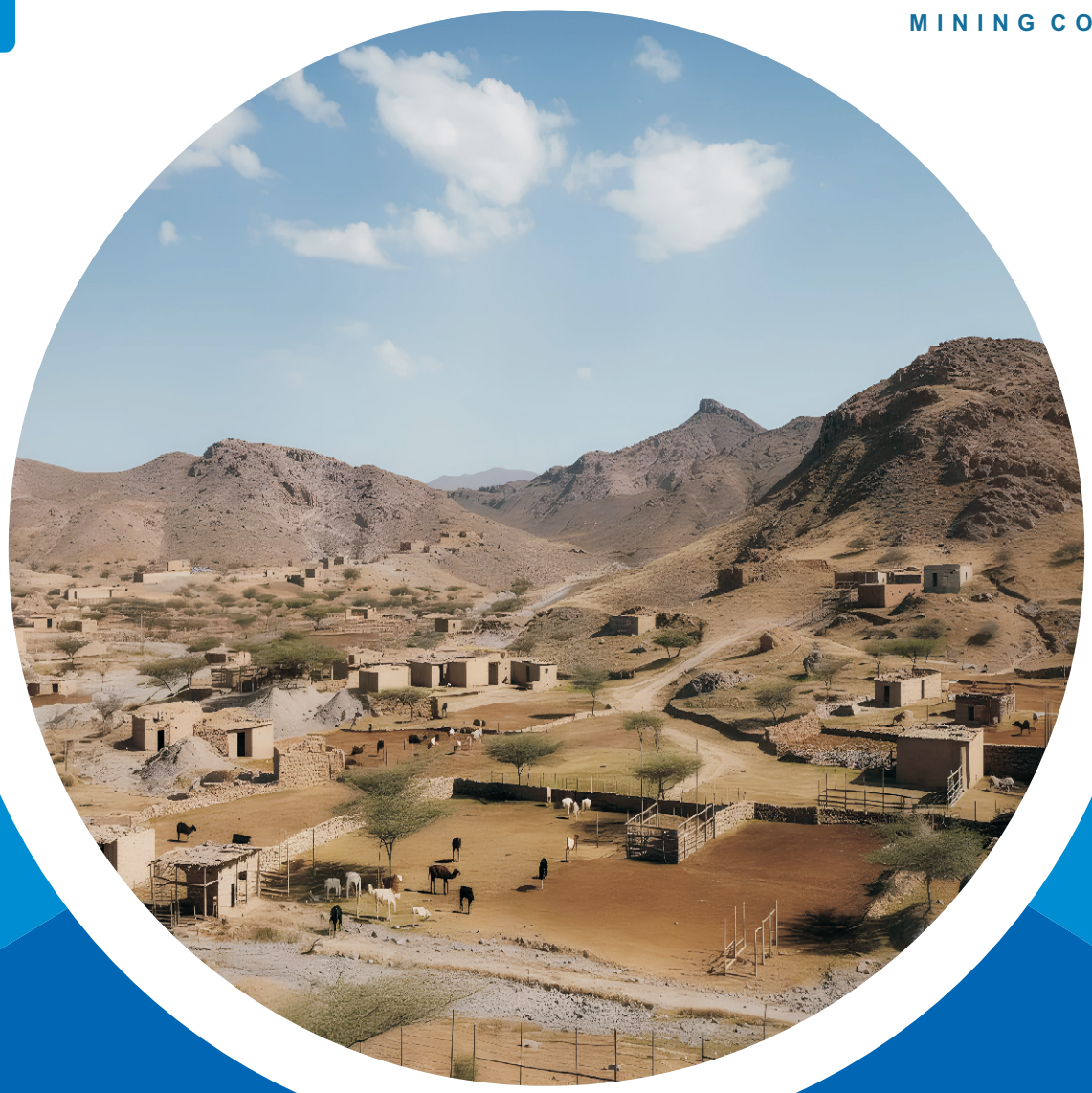

Needs Assessment Report For

Priority-I (P1) Villages of Reko Diq Mining Company (RDMC)

ISLAMIC RELIEF (PAKISTAN) - IRP

Acknowledgment

Islamic Relief (Pakistan)-IRP extends its heartfelt gratitude to Reko Diq Mining Company (RDMC) for their extensive support in conducting the "Needs Assessment Study for Priority-I Villages" focusing on the Nokkundi and Taftan areas of district Chagai.

We are deeply thankful to the RDMC team for their exceptional cooperation and continuous engagement throughout the assessment process. In particular, we sincerely acknowledge the invaluable guidance by Mr. Ryan Mitchell-General Manager and phenomenal contribution of Ashley Price – Head of sustainability, Mr. Essa Tahir-Community Investment Lead, Mr. Mahboob Ali-Community Investment Officer and Ms. Zainab Nazeer - Sr. Social Impact Officer, whose input and commitment were critical in the successful completion of this study.

Our appreciation is also extended to the local administration and the Community Development Committees (CDCs) of Nokkundi and Taftan for their facilitation and support at field /Community level.

A special note of thanks goes to the community representatives and households members who actively participated in surveys, focus group discussions and key informant interviews. Their valuable insights, experiences and cooperation were crucial in identifying the key development needs and challenges within their communities.

We also acknowledge the efforts of Muhammad Arsalan-Community Mobilizer, Shazia Anjum-Psychologist and Sadia Habib-Community Mobilizer for their dedicated support in data encoding, management and compilation through the KOBO Toolbox.

Finally, our sincere appreciation goes to the field team of IRP, Dr. Jamal Ud Din-Senior Officer Data analysis and report writing, Muhammad Ashraf-Program Officer, field supervisors and enumerators whose hard work and determination under challenging conditions ensured the accuracy and reliability of the findings.

This study standpoints as a collective efforts and we hope it serves as a valuable resource for RDMC, government departments, development practitioners and other stakeholders committed to advancing inclusive and sustainable development, especially in the RDMC's Priority I villages.

Regards,
Asif Sherazi
Country Director - Islamic Relief (Pakistan)

Table 1: Abbreviations

Abbreviation	Full Form
AC	Assistance Commissioner
ADC	Additional Deputy Commissioner
AI	Artificial Intelligence
BHU	Basic Health Unit
CC	Climate Change
CD	Civil Dispensary
CDC	Community Development Committee
CNIC	Computerized National Identity Card
DRR	Disaster Risk Reduction
FCS	Food Consumption Score
FGD	Focus Group Discussion
FSL	Food Security and livelihood
GBV	Gender-Based Violence
HHs	Households
IDIs	In-Depth Interviews
IRP	Islamic Relief (Pakistan)
KIIs	Key informant interviews
KM	Kilometer
NGO	Non-Governmental Organization
ORS	Oral Rehydration Solution
P1	Priority One
PKR	Pakistani Rupee
POR	Proof of Registration
PTSMC	Parent-teacher school management committee
PWD	Persons with Disabilities
RDMC	Reko Diq Mining Company
RHC	Rural Health Center
RTA	Regional Transport Authority
THQ	Tehsil Headquarter Hospital
WASH	Water, Sanitation and Hygiene
XEN	Executive Engineer

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Executive Summary

The needs assessment for Priority-I (PI) villages in Nokkundi and Taftan was conducted by Islamic Relief Pakistan to provide an evidence-based understanding of community challenges and priorities across following sectors, including food security and livelihoods, water resource management Sanitation and Hygene (WASH) , migration, protection, and climate resilience. Communities in these areas continue to face recurring shocks such as inadequate livelihood resources and opportunities, water scarcity, poor sanitation in school and health facilities, and social exclusion, all exacerbated by climate change.

The assessment covered twelve villages that combined quantitative household surveys (180 households selected through sampling method) and qualitative FGDs and KIIs to ensure a comprehensive and representative analysis. Findings revealed that most households have low literacy levels, large 6.9 family size and limited livelihood diversification with private jobs and labor being the main income sources. The initiation of RDMC operations has positively influenced local employment and income levels. However, vulnerabilities persist as indicated, 5% of households include members with disabilities and educational access remains extremely limited.

Food security data indicated that while nearly half of the households consume three meals daily, 51% fall under poor or below the borderline food consumption categories, reflecting widespread food insecurity. High food prices, low wages, and poor infrastructure were identified as key barriers to food access. Dietary diversity among women and children is low, and participation in nutrition education is minimal. Agricultural activity is scarce, with only 8% of households cultivating crops due to harsh climatic conditions, infertile soil, and water scarcity. Although 93% of households own land, most of it remains uncultivated, as irrigation depends on traditional Karez systems, which are deteriorating. Farmers also face low yields, pest attacks, and limited access to quality inputs and markets.

Of all the assessed villages around the Reko Diq Mining Site, four are located on the eastern side and eight on the western and southern sides. No agricultural activities are practiced in the eastern villages due to arid conditions and lack of water. Similarly, in the western and southern areas, agriculture is extremely limited, with only Kachao and Tang Kachao showing evidence of small-scale farming. Although land ownership remains high 93%, water scarcity and prolonged drought have left most land barren, deepening livelihood and food insecurity.

Livestock and poultry findings show low productivity, limited veterinary services, and restricted market access. About 45% of households own livestock and 31% keep poultry, yet only 4% have access to vaccination and 6% to veterinary support. Nearly 45% reported animal losses due to disease and fodder shortages. Goats (79%) dominate livestock holdings due to their adaptability, while milk production remains limited to household use. Livestock serves mainly as a coping asset sold during emergencies by 65% of households rather than a stable income source. Women contribute 40% of livestock-related activities but face challenges such as feed scarcity, inadequate veterinary support, and restricted grazing caused by mining-related fencing. Despite these constraints, livestock remains central to household food security and resilience.

Migration trends reveal limited movement, with only six households reporting male seasonal migration within the district. The lack of local employment remains the main driver, while remittances are irregular and mainly used for food, debt repayment, and healthcare. The availability of local employment through RDMC has helped reduce migration, suggesting that further investment in skills and local livelihoods could strengthen household economic stability.

In the WASH sector, findings highlight serious access and quality challenges. About 92% of households rely on a single water source for multiple needs, while 78% experience access restrictions and only 6% feel safe during water collection. Tube wells and boreholes are the primary sources (41%), followed by tanker-supplied water (27%). Weak storage and poor treatment practices 54% of households do not treat water have contributed to widespread waterborne diseases, with 41% reporting diarrhea or skin infections. Although 71% of households have latrines and 94% practice handwashing, water quality, availability, and storage remain major concerns. Strengthening WASH infrastructure, improving water safety, and promoting hygiene awareness are critical to improving public health and resilience.

The assessment also identified challenges related to protection, inclusion, and social cohesion. About 21% of households reported safety concerns, mainly theft, while smaller proportions cited harassment and other risks. Child labor was reported in 13% of households, and women's participation in community decision-making remains low at 17%, highlighting persistent gender inequality. Although most women and girls feel safe accessing schools, health facilities, and water points, border proximity to Afghanistan and Iran exposes communities to smuggling and trafficking risks, particularly at night. Nevertheless, 77% reported feeling safe during daytime. Conflict levels are low, though tensions occasionally arise over water.

Decision-making remains male-dominated 58% by men, 38% jointly, and 4% by women. Gender-based exclusion (25%) and disability-related exclusion (7%) were the most reported inequalities. While social cohesion remains strong, enhanced protection systems and inclusive participation are needed to promote equitable and stable community development.

Findings on climate change and resilience indicate moderate awareness but limited engagement in adaptive actions. While 54% of respondents were aware of climate change, only 2% participated in related training, and 26% felt excluded from climate initiatives. Most households (78%) observed rising temperatures and 86% reported reduced rainfall, consistent with local perceptions of hotter summers, shorter winters, and prolonged droughts affecting agriculture, livestock, and water availability. Social media is the main source of early warning (54%), yet 29% lack access to any alert system. Adoption of sustainable practices remains low 4% use water conservation, 1% rainwater harvesting, and 3% climate-resilient farming. Although 44% utilize solar energy, most still rely on non-renewable sources. Participation in natural resource management is limited (11%) to tree planting and soil conservation, while 81% report no access to climate-related services.

Overall, the findings underscore an urgent need for integrated, inclusive, and sustainable interventions that strengthen livelihoods, improve food and water security, enhance social protection, and build long-term resilience against environmental and economic stresses in RDMC Priority-I villages of Nokkundi and Taftan.

Preamble

The purpose of this needs assessment is to provide an evidence-based understanding of the challenges and priorities faced by communities in the target areas of Nokkundi and Taftan specifically RDMC priority villages. The assessment has been designed to capture the multi-dimensional aspects of vulnerability and resilience, with particular attention to food security and livelihoods, water resource management and water sanitation and hygiene's, migration and labor, protection and social inclusion/ cohesion and the impacts of climate change.

Communities in the Nokkundi and Taftan continue to face recurrent shocks and stresses that undermine their well-being including limited livelihood opportunities, scarcity and mismanagement of water resources, inadequate access to safe sanitation and hygiene facilities, climate-induced hazards, and socio-economic pressures that drive migration and labor shifts. At the same time, issues of social exclusion, protection risks and weak community cohesion exacerbate existing vulnerabilities particularly for marginalized groups such as women, children and persons with disabilities.

Identifying these interlinked challenges, the assessment aims to generate a holistic picture of the current situation, identifying urgent needs, structural gaps and opportunities for building resilience. The findings are intended to inform strategic planning, program design and ensuring that interventions are responsive, inclusive and sustainable.

Objectives of the need assessment study:

IRP conducted this need assessment around key sectors in twelve (12) villages of Nokkundi and Taftan. The key objectives of the study include;

- To assess the current status of food security and livelihood opportunities, identifying barriers, coping mechanisms, and potential areas for improvement.
- To examine the availability, accessibility, and management of water resources along with community access to safe sanitation and hygiene (WASH) services.
- To analyze migration and labor dynamics, including drivers of migration, labor market challenges, and their impact on community stability and well-being.
- To identify protection risks and assess the extent of social exclusion with particular focus on women, children, persons with disabilities, and other marginalized groups.
- To evaluate levels of social cohesion within and between communities, highlighting factors that foster or hinder inclusive community resilience.
- To understand the impacts of climate change and recurrent shocks on livelihoods, water resources, and community resilience mechanisms.

Methodology

The needs assessment was conducted using a mixed-methods design, integrating both quantitative and qualitative approaches to ensure a comprehensive evaluation of the stated objectives. A random sampling strategy was applied, resulting in the selection of 180 households. The sample size was statistically determined to achieve a 95% confidence level with 5% margin of error, thereby ensuring reliability and representativeness of the findings. The sample size of 180 respondents was selected based on proportionate allocation, as shown in Table 2. Among the respondents, 77% were male and 23% were female headed household. Additionally, a total of six Focus Group Discussions (FGDs) were conducted-four with female participants and two with male participants. To ensure broader female participation, four female-focused FGDs were conducted with 43 females. A female enumerator, who had previously served as a teacher in Mashki Chah and Dur Ban Chah, actively participated in the assessment and facilitated these FGDs in Mashki Chah, Humai, Tang Kachao, and Dur Ban Chah. Her familiarity with the local culture and communities helped create a comfortable and culturally appropriate environment, enabling women to share their views openly. These FGDs provided valuable qualitative insights into women's experiences regarding health, education, livelihoods, and safety, which have been integrated into the relevant thematic sections of the report. Key Informant Interviews (KIIs) were also carried out with Community Development Committee (CDC) members and representatives from the Health Department. Furthermore, in several villages, including Mashki Chah, Door Ban Chah, Hummai, Amal Aap, and Tang Kachao, KIIs were conducted with Community Liaison Officers to capture a diverse range of perspectives and contextual insights.

The mixed-methods approach was chosen to combine the statistical reliability of quantitative data with the depth and contextual insights of qualitative evidence. This integration not only strengthens the validity of the results but also provides decision-makers with a holistic evidence base to design targeted, inclusive, and sustainable interventions that are responsive to community needs.

Table 2: Summary of Sample Size and Data Collection Determination from Sampled Villages

Sr. #	Villages	In-Depth Interviews (IDIs)	Focused Group Discussions (FGDs)	Key Informant Interview (KIIs)
1.	Humai	26	Total =06 Male Group= 02 Female Group= 04	Total = 2 One with CDC members and one with the representative of health department
2.	Nok Chah	06		
3.	Door Bun Chah	47		
4.	Mask ki Chah	24		
5.	Bedok	04		
6.	Tang Kachao	18		
7.	Amal Aap	47		
8.	Kachao	03		
9.	Sarzay/Makki	01		
10.	Kirtaka	01		
11.	Miskan	03		

Data Collection Method

Data collection was carried out by the experienced and qualified enumerators. This was done to ensure the neutrality, transparency, and independence of data. The data collection exercise was carried out through comprehensive data collection tools developed by the Islamic Relief team. In-depth orientation was given to the enumerators on data collection tools and key objectives of the study to get the desired results. Once the data was collected via hard tools then it was uploaded through the KOBO tool to avoid errors and ensure data reliability. Structured questionnaires with both open and closed-ended questions were used to generate relevant data and information from household respondents.

The following tools were used for data collection: The Tools are annexed

- 180 in-depth interviews (IDIs) at the HH level
- KIIs with CDC members and other relevant stakeholders
- 10 Focus group discussions (FGDs)

Physical Observations

In addition to primary data collection, the field team systematically documented their physical observations throughout the fieldwork. These observations captured the visible conditions of households, community infrastructure, water sources, sanitation facilities, and other environmental factors directly influencing community well-being. At the conclusion of the data collection phase, the team led and enumerators consolidated and discussed these observations during a structured feedback session.

This process not only validated and enriched the information gathered through in-depth interviews (IDIs), focus group discussions (FGDs), and key informant interviews (KIIs) but also provided an independent layer of evidence. The integration of physical observations was instrumental in triangulating findings, enhancing data credibility, and strengthening the overall contextual analysis of community needs and vulnerabilities.

Language Barriers

One of the key limitations of this needs assessment was the language barrier encountered in the target areas, particularly when engaging with rural communities. Translating data collection tools into local dialects proved challenging. In many cases, enumerators had to translate questions spontaneously during interviews, either into the national language or local dialects. This introduced the risk of variations in interpretation across enumerators, which may have affected the validity and reliability of responses.

While it is estimated that the potential margin of error from this issue did not exceed 5%, the risk remained significant. To mitigate this, the data collection team underwent comprehensive orientation sessions and was instructed to clarify their understanding of each question and provided feedback where needed. Despite these measures, the challenge of ensuring uniform interpretation persisted.

Ethical Consideration

All responses were collected after obtaining informed consent from participants. A consent question was included at the beginning of the household-level questionnaire, and respondents were briefed on the objectives and purpose of the needs assessment before participating in responses. To safeguard confidentiality, personal identifiers were not used. Instead, identification numbers were assigned during data entry, analysis, and reporting, thereby minimizing any potential risks to respondents' privacy.

Findings:

Chapter 1- Respondent and Household Basic Information

Study Coverage:

In the needs assessment study, household-level data were collected from District Chaghi, covering two tehsils (Nokkundi and Taftan). Within Nokkundi, four villages-Humai, Nok Chah, Door Bun Chah, and Mask ki Chah were surveyed, while in Taftan, data were gathered from seven villages, namely Bedok, Tang Kachao, Amal Aap, Kachao, Sarzay/Makki, Kirtaka, and Miskan as shown in Table 3. This geographical spread ensured the inclusion of households from diverse locations, capturing variations in socio-economic conditions, livelihood sources, and access to basic services across different administrative units. The coverage provides a representative overview of community needs in respective areas and strengthens the basis for planning targeted interventions.

Table 3: Sampling Units

District	Tehsil	Union Council	Villages
Chagai	Nokkundi and Taftan	Nokkundi and Taftan	Humai, Nok Chah, Door Bun Chah, Mask ki Chah Bedok, Tang Kachao, Amal Aap, Kachao, Sarzay/Makki, Kirtaka and Miskan

Respondent Gender/Age Group and Settlement:

During the data collection phase of the needs assessment, a total of 77% of respondents were male, while 23 percent were female. This distribution highlights the gender dynamics within the surveyed communities where men are generally more involved in household decision-making and external interactions. The average age of respondents was 40 years, suggesting that the study primarily engaged middle-aged individuals for data collection. All respondents belonged to host communities. Therefore, the findings presented in this report specifically reflect the situation, priorities, and needs of host populations without influence from displaced or refugee groups.

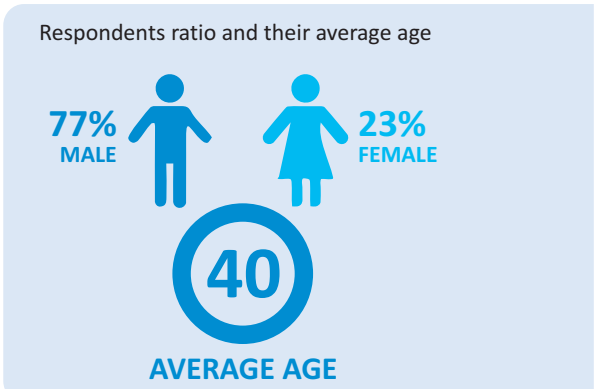

Figure 1

Education Level of Respondents:

The data highlights that the majority of respondents have low levels of formal education, with 63% identified as not literate. Primary education accounts for 16% while only 9% have reached the secondary level. A smaller proportion, 7%, reported having basic literacy skills acquired through non-formal means. Higher education levels are very limited with just 4% being graduates and only 1% holding a postgraduate degree. Overall, the findings indicate that educational attainment in the surveyed population is very low, with a large literacy gap and minimal access to advanced education opportunities. This has important implications for livelihood opportunities, skill development, and overall socio-economic mobility.

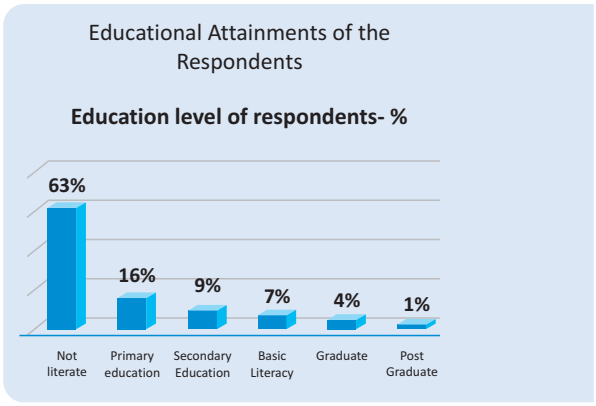

Figure 2

During the data collection process, it was observed that a nearby village named Mula Tawakul, is located approximately seven kilometers away from Door Ban Chah. During FGD discussions with the residents, they emphasized that around 10 to 15 children in the village are of school-going age. However, due to the long distance to the nearest school in Door Ban Chah and harsh weather conditions, only two boys can regularly attend school, while the rest remain out of school primarily due to accessibility challenges. A similar situation was noted in another remote village, Mawla Bux, situated about 30 kilometers from Humai. There, around 5 to 8 school-age children were identified, but due to the absence of a nearby educational facility and transportation constraints, they are unable to attend school.

Similarly, during the primary data collection, it was observed that only primary schools are available in some villages. The number of students is relatively high, and there is a pressing need for middle and high schools in areas such as Dor Ban Chah, Humai, and Tang Kachao. In these villages, students are unable to continue their education beyond the primary level due to the absence of higher-level educational facilities.

Overall Educational Status and Women's Access to Learning Opportunities

The assessment reveals that educational access across the P1 villages remains severely constrained, with pronounced gender disparities in school enrollment and literacy levels. Although primary schools exist in some villages, while girls' participation declines sharply beyond primary level due to sociocultural norms, early marriage, and concerns about safety and mobility. Adult literacy among women is also notably low, with many female respondents reporting that they had never attended school.

