internal displacements across the nation. Of these, 28,000 were triggered by conflict / insecurity while 13,000 were related to drought and loss of livelihood.¹¹

The Hard-to-Reach (H2R) assessment serves to help address these critical information gaps and assist humanitarian planning in Somalia, REACH monitors need in southern and central Somalia through the assessment of hard-to-reach areas. This assessment provides data and analysis on the humanitarian situation in the settlements located in the 7 target regions of Bay, Bakool, Gedo, Middle Shabelle, Lower Shabelle, Middle Juba and Lower Juba. The selection of the locations where REACH would be conducting the data collection was done based on the operational presence and the fact that Baidoa and Mogadishu host the biggest numbers of IDPs. Because of the magnitude of the displacements that have occurred in Jubbaland State due to clan conflicts and natural shocks, Kismayo has been designated as an additional data collection base for the upcoming round.

2.2 Intended impact

The H2R assessment will happen 3 key times (April, August and December) throughout the year when historically observed high displacements trends within Somalia.¹² The assessment will assist partners and the cluster in maintaining their operations to the greatest extent feasible by providing them with the keys to proper programming. The assessment entails contributing proudly to the following areas:

- Improving understanding of the current situation to inform the humanitarian planning cycles (HPC) and Somalia Humanitarian Fund allocation by providing information from the inaccessible areas of Somalia;
- To help the humanitarian communities with accurate information on when and where to pass humanitarian assistance for those residing in hard-to-reach areas.

¹⁰ <https://reliefweb.int/report/somalia/2022-somalia-humanitarian-needs-overview>

¹¹ UNHCR Somalia PRMN Internal Displacements - July 2021

¹² UN High Commitment for Refugees (UNHCR), Protection and Return Monitoring Network, See dashboard [here](#).

3. Methodology

3.1 Methodology overview

The H2R employed Area of Knowledge (AOK) methodology, which offers settlement-level data on needs to shape the response in a situation where direct household surveys are currently limited or unavailable. The AoK approach consist of identifying key informants (KIs) who can testify about the humanitarian needs of a specific area. These KIs are identified based on their extensive knowledge of the specific area that is being assessed, either because they have been displaced from this area recently or because they travel a lot in this area, or because they still have family or friends residing in the area. This technique is meant to support strategic planning and contribute to a more focused and evidence-based humanitarian response in areas where humanitarian workers cannot go on a regular basis due to logistics and security constraints.

- Structure of the overall assessment

Data collection will occur **three times within a year**, (December 2021, April and August 2022), to provide regular updates about the dynamic humanitarian context. These periods have been identified based on the peak displacement trends of Somalia in the past three years and the assessment aims to support the SHF and HPC timelines (allocations in March and August/September and HNO/HRP publication in October/November).

- Structure of the assessment round

Data will be collected by the enumerator teams in the informal sites¹³ around Baidoa, Kismayo and Mogadishu districts, supervise by one field officer in each location. IDP camps that received new arrivals within the three months, or new IDP settlements (set up in the three months by people who arrived from the hard-to-reach areas) will be identified through ACTED, local authorities, partners (CCCM cluster, IOM DTM), and REACH field networks. A minimum of two and maximum three key informant interviews (KIs) will be conducted at each settlement. The details of the number of target settlement are included in Annex 1.

The enumerators will conduct interviews with KIs, pre-identified by field officers (FOs), through a Kobo questionnaire. These KIs will be selected based on their knowledge of their settlement of origin that must be located in hard-to-reach areas mentioned previously in this document. FOs will make sure to keep an up-to-date contact list of potential KIs and local guides in order to build a strong network at the field level. Data will be collected at the settlement level, i.e the questionnaire relates to site level humanitarian needs, not individual needs. However, there are some household level questions that will be asked to the same KIs.

As part of the data collection cycle, focus group discussions (FGDs) are conducted in order to give a more in-depth knowledge of a dynamic setting as well as to supplement data gathered via the quantitative tool. Field Officers lead FGDs, with two senior enumerators taking notes during the conversation. FGDs are divided into two groups based on gender.

Recent displacement trends in the past four years indicate that people massively displace April – May and September – October; both lie after the dry season ends.¹⁴ The H2R assessment will link the displacement patterns and the data collection periods to effectively allocate the humanitarian responses to the settlements where potential needs exist concerning the people's movements.

3.2 Population of interest

Geographical area assessed: The assessment targets the inaccessible areas of Somalia that are located within the following regions: Bakool, Bay, Gedo, Lower Juba, Lower Shabelle, Middle Juba and Middle Shabelle.

¹³ Site where more than 15 displaced households have settled collectively. Sites not built to accommodate people, but serving that purpose, set up on state-owned or private land/buildings – CCCM Cluster Somalia.

¹⁴ [UNCHR Displacements Monitored by UNHCR Protection and Return Monitoring Network \(PRMN\)](#)

Population assessed: The target populations are IDPs.

Unit of measurement:

- Settlement: Primary focus of the assessment is the settlement level, specifically camp and IDP settlement, of the hard-to-reach areas in south-central Somalia.
- Individual / household: Given that some indicators cannot be collected at the settlement level. Respondent already identified to provide information about settlement in a hard-to-reach area, will also be asked some individual and household-level questions about the situation in the 2 weeks before departure from the hard-to-reach settlement.

3.3 Secondary data review

An initial secondary data review has been undertaken in order to identify hard-to-reach areas and displacements trends over time. In addition to this, secondary data will be used throughout all stages of the research cycle to identify locations that have information gaps, to support in the design of tools, and to triangulate data collected:

- [PRMN](#) (Protection and Return Monitoring Network) is a UNHCR-led project implemented in partnership with NRC which reports on displacements and protection risks and incidents underlying such movements.) This data source is used to monitor the displacements influx within the south central Somalia.
- CCCM Cluster settlement verifications – Camp Coordination and Camp Management (CCCM) monthly site verification led by the CCCM partners to carry out the IDP sites and their population.
- [Detailed Site Assessment \(DSA\)](#) – CCCM led cluster Multi-sectoral assessment that provides the humanitarian community with upto-date information on the location of IDP sites, the conditions and capacity of the sites, and an estimate of the severity of humanitarian needs of residents.
- [Joint Multi-Cluster Needs Assessment \(JMCNA\)](#) -
- [IOM DTM \(Displacement Tracking Matrix\)](#) – It provides critical multi-layered information on the mobility, vulnerabilities, and needs of displaced and mobile populations. For the purpose of this assessment, the DTM Somalia data will be used to track population movements and triangulate on the data collected.
- [Somalia Water and Land Information \(SWALIM\)](#) – collects data on improvements in flood warnings and flood management, as well as the assess rainfall, river flow and groundwater supplies.
- Triangulation of Area of Knowledge data in analysis and product drafting: Data produced by OCHA,FSNAU and specific clusters, when available, will be used to verify and confirm findings produced.

3.4 Primary Data Collection

Each assessment round will comprise of 12 weeks dedicated to:

- Field Officers(FOs) training: 2 full days for the training for the upcoming round November 2021 and the subsequent rounds to fully accommodate the new enumerators conducted by the Field Officers,
- Data collection: 4 weeks of daily data collection.
- Data cleaning: Daily data checking and cleaning will be conducted by the field and assessment team. Simultaneously, approximately 5 days will be allocated for spatial verification by the GIS/Data team.

Quantitative tools

The existing quantitative tool will be updated slightly based on the lessons learnt from the past rounds. This tool has been

validated by the humanitarian partners operating in Somalia and has been based on pre-existing multi-sectoral needs assessment (MSNA) tools already employed by REACH Somalia.

Assessment tools will include questions relating to the following clusters: Food Security and Livelihoods, Health, Nutrition, Shelter / NFI, WASH, Education, and Protection including Child protection and Gender based violence (GBV). Additionally, questions on access and communication will be included.

The set of assessment tools for quantitative triannual data collection, as outlined previously, will comprise of a primary face-to-face data collection tool (see section 1 of the Data Analysis Plan). The H2R assessment will follow the IMPACT Standard Operating Procedures (SOPs) for the data collection during COVID-19.¹⁵

Qualitative tools

The quantitative survey tool will be complemented by semi-structured Focus Groups Discussions (FGDs) aiming to aid interpretation and provide more information on the context in the target locations. The FGD topics will be based on the information from the quantitative data to provide a wider understanding of the community's needs. The overall objective of FGD is to deepen the REACH team's understanding of the context and provide a narrative text to quantitative indicators. The outputs from the FGDs will feed into the humanitarian situation overview and will be key in identifying the possible needs to triangulate the quantitative data. It also plays a key role in deeply understanding the intensity of accessibility and trying to figure out possible routes for humanitarian assistance. Throughout the data collection period, there will be a total of 12 focus group discussions, with four focus group discussions each data collection point. The FGDs will be arranged into female and male groups, with the goal of each FGD consisting of about 8 participants from the H2R settlements who met the quantitative tool selection requirements.

The FGDs participants were randomly selected from the KI participants in each data collection point. The FGDs will be carried out in Baidoa, Mogadishu and Kismayo districts in the following manner:

Location	Number of FGDs	Nb of FGD for male	Nb. Of FGD for female
Baidoa	4	2	2
Kismayo	4	2	2
Mogadishu	4	2	2
Total	12	6	6

Table 1 Number of FGD by location and gender

The FGDs will be disaggregated by gender. FOs will lead the data collection and organize the venue that the discussion will happen. Enumerators will be in charge of taking notes during the discussions.

Sampling

Given that physical access to the target locations is limited and there is no possibility of drawing a representative sample, purposive sampling will be adopted for all data collection methods, namely the Key Informant Interviews and the Focus group discussions. At each settlement, a minimum of two and a maximum of three key informant interviews (KIs) will be performed with key informant participants. In total, the assessment collected more than 1200 KII altogether.

¹⁵ [SOPs for Data Collection during COVID-19](#)

During each round, we will interview a different KII, and the selection criteria, which will be included in the tool, will automatically exclude them if they do not meet the above requirements. The respondents were chosen based on their knowledge of the particular targeted settlements, which were situated in inaccessible areas. The major selection criteria are as follows:

Survey participants are the key informants (internally displaced persons, or IDPs) that meet the selection criteria of:

- 1) Being newly displaced from the hard-to-reach settlement (≤ 3 months) or having visited the hard-to-reach settlement in the last 3 months;

Additionally, all key informants are supposed to be the ones who:

- 2) Lived in the hard-to-reach settlement on which they are reporting for more than 3 months: given that some of the key informants may have been through more than one round of displacement, it is essential to only include people who have sufficient knowledge of the settlement;
- 3) Come from a hard-to-reach settlement where at least some inhabitants still remain. Since the assessment of hard-to-reach areas aims to fill in gaps in understanding the humanitarian context, targeting settlements that are no longer inhabited would not contribute to this.

Since humanitarian organisations have a high demand for hard assessment reports at the district level, the H2R assessment employed 5 percent criteria of the recognized settlements within the target district to report the data at the district level. Results were weighted based on the total number of settlements in each district once they have been tallied up throughout the analysis.

3.5 Data Processing & Analysis

Data quality and cleaning

IMPACT data cleaning minimum standards checklist will be followed.¹⁶ Detailed data cleaning procedures will be outlined in the data cleaning Standard Operating procedures in the Annex 2.

Quantitative data: Every day, the surveys are uploaded on the REACH/IMPACT Kobo-server and downloaded by the Database Officer (DO) at the end of data collection. The DO anonymised and subsequently checked the dataset before it goes through to Field and Assessment Officers who will be conducting data checking and cleaning will log changes and deletions. The Assessment Officer will oversee and do the data cleaning templates for the Field Officers, who are in turn responsible for data checking and the supervision of field teams. The following protocols will be in place to ensure the quality of data collected:

- Daily data cleaning by Field Officers, who identify outliers, anomalies, and logical inconsistencies, and give regular feedback to enumerators through daily briefings and ad-hoc training. Data points that cannot be resolved through follow-ups with the enumerators or respondents will be deleted. If survey records have more than three outliers that cannot be checked, the entire record is deleted from the dataset. Also, if the duration of the survey taken is very long or short and the enumerators couldn't provide concise and clear justification, the entire survey will be deleted.
- Weekly data cleaning will be conducted by the Assessment Officer, who reviews data cleaning conducted by Field Officers and provides additional feedback to the data collection teams in regular communication, briefings, and training.

