Islamic Republic of Afghanistan
Afghanistan National Disaster Management Authority
Directorate of Mine Action Coordination

MINE ACTION LIVELIHOOD SURVEY

REPORT

1398/2019

March, 2020

Directorate of Mine Action Coordination (DMAC):

The Directorate of Mine Action Coordination (DMAC) was established in 1989 under the direction of the office of the Prime Minister to coordinate, oversee and regulate mine action activities in Afghanistan. In 1994, DMAC was amalgamated with the Afghanistan National Disaster Management Authority (ANDMA). ANDMA is the principle institution at the national level with the mandate to coordinate and manage all aspects related to disaster management (both natural and man-made disasters) and humanitarian affairs including mine action. DMAC, now one of the directorates of ANDMA, coordinates, monitors and oversees the work of the humanitarian Mine Action Programme of Afghanistan (MAPA).

DMAC is supported by the United Nations Mine Action Service (UNMAS) since 2008. UNMAS provides technical and capacity development support to DMAC.

The U.S. Department of State, Office of Weapons Removal and Abatement (PM/WRA) provides financial contributions to DMAC in support of DMAC's capacity development and promotes national ownership of the programme. PM/RWA's contributions to DMAC are made through a Slovenian organization, the International Trust Fund (ITF) – Enhancing Human Security.

Acknowledgements:

The successful implementation of this survey was a team effort involving ANDMA and DMAC staff. DMAC would like to thank the US Department of State-Bureau of Political-Military Affairs - Office of Weapons Removal and Abatement (PM/WRA) for their financial support, and the ANDMA Provincial office in Kapisa which extended its tireless support towards the successful completion of the survey.

DMAC is grateful to ITF- Enhancing Human Security for taking care of logistics, and to the communities that provided the information required for achieving the objectives of the survey. DMAC hopes that the information in this report will benefit mine-affected communities and all relevant stakeholders in Afghanistan.

Team involved in the Mine Action Livelihood Survey - Kapisa

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List of abbreviations:

AMAS	Afghanistan Mine Action Standards
ANDMA	Afghanistan Nation Disaster Management Authority
AP	Anti-Personnel (mine)
AT	Anti-tank (mine)
BF	Battlefield
DMAC	Directorate of Mine Action Coordination
DMC	Department of Mine Clearance
EOD	Explosive Ordnance Disposal
ERW	Explosive Remnants of War
GICHD	Geneva International Centre for Humanitarian Demining
ICRC	International Committee for the Red Cross
IDPs	Internally Displaced Persons
IED	Improvised Explosive Device
IM	Improvised Mine
IMSMA	Information Management System for Mine Action
IPs	Implementing Partners
ITF	International Trust Fund
MAPA	Mine Action Programme of Afghanistan
MF	Minefield
MRE	Mine Risk Education
PDIA	Post Demining Impact Assessment
PM/WRA	Political-Military Affairs, Office of Weapons Removal and Abatement
PPIED	Pressure Plate Improvised Explosive Device
QA	Quality Assurance
QC	Quality Control
QM	Quality Management
QMS	Quality Management System
Sq. m	Square Meter
UNMAS	United Nations Mine Action Service
UXO	Unexploded Ordinance

I- Executive summary:

The physical presence of landmines/ERW keeps populations from being able to fully utilize their land and resources. This keeps much of the community in conditions of poverty and food insecurity. Many of the injuries occur when people are looking for, grazing animals or harvesting their crops, meaning that communities are restricted to known mine-free lands for their agriculture. As a result, much of the farmable land goes unused, keeping profits and production.

Mine Action Livelihood Survey shows that landmine presence in Kapisa province limits food and the same can be assumed of other affected provinces. Without safe land to grow crops, farmers are left with less room for agriculture and less produce to sell or consume.

Additionally, injury from landmines keeps individuals from being able to work, further perpetuatingpoverty in landmine-affected regions. Those who are hit face expensive medical treatment and the disabled often struggle to find a job. The necessary long-term recovery period can keep victims from finding work for years, forcing them to live off of charity and slip into. Moreover, children who lose parents are left to fend for themselves, keeping them in the cycle of povertywithout education.

This Mine Action Livelihood Survey Report is intended to highlight the contributions made by the MAPA to Afghanistan's development and how to further enhance the focus of demining to the development outcome level. In line with the National Mine Action Strategic Plan (2016-2020) and in particular, the first of its four goals "Facilitating Development", the mine action livelihood survey underlines how this facilitation of development is fulfilled in practice.

