

Pasture Management in Dashte-e-Laili, Faryab

June, 2025 | Dasht-e-Laili Manteqa, Faryab Province, Afghanistan

KEY MESSAGES

- Livestock production appears central to household livelihoods, with most households relying on public rangelands and using feed to compensate for limited natural forage.
- Pasture use seems highest in spring but falls in other seasons. Rotational grazing is uneven, and extended use of the same areas is likely to add to degradation.
- Remote sensing shows little change because vegetation cover is already minimal, yet communities consistently report barren pastures, land conversion, and ongoing degradation. This suggests that much of the reported decline is already below detection thresholds.
- Pasture management is largely informal. Restoration efforts face financial and knowledge barriers, while improved practices spread mainly through community networks with limited external involvement.

CONTEXT & RATIONALE

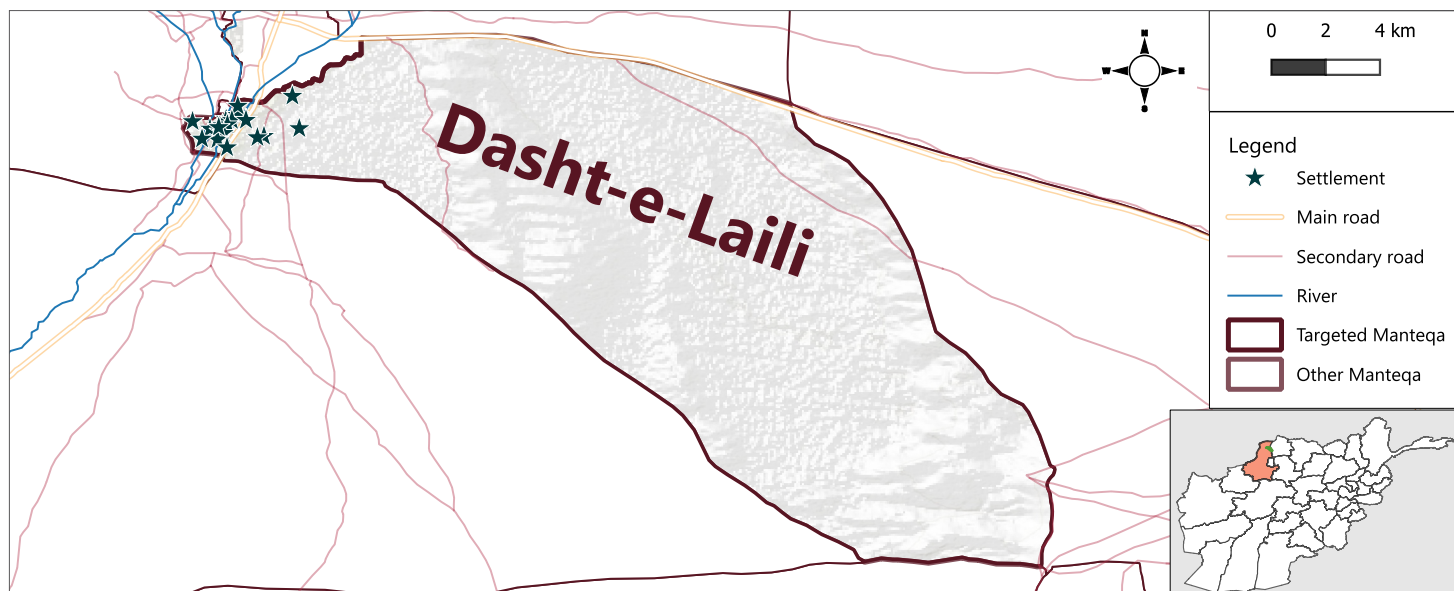
The convergence of prolonged environmental stress, socio-economic hardship, and limited institutional capacity has placed rural communities in Northwest Afghanistan under increasing pressure. In areas where livelihoods are heavily dependent on agriculture and livestock, recurring droughts, land degradation, 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-V (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 (KIIs).

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, KIIs 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](#).

