Research Terms of Reference

Humanitarian Situation Monitoring (HSM) Pilot

02-APE

Afghanistan

January 2022
Version 1

REACH Informing more effective humanitarian action

1. Executive Summary

Country of intervention	Afghanistan					
Type of Emergency	X	Natural disaster	X	Conflict	□	Other *(specify)*
Type of Crisis	X	Sudden onset	□	Slow onset	□	Protracted
Mandating Body/ Agency	*United Nations Office for the Coordination of Humanitarian Affairs (OCHA)*					
IMPACT Project Code	02-APE					
Overall Research Timeframe	02/11/2021 to 14/01/2022					
Research Timeframe	1. Pilot/ training: 13/12/2021		6. Preliminary presentation: N/A			
	2. Start collect data: 19/12/2021		7. Outputs sent for validation: 10/01/2022			
	3. Data collected: 30/12/2021		8. Outputs published: 17/01/2022			
	4. Data analysed: 04/01/2022		9. Final presentation: 17/01/2022			
	5. Data and analysis sent for validation: 05/01/2022					
Number of assessments	X	Single assessment (one cycle) (Pilot expected to then be repeated, but separate TOR to be prepared accordingly)				
	□	Multi assessment (more than one cycle)				
Humanitarian milestones	**Milestone**		**Deadline**			
	□	Donor plan/strategy	_ _/_ _/_ _ _ _			
	X	Inter-cluster plan/strategy	17/01/2022 - Emergency need severity map+ Sectoral severity map + formatted analysis to inform emergency operations in the humanitarian response + key findings presentation			
	□	Cluster plan/strategy	_ _/_ _/_ _ _ _			
	□	NGO platform plan/strategy	_ _/_ _/_ _ _ _			
	□	Other (Specify):	_ _/_ _/_ _ _ _			
Audience Type & Dissemination	**Audience type**		**Dissemination**			
	X Strategic X Programmatic X Operational □ [Other, Specify]		□ General Product Mailing (e.g. mail to NGO consortium; HCT participants; Donors) X Cluster Mailing (Education, Shelter and WASH) and presentation of findings at next cluster meeting X Presentation of findings (e.g. at HCT meeting; Cluster meeting)			

			□ Website Dissemination (Relief Web & REACH Resource Centre) □ [Other, Specify]	
Detailed dissemination plan required	□	Yes	X	No
General Objective	The HSM Pilot aims to monitor how the needs in the districts that were assessed under the Whole of Afghanistan Assessment (WoAA 2021) are evolving under the rapidly changing context in Afghanistan, whilst providing sufficient longitudinal data to allow for the development of an analytical framework that would allow a regular monitoring of humanitarian needs. This pilot is a one-time assessment designed to demonstrate the utility of a broader HSM designed and led by the humanitarian response in Afghanistan. HSM would aim to inform both the geographical and sectoral prioritization to inform a tailored and evidence-based response. HSM would also seek to complement the annual Whole of Afghanistan Assessment (WoAA) by filling in information gaps on a quarterly basis.		
Specific Objective(s)	Among assessed districts, the HSM Pilot specifically aims to: 1. Determine the pre-existing vulnerabilities (including shock, migration and reliance on unsustainable sources of primary income) and coping strategies of districts found to be in emergency need. 2. Conduct longitundal analysis to examine the evolution (including any escalations and descalations of need). 3. Develop a severity index of sectoral needs (with a specific focus on food security, health and wash) and composite index of intersectoral need through which to identify priority areas and sectors at nation-wide and district levels ahead to inform future responses to emergency need by the humanitarian response in-country. 4. Determine the drivers behind emergency needs at nation-wide and district levels. 5. Identify appropriate triggers to determine areas that maybe at immediate or potential risk of emergency needs.			
Research Questions	1. What are the pre-existing vulnerabilities and coping strategies of the populations found to be in emergency need? 2. Based on sectoral and multi-sectoral indices, what are the priority areas and sectors in emergency need? 3. What are the key drivers behind this emergency need? 4. What are triggers that could be used to determine areas at risk of acute emergency?			
Geographic Coverage	286 districts assessed under the WoAA 2021			
Secondary data sources	2021 OCHA Natural Disaster Database Afghanistan: Famine Early Warning System Network (FEWS NET) Projection for October 2021 – January 2022 Afghanistan: Intergrated Food Security Phase Classification (IPC) Projection for November 2021 – March 2022 OCHA Afghanistan Sectoral Severity Maps Whole of Afghanistan Assessment 2021 Sectoral and Multi-Sectoral Severity analysis			
Population(s)	□	IDPs in camp	□	IDPs in informal sites