The absence of post-primary educational institutions and a lack of non-formal education centers further restrict opportunities for adolescents and adult women to pursue learning or vocational skills. As a result, women and girls are often confined to household roles, with limited exposure to literacy, numeracy, or income-generating competencies. These educational gaps directly impact women's ability to engage in livelihood activities, access health information, or participate in community decision-making processes.

To address these challenges, the study recommends that RDMC, under its Corporate Social Responsibility (CSR) initiatives, promote gender-responsive education and skills development interventions in collaboration with the Education Department, Literacy and Non-Formal Basic Education Directorate, and NGOs active in the region. Specific actions include:

- Establishing community-based non-formal education centers targeting adolescent girls and women to improve basic literacy and numeracy.
- Introducing female literacy and life skills programs within existing community facilities or Women and Girls Friendly Spaces (WGFS).
- Partnering with vocational training institutes to provide tailored skills development courses in trades such as tailoring, embroidery, food processing, and small-scale entrepreneurship.
- Offering stipends or incentives to encourage girls' school attendance and reduce dropout rates.

Integrating these initiatives with livelihood and social empowerment programs will create a more inclusive and sustainable pathway for women and girls to enhance their educational attainment, economic participation, and leadership within their communities.

Income Source of Household:

The findings revealed that, households primarily rely on private employment as their main source of income with 43% engaged in private sector related jobs (such as trading firms, contractors, transport companies, mines, and service providers), making it the most dominant livelihood option. Skilled labor (22%) and unskilled labor (19%) also account for a significant portion, indicating that labor markets play a crucial role in sustaining household economies. A smaller proportion of households reported relying on agriculture/horticulture (2%), government jobs (2%), and small enterprises (1%), suggesting limited dependence on traditional or formal livelihood sources. Additionally, forest resources and donations/charity contribute minimally (1-2%), while 8% reported other unspecified sources of income. Overall, the income profile demonstrates a heavy dependence on private sector jobs and labor-based activities with limited diversification into agriculture or enterprise-based livelihoods.

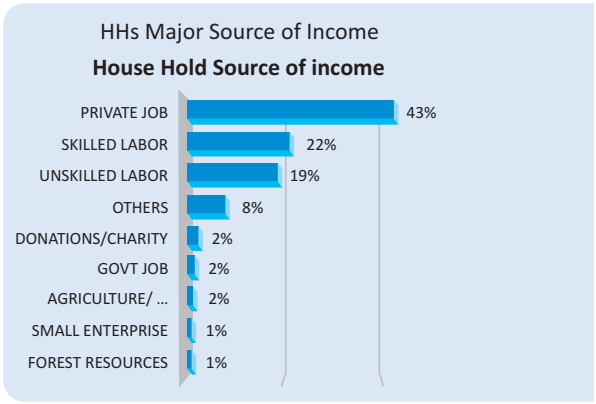

Figure 3

Average Monthly Income Range:

The income data shows that a significant proportion of households (43%) fall within the above 40,000 PKR monthly income range, highlighting a relatively stronger earning capacity for a considerable segment of the population. Meanwhile, 17% earn between 11,000-20,000 PKR, and 16% fall within the 31,000-40,000 PKR bracket. Around 13% of households earn 21,000-30,000 PKR, while the lowest income group earns 1,000-10,000 PKR and accounts for 11%. Overall, while a large share of households report higher earnings, a significant portion still lies within low- to middle-income categories, suggesting income disparities within the community. This mixed profile reflects that although some have higher incomes, many remain vulnerable with limited financial resources, which has direct implications for their resilience, access to services, and coping capacity in times of crisis. It is also worth mentioning that the majority of respondents, during open discussions, perceived a noticeable improvement in their income levels following the recent commencement of operations by the Reko Diq Mining Company (RDMC) in the area. Many residents, particularly youth from the (PI) villages, have secured employment with RDMC in various capacities ranging from skilled and unskilled to mixed positions such as Assistant Community Liaison Officers, RO Plant Caregivers, and Teachers. This development has positively impacted household incomes and significantly enhanced the overall economic well-being of the communities over the past two years.

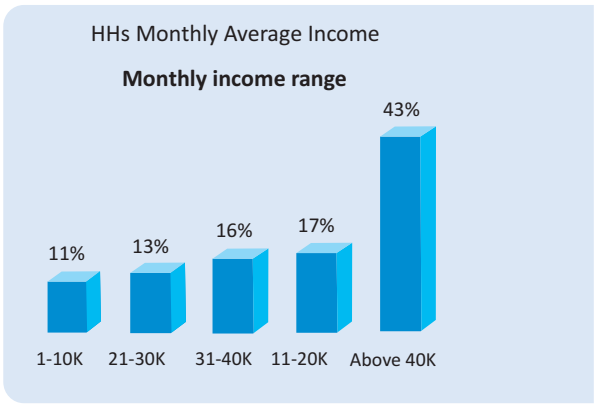

Figure 4

Different Age Group Household Members and Household Size:

The household demographic profile in sampled households indicates a total population of 1,242 individuals across the surveyed households with a nearly balanced gender distribution which is 667 males (54%) and 575 females (46%). The data shows that children under five years (0-59 months) make up a sizeable group (243 individuals, 20% of the population), reflecting a young population structure. School-aged children (6-12 years) account for another 245 individuals (20%), while adolescents aged 13-17 years represent 165 individuals (13%).

The working-age population (18-49 years) is the largest segment comprising 451 individuals (36%), which has implications for both livelihood opportunities and dependency ratios within households. Older age groups (50 years and above) are relatively small with 138 individuals (11%), indicating fewer elderly dependents compared to younger age groups.

The average household size of 6.9 members is relatively large suggesting extended family structures and higher dependency burdens. This demographic composition highlights a youthful population with significant needs for education, health, nutrition and livelihood opportunities alongside implications for household resource allocation and social service planning.

Table 4: Age Categorization of Sampled Population

Category	Gender Wise			Average HH Size
	Male	Female	Total	
0-59 months	135	108	243	**6.9**
6 - 12 years	129	116	245	
13 - 17 years	89	76	165	
18 - 29 years	120	108	228	
30 - 49 years	115	108	223	
50 - 59 years	49	30	79	
60 - 69 years	18	18	36	
70 and above	12	11	23	
Total	**667**	**575**	**1,242**	

Vulnerable Group Members in Surveyed Households:

The data highlights the presence of specific vulnerable groups within the surveyed households. A total of 37 orphaned children were identified (20 boys and 17 girls) reported across 12 households, indicating that a small but significant number of families are caring for orphans and may require additional support. In terms of maternal health, 7 pregnant women and 35 lactating women were recorded, pointing to ongoing needs for maternal and child health services, nutrition, and care.

In the P1 villages, pregnant and lactating women have been identified as one of the most vulnerable groups, yet their access to maternal and reproductive healthcare services remains critically constrained. Field observations and community consultations indicate that the majority of women continue to depend on traditional birth attendants (TBAs) for deliveries due to the absence of functional Basic Health Units (BHUs) within a reasonable distance and the irregular presence of Lady Health Workers (LHWs). Health facilities are either too far or inadequately equipped to provide essential maternal care services, compelling women to rely on informal and often unsafe practices. Institutional deliveries remain unavailable, primarily lack of BHUs, long travel distances, poor road infrastructure, limited transportation options, and, to some extent, cultural constraints that restrict women's mobility.

To mitigate these challenges, the study suggests strengthening linkages with nearby government and RDMC health facilities and collaborating with local NGOs to facilitate regular maternal and child health awareness sessions within the communities. These sessions will emphasize safe delivery practices, antenatal and postnatal care, newborn and maternal nutrition, hygiene promotion, and awareness of reproductive health and family planning. Additionally, coordination with BHUs and health departments will be enhanced to ensure timely referrals, improved outreach of skilled midwives and LHWs, and better access to essential maternal healthcare services for pregnant and lactating women in the P1 villages.

Table 5: Vulnerable Group Information

Vulnerable group	Total	Male/Boys	Female/Girls	# of house hold reported with vulnerabilities
Number of orphan children's	37	20	17	12
Number of Pregnant women		7		7
Number of lactating women		35		35

Disability Status:

The findings indicate that 5% of surveyed household members are living with some form of disability, while 95% reported no disability. This relatively high proportion highlights disability as a significant vulnerability within the community underscoring the need for inclusive programming, accessibility measures and targeted support services to ensure that persons with disabilities are not excluded from education, livelihood and social protection opportunities.

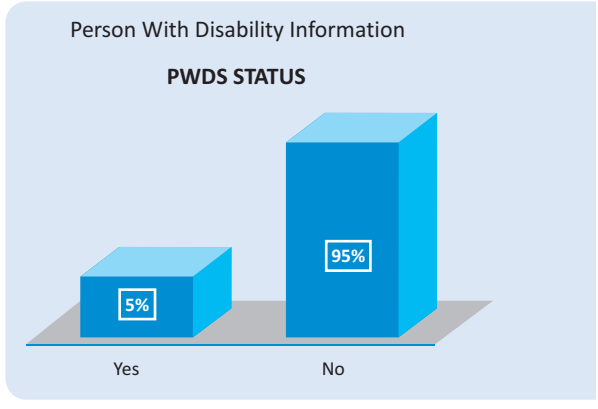

Figure 5

Type of Disabilities:

Out of the 5% of households that reported having members with disabilities the most common challenges were related to walking or climbing steps (25%), followed by communication difficulties (21%) and visual impairments (18%). Other reported conditions included self-care limitations (16%), hearing difficulties (11%) and issues with remembering or concentrating (10%).

This breakdown shows that mobility and communication-related disabilities are the most prevalent among affected households. In the context of needs assessment, these findings underscore the necessity for inclusive services, mobility support, accessible health care and tailored interventions to ensure households with persons with disabilities are not left behind in development and humanitarian programming.

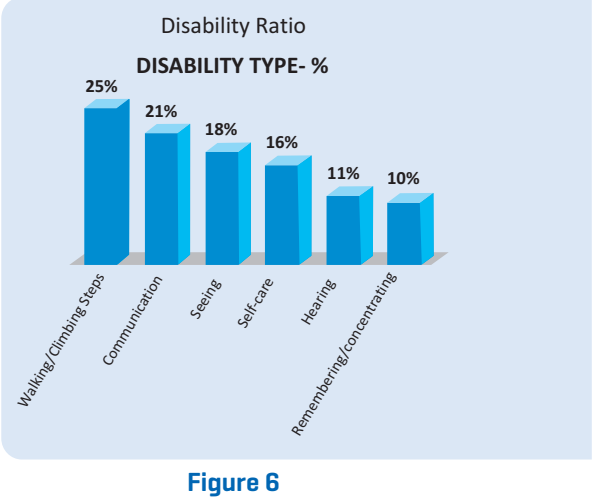

Figure 6

Furthermore, when this issue was discussed with the field team regarding the higher ratio of persons with disabilities (PWDs) specifically in the context of walking/climbing, they explained that older individuals aged around 55 to 60 years or above were also included in this category. Upon further investigation, it was revealed that many residents in these villages have been working as laborers in nearby mining sites, where different mining companies have been operating for many years. Due to the heavy physical workload involved in mining activities, many of them have been affected by joint and knee problems over time, which contributes to the higher reported disability rate in the area.

Chapter 2-Food Security & Livelihoods

Meal Consumption Frequency:

The meal consumption data indicates that nearly half of the households (49%) are able to consume three or more meals per day, reflecting relatively better food access for this group. However, a significant proportion (45%) reported eating only two meals a day while 6% of households survive on just one meal daily signaling concerning levels of food insecurity for the most vulnerable. Overall, while a majority manage two or more meals, the presence of households with only one meal highlights gaps in food availability and access that require targeted food security and nutrition interventions.

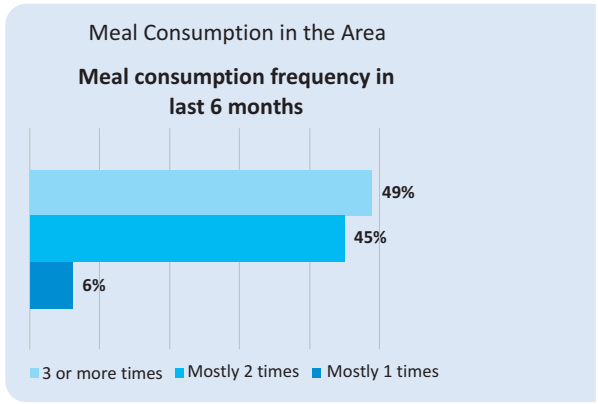

Figure 7

Food Consumption Status:

The Food Consumption Score (FCS) data shows that 9% of households fall within the poor food consumption category (0-21) indicating very limited dietary diversity and inadequate nutrition. A larger proportion 42%, are in the borderline category (21.5-35) reflecting fragile food security where even minor shocks could push these households into poor consumption. Meanwhile, 48% of households are in the acceptable category (above 35) suggesting relatively better dietary intake and food access.

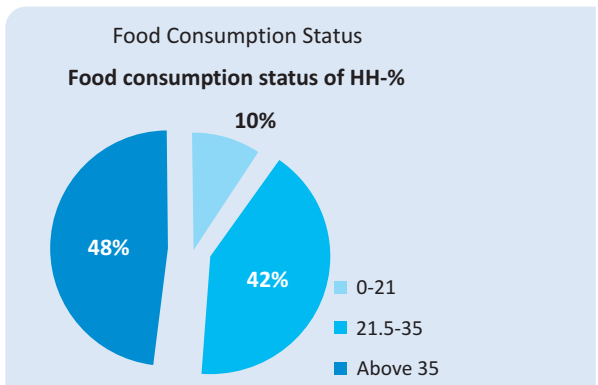

Figure 8

Overall, the findings highlight that while nearly half of the households meet acceptable food consumption levels a considerable 51% (poor + borderline) remain at risk underlining the need for nutrition support, livelihood strengthening and food security interventions to prevent further deterioration.

Food Consumption Score- Village Wise Risk Ranking

Table 6: Risk Categorization Based on Food Consumption Score (FCS)

71% and above	Villages where - 70% and above of HH falls FCS below 35 rank in High Risk category.
41% -70%	Villages where - 41%-70% of households fall below FCS of 35 are categorized as medium risk category.
Below 40%	Villages where 40% or fewer households have an FCS below 35 are categorized as low risk category.

The Food Consumption Score (FCS) analysis highlights important inconsistencies in food security across the surveyed villages. Villages such as Kirtaka, Humai, Miskan, Nok Chah and Kachao fall into the high-risk category with 71% and above households below the acceptable threshold (35) highlighted with red in table 7. This indicates severe food insecurity with households entirely dependent on borderline or poor food consumption patterns and facing limited dietary diversity. Among these, Nok Chah stands out with 83% of households in the poor FCS category indicating a critical situation requiring urgent food assistance and livelihood support. Villages including Mask ki Chah, Amal Aap, Sarzay/Makki, and Door Bun Chah fall into the medium-risk category where 41-70% of households remain below acceptable FCS. Although some households in these areas have acceptable consumption, a majority are still struggling highlighting the need for nutrition-sensitive interventions and livelihood diversification measures to improve dietary quality. By divergence, Tang Kachao and Bedok fall in the low-risk category where below 40% of household falls in below acceptable FCS is 35. While relatively better off a minority of households in these areas remain vulnerable and would require targeted support to avoid slipping back into food insecurity. Overall, the findings show that food security challenges are widespread with certain villages facing acute crises that demand immediate humanitarian action while others need resilience-building measures to sustain and improve their current status of their livelihood.

Table 7: Risk Categorization of the Villages in the Context of FCS

Villages	FCS Thresholds				Risk category
	0-21	21.5-35	Above 35	Below 35 FCS	
Kirtaka	0%	100%	0%	100%	High
Humai	0%	100%	0%	100%	High
Miskan	0%	100%	0%	100%	High
Nok Chah	83%	17%	0%	100%	High
Kachao	0%	100%	0%	100%	High
Mask ki Chah	19%	49%	32%	68%	Medium
Amal Aap	33%	33%	33%	67%	Medium
Sarzay/Makki	0%	50%	50%	50%	Medium
Door Bun Chah	4%	46%	50%	50%	Medium
Tang Kachao	0%	32%	68%	32%	Low
Bedok	6%	17%	78%	22%	Low

Meal Reduction Due to Food Shortage- 30 days

Findings of study indicate that, almost half of the households (49%) reported participating rarely (1-2 times) and 26% indicated they never participate suggesting limited access or utilization. Around 20% reported engaging sometimes (3-10 times), while only 5% do so frequently (>10 times). These findings highlight a potential gap in availability, awareness and or capacity pointing to a need for targeted interventions to increase access and regular engagement in this activity.

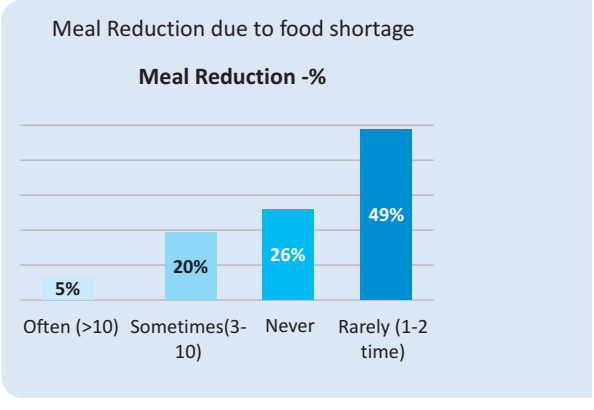

Figure 9

Main Source of HH Food:

The analysis of food sources among households shows a strong reliance on market purchases with 90% of respondents obtaining food primarily through buying. Only a small proportion depends on their own production (7%), borrowing or credit (3%), and food aid (1%). This indicates that most households are highly dependent on the market for their food needs highlighting potential vulnerability to price fluctuations or market disruptions and underscoring the need for interventions that improve food security and self-sufficiency.

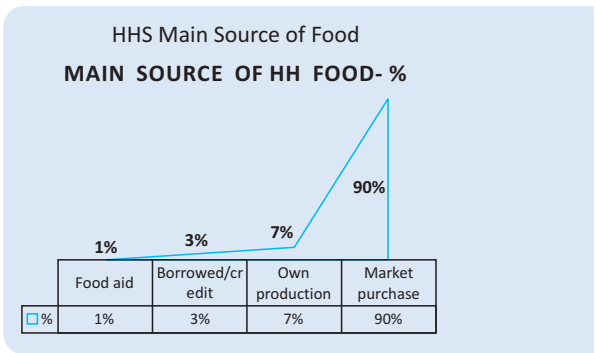

Figure 10

Food Shortage Experience in the Last 7 Months

The data on food shortage experiences over the past seven months indicates that a significant proportion of households faced challenges in accessing sufficient food. The highest reported shortages occurred in June 2025 (26%) followed by July (20%) and February (20%). Moderate shortages were reported in March (11%) and January (9%), while fewer households experienced shortages in May (8%) and April (6%). Overall, 67% of respondents reported experiencing food shortages at some point during this period while 33% did not. This pattern suggests that food insecurity is more pronounced during certain months potentially linked to seasonal availability, market fluctuations or household coping capacity highlighting the need for targeted interventions to strengthen food access and resilience.

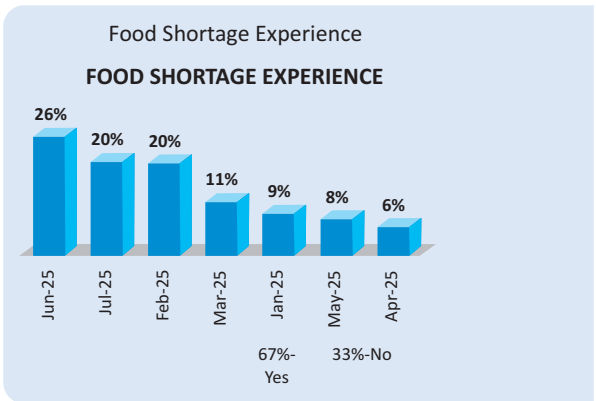

Figure 11

Household Food Coping Mechanisms

The findings indicate that households are employing coping strategies to manage food shortages. A large proportion of households (74%) reported relying on less preferred or less nutritious foods, reflecting adjustments in diet quality due to limited food availability. Similarly, 80% of households indicated that they borrow food or money to meet their food needs, highlighting economic stress and reliance on social networks to cope with food insecurity.

These results underscore the risky nature of household food security, where most families are forced to adopt measures that can affect nutrition and financial stability. Targeted interventions, such as food assistance, livelihood support, or market stabilization, are critical to reducing reliance on undesirable coping strategies.

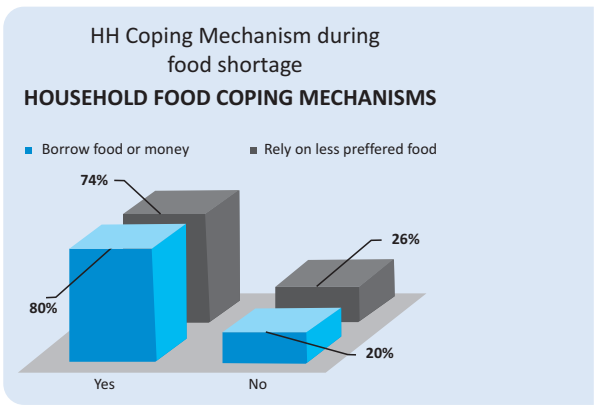

Figure 12

Household Food Sufficiency

The assessment of household food sufficiency indicates that the majority of households (75%) experience food availability as sometimes sufficient, meaning they can meet their food needs only intermittently. A smaller portion (15.6%) reported that their food supply is always sufficient, reflecting consistent access. Conversely, 8.9% of households experience food as often insufficient, and a very small fraction (0.6%) reported it as always insufficient, indicating chronic food insecurity.

These findings suggest that while most households can meet their food needs occasionally, a significant proportion face instability in food access, highlighting the need for interventions to improve consistent food security and resilience.

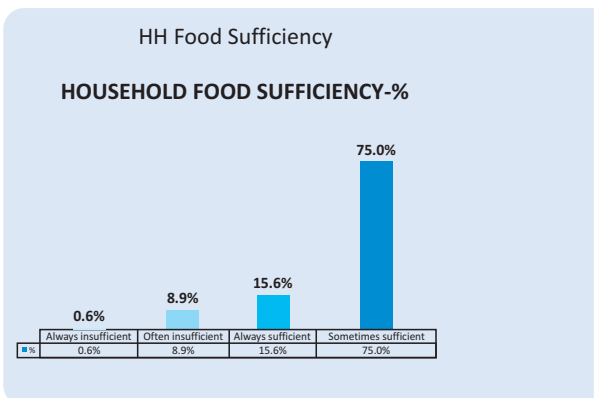

Figure 13

Household Food Access Disruptions:

The data indicate that high food prices are the predominant factor affecting household food access with 82.2% of respondents reporting this as a challenge. Other factors, such as livestock disease (2.8%), drought/flood (1.7%) and crop failure (0.6%) affect a smaller portion of households individually.

Some households reported multiple overlapping challenges, including combinations of crop failure, livestock disease, high food prices, conflict or drought/flood, though these were relatively rare (0.6%-3.9%). Additionally, 4.4% of respondents cited other unspecified factors impacting their food access.
Overall, the findings highlight that economic barriers, primarily high food prices, are the main driver of food access disruptions, while environmental and production-related factors, though present, have a comparatively limited impact. This emphasizes the need for interventions targeting affordability and market stabilization alongside supporting agricultural resilience and livestock health.