Map 1: Dasht-e-Laili Manteqa



PASTURE AND RANGELAND USE PATTERNS

Introduction

Dasht-e-Laili, located in Faryab Province, consists of 19 villages with an estimated 3,810 households (approximately 24,632 individuals).³ There are no returnees or internally displaced persons (IDPs) currently residing in the manteqa.⁴ According to a previous assessment, livestock and agriculture are among the primary livelihoods for its residents, and around 51% of its area are considered pastures.⁵

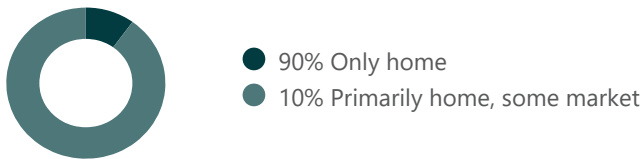
Dasht-e-Laili Manteqa's pasture use reflects the interplay between harsh climatic conditions, limited forage windows, and socio-economic pressures. Household surveys and KI interviews provide insight into seasonal grazing patterns, decision-making processes, and management practices that shape rangeland use across its communities.

Household-level Pasture Use

Home Consumption and Commercial Farming

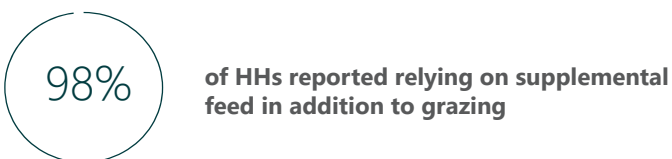
Ninety percent of surveyed households produce livestock mainly for home consumption with limited market engagement, while ten percent produce exclusively for subsistence. This pattern suggests that pasture resources may not support production beyond occasional market-oriented use.

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



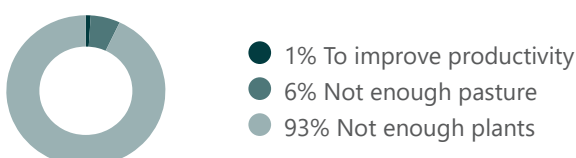
Grazing and Supplemental Feed

The use of supplemental feed was reportedly driven by a lack of sufficient natural vegetation. In the manteqa, 98% of surveyed HHs reported relying on both grazing and feed, with only 2% depending solely on grazing. This indicates a widespread shift away from exclusive reliance on natural pasture.



For the vast majority of surveyed households (93%), the use of supplemental feed was reportedly driven by a lack of sufficient natural vegetation, indicating that forage scarcity is a widespread challenge in sustaining livestock. A smaller portion (6%) cited limited pasture availability as the reason, suggesting that land access issues also contribute to feed supplementation.

% of HHs that reported reasons for using supplemental feed

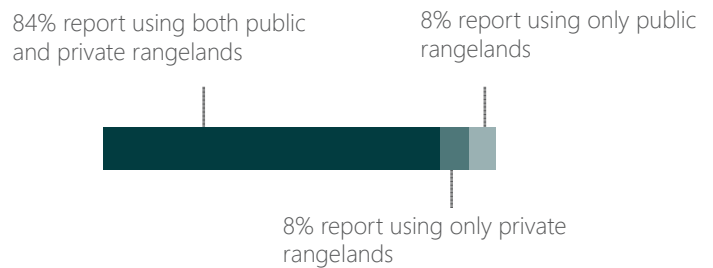


Only 1% of households use supplemental feed with the goal of improving productivity, highlighting that for nearly all households, supplementation may be a necessity rather than a strategic choice. Herders are often compelled to sell household assets to purchase feed for their livestock when enough vegetations is not available in pastures.⁶ These findings underscore the critical role of natural forage in livestock systems and suggest that when vegetation is insufficient, households are compelled to rely on external feed sources to maintain herd viability.

Public or Private Land

Most herders in Dasht-e-Laili depend on public rangeland to some extent. While private rangeland may serve as a buffer for 84% of households who use both public and private land, this indicates that public pastures remain indispensable for sustaining herds.

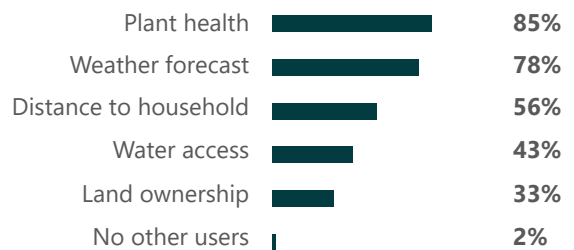
% of HHs that reported whether they make use of public or private rangelands for grazing



Pasture Selection

Most surveyed households reported selecting pastures based on plant health (85%), weather forecasts, and proximity to the household. Fewer consider water access for animals (43%) and land ownership (33%). Only 2% factor in whether other users are present, indicating limited concern for shared use.