The mine action livelihoods survey was funded by the U.S. Department of State, Bureau of Political-Military Affairs, Office of Weapons Removal and Abatement (PM/WRA), through ITF-Enhancing Human Security.

DMAC carried out the Mine Action Livelihoods Survey 2019 in Kapisa Province, during 4th and 11th September 2019. This survey was carried out by four trained teams in twelve communities, located in the four districts, of Kapisa Province.

Focus group discussions were held separately with men, women, boys and girls, and included village leaders, farmers and key informants. Opportunities were provided for the members of the teams to discuss the findings during debriefing sessions when the survey was completed.

Main Findings:

Clearance has made considerable areas of land available to the whole communities for grazing, fuel wood and fodder collection. This has had major social and economic impact across in the communities surveyed. Agricultural land, water canals and stone mines have also been cleared to the great benefit of their individual owners. Clearance of roads and pathways has enabled access to land, neighboring villages and to markets.

The cleared areas are directly benefiting 2,396 families. In summary, land release activities created the following opportunities:

Agriculture and farming:

- Over the course of one year, the 12 communities surveyed, have harvested crops, animal products/dairy, fuel wood and stones from the cleared lands; this has led to an increase in economic condition rising up to USD 857,689.
- 120 hectares of explosive ordnances contaminated land was released and turned into fertile agricultural land and contaminated irrigation canals were restored in two villages.
- Approximately 400 trees were planted on cleared ground, which contributes to better air quality and improving living conditions.
- Approximately 6,900 livestock (sheep, goats, cows) are fed in the cleared pasture lands; this contributes to the economic wellbeing of the communities and produces products that can be sold to the neighboring communities.

Construction and development:

- Two schools are constructed on the cleared lands and access to ten schools is enabled in 12 surveyed villages.
- A clinic is constructed on the cleared land in Kuhnadeh village, which has started to provide essential health services to the local communities.
- Construction of 523 new houses on cleared lands has enabled resettlement of displaced people.
- 6,480 cubic meters of stone is mined, for construction of houses and other infrastructures, from cleared lands in two village over a period of twelve months.

Access, connectivity and roads:

- Asphalt roads are constructed with 6 km in length and 6 meters width on cleared lands, this has helped connect Mahmud-e-Raqi, the provincial capital with Nijrab and Tagab districts.
- Extension of the power transmission line on cleared land has been made possible by clearance activities, this has enabled to connect Mahmud-e-Raqi, the provincial capital with the hydroelectric dam Naghlu Surobi, in south of Kapisa.

Case Studies:

The four case studies detailed in part six (VI) of this report provide a snapshot of the situation after clearance and the outcomes of the demining activities in the surveyed villages.

Perception of safety:

When describing the situation before demining, people in the communities talked of their fear of injury and fatalities from mine accidents and of feeling permanently frightened and concerned about the safety of children. Following clearance operations and mine action interventions, one of the most valued benefits from demining expressed by communities was the feeling of safety and security for themselves and their families. A reduction in this general fear and a feeling of relief was a notable outcome of the demining activities.

In total 15,250 explosive devices were found and safely destroyed by demining teams in the 12 villages surveyed. It is evident that the work of mine action clearance serves as a lifesaving intervention in conflict affected communities.

Explosive Ordnance Risk Education (EORE)

It was revealed that after 2013, EORE was not conducted in the communities visited. Based on the information collected from the communities and also according to the mine action national database, EORE sessions were provided to all twelve villages surveyed. The level of MRE coverage for women appears to be less than that for men. Based on the findings of the survey, women in seven communities said that they did not receive any EORE sessions.

Victim Assistance:

According to information collected from the twelve surveyed villages, before the clearance 176 people were victims of explosive ordnances accidents. The survey team interviewed 45 EO victims who revealed details of the accidents. The survey team also interviewed the families of 11 victims who were killed as a result of EO explosion. The majority of victims interviewed had lost their legs, arms and some their eyes.

It was found that all of the interviewed victims, having survived the accidents, had received medical support. Furthermore, those victims who lost their limbs received artificial limbs through the International Committee of the Red Cross (ICRC).

Prioritization:

It was found that the villagers are satisfied with the prioritization of cleared areas within their communities and the elders of the surveyed communities stated that the demining teams have consulted with them before the start of clearance operations.