	□	IDPs in host communities		□	IDPs [Other, Specify]	
	□	Refugees in camp		□	Refugees in informal sites	
	□	Refugees in host communities		□	Refugees [Other, Specify]	
	□	Host communities		**X**	**Populations in emergency need**	
Stratification	X	Geographical #: 286 districts[1] Population size per strata is known? □ Yes X No	□	Group #: _ _ _ Population size per strata is known? □ Yes □ No	□	*[Other Specify]* #: _ _ Population size per strata is known? □ Yes □ No
Data collection tool(s)	X	Structured (Quantitative)		□	Semi-structured (Qualitative)	
	Sampling method			**Data collection method**		
Structured data collection tool	**X Purposive** □ Probability / Simple random □ Probability / Stratified simple random □ Probability / Cluster sampling □ Probability / Stratified cluster sampling **X** Snowballing			**X Key informant interview (Target #): 7299 (across 2227 BSUs)** □ Group discussion (Target #):_ _ _ _ _ □ Household interview (Target #):_ _ _ _ _ □ Individual interview (Target #):_ _ _ _ _ □ Direct observations (Target #):_ _ _ _ _ □ [Other, Specify] (Target #):_ _ _ _ _		
Data management platform(s)	X	IMPACT		□	UNHCR	
	□	[Other, Specify]				
Expected ouput type(s)	□	Situation overview #: _ _	□	Report #: _ _	□	Profile #: _ _
	□	Presentation (Preliminary findings) #: _ _	X	Presentation (Final) #: 1	□	Factsheet #: _ _
	□	Interactive dashboard #:_	□	Webmap #: _ _	X	Map #: 4 multi-sectoral severity need at province level, Food Security and Agriculture (FSAC) sectoral severity need at province level, Health sectoral severity need at province level, and Water Sanitation and Hygiene (WASH) sectoral severity need at province level
	X	Formatted Analysis #: 1				
Access	X	Public (available on REACH resource center and other humanitarian platforms)				
	□	Restricted (bilateral dissemination only upon agreed dissemination list, no planned publication on REACH or other platforms at this stage)				
Visibility *Specify which **logos** should be on outputs*	**REACH**					
	Donor: US Bureau for Humanitarian Aid (BHA)					
	Coordination Framework: OCHA					

[1] Comparison between districts will be between non-representative data

	Partners: N/A

2. Rationale

2.1 Background

Endemic poverty and decades of conflict have converged with COVID-19, natural disasters, and recent changes in governance to generate disparate needs and vulnerabilities within Afghanistan. The year-on-year increase in the number of people in acute and multi-sectoral need highlights the overall need for identification of possible areas in severe humanitarian need for timely evidence-based decision making and prioritisation via joint inter-sectoral analysis. While the overall availability and quality of data in Afghanistan is high, the rapidity with which humanitarian needs are anticipated to evolve following recent politic-economic shifts in-country will require a need for integrated analysis at regular intervals to both coordinate and triangulate findings from sectoral and inter-sectoral information sources and to inform a more timely and tailored response.

The Humanitarian Situation Monitoring (HSM) proposes to fill this information gap by providing regular analysis via a jointly-developed framework which draws from both primary and secondary sources for real-time monitoring regarding the severity and drivers of needs within Afghanistan. The HSM pilot is a one-time assessment designed to demonstrate the utility of a broader HSM and develop parameters for a future analytical framework.