Table 8: Factors Contributing to Food Shortages

Multiple Responses	Respondents #	Responses %
Crop failure	1	0.6%
Crop failure, Livestock disease and High food prices	1	0.6%
High food prices and Conflict	1	0.6%
High food prices and Drought/Flood	1	0.6%
Livestock disease and High food prices	1	0.6%
Crop failure and High food prices	2	1.1%
Crop failure and Livestock disease	2	1.1%
Drought/Flood	3	1.7%
Livestock disease	5	2.8%
Livestock disease and High food prices	7	3.9%
Others	8	4.4%
High food prices	148	82.2%

In others major mention low wage rate, poor road infrastructure and diseases occurred in their households.

Children under 5 Food Consumption

The dietary patterns of children under five reveal a reliance on breast milk consumed by 20% of children making it the most common food source. Other frequently consumed items include vegetables (16%), milk/dairy (15%) and fortified foods (14%) indicating moderate diversity in the diet.

However, a concerning 14% of children reportedly consume no food items from the listed categories reflecting potential gaps in feeding or nutritional insecurity. Consumption of protein-rich foods such as eggs (10%), meat (6%), and fish (1%) is relatively low suggesting limited access to or preference for animal-source foods. Fruits (3%) are also minimally consumed indicating inadequate intake of essential vitamins and micronutrients.

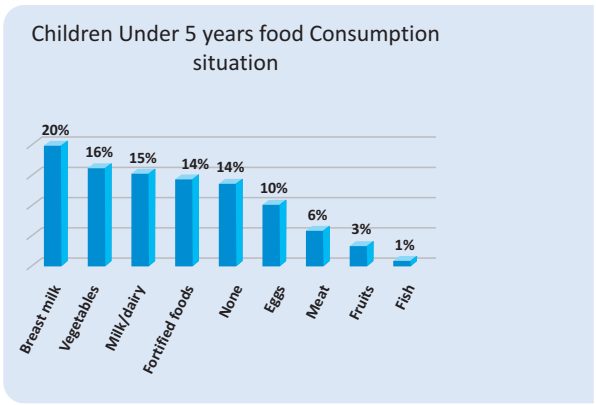

Figure 14

Overall, while there is some dietary diversity among children under five, the data highlights significant nutritional gaps particularly in protein and micronutrient-rich foods which could contribute to malnutrition if not addressed.

PLW Food Intake Patterns

The dietary assessment of pregnant and lactating women shows a severe gap in consumption of nutrient-rich foods. Only a small fraction of women reported consuming fortified foods (3%) or iron-rich foods (3%) while the overwhelming majority 94% of respondents reported consuming none of these recommended food items.

This indicates a critical risk of micronutrient deficiencies particularly iron deficiency which can adversely affect both maternal health and child development. The findings underscore an urgent need for targeted nutritional interventions including supplementation programs, promotion of fortified and iron-rich foods and awareness campaigns to improve dietary practices among pregnant and lactating women in the respective communities.

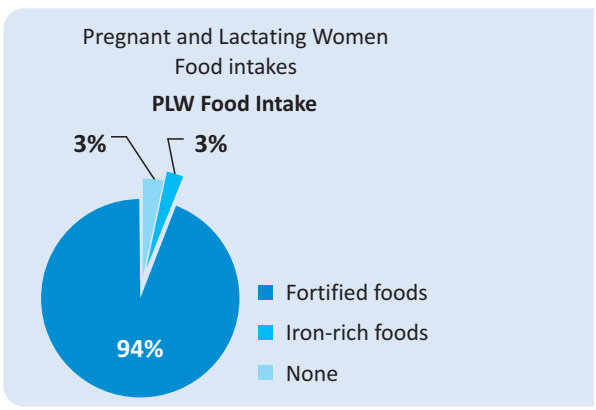

Figure 15

These results were also confirmed during the Focus Group Discussions (FGDs). Participants emphasized that the lack of road connectivity and the long distance to markets make it difficult for pregnant and lactating women, children, and the elderly to access perishable food items such as vegetables and fruits. These challenges, coupled with low household income, contribute significantly to malnutrition among children and nutritional deficiencies among women and the elderly, particularly during periods when livestock feed is scarce.

Community Nutrition Education Awareness

The data highlights extremely low participation in community nutrition education programs. Only 4% of respondents reported that they have participated while 12% were aware of such programs but did not participate. The majority 84% of respondents indicated no awareness or participation in these initiatives.

This reflects a significant gap in both access to and engagement with nutrition education suggesting that existing programs are either not reaching the community effectively or are limited in scope. Enhancing outreach, accessibility and community engagement strategies is essential to improve nutrition knowledge and practices among households.

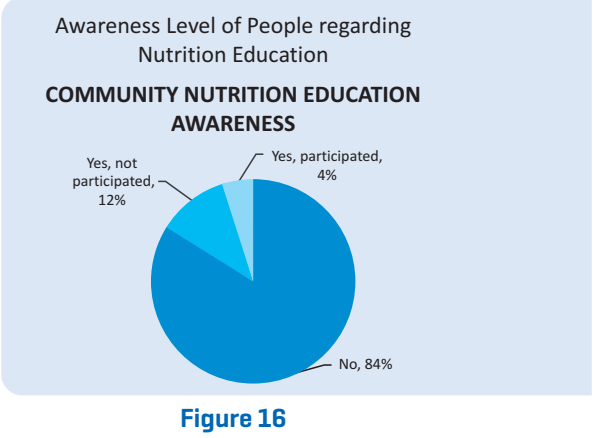

Figure 16

Chapter 3- Agriculture & Horticulture

Farming Practices and Livelihood Support

The survey findings highlight significant gaps in household engagement with agricultural practices and access to support services. Out of 180 surveyed households, only 8% (15 households) reported cultivating crops, primarily fruits or vegetables. Among these farming households, 33% used improved seed varieties and 13% used fertilizers or pesticides, indicating limited adoption of modern inputs due to low awareness, affordability, and access to agricultural resources most importantly due to water scarcity. Post-harvest management practices were also weak 47% stored crops for later use or sale, while 53% experienced post-harvest losses. Market-related challenges were evident, with only 7% expressing satisfaction with crop prices, 47% dissatisfied, and another 47% partially satisfied. Access to agricultural extension training was minimal (7%), with very limited institutional or technical support, and no household reported access to agricultural loans or credit. Overall, the data reflect very low engagement in farming and weak institutional and financial support for those relying on agriculture. The coding of these indicators were recorded as a multiple responses.

Table 9: Agriculture Practices and Factors Contributing to Agriculture losses

Indicator	Yes		No		To Some extent		NA	
	Responses	%	Responses	%	Responses	%	Responses	%
Cultivation Practices	15	8%	165	92%	0	NA	0	0
Use of Improved Seeds	5	3%	10	6%	0	NA	165	92%
Fertilizer & Pesticide Use	2	1%	13	7%	0	NA	165	92%
Crop Loss Due to Water Scarcity	6	3%	9	5%	0	NA	165	92%
Crops Stored for Use/Sale	7	4%	8	4%	0	NA	165	92%
Post-Harvest Losses	8	4%	7	4%	0	NA	165	92%
Crop Prices Satisfaction	1	1%	7	4%	7	4%	165	92%
Extension Training	1	1%	14	8%	0	NA	165	92%
Agriculture Support received	0	0%	15	8%	0	NA	165	92%
Agriculture Credit Access	0	0%	15	8%	0	NA	165	92%

The major causes of post-harvest losses reported by communities include pest infestation, crop spoilage and less accessibility or high cost transportation-related challenges.

Land Access

The data reveal that although a large majority of households (93%) report owning land, only 7% have very limited plots suitable merely for kitchen gardening. However, land ownership does not necessarily translate into productive farming activity. Field observations confirmed that cultivation is practiced only on a small scale in two to three villages, such as Tang Kachao and its surrounding areas. The key barriers to agricultural use include insufficient and limited water supply, soil infertility and salinity, and limited access to agricultural knowledge, quality inputs, and extension services. Despite relatively secure land tenure, these biophysical and technical limitations significantly hinder agriculture productivity. Therefore, enhancing water accessibility, providing agricultural inputs, and strengthening farmer training and extension services would likely have a greater impact on improving cultivation and food security.

Land Area and Utilization:

The assessment of land ownership and utilization reveals that most households in the community possess small landholdings with 10 households owning less than 5 acres, 4 households owning 6-10 acres and only 1 household having more than 20 acres. Despite this ownership, the cultivation of land during the last season was limited. Only households with less than 5 acres (10 households) and 6-10 acres (1 household) reported cultivating their land, while the household with more than 20 acres did not cultivate any land. This indicates underutilization of available land which may be due to constraints such as limited resources, labor shortages or lack of access to inputs. Overall, although land ownership is relatively widespread, the small size of most holdings and low levels of cultivation suggest that households face challenges in maximizing agricultural productivity potentially affecting both food security and income.

Table 10: Land Utilization

Land Area ->	6 to 10 Acres	above 20 Acres	Less than 5 Acres
Total land ->	4	1	10
Land Cultivated Last Season -> ?	1	0	10

Main Crops Cultivated:

The assessment findings reveal a diversified and market-oriented cropping pattern in the area, with cotton, cotton-fruits-fodder combinations, and vegetables each accounting for 23% of total responses. This indicates that households prioritize cash crop production to generate income while simultaneously engaging in multi-cropping systems to optimize land use and mitigate risks. Fodder cultivation (15%) reflects the strong linkage between crop and livestock-based livelihoods, highlighting the role of livestock as a key income and resilience source. Meanwhile, wheat-based mixed crops such as wheat-fodder and wheat-fruits (each 8%) are cultivated primarily for household consumption and food security rather than commercial sale. The limited share of wheat production may be associated with water scarcity, soil conditions, or irrigation constraints that favor high-value or drought-tolerant crops. Overall, the cropping pattern demonstrates a balanced livelihood strategy where communities combine income generation through cotton and vegetables with subsistence-oriented cultivation to ensure household resilience and food security.

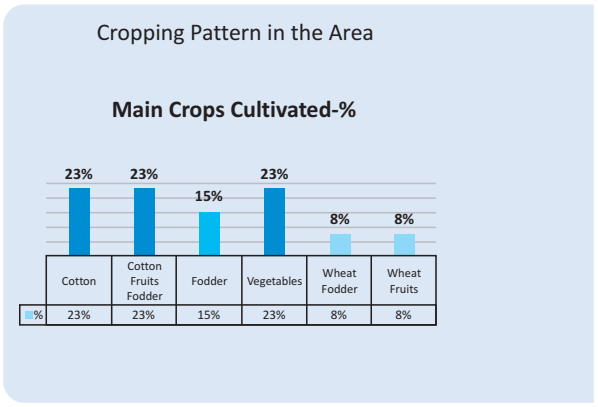

Figure 17

Farming Practices

The assessment of farming practices indicates that a majority of households (58%) engage in mixed cropping cultivating multiple crops on the same land to diversify production and reduce risk. In contrast, 42% of households practice mono-cropping (cultivating one type of crop) focusing on a single crop which may increase vulnerability to crop failure or market fluctuations. These findings suggest that while some households are adopting diversification strategies to enhance food security and income stability, a significant proportion still relies on single-crop cultivation, highlighting opportunities for promoting sustainable and resilient farming practices.

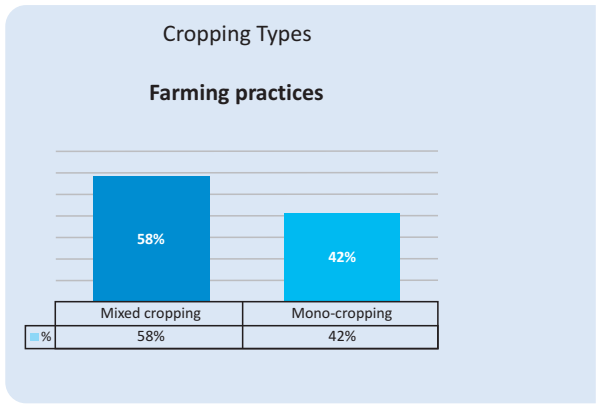

Figure 18

Main Irrigation Sources:

The assessment findings indicate that Karez systems are the primary source of irrigation, utilized by 80% of respondents. This highlights the community's strong dependence on traditional, gravity-fed underground water channels for agricultural activities. The limited use of dug wells (6.7%), tube wells (6.7%), and combined tube well/pond Karez systems (6.7%) suggests that access to modern or alternative irrigation sources remains minimal. Heavy reliance on Karez indicates both the importance and vulnerability of this traditional system, which is often affected by reduced water recharge, maintenance challenges, and seasonal fluctuations. The low presence of mechanized or groundwater-based irrigation options points to the need for rehabilitation of existing Karez structures, improved water management practices, and introduction of efficient irrigation technologies to ensure sustainable agricultural productivity and resilience against water scarcity.

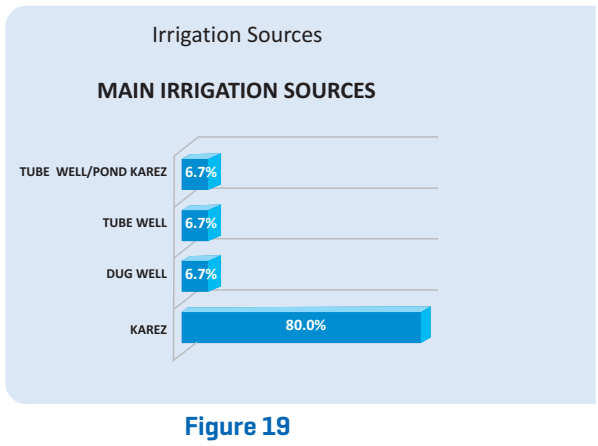

Figure 19

The analysis focuses on the main irrigation sources identified during the assessment. Since only about 8% of households reported engaging in agricultural practices mainly from Tang Kachao and Kacho villages the irrigation sources mentioned primarily reflect conditions in these areas. In these villages, natural water source are locally recognized as Karez systems, which serve as the main source of irrigation.

Water Sufficiency for Agriculture

The assessment of water sufficiency for agricultural purposes indicates that a significant proportion of households face water-related challenges. Half of the respondents (50%) reported that water is sometimes insufficient, while 7% indicated it is mostly insufficient, highlighting intermittent or chronic water shortages. Only 43% of households reported having sufficient water for agriculture. These findings suggest that water scarcity is a limiting factor for agricultural productivity in the community, emphasizing the need for improved water management, irrigation infrastructure, and conservation practices to support consistent crop production and food security. It is important to note that this discussion primarily applies to those villages that have some level of agricultural activity, such as Tang Kachao and its surrounding areas.

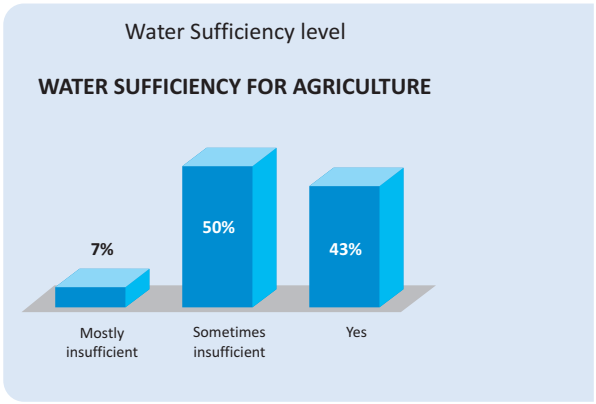

Figure 20

During the physical observation in Tang Kachao, the team visited the main water source. It noted that Sendek had installed a 6 to 7-inch plastic PVC pipeline to irrigate agricultural orchards. However, the pipeline was laid across a flood channel and was found leaking at several points, resulting in significant water losses. Such issues highlight the need for improved water management and maintenance systems to ensure efficient utilization and conservation of available water resources.

Crop Yield Changes Compared to 3 Years Ago

The data indicates that the majority of households (73%) reported that their crop yields have remained the same compared to three years ago, suggesting stability in agricultural production for most farmers. A smaller proportion of households experienced increased yields (13%) while an equal proportion (13%) reported a reduction in crop yields, reflecting localized variations due to factors such as weather, irrigation, or farming practices. Overall, while crop production has been generally stable over the past three years, a minority of households facing reduced yields may require targeted support to enhance productivity and resilience.

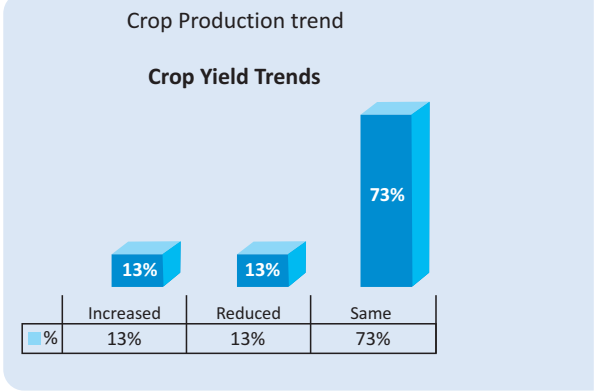

Figure 21

The primary reasons reported for declining crop yields were pest and disease infestations, which significantly affect crop health and productivity, along with the rising costs of agricultural inputs such as seeds, fertilizers, and pesticides in the market. These factors collectively reduce both the quantity and profitability of harvests and pose serious challenges for farming households.

Crops Marketing Channels

The data on crop sale points shows that the majority of households (67%) do not sell their crops, indicating that their production is primarily for household consumption. Among those who do sell - 27% use local markets while a small minority (7%) rely on middlemen for selling their produce. This pattern suggests limited market engagement among households which may constrain their income generation opportunities. Strengthening access to local markets reducing dependency on intermediaries and promoting market linkages could help households enhance their agricultural income and economic resilience.

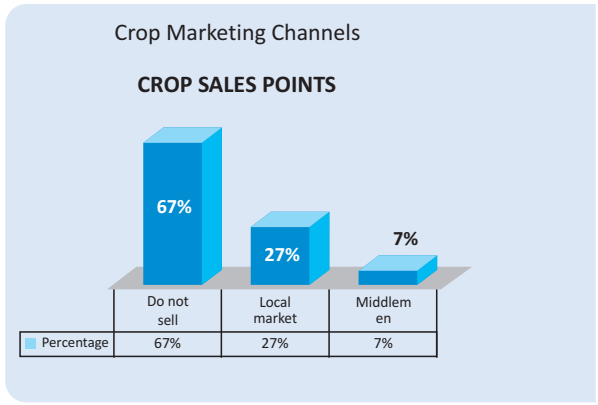

Figure 22

Contribution of Crop Income to Household Livelihoods

The findings show that crop income makes a relatively low contribution to household livelihoods. As indicated, 43% of households reported no crop-related income, relying instead on non-farm sources such as labor or trade. Around 36% indicated a moderate contribution (25-50%), suggesting farming plays a supplementary role. Only 21% reported crops as their main income source (>50%), making them more vulnerable to risks like crop failure, price fluctuations, and climate shocks.

This trend was particularly observed in Kachao and Tang Kachao, where households relying on natural springs for irrigation and primarily cultivated vegetables and fruits.

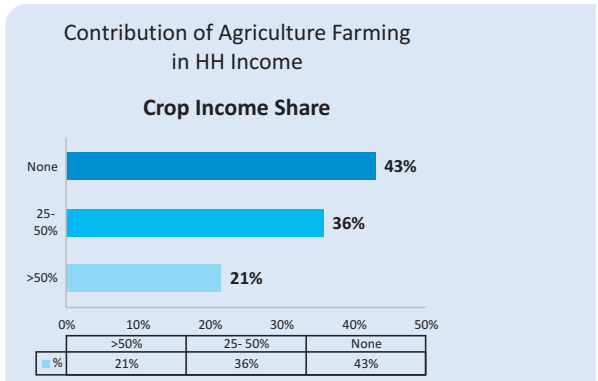

Figure 23

Overall, the data reflect low dependence on agriculture, limited productivity, and the importance of non-farm income. Strengthening market access, promoting climate-resilient farming, and providing targeted support to farming households could help reduce vulnerability and enhance agricultural profitability.

FGD findings confirm that farmers in Tang Kachao and nearby villages continue to rely on traditional farming practices. During physical observation and discussions with farmers, it was noted that no systematic pest management measures are being applied to prevent or control diseases in fruit trees. Similarly, livestock manure is used as fertilizer without any proper application strategy, and land leveling practices are absent. The main crops observed in the area include dates, pomegranates, and figs; however, their production levels are very low. Farmers are unable to sell their produce in the market or even use it effectively for local consumption due to limited agricultural knowledge, lack of access to quality inputs and fertilizers, and the absence of technical training or extension support.

Chapter 4- Livestock and Poultry

Household Livestock and Poultry Practices:

The analysis of household livestock and poultry practices reveals significant gaps in animal health, livestock and poultry management and market access. While 45% of households reported owning livestock or poultry, only 31% were actually engaged in poultry keeping, indicating that ownership does not always decode into active production. Preventive animal healthcare is notably weak with only 4% of households vaccinating their animals in the last 12 months and just 6% having access to veterinary services leaving the majority vulnerable to disease outbreaks. This lack of support is reflected in the high proportion of households (45%) that experienced livestock or poultry losses during the same period. In addition, 79% of households faced challenges with fodder availability and rising costs which not only strain household resources but also discourage investment in improved livestock practices. Adoption of modern management techniques remains low with only 26% of households using improved methods. On the economic side, satisfaction with prices is limited as only 19% of households were satisfied compared to 62% who expressed dissatisfaction suggesting that while input costs such as fodder and healthcare are rising market returns on livestock and poultry remain weak. Overall, the findings indicate that households face a combination of service, resource and market challenges that reduce the potential benefits of livestock and poultry as a livelihood source.

Table 11: Livestock Practices at HH Level

Indicator	Yes		No		To Some Extent	
	Yes	%	No	%	To Some Extent	%
Household Ownership of Livestock/Poultry	81	45%	99	55%	NA	NA
Household Poultry Keeping	24	31%	53	69%	NA	NA
Household Animal Vaccination (Last 12 Months)	3	4%	74	96%	NA	NA
Household Experience of Livestock/Poultry Losses (Last 12 Months)	35	45%	42	55%	NA	NA
Household Experience with Fodder Availability and Costs	61	79%	16	21%	NA	NA
Use of Improved Livestock Management Technique	20	26%	57	74%	NA	NA
Satisfaction with Prices	15	19%	48	62%	14	18%
Access to Veterinary Services	5	6%	70	91%	2	3%

Livestock Type:

The analysis of livestock ownership shows that goats are the most commonly owned animal reported by 79% of households either alone or in combination with other livestock. A smaller proportion of households diversify their ownership with 9% keeping both goats and sheep while smaller segments reported combinations such as goats with camels (2%), goats with donkeys (1%), and goats with sheep and camels (1%). Ownership of only sheep or only camels was very limited, each reported by just 2% and 1% of households respectively. Very few households owned a broader mix of species, such as goats, sheep, camels and donkeys together (1%). Overall, the findings indicate that goats dominate household livestock holdings due to their adaptability,

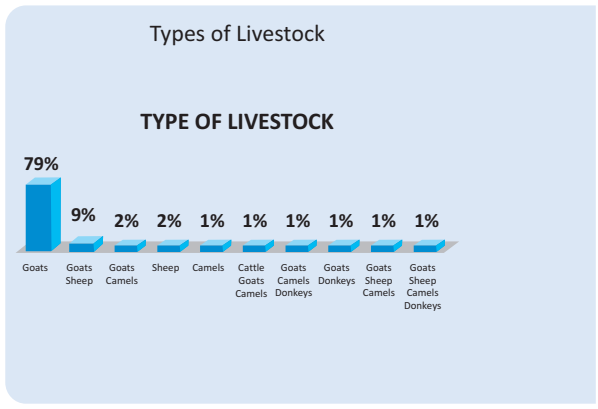

Figure 24

lower input requirements, and suitability to local conditions. Ownership of other livestock such as sheep, camels, cattle, and donkeys is much less common and usually held in combination with goats, reflecting a strategy of limited diversification.