¹⁶ [Data Cleaning Minimum Standards Checklist](#)

- The GIS and Database Officers do data aggregation and spatial verification, who provide feedback to ascertain settlement coverage.

Qualitative data: transcripts of the FGD discussions will be translated into English from Somali. The transcripts of the FGD will be anonymised, and a data saturation grid will be developed to analyse the information gathered. Cross-case analysis will then be applied for the topics under consideration.

Data Analysis and Aggregation

Quantitative data: Data collected with structured tools will be aggregated at the following levels:

- Settlement.
- District

The indicators reported with the most frequent responses by the percentage of assessed settlements data first will have to be aggregated to the settlement level. Given that more than one quantitative survey will be collected for a given settlement, data from key informants reporting on the same settlement is aggregated to the settlement level using an R script which employs the following logic to calculate settlement-level responses:

Aggregation of KI responses to settlement level:

- **Single response questions:** The majority of survey questions only allow a KI to select a single response. For this type of question, mode aggregation is used, whereby "I don't know" responses are dropped and then the most commonly reported response is taken for each settlement. Should several KIs from the same settlement provide different responses to the same question, the result is reported as "No consensus".
- **Multiple response questions:** Mode aggregation is used, whereby "I don't know" responses are dropped and then all other responses reported by the KIs are presented.

Outputs

The main outputs to be produced from the Assessment of Hard-to-reach Areas are humanitarian situation overviews that will summarise access to basic services for populations in the assessed settlements. The situation overviews will be produced on a triannual basis and will provide an overview of access to services trends and needs in each sector (FSL/Protection/WASH/Education/Shelter/NFI/Communication). The situation overview will present key multi-sectoral indicators and severity maps for each sector.

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?	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)?	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

<i>Task Description</i>	<i>Responsible</i>	<i>Accountable</i>	<i>Consulted</i>	<i>Informed</i>
<i>Research design</i>	REACH Senior Assessment Officer (SAO)	REACH Senior Assessment Officer (SAO), REACH Research Manager (RM)	REACH Country Coordinator (CC) IMPACT HQ Research Design and Data Unit (RDDU)	OCHA Somalia ICCG
<i>Supervising data collection</i>	REACH Field Officers (FOs)	REACH SAO	REACH Senior Database Officer (SDO), REACH RM	OCHA Somalia, ICCG
<i>Data processing (checking, cleaning)</i>	REACH SAO, FOs, GIS Officer (GISO) REACH SDO	REACH SAO	REACH RM	OCHA Somalia, ICCG
<i>Data analysis</i>	REACH SAO REACH GISO REACH SDO	REACH SAO	REACH CC REACH RM, IMPACT HQ RDDU	OCHA Somalia, ICCG
<i>Output production</i>	REACH SAO	REACH SAO	OCHA Somalia REACH CC REACH RM IMPACT HQ Reporting Unit	ICCG
<i>Dissemination</i>	REACH SAO	REACH SAO	REACH CC REACH RM HQ Research Department - Communication	OCHA Somalia ICCG

Monitoring & Evaluation	REACH SAO	REACH SAO	REACH CC REACH RM IMPACT HQ Research Department
Lessons learned	REACH SAO, FOs, GISO, SDO, RM	REACH RM	REACH CC IMPACT HQ Research Department

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

1: RESEARCH QUESTIONS ADDRESSED WITH STRUCTURED TOOL(S)

Research questions	IN #	Data collection method	Indicator group / sector	Indicator Variable /	Questionnaire Question	Instructions	Questionnaire Responses	Data collection level	Sampling	Maps planned?
N/A	A.1	KI Interview	Key characteristics	base of the data collection	Please specify your (enumerator) base:			Community level	Purposive	
	A.2	KI Interview	Key characteristics	Code of the enumerator	Please specify your (enumerator) code:		ETH1 - ETH 14	NA	NA	
	A.3	KI Interview	Key characteristics	Name of the IDP site	What is the name of the IDP site where you are collecting data?	Select one	Mogadishu, Kismayo and Baidoa	NA	NA	
	A.4	KI Interview	Key characteristics	consent	Hi, my name is _____. I work for REACH, an initiative of ACTED INGO. We are currently conducting a survey to understand remote locations that have little humanitarian access. We would like to know more about the settlement in which you lived before moving to location	Select one	Yes, No	NA	NA	

					<p>where you are staying currently. We also may ask you a few questions about yourself personally. The survey will take about 20 to 25 minutes to complete. Any information that you provide will be kept strictly confidential. This is voluntary and you can choose not to answer any or all of the questions if you want; you may also choose to quit at any point. However, we hope that you will participate since your views are important. Responses are not directly tied to any form of humanitarian assistance and answers given in this interview will not directly affect any status as a beneficiary or non-beneficiary. Do you have any questions? May I begin now?</p>					
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	A.5	KI Interview	Key characteristics	COVID-19 awareness to community	<p>As a humanitarian agency, we would like to inform you about current pandemic of coronavirus infection. The virus is highly contagious and spreads person to person. You can get infected through handshake, hug or standing very close to an infected person (less than 1 meter), and also through touching the surfaces that were touched by someone who is sick, and then putting hands on your face and eyes.</p> <p>The symptoms of disease include fever, cough, shortness of breath, and breathing difficulties.</p> <p>You can protect yourself and help prevent spreading the virus to others if you:</p> <p>Wash your hands regularly for 20</p>	Note	Note			
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				<p>seconds, with soap and water Cover your nose and mouth with a disposable tissue or flexed elbow when you cough or sneeze Avoid close contact (1 meter) with people who are unwell Stay home and self-isolate from other people if you feel unwell and advise people with symptoms of disease to do so Don't touch your eyes, nose, or mouth if your hands are not clean Try as much as possible to use contactless payment methods and limit the use of paper money. Also, wash your hands thoroughly each time after you touch the money or any other surface which is exposed.</p> <p>Please note that using medical masks alone does not provide sufficient level of</p>						
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					protection. They can only be effective if combined with frequent hand cleaning with soap and water, and only if single-use masks are disposed after each use.					
	A.6	KI Interview	Key characteristics	Gender of the respondent	What is the key informant's gender?			Household	Purposive	
	A.7	KI Interview	Key characteristics	Age of the respondent	What is the key informant's age?	select one	18-49 ,50-60, 61+	Household	Purposive	
	A.8	KI Interview	Key characteristics	Name of the respondent	What is the respondent's name? (cannot be left blank)	text	text	Household	Purposive	
	A.9	KI Interview	Key characteristics	Phone number of the respondent	What is the respondent's phone number?	Integer	Integer	Household	Purposive	
	A.10	KI Interview	Key characteristics	Declined consent note	If the respondent has declined consent please end the assessment and find another KI to interview					
What are the factors that contribute to displacement	B.1	KI Interview	Displacement	% of settlements reporting people were left behind	When your household was moving out of the settlement, did you leave behind any members?	Select one	Yes No	Household	Purposive	No

from the H2R areas?	B.2	KI Interview	Displacement	Top 3 population groups stayed in the settlement of origin	Who from your household stayed in your settlement of origin?	Select multiple	Girls 0 - 11 Boys 0 - 11 Adolescent girls 12-17 Adolescent boys 12-17 Adult women (18-59) Adult men (18-59) Elderly women (60+) Elderly men (60+)	Household	Purposive	No
	B.3	KI Interview	Displacement	% of settlements reporting person with disabilities left behind	Among those members of your household who remained in the settlement, are there any people with difficulties seeing, hearing or moving around?	Select one	Yes No	Household	Purposive	No
	B.4	KI Interview	Displacement	Top 3 primary reasons people moved to the current place	What are the reasons why your <u>family household</u> moved to the current place of stay?	Select multiple	Access to water Access to food Better security situation Presence of jobs Availability of shelters Better access to services None No response or I don't want to answer Don't know Other (please specify)	Household	Purposive	No
	B.5	KI Interview	Displacement	% of settlements by reported proportion of people now living in the	in the last 3 months, what proportion of the total population now living in the your settlement of origin were people coming	Select one	There are no people coming from a different settlement within Somalia in the settlement (IDPs) Around half	Settlement	Purposive	No

				settlement from the settlement of origin in the past 3 months	from a different settlement within Somalia (IDPs)		Less than half (few or some) More than half (most) All Don't know			
	B.6	KI Interview	Displacement	% of settlements reporting people from other part of country now live in H2R settlement	Did any people from a different settlement within Somalia move permanently to your settlement of origin in the past 3 months?	Select one	Yes No Do not know	Settlement	Purposive	No
	B.7	KI Interview	Displacement	% of settlements reporting know where people displaced	Do you know where MOST people from other settlement of Somalia who arrived in the past 3 months to live in your settlement of origin came from?	Select one	Yes No	Settlement	Purposive	No
	B.8	KI Interview	Displacement	Top region from the people in th past 3 months	If yes (B.7), what REGION did MOST of those people arrive from in the past 3 months?	Select one	List of regions	Settlement	Purposive	No
	B.9	KI Interview	Displacement	Top district from the people in th past 3 months	If yes (B.7), from what district were those who moved permanently to your settlement of origin in the past 3 months?	Select one	List of districts	Settlement	Purposive	Yes
	B.10	KI Interview	Displacement	Top 3 reasons people moved to settlement	What were the main reasons why most of the IDPs decided to move to your	Select multiple	Access to water Access to food Better security situation Presence of jobs	Settlement	Purposive	No

					settlement of origin in the past 3 months?		Availability of shelters Better access to services No response or I don't want to answer Don't know Other (please specify)			
	B.11	KI Interview	Displacement	Top 3 reasons for living the area of origin	What are the reasons why most people ORIGINALLY FROM the your settlement of origin moved out in the past 3 months?	Select multiple	Drought Flooding Conflict Lack of jobs Evictions No access to services No response or I don't want to answer Locust Don't know Other (please specify)	Settlement	Purposive	No
	B.12	KI Interview	Displacement	Top 3 conditions for people to return area of origin	What would be the necessary conditions for people to return to your settlement of origin in the coming 3 months?	Select multiple	Security, humanitarian assistance, economic opportunity, improvement of basic services, reconstruction of shelter, Other (please specify)	Settlement	Purposive	No
What are the needs and coping strategies of the populations in H2R areas	C.1	HH Interview	Food security and livelihood	% of settlements reporting accessing functional market	in the past 3 months, were people from your settlement of origin accessing any functional market?	Select one	Yes, at all times Yes, but access limited to some days No access Don't know	Settlement	Purposive	Yes

regarding Food Security? To which Food services and types of humanitarian assistance, if any, do populations in H2R areas have access? What are the constraints to access to Food and assistance?	C.2	HH Interview	Food security and livelihood	Top 3 means of transportation to reach accessible markets around the settlements	How people were reaching the accessible markets in your settlement of origin?	Select one	private - car, motorcycle, Animals, taking a ride (neighbors, friends, family) public transport - bus, motorcycle, mini buses Walk	Settlement	Purposive	No
	C.3	HH Interview	Food security and livelihood	Top 3 reasons why people could not access markets	What were the reasons people were not accessing market in the past 3 months?	Select multiple	Security risks Market too far No items needed at the market No cash to buy goods Being disabled Insufficient quality of goods Road Closed Concerns about contracting or transmitting the coronavirus infection Other (please specify)	Settlement	Purposive	No
	C.4	HH Interview	Food security and livelihood	Top region where the market to which most people in the settlement have been going in the past 3 months	What region is the market to which MOST people from your settlement of origin have been going to in the past 3 months located?	Select one	List of regions	Settlement	Purposive	No
	C.5	HH Interview	Food security and livelihood	Top district where the market to which most people in the settlement	What district is the market to which MOST people from your settlement of origin have been going	Select one	List of districts	Settlement	Purposive	No

				have been going in the past 3 months	to in the past 3 months located?					
	C.6	HH Interview	Food security and livelihood	% of settlements reporting settlement were markets is located	What is the name of the settlement where the market is located?	Select one	List of settlements	Settlement	Purposive	No
	C.7	HH Interview	Food security and livelihood	% of settlements reporting settlement were markets is located	What is the name of the closest settlement to the one where the market is located?	Select one	List of settlements	Settlement	Purposive	No
	C.8	HH Interview	Food security and livelihood	% of settlements by time taken for most households to walk to functional markets	How long do people from your settlement of origin need to walk in order to access a functional market?	Select one	Under 30 minutes 30 minutes to less than 1 hour One hour to less than half a day Half a day More than half a day Don't know	Settlement	Purposive	No
	C.9	HH Interview	Food security and livelihood	Top 3 items available in the markets in the past 3 months	Have the following things been available in the past 3 months in the market where the majority of population goes from your settlement of origin?	Select multiple	Food Tools for farming and seeds Livestock Fuel for cooking Construction materials Clothes and materials for sewing Shoes Soap Jerry cans	Settlement	Purposive	No