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



SUMMARY

- **Livestock and agriculture are the main livelihood source**, although most households produce mainly for home consumption, with very limited market activity
- **Grazing is reportedly almost always combined with supplemental feed**, reflecting widespread forage scarcity, with feed being a necessity rather than a choice.
- **Pasture selection is reportedly driven by plant health, weather, and distance**, while water access and ownership matter less, and competition from other users is rarely considered.

PASTURE AND RANGELAND USE PATTERNS

Seasonality and Rotation

Seasonality

Households in Dasht-e-Laili 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 indicated that pastures provide insufficient forage during these months. While Dasht-e-Laili 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

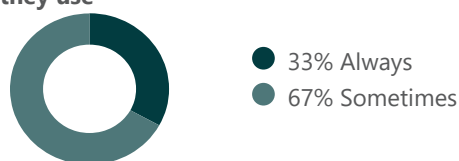
% of surveyed HHs that reported seasonality of grazing, pasture productivity and seasonality of forage

Seasons	In which season		
	Do you use pastures?	Is there most grass on pastures?	Does the pasture not have enough feed?
Spring	100%	100%	0%
Summer	27%	10%	58%
Autumn	1%	0%	90%
Winter	1%	2%	97%

Rotation Cycles

According to survey data, rotation is a widely adopted practice in the manteqa, although to varying degrees. Around 33% of households reported always practicing it, while 67% do so only sometimes. KIs noted that rotation is practiced, but it has not improved pasture conditions, as livestock numbers exceed the pasture's carrying capacity

% of surveyed HHs that reported regularly rotating rangeland they use

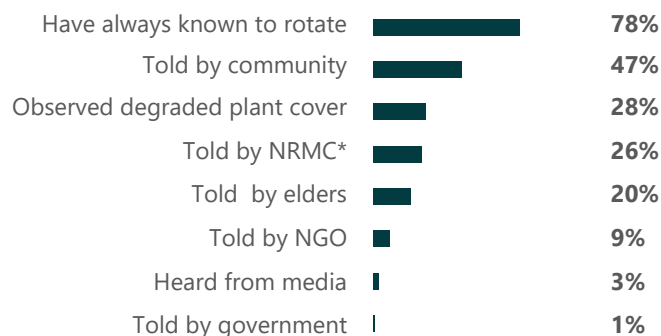


Reasons for Rotation

Findings indicate that for most households (78%), rotational grazing is informed by long-standing local knowledge, with respondents stating they have always practiced it. Nearly half mentioned advice from other community members, and 20% cited guidance from elders. These patterns suggest that social consensus and traditional practices play a central role in shaping grazing behaviour.

In contrast, institutional sources appear to have limited influence on rotational grazing practices. Only 26% of households reported receiving advice from Natural Resources Management Committees (NRMCS). Just under a third of households (28%) reported relying on visual cues such as degraded plant cover to guide rotation decisions. While this may help fine-tune timing, practitioners in other contexts emphasize that maintaining adequate residual stubble height is critical for successful pasture regeneration.⁹

Reported reasons for rotation, in % of surveyed HHs¹¹



While external inputs from NGOs or media appear to reach some households, these findings suggest that local governance plays a more prominent role in pasture management. This dynamic could be leveraged by external actors. KIs noted that traditional approaches remain largely unchanged, yet pastures continue to degrade. They also highlighted the potential for NGOs to provide technical training and address knowledge gaps that may strengthen both community practices and local capacity.

Length of Pasture Stay

Survey data indicates that households have their livestock remain on a single pasture for an average of 77 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