The FGD result also confirms that Livestock remains the primary source of livelihood for the majority of households. The most commonly reared animals include goats, sheep, and camels, while poultry farming is rare due to extreme temperatures and the presence of predators. Discussions revealed that in some villages, a few livestock owners possess large herds of up to 300-400 goats and sheep. Overall, livestock are found in varying numbers across all villages and serve as a vital asset for income generation, food security, and social status. Families primarily keep animals for milk, meat, and income generation, while during emergencies, livestock are often sold to meet immediate household needs, making them a crucial safety net and a cornerstone of community resilience.

Livestock and Poultry Numbers:

The livestock ownership pattern shows a strong dominance of goats (666), making them the most common type of livestock, likely due to their lower maintenance requirements, adaptability to local conditions, and role in providing both food and income. Chickens (145) also appear in significant numbers, reflecting their importance for household nutrition (eggs/meat) and small-scale income. Camels (71) and sheep (51) are present in moderate numbers, suggesting their role in traditional livelihoods and as assets for trade or transport. Very few cattle (18) and donkeys (5) were reported, while ducks (10) are minimally kept. Interestingly, no buffaloes were recorded, indicating either unsuitability of the area's ecology or cultural preferences. Majority households purpose of poultry is home used instead of marketing purpose.

Livestock Production in Numbers

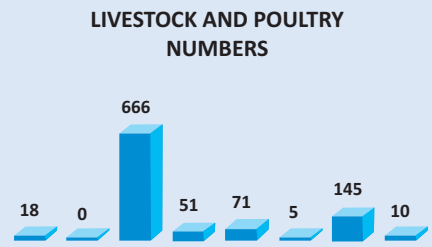

Figure 25

Village-Wise Number and Type of Livestock:

The livestock assessment across surveyed villages indicates that goats are the most commonly owned animals, with a total of 666 goats distributed across most villages. Camels (71) and sheep (51) are less prevalent, while cattle (18) and donkeys (5) are comparatively rare. Certain villages, such as Door Bun Chah and Tang Kachao, have a more diverse livestock population, including goats, camels, sheep, and cattle, whereas villages like Kirtaka and Miskan primarily keep goats. Some villages, such as Sarzay/Makki, report no livestock ownership.

Overall, the data highlights a heavy reliance on goats for livelihoods, with limited diversity in other livestock types which may affect income generation, food security and resilience against livestock-related shocks. Villages with limited or no livestock may require targeted support in livestock development and veterinary services to enhance productive capacity.

Table 12: Village-wise Comparative Analysis of Livestock in sampled house hold

Village	Type and Number of livestock				
	Goats	Camels	Sheep's	Cattles	Donkeys
Amal Aap	70	1	0	0	0
Bedok	65	2	0	1	0
Door Bun Chah	154	15	10	12	3
Humai	47	0	4	0	0
Kachao	63	1	5	0	0
Kirtaka	7	0	0	0	0
Mask ki Chah	61	47	6	0	0
Miskan	28	0	0	0	0
Nok Chah	83	5	17	0	2
Sarzay/Makki	0	0	0	0	0
Tang Kachao	88	0	9	5	0
Grand Total	**666**	**71**	**51**	**18**	**5**

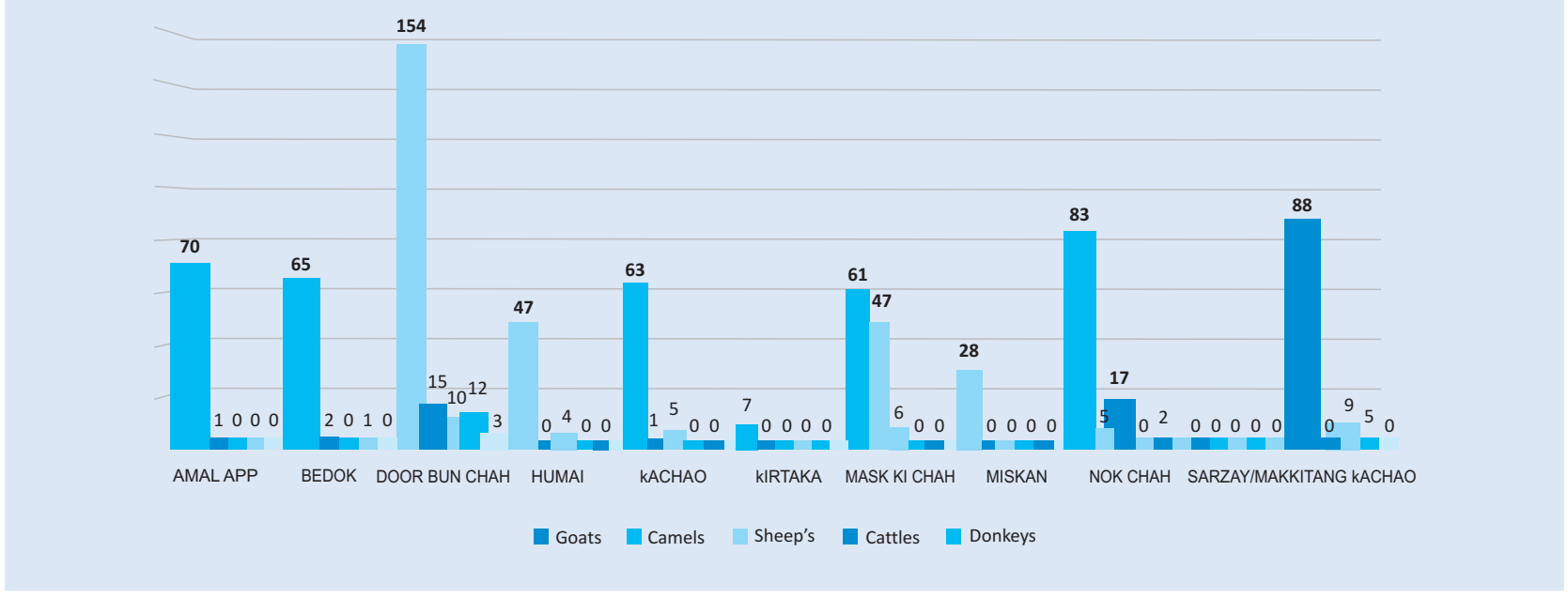

Figure 26

Purpose of Livestock:

The analysis of livestock ownership purposes indicates that milk production is the most common reason households keep livestock reported either solely (26%) or in combination with other purposes such as breeding, meat or ceremonial uses. When combined categories are considered, more than half of the households link livestock ownership to milk highlighting its importance as both a nutritional source and an income-generating activity. Breeding was reported as a main purpose by 16% of households independently and by an additional proportion in combination with milk and meat showing its role in communities' sustainability. Meat production alone accounted for 9% of responses while broader uses such as meat, breeding, sale and ceremonial purposes together were limited but still present (1-5%). Overall, the findings suggest that households rely on livestock for multi-functional purposes with milk standing out as the primary benefit, while breeding and meat play supportive roles. The inclusion of sale and ceremonial functions in some responses reflects the cultural and economic significance of livestock beyond direct household consumption.

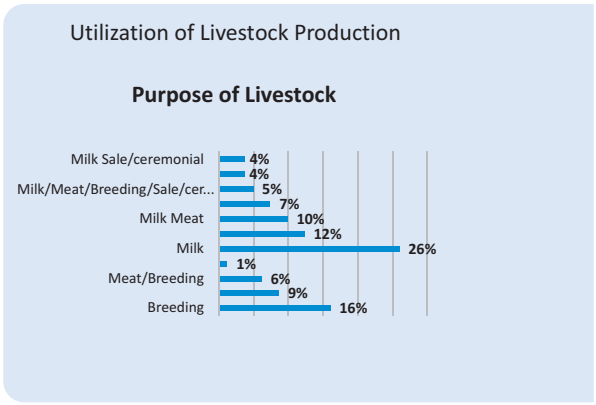

Figure 27

Average Daily Milk Production:

The findings indicate that the majority of households (69%) produce only 1-3 liters of milk per day suggesting small-scale production primarily for household consumption rather than market sale. A smaller proportion (17%) produce 4-6 liters while very few households produce larger quantities-7-10 liters (4%) or more than 10 liters (4%). Additionally, 6% did not report any milk production. Overall, the data highlights a predominantly low level of milk production across households, which may point to limited livestock ownership, resource constraints, or production being geared towards subsistence rather than commercial purposes.

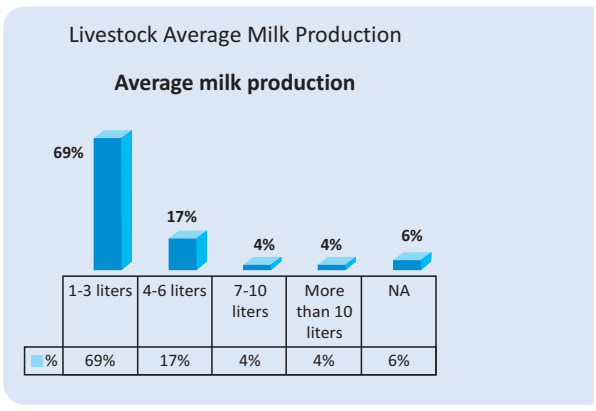

Figure 28

Patterns of Livestock Product Sales

The majority of households (67%) reported that they do not sell livestock products regularly indicating limited market engagement and suggesting that livestock may be kept mainly for household consumption or savings rather than as a consistent income source. Around 20% of households sell livestock products as a secondary income source showing partial reliance on livestock for supplementary earnings. Only 13% depend on the sale of livestock products as their main income source, reflecting a relatively small group engaged in livestock as a primary livelihood strategy.

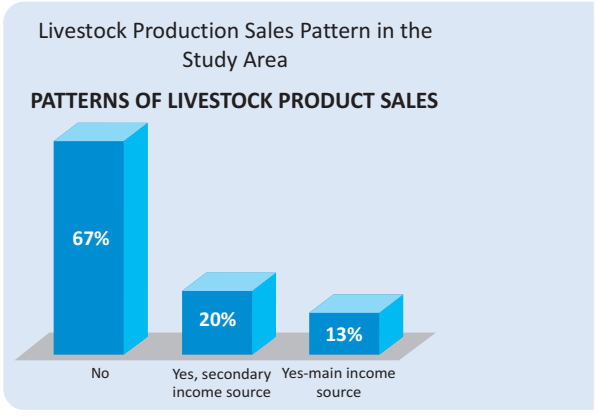

Figure 29

Role of Livestock Product Sales in Household Income

The findings show that the majority of households (65%) sell animals only in emergencies highlighting that livestock are largely considered a form of financial security or "savings" rather than a regular income source. About 26% reported not selling animals at all, which may indicate small size of portion preference for subsistence use or reliance on livestock for non-monetary benefits such as milk or fertilizer. Only 6% of households sell animals regularly suggesting very limited engagement in consistent livestock marketing. A very small proportion (3%) sell animals specifically for events such as weddings or festivals.

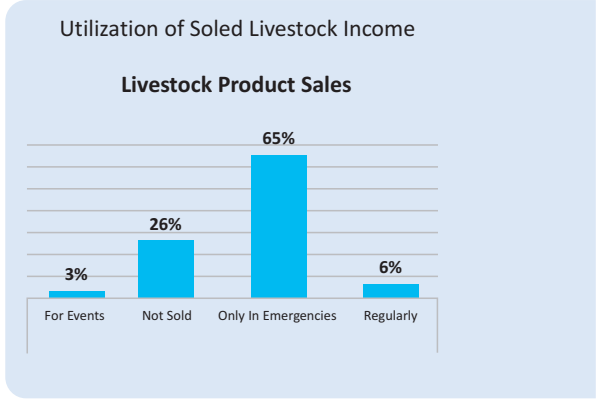

Figure 30

Veterinary Services Used and Distance:

The assessment of livestock-related services indicates limited utilization and access challenges for households. Only 1 household reported using advisory or guidance services and reported traveling a distance of 6-10 km. Treatment services were accessed by 5 households, with the majority traveling less than 5 km. Vaccination services were used by 1 household, but required traveling more than 20 km, highlighting significant barriers in accessing preventive care. However, these were not formal veterinary services; rather, they relied on traditional practices available in nearby villages, where individuals seek advice from elders and apply local remedies. FGD discussion confirms that, no formal veterinary service was found in any of the assessed villages. For proper vaccination, treatment, or other livestock-related services, people were traveling to distant locations such as Taftan, Nokkundi, or Dalbandin.

Overall, the data suggest that livestock service provision is scarce and unevenly accessible, with some households facing long travel distances for essential services. Strengthening local veterinary services, outreach programs, and vaccination campaigns could improve livestock health, productivity, and resilience in these communities.

Table 13: Veterinary services Avaialbale in the study arae

Type of Services		Distance	
Type of Services	Households Used	Distance Range	HH Responded
Advisory/Guidance	1	6-10 KM	1
Treatment	5	Less than 5 KM	2
Vaccination	1	More than 20 KM	5

Main Causes of Livestock/Poultry Losses/Death:

The primary cause of livestock and poultry losses is disease reported by 55% of households making it the most significant threat to animal survival. Lack of feed and water is the second major cause at 18% reflecting challenges in meeting basic nutritional needs. A smaller proportion of respondents (10%) reported combined causes of disease and lack of feed/water while theft accounts for 4%, either alone or in combination with disease. Other reasons such as unspecified factors (4%), combined lack of feed/water with other issues (2%), and natural disasters (2%) were also mentioned but remain less frequent.

Factors Contributing to Livestock losses

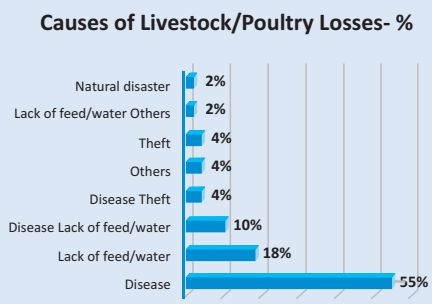

Figure 31

Main Fodder Sources:

The findings indicate that the majority of households (45%) rely on collected fodder from natural sources such as fields, forests or common lands highlighting dependence on non-market and often less reliable supplies. 37% of households purchase fodder reflecting a significant reliance on markets to meet livestock feed needs which can increase vulnerability to price fluctuations. A smaller proportion, 17% of households use their own production of fodder suggesting limited integration of fodder cultivation within household farming systems. During FGDs, participants shared that livestock primarily depend on natural fodder; however, the area remains extremely dry throughout the year, making feed availability a persistent challenge. Camel herding is practiced in distant grazing areas, but due to water scarcity, animals occasionally die from dehydration.

Fodder Source for the Livestock in the Study area

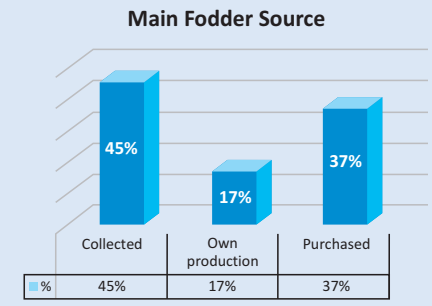

Figure 32

Adaptive Responses to Fodder Shortages

The findings reflects that, during fodder shortages, households primarily rely on borrowing fodder (35%) or reducing the number of animals they keep (35%) as the main coping mechanisms. A significant share of households also reported buying less fodder (29%) indicating an adjustment in consumption to manage limited resources. Only a very small proportion (1%) reported migration as a strategy suggesting that mobility is not a common option.

Coping mechanism during Fodder Shortages

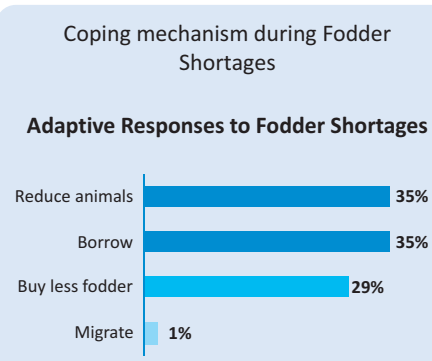

Figure 33

Overall, the results highlight that households tend to adopt short-term coping measures such as borrowing or reducing herd size rather than more sustainable solutions reflecting both the economic pressures and the vulnerability of livestock-dependent households during fodder crises. Small livestock, such as goats and sheep, are often fed household food residues, including dry bread, due to the lack of green fodder and proper feed resources.

Livestock Management Responsibilities

The findings highlight a clear gender dimension in livestock management with women bearing the primary responsibility (40%) for the care and upkeep of animals. While men (28%) and shared responsibilities between men and women (27%) also represent significant portions, the data underscores that women's role is central in this sector. The involvement of children (5%) remains minimal suggesting that livestock tasks are largely managed by adults. These results emphasize the importance of recognizing and supporting women's contributions in livestock-related interventions as they are the main caretakers and directly influence household livestock productivity and resilience.

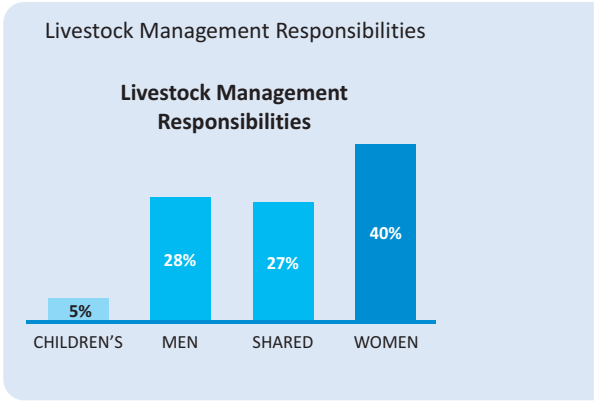

Figure 34

Main Challenges in Livestock Management

The data shows that households face interlinked and overlapping challenges in livestock management with the most frequently reported issues revolving around feed shortage and disease. Feed shortage alone (16 responses) was the most common single challenge followed by disease (10 responses). However, many households reported combinations of challenges reflecting the complex nature of livestock management. For example, households frequently cited disease combined with feed shortage and limited veterinary access (8 responses) or disease, veterinary access, feed shortage and theft together (4 responses).

Other challenges such as water shortage, theft, cost issues and market access also emerged but were often mentioned alongside the primary problems of feed shortage and disease rather than as standalone issues.

Overall, the findings suggest that disease and feed shortages are the central challenges often compounded by limited veterinary services, high costs, water scarcity and theft. This indicates that households do not experience these constraints in isolation; instead, they face multiple, overlapping stresses that increase livestock vulnerability and make management more difficult.

During the FGDs, a particularly critical concern was raised by the residents of Maski Chah and Nok Chah, who reported that the extensive fencing erected by drilling and mining companies such as Sia Diq and others has significantly restricted the mobility and grazing routes of livestock. This limitation has not only reduced access to traditional grazing lands but also exacerbated feed shortages and increased stress on the remaining rangeland areas. Participants emphasized that the situation is becoming increasingly alarming, as constrained mobility threatens the very foundation of their pastoral livelihoods.

Table 14: Livestock Managemnt Issues

Livestock Management Challenges	HH Responses
Cost issues	4
Disease	10
Disease and Cost issues	4
Disease and Feed shortage	5
Disease, Feed shortage and Theft	1
Disease, Feed shortage, Water shortage and Theft	1
Disease and Theft	1
Disease and Vet access	2
Disease, Vet access and Feed shortage	8
Disease, Vet access, Feed shortage and Cost issues	2
Disease, Vet access, Feed shortage and Theft	4
Disease, Vet access, Feed shortage and Water shortage	1
Disease and Water shortage	1
Feed shortage	16
Feed shortage and Cost issues	2
Feed shortage and Market access	1
Feed shortage and Water shortage	5
Feed shortage, Water shortage and Cost issues	1
Market access	2
Theft	2
Vet access and Feed shortage	1
Water shortage	1

Livestock Sale Locations:

The findings show that the majority of households (55%) do not sell livestock or related products indicating that most livestock is primarily for household consumption or subsistence purposes. Among those who do sell, 27% use local markets, making it the most common formal sales channel. Smaller proportions sell directly within the community (9%) or through middlemen (9%) reflecting limited access to broader market networks.

Overall, the data suggests that livelihoods from livestock sales are limited with most households either not participating in the market or relying on nearby/local channels rather than commercial or intermediary networks.

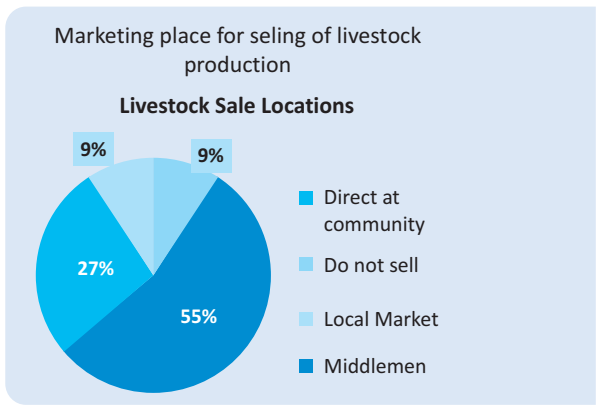

Figure 35

% of Income from Livestock:

The findings indicate that for nearly half of the households (45%) livestock contributes no income suggesting that livestock is primarily kept for subsistence or non-commercial purposes. Among households generating income from livestock, 24% earn 25-50% of their total income, 18% earn more than 50%, and 13% earn less than 25%. Overall, while a minority of households rely significantly on livestock as a source of income, the majority either gain very little or no financial benefit, highlighting that livelihood dependence on livestock is limited in these communities.

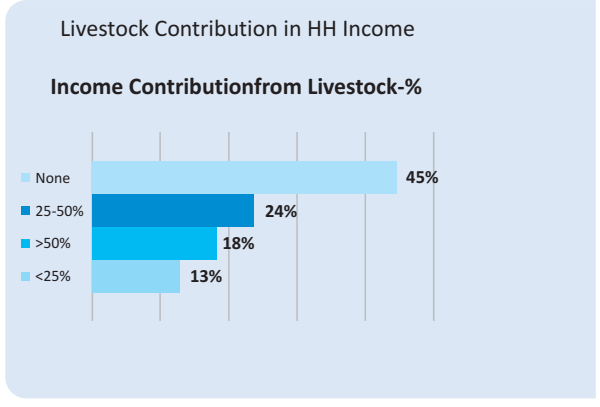

Figure 36

Chapter 5- Migration and Labor

Household Migration and its Impacts

The findings indicate that recent household migration for work is very low with only 6 households reporting migration in the past 12 months out of 180 surveyed, while the vast majority (174 households) did not have any members migrate. The impact of migration on farming and livestock appears minimal with only 1 household reporting an effect, 2 households noting some impact and 3 reporting no impact suggesting that migration has not significantly affected labor availability in these communities. Protection risks associated with migration were not reported at all indicating no perceived threats or vulnerabilities linked to migration. Regarding future migration intentions, responses are mixed as highlighted 1 household would consider migration if conditions worsen, 2 households would not and 4 were unsure reflecting low willingness but some uncertainty about potential migration.

