

Pasture Management in Saray Qala, Faryab

June, 2025 | Saray Qala Manteqa, Faryab Province, Afghanistan

KEY MESSAGES

- Most households appear to rely on public rangelands and supplemental feed to sustain livestock, with pasture selection driven by ecological factors such as distance, plant health and weather forecast.
- Rotational grazing seems to be widely known but inconsistently practiced, and traditional methods were perceived as ineffective due to drought and limited pasture recovery.
- Pasture access seems to have remained largely stable over the past five years, but degradation in spring and declining livestock numbers pointed to growing pressure on rangeland systems.
- Financial constraints, excessive livestock, and lack of knowledge were reported as main barriers to pasture restoration, while agricultural knowledge was primarily sourced from International Non-Governmental Organizations (INGOs) and informal networks.

ASSESSMENT OVERVIEW

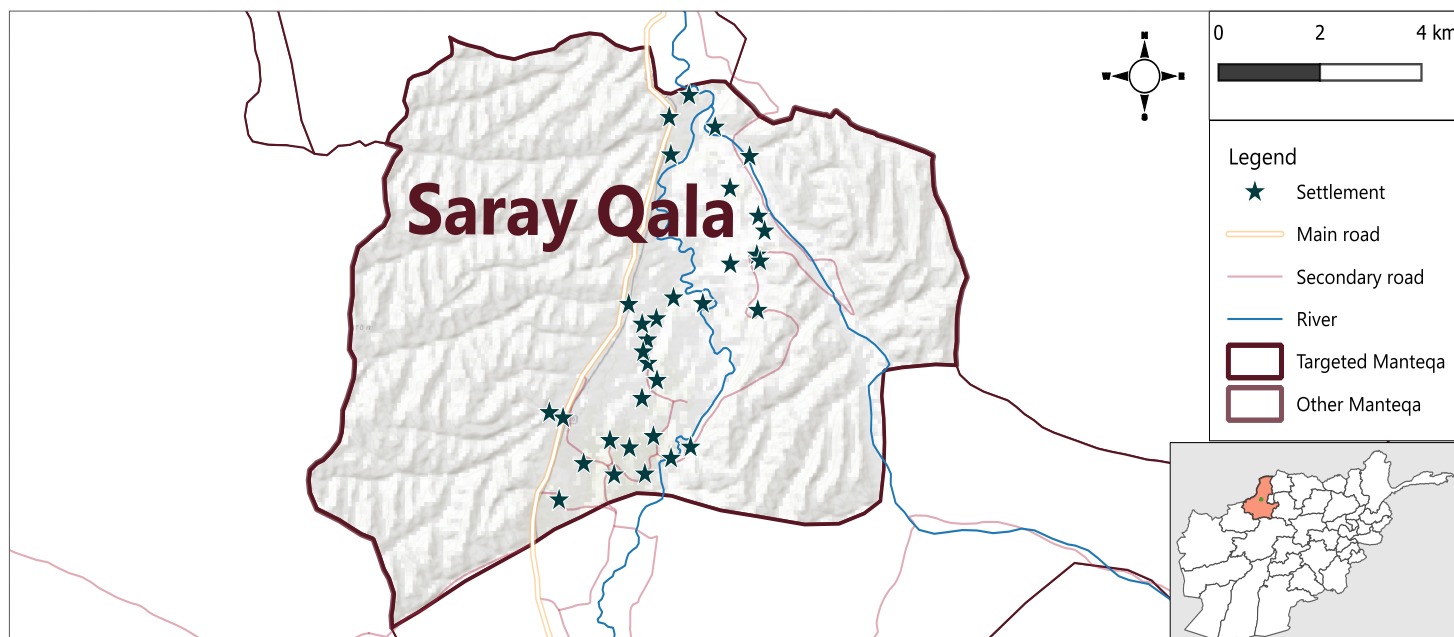
This assessment aims to analyze seasonal and year-round patterns of pasture and dryland use, evaluate degradation drivers, including climatic and socio-economic pressures, and examine local governance structures and community capacities to inform sustainable rangeland interventions across five manteqas² in Northwest Afghanistan. The selected manteqas have been targeted to implement a pilot of Acted’s THRIVE initiative to support rangeland restoration in cooperation with local communities.