							Womens' menstrual hygiene materials Mosquito nets Don't know			
	C.10	HH Interview	Food security and livelihood	% of settlements reporting skipping 2 or more meals due to a lack of food	in the last 3 months, did MOST people in your settlement of origin have to skip 2 or more meals a day?	Select one	Yes No Do not know	Settlement	Purposive	No
	C.11	HH Interview	Food security and livelihood	% of settlements reporting improved or worsened access to food in comparison to previous month	Compared to previous month, has access to food in your settlement of origin improved, worsened or remained the same?	Select one	Worsened Improved Remained the same Don't know	Settlement	Purposive	No
	C.12	HH Interview	Food security and livelihood	Top 3 reasons people could not access enough food	in the last 3 months, what were the main reasons people couldn't access enough food in your settlement of origin?	Select multiple	Unsafe to access land; not enough land; crops destroyed by flooding; crops destroyed by pest; lack of rain; crops destroyed by conflict; cultivation disrupted by displacement; growing season too short; crops stolen; no livestock; no food distribution; no market; prices too high; lack of fishing nets; no reason, I don't know or don't want to answer; other	Settlement	Purposive	No

	C.13	HH Interview	Food security and livelihood	Top 3 sources of food in the last 3 months	% of settlements reporting skipping 2 or more E36	Select one	Own production (cultivation, livestock) Foraged for wild foods (including hunting, fishing) Bought with cash Given by family or friends living in another settlement Received food assistance from NGOs Don't know Other (please specify)	Settlement	Purposive	No
	C.14	HH Interview	Food security and livelihood	% of settlements reporting coping due to a lack of food	in the last 3 months, when there was not enough food in your settlement of origin, what did ANY people do to cope with the lack of food?	Select multiple	Access to food has been sufficient in the past month Borrow food from others Eat wild foods not commonly a part of diet Limit portion sizes Part of family skips meals so others can eat Reduce number of meals eaten in a day Skip entire days without eating Buy cheaper food No response or I don't want to answer Don't know Other (please specify)	Settlement	Purposive	No
	C.15	HH Interview	Food security and livelihood	Top 3 activities people in the settlement	in the last 3 months, which of the following activities did people in	Select multiple	Farming Livestock produce Contractual work	Settlement	Purposive	No

				engaged in the past 3 months	your settlement of origin mainly engage in to support their families?		Business Day labour Receiving money from relatives or friends outside of the settlement Receiving humanitarian assistance Rent of land or property Begging None Don't know Other (please specify)			
	C.16	HH Interview	Food security and livelihood	% of settlements reporting food price change	Did prices of food change in places where people from your settlement of origin were buying it, compared to last month?	Select one	Prices increased Prices decreased Prices did not change Don't know People from settlement usually don't buy any food from anywhere	Settlement	Purposive	No
	C.17	HH Interview	Food security and livelihood	% of settlements reporting malnourished people	in the past 3 months, which part of people living in the settlement looked this way? (SHOW PICTURE TO THE RESPONENT)	Select one	None Don't know Less than half Half More than half All	Settlement	Purposive	No
	C.18	HH Interview	Food security and livelihood	Top 3 main source of income in the past 12 months	What were your household's main sources of income/household financial support in the past 12 months/1 year?	Select multiple	1. Salaried work 2. Casual or daily labour 3. Income from own business or commerce 4. Government social benefits or assistance 5. Remittances 6. Support from family and friends (not	Household	Purposive	No

							including remittances) 7. Humanitarian assistance 8. Charitable donations (not including humanitarian assistance) 9. Other (please specify)			
	C.19	HH Interview	Food security and livelihood	% of households reporting decline of income in the past 30 days	In the last 30 days, has there been an overall decline in your household income?	Select one	Yes No Do not know	Household	Purposive	No
	C.20	HH Interview	Food security and livelihood	% of households reporting decline of income in the past 30 days	If yes, approximately how much lower is your MONTHLY total household income currently?	Integer	Integer	Household	Purposive	No
	C.21	HH Interview	Food security and livelihood	% of households reporting average cost for a person to reach to a market	How much would it cost for the person to reach the market in Somali Shillings?	Integer	Integer	Household	Purposive	No
What are the needs and coping strategies of the populations in H2R areas regarding	D.1	HH Interview	Health	% of settlements reporting people in the settlements who access health services	in the last 3 months, were people from your settlement of origin able to access ANY health services?	Select one	Yes No Do not know	Settlement	Purposive	Yes

Healthcare? To which Healthcare and types of humanitarian assistance, if any, do populations in H2R areas have access? What are the constraints to access to healthcare and assistance?	D.2	HH Interview	Health	Top 3 health services available to people	in the last 3 months, what health services have been available to people from your settlement of origin?	Select multiple	None Clinic Mobile clinic Drugstore Hospital Healer First aid post Individual practitioner Midwife Don't know Other (please specify)	Settlement	Purposive	No
	D.3	HH Interview	Health	% of settlements by time taken for most households to walk to closest functional clinic or hospital	in the last 3 months, how long did it take for MOST people to access the closest functional clinic or hospital FROM your settlement of origin BY WALKING?	Select one	Under 30 minutes 30 minutes to less than 1 hour One hour to less than half a day Half a day More than half a day Don't know	Settlement	Purposive	No
	D.4	HH Interview	Health	% of settlements reporting people in the specific groups who were not able to access the health services	Do you know ANY of the groups that have not been able to access the healthcare services when needed from the your settlement of origin in the past 3 months?	Select one	Boys under 18 Girls under 18 Men over 18 years old Women over 18 years old Men over 60 Women over 60 None Don't know Other (please specify)	Settlement	Purposive	No
	D.5	HH Interview	Health	Top region where the clinic to which most people in the settlement have been going in	What region is the clinic to which MOST people from your settlement of origin go located?	Select one	List of regions	Settlement	Purposive	No

				the past 3 months						
	D.6	HH Interview	Health	Top district where the clinic to which most people in the settlement have been going in the past 3 months	What district is the clinic to which MOST people from your settlement of origin go located?	Select one	List of districts	Settlement	Purposive	No
	D.7	HH Interview	Health	% of settlements reporting settlement were clinic is located	What settlement is the clinic to which MOST people from your settlement of origin go located?	Select one	List of settlements	Settlement	Purposive	No
	D.8	HH Interview	Health	% of settlements reporting settlement were clinic is located	What is the name of the closest settlement?	Select one	List of settlements	Settlement	Purposive	No
	D.9	HH Interview	Health	% of settlements by most common barriers to accessing health services	in the last 3 months, what have been the most common barriers accessing health care services from your settlement of origin?	Select one	Distance Security Cost of services Absence of qualified personnel Being disabled Absence of Female Personnel None Don't know Other (please specify)	Settlement	Purposive	No

	D.10	HH Interview	Health	% of settlements by how often people visit healthcare workers	How often did any healthcare workers (community health worker, nurse, doctor or midwife) provide basic health services (examination, first aid, health education) WITHIN your settlement of origin in the last 3 months?	Select one	Once a week or more often 2 or 3 times a month Once a month Less frequently than once a month There were no healthcare workers working in the settlement in the last month Don't know	Settlement	Purposive	No
What are the needs and coping strategies of the populations in H2R areas regarding protection? To which protection services and types of humanitarian assistance, if any, do populations in H2R areas have access? What are the constraints to access to	E.1	HH Interview	Protection	% of settlements reporting good relationship between IDPs and host community	How would you describe the relations between IDPs and host community in your settlement of origin in the past 3 months?	Select one	Very bad Bad Good Very good No response or I don't want to answer Don't know	Settlement	Purposive	No
	E.2	HH Interview	Protection	% of settlements reporting missing child	Do you know if ANY of the boys and girls under 18 went missing in your settlement of origin in the last 3 months?	Select one	Yes No Do not know	Settlement	Purposive	No
	E.3	HH Interview	Protection	% of settlements reporting unaccompanied children in the settlements	in the last 3 months, were there ANY boys and girls under 18 without father, mother or other relatives who support them living in your settlement of origin?	Select multiple	Yes No Do not know	Settlement	Purposive	No

protection and assistance?	E.4	HH Interview	Protection	Top 3 places for boys and girls under 18 without family or relatives used to live in the past 3 months	If yes (E.3), in the last 3 months, where did MOST of the boys and girls under 18 without father, mother or other relatives who support them live in your settlement of origin?	Select multiple	Living with other families in the community (with neighbors or other community members) Kafala Formal/ governmental foster care (state-run orphanage) Living on their own or with other unaccompanied boys and girls under 18 I don't know Other (please specify)	Settlement	Purposive	No
	E.5	HH Interview	Protection	Top 3 places for boys and girls under 18 without family or relatives used to live in the past 3 months	If yes (E.3), what were the places where MOST of the boys and girls under 18 without father, mother or other relatives who support them lived in your settlement of origin?	Select multiple	In the houses In the street At the workplace I don't know Other (please specify)	Settlement	Purposive	No
	E.6	HH Interview	Protection	Top 3 protection services for boys and girls under 18 were available	If yes (E.3), which protection services for boys and girls under 18 were available in the last 3 months in your settlement of origin?	Select multiple	None Family tracing / reunification of children separated from families Alternative care arrangements for children without their parents (foster home, state-run orphanage, kinship care) Referral services for children (services that	Settlement	Purposive	No

							provide information about the available types of support for the children) Psychosocial support for children Social workers working with children I don't know Other (please specify)			
	E.7	HH Interview	Protection	Top 3 causes of conflict in the settlement in the past 3 months	in the last 3 months, what were the causes of MOST disputes in your settlement of origin?	Select multiple	Land dispute Food access dispute Livestock access dispute Water access dispute Family dispute Access to work Access to humanitarian aid Shelter dispute Clan dispute Tax dispute Property dispute None No response or I don't want to answer Don't know Other (please specify)	Settlement	Purposive	No
	E.8	HH Interview	Protection	% of settlements reporting people evicted in the past 3 months	in the last 3 months, were ANY people evicted in your settlement of origin?	Select one	Yes No Do not know Do not want to answer	Settlement	Purposive	No