Overall, the data suggests that migration is rare and currently has limited impact on livelihoods, farming or livestock in these communities with households showing low propensity to migrate even under worsening conditions.

FGD findings also reveal that the majority of respondents believe migration from these villages was significantly higher before the interventions of the Reko Diq Mining Company (RDMC). At that time, many residents particularly youth migrated to Dalbandin, Taftan, Nokkundi, and Quetta in search of employment opportunities. However, migration has now declined as local youth are increasingly finding jobs with RDMC and its associated contractors. This shift has contributed positively to community stability, local retention, and improved household income levels.

Table 15: Migration Condition in the Area

Indicator	Yes	No	To some Extent	Not Sure
Recent Household Migration for Work	6	174	0	0
Impact of Migration on Farming and Livestock	1	3	2	0
Protection Risks Associated with Migration	0	0	0	0
Likelihood of Migration if Conditions Deteriorate	1	2	0	4

Economic-Driven Migration and Remittance Trends:

Out of the 6 households reporting migration, all migrants were male adults. Among them, 4 undertook seasonal migration while 2 migrated long-term, indicating that short-term or cyclical migration is more common. The main reasons for migration were better wages (1 household) and lack of local jobs (5 households), highlighting economic motivations as the primary driver. Regarding migration destinations, all migrants stayed within the district, suggesting limited long-distance mobility. In terms of post-migration work, most migrants engaged in factory work (6), trade (2), farm labor (1), unskilled labor (1), and study purposes (1), showing that migrants primarily seek employment in industrial or informal labor sectors.

Overall, the data indicates that male adults migrate mainly for economic reasons, often seasonally, and tend to stay locally while engaging in a variety of labor-intensive jobs to support their households.

Table 16: Migration Reason, Type and Work Type after Migration

Who migrated	Migration Type		Main Reason of Migration		Migration Destination	Type of Work After Migration				
	Long Term	Seasonal	Better Wages	No Local Jobs	Within Districts	Factory Work	Farm Labor	Unskilled Labor	Trade	Study Purpose
6 Male adult	2	4	1	5	6	1	1	2	1	1

Among the migrant household members, migration duration varied: 1 migrant stayed for 1-3 months, 2 migrants for 3-6 months, and 1 migrant for more than 6 months, indicating that seasonal or short-term migration is most common. Regarding remittances, 3 households reported not receiving any remittances, 2 receive them occasionally, and 1 household receives them regularly, showing that financial support from migration is limited and inconsistent.

Overall, the findings suggest that migration in these communities is mainly short-term, with low and irregular remittance flows, indicating that migration contributes only modestly to household income.

Table 17: Duration of Migration and Remittances

Duration of Migration				Household Receipt of Remittances		
1-3 Months	3-6 Months	Above 6 Moths	Less than 1 Month	No	Occasionally	Yes, Regularly
1	2	1	2	3	2	1

The limited remittances received were primarily used for food, debt repayment, and health (2 households) and for education (1 household), showing that migration income is mostly directed toward basic household needs and human capital investment.

In the absence of the migrant, household responsibilities were mostly managed by elderly family members (5 households), with relatives assisting in 1 household, indicating a reliance on family support rather than external labor.

Regarding alternatives that could reduce the need for migration, households emphasized local employment opportunities (5 households) as the main solution, followed by skills training (1 household), highlighting the importance of enhancing local livelihood options to minimize economic-driven migration.

Overall, the data suggests that remittances are limited and primarily used for essential needs, household responsibilities are mostly borne by elderly members in the migrant's absence, and improving local job opportunities and skill development could reduce the pressure for migration.

Table 18: Utilization of Remittances Income Received during Migration

Use of Remittances Received				Who Manages in Migrant's Absence		Alternatives to Reduce Household Migration	
Education	Food, Debt and Health	Food, Education and Health	Food and Health	Elderly	Relatives	Local Jobs	Skills Training
1	2	2	1	5	1	5	1

Chapter 6-Water, Sanitation & Hygiene (WASH)

Water, Sanitation, and Hygiene (WASH) Practices and Access

The assessment of Water, Sanitation, and Hygiene (WASH) practices reveals a mixed scenario of strengths and gaps within the community. Most households (92%) rely on the same water source for cooking, washing, bathing, livestock, or agriculture, and similarly, 92% store drinking water, indicating high dependence on available water sources and some awareness of safe storage practices. However, 78% face restrictions in accessing water, and only 6% feel safe and free from conflict or discrimination when fetching water, highlighting inequities and vulnerabilities in water access. While 38% reported issues with water storage, such as leakage or contamination, awareness and training on safe water treatment remain very limited (12%). Perceptions of drinking water safety are mixed, with 44% considering their water is safe, 38% not safe, 18% unsure, and only 17% have raised complaints about water quality, despite 39% noting negative health impacts.

Waterborne diseases remain a significant concern, with 41% of households reporting recent illnesses and 22% experiencing impacts on work or school. Seasonal trends are observed by 33%, yet only 14% have received health education on prevention. In terms of sanitation, 71% of households have latrines, with 61% observed to be clean, and adoption of personal hygiene practices is high, with 91% using basic hygiene items and 94% practicing daily handwashing.

Table 19: WASH Practices in the Study Area

Indicator	Yes	No	Don't know	NA
Water Source Usage	92%	8%	NA	
Water Access Restrictions	22%	78%	NA	
Water Fetching Safety and Equity	6%	94%	NA	
Drinking Water Storage	92%	8%	NA	
Water Storage Issues	38%	62%	NA	
Water Safety Awareness and Training	12%	88%	NA	
Perceived Drinking Water Safety	44%	38%	18%	
Water Quality Complaints	17%	83%	NA	
Perceived Health Impact of Water Quality	39%	61%	NA	
Recent Waterborne diseases observed/occurred	41%	59%	NA	
Impact on water-borne diseases on Work/School	22%	106%	NA	
Seasonal Waterborne Disease Trends	33%	67%	NA	
Health Education on Waterborne Disease Prevention	14%	86%	NA	
Household Latrine Availability	71%	29%	NA	
Latrine Cleanliness	61%	10%	NA	29%
Use of Hygiene Items	91%	9%	NA	
Handwashing Practices	94%	6%	NA	

The community reported several challenges related to time and access constraints in fetching water. Many households experience delays due to traffic, crowding or time limits at water sources with some noting that water can only be collected once or twice a day or that each village has allocated days for water collection. A few households highlighted a lack of personal transport or other resources which further limits their ability to fetch water efficiently. Additionally, conflicts and sharing arrangements at water points were noted with some households waiting two to three days to access water. These constraints collectively contribute to significant time burdens for household members and affect their ability to manage other daily activities.

The community reported some concerns related to safety, conflict and discrimination while fetching water. Child safety is a notable issue as children who assist in water collection may face risks due to long distances, unsafe terrain or exposure to hazards along the route. Additionally, conflicts and disputes over water access were highlighted particularly in areas where water sources are shared among multiple households or villages. Some respondents also reported experiences of discrimination or restricted access which further complicates safe and equitable water collection. These findings underscore that water collection is not only a labor-intensive task but also a potential source of physical risk and social tension emphasizing the need for safer more accessible water sources and equitable water management practices.

Households reported several issues with water storage facilities, which affect the safety and availability of stored water. Common problems include breakage, holes, and leakage, with some noting leakage in walls or storage structures. These issues can lead to contamination of drinking water, loss of stored volumes, and increased risk of waterborne diseases. The observations highlight that many households rely on storage facilities that are either damaged or poorly maintained, underscoring the need for improved storage infrastructure, regular maintenance, and awareness on safe water handling to ensure consistent access to clean and safe water.

Community members (12%) who received training on water safety and awareness reported that, these trainings were provided by the health workers and non-government organizations in their respective areas. 17% who raised the concern on water quality shared that, in response from this- in Humai village health worker visited and provided training on water treatment practices and in Village Door Bun Chah- RDMC contributed to ensure provision of safe water through installation of water filtration plants and provision of water bore.

Main Source of Drinking Water

The assessment of drinking water sources indicates that households rely on a diverse mix of water sources reflecting variations in access, reliability and quality. The most commonly used source is tube wells or boreholes as reported by 41% of respondents followed by tanker or vendor water (27%) highlighting a heavy dependence on both private and communal sources. Protected dug wells and Karez systems are also utilized by 9% of households each indicating reliance on traditional or locally managed water sources.

Smaller proportions of households access water through piped connections into dwelling or yard (3%), public taps/standpipes (1%), or combinations of sources such as tube well with tanker/vendor or protected dug well (1% each) showing some flexibility in source usage. A few households (1-2%) depend on unprotected wells, springs, rivers, ponds or other miscellaneous sources which may pose safety risks. Karez is major source of drinking water in Tang kachao village only.

Table 20: Main Source of Drinking Water

Main Source of Drinking Water	Responses	Responses %
Karez	16	9%
Piped into dwelling/yard	5	3%
Piped into dwelling/yard Karez	1	1%
Piped into dwelling/yard Tanker/vendor	2	1%
Protected dug well	17	9%
Protected dug well Tanker/vendor	1	1%
Public tap/standpipe	2	1%
Tanker/vendor	49	27%
Tanker/vendor Others-	4	2%
Tube well/borehole	74	41%
Tube well/borehole Protected dug well	2	1%
Tube well/borehole Tanker/vendor	2	1%
Unprotected well/spring/river/pond	2	1%
No Response	3	2%

Primary Water Collectors in Households

The data indicate that water collection responsibilities are predominantly managed by adult males, with 51% of households reporting men as the primary collectors. Adult females are primarily responsible in 10% of households, while boys under 18 years are involved in only 1% of cases. A notable proportion, 38% of households, report shared responsibility, suggesting that water collection duties are sometimes distributed among multiple household members.

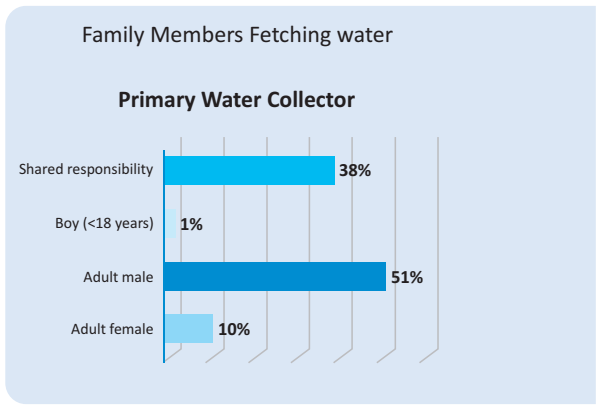

Figure 37

The assessment highlights severe water scarcity in the target communities, which disproportionately affects women. According to the assessment data, 10% of adult females and nearly 19% of women share joint responsibility for water fetching, resulting in an overall 29% of females primarily responsible for water collection and household water management. This significant responsibility not only increases their physical workload but also exposes them to security risks and health hazards. Furthermore, the assessment identified a lack of separate sanitation facilities for women and girls, limited access to clean toilets, and inadequate provisions for menstrual hygiene management, which compromise privacy, dignity, and overall health.

To address these challenges, the study proposes the establishment of women-friendly WASH facilities that prioritize privacy, safety, and accessibility. This includes separate toilets for women and girls, properly lit pathways and facilities, handwashing stations, and safe spaces for menstrual hygiene management. In addition, community awareness sessions will be organized to promote hygiene practices and encourage shared responsibility in water use and sanitation. These interventions aim not only to reduce women's physical and safety burdens but also to enhance their health, dignity, and participation in community life, while promoting equitable access to essential water and sanitation services.

Daily Frequency of Household Water Collection

The data indicates that household water collection is a frequent daily activity, reflecting the community's reliance on distant or limited water sources. Nearly half of the households (46%) fetch water once per day, while 17% collect water twice, and 16% collect three times daily. A significant proportion (21%) reported fetching water more than three times per day, highlighting households that likely face greater challenges in accessing sufficient water.

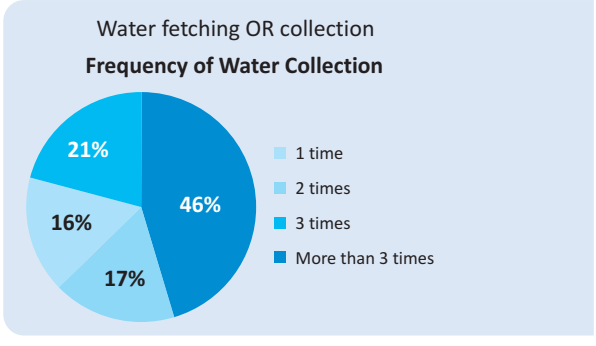

Figure 38

Average Daily Household Water Collection

The data indicates that the majority of households (76%) collect more than 30 liters of water per day, reflecting the significant daily water needs for drinking, cooking, cleaning, and livestock. Smaller proportions of households collect 21-30 liters (11%), 11-20 liters (6%), or 1-10 liters (2%) per day. A small number of households (6%) did not provide a response.

Overall, these findings suggest that while most households manage to collect sufficient quantities of water, the high daily volume requirements likely place a time and labor burden on household members, especially where water sources are distant, underscoring the importance of improving water access and supply reliability.

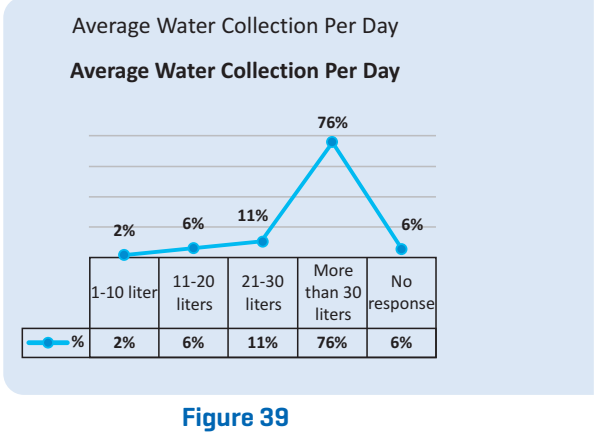

Figure 39

Year-Round Water Source Reliability

The data indicates that water source reliability is a major concern for the community. Only 34% of households reported that their water source is always reliable throughout the year, while nearly half (49%) indicated that their sources are sometimes unreliable. Additionally, 17% of households reported their water source as very unreliable, suggesting periods of severe scarcity.

Overall, these findings highlight the seasonal vulnerability and uncertainty in water supply, which can affect household consumption, hygiene, and livelihoods. There is a clear need for measures to improve water reliability, such as enhanced storage, infrastructure development, and alternative water sources to ensure consistent access year-round.

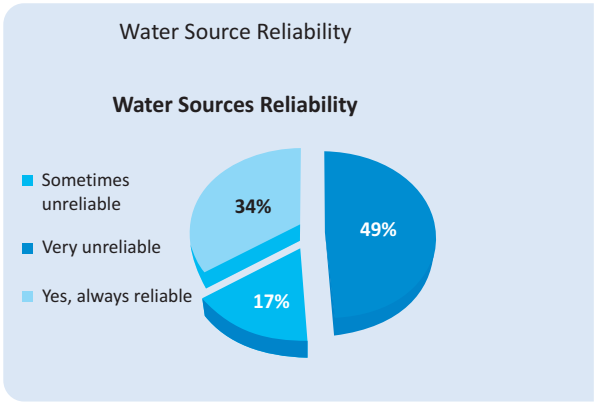

Figure 40

Water Unavailability from Main Source in the Last 4 Weeks

The data indicates that households experience varying levels of water shortages from their main source. A small proportion reported water being unavailable for 1 day (11%), 2 days (13%), 3 days (9%), or 4 days (6%) in the past four weeks, while 6% experienced unavailability for more than 7 days. Notably, a large proportion of respondents (56%) did not provide a response, which may indicate either consistent water availability or lack of precise recall.

Overall, the findings suggest that while some households face intermittent water shortages, a significant number either experience reliable water supply or were unable to report, highlighting the need for improved monitoring and infrastructure to ensure consistent access to water throughout the month.

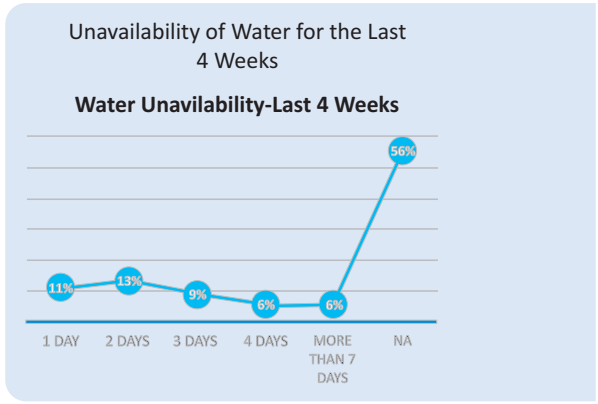

Figure 41

Monthly Household Expenditure on Water

The data indicates that the majority of households (93%) access water free of cost, suggesting reliance on communal, traditional, or self-sourced water systems. Only a small proportion of households reported spending 400-500 PKR per month (1%) or more than 500 PKR (2%) on water. A few respondents (4%) did not provide information on expenditure.

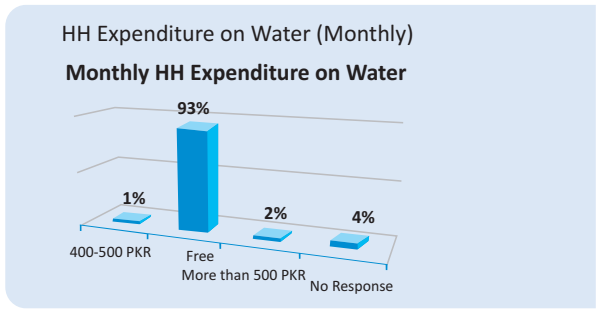

Figure 42

Alternative Water Sources When Primary Source is Unavailable

The data indicates that households rely on a variety of alternative water sources when their primary source is unavailable, highlighting adaptive strategies to cope with water scarcity. The most commonly reported alternative is borrowing from neighbors (48%), reflecting strong community support networks. Nearby improved sources are used by 24%, either alone or in combination with borrowing (0.6%). Some households resort to unprotected or unsafe sources such as ponds (15%), often in combination with borrowing (1.7%), indicating exposure to potential health risks. A smaller proportion of households purchase water from vendors or tankers (3.3%), with very few combining this with borrowing (0.6%). Other sources account for 2.2%, while 6.1% of respondents did not provide a response.

Overall, these findings highlight that while households demonstrate flexibility and community cooperation in securing water, a significant number still rely on unsafe or informal sources, underscoring the need for improved water infrastructure, reliable sources, and safe access options to reduce health risks and vulnerability during shortages.

Table 21: Alternative Means of Water

Alternate Sources	Responses	Responses %
Borrow from neighbors	86	48%
Nearby improved source	44	24%
Nearby improved source Borrow from neighbors	1	1%
Others	4	2%
Purchase from vendor/tanker	6	3%
Purchase from vendor/tanker Borrow from neighbors	1	1%
Unprotected/unsafe source (water pond)	24	13%
Unprotected/unsafe source (water pond) Borrow from neighbors	3	2%
No response	11	6%

Household Water Sufficiency for Basic Needs

The data indicates that nearly half of the households (48%) report that their water supply is always sufficient to meet basic needs, including drinking, cooking, hygiene, sanitation and livestock. A slightly smaller proportion (45%) indicated that water is sometimes sufficient while a small fraction (3%) reported that water is rarely sufficient. A few households (4%) did not provide a response.

Overall, while a majority of households generally have adequate water the significant proportion experiencing occasional shortages underscores the need for improved water access, storage and management practices to ensure consistent availability for all essential household activities.

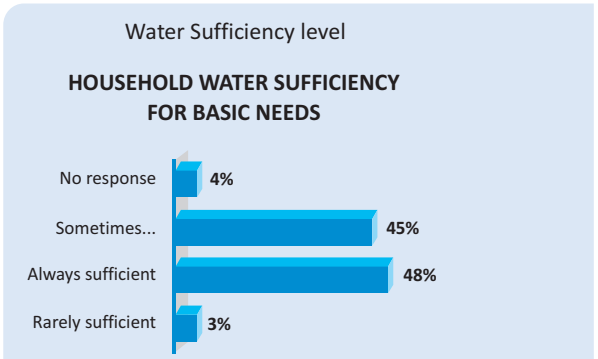

Figure 43

Household Coping Strategies during Water Shortages:

The data indicates that households adopt a variety of strategies to cope with water shortages reflecting both adaptive behaviors and exposure to risks. The most common strategy is borrowing water reported by 37% of households, sometimes combined with using unsafe sources (3%). Reducing hygiene practices is another frequent response (19%) while reducing water use for cooking is reported by 9% with a few combining these strategies with borrowing water. Use of unsafe water sources is reported by 13% highlighting potential health risks. Other strategies including miscellaneous coping methods account for 4%, while 11% of households did not provide a response.

Overall, the findings indicate that households rely on a mix of borrowing, reducing consumption, and unsafe water use to manage shortages. This highlights the vulnerability of the community to water scarcity and the need for interventions such as improved water supply, safe storage, and community-based water management practices to reduce health risks and enhance resilience.

Table 22: Coping strategies during water shortages

Coping Strategies	Responses	% Responses
Borrow water	66	37%
Borrow water Use unsafe source	5	3%
Buy water	2	1%
Others	8	4%
Reduce cooking use	16	9%
Reduce cooking use Borrow water	2	1%
Reduce hygiene use	35	19%
Reduce hygiene use Borrow water	1	1%
Reduce hygiene use Reduce cooking use	3	2%
Use unsafe source	23	13%
No response	19	11%

Types of Containers Used for Water Storage

The data indicates that plastic containers are the predominant choice for water storage used by 87% of households likely due to their affordability, availability and ease of handling. Smaller proportions of households use cemented tanks or reservoirs (3%), clay pots/earthen jars (3%) or metal containers (1%), which may offer varying levels of durability or water quality benefits. A few households (7%) did not provide a response.

Overall, while plastic containers dominate storage practices, the reliance on a single type of container may have implications for water safety and hygiene, emphasizing the importance of proper cleaning, maintenance and safe handling practices to prevent contamination.

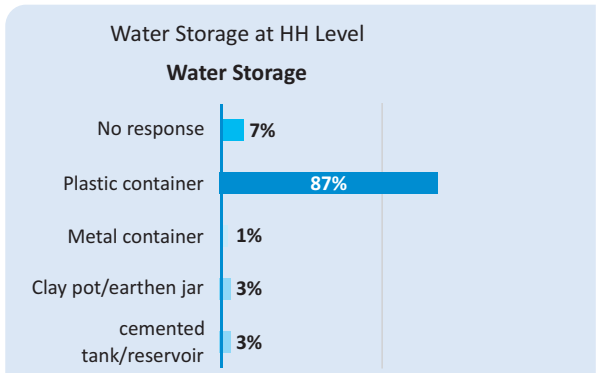

Figure 44

Frequency of Water Storage Container Cleaning

The data indicates that households follow varied practices in cleaning their water storage containers. The most common cleaning frequency is weekly (38%), followed by daily cleaning (32%). A smaller proportion of households clean their containers monthly (19%), while 6% never clean their storage containers and 2% clean less than once a month. A few households (3%) did not provide a response. Overall, while a majority of households maintain regular cleaning practices, the presence of infrequent or no cleaning among some households suggests a risk of water contamination, highlighting the need for awareness campaigns on safe water storage and hygiene practices.

