Research Terms of Reference

Pasture Management
AFG2401c
Afghanistan

15 May 2025
V1

AGORA Localised Response Inclusive Recovery Effective Stabilisation

1 Executive Summary

Country of intervention	Afghanistan					
Type of Emergency	□	Natural hazard	□	Conflict	x	Other: Agricultural livelihoods
Type of Crisis	□	Sudden onset	□	Slow onset	x	Protracted
Mandating Body/ Agency	NMOFA					
IMPACT Project Code	02BAS					
Overall Research Timeframe (from research design to final outputs / M&E)	15/03/2025 to 31/08/2025					
Research Timeframe Add planned deadlines (for first cycle if more than 1)	1. Pilot/ training: 15/05/2025		7. Outputs sent for validation: 3/07/2025			
	2. Start collect data: 20/05/2025		8. Outputs shared with partner: 15/07/2025			
	3. Data collected: 31/05/2025					
	4. Data analysed: 15/6/2025					
	5. Data sent for validation: 18/06/2025					
Number of assessments	X	Single assessment (one cycle)				
	□	Multi assessment (more than one cycle)				
Humanitarian milestones Specify **what** will the assessment inform and **when** e.g. The shelter cluster will use this data to draft its Revised Flash Appeal;	**Milestone**		**Deadline (can be tentative)**			
	□	Donor plan/strategy				
	□	Inter-cluster plan/strategy				
	□	Cluster plan/strategy				
	□	NGO platform plan/strategy				
	x	Other (Specify): ACTED THRIVE programming	15/07/2025			
	Audience type		**Dissemination**			

Audience Type & Dissemination Specify **who** will the assessment inform and **how** you will disseminate to inform the audience	□ Strategic □ Programmatic X Operational		□ General Product Mailing (e.g. mail to NGO consortium; HCT participants; Donors) □ Cluster Mailing (Education, Shelter and WASH) and presentation of findings at next cluster meeting □ Presentation of findings (e.g. at HCT meeting; Cluster meeting) □ Website Dissemination (Relief Web & REACH Resource Centre) x Bilateral dissemination (ACTED)	
Stakeholder mapping *Has a detailed stakeholder mapping been conducted during research design to identify all actors that could **contribute** to and/or **benefit from** the research?*	x	Yes	□	No
General Objective	To provide a comprehensive, localized understanding of private and public pasture and rangeland use, and the underlying factors driving overuse and conversion of pastures, among rural communities in 5 manteqas in NW Afghanistan, to inform programming for sustainable pasture management in these manteqas			
Specific Objective(s)	1) Map current seasonal and year-round use of public and private lands as pastures and for dryland agriculture among rural communities across 5 manteqas 2) Identify and assess the impact of increased or competing demand for land, as well as climatic pressure on pastures and rangelands in the 5 manteqas 3) Understand drivers for choices in the use and management of private and public pastures for grazing or conversion in the 5 manteqas 4) Understand local pasture management capacities and support needs to identify opportunities and challenges to sustainable pasture management and grazing schemes in the 5 manteqas			
Research Questions[1]	1. How and when are pastures and rangelands used for grazing in each manteqa? 2. Which pastures and rangelands are degraded at riskof degradation due to overuse, competing demand or climatic pressures? 3. What underlying factors affect the implementation of sustainable pasture management mechanisms in the 5 manteqas?			
Geographic Coverage	5 manteqas in 4 provinces in NW Afghanistan: - Alasha Wuloswali Manteqa, Markaz Hazrat-e-Sultan District, Samangan Province - Pump Khana Manteqa, Shiberghan District, Jawzjan Province - Saray Qala Manteqa, Khwaja Sabz Posh District, Faryab Province - Dasht-e-Laili Manteqa, Andkhoy District, Faryab Province - Shadian Manteqa, Nahr-e-Shadi District, Balkh Province			
Secondary data sources	- AGORA, SRDP IV Executive Summary, December 2019 - AGORA, Manteqa Profiles, Samangan Province, December 2023 - AGORA, Manteqa Profiles, Faryab Southeast, November 2023			

[1] For an overview of the sub-questions, please refer to the Methodology section below.

- AGORA, Manteqa Profiles, Faryab North west November 2023
- AGORA, Manteqa Profiles, Balkh Province, August 2023
- AGORA, Manteqa Profiles, Jawzjan Province, December 2023
- AGORA, SRDP IV District Water User Group Mapping, December 2019
- S2AP. The KAP survey model (Knowledge, Attitude & Practices)
- Hima Uprety, AFD/ MADERA, SI, GERES: Study on Management and Regeneration of Pasturelands in High Altitude, n.d.
- MoA: National Plan for Sustainable Range Management, 2011
- Hemat et al.: Watershed restoration in Afghanistan, Proceedings of the 2008 Joint Meeting of the Society for Range Management and the America Forage and Grasslands Council, 2008
- Wolfgang Pittroff: Rangeland management and conservation in Afghanistan, 2011
- Lyndsay Alden-Wiley: Looking for Peace on the Pastures: Rural Land Relations in Afghanistan, 2004
- Lyndsay Alden-Wiley: Land Rights in Crisis: Restoring Tenure Security in Afghanistan, 2003
- Lyndsay Alden-Wiley: Land and the Constitution: Current Land Issues in Afghanistan, 2003
- Lyndsay Alden-Wiley: Land Relations in Faryab Province: Findings from a Field Study in 11 Villages, 2004
- Mark Patterson: The Shiwa Pastures, 1978–2003: Land Tenure Changes and Conflict in Northeastern Badakshan, 2004
- USAID Afghanistan: A Step-by-Step Provisional Guideline Towards Community-Based Pasture Management and Integrated Development, 2005
- UNCCD: UNCCD, n.d.
- FAO: Voluntary Guidelines on tenure, n.d.
- FAO: Pastoralist Knowledge Hub, n.d.
- MAIL: Rangeland Law, n.d.
- FAO/MAIL: Policy and strategy for forest and range management sub-sectors, pre 2021
- FAO: Forest and Landscape Restoration Afghanistan Knowledge Hub, n.d.
- FAO, various: FAO FLR Lit review, n.d.
- WB: Afghanistan: Capacity Development for Natural Resource Management, 2018
- Khurram, Larawai, Shalizi: Assessing regeneration strategies for sustaining intensively used Chilgoza pine-dominated community forests in Afghanistan, 2023
- Wiley/AREU: Land, People, and the State in Afghanistan: 2002 – 2012, 2013