2.2 Intended impact

HSM seeks to inform both the geographical and sectoral prioritization of emergency needs and any subsequent emergency interventions by actors in the response – including OCHA and clusters. HSM would also seek to complement the annual Whole of Afghanistan Assessment (WoAA) by filling in information gaps on a quarterly basis which could then inform OCHA and cluster planning. The HSM pilot is a one-time assessment designed to demonstrate the utility of a broader HSM, as well as inform response planning.

3. Methodology

3.1 Methodology overview

HSM will inform regular emergency need prioritization through a joint analytical framework, incorporating both primary and secondary data sources, which would then inform emergency (geographic and sectoral) prioritization and trigger emergency response. In the interim, the HSM pilot will use WoAA 2021 sectoral and multi-sectoral analysis to determine districts in emergency need. To do so, enumerators will conduct approximately 7300 face-to-face, mobile, or area of knowledge (AoK) Key Informant Interviews (KIIs) according to accessibility levels, across 286 districts,. KI networks will be developed through a snowballing approach to cover the entirety of selected districts, stratifying each district's network by basic service unit (BSU)[2] to ensure a minimum of 3 KIs per BSU, each with information covering a different settlement than the others[3] and a minimum of 10% of settlements covered per district.
Through this process, the KI network ensures that information collected in each district is equally distributed across its different economic and geographic service units, each of which representing settlements and populations with similar levels of service access and humanitarian needs.

Data collection will occur between Sunday 19 Dec 2021 – Thursday 30 December 2021.

The needs assessment questionnaire aims to assess needs at the settlement level, while ensuring comparability to existing nation-wide assessments, often conducted through household surveys (such as the WoAA assessment). The tool that will be used in this pilot round of HSM data collection is a slightly tweaked version of the tool used in the previous round of Hard To Reach data collection, that occurred in August/September 2021, under the umbrella of the WoAA 2021, that was endorsed by OCHA and the ICCT.

[2] BSUs are defined as economic and geographic service units, each of which representing settlements and populations with similar levels of service access and humanitarian needs.
[3] Unless less than 3 settlements are present within the BSU.

Population of interest

Although BSUs will be used to stratify district-level data collection, ensuring that settlements covered are representative of the diverse social and economic situations of communities across each district, the basic sampling unit will be the settlement, to maximize accuracy of the KIIs. Selected KIs, identified through snowballing, will be reporting on the general needs and access to services of the populations living in the selected settlement. When the settlement is not accessible, interviews will be conducted with Internally Displaced Persons (IDPs) that had recently left from their district of origin and were currently residing in neighbouring accessible areas and that have the most up-to-date, accessible knowledge of the settlement they are reporting on; either because they remain in strict contact with the place of origin or because their departure from it is very recent (Area of Knowledge methodology).

Within each settlement, while some questions will estimate the presence of various population groups included in the HNO, all questions will be asked about the experience of the entire settlement population, not separately for each population group.

3.2 Secondary data review

To complement these REACH-designed sectoral and multi-sectoral need indices, the HSM pilot will rely on the following secondary data sources:

- 2021 OCHA Natural Disaster Database
- Afghanistan: Famine Early Warning System Network (FEWS NET) Projection for October 2021 – January 2022
- Afghanistan: Intergrated Food Security Phase Classification (IPC) Projection for November 2021 – March 2022
- International Office of Migration (IOM) Emergency Events Tracking (EET)
- OCHA Afghanistan Sectoral Severity Maps
- Whole of Afghanistan Assessment 2021 Sectoral and Multi-Sectoral Severity analysis.

3.3 Primary Data Collection

HSM will rely on the Hard to Reach (HtR) methodology. For more information, please refer to the HtR Term of Reference. In short, at least three key informant interviews (KIIs), reporting each on a different settlement, are conducted in each Basic Service Unit (BSU). To determine a BSU, participatory mapping of settlements and services available were conducted prior to data collection of WoAA 2021. Through a snowballing approach, key informants, (community leaders, teachers, doctors, (overall, adult individuals with a certain knowledge of the needs of the settlement)) will be interviewed where possible in person. When access constraints will prevent face-to-face interviews, these will be conducted via phone, or via the Area of Knowledge methodology should there be no network coverage.