However, none of the women in the communities visited said that they had been consulted. It shows that the viewpoints of the women in the visited communities were not considered while planning the mine action operations, which can be outlined as an area of improvement for the future.

Quality Management:

Generally, it was found that the community members (men and women) are confident that the area is safe after clearance by demining teams. The findings of the survey indicate that DMAC has successfully established procedures for monitoring and controlling the technical processes and outputs of mine action to make sure that the area after clearance is safe and the cleared lands are being used for the purposes illustrated in the project documents.

Capacity Development:

The seventh mine action livelihood survey was planned, managed and conducted by staff from DMAC. The results indicate that the process of training and implementation faced no problems and the DMAC survey teams were able to visit all the 12 villages selected for the survey.

II- Introduction:

This Mine Action Livelihoods Survey collected evidence-based information demonstrating that clearance of land resulted in significant changes in the socio-economic conditions of the surveyed communities. The impact of mine action activities is beyond the immediate benefit of saving lives and flows on to wider economy and society. The surveyed communities, according the survey, have gained noticeable socio-economic benefit from mine action activities.

Mine Action Livelihood Survey seeks to understand the development outcomes from demining activities better. This survey is undertaken at community-level and on a periodically to document the achievements and identify changes to policy and practice that could further enhance the contribution that the Mine Action Programme of Afghanistan (MAPA) makes towards Afghanistan's development. The survey findings will contribute to better reporting to the MAPA donors and the Government of the Islamic Republic of Afghanistan (GoIRA) as well as to the mine and ERW affected communities about the contributions made by the MAPA.

Implementation of this survey required female interviewers as well, Afghan women surveyors were included in each survey team to ensure that the views and insights of women and children are noted.

The primary objective of the survey was to get a better understanding of the mine action impact on livelihood and development of the communities and how to further enhance the positive effects of mine action intervention in the communities, particularly in the rural parts of the country where people suffer from underdevelopment and insecurity.

In pursuance to the series of Mine Action Livelihood surveys initiated by the UNMAS in partnership with the GICHD, DMAC was interested in continuing the conduct of regular mine action livelihood surveys in order to understand better the livelihood and development

outcomes resulting from mine action operations in the communities.

The following mine action livelihoods surveys were conducted from 2010 to 2019.

1. The 1st survey was conducted in 2010, through which 25 communities were surveyed in Kabul, Parwan and Balkh provinces.
2. The 2ndsurvey was conducted in 2011, through which four communities were surveyed in the western province of Herat.
3. The 3rd survey was conducted in 2012, through which four communities were surveyed in the north eastern province of Badakhshan.
4. The 4th survey was conducted in 2016, through which 21 communities were surveyed in Bamyan and Samangan provinces.
5. The 5th survey was conducted in 2017, through which 24 communities were surveyed in Nangarhar and Takhar provinces.
6. The 6th survey was conducted in 2018, through which 12 communities were surveyed in the south eastern province of Khost.
7. The 7th survey was conducted in 2019, through which 12 communities were surveyed in the center province of Kapisa.

III- Survey location

This mine action livelihoods survey was implemented in the central part of the country, Kapisa province.

Kapisa is located 80 km north-east of Kabul, it is bordered from the north by Panjshir province, from the east by Laghman province, from the south by Kabul province and from the south-west by Parwan province. Covering an area of **1,842** km² makes Kapisa the smallest province in the country. However, it is the most densely populated province after Kabul. It is divided into 7 districts, Mahmud-i-Raqi is the provincial capital, while the most populous district of Kapisa is Nijrab. The population of Kapisa is estimated to be **364,900**, although there has never been an official estimate. The major ethnic group are Pashtuns, Tajiks and Pashai, there is also a sizable minority of Hazara and Nuristanis. Agriculture remains the largest portion of the economy.

Kapisa Province's terrain is a mixture of high peaks, mountainous river valleys, and shallow central plains; the highest points of the province are in the east, on the borders with Panjsher and Laghman Provinces. The province is a strategic crescent that was fought over by many groups such namely Russian and Mujahedeen, internal conflicts of Mujahedeen, Northern Alliance and Taliban.