Methodology: This Pasture Management Research Assessment relies on a mixed-methods approach combining a HH survey, KIs and Remote Sensing indicators to assess the use, management and state of pastures in five manteqas in North West Afghanistan. Data collection was carried out between the 26th of May and the 13th of June 2025. Findings in this factsheet should be considered indicative. For more details, follow this [link](#).

CONTEXT & RATIONALE

The convergence of prolonged environmental stress, socio-economic hardship, and limited institutional capacity has placed rural communities in Northwest Afghanistan under increasing pressure. In areas where livelihoods are heavily dependent on agriculture and livestock, recurring droughts, land degradation, and competing land use have intensified vulnerabilities.¹ To support sustainable recovery and resilience-building, the Pasture Management Assessment aims to generate localized, evidence-based insights into the use, degradation, and governance of pasture and rangeland resources. Conducted as part of the Sustainable Rural Development Programme (SRDP) V, this assessment aims to inform programming and prioritization for sustainable land management by tracking seasonal patterns, and community practices across five manteqas. The inclusion of remote sensing further enhances the ability to monitor environmental change over time and triangulate findings with pasture management’s Household (HH) survey and Key Informant Interviews (KIs).

Map 1: Saray Qala Manteqa



PASTURE AND RANGELAND USE PATTERNS

Introduction

Saray Qala is located in Faryab Province, comprising 30 villages with an estimated 10,029 households (74,968 individuals).³ No returnees or internally displaced persons (IDPs) were reported in the manteqa.⁴ According to a previous assessment, livestock agriculture is one of the most important livelihood sectors for Saray Qala's residents, and around 33% of its area are considered pastures.⁵

Household surveys and key informant interviews provide additional insight into seasonal grazing patterns, decision-making processes, and management practices that shape rangeland use across its communities.

Household-level Pasture Use

Home Consumption and Commercial Farming

Most households rely on livestock farming both for food and income. The majority (85%) farm mainly for home consumption but also sell some products. A smaller group, 9%, focuses on market sales while still keeping some for home use. Only 5% farm solely for their own consumption. Livestock agriculture therefore seems to be primarily for self-sufficiency, but is also an important source of income.

% of HHs that reported whether they farm for home consumption or market sale



Grazing and Supplemental Feed

All surveyed households reported using supplemental feed alongside grazing. This highlights the central role of feed in the local livestock sector, and that grazing alone may not be sufficient to meet animal needs.



100% of HHs reported relying on supplemental feed in addition to grazing

Surveyed HHs reported using supplemental feed for three main reasons. The majority (56%) do so to enhance livestock productivity. Meanwhile, 29% cited insufficient plant cover, and 15% pointed to a lack of pastureland, suggesting that environmental conditions constitute a constraint for livestock agriculture in the manteqa.

% of HHs that reported reasons for using supplemental feed

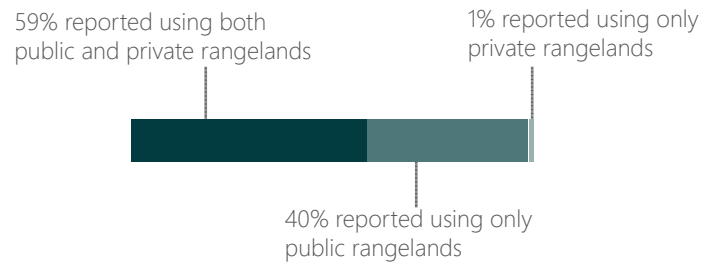


While supplemental livestock feed can offset temporary forage shortages, previous assessments in the region indicate that during drought periods herders are often compelled to sell assets, including portions of their herd or even household possessions, to purchase food and water for the remaining livestock.⁶ As such, pasture health likely plays a critical role in maintaining the balance between the cost of supplemental feed required to sustain livelihoods and the availability of natural forage resources.

Public or Private Land

Most herders in Saray Qala depend on public rangeland to some extent, with private rangeland serving as a buffer for 59% of households who use both public and private land. This indicates that public pastures remain indispensable for sustaining herds.

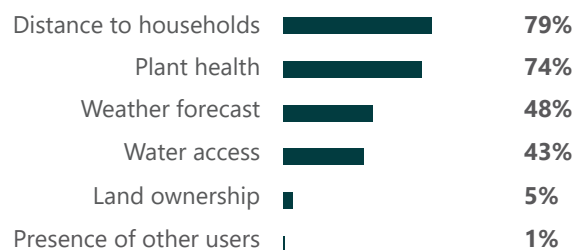
% of HHs that reported whether they make use of public or private rangelands for grazing



Pasture Selection

Households prioritize practical and ecological concerns in pasture selection, mainly distance to home (79%) and plant health (74%). Weather (48%) and water access (43%) also matter, while land ownership (5%) and other users (1%) have little influence.