More specifically, KIs are identified by the enumerators hired for the data collection and knowledgeable of the BSU as well as through a participatory process involving the local Councils ("shuras") that are consulted at the mapping of the BSU stage. Once an initial KI is identified, through snowballing, a district network of KIs is subsequently developed.

Prior to data collection, REACH field teams will be piloting the tool, and a training of enumerators will take place between December 13th and 15th to ensure everyone is familiar with the tool and the application (Kobo tool) used for data collection.

3.4 Data Processing & Analysis

Throughout data collection, cleaning will regularly take place to maintain the high standard of the assessment. Data cleaning and verification will take place daily. Feedback will be provided directly to REACH Senior Field Officers (SFOs) by the REACH Operations Program Manager. REACH SFOs will then inform the province REACH supervisor overseeing the data collection team or inform the data collection team directly. Data quality checking using the IMPACT Data Cleaning Minimum Standards Checklist will be used to outline the process and criteria for data deletion and determine staff responsibilities. Data cleaning will focus on identifying outliers in the data, contradictory or unlikely response options (logical inconsistencies), and suspicious patterns from enumerators. A cleaning log of all changes will be kept and will be available upon request after the REACH publication of datasets. Refer to Annex 2 for further details.

Relying on R, REACH will draw on the Data Analysis Plan (DAP), sectoral need composites, and multi-sectoral need composites to offer key (indicative) findings of needs at district level, with data weighted based on the numbers of settlement per district Tabulated analysis at district levels, including sectoral and multi-sectoral analysis relevant to emergency planning

as well as and a multi-sectoral severity map, and an overall national overview will be drafted and presented to OCHA and clusters.

4. Key ethical considerations and related risks

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

The proposed research design…	*Yes/ No*	*Details if no (including mitigation)*
… Has been coordinated with relevant stakeholders to **avoid unnecessary duplication** of data collection efforts?	Yes	
… **Respects respondents, their rights and dignity** (*specifically by: seeking informed consent, designing length of survey/ discussion while being considerate of participants' time, ensuring accurate reporting of information provided*)?	Yes	
… Does not **expose data collectors to any risks as a direct result** of participation in data collection?	Yes	
… Does not **expose respondents / their communities to any risks as a direct result** of participation in data collection?	Yes	
… Does not involve **collecting information on specific topics which may be stressful and/ or re-traumatising** for research participants (both respondents and data collectors)?	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.?	No	While vulnerable groups are not explicitly interviewed for this assessment, it is possible that vulnerable individuals maybe interviewed. Enumerators are prepared and trained for this.
… Follows IMPACT SOPs for management of **personally identifiable information**?	Yes	

5. Roles and responsibilities

Table 3: Description of roles and responsibilities

Task Description	*Responsible*	*Accountable*	*Consulted*	*Informed*
Research design	Assessment Officer (AO)	Research Manager (RM)	IMPACT HQ – Research Design and Data Unit (RDDU)	Country Coordinator (CC)

Supervising data collection	Operations Program Manager (PM)	Country Operations Manager (COM)	RM/ IMPACT HQ – RDDU	CC
Data processing (checking, cleaning)	Database Manager (DM)	AT	RM/ IMPACT HQ – RDDU	CC
Data analysis	DM	AT	PM/RM/ IMPACT HQ – RDDU	CC
Output production	AO	RM	PM/DM/IMPACT HQ – Research Reporting Unit (RRU)	CC
Dissemination	AO	RM	IMPACT HQ – RRU	CC
Monitoring & Evaluation	AO	RM	IMPACT HQ – Research Department (RD)	CC
Lessons learned	AO	RM	IMPACT HQ - RD	CC

Responsible: *the person(s) who executes the task*

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

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

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

6. Data Analysis Plan

Please see the following link.