Population(s) Select all that apply	□	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]	
	X	Host communities		□	[Other, Specify]	
Stratification Select type(s) and enter number of strata	X	Geographical #: 5 manteqas Population size per strata is known? x Yes □ No	□	Group #: _ _ _ Population size per strata is known? □ Yes □ No	□	[Other Specify] #: _ _ Population size per strata is known? □ Yes □ No
Data collection tool(s)	x	Structured (Quantitative)		x	Semi-structured (Qualitative)	
	Sampling method			**Data collection method**		

Structured data collection tool (s) # 1 Select sampling and data collection method and specify target # interviews	□ Purposive □ Snowballing x 2-stage cluster sampling	□ Key informant interview (Target #) _ x Individual interview (Target #): 782 □ Focus group discussion (Target #):_ _ _
Semi-structured data collection tool (s) # 2 Select sampling and data collection method and specify target # interviews ***If more than 2 structured tools please duplicate this row and complete for each tool.	x Purposive □ Snowballing	x Key informant interview (Target #): 5 □ Individual interview (Target #):_ _ _ _ _ □ Focus group discussion (Target #):_ _ _ _

Disaggregation by gender and age Are you planning to conduct sex/age disaggregated analysis?	Gender		Age	
	x	Yes	□	Yes
	□	No	x	No

Data management platform(s)	X	IMPACT	□	UNHCR		
	□	[Other, Specify]				
Expected ouput type(s)	□	Situation overview #: _ _	□	Report #: _ _	X	Profile #: 5
	X	Presentation (Preliminary findings) #: _ _	□	Presentation (Final) #: _ _	□	Factsheet #: _ _
	X	Interactive dashboard #:_	□	Webmap #: _ _	X	Map #: _ _
Access	□	(available on REACH resource center and other humanitarian platforms)				
	X	Restricted (bilateral dissemination only upon agreed dissemination list, no publication on REACH or other platforms)				
Visibility Specify which **logos** should be on outputs	AGORA					
	Donor: Norwegian Ministry of Foreign Affairs					
	Coordination Framework: NA					
	Partners: NA					

2 Rationale

2.1 Background

Rangelands make up for around 47% of Afghanistan's land cover, and by proportion, occupy the largest share of the country's territory. With predominant vegetation consisting of grasses, herbs, shrubs and low-growing trees, rangeland ecosystems play a key role for Afghanistan's economy and sustain livelihoods for nearly 80% of the country's households (WB 2017). Increasing temperatures and recurring droughts have a negative effect on rangelands and pastures, further exacerbated by socio-economic pressures that translate into increased demand pressure on rangelands. While traditional and local mechanisms to prevent overgrazing may still exist, communities report that their own knowledge is no longer sufficient to prevent rangeland degradation. During an IMPACT field visit to Saray-e Qala in 2024, communities reported

that pastures did not regenerate despite sufficient precipitation, potentially due to permanent damage to plant roots by goats.

As part of its work with Acted on the Norwegian Ministry of Foreign Affairs (NMoFA)-funded Sustainable Rural Development (SRDP) V Programme, IMPACT is well-placed to conduct an assessment on pasture[2] management at the manteqa level to fill this gap. SRDP intends to address the root causes of instability and poverty in four provinces in Northwest (NW) Afghanistan (Faryab, Jawzjan, Balkh, and Samangan) by creating a conducive environment for the active participation of local authorities and citizens in community-driven, area-based initiatives that contribute to improving basic service delivery and livelihood security. In particular, evidence from this assessment may be integrated within the SRDP programming by helping shape Acted's flagship pilot THRIVE, an integrated approach to restore degraded landscapes through landscaping, reforestation and livelihoods activities in close cooperation with affected communities. Findings from the assessment may also help build a deeper understanding of how (I)NGOS in NW Afghanistan can engage with local communities on development projects related to the management of key resources at the community level.

Target areas for the implementation of the THRIVE pilot have been identified based on secondary data from previous IMPACT assessments, as well as feedback from Acted field staff in NW Afghanistan. According to a 2023 Manteqa Profiling (IMPACT), the top three reported income sources across the five target areas were Agriculture (94.3%) Livestock (77.6%) and Daily labor (no contract) (76.1%), indicating a strong reliance on agricultural and livestock-based livelihoods, with a significant portion also depending on informal daily labor. With community buy-in being an integral part of the sustainability of land regeneration activities, this assessment aims to provide a better understanding of local perspectives on resilience gaps in the management of rangelands and pastures, and will be closely aligned with a separate research cycle on the use and management of agricultural irrigation water in the same areas.