Factors reported in the selection of pastures for grazing, by % of HHs⁷



SUMMARY

- **Livestock production seems to underpin both cash income and household consumption** for most surveyed households.
- **Households generally combine grazing with livestock feed**, likely to improve productivity, but also to counterbalance insufficient natural vegetation.
- **Public rangeland seems to be widely used**, with nearly all households relying on them at least in part.
- **Pasture choice seems to be led by ecological and logistical criteria** such as plant health, distance, water availability and weather, while land ownership and crowding appear less important.



PASTURE AND RANGELAND USE PATTERNS

Seasonality and Rotation

Seasonality

Households in Saray Qala reported relying most heavily on pastures in spring, when natural grass availability peaks. In contrast, during autumn and winter, pasture productivity declines sharply. Most respondents reported that pastures provide insufficient forage during these months. While Saray Qala experiences an arid climate with most precipitation received in spring, the decline in pasture conditions over the seasons is likely exacerbated by the dry conditions witnessed over the past years.⁸

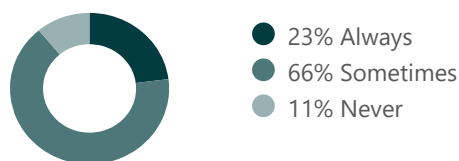
% of surveyed HHs that reported seasonality of grazing, pasture productivity and seasonality of forage

Seasons	In which season		
	Do you use pastures?	Is there most grass on pastures?	Does the pasture not have enough feed?
Spring	99%	100%	0%
Summer	49%	44%	42%
Autumn	7%	2%	84%
Winter	37%	0%	60%

Rotation Cycles

According to survey data, rotation is a widely adopted practice in the manteqa, although to varying degrees. Around 23% households reported always practicing it, while 66% do so only sometimes. Only a small proportion reported never relying on rangeland rotation. However, KIs noted that rotational grazing has not been effective, as increasing areas of pasture are being converted into rainfed lands, and households are likely to continue cultivating additional pasture land.

% of surveyed HHs that reported regularly rotating rangeland they use



Reasons for Rotation

Rotational grazing seems to be motivated above all by a local consensus about its importance. Most HHs indicated they have always known to practice rotation, while 15% listened to advice from other community members.

Key Informants pointed out time limits on pasture use to prevent overgrazing. While this may be an effective method if aligned with plant health cues, practitioners in other contexts emphasize that maintaining adequate residual stubble height is critical for successful pasture regeneration.⁹

In addition, key Informants stressed that despite protected grazing periods, traditional rotational practices have not proven effective for pasture recovery in recent years.

Reported reasons for rotation, in % of HHs¹¹



Key Informants noted that knowledge about rotational grazing has been passed down through generations but that a lack of pastures and precipitation has undermined its efficiency, despite some technical support from the government and NGOs.

Length of Pasture Stay

Survey data suggests that households have their livestock remain on a single pasture for an average of 106 days. It is unclear whether this period represents continuous use or is divided into shorter grazing bouts within paddocks, but if concentrated, such extended use could risk overgrazing and limit pasture recovery.¹⁰