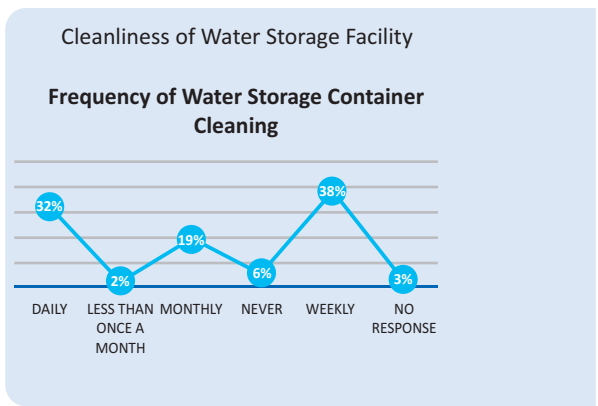

Figure 45

Household Water Treatment Methods

The data indicates that household water treatment practices are limited, with 54% of households not using any treatment methods. Among those who treat water, boiling is the most common practice (20%), followed by letting water stand and settle (11%). Some households combine methods, such as boiling and letting it stand (1%) or filtration with alum/other chemical treatment (3%), while filtration alone (6%) is less common. A small proportion of households (4%) reported other treatment methods.

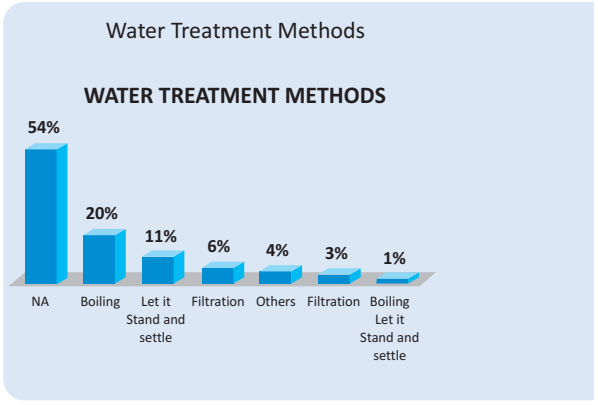

Figure 46

Overall, these findings suggest that while some households attempt basic water treatment, the majority do not treat water, which increases the risk of waterborne diseases. This highlights the need for awareness programs and promotion of simple, effective water treatment methods to ensure safe drinking water at the household level.

Reasons for Not Treating Household Water

The primary reason households do not treat water is the perception that it is already safe reflecting a reliance on the source and a sense of trust in water quality. Another significant barrier is lack of resources which may include containers, fuel or treatment chemicals. Fewer households quoted lack of knowledge about treatment methods and lack of time as reasons for not treating water. Overall, these findings suggest that while perceived water safety is the main factor, material constraints also play a role. This highlights the importance of awareness campaigns on water safety and support for affordable and accessible treatment options to improve household-level water quality practices.

Observed Issues in Drinking Water over the Past 6 Months:

The data indicates that nearly half of the households (46%) did not observe any issues with their drinking water in the past six months. Among those reporting concerns, the most common problems include sediments or particles (12%), unpleasant taste (8%), and oil or grease film (7%). Other issues noted were the presence of insects or worms (6%), bad smell or odor (6%), and unusual water color (2%). A small proportion of households reported combinations of these problems, such as sediments with oil/grease film (1%) or unpleasant taste with bad odor and sediments (1%). Additionally, 8% of households did not respond.

Overall, while a large proportion of households perceive their water as safe, the presence of physical, sensory, and biological contaminants in a notable number of households highlights the need for improved water treatment, monitoring, and awareness of safe water handling practices to protect health.

Table 23: Issues Observed in Drinking water

Key Issues Observed	Responses	Responses %
None	83	46%
Sediments/particles	22	12%
Unpleasant taste	15	8%
No response	14	8%
Oil/grease film	12	7%
Presence of insects or worms	11	6%
Bad smell/odor	10	6%
Bad smell/odor Unusual color (yellow, brown, etc.)	3	2%
Sediments/particles Oil/grease film	2	1%
Unpleasant taste Bad smell/odor Sediments/particles	2	1%
Unpleasant taste Sediments/particles	2	1%
Unusual color (yellow, brown, etc.)	2	1%
Unpleasant taste Bad smell/odor	1	1%
Unpleasant taste Oil/grease film	1	1%

Village Wise detail regarding Water Condition

The data from the table reflects community perceptions regarding the quality of drinking water across the surveyed villages. Overall, out of 178 respondents, a considerable proportion (82 individuals) reported noticing no visible or sensory issues in their drinking water over the past six months, suggesting that many communities generally perceive their drinking water as safe. However, the presence of reported issues such as sediments/particles (25 responses), unpleasant taste (23), bad odor (18), and insects or worms (15) indicates that water contamination concerns persist in several areas.

Village-level analysis reveals notable differences in perception and experience. Amal Aap stands out with the highest frequency of reported issues, particularly sediments/particles (12 cases) and unpleasant taste (12 cases), followed by oil or grease film (6) and unusual color (3). This suggests possible contamination or inadequate filtration in the local water sources. Similarly, Door Bun Chah also shows multiple complaints, especially regarding bad odor (9 cases), unpleasant taste (5), and unusual color (4), indicating deteriorating water quality and potential issues related to water storage or source contamination.

In Humai, despite a relatively higher number of respondents (28), most reported no problems, though a few mentioned unpleasant taste, sediments, and insects possibly seasonal or localized issues. Nok Chah and Tang Kachao present mixed results; while about half of the respondents in these villages noticed sediments or insects, the remainder reported no visible problems, pointing to varying source quality or differential access to cleaner supplies.

By contrast, Maski Chah, Kachao, Bedok, Kirtaka, and Miskan reported fewer concerns. In Maski Chah, a majority (16 out of 22) reported no issues, though insects/worms (5 cases) were observed by a few households, indicating possible contamination in domestic storage containers. The villages of Bedok and Kachao reported entirely clean water experiences, while Miskan and Kirtaka recorded minor issues such as sediments, likely due to natural particulates or unfiltered groundwater use.

Overall, the data suggest that while the majority of households across villages perceive their drinking water as acceptable, localized contamination issues exist-particularly in Amal Aap and Door Bun Chah, where multiple respondents noticed unpleasant taste, odor, and visible impurities. These findings point to the need for targeted water quality testing and improved source protection or household treatment interventions in these areas.

Table 24: Village Wise Issues Observed in Drinking Water

Village	Unpleasant Taste	Bad Smell/Odor	Unusual Color	Sediments/ Particles	Oil/Grease Film	Insects/ Worms	None	Total Respondents
Humai	3	2	0	3	0	2	18	28
Nok Chah	0	0	0	4	0	0	5	9
Tang Kachao	2	2	0	0	0	4	5	13
Kachao	0	0	0	0	0	0	3	3
Amal Aap	12	4	3	12	6	0	7	44
Door Bun Chah	5	9	4	2	2	4	24	50
Maski Chah	0	1	0	0	0	5	16	22
Sarzay/Makki	1	0	0	0	0	0	0	1
Bedok	0	0	0	0	0	0	4	4
Kirtaka	0	0	0	1	0	0	0	1
Miskan	0	0	0	3	0	0	0	3
Total	**23**	**18**	**7**	**25**	**8**	**15**	**82**	**178**

Household Satisfaction with Drinking Water Quality

The data indicates a mixed level of satisfaction among households regarding the drinking water they currently use. About 32% of households reported being very satisfied, and another 32% were somewhat satisfied, reflecting that a significant portion finds the water acceptable for use. Conversely, 18% expressed some dissatisfaction and 4% were very dissatisfied, while 14% remained neutral.

Overall, while the majority of households are generally satisfied, a notable proportion still experiences concerns or dissatisfaction with water quality. This suggests the need for continued monitoring, water quality improvement measures, and awareness programs to ensure safe and acceptable drinking water for all households.

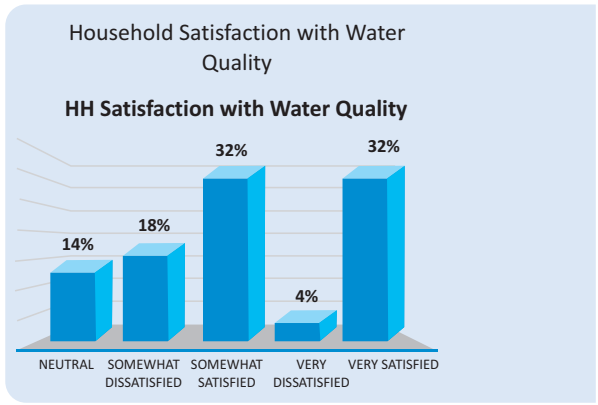

Figure 47

Main Reasons for Dissatisfaction with Drinking Water Quality

A significant portion of households expressed dissatisfaction with their drinking water due to visible contamination and sensory concerns. Reported issues included sediments/particles, unpleasant taste, bad odor, oil/grease films, unusual coloration, and presence of insects or worms. These concerns highlight gaps in water safety, treatment, and storage practices, undermining community confidence in drinking water and posing potential risks to household health. Addressing these issues through improved water treatment, storage facilities, and regular quality monitoring is essential to ensure safe and acceptable drinking water access.

Prevalence of Water Borne Diseases:

The data reveals a significant incidence of waterborne and related illnesses within the surveyed households. Diarrhea and skin infections were the most commonly reported diseases, each affecting 31% of respondents. These are often linked to unsafe drinking water, poor hygiene practices, and inadequate sanitation facilities. Additionally, typhoid (13%), cholera (7%), and dysentery (5%) were also reported, indicating the circulation of bacterial and parasitic infections associated with contaminated water sources.

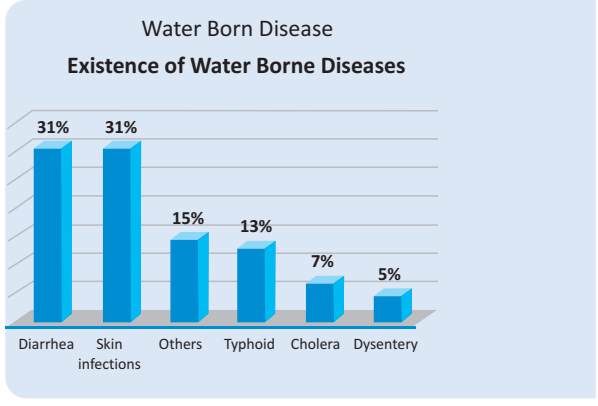

Figure 48

A notable 15% of respondents also mentioned "other illnesses," which included body pain, hair fall, stomach and kidney problems symptoms that may be indirectly associated with poor water quality or chronic exposure to contaminants. Overall, the high prevalence of diarrhea, skin infections, and other related diseases underscores the urgent need for improved WASH interventions, including safe water supply, effective household water treatment, hygiene education, and disease prevention measures to safeguard community health.

During the Focus Group Discussions (FGDs) held across all villages, participants consistently identified diarrhea, typhoid, and skin infections as the most prevalent water-borne diseases, particularly affecting children and women. These illnesses persist throughout the year but intensify during the summer months, when water scarcity forces communities to rely on unsafe or stagnant water sources.

In many villages, the absence of clean and reliable drinking water has compelled residents to depend on open wells and unprotected hand pumps, which often contain saline or contaminated water. Participants from Door Ban Chah and Humai noted that although Reverse Osmosis (RO) plants have been installed by RDMC, they are inadequate to meet the overall household demand. As a result, many families continue to consume untreated water, contributing to the recurrence of water-borne diseases.

A particularly concerning situation was reported during the FGD in Amalap, where residents shared that, despite the daily supply of filtered water through tankers by the Saindak Company, an increasing number of adults are experiencing kidney-related health problems. Participants attributed this trend to possible chemical contamination in the supplied water, citing a noticeable rise in symptoms such as kidney pain, weakness, and related ailments in recent years.

HH Members Seek Medical Treatment:

The findings reveal that 15% of households did not seek any treatment for waterborne diseases, indicating possible barriers such as lack of access, awareness, or affordability. Meanwhile, 11% of affected individuals visited private clinics or hospitals, and another 11% sought care at public health facilities, suggesting moderate utilization of formal healthcare services. Additionally, 8% relied on traditional healers or home remedies, reflecting a continued dependence on informal care practices.

A significant 55% of respondents marked 'Not Applicable (NA)', implying that more than half of the surveyed households did not report any illness during the reference period. These results collectively highlight the need to strengthen awareness, affordability, and accessibility of healthcare services in communities affected by unsafe water conditions.

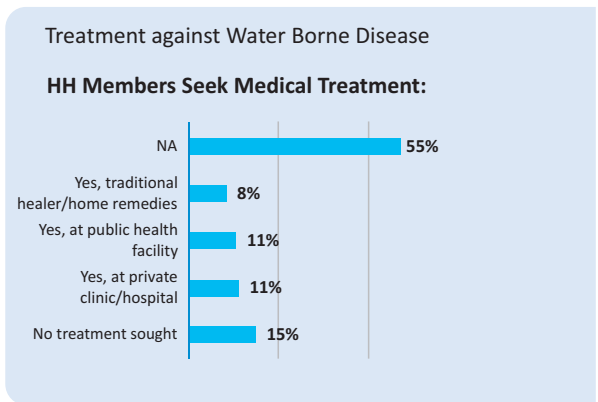

Figure 49

Reasons for Not Seeking Treatment

The reasons for not seeking medical treatment primarily revolve around financial, perceptional, and accessibility barriers. Many households reported that they could not afford treatment, highlighting the financial constraints that prevent them from accessing healthcare services. Others did not consider the illness serious enough to require medical attention, which points to low health awareness and the tendency to underestimate health risks. Additionally, some households mentioned that the health facility was too far, reflecting significant challenges related to physical access and distance. Collectively, these factors underscore the need for interventions that address affordability, health awareness, and accessibility in order to improve healthcare-seeking behavior.

Average Cost of Illness Treatment

The majority of households (75%) reported spending more than PKR 1,500 per illness episode, indicating a high financial burden. A smaller proportion (12%) spent less than PKR 500, while 11% incurred costs between PKR 501-1,000, and only 2% reported expenses between PKR 1,001-500. These findings suggest that for most households, the cost of treatment is considerably high, which may contribute to financial strain and could be a barrier to timely healthcare-seeking behavior.

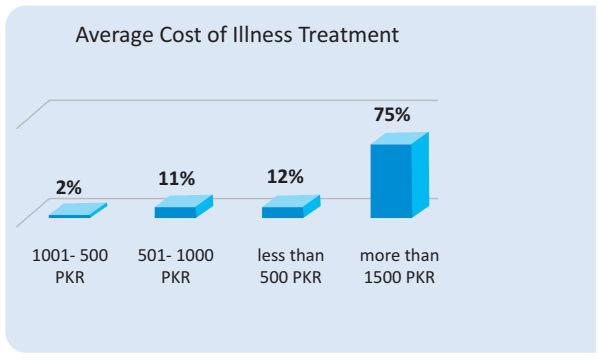

Figure 50

Type of Toilet Facility Used by Households

The majority of households (49%) reported using a pit latrine at the household level, which suggests that basic sanitation is available for nearly half of the respondents. Around 16% rely on communal latrines, reflecting shared usage and potential hygiene concerns. A smaller portion (6%) have access to pour flush or VIP latrines, indicating improved sanitation facilities but only for a limited number of households. Alarmingly, 29% of households reported having no latrine facility at all, pointing to open defecation practices and significant public health risks.

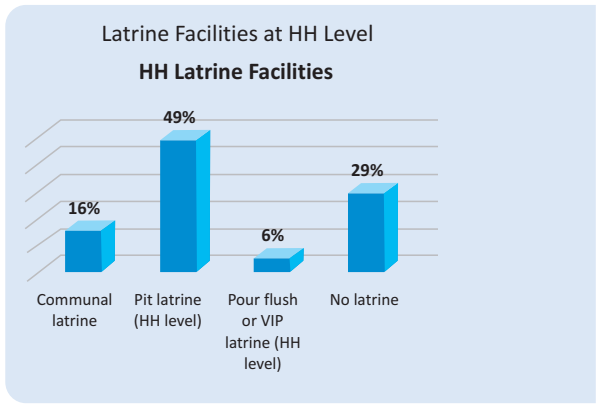

Figure 51

Reasons for Not Having a Latrine

Households without latrine facilities face multiple barriers that limit the adoption of safe sanitation practices. In many cases, the absence of toilets is linked to a lack of awareness or the perception that sanitation is not a household priority, reflecting behavioral and social factors. Financial constraints are another major reason, as many families cannot afford the costs of construction or materials. In some households, limited space within the compound prevents the installation of a latrine, while in others, challenging soil conditions or rocky terrain make pit digging difficult. Additional barriers include the unavailability of construction materials in the local market, lack of water for flush or pour-flush systems, and fears of structural collapse due to flooding or sandstorms. These findings highlight the combined effect of economic, environmental, technical, and social challenges that hinder households from constructing and maintaining sanitation facilities.

Current Condition of Latrines:

The data shows that only 18% of households have fully functional latrines, indicating limited access to proper sanitation in its best form. The largest share, 39%, reported that their latrines are functional but require minor repairs, suggesting that with modest support, these facilities could be upgraded to fully functional status. Meanwhile, 9% of households have partly functional latrines due to major damages, and 4% have non-functional or abandoned facilities, reflecting more serious maintenance and usability challenges. Importantly, 29% of households reported having no latrine facility at all, underscoring a significant sanitation gap. Collectively, these findings highlight that while some level of infrastructure exists, a large proportion of households either lack facilities entirely or have latrines in need of repair or major rehabilitation.

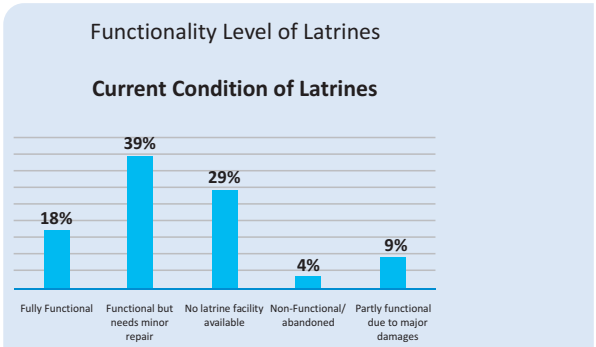

Figure 52

Additional Observations on Latrine Facilities

The observations highlight both positive hygiene practices and critical gaps in household sanitation. In many cases, latrines were found to be located more than 100 feet away from dwellings and water sources, which minimizes risks of contamination and aligns with safe sanitation practices. Encouragingly, some households had handwashing facilities inside or adjacent to the toilet and separate facilities for men and women, reflecting an awareness of hygiene and gender-sensitive needs. Additionally, the presence of latrines where no faces were visible around the structure indicates relatively good maintenance and cleanliness.

However, gaps remain. A proportion of households reported no additional facilities or safety measures pointing to missed opportunities for improving sanitation infrastructure. In some cases, reliance on a single septic tank was observed, which, while functional, may limit resilience if not properly managed.

Reported Handwashing Practices

The analysis of handwashing practices indicates that the majority of households reported washing their hands after using the toilet, making it the most consistently practiced hygiene behavior. Many households also mentioned washing hands before cooking and before eating, reflecting awareness of food-related hygiene, though this practice is not as widespread as post-toilet handwashing. A smaller proportion of households reported washing hands before feeding children or after assisting children with latrine use/changing babies, which highlights some recognition of child-specific hygiene needs, but these practices remain less common. Similarly, handwashing after returning from outdoors was mentioned by fewer respondents, suggesting lower awareness of contamination risks from outside exposure. Notably, 17 households gave no response, indicating possible knowledge or practice gaps. Overall, the findings suggest that while handwashing after toilet use is well-established, more consistent adoption of handwashing at all critical times-including food preparation, child care, and after outdoor activities is needed to ensure comprehensive hygiene practices.

Table 25: Hygiene Practices in the Study Area

Timing of Handwashing Practicing	Reponses
After returning from outdoors	2
After using the toilet	2
After using the toilet After returning from outdoors	3
After using the toilet Assisting children with latrine/ changing babies	1
After using the toilet Assisting children with latrine/ changing babies Before cooking Before eating	2
After using the toilet Assisting children with latrine/ changing babies Before cooking Before eating After returning from outdoors	1
After using the toilet Assisting children with latrine/ changing babies Before cooking Before eating Before feeding the child	16
After using the toilet Assisting children with latrine/ changing babies Before cooking Before eating Before feeding the child After returning from outdoors	42
After using the toilet Before cooking	1
After using the toilet Before cooking After returning from outdoors	1
After using the toilet Before cooking Before eating	13
After using the toilet Before cooking Before eating After returning from outdoors	10
After using the toilet Before cooking Before eating Before feeding the child	13
After using the toilet Before cooking Before eating Before feeding the child After returning from outdoors	1
After using the toilet Before eating	14
After using the toilet Before eating After returning from outdoors	3
After using the toilet Before eating Before feeding the child	1
After using the toilet Before feeding the child After returning from outdoors	1
Assisting children with latrine/ changing babies Before cooking Before eating	1
Assisting children with latrine/ changing babies Before cooking Before eating Before feeding the child	2

Timing of Handwashing Practicing	Reponses
Assisting children with latrine/ changing babies Before cooking Before eating Before feeding the child After returning from outdoors	4
Before cooking	3
Before cooking After returning from outdoors	1
Before cooking Before eating	3
Before cooking Before eating After returning from outdoors	1
Before cooking Before eating Before feeding the child	6
Before cooking Before eating Before feeding the child After returning from outdoors	5
Before eating	7
Before eating After returning from outdoors	1
Before feeding the child	2
No response	17

Handwashing Methods at Critical Times:

The findings reveal that the majority of households (61%) reported washing their hands with soap and water at critical times, which reflects good hygiene awareness and practice. However, a considerable proportion (20%) still rely on water alone, which is less effective in removing germs. A smaller share (10%) use ash and water, indicating an alternative practice where soap may not be affordable or accessible. Alarmingly, 9% of households do not wash their hands at all during critical times, highlighting a significant public health concern. Overall, while most households demonstrate positive handwashing behavior, the reliance on suboptimal methods and the presence of households not practicing handwashing underscore the need for continued promotion of proper hand hygiene, alongside efforts to improve access to soap and other hygiene resources.

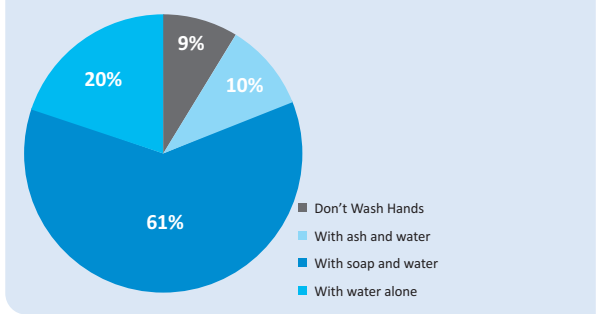

Figure 53

Chapter 7- Protection, Inclusion & Social Cohesion

Protection, Services Access and Community Participation

The findings reveal protection and participation challenges within the community. Around 21% of households (37) reported facing safety concerns in the past 12 months, indicating that security remains a main issue. Child labor was identified in 13% of households (24) with 33 children, highlighting ongoing child protection concerns despite the majority not engaging children in labor.