2.2 Intended impact

According to IMPACT's partner Acted, which has been implementing land restoration activities as part of its flagship THRIVE methodology under SRDP V in the assessment's target areas, the biggest challenges locally are a lack of knowledge on adaptive practices and a lack of buy-in, as local communities consider long-term agricultural redevelopment a trade-off versus short-term income generating activities, leading to sustained demand pressure on pastures. THRIVE activities have also focused on engaging communities through Natural Resource Management Committees, which have been trained on pasture restoration and reforestation but lack capacity to scale up pasture restoration and communal management initiatives. Evidence on inefficiencies and barriers to sustainable pasture management, as well as actionable suggestions on adaptive practices at the manteqa level can support local coordination mechanisms such as the Natural Resource Management Committees in fulfilling their mandates. It can also help INGOs adapt their programming to address local issues such as overgrazing, land degradation, and conflicts over pasture, and inform the implementation of pasture related policies that are meaningful for the targeted areas in NW Afghanistan.

3 Methodology

3.1 Methodology overview

The assessment will consist of multiple elements aimed at various dimensions of pasture management, from individual farmers to line departments involved in rangeland related policy making at the district level. As such, it will consist of remote sensing elements to map current and historical land cover and pasture health, as well as primary data collection to provide an improved understanding of resilience gaps in pasture use, demand pressure, and management mechanisms in the targeted areas.

[2] Despite considerable overlap, exact definitions of the terms rangeland and pasture are highly contested. For the purpose of this assessment, these terms will be used interchangeably. A more meaningful distinction in the context of Afghanistan can be made for public and private lands, as land ownership has consequences for land use. According to Acted field staff, local authorities have been implementing the Rangeland Law of 1971, which prohibits the use of public agricultural land except for livestock grazing.

Remote Sensing/ Secondary Data

To investigate changes in pasture health, IMPACT will follow a methodology outlined in the International Fund for Agricultural Development Technical Note on Pasture Condition Maps in Kyrgyzstan (2022). A series of satellite imagery indexes will be calculated using Landsat-based Spectral indices, comparing at least two historical periods of 4 years to account for drought periods. Each period will be analyzed for irrigated land, rain-fed land, and pastureland, which will then be compared across periods. The change in pasture areas will be analyzed between the historical periods and shown on maps. Given that rangelands tend to be converted to rainfed agricultural land opportunistically, tracking pasture health and land cover changes over time will help triangulate findings from the planned Knowledge, Attitudes and Practices Survey (see below) to better understand socio-economic factors that drive decisions on pasture use.

Primary Data Collection

Key Informant Interviews

Given the geographical spread of the manteqas across five districts, REACH will conduct a total of 5 KIIs with the respective local (district-level) departments of the Ministry of Agriculture, Irrigation and Livestock to provide a deeper understanding of local governance approaches regarding the implementation of pasture and rangeland policy. REACH will also conduct 1 KII per manteqa with herders. While it is likely that a larger sample would provide more contextual evidence for each manteqa, IMPACT field staff in the region have pointed out that identifying and interviewing additional KIIs that belong to this population of interest may be restricted by logistical challenges.

HH survey

To provide a better understanding of how pastures and drylands are used and what factors influence rainfed land use locally, REACH will conduct a quantitative KAP survey at household level in the 5 targeted manteqas. With communities in rural NW Afghanistan relying on both irrigation and dryland agriculture, this assessment and in particular its primary data collection tools will be aligned with a separate research cycle on irrigation management that targets the same areas; see below.

Alignment with Pasture Management Research Cycle

As REACH will be carrying out a research cycle on pasture management and irrigation in the same targeted manteqas, it has been decided to align these respective assessments to avoid assessment fatigue due to recurring data collection exercises. The table below provides an overview of the planned alignment of the irrigation and pasture management research cycles.

Alignment with Pasture Management assessment		
Irrigation Management	**Pasture Management**	**Purpose**
Remote Sensing (Evapotranspiration)	Remote Sensing (Pasture Health)	Map potential vulnerabilities with regard to natural resources
Quantitative KAP survey, representative (95/5) at manteqa level		HH level data on irrigation and pasture use practices
5 semi structured KIIs with line ministry staff at district level (1 per manteqa)		Policy-related/ district level data on water and pasture management

15 semi structured KIIs with Mirab Bashi/ Chakbashi/ local water managers (2-3 per manteqa)		Manteqa level data on water management .
	5 semi structured KIIs for each Manteqa with herders or livestock farmers	Information on pasture use in manteqa
Total Primary Data Collection		
20 KII	5 KII	
782 HH surveys		

Methods summary

Research questions	**Data collection method**
1. How and when are pastures and rangelands used for grazing in each manteqa?	
a. How do communities use public and private, land respectively?	KII
b. In which seasons do communities make use of pastures and rangelands for grazing?	HH survey
c. What kind of rotational grazing systems do communities make use of, if any?	HH survey
2. Which pastures and rangelands are degraded or danger of degradation due to overuse, competing demand or climatic pressures?	RS/ KII
a. Which pastures can be considered degraded?	RS
b. Which historic pastures have been converted to rainfed agricultural land?	RS
c. What factors increase demand pressure on pastures?	HH survey/ KII
3. What underlying factors affect the implementation of sustainable pasture management mechanisms in the 5 manteqas?	
a. Which criteria do communities consider when using land for rainfed agriculture?	HH survey
b. What local knowledge on pasture management and restoration do communities possess?	KII
c. What exogenous pressures affect community governance structures on pasture management?	KII
d. What additional soil restoration techniques/ seeds could strengthen pasture restoration efforts locally?	Secondary data

3.2 Population of interest

Targeted areas

In contrast to formal administrative divisions used in Afghanistan, manteqas cover areas smaller than districts, and are based entirely on a shared, local understanding of manteqa boundaries based on geographic features, shared natural resources, or other socio-geographic factors. As part of SRDP V, IMPACT has previously mapped and profiled 84 manteqas across Jawzjan, Faryab, Balkh and Samangan provinces in NW Afghanistan through Mapping Focus Group Discussions and Key Informant Interviews (IMPACT Manteqa Profiles, 2023).