Scope of the current contamination in Kapisa Province:

Based on the national mine action database, as of 1st January 2020, there are only 18 recorded AP mine hazards, covering an area of 662,750 square meters and impacting 12 communities in 5 districts of Kapisa province. The remaining contamination in Kapisa provinces is from anti-

personnel (AP) mines relating to legacy contamination.

The indirect impact of this contamination on other communities is considerable. Each minefield is linked to only one community. If a minefield is between communities, it impacts not on only the nearest one but also neighboring communities which are using the roads for transportation and the land for agriculture and grazing.

In addition, contamination impacts people travelling between non-contaminated communities passing through the affected community. Furthermore, if development projects, aimed to assist a group of impacted and non-impacted communities, are hampered due to landmines, it has an impact on all nearby communities who might potentially benefit from the development projects such as powerlines and other infrastructures.

Most of the AP contaminated areas are located in the Koh Band district, followed by the Hisa-i-Awali Kohistan and Nijrab, while the other two districts (Alasay and Tagab) have the fewest AP hazards. The Koh Band district also remains the most affected in terms of the number of hazards and contaminated area.

See below table for a more detailed breakdown.

Table 1: Remaining contamination by device type, order of area (square meters)

Type of Hazards	Number of Hazards	Remaining Area
AP	18	662,750
Total	**18**	**662,750**

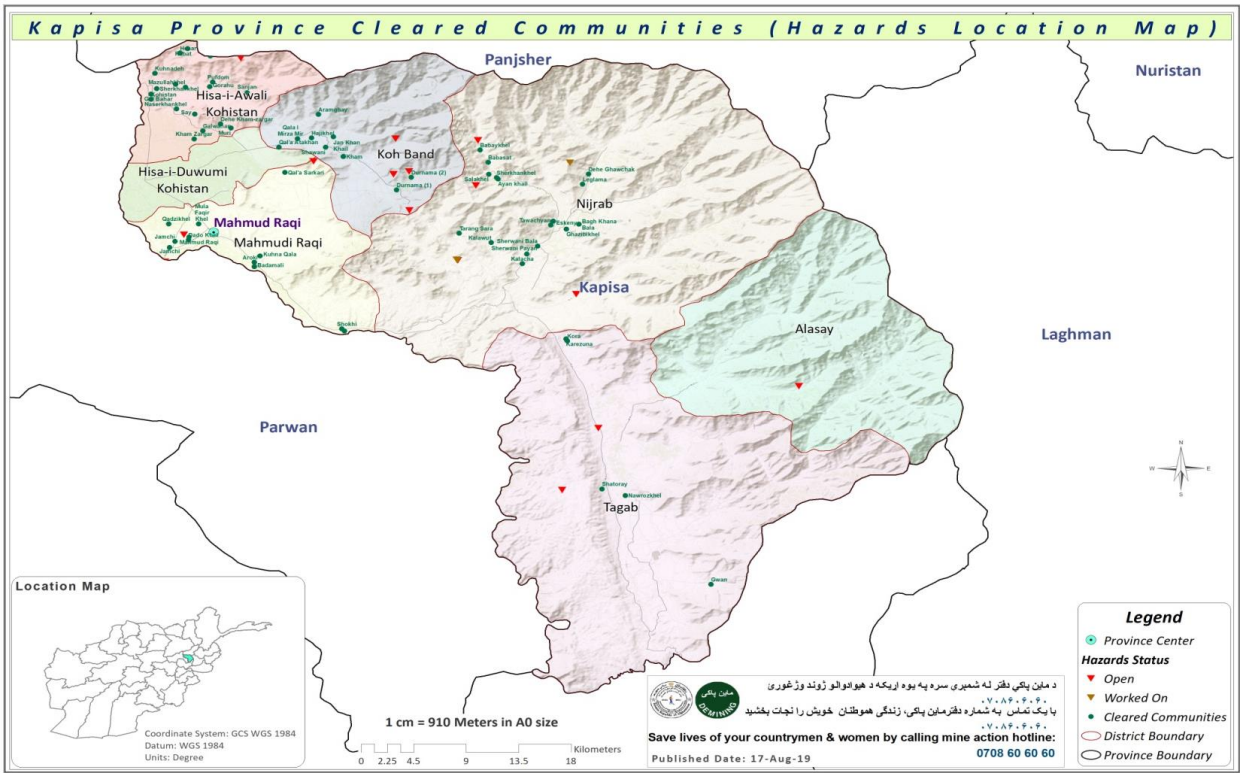
Table 2: Remaining AP contamination by district, order of area (square meters)