	E.9	HH Interview	Protection	% of settlements reporting people had no tenure agreements	Do you know ANY cases when people from the settlement had no tenure agreements when they did not own land they were using?	Select multiple	Yes No Do not know	Settlement	Purposive	No
	E.10	HH Interview	Protection	% of settlements reporting form of tenure agreements people who did not own their land	What is the form of tenure agreements MOST people who did not own their land in your settlement of origin had in the last 3 months?	Select one	Oral Written None Don't know Other	Settlement	Purposive	No
	E.11	HH Interview	Protection	% of settlements reporting people able to leave and return safely in the settlements in the past 3 months	in the last 3 months, were people able to leave your settlement of origin and return safely?	Select one	Yes No Do not know	Settlement	Purposive	No
	E.12	HH Interview	Protection	% of settlements reporting people have been able to move safely around the settlement during the day	in the past 3 months, have people been able to move safely around the settlement during the day?	Select one	Yes No Do not know	Settlement	Purposive	No

	E.13	HH Interview	Protection	% of settlements reporting people have been able to move safely around the settlement during the night	in the past 3 months, have people been able to move safely around the settlement during the night?	Select one	Yes No Do not know	Settlement	Purposive	No
	E.14	HH Interview	Protection	Top 3 incidents happened in the settlements in the past 3 months	in the last 3 months, did you hear about any of the following types of incidents that happened in your settlement of origin?	Select multiple	Conflict within the settlement Sexual violence Abduction Theft Unofficial tax collection Conflict with people who do not live in the settlement UXO Airstrikes including with people or livestock None No response or I don't want to answer Don't know Other (please specify)	Settlement	Purposive	No
	E.15	HH Interview	Protection	% of settlements reporting evidence of explosive material	Is there ANY evidence of explosive material in your settlement of origin? (e.g. UXO, dynamite)	Select one	Select one Yes No Do not know	Settlement	Purposive	No

	E.16	HH Interview	Protection	% of settlements reporting people were harmed by the explosive material	If yes (E.15), Do you know, if ANY people were harmed/killed by the explosive material in your settlement of origin?	Select one	Select one Yes No Do not know	Settlement	Purposive	No
	E.17	HH Interview	Protection	Top 3 places for security incidents in the past 3 months	Where did the security incidents happen in the past 3 months?	Select multiple	In shelters Water points Latrines Bathing areas Markets Schools Clinics Humanitarian aid distribution points On the road Checkpoints In the field Don't know Other (please specify)	Settlement	Purposive	No
	E.18	HH Interview	Protection	Top 3 conflicts mediators in the past 3 months	If conflict happened, which of the following groups served as mediators in the past 3 months?	Select multiple	Community leaders / elders Clan leaders Local NGO/INGO/UN Health centres/staff Gatekeepers Local authorities Religious leaders None No response or I don't want to answer Don't know Other (please specify)	Settlement	Purposive	No

	E.19	HH Interview	Protection	Top 3 security incidents in the past 3 months in the settlements	in the last 3 months, did you hear of ANY of the following incidents that happened to people when they were trying to move out of the settlement?	Select multiple	Tax to leave the settlement Sexual violence Family separation Remaining relatives are targeted Loss of property Killing Physical injury None No response or I don't want to answer Don't know Other (please specify)	Settlement	Purposive	No
	E.20	HH Interview	Protection	Top 3 places were women in the settlement avoid for safety and security concerns	in the last 3 months, which places, if any, were women in your settlement of origin trying to avoid for safety and security concerns?	Select multiple	Markets Roads outside the settlement Checkpoints Field Latrines Water points No response, or I don't want to answer None I don't know Other	Settlement	Purposive	No
	E.21	HH Interview	Protection	Top 3 violences happened to women in the settlement in the past 3 months	in the last 3 months, did you hear about the following things that happened to ANY women in your settlement of origin?	Select multiple	Sexual violence Physical violence (e.g. beating) Killing Marriage of a girl under 18 years old No response, or I don't want to answer None	Settlement	Purposive	No

							I don't know Other (please specify)			
	E.22	HH Interview	Protection	Top 3 services available to women	in the last 3 months, were any of those services available to women from your settlement of origin?		Treatment for rape survivors Psycho-social support Treatment for physical injuries due to GBV Legal aid and support Shelters for the victims of physical abuse No response, or I don't want to answer None I don't know Other (please specify)	Settlement	Purposive	No
What are the needs and coping strategies of the populations in H2R areas regarding Shelter/Non-food items? What are the constraints to access to services and assistance?	F.1	KI Interview	Shelter and NFI	% of settlements reporting most common shelter type used in the settlements	in the last 3 months, WHAT was the MOST COMMON shelter type used by the population in your settlement of origin? (Show pictures)	Select one	Permanent structure (e.g. brick, metal roof) Tent Bul Abandoned building Community building (mosque, school, hospital) Dwelling hut with thatched roof No shelter (sleeping in the open) Don't know Other (please specify)	Settlement	Purposive	No
	F.2	HH Interview	Shelter and NFI	% of settlements reporting people were sleeping in the	Do you know if ANY people were sleeping in the open in your settlement of origin in the last 3 months?	Select one	Yes No Do not know	Settlement	Purposive	No

				open air in the past 3 months						
	F.3	HH Interview	Shelter and NFI	Top 3 reasons why shelters were damaged or destroyed in the past 3 months	If ANY shelters were destroyed or significantly damaged in your settlement of origin in the last 3 months, what was the MAIN reason?	Select one	Flooding Conflict / looting Fire There were no shelters destroyed or significantly damaged in the last month Don't know Other (please specify)	Settlement	Purposive	Yes
	F.4	HH Interview	Shelter and NFI	% of settlements by proportion of shelter destroyed in the last 3 months	in the last 3 months, how many shelters were destroyed and not rebuilt in your settlement of origin?	Select one	Less than half (few or some) Around half More than half (most) All Don't know	Settlement	Purposive	No
	F.5	HH Interview	Shelter and NFI	% of settlements reporting the main reason the destroyed shelters were not built	in the last 3 months, what was the MAIN reason the destroyed shelters were not rebuilt in your settlement of origin?	Select one	Building materials unavailable in the settlement No money to buy materials Too dangerous to travel to the market Necessary materials unavailable at the market People whose shelters were destroyed moved away No response or I don't want to answer	Settlement	Purposive	No

							Don't know Other (please specify)			
	F.6	HH Interview	Shelter and NFI	% of settlements reporting NFIs price change	Did prices of NFIs change in places where people from your settlement of origin were buying them, compared to last month?	Select one	Prices increased Prices decreased Prices did not change Don't know People from settlement usually don't buy any NFIs from anywhere	Settlement	Purposive	No
What are the needs and coping strategies of the populations in H2R areas regarding Water, Sanitation and Hygiene? To which WASH and types of humanitarian assistance, if any, do populations in H2R areas have access? What are the constraints to access to WASH and assistance?	G.1	KI Interview	WASH	% of settlements by reported main source for drinking water in the settlements in the past 3 months	in the last 3 months, what was the MAIN source of water for drinking for people in your settlement of origin?	Select one	Water kiosk Vendors or shop Piped system Protected well with hand pump Protected well w/o hand pump Unprotected well Berkad River / pond/earth water pan Water tank and tap Water trucking Borehole with submersible pump Other (please specify)	Settlement	Purposive	No
	G.2	KI Interview	WASH	Top 3 people responsible water fetching in the settlement	in the last 3 months, who was responsible THE MOST for fetching water in your settlement of origin?	Select multiple	Boys under 18 Girls under 18 Men over 18 years old Women over 18 years old Men over 60 Women over 60 None	Settlement	Purposive	No

							Don't know Other (please specify)			
	G.3	KI Interview	WASH	% of settlements reporting disabled people participate fetching water	Were any of those people fetching water disabled? (Having difficulties with moving, hearing or seeing)	Select one	Yes No Do not know	Settlement	Purposive	No
	G.4	KI Interview	WASH	% of settlements reporting using surface water for drinking	Did ANY people have to use surface water for drinking? (water from a pond / river)?	Select one	Yes No Do not know	Settlement	Purposive	Yes
	G.5	KI Interview	WASH	% of most commonly used container for collecting water in the settlement	What container is most commonly use for collecting or storing water?	Select one	20 Liter jerry can Barrel Other (please specify)	Settlement	Purposive	No
	G.6	KI Interview	WASH	The average cost do people in the settlements pay per container	How much do people pay per container?	Integer	Integer	Settlement	Purposive	No
	G.7	KI Interview	WASH	% of settlements by time to fetch water	in the last 3 months, how long did it take on average BY WALKING for people to reach, wait in the line, and return with drinking water to your settlement of origin?	Select one	Under 30 minutes 30 minutes to less than 1 hour One hour to less than half a day Half a day More than half a day Don't know	Settlement	Purposive	No

	G.8	KI Interview	WASH	% of settlements reporting accessing enough water in the past 3 months	in the last 3 months, have MOST people been able to access enough water to meet their needs in your settlement of origin?	Select one	Yes No Do not know	Settlement	Purposive	Yes
	G.9	KI Interview	WASH	% of settlements reporting access to sufficient water for drinking and cooking both dry and rainy seasons	Is access to water for drinking and cooking sufficient during both dry and rainy season?	Select one	Yes No Do not know	Settlement	Purposive	No
	G.10	KI Interview	WASH	% of settlements reporting stagnant water visible nearby settlement	Was there stagnant water visible near the settlement in the past 3 months?	Select one	Yes No Do not know	Settlement	Purposive	No
	G.11	KI Interview	WASH	% of settlements by reported proportion of people accessing latrines	in the last 3 months, what proportion of people were using latrines in your settlement of origin?	Select one	None Around half Less than half (few or some) More than half (most) All Don't know	Settlement	Purposive	No
	G.12	KI Interview	WASH	Top 3 barriers to accessing latrines in the settlement	in the last 3 months, what were the MAIN barriers to using the latrines in your settlement of origin? (Select multiple	None available Insufficient number Not functional Overcrowded Too dirty Too far	Settlement	Purposive	No

							It is not common to use them Not safe for women Not safe for people with difficulties hearing, seeing, moving Not appropriate for children Dangerous at night Don't know Other (please specify)			
	G.13	KI Interview	WASH	% of settlements by reported waste disposal facilities	What is the main way in which waste is disposed in the settlement in the past 3 months?	Select one	Burned Buried Dumped in a dedicated area Don't know Other (please specify)	Settlement	Purposive	No
	G.14	KI Interview	WASH	% of settlements reporting change for soap price	Did prices of soap change in places where people from your settlement of origin were buying it, compared to last month?	Select one	Prices increased Prices decreased Prices did not change Don't know People from settlement usually don't buy any item from anywhere	Settlement	Purposive	No
	G.15	KI Interview	WASH	% of settlements reporting using soap and water for hand washing	in the last 3 months, did majority of the people in the settlement have access to and use water and soap to wash hands?	Select one	Yes No Do not know	Settlement	Purposive	Yes
To which Education and types of humanitarian	H.1	KI Interview	Education	Top 3 education facilities available in settlements	What are the education services (state-run, NGO-run or quranic) that children	Select multiple	None Primary school for boys Primary school for girls Secondary school for	Settlement	Purposive	No

assistance, if any, do populations in H2R areas have access? What are the constraints to access to education and assistance?					from the settlement were ABLE to access in the past 3 months?		boys Secondary school for girls Quranic school for boys Quranic school for girls NGO mobile school Basic writing and numeracy for boys Basic writing and numeracy for girls Don't know Other (please specify)			
	H.2	KI Interview	Education	% of settlements by time taken for most households to walk to education facilities	How much time did it take to access BY WALKING the closest functional school (state-run, NGO-run or quranic) from your settlement of origin in the last 3 months?	Select one	Under 30 minutes 30 minutes to less than 1 hour 1 hour to 3 hours More than 3 hours Don't know	Settlement	Purposive	Yes
	H.3	KI Interview	Education	% of settlements by most common barriers to accessing education faced by girls	What was the main barrier accessing education for the GIRLS from your settlement of origin in the past 3 months?	Select one	None Security Cost of studies Distance to closest services Cultural reasons Need to support family Being disabled Early marriage Quality of education School remained closed Don't know Other, please specify	Settlement	Purposive	No