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

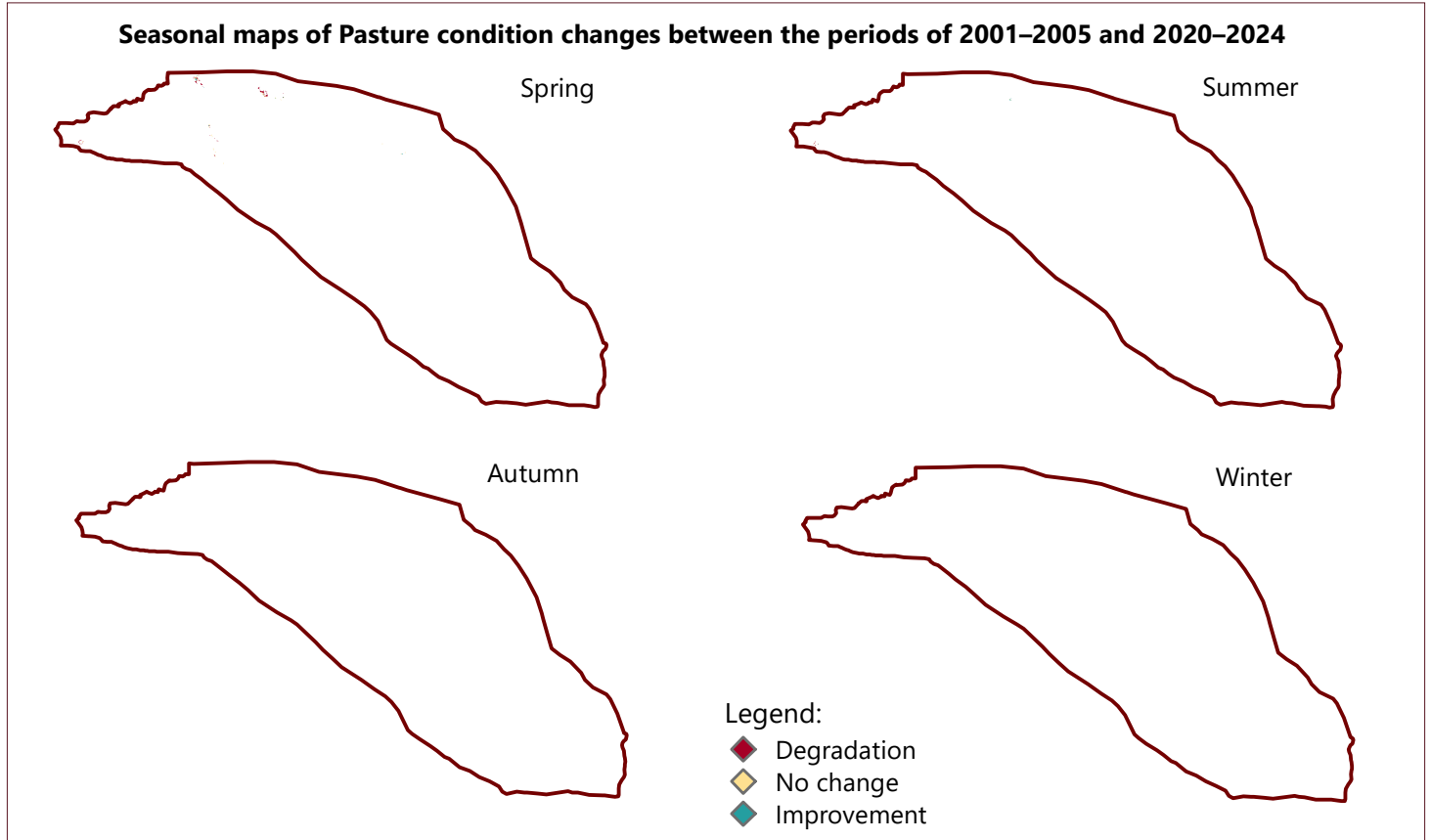
KIs identified overuse as the main challenge in Dasht-e-Laili. They noted that pastures fed by rain and irrigation are degrading due to water scarcity, rising livestock numbers, and inconsistent rotational grazing. When rainfall is low, pastures are converted to fallow or rainfed land, and when sufficient, rainfed land is used for grazing.

SUMMARY

- **Pasture use seems to peak in spring when forage is more available, but it declines in autumn and winter as conditions become drier**, which may add stress to already fragile rangelands.
- **Rotational grazing is practiced to some extent, though not always consistently**, and this uneven use may place additional pressure on certain areas.
- **Decisions around grazing appear to rely mainly on traditional knowledge and community influence**, with only limited input from outside institutions.
- **Pastures seem to often be used until vegetation shows signs of stress**, and livestock appear to remain for extended periods, raising the risk of overgrazing.

CONDITION, PRESSURES, AND DRIVERS OF LAND USE

Map 2: Pasture Condition Changes Between 2001-2005 and 2020-2024, Dasht-e-Laili Manteqa





Pasture Conditions

Satellite imagery and vegetation indices, primarily the Normalized Difference Vegetation Index (NDVI), provide a way to monitor seasonal and interannual vegetation cover. A comparison between 2001–2005 and 2020–2024 indicates that rangeland vegetation in Dasht-e-Laili is extremely limited. The seasonal maps (see Map 2) show almost no detectable improvement or degradation, with only faint signals of short-lived vegetation growth during spring. This reflects the very sparse biomass that satellites can capture in this environment.