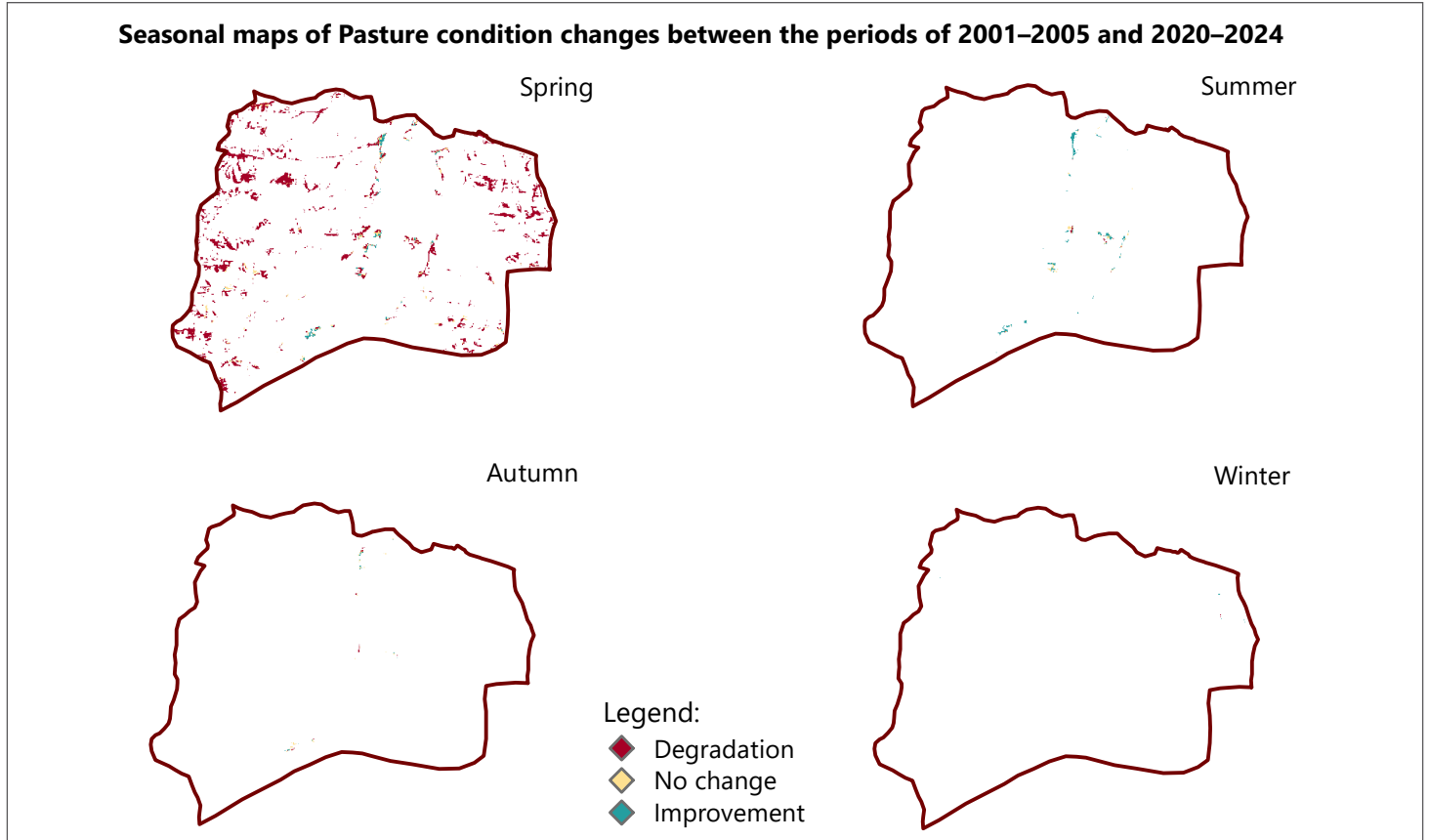
106 Average number of days surveyed HHs keep their livestock on a single pasture

SUMMARY

- Pasture use reportedly peaks in spring, but shortages in autumn and winter could force reliance on depleted land, adding stress to fragile rangelands.
- Most households seem to know about rotational grazing, but not all practice it, and KIs describe it as ineffective.
- Community consensus, elders, and peer advice likely shape grazing decisions far more than NGOs or government, making local structures key for management.
- Rotation seems to be based on time limits, which may limit recovery if misaligned with key indicators such as stubble height.
- Livestock remain on a pasture for an average of 106 days, which, if continuous, may exceed sustainable use in semi-arid conditions and heightens the risk of overgrazing.

CONDITION, PRESSURES, AND DRIVERS OF LAND USE

Map 2: Pasture Condition Changes Between 2001–2005 and 2020–2024, Saray Qala Manteqa



Pasture Conditions

Satellite imagery and vegetation indices, primarily Normalized Difference Vegetation Index (NDVI) and related spectral measures help track seasonal and interannual changes in vegetation cover. The seasonal analysis of rangeland conditions in Saray Qala (see map 2) (2001–2005 vs. 2020–2024) shows clear shifts in pasture health influenced by the region’s high elevation and climate. In spring, widespread degradation is evident in the north and center, driven by reduced rainfall, shorter growing seasons, and grazing pressure, whereas pastures were healthier in the early 2000s due to colder, wetter conditions.