District	Device Type	Number of Hazards	Remaining Area
Koh Band	AP	10	255,494
Hisa-i-Awali Kohistan	AP	1	168,241
Nijrab	AP	5	159,224
Alasay	AP	1	57,038
Tagab	AP	1	22,753
Total		**18**	**662,750**

Table 3: Area cleared, remaining contamination and civilian casualties by district, order of area (square meters)

S.#	District	Area Cleared	Remaining Area	Civilian Casualties according to IMSMA
1	Mahmudi Raqi	5,903,053	0	97
2	Hisa-i-Awali Kohistan	4,144,236	168,241	100
3	Koh Band	3,028,076	255,494	14
4	Tagab	1,318,094	22,753	116
5	Nijrab	998,336	159,224	115
6	Alasay	0	57,038	13
Grand Total		**15,391,795**	**662,750**	**455**

Figure 1: Location of communities in Kapisa Province:



Civilian casualties in Kapisa province:

Based on the national mine action database, between January 2019 to December 2019, in total 16 civilian casualties, caused by spot ERW and IM explosions, were recorded in Kapisa province. In this period, the civilian casualties from ERW were at 81% and IM made up 19% of all civilian casualties. IM is used by anti-government elements to target military personnel and convoys. However, since they are victim-activated (unlike remote-controlled IEDs), many IM incidents result in the loss of civilian life. Under the terms of the Ottawa Treaty, victim-activated mine items are considered to be anti-personnel mines.

The locations of IMs are not recorded precisely, so after every single IM incident, a vast area is suspected of containing more IMs. This poses a long-term challenge for Afghanistan.

Table 4: Civilian casualties by district from January 2019 to December 2019.

District	Mine		ERW		IM		Total
	Injured	Killed	Injured	Killed	Injured	Killed	
Nijrab	0	0	2	9	3	0	**14**
Tagab	0	0	1	1	0	0	**2**
Total	**0**	**0**	**3**	**10**	**3**	**0**	**16**

From the beginning of programme to December 2019, in total 455 civilian casualties were recorded due to mine, ERW and IM explosions in Kapisa province. In this period, the civilian casualties from mine were accounting for 35%, 58% were because of ERWs and IM made up to 7% of all civilian casualties.

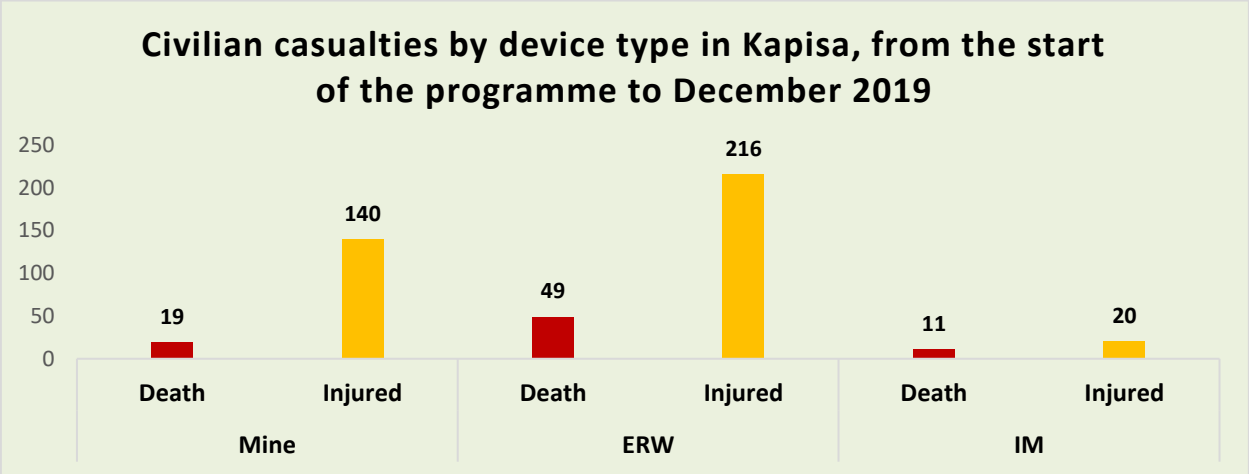
Table 5 below shows a summary of civilian casualties from the beginning of programme until December 2019, demonstrating that ERWs have had a significantly higher toll, far greater than mines and IM. The Tagab district of Kapisa had the highest share of mines, ERWs and IM casualties, while the Nijrab, Mahmudi Raqi and Hisa-i-Awali Kohistan had the second, third and fourth highest number of recorded casualties respectively in the province.