*A **manteqa** in northwest Afghanistan is a geographic area containing a number of villages and is identified by both its inhabitants and the other inhabitants of the district under one common regional name. It is thus the basic reference point for the village population in the area. The manteqa boundaries are usually clearly defined by natural geographical features such as rivers, watersheds etc. IMPACT and Acted previously mapped and profiled Manteqa in Northwest Afghanistan and found that, beyond geographical boundaries, the existence of each of the assessed manteqa in the minds of its inhabitants stems from a feeling of belonging and attachment towards it, itself borne out of geographical proximity, common history, economic, social and tribal/ethnic ties, and the solidarity derived from the community management of some of the resources upon which rural livelihoods depend. The customary governance structures that were found to exist at various levels within the manteqa play an important role in community resilience and resource management.*

The 5 manteqas targeted in this research are part of SRDP V implemented by Acted and IMPACT in Northwest Afghanistan. These manteqas were selected based on key informants' reports on soil erosion, forest degradation and pasture degradation, availability of communal land, access, and reliance on agricultural livelihoods, complemented with Acted field teams' knowledge of the area.

The 5 manteqas are:

- Shadian Manteqa, Nahr-e-Shadi District, BalkhProvince
- Alasha Wuloswali Manteqa, Markaz Hazrat-e-Sultan District, Samangan Province
- Pump Khana Manteqa, Shiberghan District, Jawzjan Province
- Dasht-e-Laili Manteqa, Andkhoy District, Faryab Province
- Saray Qala Manteqa, Khwaja Sabz Posh District, Faryab Province

Population

Due to the close relationship between pasture use and dryland agriculture, the assessment will target manteqa residents engaged in dryland agriculture. While exact numbers for the population of interest is not known, findings from earlier IMPACT assessments indicate that a large number of residents fall in this category, as agriculture and livestock farming are the primary livelihoods in the targeted manteqas. As such, IMPACT will conduct a HH-level KAP survey with households engaged in livestock agriculture as their primary source of income. In addition, IMPACT will aim to conduct Key Informant Interviews with livestock herders for insights into pasture use locally.

3.3 Secondary data review

During the first weeks of implementation, a thorough secondary data review will be conducted by the IMPACT Senior Assessment Officer in order to build on and complement existing data and tools. This will include data from previous

assessments under SRDP in NW Afghanistan, as well as publicly available secondary literature to inform the methodology of the planned assessment. It is expected that the following Key Sources will be consulted:

Secondary Source	Purpose of Source
Study on Management and Regeneration of Pasturelands in High Altitude. Hima Uprety, AFD/ MADERA, SI, GERES. n.d.	• Contextual understanding of pasture restoration in high altitude areas • Key definitions and concepts related to pasture management • Insights into pasture restoration methodologies and their effectiveness
National Plan for Sustainable Range Management. MoA. 2011	• Contextual understanding of national strategies for range management • Key definitions and concepts related to sustainable range management • Methodology for implementing national range management plans
Watershed restoration in Afghanistan. Hemat et al. 2008	• Contextual understanding of watershed restoration efforts • Verification/triangulation of primary data on rangeland conditions • Methodology for assessing watershed restoration impacts
Rangeland management and conservation in Afghanistan. Wolfgang Pittroff. 2011	• Contextual understanding of rangeland management challenges • Key definitions and concepts related to rangeland conservation • Insights into rangeland management practices and their sustainability
Looking for Peace on the Pastures: Rural Land Relations in Afghanistan. Lyndsay Alden-Wiley. 2004	• Contextual understanding of rural land relations • Verification/triangulation of primary data on land tenure issues • Insights into land conflict resolution and management
Land Rights in Crisis: Restoring Tenure Security in Afghanistan. Lyndsay Alden-Wiley. 2003	• Contextual understanding of land tenure security issues • Key definitions and concepts related to land rights • Methodology for restoring tenure security
Land and the Constitution: Current Land Issues in Afghanistan. Lyndsay Alden-Wiley. 2003	• Contextual understanding of constitutional land issues • Verification/triangulation of primary data on land rights • Insights into legal frameworks for land management
Land Relations in Faryab Province: Findings from a Field Study in 11 Villages. Lyndsay Alden-Wiley. 2004	• Contextual understanding of land relations in Faryab Province

Secondary Source	Purpose of Source
	• Verification/triangulation of primary data on local land issues • Methodology for assessing land relations and conflicts
The Shiwa Pastures, 1978–2003: Land Tenure Changes and Conflict in Northeastern Badakshan. Mark Patterson. 2004	• Contextual understanding of land tenure changes and conflicts • Verification/triangulation of primary data on land use • Insights into historical land tenure and conflict resolution
A Step-by-Step Provisional Guideline Towards Community-Based Pasture Management and Integrated Development. USAID Afghanistan. 2005	• Contextual understanding of community-based pasture management • Key definitions and concepts related to integrated development • Methodology for implementing community-based management practices
UNCCD. n.d.	• Contextual understanding of global rangeland management • Key definitions and concepts related to desertification • Methodology for combating land degradation
Voluntary Guidelines on tenure. FAO. n.d.	• Contextual understanding of tenure guidelines • Key definitions and concepts related to land tenure • Methodology for implementing voluntary guidelines
Pastoralist Knowledge Hub. FAO. n.d.	• Contextual understanding of pastoralist knowledge • Key definitions and concepts related to pastoralism • Insights into best practices for pastoralist communities
Rangeland Law. MAIL. n.d.	• Contextual understanding of rangeland laws • Key definitions and concepts related to legal frameworks • Methodology for implementing rangeland laws
Policy and strategy for forest and range management sub-sectors. FAO/MAIL. pre 2021	• Contextual understanding of policy and strategy for forest and range management • Key definitions and concepts related to forest and range management • Methodology for policy implementation
Forest and Landscape Restoration Afghanistan Knowledge Hub. FAO. n.d.	• Contextual understanding of forest and landscape restoration