	H.4	KI Interview	Education	% of settlements by most common barriers to accessing education faced by boys	What was the main barrier accessing education for the BOYS from your settlement of origin in the past 3 months?	Select one	None Security Cost of studies Distance to closest services Cultural reasons Need to support family Early marriage Quality of education School remained closed Don't know Other (please specify)	Settlement	Purposive	No
To which communication services and types of humanitarian assistance, if any, do populations in H2R areas have access? What are the constraints to access to information and assistance?	I.1	KI Interview	Communication	Top 3 main sources information in the settlements	in the last 3 months, what were the main sources of news for people living in your settlement of origin?	Select multiple	Radio SMS Social media (Facebook, twitter) Internet Mobile phone calls Conversations face to face No response or I don't want to answer Don't know Other (please specify)	Settlement	Purposive	No
	I.2	KI Interview	Communication	% of settlements reporting main channel of news in the settlement	in the last 3 months, WHO was the main source of news for MOST people in your settlement of origin?	Select one	Friend/family/neighbors NGO workers Community leader, religious leader Local authorities Transport drivers Merchants Don't know Other (please specify)	Settlement	Purposive	No

	I.3	KI Interview	Communication	Top 3 most common reported radio station listened	Which radio stations did MOST people in your settlement of origin listen to in the last 3 months?	Select multiple	None Africas Foundation Voice of America BBC Bar Radio Radio Radio Radio Radio AI AI AI Radio Radio Radio Star Don't Other (please specify)	Settlement	Purposive	No
	I.4	KI Interview	Communication	% of settlements reporting people in the settlement receive information about the NGOs/INGOs	in the last 3 months, were people from your settlement of origin receiving information from the NGOs (both local and international) about available humanitarian assistance?	Select one	Yes No Do not know	Settlement	Purposive	No
	I.5	KI Interview	Communication	Top 3 barriers to accessing information in the settlement	in the last 3 months, what were the MAIN barriers to accessing ANY information from the settlement?	Select multiple	No obstacles to getting information Lack of electricity Lack of radio signal Lack of mobile networks	Settlement	Purposive	No

							Information is written and people are unable to read People do not have credit on their phones Don't know Other (please specify)			
	I.6	KI Interview	Communication	% of settlements reporting support received in the past 3 months	in the last 3 months, were any people in your settlement of origin able to access any kinds of support provided by NGOs?	Select one	Yes No Do not know	Settlement	Purposive	Yes
	I.7	KI Interview	Communication	Top 3 NGO support people received in the past 3 months	If yes (I.6), in the last 3 months, what were the types of NGO support people from your settlement of origin were able to access? (READ THE OPTIONS OUT LOUD)	Select multiple	Food distributions Vaccinations Education services Construction materials / NFIs Legal support Seeds, tools for farming Livestock Cash distribution None Don't know Other (please specify)	Settlement	Purposive	No
	I.8	KI Interview	Communication	% of settlements reporting secondary road through the settlement	Is there a main or a secondary road going through the settlement? (READ THE OPTIONS OUT LOUD)	Select one	Yes No	Settlement	Purposive	No
	I.9	KI Interview	Communication	% of settlements reporting road is safe	If yes, Is the road safe to travel on?	Select one	Yes No Do not know	Settlement	Purposive	No

	I.10	KI Interview	Communication	% of settlements reporting airstrip for the civilian airplanes	Is there an airstrip in close proximity to the settlement that can be used by civilian airplanes?	Select one	Yes No	Settlement	Purposive	No
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2: RESEARCH QUESTIONS ADDRESSED WITH SEMI-STRUCTURED TOOL(S)

Research Questions	SUBQ#	Data collection method	Sub-research question group	Sub-research Question	Questionnaire QUESTION	Probes	Key disaggregations
NA	A.1	FGD	Key characteristics	Facilitator ID	Facilitator ID	N/A	
	A.2	FGD	Key characteristics	Note taker ID	Note taker ID	N/A	
	A.3	FGD	Key characteristics	Date	Date	N/A	
	A.4	FGD	Key characteristics	Region	What is the region you are conducting the FGD?	N/A	
	A.5	FGD	Key characteristics	District	What is the district you are conducting the FGD?	N/A	
	A.6	FGD	Key characteristics	Number of FGD participants	Number of FGDs participants?	N/A	
	A.7	FGD	Key characteristics	Gender of FGD participants	Female: Male:	NA	
	A.8	FGD	Key characteristics	consent	Asalamu Calaykum, we're (INSERT NAMES) from (INSERT NAMES OF ORGANIZATIONS), and we're doing a hard-to-reach assessment in order to support the humanitarian partners get information on how they can support the	NA	

					<p>communities who are living in those regions. Hence, we would like to interview you about the settlements you moved from in the last 3 months. It is entirely up to voluntary participation. This implies we will not tell anybody about our discussion or what you told us today. Everything you tell us will be kept strictly confidential, and your personal information will be carefully safeguarded. You may withdraw from the FGD at any moment or refuse to answer certain questions. We will not attribute the information you provide to us, and we will not report using your name. No one will be able to relate your replies to any other information that could identify you because they will be aggregated and analyzed with several other responses. Participation</p>		
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					in this interview has no reward, aid, or any other benefits associated that you should expect as a participant. If it is fine with you, our organizations will give you feedback and explain how the data was used. Do you agree, based on the foregoing, to participate in this focus group and for us to share the information acquired in this focus group with other organizations without disclosing your personal information other than your gender and age, as appropriate?		
What are the factors that contribute to displacement from the H2R areas?	B.1	FGD	Definition of Hard to reach areas	What are the hard to reach and where are they located?	How would you describe the area you used to lived or or your relatives live in? <i>Hint - Try to guide the participants areas we are assessing (Bakool, Bay, Gedo, Lower Juba, Lower Shabelle, Middle Juba and Middle Shabelle)</i>	Would you consider this area as inaccessible? Why?	by interview location

	B.2	FGD	Movement intentions	What are the push and pull factors that contribute to the displacement of the people from their area of origin?	To your opinion, how do people make displacement decision?	What Are the push factors that make people leave? Some specific events that make people take the decision, etc. Who is the first person to leave and Why?	by interview location
What are the needs and coping strategies to access basic services, protection and food in H2R settlements? What are specific needs for vulnerable population groups?	C.1	FGD	Access to basic services	To what extent do people living in H2R have access to basic services?	How would you rate the access to basic services (Education, Health, WASH and Markets) within your community: very poor, poor, good, very good ?	Why? What are the main barriers that you face?	by interview location
	C.2	FGD	Coping mechanisms	What are the main coping strategies implemented for the access to basic services in H2R areas?	What does the community in your area of origin do when they cannot meet the basic services related to EDUCATION, HEALTH, WASH and MARKETS?	What kind of support would you need to avoid that? How often do they implement these strategies?	by interview location
	C.3	FGD	Access to protection services	To what extent do people living in H2R have access to protection services?	How would you rate the access to protection services within your community?	What are the barriers you face accessing protection services?	
	C.4	FGD	Coping mechanisms	To what extent do people living in H2R are have	What does the community in your area of origin do when they couldn't meet the basic	Why? what kind of support would they need to avoid that? How often do they	

				access to protection services?	services related to PROTECTION?	implement these strategies?	
	C.5	FGD	Access to food	To what extent do people living in H2R have access to FOOD?	How would you rate the access to FOOD within your community?	What are the barriers you face accessing food?	
	C.6	FGD	Coping mechanisms	To what extent do people living in H2R have access to food?	What does the community in your area of origin do when they couldn't meet the basic needs of FOOD? What do your household/community usually do/used if they encounter shortage of food? .	Why? what kind of support would they need to avoid that? How often do they implement these strategies?	
	C.7	FGD	Priority needs for the hard to reach communities	What are the priority needs for the communities in those areas?	Based on this conversation, to your opinion what are the community's top three priority needs in the last three months in the H2R areas?	Why these priorities? Are these priorities changing over time/the year/or based on seasonality?	by interview location
	C.8	FGD	Priority needs for the vulnerable groups of hard to reach communities	What are the priority needs for the communities in those areas?	What additional needs women, children, elders and/or PwD may face in the H2R areas?	Why? What are the coping mechanisms of these groups of people?	by interview location

To what extent humanitarian assistance is reaching to H2R areas? What are the constraints to access to services and assistance? What are the alternatives?	D.1	FGD	Support needed in H2R areas	What are the unmet needs of communities in H2R areas?	Based on this conversation, what kind of support would you need to avoid the situation described above?	What would be the best way to assist people in your community? what modality? what frequency?	
	D.2	FGD	Support available in H2R areas	What are the unmet needs of communities in H2R areas?	What kind of humanitarian assistance is already available in your location of origin?	If they receive it: • what should be improved?	by interview location
	D.3	FGD	Barriers for aid delivery	What are the barriers for aid delivery in H2R areas?	If no support received, to your opinion why ?	What are the main barriers that face humanitarian actors to deliver assistance? What are the barriers/constraints for the population to access the assistance?	
	D.4	FGD	Alternative for aid delivery	What are the alternative available for aid delivery in H2R areas?	If humanitarian actors do not have access to your area, what are the other options to deliver assistance to people in need?	How can be delivered? How you would like to be delivered services by the humanitarian communities?	by interview location
NA	E.1	FGD	Conclusion	Conclusion	Any other comments/ topics raised by the FGD participants.		by interview location

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	■ Yes
		# of downloads of x product from Relief Web	Country request to HQ		■ 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		■ Yes
		# of visits to x webmap/x dashboard	Country request to HQ		□ Yes
IMPACT activities contribute to better program implementation and coordination of the humanitarian response	Number of humanitarian organisations utilising IMPACT services/products	# references in HPC documents (HNO, SRP, Flash appeals, Cluster/sector strategies)	Country team	Reference_log	Somalia Humanitarian NeedsOverview (HNO) Somalia Humanitarian Response Plan (HRP), Somalia Humanitarian Fund (SHF) Allocation Release

		# references in single agency documents			Protection Monitoring System Dashboard Cluster Strategies
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	Usage survey to be conducted at the end of each publication collected through Kobo tool embedded into the outputs targeting at least 20 partners.
		Perceived usefulness and influence of IMPACT outputs			
		Recommendations to strengthen IMPACT programs			
	Number of humanitarian documents (HNO, HRP, cluster/agency strategic plans, etc.) directly informed by IMPACT products	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 organisations 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	<input type="checkbox"/> Yes
		# of organisations/clusters inputting in research design and joint analysis			<input checked="" type="checkbox"/> Yes
		# of organisations/clusters attending briefings on findings;			<input checked="" type="checkbox"/> Yes

ANNEX 1: TARGET LOCATION

State	Region	District	Targeted through	Target settlements (H2R)	Number of KI
Hirshabelle	Middle Shabelle	Adan Yabaal	Banadir	2	6
Hirshabelle	Middle Shabelle	Balcad		14	41
Hirshabelle	Middle Shabelle	Cadale		4	12
Hirshabelle	Middle Shabelle	Jowhar		20	60
Jubaland	Gedo	Baardheere	Baidoa	10	30
Jubaland	Gedo	Belet Xaawo		4	11
Jubaland	Gedo	Ceel Waaq		3	9
Jubaland	Gedo	Doolow		4	13
Jubaland	Gedo	Garbahaarey		7	21
Jubaland	Gedo	Luuq		9	26
Jubaland	Lower Juba	Afmadow	Kismayo	7	20
Jubaland	Lower Juba	Badhaadhe		3	10
Jubaland	Lower Juba	Jamaame		6	19
Jubaland	Lower Juba	Kismaayo		10	30
Jubaland	Middle Juba	Bu'aale		4	13
Jubaland	Middle Juba	Saakow		7	20
Jubaland	Middle Juba	Jilib		3	9
SWS	Bakool	Ceel Barde	Baidoa	2	5
SWS	Bakool	Rab Dhuure		4	13
SWS	Bakool	Tayeeglow		6	18
SWS	Bakool	Waajid		3	10
SWS	Bakool	Xudur		11	32
SWS	Bay	Baydhaba		78	234
SWS	Bay	Buur Hakaba		31	94
SWS	Bay	Diinsoor		9	27
SWS	Bay	Qansax Dheere		5	14
SWS	Lower Shabelle	Afgooye	Banadir	22	67
SWS	Lower Shabelle	Baraawe		5	14
SWS	Lower Shabelle	Kurtunwaarey		4	13
SWS	Lower Shabelle	Marka		14	43
SWS	Lower Shabelle	Qoryooley		17	51

SWS	Lower Shabelle	Sablaale		5	14
SWS	Lower Shabelle	Wanla Weyn		26	79
Total				359	1078

ANNEX 1: ASSESSMENT OF HARD-TO-REACH AREAS OF SOMALIA

Data cleaning standard operating procedures

These Standard Operating Procedures (SOPs) are based on the **tool designed for the Assessment of the Hard-to-reach Areas (H2R) of Somalia**, and builds on the requirements outlined in the IMPACT Data Cleaning Minimum Standards Checklist.¹⁷

This document outlines the checks that must be performed on the data based on the tool logics and also provides an overview of roles and responsibilities during data processing.