Table 5: Civilian casualties by district from the beginning of programme to December 2019.

District	Mine		ERW		IM		Grand Total
	Death	Injured	Death	Injured	Death	Injured	
Tagab	0	39	13	49	6	9	116

Nijrab	6	39	18	46	3	3	115
Mahmudi Raqi	7	32	4	49	1	4	97
Hisa-i-Awali Kohistan	5	22	8	49	0	0	84
Hisa-i-Duwumi Kohistan	0	5	2	8	0	1	16
Koh Band	1	2	4	7	0	0	14
Alasay	0	1	0	8	1	3	13
Grand Total	**19**	**140**	**49**	**216**	**11**	**20**	**455**

Graph-1: Civilian casualties by device type in Kapisa, from the start of the programme to December 2019



IV- Survey implementation

Human Resources:

This survey was carried out by four trained (2 male and 2 female) teams comprised of DMAC and ANDMA staff, in 12 communities located in four districts of Kapisa province (*for more details, please refer to Annex-1*).

Participation and inclusion of the women surveyors considerably enhanced the breadth of information obtained.

Table-6: List of communities visited by the survey teams in Kapisa province.

S#	Location		Area Cleared (Sq. m)	
	District	Community	# of Hazards	Area
1	Hisa-i-Awali Kohistan	Chashma-I-Mazullah	6	738,135
2		Gul Bahar	8	1,011,457
3		Muri	5	621,456
4		Kuhnadeh	7	688,290
5	Koh Band	Kham	15	694,000
6		Shawani	28	1,232,622
7	Mahmudi Raqi	Badamali	9	1,607,971
8		Mahmud Raqi	37	604,131
9		Mula Faqir Khel	4	44,200
10		Shokhi	34	4,161,555
11	Nijrab	Sherwani Bala	10	790,280
12		Bagh Khana Bala	7	367,756
Total			**170**	**12,561,853**

Gender and diversity mainstreaming considerations:

DMAC ensure that gender, at all stages of project planning, implementation and evaluation is mainstreamed, with a view to incorporate the impacts of gender at all levels of project.

Since male surveyors cannot generally access female community members due to cultural restrictions, a gender perspective has been mainstreamed throughout the process of this survey.

In order to access all group (women, men, girls and boys) in the affected communities two female survey teams participated in the survey. Women surveyors were involved in the planning, training, implementation and data collection of the survey. This approach enabled the survey to reach out to both female and male community members and to acknowledge, identify and understand the differences, distinct capabilities, responsibilities, needs and priorities of women, girls, boys and men.

Due to their gender-specific mobility patterns, roles, rights and responsibilities, women, girls, boys and men often hold different information on areas that are contaminated, or suspected of being contaminated, in their communities. Each category has different exposure patterns to the threats caused by the hazards, and different responses to the hazards and their consequences.

If all groups are not consulted in information gathering activities, vital and life-saving information may be lost. In other areas of mine action, such as explosive ordnance risk education and participation in the prioritization of hazardous land for clearance, gender determines the access to and impact of activities and services, where women and girls often face more restrictions compared to men. Gender-specific roles and responsibilities can also mean that women, girls, boys and men have distinct clearance priorities.

Cultural restrictions and norms prevent some women from travelling and working away from their families and home area; therefore, female surveyors were hired in Kapisa accompanied by a Mahram (chaperone) when they were traveling to communities.

Surveyors interviewing all groups in the communities

Criteria for the selection of communities in MALS:

Selection of the communities in Kapisa province included both urban and rural communities to ensure data was gathered on the impact of contamination along with the different phases of mine action, different types of mine action operations taking into account comprehensive relevant metrics.

The 12 villages surveyed cannot fully be representative of all affected communities in the province. However, selection sought to contrast between urban and rural settings, different types of contamination, different land type of blockages (agricultural, grazing or residential), the different type of hazards and different stages of clearance.