Secondary Source	Purpose of Source
	• Key definitions and concepts related to restoration practices • Insights into best practices for forest and landscape restoration
FAO FLR Lit review. FAO, various. n.d.	• Contextual understanding of forest and landscape restoration literature • Key definitions and concepts related to restoration • Methodology for reviewing restoration literature
Afghanistan: Capacity Development for Natural Resource Management. WB. 2018	• Contextual understanding of natural resource management capacity • Key definitions and concepts related to resource management • Methodology for capacity development
Assessing regeneration strategies for sustaining intensively used Chilgoza pine-dominated community forests in Afghanistan. Khurram, Larawai, Shalizi. 2023	• Contextual understanding of regeneration strategies • Verification/triangulation of primary data on forest management • Methodology for assessing regeneration strategies
Land, People, and the State in Afghanistan: 2002 – 2012. Wiley/AREU. 2013	• Contextual understanding of land tenure practices • Key definitions and concepts related to land policy • Insights into land tenure and policy practices
Technical Note on Pasture Condition Maps in Kyrgyzstan, IFAD, 2022	• Methodology for mapping historical developments of pasture health using remote sensing

3.4 Primary Data Collection

Qualitative Data Collection:

Given the focus of the assessment on specific local areas selected as pilot locations for the implementation of THRIVE under SRDPV, KI sampling will be entirely purposive. Key Informants from relevant line departments involved in rangeland and pasture management, as well as livestock herders from the 5 targeted manteqas will be identified with the help of IMPACT's partner Acted. KIIs will be conducted using a semi-structured tool that will be developed by the IMPACT Senior Assessment Officer following the Secondary Data Review.

Quantitative Data Collection:

The Household Interviews will be conducted using a closed, quantitative tool using the Kobo Collect data collection platform. The survey will be designed using indicators knowledge, attitudes and practices surrounding the use of drylands for livestock grazing and rainfed agriculture at household level.

For this, the Senior Assessment Officer will develop a Knowledge, Attitudes and Practices (KAP) survey that will aim to capture information on how pasture and rangelandare used locally. The tool design will be informed by secondary data on

methodological considerations for KAP surveys, as well as on best practices for pasture management as per Acted's documentation on the THRIVE methodology and the FAO Climate-Smart Agriculture Sourcebook.

Household Interviews with Heads of Household in 5 Manteqas

The HHI will use a two-stage stratified cluster sampling methodology based on the population size. REACH divided the total population per settlement by 7 (the average household size in Afghanistan) and then took a population sample of 95% Confidence level with a 5% Margin of Error for each Manteqa, and the buffer was set at 10%.

A trainer-of-trainer methodology will be applied, where REACH Senior Field Officers are trained in Kabul and then return to their regional basis in order to train the enumerators on the tools, a process that takes approximately 2 weeks. Enumerators will be trained at REACH's regional base in Mazar-e Sharif.

Sampling strategy

The total population for each settlement is derived from the World Pop Database, and divided by 7 (the average household size in Afghanistan and the standard for the humanitarian community) to estimate the number of households at settlement level.

The household (HH) tool utilised a random **two-stage stratified cluster sampling** method using data from secondary sources. The strata are the **5 Manteqas**, and the settlements as clusters. The two-stage stratified cluster sampling approach is as follows:

- The first stage uses the random stratified cluster sampling of settlements. A minimum of 6 households will be interviewed per settlement (cluster) to qualify for random selection based on the required number of interviews at the manteqa (strata) level.
- The second stage entails the random sampling of households within each settlement that was selected in the first stage. This method utilises the clusters identified above in order to determine the required number of households to be sampled in each settlement.

Once the sampling has been determined, in the field, to ensure randomisation of household selection, enumerators will be provided with the sample size for each population group (households engaged in irrigated farming, and households relying on pasture for livestock) in the settlement (PSU[1]) they are visiting. They will then approach the centre of the village, pick a random direction (by dropping a pen and following the direction it points) and then walk in that direction to the edge of the village, counting either the number of minutes or number of houses passed. The minutes or number of houses will then be divided by the number of interviews to be completed, with the enumerator approaching every n-number house for data collection. If the household identifies as one of the target population groups in the PSU, the interview will be completed, and the enumerator will carry on to the next n-number house. If the household is not one of the target population groups in the PSU, the enumerator will then return to the original location (village centre) and continue the randomisation process in a new direction determined by the drop of a pen. This will ensure that all households are randomly selected, to produce a representative household analysis for each of the 5 Manteqas. In each settlement, it is anticipated that a satisfactory sample of population group (households engaged in irrigated farming (50%), and households relying on pasture for livestock (50%)) will be included at the Manteqa level during the data collection. This will enable the generation of indicative findings for each population group.

Enumerators will carry a smartphone with the pre-installed Kobo tool, introduce themselves and the purpose of the data collection, and ensure informed consent as well as the majority of age of the respondent. The Kobo tool will feature a question with selection criteria for each specific population group, based on which enumerators will administer either of the two questionnaires (pasture or irrigation management) until the respective quotas of 50% have been met for each settlement.

In addition, the possibility to access female household members will be informed by the accessibility list developed by REACH, which includes the mapping of female access to determine the most inclusive and safest option for reaching female respondents. For the targeted districts, interviews with female respondents will be carried out by female enumerators, following the approach outlined above.