These SOPs are meant for both Field Officers (FOs) and Assessment Officers (AOs). The document does not intend to cover all aspects that may need to be checked but is rather a compilation of guidelines and has to be duly updated every time a new version of the tool comes out.

Roles and responsibilities during data processing

The table below outlines the responsibilities regarding data processing inside the team. It is the responsibility of each individual member of the team to be familiar with the scope of their responsibilities. Please note that this list is not exhaustive.

<i>Task description</i>	<i>Person responsible</i>	<i>Frequency</i>	<i>Description of the Procedure</i>
<i>Data collection</i>	Field Officers (FOs)	Daily	Data is collected by the enumerators and sent to KoBo on a daily basis. The Field Officers control the process of submission of the questionnaires to the server.
<i>Raw data downloading and preparation</i>	Senior Database Officer (SDO)	Daily	As part of data protection procedures, the dedicated <u>Senior Database Officer</u> is the only person who has direct access to the raw data and also stores potentially sensitive information that should not be shared as the data is processed. After ensuring that all potentially sensitive information has been deleted, the <u>Senior Database Officer</u> immediately shares the datasets with respective Field Officers for data cleaning, always keeping the AO in CC.

¹⁷ IMPACT Initiatives. Data Cleaning Minimum Standards Checklist

https://www.impact-repository.org/wp-content/uploads/2020/01/IMPACT_Memo_Data-Cleaning-Min-Standards-Checklist_14012020.pdf

Data cleaning, checking and translation	FOs	Daily	<p>The Field Officers, based in Mogadishu and Baidoa, perform daily data cleaning and data checks as outlined further in the SOP. All checks and data cleaning are done in the macro-enabled data cleaning sheet that is updated every month.</p> <p><i>The <u>macro-enabled data cleaning sheet</u> (also called a macro cleaning tool) is a MS Excel template designed by the SDO aimed to make cleaning KoBo data faster and easier. It contains a number of shortcuts that help to find, flag, correct and delete errors in the data.</i></p> <p>Also the Field Officers check the options included in 'Other' column and translate the entries that cannot be classified under already existing options.</p> <p>Issues flagged during the data cleaning process are recorded by the FOs and then communicated to the enumerators and the AO and inform daily morning debriefings done by the FOs with enumerators, and also the agenda for refresher training of enumerators, happening on a monthly basis and delivered by the FOs.</p> <p>Based on the results of the data cleaning from the previous week, the AOs provide consolidated feedback to FOs during a skype call/meeting on a weekly basis.</p>
			Also the Field Officers under the supervision of an Assessment Officer analyse the enumerator behaviour logs.
Clean data sharing	Field Officers (FO)	At least weekly	The Field Officers share clean data with the Assessment Officer at least once a week , putting the dedicated GIS Officer in CC. The need of more frequent clean data submission can be discussed between the FOs and the AO based on the need.
Spatial verification	GIS Officer	Weekly	The GIS Officer conducts spatial verification of the locations where the interviews were conducted, and flags issues to the AO. Unless agreed otherwise, the datasets are shared with the GIS Officer on a weekly basis.
Data quality control	AO	TBD	While FOs are the ones who do the daily data cleaning, it is the AO who is responsible for the final quality of the data.
Macro enabled tool update	DO	TBD	Once a month the AO updates the DO if any changes are needed to the macro enabled tool. The DO then makes changes to the spreadsheet and shares the updated macro tool with the FOs and the AO.
Clean data submission to the HQ	AO	Monthly	Once a month the AO submits two consolidated clean datasets (one from Baidoa and one from Mogadishu) to the HQ for validation. The final outputs will consist of 2 clean consolidated datasets each month, where personally identifiable information is deleted.

Raw data processing

Raw datasets contain survey data from the key informant face-to-face (KI) interviews conducted by the enumerators on that day. In preparing the raw data for analysis, the Senior Database Officer will do the following steps:

a. Check for and remove duplicates in the raw data to ensure that all observations are unique (there are no entries with the same UUIDs).

b. Dataset for Spatial Verification: Generate a copy of the raw dataset with only data columns for UUID and GPS coordinates. Data columns to be included shown below.

1. UUID

2. Base name (Baidoa or Mogadishu)

3. District and name of the IDP site where the team is conducting the assessment

3. GPS Coordinates:

- Latitude
- Longitude
- Altitude
- Precision

c. Removing all Personally Identifiable Information: Senior Database Officer makes a copy of the raw dataset, removing the indicators that contain potentially sensitive information.¹⁸

For the H2R V.1 tool such information is:

- Names of the Key Informants (KIs);
- Phone numbers of the Key Informants;
- Names of the **referred** Key Informants (KIs);
- Phone numbers of the **referred** Key Informants;
- GPS coordinates.

¹⁸ IMPACT Initiatives. Research Cycle Data Management at IMPACT: Personally Identifiable Information Standard Operating Procedure https://www.impact-repository.org/wp-content/uploads/2019/08/SOP_data_protection_PII.pdf

Prepared dataset is then shared with the respective Field Officers.

Getting the Data from KoBo:

Note to the Senior Database Officer:

- Download the data always in the same format - .XLS.
- Once you download the data remember to rename the form:
vKTUBeB7LywAXThRXrXXj7 → REACH_SOM_Baidoa_15Jan2020
- Do not forget to delete personally identifiable information from the datasets before sharing them.

General data quality and data cleaning tips

1. *Knowledge of the H2R tool* is essential to understand respective skip logics, to clean the dataset properly and catch logic mistakes.

2. *Knowledge the local context:* continuous communication must be going on between the FOs and the respective AO in order to help flag responses that do not make sense.

3. *Whilst reviewing and cleaning the data, both horizontal and vertical logic should be applied.*

Note to the FOs and the AO:

- Horizontal logic (scroll to the right): check whether reported responses of each indicator of each survey are logically consistent and make sense in relation to each other.
- Vertical logic (scroll down): with the data sorted by enumerator ID, scroll dataset downwards to check whether there are any suspicious response patterns for specific enumerators that suggest the enumerator is performing poorly or misunderstood a question or response option. Check the overall distribution of responses, that way you can find out which enumerator's surveys seem suspicious. Too similar responses given during different

¹⁸ IMPACT Initiatives. Research Cycle Data Management at IMPACT: Personally Identifiable Information Standard Operating Procedure https://www.impact-repository.org/wp-content/uploads/2019/08/SOP_data_protection_PII.pdf

interviews might be suggestive of data falsification.

- By using the filter function, also ensure to check response options “None”, “Other (Please specify)”, “Don’t know” etc. If one enumerator consistently has many of these flag this. For “Other (Please specify)” check what was manually entered and whether that would already be covered by an existing response option. If yes, correct accordingly and flag to an enumerator.
- Multiple response questions: whilst enumerators are instructed to not read out response options (with exception of questions where they are specifically requested to do so), check whether there are any suspicious patterns such as all respondents of one enumerator all reporting the same responses. Whilst this is theoretically possible, it could also suggest that enumerator is leading his/her respondents.

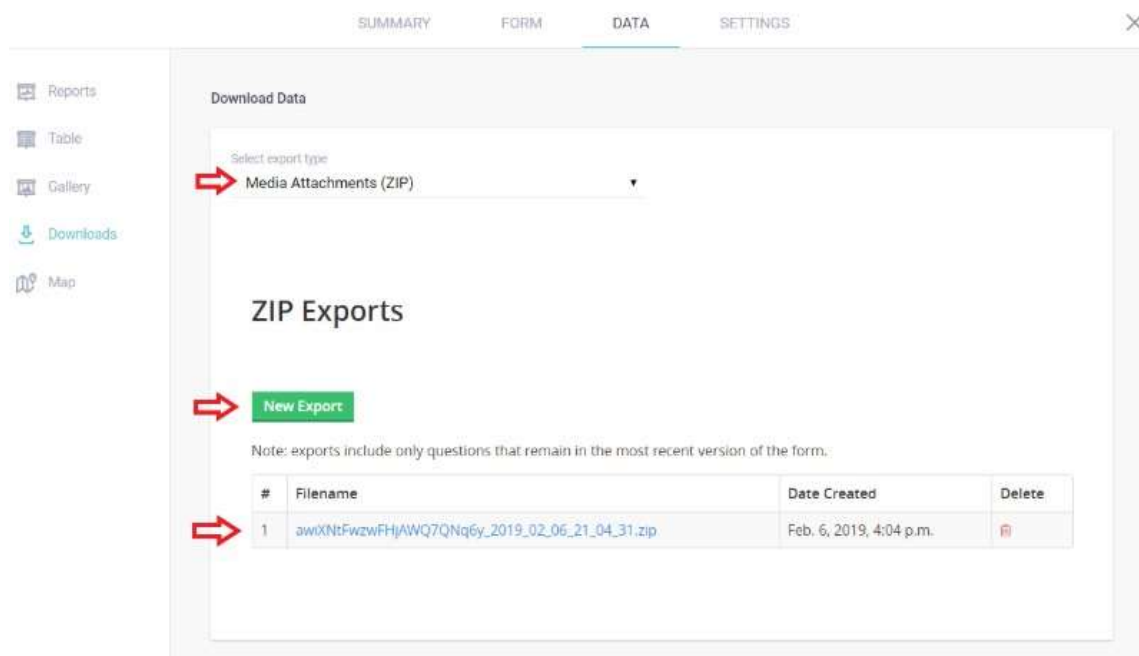
4. Data cleaning / reviews should also entail keeping good track of your data collection coverage:

- Make pivot tables – so you can easily identify how many settlements we have covered by districts so far and direct the enumerator teams accordingly depending on the coverage focus.
- Check how many times a settlement has been assessed in that month – whilst having more than 2 KI surveys per settlement is good to ensure that no settlement would be lost once some entries have to be deleted, more than 4-5 surveys are unnecessary.
- Don’t only flag the issues, ensure that you explain why something wouldn’t make sense and also leave room for a positive feedback for the areas where the data collection teams did well.

Tracking enumerator behavior:

Audit question is used to monitor enumerator behavior and discover which questions are taking longer to answer, better understand how the enumerators are navigating a certain form, and see which enumerators are generally taking quicker or longer periods of time to submit answers.

Collect saves the audit logs for each submission in a CSV file that are saved and uploaded to the server just as an attached photo would be. Analysis of the audit files is then done accordingly.



After the data has been submitted, open your project in the browser and go to DATA, then Downloads. Select Media Attachments (ZIP) as the export type and then click on New Export. Once the download is done pending, click on the file to download it to your computer.