The villages were selected based on the below criteria:

1. Security &accessibility.
2. Geographical location.
3. Village contamination status:
    - Fully cleared
    - Partially cleared
4. Type of contamination problem (Only ERW or Mine &ERW contaminated).
5. Areas cleared by different demining methods.
6. MFs/BFs with varied terrain, such as flat, mountainous areas.
7. MFs/BFs with varied outcomes such as:
    - Quantity of crops produced on cleared land.
    - Number of families accommodated on cleared land.
    - Estimated amount of income villagers can secure as a result of their land cleared of mines/ERW.
    - Number of public works constructed on cleared land.

Other key factors:

1. Community Impact Category (high/medium/low).
2. Ethnic make-up.
3. Long-established versus new communities.
4. Degree to which community has alternative livelihood options.
5. High/low numbers of victims in community.

Methodology:

The sustainable livelihood framework was used for the Kapisa survey as a basis for obtaining a balanced and holistic view of the situation in ERW/landmine-affected communities (for more information please refer to Annex-2).

The following survey tools used by male and female survey teams in order to collect primary qualitative and quantitative data in the surveyed communities.

S.#	Tool	Purpose of the tool
1	Time Line	To understand the history of the village and situation before, during and after the mine/ERW contamination.
2	Community Map	Showing the relationship between the village and the mined/cleared areas.
3	Community Profile	To build up a picture of the social, financial, physical, natural and human assets inside the community, as well as the relationship between the community and the outside community and to know about the main external influences on the village.
4	Focused Group Discussion (FGD)	To understand people's feeling, attitudes, perceptions, reactions, experiences and emotions.
5	Daily Clocks and Seasonal Calendars	To obtain Information at which season men and women, boys and girls are differently exposed to risks from landmines/ERW.
6	Case Studies of mine/ERW Victims/Survivors	To have a short description of the history of the incident and of the situation of the victim/survivor, including any support that they have received from any organisation.
7	Case Studies on the Outcome of the demining work	To have a short description of the situation after clearance and the outcome of the demining work in the surveyed villages.

Meeting with Local Authorities and Communities:

To ensure that the provincial authorities and community Shuras are involved, before the start of the survey, the DMAC accompanied by the provincial director of ANDMA, convened meetings with provincial governor, districts governors, head of provincial council and communities' Shuras for a comprehensive introduction and information sharing on the objectives of survey, the potential

(realistic) benefits that might come to the community, the methods to be used, people to be involved and timetable for the field visit.

Both, the local authorities and communities' shuras, were keen to know about the positive impacts of mine action on the country's development and at the same time they provided the required support to survey teams for the successful completion of the survey.

Survey team training:

As part of the survey plan, based on the need there was a two-day training for the survey teams to ensure a common understanding of the survey objectives and to practice the survey and data collection tools.

Training Approaches:

1. Class lectures/theory.
2. Class group work and role play.
3. On Site Practical Work.

The purposes of the training were**:**

- To gain a common understanding of the survey.
- To understand the principles, approaches and tools to be used in the survey.
- To practice the tools and skills that will be used in the survey.
- To understand how to plan and implement these interventions.

V- Survey findings

The survey findings are presented below and represent what communities expressed to the survey teams and all the required measures taken into consideration to reflect the results as accurately as possible.

The Survey teams collected information and recommendations from 12 communities on the impact of mine action on development, the economic returns from mine action, people's

livelihoods and well-being, prioritization, quality management, explosive ordnance risk education and victim assistance aspects of mine action. Gender and diversity (including age and occupation) are cross-cutting issues that were integrated into the survey findings. The report also examines the capacity of DMAC personnel to be able to design, conduct, analyze and report on future landmines livelihood surveys.

The survey findings of each of the issues mentioned above are reflected separately along with some case studies.

Economic Returns to Investment in Mine Action:

The economic returns from demining (either alone or in combination with follow-on investments) vary widely among communities, but in some cases are extremely high such as extension of the power transmission line on cleared land, which connects Mahmud-e-Raqi, the provincial capital with the hydroelectric dam of Naghlu, Surobi. Community residents provided evidence-based information on economic benefits such as cultivation of agriculture land, the establishment of productive orchards, access to construction materials, tending animals in demined land, construction of irrigation canals, construction of houses, schools, clinic, roads and as a source of wood collection. Furthermore, installing of the power transmission line for electricity energy system in demined land was indicated by locals.

The benefits and other consequences of mine clearance were assessed with communities using complementary survey methods that yielded quantitative and qualitative information derived from a range of social groups within communities. The general descriptions suggest that demining contributed to very significant benefits and enabled follow-on investments.