In the two targeted districts where the female respondents can not be accessed, female enumerators can conduct interviews remotely only (no in-person access). A male enumerator will visit the target settlement in-person seek consent to provide a phone to an adult, knowledgeable female household member to be interviewed by a female enumerator working from her home. Based on this approach, IMPACT will aim to interview a minimum of 20% female respondents.

For an overview of the HH surveys to be conducted, please refer to the table below:

No	Stratification (Manteqa)	# HH surveys	# units (villages) to assess	Cluster size
1	Alsha Wuloswali	168	16	10.5
2	Dasht-e-Laili	186	13	14.31
3	Pump Khana	156	19	8.21
4	Saray Qala	162	16	10.12
5	Shadian	110	4	1
Total		**782**		

3.5 Data Processing & Analysis

Qualitative Data

As audio recordings for quality assurance purposes are not currently feasible in the context of Afghanistan, qualitative primary data will be collected by taking detailed notes. Debriefs will be held with facilitators after each KII to identify possible data quality issues (misunderstood questions, off-target answers, missed questions). Facilitators will share full notes with the Senior Project Officer in Mazar. All qualitative data will be translated into English . Using a data saturation grid, a content analysis will be conducted for each manteqa. While addressing the research questions, the aim is to identify themes, patterns and relationships, and where possible. Data processing and analysis follows the IMPACT Minimum Standards for Semi-Structured Data Processing and Analysis.

Quantitative Data

All data will be checked and cleaned on a daily basis through a circular process according to the IMPACT Data Cleaning Minimum Standards Checklist: The REACH Data team will receive the data that was uploaded from the field team's smart phones on a daily basis. This data will be anonymized and then be checked by the Assessment Officer, who will feed it back to the Programme Officer in Kabul who will then follow up with the Regional Senior Field Officers, who will inform enumerators of the feedback. Interviews will be checked for 1) Time length (to check if enumerators are rushing), 2) logic of responses (to ensure that enumerators are thinking answers through) and 3) Other responses (to ensure that text-based responses aren't already included as options*). In the case that responses were incorrect or require a change in the response, the field teams will feed those responses back through the SFOs and Programme Officers, who will make the changes to the data in a cleaning log.* At the end of data collection, a final check of the cleaning log will be done to standardize all responses, and then the data team will clean that data by running both the data and a cleaning log through an R script. A data analysis plan, developed by the Assessment Officer, will then be used by the data analysis team to analyse the data in R. This will be used to produce a dataset that can be plugged into InDesign to produce the site profiles.

3.6 Limitations

As part of one of three research cycles (climate change, irrigation and Pasture management) in the same targeted areas, the pasture management and irrigation infrastructure assessments will be closely aligned with each other to avoid assessment fatigue. As a result of this, findings from this data collection exercise will be representative at the manteqa level, but indicative for the population of interest engaged in pasture use.
IMPACT will aim to interview a minimum of 20% female respondents across the irrigation and pasture management research cycles. While interviewing female respondents is not currently prohibited, access depends on a coordination process with the de facto authorities that may result in ad-hoc restrictions locally.

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?	x	
… **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*)?	x	
… Does not **expose data collectors to any risks as a direct result** of participation in data collection?	x	
… Does not **expose respondents / their communities to any risks as a direct result** of participation in data collection?	x	
… Does not involve **collecting information on specific topics which may be stressful and/ or re-traumatising** for research participants (both respondents and data collectors)?	x	
… Does not involve **data collection with minors** i.e. anyone less than 18 years old?	x	
… Does not involve **data collection with other vulnerable groups** e.g. persons with disabilities, victims/ survivors of protection incidents, etc.?	x	
… Follows IMPACT SOPs for management of **personally identifiable information**?	x	

5 Roles and responsibilities

Task Description	Responsible	Accountable	Consulted	Informed
Research design	*SAO*	*SAO*	*Associate Research Manager (ARM)*	*Country Coordinator*

Supervising data collection	SPO	SAO	ARM	CC
Data processing (checking, cleaning)	DBO	AO/SAO	ARM	CC
Data analysis	DBO	Data Specialist	SAO	ARM
Output production	AO	SAO	ARM	CC
Dissemination	Acted	Acted	ARM	CC
Monitoring & Evaluation	Associate Research Manager	CC	Impact Research Team	Acted PD Team
Lessons learned	Associate Research Manager	CC	Impact Research Team	Acted PD Team

6 Data Analysis Plan

6.1 Research questions addressed with Semi-structured tool

Research questions	SUBQ#	Sub-question	Questionnaire QUESTION	Probes	Data collection method	Key disaggregations (Group types)
(icebreaker)	0.0	N/A	Can you tell me a little about your work or connection with pastureland in this manteqa?			
1. How and when are pastures and rangelands used for grazing in each manteqa?	1.1	a. How do communities use public and private land respectively?	How do communities in this manteqa typically use public and private pastureland? Through what mechanisms is public land managed in your manteqa?	Access to or conflict over public land? Clarity of ownership and applicable laws? (e.g. rangeland law) When are different areas used (spring, summer, autumn, winter)? Are there areas used year-round?	KI	Importance of public land / Importance of private land
2. Which pastures and rangelands are degraded or danger of degradation due to overuse, competing demand or climatic pressures?	2.1	c. What factors increase demand pressure on pastures?	What are the main pressures or challenges affecting pastureland in this manteqa?	Rotation, Quruq? Seasonality? Conversion to rainfed land?	KI	Behaviour (rotation, conversion) / Climatic pressures