Once the ZIP file has been extracted and opened, click on the file labeled 'audit.csv' to view the audit logs. It's important to note that the CSV uses Unix Epoch time so the logs are recorded in milliseconds.

Using macro enabled tool for data cleaning:

Populating data into the macro enabled cleaning sheet:

Please keep in mind that daily updated raw dataset contains running log of all data kept in the server. So you'll need to filter manually the newly uploaded surveys into the consolidated cleaning sheet. Follow these bellow steps to do this in an easy and effective way;

1. Open the raw dataset and the macro enabled spreadsheet.
2. Copy your raw data into the first tab of the macro called "raw_data".
3. Copy the uuid from your macro-cleaning tool.
4. Paste the uuid you copied from the cleaning tool at the bottom of the raw data
5. Then see the duplicates (Home - Conditional Formatting - Highlight Cells Rules - Duplicate Values).
6. Filter unique values (filter by color - non fill).
7. Copy the unique rows into your macro tool.

This will allow you to avoid errors of the macro in case of populating duplicating UUIDs.

IMPORTANT STEPS:

1. Delete interviews that took less than 20 minutes.
2. Run all necessary data checks first, flagging the outliers.
3. Go to Data Cleaning Tab and sort all entries by UUID (don't forget to select "expand the selection" as you do the sorting).
4. Mark out the entries with 3+ outliers (outliers are responses that are logically inconsistent, e.g. shelters destroyed by conflict and no protection incidents. Spelling of an IDP site is NOT an outlier!).
5. If any entry **has 3 outliers (conflicting values) that cannot be checked (either through enumerator follow-up or callback to the respondent), the whole interview must be deleted immediately!**
6. Do further cleaning for the remaining entries as usual.
7. At all times when changing the multiple choice questions, make sure that numeric values (0/1) are changed and logged accordingly.
8. Pay attention to using proper spelling of the response options – keep the tool open to guide you. Otherwise, there is a risk that the analysis contains errors – the analysis script will recognize the response options ONLY the way they are spelled in the tool, e.g. it will read bought_cash but not 'bought cash' or 'bought with cash'.

Data checking:

Examples of checks that can be done using macro enabled tool. Please note that checks done using macro enabled tool are not exhaustive; additional manual data checks are needed to ensure data quality:

Check Type	Columns checked	Description
CHECK_Time	start end	Check if the time taken for interview is realistic: if the time taken for an interview is too short, it may point at data falsification. Action: All interviews that took less than 20 minutes must be <u>deleted</u> .
CHECK_Start	start	Check if the time between interviews makes sense. Action:
CHECK_End	end	<ol style="list-style-type: none"> 1. Flag the entries where too little time passed between the end of one interview and beginning of another: if too little time passed, it may be indicative that the interview was falsified. Keep in mind that the end time may not always be reliable. 2. If for particular enumerators time between interviews is always short, communicate to the team leader to ensure the work quality of the field team.
CHECK_other	'Other' columns	Check that data entered into 'Other' column is translated, logical, and consistent with the context. Action: If data entered into 'Other' column matches any of the potential survey responses, re-classify that entry and log the change. If the entry cannot be reclassified, just translate.
CHECK_assess_mode	assess_mode	Remote assessment of the sites is not meant to be conducted during on-site visits. If the enumerators are choosing this option during on-site data collection, this is incorrect. Action:
		<ol style="list-style-type: none"> 1. If "remote" is selected and you know that no remote calls have been conducted recently, change to "direct". 2. Otherwise, clarify with the enumerator and change accordingly.

CHECK_market	market_goods	<p>If only “Food” is selected in the previous column, the macro tool will return “CHECK”, as for the purpose of the assessment a functional market is a place where a person can buy at least 5 different food items and at least one type of non-food item.</p> <p>Action:</p> <ol style="list-style-type: none"> 1. Flag the entry. 2. Clarify with enumerator and change if an immediate follow-up is possible. 3. If an enumerator follow-up is not possible, follow up with the respondent and change accordingly. 4. If only food is available in the market (based on the follow-up), change to no_access, making sure that the respective changes are also made in the columns referring to place where a person accesses market, and the explanation is provided in the Reason column of the Cleaning Log tab. Also pay attention and change values where relevant, including the 0 / 1 data in columns: market_region market_district market_settlement distance_to_market market_goods 5. If neither of the follow-ups is possible, delete entries from the respective columns: market_region market_district market_settlement distance_to_market market_goods 6. Communicate to the enumerators to make sure the question is understood and asked properly, and also that they are aware of the definition of functional market.
CHECK_log_marketaccess	food_source access_market	<p>Checks if there is logics between responses: if the respondent reported the main food source “bought with cash” and “no access to market” at the same time, the formula will return CHECK.</p> <p>Action:</p> <ol style="list-style-type: none"> 1. Flag the entry. 2. Follow up with the enumerator on whether there is an explanation to this contradiction. Change accordingly if people can access market, if bought_cash selected by mistake, change accordingly. 3. If an enumerator follow-up is not possible, follow up with the respondent and change accordingly.

		<ol style="list-style-type: none"> 4. Check the column nomarket_why. If no_cash is selected, this indicates that the respondent misunderstood the question. 5. If a follow-up neither with the enumerator nor the respondent is possible, and in the nomarket_why column no_cash option is selected, you have to delete cells from columns: food_source access_market nomarket_why nomarket_why/no_cash 6. If in the nomarket_why column no_cash option is <u>not</u> selected, leave the column food_source and access_market unchanged. 7. Communicate to the enumerators to make sure the question is understood and asked properly.
CHECK_food_security	people_malnourished food_situation	<p>If 'all' is selected as a response option to people_malnourished, but the food_situation is indicated as 'improved', the formula will return CHECK.</p> <ol style="list-style-type: none"> 1. Flag the entry. 2. Follow up with the enumerator on whether there is an explanation to this contradiction. Change accordingly if an explanation is provided. 3. If an enumerator follow-up is not possible, follow up with the respondent and change. 4. If neither of the follow-ups is possible, delete entries from the respective columns: people_malnourished food_situation 5. Communicate to the enumerators to make sure the question is understood and asked properly.
CHECK_available_health	access_healthservices available_health_services	<p>If the interview indicates that there is access to health services but further 'none' is selected for available types of services, the formula will return CHECK.</p> <ol style="list-style-type: none"> 1. Flag the entry. 2. Follow up with the enumerator on whether there is an explanation to this contradiction. Change accordingly if an explanation is provided. 3. If an enumerator follow-up is not possible, follow up with the respondent and change. 4. If neither of the follow-ups is possible, delete entries from the respective columns: access_healthservices available_health_services available_health_services/none 5. Communicate to the enumerators to make sure the question is understood and asked properly.

CHECK_barriers_health	access_healthservices barriers_health	<p>The formula checks the logics between responses when no access to health services is indicated but at the same time 'none' is selected for barriers to accessing health services.</p> <ol style="list-style-type: none"> 1. Flag the entry.
		<ol style="list-style-type: none"> 2. Follow up with the enumerator on whether there is an explanation to this contradiction. Change accordingly if an explanation is provided. 3. If an enumerator follow-up is not possible, follow up with the respondent and change. 4. If neither of the follow-ups is possible, delete entries from the respective columns: access_healthservices barriers_health barriers_health/none 5. Communicate to the enumerators to make sure the question is understood and asked properly.
CHECK_shelter	shelter_type ppl_no_shelter	<p>If the shelter type is indicated as 'none', but at the same time no people reported as sleeping without shelter, the formula will return CHECK.</p> <ol style="list-style-type: none"> 1. Flag the entry. 2. Follow up with the enumerator on whether there is an explanation to this contradiction. Change accordingly if an explanation is provided. 3. If an enumerator follow-up is not possible, follow up with the respondent and change. 4. If neither of the follow-ups is possible, delete entries from the respective columns: shelter_type ppl_no_shelter 5. Communicate to the enumerators to make sure the question is understood and asked properly.
CHECK_log_shelter_sit	ppl_no_shelter shelters_not_rebuilt	<p>If all shelters in the settlement are reported as destroyed but at the same time there are no people sleeping in the open, it is not logically consistent, and the formula will return CHECK.</p> <ol style="list-style-type: none"> 1. Flag the entry. 2. Follow up with the enumerator on whether there is an explanation to this contradiction. Change accordingly if an explanation is provided. 3. If an enumerator follow-up is not possible, follow up with the respondent and change. 4. If neither of the follow-ups is possible, delete entries from the respective columns: shelter_type ppl_no_shelter shelters_not_rebuilt 5. Communicate to the enumerators to make sure the question is understood and asked properly.

CHECK_educ_bar_girl	education_avail able education_bar_ girls	<p>If 'none' is selected to education services available but further also 'none' is selected for barriers, the formula will return CHECK.</p> <ol style="list-style-type: none"> 1. Flag the entry. 2. Follow up with the enumerator on whether there is an explanation to this contradiction. Change accordingly if an explanation is provided. 3. If an enumerator follow-up is not possible, follow up with the respondent and change.
		<ol style="list-style-type: none"> 4. If neither of the follow-ups is possible, delete entries from the respective columns: education_available education_available/none education_bar_girls 5. Communicate to the enumerators to make sure the question is understood and asked properly.
CHECK_ed_dist_g	time_to_school education_bar_ girls	<p>If time to school is indicated as under 30 minutes and distance as a barrier to accessing services, the formula will return CHECK.</p> <ol style="list-style-type: none"> 1. Flag the entry. 2. Follow up with the enumerator on whether there is an explanation to this contradiction. Change accordingly if an explanation is provided. 3. If an enumerator follow-up is not possible, follow up with the respondent and change. 4. If neither of the follow-ups is possible, delete entries from the respective columns: time_to_school education_bar_girls 5. Communicate to the enumerators to make sure the question is understood and asked properly.
CHECK_educ_bar_boy	education_avail able education_bar_ boys	<p>If 'none' is selected to education services available but further also 'none' is selected for barriers, the formula will return CHECK.</p> <ol style="list-style-type: none"> 1. Flag the entry. 2. Follow up with the enumerator on whether there is an explanation to this contradiction. Change accordingly if an explanation is provided. 3. If an enumerator follow-up is not possible, follow up with the respondent and change. 4. If neither of the follow-ups is possible, delete entries from the respective columns: education_available education_available/none education_bar_boys 5. Communicate to the enumerators to make sure the question is understood and asked properly.

CHECK_ed_dist_b	time_to_school education_bar_boys	<p>If time to school is indicated as under 30 minutes and distance as a barrier to accessing services, the formula will return CHECK.</p> <ol style="list-style-type: none"> 1. Flag the entry. 2. Follow up with the enumerator on whether there is an explanation to this contradiction. Change accordingly if an explanation is provided. 3. If an enumerator follow-up is not possible, follow up with the respondent and change. 4. If neither of the follow-ups is possible, delete entries from the respective columns: time_to_school education_bar_boys 5. Communicate to the enumerators to make sure the question is understood and asked properly.
CHECK_aid_livelihood	ngo_support_y_n livelihood_activ	<p>Checks the logics: if aid is reported as unavailable but at the same time the main livelihood activity is receiving humanitarian aid, the formula will return CHECK.</p> <ol style="list-style-type: none"> 1. Flag the entry. 2. Follow up with the enumerator on whether there is an explanation to this contradiction. Change accordingly if an explanation is provided. 3. If an enumerator follow-up is not possible, follow up with the respondent and change. 4. If neither of the follow-ups is possible, delete entries from the respective columns: ngo_support_y_n livelihood_activ (<u>only</u> option humanitar_assistance!) livelihood_activ/humanitar_assistance 5. Communicate to the enumerators to make sure the question is understood and asked properly.
CHECK_aid_log	ngo_support_y_n protection_inc_location	<p>If humanitarian aid is reported unavailable but at the same time the main places where security incidents occurred were the places of aid distribution, the formula will return CHECK.</p> <ol style="list-style-type: none"> 1. Flag the entry. 2. Follow up with the enumerator on whether there is an explanation to this contradiction. Change accordingly if an explanation is provided. 3. If an enumerator follow-up is not possible, follow up with the respondent and change. 4. If neither of the follow-ups is possible, delete entries from the respective columns: ngo_support_y_n protection_inc_location (<u>only</u> option human_aid_distr) protection_inc_location/human_aid_distr 5. Communicate to the enumerators to make sure the question is understood and asked properly.