Surveyed HHs and KIs confirmed that spring is the most critical grazing period, when herds are moved early onto pastures, and that recent years of drought have sharply reduced regeneration, consistent with the patterns detected in the imagery. In summer, the maps show general stability with improvements in small areas around the manteqa’s main settlements, despite climate data showing hot, dry months and almost no precipitation, which may be the result of locally successful pasture restoration efforts.¹²

HHs and KIs noted that although summer pastures are widely used, vegetation naturally declines with heat and lack of rainfall, so NDVI values remain stable at low levels rather than showing recovery. In autumn, satellite data show little or no change, matching the reports that these pastures are seldom used and that rainfall is insufficient to stimulate growth, leaving vegetation cover low but stable. In winter, the imagery shows no major change between periods, likely a result of snow cover and cold conditions that keep vegetation dormant. Surveyed HHs indicated that pastures are used in winter despite dormancy, but remote

DEFINITIONS



Degradation here refers to a decline in plant growth and cover, shown by lower satellite greenness index values in the recent period (2020–2024) compared to the baseline (2001–2005).



Improvement here refers to an increase in plant growth and cover, shown by higher satellite greenness index values in the recent period (2020–2024) compared to the baseline (2001–2005).

sensing cannot capture grazing impact under snow and inactive vegetation. Taken together, the results show that degradation is concentrated in spring when rainfall and plant growth are most variable and grazing pressure is high, while other seasons appear stable mainly because vegetation is already sparse or inactive. Local perceptions of recurring drought and the ineffectiveness of rotational grazing reinforce the interpretation that pasture health is under increasing stress despite the apparent seasonal stability in the satellite record.

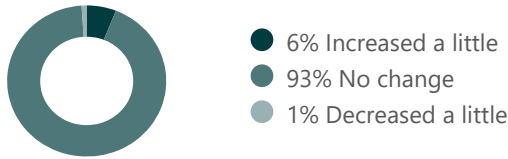
CONDITION, PRESSURES, AND DRIVERS OF LAND USE

Pastoral Shifts (2019-2024)

Changes in pastureland

The vast majority of surveyed households (93%) reported no change in pasture area. A small share (6%) observed a slight increase, while only 1% noted a slight decrease. These findings suggest that communities perceive accessible pasture areas as having remained largely stable, though localized variations may exist such as pasture health.

% of surveyed HHs that reported changes in accessible pasture area for their HHs over the past 5 years



Pasture Availability

Of the small proportion of households that reported a decrease in accessible pasture area, all cited pasture conversion, an increase in the livestock numbers of other pasture users, and barren pastures as the main reasons. Despite the small proportion of surveyed HHs in this category, these concerns were echoed by Key Informants, who pointed out a lack of clarity regarding governmental regulations around the use of pastures, which may lead to the conversion of pastures into rainfed agricultural land. Key Informants also indicated dry conditions having affected pasture health, also reflected in the remote sensing analysis above (see Map 2). These trends may thus affect a larger proportion of livestock farmers than survey findings suggest.

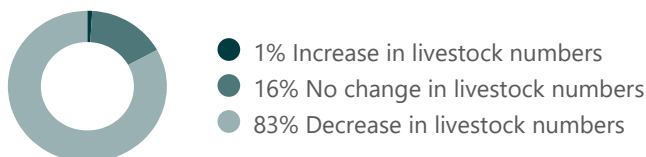
Reported reasons for a decrease in accessible pasture area in % of surveyed HHs¹³



Changes in Livestock Numbers

The majority of households (83%) experienced a decrease in livestock numbers, while a small share (16%) reported no change, and only 1% saw an increase. This indicates a strong overall downward trend in livestock holdings, likely reflecting challenges such as pasture quality, disease, or economic pressures.

% of surveyed HHs that reported changes in livestock numbers over the past 5 years



SUMMARY

- Remote sensing analysis indicates that pasture health is under increasing stress in spring, the prime grazing season.
- Most households reported no change in pastureland access over the past five years, suggesting that livestock agriculture is constrained by pasture health rather than declines in pasture area.
- Livestock numbers appear to have decreased over the past 5 years reflecting a downward trend in household holdings, likely due to challenges such as poor pasture quality, disease, and economic pressures.
- Prolonged drought may be contributing to broader pasture degradation beyond what survey data captures.