3. What underlying factors affect the implementation of sustainable pasture management mechanisms in the 5 manteqas?	**3.1**	b. What local knowledge on pasture management and restoration do communities possess?	What local knowledge and practices exist around pasture management in this manteqa?	What strategies have traditionally been used to manage or restore pastures? Are there any seasonal rules or customary restrictions? Have these practices changed over time? Why? What factors make it difficult to follow or maintain these practices today? Are there successful examples of sustainable use?	KI	Existence of traditional mechanisms Lack of sustainability in traditional mechanisms
	3.2	c. What exogenous pressures affect community governance structures on pasture management?	How do communities manage the pastures in their areas by themselves? What external factors impact how communities govern and manage pastureland?	Do external actors (government, NGOs, private sector) influence pasture management? Has climate change or drought affected governance? Are there conflicts with other communities (e.g., Kuchi)?	KI	Community management is efficient/ Community management limited

6.2 Example 2: Research questions addressed with Structured Tool(s)

Research questions	IN #	Data collection method	Indicator/ Variable	Questionnaire Question	Questionnaire Responses	Single or Multiple response	Data collection level
Disaggregation/ Selection	D.1.1		Respondent selection criteria (practicing irrigation or livestock agriculture)	Do you or the majority of your HH members (including yourself) rely on agriculture for income or to feed your family?	Primarily irrigation agriculture (including borewells) **(interview stops/ interview on irrigation management)**	Single	HH
					Primarily livestock agriculture		
					Primarily cultivating rainfed land **(interview stops/ medium priority to continue interview depending on population target reached)**		
					No **(interview stops)**		
	D.1.2		Gender	Please specify your gender.	Female	Single	HH
					Male		

	D.1.3		Age of respondent	How old are you?	Enter number (adult) **(If <18, interview stops)**	N/A	HH
	D 1.4		Disability	Do you or any members of your household have a lot of difficulty with or cannot do any of the following (choose all that apply)	Difficulty seeing even if wearing glasses Difficulty hearing even while using a hearing aid Difficulty walking or climbing steps Difficulty remembering and concentrating Difficulty with self care (such as washing all over or dressing) Difficulty communicating when using the household's usual language (for example understanding or being understood) no difficulties (None of my household members has a difficulty) I don't know/I don't want to answer (don't read aloud)	Multiple	HH
	D.1.5		Host HH	this location the area of origin for the majority of household members?	Yes No	Single	HH
	D.1.6		Returnee HH	Have the majority of household members including you ever been forceably displaced and fled to another country?	Yes No	Single	
	D.1.7		IDP HH	Have the majority of the household members ever been forceably displaced from their homes and fled to another province or district in Afghanistan?	Yes No	Single	
	D.1.8		Length of displacement	If yes, how long have you been displaced?	Less than 6 months 6 months to 2 years More than 2 years Solid/ finished apartment Unfinished/ non enclosed building Tent Makeshift shelter Other (specify) Don't know Prefer not to answer	Single	HH
	D.1.11		Manteqa		Shadian Alasha Woluswali	Single	HH

				What manteqa is your household in?	Pumpkhana Saray Qala Dasht-e Laili Other (**interview stops**)		
	D.1.12		Settlement	What settlement is your HH in?	response option from settlement list	Single	HH
	D.1.13		HH size	How many people live in your HH? Hint: Please do not count (prior) members of your household that do not live with you at the moment.	Enter #	Single	HH
RQ 1. How and when are pastures and rangelands used for grazing in each manteqa?							
b. In which seasons do communities make use of pastures and rangelands for grazing?	A1.1	***HH survey***	Seasonality of grazing cycles	In which season do you or your HH use pastures for grazing?	Winter Spring Summer Fall	***Multiple***	***HH***
	A1.2	***HH survey***	Seasonality of pasture productivity	When is there most grass on the pasture?	Winter Spring Summer Fall Don't know	***Multiple (except if don't know)***	***HH***
	A.1.3	***HH survey***	Seasonality of forage	When does the pasture not provide enough feed for livestock	Winter Spring Summer Fall Don't know	***Multiple***	***HH***
	A.1.4	***HH survey***	Factors influencing grazing	How does your HHdecide when to graze?	When plants are healthy When I have no feed When feed too expensive Always do it this way Told by community members Told by NRMC Told by government Told by NGO Told by community leaders Don't know Other:	***Multiple (except if don't know)***	***HH***
c. What kind of rotational grazing systems do communities make use of, if any?	A.2.1	***HH survey***	Rotation	Doesyour HH regularly rotate the rangeland you use? (Move livestock to different pasture)	Sometimes Always Never Don't know	***Single***	***HH***
	A.2.2		Barriers to rotation	(If never) Why does your HH not rotate the rangeland you use?	No other land available Not enough plants on other land Too many animals to use other land Too many other animals on other land already No need Don't know Other:	***Multiple***	

	A.2.3		Knowledge on rotation	(If sometimes or always) Why oesyour HH rotate the land you use?	Have always known Other community members told me NRMC told me Community elders told me NGO told me Government told me Heard from media Degraded plant cover Don't know Other:	***Multiple***	***HH***
			Rotation cycles	What is the maximum number of days your HH keep livestock on one pasture?	Enter # of days	***N/A***	
c. What factors increase demand pressure on pastures?	A.3.1		Type of land used for grazing	Does your HH use public or private lands for grazing?	Only public Both public and private Only private Don't know	***Single***	***HH***
	A.3.2		Regularity of community consulted for pasture use	Does your HH consult any other community members to decide which pastures to use?	Always Sometimes Never Don't know	***Single***	***HH***
	A.3.3		Knowledge about historical land use	Do you know what the land your HH is using was used for in the last 5 years?	Only rainfed agriculture Only for grazing Some rainfed agriculture, some grazing Not used at all Something else Don't know	***Single***	***HH***
	A.3.4		Livestock number now	How many (livestock type) does rHH have now?	Cattle Sheep Goats Poultry Mule/ donkey Camel Horses	***Integer***	***HH***
	A.3.5		Livestock number past	How many (livestock type) did your HH have around 5 years ago?	Cattle Sheep Goats Poultry Mule/ donkey Camel Horses None	***Integer***	***HH***
	A.3.6		Reason of change in numbers	Why did the number of livestock change?	Did not sell as many Purchased more animals Received for free Disease Sold because of good prices Sold because of distress sale Flooding Drought Lack of water Lack of fodder	***Multiple (up to 3)***	***HH***