7. Data Management Plan

Available on request.

Annex 1: SAMPLING FRAMEWORK FOR KEY INFORMANT SURVEYS

Province	N° of districts	N° of BSUs	N° of Settlements	N° of KI Interviews
Badakhshan	15	148	1431	444
Badghis	7	68	1354	239
Baghlan	9	83	1429	249
Balkh	10	103	1222	309
Bamyan	1	5	209	25
Daykundi	6	43	1335	204
Farah	11	58	1594	232
Faryab	11	78	1459	261
Ghazni	10	71	1729	262
Ghor	10	86	2563	310
Helmand	12	108	2440	381
Herat	20	167	2717	543
Jawzjan	5	15	459	68
Kabul	8	48	696	180
Kandahar	16	125	2828	444
Kapisa	4	20	543	71
Khost	10	48	1084	160
Kunar	15	94	1335	282
Kunduz	7	97	1030	291
Laghman	4	38	661	122
Logar	6	36	806	120
Maidan Wardak	7	43	1048	137
Nangarhar	17	128	1839	387
Nimroz	3	16	399	56
Nuristan	3	18	289	54
Paktika	14	73	1548	231
Paktya	6	32	970	123
Parwan	2	13	363	39
Samangan	3	25	632	93
Sar-e Pul	4	29	592	113
Takhar	12	141	1377	423
Uruzgan	7	52	892	163
Zabul	11	92	1911	283
Total	**286**	**2201**	**40784**	**7299**

Annex 2: Data Cleaning Procedures for Key Informant (KI) Surveys

Below are the data cleaning standard operating procedures (SoPs) for KI surveys.

OVERVIEW OF DAILY RESPONSIBILITIES

Program Manager (PM)

- Responsible for communicating security concerns from Senior Field Officers (SFOs) and implementing partners to larger Senior Management Team (SMT), who can then decide on whether or not to change the sampling framework and communicate that to Assessment Officers (AOs) and Database Manager (DM)
- Knowledgeable of AO to SFO communications regarding data cleaning issues via Skype group and e-mails

Senior Field Officers (SFOs)

- Responsibility for Afghanistan regions divided between SFOs, each assigned to contact enumerator team leaders, individual enumerators and/or implementing partners if any issues with the data
- In constant communication between the database manager (DM) and field SFOs / individual enumerators regarding issues with data collection and data quality issues
- Ultimately responsible for progress tracking in google sheets
- Responsible for following up on feedback given to enumerators via google sheets

Database Manager (DM)

- Responsible for downloading, deleting and anonymizing raw data and passing to S/DBOs for cleaning
- Runs daily R data checking script with clean data, and raw data from most recent day to identify errors for SFOs to follow up on
- Reviews daily cleaned data outputs
- Updates Daily Progress Tracker (HTML)
- Makes final call on survey deletions. Updates deletion columns in online tracking sheets
- Responsible for overseeing changes to sampling framework and adjusting sampling targets accordingly

Lead Database Officer (Lead DBO)

- Responsible for supervising the visual check, split data for visual checks for J/DBOs and consolidate all the visual check results in single file.
- Runs data cleaning and checking scripts on daily basis
- Sends cleaning result to AOs for providing feedback for and follow up on it
- Consolidate all cleaning logs which feedback provided for them

Assessment Officer (AO)

- Responsible for reviewing cleaning result on daily basis and providing feedback to either DM, SFOs, GISO
- Responsible for compiling all subsequent feedback from DM, SFOs, and GISO and sending to DM
- In communication regarding security or logistical concerns that change sampling framework – communication lead by PM, DM, and SMT

Database Officers (J/DBOs)

- Visually check for patterns in the data in questions to see if there is any evidence of enumerators developing habits of always entering the same values.
- DBO's responsible for ensuring daily backups of their cleaned data occur and that proper file naming protocol is followed for cleaned data and cleaning log
- DBOs communicate all data issues to Lead DBO, who communicates feedback and issues to responsible DM to contact responsible SFO, who contacts field teams and individual enumerators to clarify any issues with the data