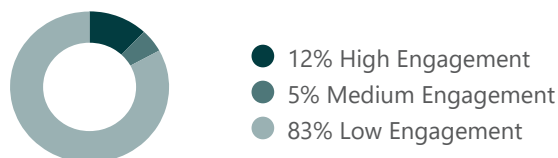


BARRIERS AND ENABLERS FOR PASTURE MANAGEMENT

Household-level Coordination

Most households (83%) reported low engagement, meaning they rarely consulted others before deciding on pasture use. A small share (12%) demonstrated high engagement, regularly consulting multiple actors, while only 5% fell into the medium engagement category. This indicates that collaborative decision-making on pasture management is limited, with most households making decisions independently.

% of HHs regularly engaging with pasture management actors

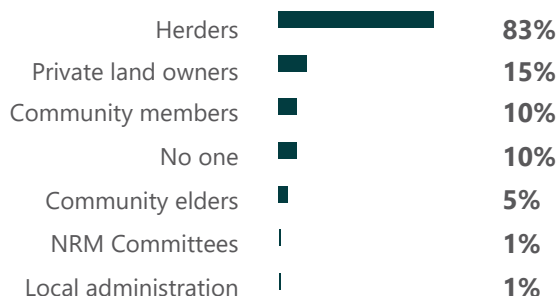


Key Informants noted that despite this, there are few disputes around pasture use, although disagreements sometimes arise with pasture users from outside the manteqa.

Coordination mechanisms

Most surveyed households reported consulting herders (83%), with fewer engaging private landowners (15%) or community members (10%). Very few seemed to involve elders, committees, or local authorities, and 10% indicated consulting no one.

Pasture management actors HHs reported engaging with, in % of HHs¹⁵

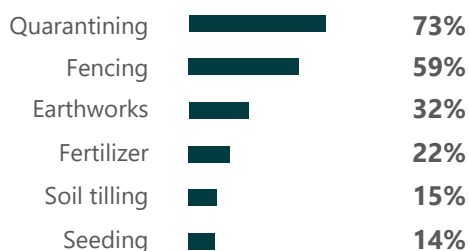


Key informants noted that two manteqa residents were appointed as focal points for coordination with the government. They highlighted that no disputes have been reported so far, attributing this to good coordination among actors.

Restoration Efforts

Most surveyed households reported quarantining (73%) and fencing (59%) to restore pastures, while fewer pointed to earthworks (32%), fertilizer (22%), tilling (15%), or seeding (14%).

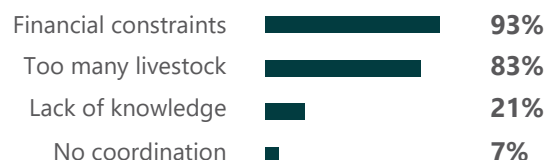
Have you taken any steps to improve pasture health yourself¹⁷



Challenges to Improving Pasture Health

The most frequently cited barriers to improving pasture health were financial constraints (93%) and excessive livestock numbers (83%). Other issues, such as limited knowledge (21%) and weak coordination (7%), were mentioned less often. These constraints seem to reflect both economic limitations and gaps in technical capacity.

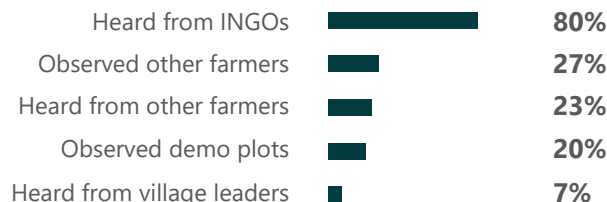
Reported challenges to improving pasture health in % of HHs¹⁶



Information About Improved Farming

INGOs were the main source of information on improved farming practices, reaching 80% of surveyed households. Peer learning also contributed, with 27% observing other farmers and 23% receiving advice from them. Demonstration plots (20%) offered limited practical exposure, while village leaders (7%) played a minimal role. These patterns suggest that external actors and informal networks shaped knowledge uptake more than traditional leadership.

Reported sources of information on improved agricultural practices, in % of HHs¹⁴



SUMMARY

- **Most households seem to make pasture decisions independently**, with limited community coordination.
- **Herders are the main point of contact**, while engagement with formal actors and committees appears minimal.
- **Reported restoration efforts focus on simple measures like quarantining and fencing**, with little use of technical interventions.
- **Financial constraints and overstocking were reported as the main barriers to improving pasture health**, alongside limited knowledge and weak coordination.
- **Households mostly pointed to external organizations as sources for agricultural information**, with minimal input from local leaders or government.