Ground information clarifies these patterns. About half of the area is classified as pasture, but KIs reported widespread degradation and frequent conversion to rainfed agriculture when rainfall is sufficient.¹² According to KIs, when precipitation allows, communities even divert runoff to stimulate temporary greening for grazing, and most households rely on supplemental livestock feed.

The absence of visible change in summer, autumn, and winter on the maps reflects the arid baseline: vegetation cover is too low to generate a spectral signal. This does not mean the land is stable or productive, only that degradation is beyond the detection capacity of remote sensing. Local soils, climate, and persistent winds further constrain regrowth. Spring remains the only period when vegetation briefly emerges, but this window has shortened over time due to declining precipitation, higher temperatures, and grazing pressure at the start of the growth cycle.

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).

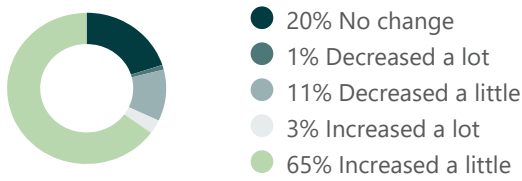
CONDITION, PRESSURES, AND DRIVERS OF LAND USE

Pastoral Shifts (2019-2024)

Changes in pastureland

Over the past five years, most households (65%) reported a slight increase in accessible pastureland, suggesting modest improvements. Meanwhile, 20% saw no change, and 12% experienced decreases. Only 3% reported a significant increase, likely reflecting highly localized shifts.

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



Pasture Availability

Most households (91%) attributed changes in pasture access to barren land, indicating widespread degradation. Smaller shares cited restricted access by landowners (18%), increased livestock from other users (9%), and pasture conversion to rainfed agricultural land. These shifts reflect growing competition and changing land use, likely driven by low precipitation and poor pasture conditions.

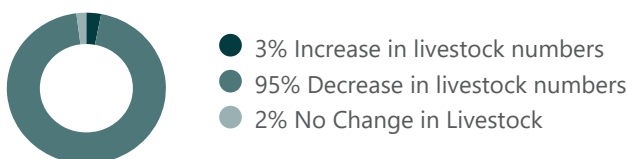
Reported reasons for a change in accessible pasture area in % of HHs¹³



Changes in Livestock Numbers

Most households (95%) reported a decrease in livestock numbers over the past five years, while only 3% saw an increase and 2% noted no change.

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



KIs noted that pasture degradation in Dasht-e-Laili may be driven by excessive livestock numbers. With both the reduction in pasture area and declining pasture conditions, the carrying capacity is increasingly likely to be exceeded.

SUMMARY

- Remote sensing shows very limited vegetation, with only brief spring growth and little detectable change in other seasons; degradation may fall below detection thresholds.
- Households reported that pastures are degraded or converted to rainfed agriculture when possible, and most households depend on supplemental feed.
- Pasture access appears to have shifted modestly, with some areas increasingly pressured by land conversion and the arrival of outside herders. However, many still describe the land as largely barren, limiting its effective use
- Livestock numbers are generally reported as declining, yet poor pasture conditions suggest grazing pressure may still exceed carrying capacity.

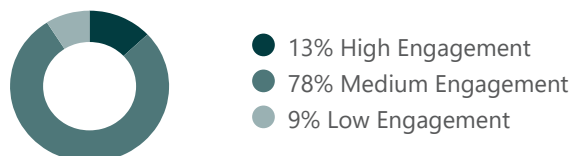


BARRIERS AND ENABLERS FOR PASTURE MANAGEMENT

Household-level Coordination

Household engagement in pasture management appears uneven. Only 13% consult multiple actors regularly, while 78% engage occasionally. A small share (9%) reported low engagement. These patterns may reflect limited coordination, with possible implications for the sustainability of shared grazing areas.