					Lack of extension/ vet services		
					Animal deah		
					Lost or stolen		
					Killed for consumption		
					Debts		
					Dowry payment		
					Other (specify)		
					Prefer not to say		
					Don't know		
	A.3.7		Change in pasture availability	Has the size of the pasture area accessible to you for your HHs' use changed in the past 5 years?	Increased a lot	***Single***	***HH***
					Increased a little		
					Remained the same		
					Decreased a little		
					Decreased a lot		
					Don't know		
	A.3.8		Reasons for change pasture availability	(If increased/ decreased) Why has there been a change in the area of pasture your HH can use?	Others have more livestock	***Multiple (except if don't know)***	***HH***
					More pastures barren		
					Pastures have been converted		
					Owner does not allow any more		
					Don't know		
					Other		
	A.3.9		Other reasons for change in pasture availability	If other, why?	Enter reason	***N/A***	***HH***
	A.3.10		Livestock feed sources	How does your HH feed your animals?	Grazing only	***Single***	***HH***
					Feed only		
					Grazing and feed		
	A.3.11			If grazing and feed, why do you use feed?	Not enough pasture available	***Single***	***HH***
					Not enough plants on pasture		
					Feed improves productivity beyond grazing		
					Other:		
	A.3.12		Reasons for farming	Does your HH farm for home consumption or to sell products on the market for income?	Exclusively for the market	***Single***	***HH***
					Primarily for the market with some home consumption		
					Primarily for home consumption, marketing surplus		
					Exclusively for home consumption		
					Don't know		
RQ 3. What underlying factors affect the implementation of sustainable pasture management mechanisms in the 5 manteqas?							
a. Which criteria do communities consider when using land for rainfed agriculture?	A.4.1		Factors for pasture use	What factors does your HHconsider when using a pasture?	Distance to household	***Multiple (except if don't know)***	***HH***
					No other community members using the same land		
					Weather forecast		
					Health of plants		
					Water access for livestock		
					Land ownership		
					Don't know		
					Other:		
	A.4.2			Who does your HH consult to	NRMC	***Multiple (except if don't know)***	***HH***
					Private land owners;		

			Land management actors	use rangeland/ pasture?	herders local administration Community elders No one Don't know Other:		
	A.4.3		Factors for lalmi use	What factors does your HH consider when using lalmi land	Distance to household No other community members using the same land Weather forecast Health of plants Sufficient rainwater Land ownership Don't know Other:	***Multiple (except if don't know)***	***HH***
	A.4.4		Land management actors	Who does your HH consult to use lalmi land	NRMC Private land owners; herders local administration Community elders No one Don't know Other:	***Multiple (except if don't know)***	***HH***
	A.4.5		Information about improved farming methods	How es your HH receive information about improved farming methods?	Observation (other farmers) Observation (demo plots) Heard about it (other farmers) Heard about it (INGO) Heard about it (government) Heard about it (village leaders) Heard about it (NRMC) Don't know Other	***Multiple (except if don't know)***	***HH***
	A.4.6		Pasture restoration activities	Does your HH (regularly) take any steps to try to improve the health of pastures ?	Fertilizer Soil tilling Seeding Quarantining Fencing Earthworks No Don't know Other:	***Multiple (except if no)***	***HH***
	A.4.7		Challenges in pasture restoration	What are the biggest challenges in" improving the health of pastures?	No coordination between community members Too many animals Financial constraints Lack of knowledge Not an important issue Don't know Other:	***Multiple (except if don't know)***	***HH***

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	x 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 utilizing IMPACT services/products	# references in HPC documents (HNO, SRP, Flash appeals, Cluster/sector strategies)	Country team	Reference_log	*[List here relevant HPC-documents to be monitored: E.g. Iraq HNO 2018, Iraq Flash Appeal Mosul, Shelter Cluster strategy]*
		# references in single agency documents			*[List here relevant agency-documents to be monitored: E.g. UNHCR Country Strategy, UNICEF WASH Response Strategy]*
Humanitarian stakeholders are using IMPACT products	Humanitarian actors use IMPACT evidence/products as a basis for decision making, aid planning and delivery Number of humanitarian documents (HNO, HRP, cluster/agency strategic plans, etc.) directly informed by IMPACT products	Perceived relevance of IMPACT country-programs	Country team	Usage_Feedback *and* Usage_Survey template	*[Outline here the usage survey to be implemented for this research cycle*
		Perceived usefulness and influence of IMPACT outputs			*E.g. Usage survey to be conducted in November 2017, following the release of x outputs, targeting at least 10 partners*
		Recommendations to strengthen IMPACT programs			
		Perceived capacity of IMPACT staff			*E.g. Usage survey to be conducted at the end of the research cycle related to all outputs, targeting at least 20 partners]*
		Perceived quality of outputs/programs			
		Recommendations to strengthen IMPACT programs			
Humanitarian	Number and/or percentage of	# of organisations providing resources (i.e.staff, vehicles,	Country team		□ Yes

stakeholders are engaged in IMPACT programs throughout the research cycle	humanitarian organizations directly contributing to IMPACT programs *(providing resources, participating to presentations, etc.)*	meeting space, budget, etc.) for activity implementation		Engagement_log	
		# of organisations/clusters inputting in research design and joint analysis			□ Yes
		# of organisations/clusters attending briefings on findings;			□ Yes