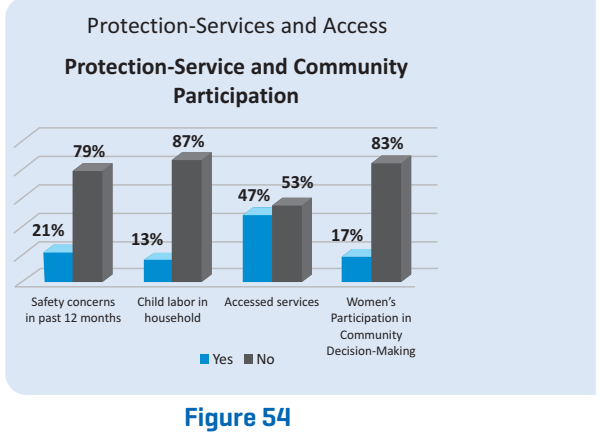

Figure 54

On the positive side, nearly half of the respondents (47% or 84 households) reported accessing services, showing relatively better engagement with available support systems, though access gaps still exist. However, women's participation in community decision-making remains very limited, with only 17% (31 households) reporting involvement, while the overwhelming majority (83%) excluded women from decision-making processes.

Overall, while service access shows some progress, the high prevalence of safety concerns, child labor, and the lack of women's participation underscore critical areas for targeted protection and empowerment interventions.

Type of Safety Concern:

Among households reporting safety concerns in the past 12 months, the most common issue was theft, mentioned by 32 households, making it the predominant security challenge in the community. A smaller proportion reported harassment (4 households), while 5 households cited other types of concerns. This pattern suggests that property-related insecurity is the most pressing safety risk, while personal safety concerns such as harassment, although less frequent, remain important for community protection measures.

During FGD discussion's it is noted that The Women and girls generally reported feeling safe when accessing essential services such as schools, health centers, and water points within their respective villages. However, the lack of local markets and livelihood opportunities limits their mobility, as travel to distant towns is infrequent and often undertaken only when necessary. Participants expressed that while internal community relations are largely harmonious characterized by strong social cohesion, mutual respect, and established protection norms there are emerging external threats that raise significant safety concerns, particularly for women and young girls.

During discussions, community members highlighted that their proximity to the Afghanistan and Iran borders exposes them to certain risks associated with cross-border smuggling and human trafficking networks. These border areas are known transit routes for irregular migration and illicit trade. Participants noted that cases of theft, robbery, and suspicious movements by unknown individuals have occasionally been reported, creating an atmosphere of insecurity during nighttime and in remote locations.

Table 26: Types of Safety Concerns

Type of Safety Concern	Responses
Theft	32
Others	5
Harassment	4

Perceptions of Safety during Day and Night

The findings reveal that the community perceives the area as largely safe during the daytime, with 77% reporting it as very safe and 22% considering it safe, while only 1% described it as very unsafe. However, perceptions change notably at night: although 53% still feel very safe and 44% safe, there is a small but important increase in feelings of insecurity, with 3% reporting the environment as very unsafe. This indicates that while safety is not a major concern during the day, nighttime safety remains more vulnerable, potentially due to theft or other risks already highlighted by the community.

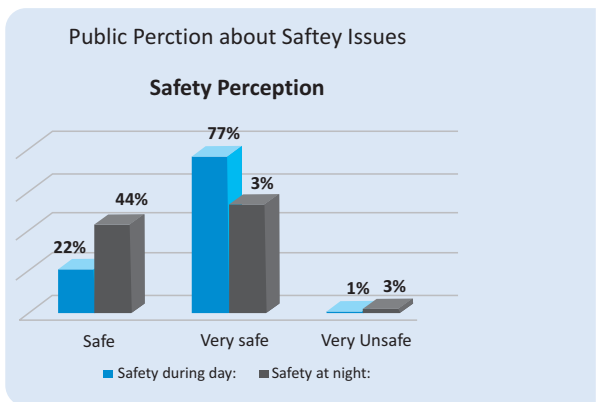

Figure 55

Perceptions and Household Access to Safe Services

Both women and households generally feel safe when accessing essential facilities. At the women's level, 95% (172) reported safe access, though a few expressed concerns at health facilities, markets, and water points, with 5 women reporting no safe access at all. At the household level, 99% (178) indicated safe access, with only 2 households noting issues at markets and water points. Overall, households reported slightly higher safety levels than women, highlighting the need to focus more on women's safety concerns in public spaces and service points.

Table 27: Public Perception about Women and HH Safty in the Context of Accessibility

Indicator	All	Health Facility	Market	None	Water points
Women feel safe accessing	172	1	1	5	1
Household has safe accessing	178	0	1	0	1

Women's Safety, Protection, and Gender-Based Violence (GBV) Prevention

Findings from the assessment and discussions conducted through Focus Group Discussions (FGDs) indicate that women in the P1 villages did not face major protection-related challenges stemming from cultural norms, geographic isolation, or social exclusion. However, restricted mobility remains one of the most significant barriers affecting women's participation in community and economic life. Women often require male accompaniment to travel outside their immediate locality, which limits their access to education, healthcare, and livelihood opportunities. This restricted mobility, coupled with limited awareness of legal rights and protection services, indirectly increases their vulnerability to gender-based risks, including domestic violence, psychological abuse, and workplace harassment.

Although no formal grievance or reporting mechanisms currently exist within the communities, participants expressed a willingness to engage in initiatives that promote women's safety and awareness.

To strengthen community-level protection systems, it is recommended that Women and Girls Friendly Spaces (WGFS) be established in collaboration with RDMC, local authorities and NGOs/INGOs. These spaces will serve as safe and accessible points for women to seek information, share concerns, and access psychosocial support. In addition, a referral directory should be developed to connect survivors of GBV or other protection concerns with available services, including Basic Health Units (BHUs), Social Welfare and Women Development Departments, and trusted NGO partners for psychosocial, legal, and medical assistance.

Preventive measures will also include awareness campaigns and training sessions on women's rights, protection from abuse, and the importance of creating safe and inclusive community environments. Capacity-building programs for local leaders, teachers, and health staff will be organized to strengthen their role in GBV prevention, identification, and response. Integrating protection and safety considerations across all livelihood, health, and social development initiatives will ensure that women's engagement in community life is not only meaningful but also secure and dignified.

Community Conflicts over Resources and Services:

The findings indicate that community conflicts are relatively limited, with the majority of households (160) reporting no conflicts. However, where conflicts do exist, they are primarily linked to water resources (11 households cited water alone, while an additional 5 mentioned land and water combined). Smaller numbers of households reported disputes over land (1), grazing/firewood (1), or mixed issues such as water and grazing/firewood (1). This suggests that water scarcity and competing demands on land and natural resources are the most significant sources of tension within communities, though they affect a minority of households.

Type of Conflicts	Responses
Grazing/firewood	1
Land	1
Land Water	5
None	160
Water	11
Water Grazing/firewood	1
Water None	1

Decision Making on Livelihoods:

The data indicates that decision-making within households is predominantly male-driven, with 58% of households reporting that men make decisions alone. Joint decision-making between men and women is observed in 38% of households, suggesting a moderate level of shared participation. However, women-only decision-making remains very limited, reported in just 4% of households. This pattern highlights gender disparities in household authority, with women's independent role in decision-making being minimal.

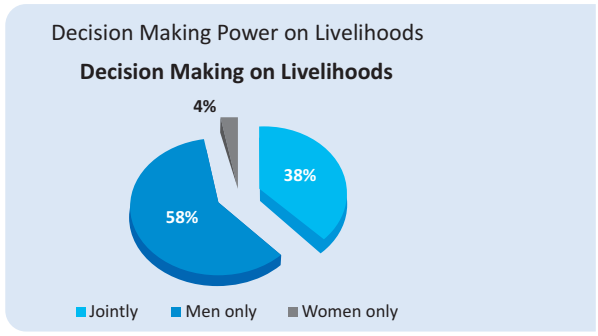

Figure 56

Marginalized Groups Access Services

The findings show that access is extremely limited among respondents, with the vast majority (79%) reporting that they never have access. Only a very small proportion (3%) reported always having access, while 13% indicated they rarely have access and 6% reported sometimes having access. This highlights a significant gap, as consistent access remains negligible and the overwhelming trend points towards persistent unavailability.

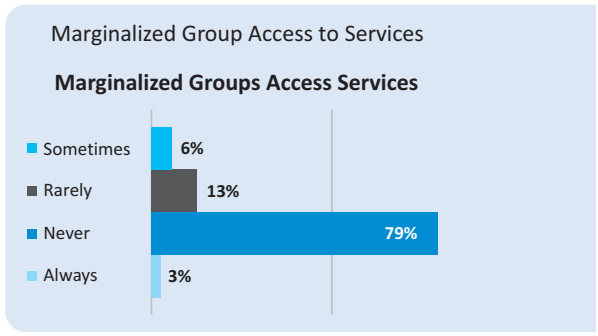

Figure 57

Any Exclusion Reported:

The data indicates that exclusion is not a widespread issue for most respondents, as 67% reported no form of exclusion. However, gender-based exclusion was identified by 25% of respondents, making it the most significant barrier. Exclusion due to disability was noted by 7%, while caste or ethnicity was mentioned by only 1%. This suggests that while the majority face no exclusion, gender remains a prominent factor influencing inequality and access.

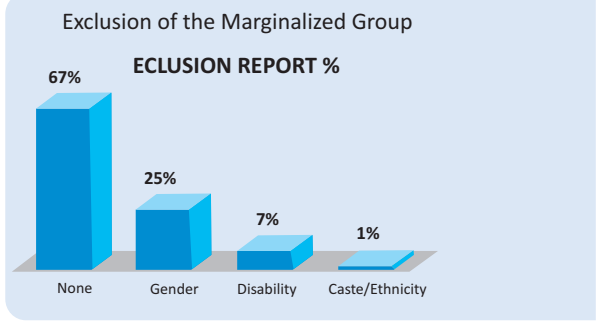

Figure 58

Gender and Inclusion

The assessment revealed notable participation gaps and vulnerabilities among women, persons with disabilities, and other marginalized groups. Cultural norms and mobility constraints often limit women's involvement in decision-making, livelihood activities, and community development processes. Similarly, persons with disabilities face barriers to accessing essential services and economic opportunities. These disparities not only reduce overall community resilience but also hinder equitable development. Addressing these gender and inclusion gaps through targeted interventions and inclusive planning is essential to ensure that all community members can contribute to and benefit from development initiatives.

Women's Livelihood and Economic Opportunities and Proposed Interventions in P1 Villages

Women in the P1 villages play an integral yet often underrecognized role in sustaining household economies. Despite social and cultural barriers that limit their participation in formal employment and public spaces, women contribute significantly through informal and home-based economic activities. The assessment revealed that women are primarily engaged in small-scale livestock rearing (such as goats and poultry), embroidery, tailoring, and handicrafts, alongside their traditional responsibilities in household management, caregiving, and food preparation. These activities, though modest in scale, are essential sources of household nutrition and supplementary income, especially for women-headed and economically marginalized families.

However, several barriers restrict women's ability to expand these income-generating practices. Limited access to vocational training, lack of market exposure, poor mobility, inadequate access to financial resources, and weak linkages with traders or buyers constrain women's ability to transition from subsistence-level production to sustainable enterprise. In addition, cultural norms often discourage women from participating in mixed-gender business environments, further isolating them from potential livelihood opportunities and skill development programs.

To address these gaps, the study proposes a comprehensive, women-centered livelihood strategy anchored around three interlinked interventions. The first component is the establishment of Women's Business Centers in villages, which will serve as a dedicated space for skill development, entrepreneurship, and economic empowerment. The center will provide structured vocational training for women in trades such as tailoring, beautician, cooking and baking, handicrafts, and livestock and kitchen gardening. It will also deliver business management and financial literacy training to strengthen women's entrepreneurial capacities. The intervention includes mentorship programs, distribution of a start-up toolkit, and facilitation of market linkages to enable women to establish and manage small-scale enterprises. The center will further organize product exhibitions and connect women entrepreneurs with local traders, specifically with RDMC and markets, to enhance visibility and ensure the sustainability of women-led businesses.

The second component focuses on kitchen gardening initiatives across all P1 villages, designed to enhance food security, improve dietary diversity, and generate supplementary household income. Women participants will receive training in sustainable gardening techniques, composting, and irrigation methods, along with inputs such as seeds, organic fertilizers, and basic tools. This activity empowers women to contribute to household nutrition while developing self-reliant, climate-resilient micro-livelihoods. The program will also promote environmental stewardship through plantation drives and community-led awareness sessions.

The third intervention involves backyard poultry farming, which targets vulnerable households, prioritizing women-headed families. Each participant will receive a poultry package including birds, locally fabricated cages, feeding trays, and a two-month supply of feed. Training will be provided on poultry care, hygiene, and disease control, complemented by decentralized veterinary support within each village. This activity will directly enhance access to eggs and meat, contributing to both nutrition and income diversification for women and their families.

Together, these interventions present an integrated approach to strengthening women's livelihoods, resilience, and participation in the local economy. By combining skill development, enterprise support, and access to productive assets, the project aims to create sustainable, community-driven opportunities that enable women to move from subsistence activities toward self-reliant and market-oriented livelihoods.

Chapter 8- Climate Change & Resilience

Community Awareness and Participation in Climate Change Programs:

The assessment of community awareness and engagement in climate change programs reveals significant gaps in both knowledge and participation. Just over half of the respondents (54%) reported being aware of climate change, indicating that nearly half of the community (46%) lacks basic awareness of the issue.

Despite moderate awareness, actual participation in climate change training over the past year is extremely low, with only 2% of respondents attending such sessions, while 98% did not participate. This highlights a critical gap between awareness and engagement in capacity-building activities.

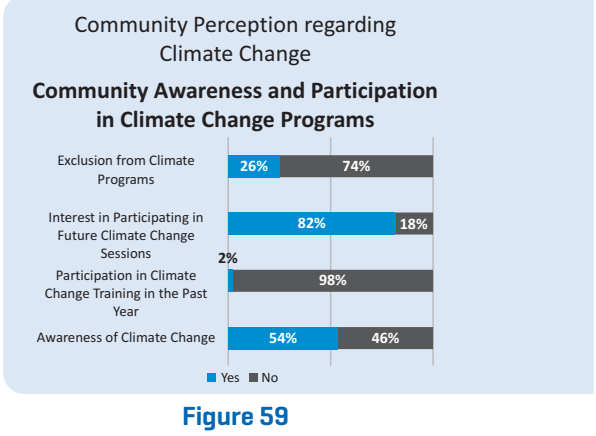

Figure 59

Encouragingly, there is high interest in future climate change sessions, with 82% of respondents expressing willingness to participate, suggesting strong potential for program uptake if accessible opportunities are provided. However, 26% of respondents reported being excluded from climate programs, indicating that a portion of the community remains marginalized or not reached by existing initiatives.

Overall, while awareness is moderate and interest in participation is high, the findings underscore the need to expand access, inclusivity, and outreach of climate change programs to ensure broader engagement and reduce exclusion.

Observed Climate Changes Over the Last 10 Years

The community's perceptions of climate trends over the past decade indicate changes in temperature and rainfall patterns. Regarding temperature changes, the majority of respondents (77.8%) reported an increase, while 13.3% observed a decrease, and a small proportion (6.7%) were unsure. Only 2.2% reported no change, suggesting that most households perceive rising temperatures in recent years.

In contrast, perceptions of rainfall changes show that a significant majority (85.6%) reported a decrease in rainfall, highlighting concerns about reduced precipitation and potential water scarcity. A smaller proportion (6.7%) observed an increase, 7.2% were unsure, and 0.6% reported no change.

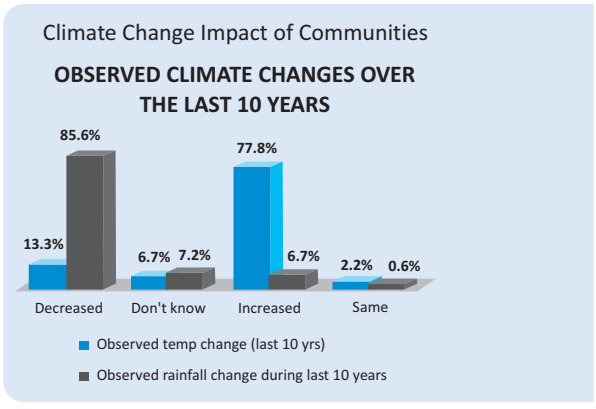

Figure 60

Overall, the data suggests that the community perceives increasing temperatures and declining rainfall, which could have substantial implications for agriculture, water resources, and livelihoods, underscoring the need for climate adaptation and resilience-building measures.

This result is also validated by all FGDs, which consistently highlighted noticeable climatic changes over the past decade, including rising temperatures, shorter winter durations though with extremely cold conditions during December and January and reduced rainfall. These climatic variations have had a significant impact on agriculture, livestock health, and water availability. Participants reported the drying of wells, a decline in natural vegetation, fodder shortages, livestock deaths, and recurrent droughts as direct consequences of climate variability. Communities strongly associated these environmental changes with the effects of climate change.

Sources of Early Warnings

The data indicates that social media is the dominant source of early warning information, cited by 54.4% of respondents, reflecting the growing reliance on digital platforms for timely updates. Traditional channels such as mosques (6.7%) and government sources (1.1%), as well as combined channels like government with social media (5.6%) or radio/TV with social media (2.2%), play a smaller but notable role in disseminating early warnings. Very few households rely solely on radio/TV (0.6%), indicating its limited standalone influence.

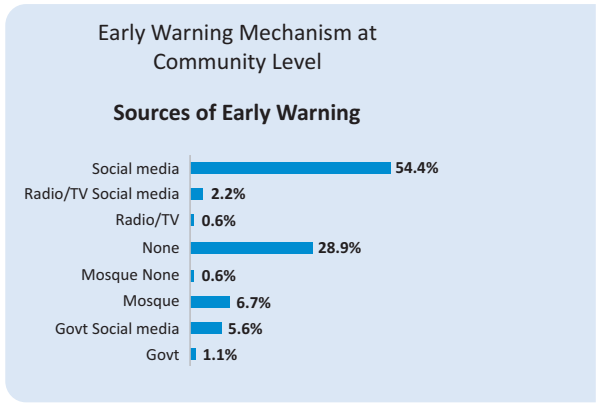

Figure 61

A concerning finding is that 28.9% of respondents reported having no source of early warning information, leaving nearly one-third of households vulnerable to shocks and unprepared for potential disasters. Overall, the findings highlight that while social media has emerged as the most influential early warning channel, traditional and institutional mechanisms remain underutilized. Expanding inclusive, multi-channel communication strategies particularly targeting those without access to digital platforms will be essential for ensuring timely and equitable dissemination of early warning information across the community.

Aware of Sustainable Practices

The assessment of community awareness regarding sustainable practices indicates that awareness levels are generally low, with 78.3% of respondents reporting no knowledge of sustainable practices. Among those aware, a small proportion mentioned specific areas: energy-related practices (8.3%), water-related practices (5.6%), and a combination of water and energy (6.7%). Very few respondents reported awareness of land management practices (0.6%) or combined land and water practices (0.6%).

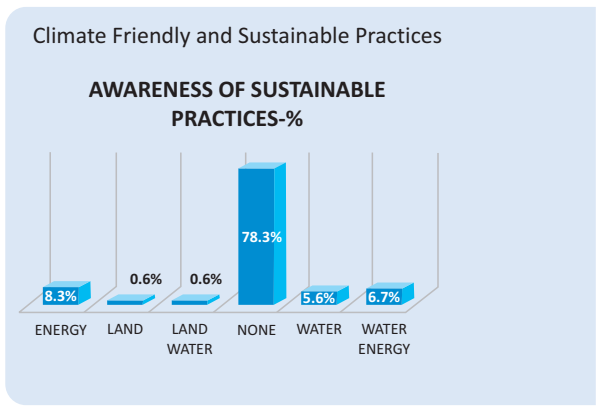

Figure 62

These findings suggest that while some households recognize certain aspects of sustainability, overall knowledge about integrated sustainable practices is minimal, highlighting a critical need for awareness campaigns, capacity building, and education programs to promote sustainable resource management within the community.

Adoption of Climate-Resilient Practices

The data indicates that the adoption of climate-resilient agricultural practices is extremely limited in the community. Only a very small proportion of households reported implementing specific strategies, such as crop rotation (1%) or using drought-tolerant seeds (2%). The overwhelming majority, 97% of respondents, reported not adopting any climate-resilient practices.

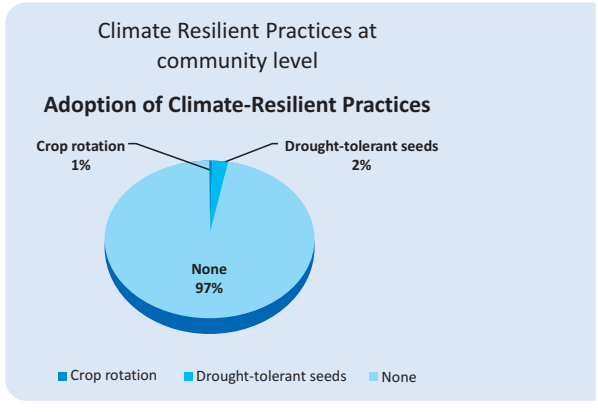

Figure 63

This suggests that most households are highly vulnerable to climate-related shocks, including droughts, erratic rainfall, and other environmental stressors. The findings underscore an urgent need for awareness campaigns, training programs, and support for the adoption

of climate-resilient agricultural techniques to enhance food security and livelihood resilience in the community.

Further discussions with community members revealed several barriers to adaptation. These include limited access to technical knowledge and agricultural extension services, lack of financial resources to invest in improved technologies, and unavailability of climate-resilient seeds and farming inputs. Additionally, the absence of local institutions supporting climate adaptation and the weak dissemination of early warning information further exacerbate community vulnerability. Farmers also reported declining water levels in Karez systems, soil degradation, and recurrent droughts as major challenges that hinder their ability to sustain agricultural activities.

Despite these barriers, some households have adopted basic coping mechanisms at the local level. Examples include the use of solar energy for lighting and small-scale water pumping, preservation of livestock as an asset during drought periods, traditional water conservation practices through Karez rehabilitation, and reliance on social networks for mutual assistance during climatic stress. A few communities have also engaged in tree planting and natural vegetation protection to reduce erosion and enhance soil fertility.

Major crop income share reported in two villages Tang kachao and Kachao, rest of the villages have no any crop income share reported.