METHODOLOGY OVERVIEW

The Pasture Management Assessment utilized mantedgas as the primary unit of analysis. Mantedgas are locally recognized geographic areas smaller than districts but larger than individual settlements, defined by shared natural resources, socio-economic ties, and customary governance structures. In the five assessed mantedgas, data was collected through a combination of household (HH) surveys and key informant interviews (KIIs), including local herders and natural resource management stakeholders.

The sampling approach for the HH survey employed a two-stage stratified cluster methodology. Settlements were first randomly selected within each mantedga, followed by random selection of households within those settlements. A minimum of six households were surveyed per settlement, with quotas split evenly between households engaged in irrigated agriculture and those relying on pasture-based livestock. To ensure inclusivity, female enumerators conducted interviews with women where access was permitted, including remote interviews in restricted areas. In Saray Qala, a total of 65 HH interviews were conducted, 16 of which with female-headed

HHs. KIIs were conducted with 1 herder and 2 district-level officials from the relevant line department.

In parallel, remote sensing analysis was conducted using Landsat-based spectral indices to assess historical changes in pasture health and land cover. This geospatial component enabled triangulation of field data with satellite imagery to identify trends in degradation and land use conversion over time.

Limitations:

- Exact proportions of mantedga residents engaged in livestock agriculture in this mantedga are unknown. Findings presented in this output should therefore be considered indicative
- Access constraints limited in-person interviews with women in some areas, potentially affecting gender-disaggregated insights.

For more information on the methodology, please refer to the Term of Reference ([TOR](#)).

ENDNOTES

1 REACH Afghanistan. Drought Impact and Resilience in Agro-Pastoral Communities in Northwest Afghanistan, Saray Qala Mantedga, 2025. [Link](#).

2 A mantedga is a geographic unit in Afghanistan, typically larger than a village but smaller than a district. It often comprises multiple villages that share social, economic, or geographic ties.

3 REACH Afghanistan Mantedga Profiles, 2023. Available on request.

4 REACH Afghanistan Pasture and Irrigation Assessment, 2025. HH surveys for both assessments were carried out at the same time with a combined sampling. Findings for demographic indicators across both assessments are statistically representative at 95/10 for the mantedga.

5 REACH Afghanistan. Drought Impact and Resilience in Agro-Pastoral Communities in Northwest Afghanistan, Pump Khana Mantedga, 2025.

6 Respondents could select more than one option.

7 Respondents could select more than one option.

8 REACH Afghanistan. Drought Impact, Saray Qala Mantedga.

9 UWM Crops and Soils Division of Extension. "Meeting the Needs of the Animal and Forage Plant through Grazing Management." [Link](#).

10 WSU Extension. "Optimizing Pasture and Animal Production through Planned Grazing." [Link](#).

11 Respondents could select more than one option.

12 REACH Afghanistan. Drought Impact, Saray Qala Mantedga.

13 Respondents could select more than one option.

14 Respondents could select more than one option.

15 Respondents could select more than one option.

16 Respondents could select more than one option.

17 Respondents could select more than one option.

About AGORA

AGORA is a joint venture between Acted and IMPACT Initiatives created in 2016 to operationalise our motto « Think local, Act global ». It is an innovative area-based approach that aims to better address the relief, environmental and development needs of people in fragile contexts through a NEXUS approach.

The key value added of AGORA is:

- Working at the **right geographical scale**, enabling both meaningful engagement with local actors and the ability to scale-up the action
- Contextualising action through a strong evidence-base and reliance on **local knowledge** to inform programme approaches
- Putting local actors at the centre** by strengthening their capacity, enabling them to identify their own needs and response priorities through participative research and planning approaches, and to participate and monitor implementation
- Linking local and external actors** so that the latter can contribute resources and capacity to implement local solutions and response priorities.

AGORA strengthens territorial resilience by enabling a wide range of programmes, including strengthening local governance, improving basic services and livelihoods, climate change adaptation and mitigation, improving natural resources management, disaster risk reduction and management, anticipatory action, or supporting durable solutions to displacement.

AGORA has already been piloted in **17 countries through 20 projects**, reaching approximately **1,8 million direct beneficiaries** and supporting **nearly 1,294 organisations**.