All changes to the data must be done **ONLY** in the Data Checking tab of the macro tool using the keyboard shortcuts. Otherwise no entries in the clean data tab will be made.

Cleaning Log

Cleaning Log tab is part of the macro enabled cleaning spreadsheet that is created automatically once the data are populated in the cleaning tool.

It should contain the following information:

1. **Question** - reference to the specific question that is being checked.
2. **Follow-up** is the column where the FO / AO outlines the final change that is done on the entry.
3. **Enumerator code**.
4. **UUID** – unique identifier that is automatically assigned to each interview in the dataset.
5. **Community** – information on the region where the respective interview was collected.
6. **Notes** – used by the FO / AO to communicate the reasons why a particular value got flagged and to suggest solutions
7. **Old value** – flagged value.
8. **New value** – value that will be recorded in the clean data tab after the follow-up.
9. **Reason** – used to outline the reason why a certain value was flagged / changed.
10. **Name of the person who made changes**

After you finish doing records to the cleaning log, look through it attentively. Try to read it as if you were a person that sees the data for the first time. Would you understand the rationale behind each change? Is all information included?

Question	Follow-up	Enumerator	uuid	Community	Notes	Old Value	New Value	Reason	Modified by?
1 assess_mode	Value changed after clarification with an enumerator	et_6	76277315-d272-4d96-a69d-a217c7b60c2d	middle_shabelle		remote	direct	survey was conducted direct interview not remote as reported	FO
2 when_left_prev	Value changed after clarification with an enumerator	et_3	5e0e2c7b-ebc6-4b34-b3a2-15b2743d2b2f	middle_shabelle		moreonemonth	lessonemonth	clarification from enumerator for wrong selection of the response but respondent is in lessonemonth at the site interviewed	FO
3 when_left_prev	Value changed after clarification with an enumerator	et_3	399a46da-2584-45e5-b986-2edb8f86e297	middle_shabelle		moreonemonth	lessonemonth	clarification from enumerator for wrong selection of the response but respondent is in lessonemonth at the site interviewed	FO
4 when_left_prev	Value changed after clarification with an enumerator	et_3	1db9f04e-921d-40f7-81f9-ccfbff076245	middle_shabelle		moreonemonth	lessonemonth	clarification from enumerator for wrong selection of the response but respondent is in lessonemonth at the site interviewed	FO
5 when_left_prev	Value changed after clarification with an enumerator	et_3	b66df9f4-3be4-4aee-8569-c4427e203b8f	middle_shabelle		moreonemonth	lessonemonth	clarification from enumerator for wrong selection of the response but respondent is in lessonemonth at the site interviewed	FO
6 how_long_stay	Value changed after clarification with an enumerator	et_1	b06a77e5-e2be-43b6-8a4d-a3e172bfa0ba	lower_shabelle		lessthan1mo	1to3months	Clarification from enumerator after followup followed up with enumerator and crosschecked response from other respondents from same settlement reporting still_inhabitants at the settlement	FO
7 still_inhabited	Value changed after clarification with an enumerator	et_7	2fc949b9-3cbb-438d-b3ba-e980c8de4a92	hiraan		no	yes	followed up with enumerator and crosschecked response from other respondents from same settlement reporting still_inhabitants at the settlement	FO
8 still_inhabited	Value changed after clarification with an enumerator	et_7	a7b3a841-3942-439f-a686-b38e8e739eeb	hiraan		no	yes	followed up with enumerator and crosschecked response from other respondents from same settlement reporting still_inhabitants at the settlement	FO





Deletions Tab, likewise, appears automatically in the tool. It contains all entries that were deleted from the questionnaire.

Keyboard Shortcuts for Macro Enabled Tool:

Please close all other MS Office applications during the cleaning process so you can speed up the process and avoid the software crashing.

NB: To allow smooth functionality of the macro sheet, please close other office applications during data cleaning.

SHORTCUTS		
Name	Shortcut	Function
Populating	Ctrl + Shift + P	Sets up the Raw Data and Data Checking sheets so they link to the data in the Raw Data sheet. If you get more forms that you want to add later, then you can just add them at the end of the Raw Data sheet and run the Populating function again, to add these new rows to the Data Checking and Clean Data sheets.
Correcting	Ctrl + Shift + C	Changes the value of a cell and adds an entry to the cleaning log. To be used if you already know what the value of the cell should be and you do not need to first flag it and get feedback.
Deleting	Ctrl + Shift + D	Deletes the selected row in all sheets, including the Raw Data sheet. Also adds a Cleaning Log entry and copies the deleted row to Deletions.
Flagging	Ctrl + Shift + F	Flags a cell for feedback and adds a feedback entry to the cleaning log.
Toogling	Ctrl + Shift + T	Toogles back and forth between the Cleaning Log and the Data Checking sheet. If on the Cleaning Log and have selected a cell in an entry, takes you to the row and column in the Data Checking script that the entry is about. If on the Data Checking sheet, takes you back to the cleaning log.
Undoing	Ctrl + Shift + Z	Allows you to undo a change. Select the row on the cleaning log, use the shortcut to run the script and then the value will be brought back to the original one.
Expanding	Ctrl + Shift + E	Expands and collapses the current column
Adding column	Alt + I, then C	Adds a new column in a position right before the cell you currently have selected.

COLOUR CODES		
Colour	Color Name	Meaning
	Blue	Value has been edited (automatically filled when editing in Data Checking)
	Yellow	Value has been flagged for follow-up
	Orange	This is a checking column
	Red	This needs to be filled out (UUID, enumerator, community columns)

Other Data Checks:

This section outlines data checks that are not included into the macro enabled cleaning tool and therefore require manual checking & cleaning. Manual checks will be performed on a daily basis, at the same time certain checks (e.g. checking enumerator patterns) require looking at the consolidated (weekly, monthly) datasets to allow comparison and are therefore outlined in a separate sub-section.

Daily:

#	Question	CHECK EXPLAINED	ACTION
	today	Since the datasets downloaded every day have entries from yesterday, check that you process the data that has been collected the previous day only.	FO: Use filtering by date before processing the data.
	spatial checks	Use the file with spatial verification outputs to check if the specific settlements match with the reported ones.	AO: Flag to FO. FO: Flag the cell and follow-up with the enumerator about the reasons of inconsistency.
	idp_site	Check if all IDP settlements are spelled the same way.	AO: Flag to FO. FO: Adjust the spellings of the sites.
	All "other" columns	Check if translations are done for all relevant 'Other' entries.	AO: Flag to FO. FO: Translate if necessary. Reclassify the entry where possible. If an entry cannot be reclassified, leave it as 'Other'
	CHECK_settlement_name	<p>Checking whether all names of the settlements are spelled correctly, due to high number of errors in the master list.</p> <p><u>See Annex 1 for detailed instructions to this check!</u></p>	<p>AO: Flag to FO.</p> <p>FO:</p> <ol style="list-style-type: none"> Sort the settlements in alphabetical order (do not forget to expand selection, or only this column will be changed!). Go to Conditional Formatting – Highlight Cell Rules – Duplicate Values and choose to highlight duplicate values. After that scroll down checking if the names of settlements that are shown as unique within the same districts are actually misspelled names of the same settlements: e.g. Afgoye and Afgooye. These similarly spelled settlements will have different p-codes. If two settlements have very similar spelling, cross-check with the GIS unit to verify whether the settlements are the same. If you confirm that the two settlements are the same but have different p-codes, make sure you put them under the same p-code (you can pick the one from either of the identified settlements – the most important during analysis is to have it the same).

	Other settlements	Check if the respective settlements can be found in the master list (e.g. a settlement was put as "other" because of different spelling: Basra / Basro).	AO: Flag to FO. FO: Correct the spelling where relevant and add to the list. Leave as 'Other' if no matches found.
	deviceid enum_code	Check if the device IDs and the enumerator codes are consistent. Different device ID may indicate that the enumerator chose a wrong enumerator code.	AO: Flag to FO. FO: Flag if inconsistent and change after double-checking with the enumerator. Inform the enumerator teams they should notify the FOs if they are planning to use another device. Emphasize that using the same device throughout the whole assessment is strongly advisable.
	market_settlement	Check persons reporting long walking times to avoid the errors when a person reports	AO: Flag to FO. FO:

	distance_to_market market_district	that it takes him/her half a day to reach the place while it is the same settlement / a neighboring village. Also if long distances are reported within the same settlement.	1. Flag the cell and follow-up with the enumerator. 2. If a follow up is not possible, delete the entry from distance_to_market.
	settlement_clinic distance_clinic settlement_clinic	Check persons reporting long walking time to avoid the errors when a person reports that it takes him/her half a day to reach the place while it is the same settlement / a neighboring village. Also if long distances are reported within the same settlement.	AO: Flag to FO. FO: 1. Flag the cell and follow-up with the enumerator. 2. If a follow up is not possible, delete the entry from distance_clinic.
	barriers_health distance_clinic	Check if for the settlements that report under 30 minutes of walking to clinic 'distance' was selected as a barrier for accessing health services.	AO: Flag to FO. FO: 1. Flag the entry. 2. Follow up with the enumerator on whether there is an explanation to this contradiction. 3. If an enumerator follow-up is not possible, follow up with the respondent and change accordingly. 4. If neither of the follow-ups is possible, delete entries from the respective columns: barriers_health (only related to distance) barriers_health/distance distance_clinic 5. Communicate to the enumerators to make sure the question is understood and asked properly

	protection_incidents dam_shelters_reason	If “none” is reported to protection incidents question but at the same time the main cause of shelters destructed in the last month was conflict_looting, it is a logical error.	AO: Flag to FO. FO: <ol style="list-style-type: none"> 1. Flag the entry. 2. Follow up with the enumerator on whether there is an explanation to this contradiction. 3. If an enumerator follow-up is not possible, follow up with the respondent and change accordingly. 4. If neither of the follow-ups is possible, delete entries from the respective columns: protection_incidents protection_incidents/none dam_shelters_reason 5. Communicate to the enumerators to make sure the question is understood and asked properly
	uuid	Check for duplications and delete lines with the same UUID.	AO/FO: delete entry.

Weekly /:

These checks are done in the consolidated datasets. It is important to do weekly checks, as they allow to figure out data quality issues at an earlier stage.

#	Question	CHECK EXPLAINED	ACTION
		Weekly : Check enumerator patterns. Filter the consolidated dataset by enumerator and use horizontal checks to see if any of the enumerators tend to select the same answers all the time.	AO: Flag to FO. FO: Flag the cell and follow-up with the enumerator.
		Weekly: Check if there are enumerators consistently doing fewer interviews than the others.	AO: Flag to FO. FO: Follow-up with the enumerator.

Data sharing and validation

For the Hard-to-reach Assessment, the following documentation always needs to be shared alongside any dataset submitted for HQ review & validation:

1. Raw dataset
2. Clean dataset
3. A macro enabled cleaning tool that includes the following tabs⁷:
 - Data checking
 - Cleaning log
 - Deletions
4. KOBO questionnaire

- a. For all assessments using Kobo/ ODK for data collection, the “audit logging meta question type” should be included during tool design (more here); when possible, data from this should be used to monitor enumerator behaviour.
6. Data deletion report
7. Sampling verification

⁷ At the later stages of the assessment cycle, the R script/ code used to clean and process the data will also be shared.