Individual Enumerators

- Ensure phones are fully charged prior to next day of data collection
- Ensure phones are set to the correct time and date prior to data collection. Achieved with steps below: Settings→General management→Date and time→Automatic date and time AND Use 24-hour format ON
- Upload forms to the kobo server daily
- Enumerator ID is in the format 'organization-province-number' ie. reach-badakhshan-5

GIS Officer (GISO)

- Cross-checks household locations with village selected by enumerator. If location issues or spatial duplicates found, they are to be brought up with TAM, who will contact responsible SFO.

Additional information for DBOs:

- We've been automating most of the data processing stages and encourage our DBOs to implement their new ideas for developing this process. In addition, DBOs should familiarize their self with all data cleaning scripts, in particular, translation, replacing cleaning log and pattern check logger, time check and etc.
- DBOs responsible for familiarizing themselves with the constraints of the kobo data collection tool
- DBOs to have the latest version of the kobo tool and this SOP open to understand each question code
- The column structure must be followed in order
- Any consistent pattern issues related to specific enumerators should be noted by DBOs
- Translations from Dari or Pashto first harmonized to match existing categories if possible. If answers do not fall into already existing categories but occur more than once, answers are harmonized as new categories

DATA PROTECTION

To maintain the safety and security of both respondents and enumerators, the following procedures will be followed:

- Key informant names and phone numbers are deleted from final dataset;
- Settlement location, enumerator information and interview times are deleted from final dataset
- Settlement location will be removed from processed raw dataset that is shared among AOs and PM
- Province codes, district codes, and enumerators will be used for raw dataset that is shared among AOs and PM
- Database Manager is the only individual with full access to raw dataset

DELETION OF DATA

- Considering the deletion criteria the deletion command will be coded in R script to apply on daily data processing
- Database Manager is responsible for deletion of surveys
- Database Manager receives cleaning logs from lead DBO and feedback from GISO, and compiles uuid of surveys to delete from dataset.

Criteria for deletion:

- All surveys completed in under 20 minutes or 80 minutes or more
- All surveys with a pattern match of 90% or higher to another survey
- All surveys with a respondent 17 years of age or younger
- All surveys without consent
- All surveys with 6 or more flags, without reasonable explanation
- Surveys located 5km or more from selected village, without reasonable explanation

DATA CHECKING SUMMARY

A – DUPLICATE CHECKS: PARENT WORKSHEET

Duplicate uuid's should not be present

#	STEP
1.	**Duplicate surveys are flagged for deletion**. We have already coded this in our data processing script. If there was any duplicate, it will be flagged for deletion.

B – TIME CHECKS: PARENT WORKSHEET

Survey should take between 20 and 79 minutes

#	STEP
1.	This survey should take between **20 and 79 minutes** to complete. **Under 20 minutes: Surveys will be deleted** as invalid as they are of suspected poor quality/to be fake. **80 minutes or more: Surveys will be deleted** as invalid as they are of suspected poor quality/to be fake. Surveys taking **longer than 70 minutes will be flagged for Area SFO review.** If there is no valid explanation provided, then the interview will be deleted. Operations will be notified of this deletion.
2.	We're using audit files to check the duration of each survey and using R script for doing this operation.

C - TRANSLATIONS FROM DARI / PASHTO

Organization and Village names may be entered in Pashto or Dari

#	QUESTION	ACTION
1.	**village_other, organisation_other** *Parent Worksheet*	'**Other' answers, entered initially in Dari or Pashto.** Translations from Dari/Pashto done within same cell in the *Data Checking* Tab. If possible, translations are first harmonized into groups that match existing categories. If answer falls into category that already exists, the 'other' category answer is corrected in the same cell.