% of HHs regularly engaging with pasture management actors

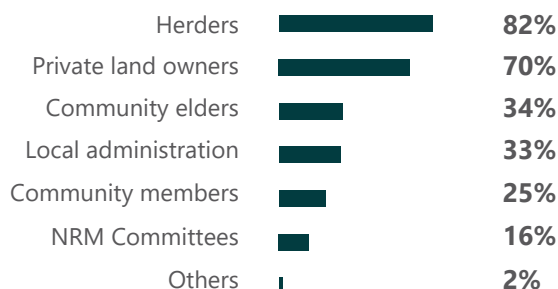


KI findings underline no major conflicts and disputes over pasture management between communities. They also pointed to a breakdown of local governance mechanisms around pastures due to droughts, but noted that private landowners manage their pastures independently.

Coordination mechanisms

Pasture coordination appears to be largely informal. Most households reported engaging with herders (82%) and private landowners (70%), while fewer seem to consult community elders (34%) or local administration (33%). Only 16% engage with NRM Committees, suggesting that formal coordination mechanisms remain limited.

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

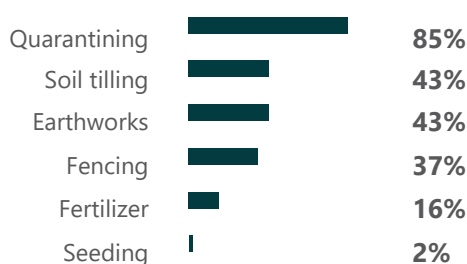


KIs noted that despite the degradation of pastures in the mantaqa, no conflicts occurred over pasture use within the community.

Restoration Efforts

Nearly all surveyed households reported taking action to restore pasture health. Quarantining was most common (85%), followed by soil tilling and earthworks (both 43%). Fencing was less frequent (37%), while fertilizer use (16%) and seeding (2%) were rare, suggesting limited uptake of more intensive restoration methods. Those actions seem to have had limited positive impact on pasture health, which may indicate a lack of knowledge on how to fully implement them.

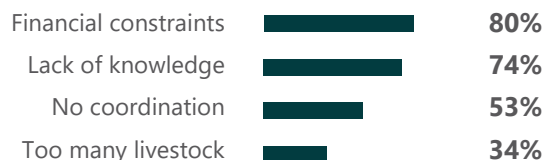
Have you taken any steps to improve pasture health yourself¹⁷



Challenges to Improving Pasture Health

Surveyed households reported diverse barriers to restoring pasture health. Financial constraints (80%) were the most commonly reported challenge, followed by lack of knowledge and poor coordination. A third (34%) also cited overstocking, suggesting that both resource and management issues limit effective restoration.

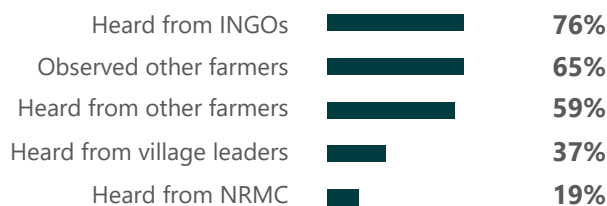
Reported challenges to improving pasture health in % of HHs¹⁶



Information About Improved Farming

Surveyed households reported learning about improved farming practices through both formal and informal sources. INGOs were most frequently cited (76%), followed by observation (65%) and peer exchange (59%). These responses suggest that informal channels remain important alongside formal ones, but also highlight the key role of INGOs in spreading adapted farming practices.

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



SUMMARY

- **Household engagement in pasture management appears uneven and mostly informal**, with herders and private landowners playing the central role while formal committees remain marginal.
- **KIs suggest no major conflicts over pasture use**, though local governance around shared pastures is reportedly weakened by drought.
- **Households reported undertaking restoration measures, mainly quarantining**, with more resource-intensive methods like seeding and fertilizer use appearing rare.
- **Barriers to restoration are described as financial limitations**, lack of knowledge, and weak coordination, with overstocking also noted.
- **Information on improved farming practices appears to come mainly from INGOs**, but peer exchange and direct observation remain important sources.

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 Dasht-e-Laili, a total of 76 HH interviews were conducted, 17 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, Dasht-e-Laili 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 Faryab Province Mantedga Profiles, Dasht-e-Laili Mantedga.

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, Dasht-e-Laili Mantedga, 2025.

6 Faryab Province Mantedga Profiles, Dasht-e-Laili Mantedga.

7 Respondent could select more than one option.

8 REACH Afghanistan drought Impact, Dasht-e-Laili 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 Faryab Province Mantedga Profiles, Dasht-e-Laili 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**.