Major crop income share

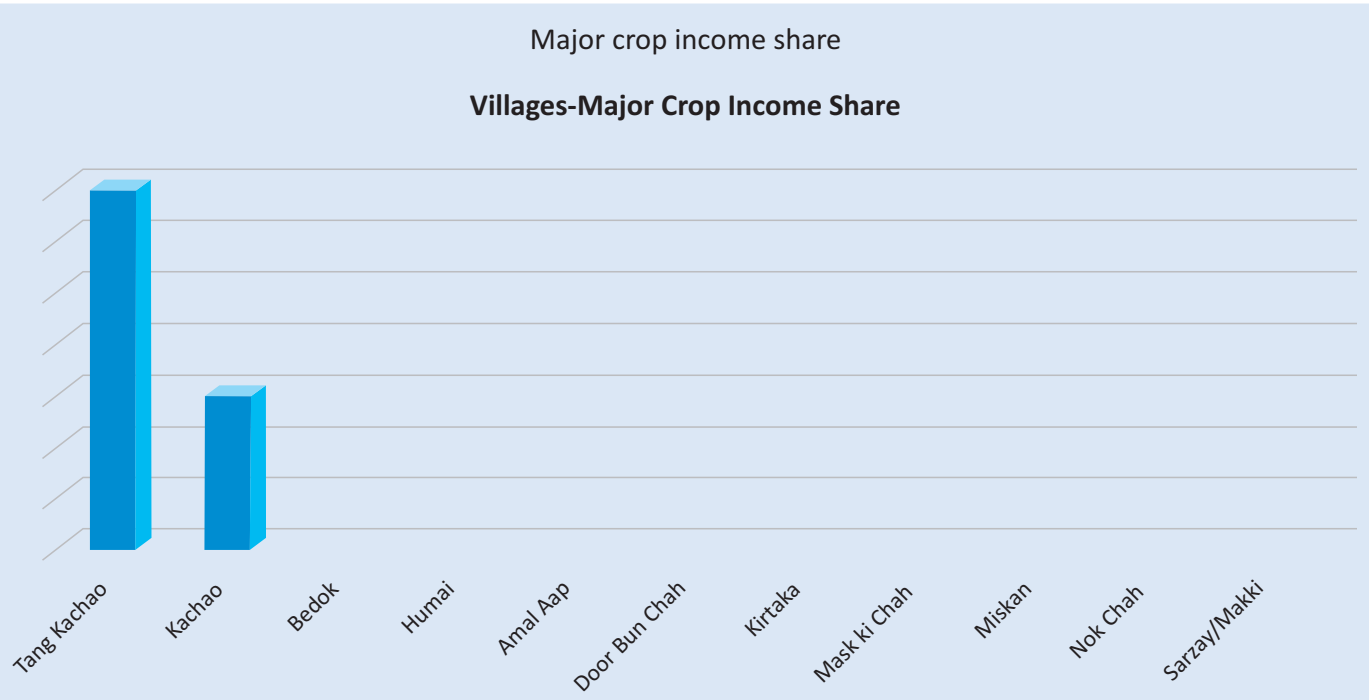

Figure 64

Practice Water Conservation

The data indicates that the adoption of water conservation practices is extremely low among the surveyed households. Only a small number reported practicing efficient water storage (4%) or rainwater harvesting (1%), while the overwhelming majority, 95% of respondents, and do not engage in any water conservation practices.

This highlights a significant vulnerability to water scarcity, particularly in areas reliant on irregular rainfall or limited irrigation sources. The findings underscore the need for awareness campaigns, technical support, and promotion of simple water-saving techniques to encourage households to adopt sustainable water management practices, which are crucial for agriculture, livestock, and household use.

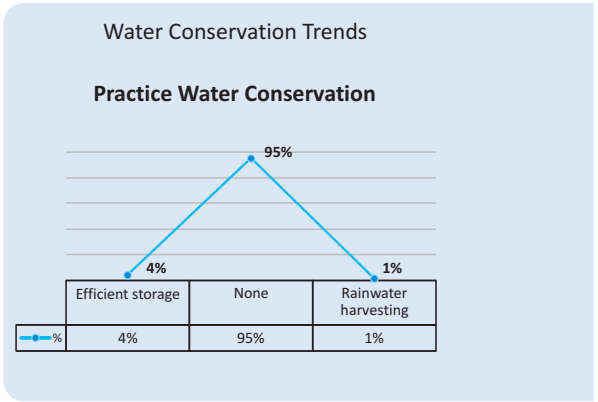

Figure 65

Use Renewable Energy

The assessment of renewable energy usage indicates moderate adoption within the community, though 56.1% of households reported not using any renewable energy sources. Among those adopting renewable solutions, solar home systems are the most common (31.1%), followed by a combination of solar home and solar pumps (11.1%). Very few households reported using more advanced combinations, such as solar home, solar pump, and biogas (0.6%), or standalone solar pumps (0.6%) and improved stoves (0.6%).

These findings suggest that while renewable energy uptake is growing, a large proportion of households still rely on non-renewable energy sources. Promoting awareness, affordability, and access to renewable technologies could enhance energy security, reduce environmental impact, and support sustainable livelihoods in the community.

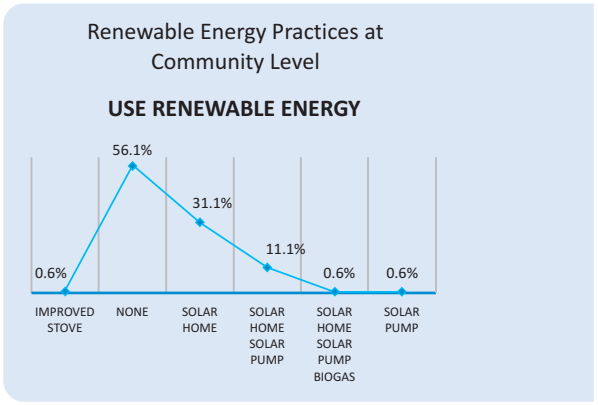

Figure 66

Community Involvement in Natural Resource Management

The data indicates that community participation in natural resource management is very limited. The overwhelming majority of households, 88.9%, reported no involvement in any natural resource management activities. Among those engaged, tree planting is the most common activity (7.8%), followed by soil and watershed management (2.8%) and combined pasture, soil, and watershed management (0.6%). These findings suggest that while a small portion of the community is engaged in environmental stewardship, most households do not actively participate in managing or conserving natural resources. This highlights the need for awareness campaigns, capacity building, and community-based initiatives to promote sustainable resource management practices, which are crucial for environmental resilience, agriculture, and livelihood sustainability.

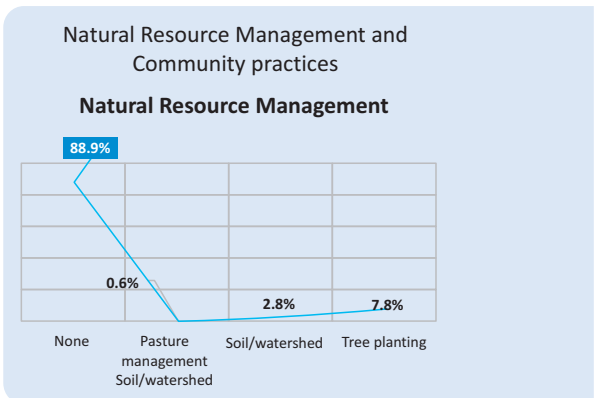

Figure 67

Access to Climate Friendly Services by Marginalized Groups

The data indicates that marginalized groups have very limited access to climate-related services. The vast majority of respondents, 81%, reported never having access, while 10% reported rare access and 6% reported occasional access. Only a small fraction, 4%, stated that they always have access to climate services.

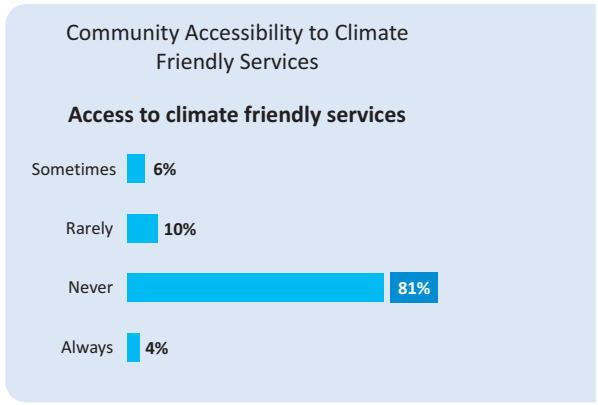

Figure 68

These findings highlight a significant inequity in the distribution of climate services, leaving marginalized populations particularly vulnerable to climate-related risks. There is an urgent need to design inclusive outreach strategies, remove barriers to access, and ensure that climate services reach all segments of the community, especially those most at risk.

Community Feedback and General Observations:

Appreciation for Islamic Relief Services:

Community members expressed gratitude for the support provided by Islamic Relief since 2006, including aid during water shortages and provision of hand pumps. They acknowledged past cooperation and requested continued support for their community needs.

Water and Sanitation Challenges:

- Lack of clean and sufficient water is a major concern, with sources located 3-8 kilometers away from homes.
- Households reported waterborne diseases due to inadequate safe water supply and storage issues.
- There is a strong demand for Jerry cans, water filters, and washroom/latrine facilities.

Education Needs:

- Schools are located far from villages (6 km), leading to school dropouts
- Communities requested establishment of middle schools to ensure access to education.

Healthcare Gaps:

- Local hospitals exist but face a shortage of doctors.
- Community members requested small hospitals, midwives, and access to doctors.

Livelihood and Agriculture Issues:

- Insects are damaging fruits and vegetables, causing major crop losses, which threatens livelihoods.

Other Community Needs:

- Solar and battery systems, sports materials, and other basic facilities were highlighted as additional requirements to improve living conditions.

Overall Observation:

The community is grateful for past support but continues to face critical gaps in water, sanitation, health, education, and agricultural support. They emphasized the urgent need for sustainable interventions to address water scarcity, health risks, and livelihood challenges.

Chapter 09: Key Issues Highlighted/Evidence/Needs Identified and Proposed Interventions:

Table 28: Food Security Challenges and Response Framework

Issue / Challenge	Evidence	Implications	Key Needs Identified	Proposed Interventions
Low meal frequency / inadequate food intake	6% eat 1 meal/day, 45% eat 2 meals/day	Indicates food insecurity and unstable access among vulnerable households.	◆ Targeted food assistance for high-risk villages like. ◆ Price stabilization or cash/voucher programs ◆ Nutrition-sensitive programs for children under 5 and PLWs. ◆ Community- based nutrition education and awareness. ◆ Food security resilience strategies to reduce dependency on markets or local food production (kitchen gardening, small livestock). ◆ Seasonal support to cope with food shortages (food banks, food-for-work, etc.)	**Short-Term:** Provision of targeted food assistance to food-insecure households. Supplementary feeding for children under 5 and pregnant/lactating women (PLWs). **Medium-Term:** Promote household food production through kitchen gardening and small livestock rearing. Conduct community-based nutrition and hygiene awareness sessions. **Long-Term:** Diversify livelihoods and improve local market access. Support sustainable, community-led food production initiatives (e.g., business startup grants, farmer cooperatives).
Poor & borderline food consumption	9% poor FCS, 42% borderline FCS -> 51% below acceptable level	Over half of households face food insecurity and fragile dietary diversity.		
High-risk villages	5 villages (Kirtaka, Humai, Miskan, Nok Chah, Kachao) have 100% HH below FCS 35	Localized acute food insecurity-requires urgent food assistance.		
Seasonal food shortages	67% households experienced shortages; highest in June (26%), July (20%)	Indicates seasonality and market dependency during lean periods.		
Dependence on market purchases	90% buy food; 7% produce their own	High vulnerability to price inflation and market shocks.		
Negative coping mechanisms	80% borrow food/money; 74% rely on less preferred foods	Strong evidence of economic stress and declining diet quality.		

Issue / Challenge	Evidence	Implications	Key Needs Identified	Proposed Interventions
Food access disruptions due to high prices	82.2% cited high prices as main barrier	Food affordability is a major challenge.		
Nutritional gaps among children <5	14% consume no listed foods; 1% fish, 6% meat, 10% eggs	Protein and micronutrient deficiencies likely.		
PLW nutrient intake	94% consume no fortified/iron-rich foods	Severe micronutrient deficiency risk among PLWs.		
Low nutrition education participation	Only 4% participated; 84% unaware	Lack of community awareness limits behavioral change.		

Table 29: Key Agricultural Issues, Evidence, and Response Actions

Issue	Evidence	Implication	Key Needs Identified	Proposed Interventions
Low cultivation rates	Only 8% cultivate crops	Very limited agricultural engagement; heavy reliance on non-farm income.	◆ Improved agricultural inputs and practices (Provision of seeds, fertilizers, irrigation) ◆ Improve water management and irrigation solution. ◆ Access to extension services and agricultural credit. ◆ Enhance market linkages for crops selling and price incentives. ◆ Reduce post-harvest losses via storage and pest management	**Short-Term:** Agriculture input support and training on improved seeds and fertilizers, small irrigation support and pest/disease management. Land leveling Gabion walls to protect land from flood impacts. Promote kitchen gardening, **Medium-Term:** Extension services improvement, access to credit/finance, market linkages and improved post-harvest storage through trainings and strengthening. **Long-Term:** Sustainable water management, resilient cropping systems and farmer field schools strengthening
Poor adoption of improved inputs	Improved seeds 3%, fertilizers/ pesticides 1%	Lack of access, affordability, and awareness.		
Negligible institutional support	Only 1% received extension training or support	Weak agricultural service delivery.		
Small and underutilized landholdings	<5 acres = 10 HH; 6-10 acres = 4 HH	Potential for land optimization through support.		
Water insufficiency	50% sometimes insufficient; 7% mostly insufficient	Water scarcity affecting productivity.		
Low market access/ satisfaction	Only 1% satisfied with crop prices; 67% do not sell crops	Weak market linkages and profitability.		
Minimal post-harvest management	Only 4% store crops	Post-harvest inefficiencies reduce food and income.		

Table 30: Key Livestock and Poultry Issues, Evidence, and Response Actions

Issue	Evidence	Implication	Key Needs Identified	Proposed Interventions
Low veterinary access	Only 6% access services; 4% vaccinate	High disease vulnerability.	◆ Livestock feed availability and fodder production (Affordable fodder supply systems) ◆ Training in improved livestock management techniques ◆ Support for women in livestock management (Women-focused livestock training and livestock provision where applicable) ◆ Market access for livestock and products (Market access improvement) ◆ Promotion of small-scale dairy and poultry production.	**Short-Term:** Livestock and poultry Vaccination campaigns (Mobile vet campaigns, emergency feed and awareness raising campaigns). Promote small scale poultry, farming. Encourage cooperative purchasing and local food markets. **Medium-Term:** Livestock management training, startup of fodder cultivation programs, women-focused interventions (Women training on livestock management/ strengthening on advance level poultry management) improved veterinary access and breed improvement. **Long-Term:** Market linkages for livestock products, sustainable fodder management and production systems, breeding programs and livestock-based livelihood diversification
High livestock losses	45% households experienced losses	Weak animal health systems.		
Feed/fodder shortage	79% face high costs or shortages	Resource and cost constraint.		
Low adoption of improved techniques	Only 26% use improved practices	Productivity and income limitation.		
Market dissatisfaction	62% dissatisfied with prices	Weak profitability and value chain links.		
Women major caretakers	40% manage livestock	Opportunity for women-centered livelihood support.		
Main loss cause = disease	55% report disease as main reason	Preventable with better veterinary outreach.		
Low marketing participation	55% do not sell livestock	Untapped income potential.		

Table 31: Key Water, Sanitation & Hygiene (WASH) Issues, Evidence, and Response Actions

Issue	Evidence	Implication	Key Needs Identified	Proposed Interventions
Water access restrictions and High dependence on limited water sources.	High dependence on limited water sources (92%) with restricted access (78%)	Vulnerability to water scarcity, inequities, and social tension; labor-intensive water collection	◆ Safe, reliable, and equitable water access ◆ Safer water collection pathways, community-based monitoring ◆ Improved storage facilities and treatment knowledge ◆ Regular water quality monitoring, consistent awareness ◆ Health awareness and preventive measures ◆ Improved sanitation facilities, behavior change ◆ Consistent handwashing at critical times with soap ◆ Accessible, affordable treatment options ◆ Reduced burden through closer/efficient water points ◆ Reliable, year-round water sources ◆ Safe alternative water sources, emergency plans	**Short term:** Provide temporary water access, collection schedules, and emergency latrines. Construction of safe climate resilient latrines for households. Promote safe water collection, handwashing, and household water treatment. Sewerage system for Tang kacaho to minimize disease and enhance community esthetic value. Repair/replace storage containers and address immediate water quality issues. Raise awareness on hygiene, waterborne illness prevention, and coping strategies. **Medium term:** Construct/rehabilitate boreholes, tube wells, Karez, and protected wells. Establish safe water points, lighting, and pathways; upgrade latrines. Provide training on water treatment, storage, hygiene, and WASH-health integration. Install community filtration systems and local water points; expand rainwater harvesting. Deliver mobile health services and school/community hygiene programs. **Long term:** Develop piped water networks with community management committees. Build sustainable storage infrastructure and continuous water quality monitoring. Institutionalize WASH-health programs and integrate hygiene education.
Unsafe or inequitable water fetching	Low water fetching safety (6% feel safe), child safety risks	Increased physical risk and social conflict during collection		
Water storage issues leakage/contamination) and less awareness of safe water handling	Water storage issues (38%), low awareness of safe water handling (12%)	Risk of contamination, waterborne diseases, loss of water volume		
Mixed perception of drinking water safety or Perceived unsafe drinking water	Mixed perception of water safety: 44% safe, 38% unsafe, 18% unsure	Hesitation in water use; potential health risks		
Recent waterborne disease occurrence/ Prevalence of waterborne diseases	Waterborne diseases prevalent (41% households), limited health education (14%)	Negative impacts on work, school, and livelihoods		
Sanitation gaps	Sanitation gaps: 29% no latrine, 61% latrine cleanliness	Open defecation, contamination risk, disease transmission		
Handwashing practices	Handwashing practices suboptimal: 61% use soap, 20% water alone, 9% none	Ineffective hygiene, high risk of infection		

Issue	Evidence	Implication	Key Needs Identified	Proposed Interventions
Limited household water treatment	Household water treatment limited: 54% no treatment	Increased risk of waterborne diseases	◆ Community awareness, adoption of water-saving and climate-resilient practices ◆ Improve water quality, continuous monitoring ◆ Affordable healthcare and WASH interventions	Promote improved sanitation (VIP/pour-flush) and climate-resilient water management. Establish equitable, community-led water allocation and treatment systems.
High water collection frequency	High water collection frequency and volume (76% collect >30L/day, 21% >3 times/day)	Significant labor/time burden, especially for men and children		
Seasonal and year-round water reliability issues	Seasonal and year-round water reliability issues (34% always reliable, 17% very unreliable)	Unpredictable water availability affects consumption, hygiene, and livelihoods		
Unsafe coping strategies during water shortages	Households adopt unsafe coping strategies during shortages (e.g., unsafe sources 13%)	Health risks, spread of disease		
Low adoption of water conservation and climate-resilient practices	Low adoption of water conservation and climate-resilient practices (<5%)	Vulnerability to scarcity, reduced sustainability		
Satisfaction with drinking water quality	Mixed satisfaction with drinking water quality (32% very satisfied, 18% dissatisfied)	Lack of confidence in water; potential health risks		
High financial burden of water borne diseases/illness treatment.	Financial burden of illness treatment: 75% spend >1,500 PKR	Limited healthcare access, economic strain		

Table 32: Key Protection Inclusion and Social Cohesion Issues, Evidence, and Response Actions

Issue	Evidence	Implication	Key Needs Identified	Proposed Interventions
Safety concerns	21% of households (37/180) reported safety issues; main concern: theft (32 households)	Security remains a significant issue, particularly at night; affects community confidence and wellbeing	◆ Address safety concerns, especially theft and night-time insecurity. ◆ Prevent child labor and ensure children's safety and access to education. ◆ Increase women's involvement in household and community decision-making. ◆ Reduce conflicts over water, land, and other resources. ◆ Ensure equitable access to essential services for vulnerable populations. ◆ Reduce gender-based exclusion and promote equitable participation in services and decision-making.	**Short term:** Conduct community safety and night patrol awareness campaigns. Identify and support children at risk; raise child protection awareness. Promote women's rights and participation in decision-making. Support conflict resolution and fair resource management. Provision of livelihood opportunities to women to ensure their participation in livelihood through vocation trainings. **Medium term:** Establish community watch groups and reporting mechanisms. Facilitate school enrollment and livelihood support for families. Organize women's leadership and decision-making training; form women's groups. Establish community-based water and land management committees. Implement inclusive service provision strategies. Promote inclusive programming and participation. **Long term:** Strengthen local law enforcement and integrate community safety into development planning. Strengthen community-level child protection mechanisms and advocacy programs.
Child labor	13% of households (24/180) reported child labor, involving 33 children	Persistent child protection concerns; risks to education and wellbeing		
Women's participation in decision-making	Only 17% (31/180) households reported women participation; 83% excluded	Gender inequality in household and community decision-making; limits empowerment and inclusive governance		
Community conflicts (resource-based)	Minor conflicts: water (11), land & water (5); majority (160) report no conflict	Resource scarcity can trigger tensions affecting cohesion		
Marginalized groups access to services	79% never access; 3% always access	High exclusion; limits protection and livelihood support for vulnerable populations		

Issue	Evidence	Implication	Key Needs Identified	Proposed Interventions
Gender-based exclusion	25% reported gender-based exclusion	Persistent gender inequality impacting access to services and social cohesion		Institutionalize women's representation in local governance structures. Develop sustainable resource management plans and equitable access policies. Policy and structural reforms to ensure sustained equitable access. Strengthen legal frameworks and community norms supporting gender equality.

Table 33: Key Climate Change and Resilient Related Issues, Evidence, and Response Actions

Issue	Evidence	Implication	Key Needs Identified	Proposed Interventions
Awareness of climate change	54% aware, 46% unaware	Nearly half the community lacks basic understanding; limits adaptation planning	◆ Increase climate change awareness. ◆ Enhance participation in climate programs. ◆ Strengthen capacity to respond to climate impacts. ◆ Promote adoption of climate-resilient practices. ◆ Improve water conservation. ◆ Expand renewable energy use. ◆ Increase community involvement in natural resource management.	**Short term:** Conduct awareness campaigns and educational sessions on climate change. Provision of climate smart energy source like solarized system to all households. Targeted outreach and mobilization for participation in climate programs. Provide information on adaptive measures for farmers. Demonstration plots and training on climate-resilient practices. Promote low-cost water-saving techniques and awareness campaigns. Awareness and demonstrations on renewable energy use. Awareness campaigns for community involvement in natural resource management. Inclusive outreach for marginalized groups to access climate services.
Participation in climate programs	Only 2% participated in past year; 26% excluded	Low engagement in capacity-building limits resilience and adoption of climate-smart practices		
Perceived climate change impacts	77.8% reported increased temperature; 85.6% reported decreased rainfall	Increased vulnerability to water scarcity, agriculture, and livelihoods		
Adoption of climate-resilient practices	97% not adopting; very low crop rotation (1%) and drought-tolerant seeds (2%)	High vulnerability to climate shocks; food insecurity risk		

Issue	Evidence	Implication	Key Needs Identified	Proposed Interventions
Water conservation practices	95% do not practice; 4% store water efficiently, 1% rainwater harvesting	High water scarcity vulnerability	◆ Ensure equitable access to climate services for marginalized groups.	**Medium term:** Conduct community workshops and school-based climate education. Training and capacity-building programs for climate program engagement. Promote climate-resilient agricultural techniques. Provide subsidized access to seeds and technology for resilient practices. Introduce community rainwater harvesting and storage initiatives. Promote affordable renewable energy solutions. Encourage community-based natural resource management activities. Provide targeted support for vulnerable groups to access climate services. **Long term:** Integrate climate awareness into local development planning. Institutionalize community-led climate programs. Integrate climate adaptation into regional planning. Institutional support for climate-smart agriculture. Develop sustainable water management plans. Integrate renewable energy into local development initiatives. Implement policy reforms to ensure equitable access to climate services.
Renewable energy adoption	56.1% not using; 31.1% solar home systems; 11.1% solar+ solar pump	Partial uptake; many still rely on non-renewable sources		
Community involvement in natural resource management	88.9% not involved; 7.8% tree planting	Low participation limits environmental sustainability		
Access to climate services for marginalized groups	81% never access; 10% rare; 4% always	Marginalized communities highly vulnerable to climate shocks		

Annexes

Type of Annex	Attachments
Household level data collection tool	HH level level tool -Need assessment-V-
Data set	Data set
FGDs and KIIs tools	FGD Tool for Need Assessment-2308202 ; KIIs Questionaire-230820
FGDs and KIIs report	Need Assessment Study FGD-Summary ; Summary report of KIIs.docx

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