D – SPECIFIC QUESTION CHECKS

Parent Worksheet

#	QUESTION	ACTION
1.	**idp_hh_range**	Flagged if **idp_hh_range and proportion_host are both "many_hh" or "all_hh"**

2.	**returnee_hh_range**	Flagged if **returnee_hh_range and proportion_host are both "many_hh" or "all_hh"**
3.	**returnee_hh_range**	Flagged if **returnee_hh_range and idp_hh_range are both "all_hh"**
4.	**settlement_events**	Flagged if **active_conflict selected but no active_conflict in INSO database**
5.	**settlement_events**	Flagged if **avalanche, locusts, floods, or drought selected but no natural disaster recorded in OCHA natural disaster database**
6.	**hunger_level**	Flagged if **hunger_level is bad or worse, but "yes" selected for food_access**
7.	**coping_mechanism**	Flagged if **"coping_no" is selected for coping_mechanism, but "no" is selected for food_access**
8.	**edu_barriers**	Flagged if **gov_school_barriers or rel_school_barriers is "edu_security", but "event_conflict" is not selected for settlement_events**
9.	**health_access**	Flagged if **health_access is "no", but birth_women is "birth_hospital" or "birth_clinic"**
10.	**reason_change_farming**	Flag if **reason_change_farming is event_flood, but events_one_year is not event_flood. Flag if reason_change_farming is event_conflict, but events_one_year is not event_conflict. Flag if reason_change_farming is event_drought, but events_one_year is not event_drought. Flag if reason_change_farming is event_locust, but events_one_year is not event_locust. Flag if reason_change_farming is event_snow, but events_one_year is not event_snow. Flag if reason_change_farming is event_earthquake, but events_one_year is not event_earthquake. Flag if reason_change_farming is event_covid, but events_one_year is not event_covid**
11.	**reason_change_livestock**	Flag if **reason_change_livestock is event_flood, but events_one_year is not event_flood. Flag if reason_change_livestock is event_conflict, but events_one_year is not event_conflict. Flag if reason_change_livestock is event_drought, but events_one_year is not event_drought. Flag if reason_change_livestock is event_locust, but events_one_year is not event_locust. Flag if reason_change_livestock is event_snow, but events_one_year is not event_snow. Flag if reason_change_livestock is event_earthquake, but events_one_year is not event_earthquake. Flag if reason_change_livestock is event_covid, but events_one_year is not event_covid**
12.	**reason_change_employment**	Flag if **reason_change_employment is event_flood, but events_one_year is not event_flood. Flag if reason_change_employment is event_conflict, but events_one_year is not event_conflict. Flag if reason_change_employment is event_drought, but events_one_year is not event_drought. Flag if reason_change_employment is event_locust, but events_one_year is not event_locust. Flag if reason_change_employment is event_snow, but events_one_year is not event_snow. Flag if reason_change_employment is event_earthquake, but events_one_year is not event_earthquake. Flag if reason_change_employment is event_covid, but events_one_year is not event_covid**
13.	**health_barrier**	Flagged if **health_barrier is "edu_security", but "event_conflict" is not selected for settlement_events**
14.	**health_barrier**	Flagged if **health_type_time is "14_min", but "barrier_transport" is not selected for health_barrier**

15.	**nutrition_barrier**	Flagged if **nutrition_barrier is "no_tazkira", but tazkira_proportion is "many_hh" or "all_hh"**
16.	**shelter_issue**	Flagged if **shelter_issue is "none", but priority_needs includes "prio_shelter"**
17.	**girls_marriage**	Flagged if **girls_marriage is "yes" but "coping_marriage" is not selected**
18.	**shelter_damaged**	Flagged if **shelter_damaged is "all_shelter" or "many_shelter", but "shelter_repairs" is not selected for reason_debt**
19.	**shelter_repaired**	Flag if **shelter_repaired is "all_shelter" or "many_shelter", but "shelter_repairs" is not selected for reason_debt**
20.	**nfi_market_barrier**	Flagged if **nfi_market_barrier is "barrier_covid", but "event_covid" is <u>not</u> selected for settlement_events**
21.	**nfi_market_barrier**	Flagged if **nfi_market_barrier is "barrier_danger_conflict", but "event_conflict" is <u>not</u> selected for settlement_events**
22.	**nfi_market_distance**	Flag if **nfi_market_distance is "more_2", but "barrier_distance" is not selected nfi_market_barrier**
23.	**access_handwash**	Flag if **access_handwash is "no_hh" or "few_hh", but soap_access is "yes"**
24.	**access_handwash**	Flag if **access_handwash is "no_hh" or "few_hh", but latrine_facility is "many_hh" or "all_hh"**
25.	**explosive_hazards**	Flag if **explosive_hazards is "no", but nutrition_barrier is "no_security"**
26.	**one_member**	Flag if **one_member is "no_hh" or "few_hh", but tazkira_proportion is "many_hh" or "all_hh"**

E – ENUMERATOR PATTERN CHECKS

#	QUESTION	ACTION
1.	Select_one and select_multiple questions	Visual check that individual enumerators are not developing patterns for answers to these questions or answering the same answers for every survey
2.	proportion_hh and proportion_hh_2	Visual check that individual enumerators are not developing patterns regarding proportions of hhs

G – DAILY GIS SPATIAL CHECKS

Detailed summary found in Annex II

#	STEP
1.	Database Manager provides location data of the days' surveys to GIS Officer (GISO) at the end of each day of data collection, in *csv format*. The following information is included in the spreadsheet exported to the GISO: **data collection date, uuid, village code, village name (in kobo format).** It is not necessary to include other fields in the export to the GISO.

2.	GISO loads new points into ArcGIS software, along with a reference shapefile with all villages covered in the assessment. The field **'kobo_code'** in the village reference shapefile will be equivalent to the **'village'** field from the kobo entries. GISO then *performs a table join in the kobo points layer* using the two matching codes. 2 sets of coordinates will now be present in the attribute table of the kobo points.
3.	GISO check for duplication of coordinates **(within 10m)** collected in kobo. A summary of duplicate uuid is exported as a table. **Surveys with duplicate coordinates are flagged to the Database Manager to flag to SFOs who ensure information reaches individual enumerators**
4.	**'XY to line'** function used from ArcGIS Toolbox to draw line between the pair of coordinates present in the point attribute table. Surveys greater than 5km **and greater than 10km** from villages where they are indicated to have taken place are flagged.
5.	GISO exports a report table with uuid, village name, and distance (km) columns for surveys located greater than 5km from indicated village. **Uuid's with wrong village assigned are flagged to the Database Manager, and then to regional SFO to discuss with individual enumerators**

H – DAILY R SCRIPT FOR RAW DATA CHECK

Producing reports broken by region, the purpose of the daily R script check is to provide guidance to SFOs and DBOs for enumerator follow up and provide an additional check against enumerator error.

R Script incorporates cleaned data as well as raw data from the most recent day of data collection

#	QUESTION	ACTION
1.	**progress check**	At province level. Shows progress at the province, district, and basic service unit (BSU) level
2.	**time checks**	Flags surveys with illogical time stamps including an end time that is before the start time, interviews submitted in the future, interviews that are either under 25 minutes or more than 70 minutes. Interviews under 20 minutes or more than 79 minutes will be automatically deleted.
3.	**survey frequency**	Flags enumerator productivity in most recent day of data collection. Enumerators with more than 8 surveys per day maybe notified to slow down and interviews may be deleted if number exceeds 8.

SUMMARY OF SAMPLING FRAMEWORK CHANGES

- **Step 1:**
  Individual enumerator or team leader raises security or logistical concern (including active conflict, natural disaster, change in mobile connectivity in area, hostility from local actors etc.) to SFO. PM then alerts DM and SMT.
- **Step 2:**
  SFO escalates security or logistical concern to PM.
- **Step 3:**
  SMT determines sampling framework change and communicates sampling change to PM, AO, and DM. Alternatively, PM communicates sampling change to AO and DM.
- **Step 4:**
  DM adjusts sampling framework to accommodate changes.