The wide variety of assets freed and created opportunities, following the clearance operations in 12 surveyed communities include:

- In total 2,396 families with an average household size of seven persons (16,772 individuals) in the 12 communities surveyed directly benefited from mine action activities.
- Over the course of one-year, the 12 communities surveyed have harvested 723,178 kilograms (kg)cereal crops (wheat, corn, rice); 241,059Kg green crops (alfalfa, fodder); 289,271Kg various vegetables, 192,847Kg various fruits, 1,035,000Kg animal product/ dairy, 89,728Kg fuel wood, and 6,480 cubic meters stone for constructions of houses from the cleared lands. The net value of these equals to **USD 857,689**, which represents growth in the local economy.

VI- 120 Hectares of barren land was rehabilitated and turned into a fertile agriculture land as a result of clearance of contaminated canals in two village (Gul Bahar and Shokhi) from mine/ERW.

VII- Approximately 400 trees have been planted so far in Kuhnadeh village on the cleared land, this provides ecological green space and a recreational place for villagers.

VIII- Approximately 6,900 livestock (sheep, goats, cows) are fed in the cleared areas, in the surveyed communities; food security increased as more food was produced including meat and dairy. Many mined areas cleared were located on hillsides, clearing the land has improved and enabled access to pasture lands ridding them from the long fallow it had suffered. Grazing land benefits those with livestock, those who work for livestock owners, and those who use locally-produced livestock products.

- Construction of asphalted road with 6 Km length and 6 m width on the cleared land, which connects Mahmud-e-Raqi, the provincial capital with Nijrab and Tagab districts. This portion of road has improved access to markets, reduced travel time and fuel consumption, all of which have improved household incomes. However, the community has also benefited from the asphalting roads, employment in the Mahmud-e-Raqi, the provincial capital, a bus to take students to university and contribution to the medical clinic.

- Extension of the power transmission line on cleared land, which connected Mahmud-e-Raqi, the provincial capital with the hydroelectric dam Naghlu Surobi, located in south of Kapisa; this has improved access to electricity, reduced the need for fuel wood and the use of generators, an overall positive environmental effect.

- Construction of two schools on cleared land and access to ten schools in 12 surveyed villages, provided education facilities for, 6,390 students (4,260 boys and 2,130 girls).

- Construction of 523 new houses on cleared lands. As the community expanded due the increase of population and settlement of refugees and IDPs, without mine/ERW clearance these houses could not have been built.

- Construction of a clinic on the cleared land in Kuhnadeh village, provided basic health services for the villagers.

- 6,480 cubic meter of stone is extracted for construction of houses and other infrastructures structures from cleared land in two village over a one-year period.

- As a result of clearance, people have more freedom of movement in the areas cleared and the cleared land also offered potential for leisure activities.

  The clearance has enabled the population to farm their lands efficiently and grow enough food to support their families, graze livestock and to access other facilities without concern for their safety or that of their children.

- Fuel wood and fodder: wood is still the main cooking fuel in rural areas, although animal dung and liquid propane gas are also used. The cost of wood is that of the labor to collect it, often the job of children. The long period of enforced fallow favored tree growth in mined areas, and has thus provided a rich resource in some hillside (particularly the mid-

altitude areas. Following clearance operations in communal areas, all families have access to this resource.

Table-7: Annual income from cleared land in the 12 surveyed communities:

S. #	Product/Yield Type	Unit	Annual Harvest	AFN Value per Unit	Total AFN Gross Value	[1]Total AFN Expenses of Product/Yield	Total AFN Net Value	Total Net Value in USD*
1	Cereal Crops (wheat, corn, rice)	Kg	723,178	30	21,695,328	4,339,066	17,356,262	222,516
2	Various Fruits	Kg	192,847	50	9,642,368	1,928,474	7,713,894	98,896
3	Various Vegetables	Kg	289,271	15	4,339,066	867,813	3,471,252	44,503
4	Green crop (Alfalfa)/Hay/Fodder)	Kg	241,059	10	2,410,592	482,118	1,928,474	24,724
5	Animal Product/Dairy	Kg	1,035,000	40	41,400,000	8,280,000	33,120,000	424,615
6	Fuel Wood	Kg	89,728	10	897,283	179,457	717,826	9,203
7	Stone Cutting	Cu. M	6,480	500	3,240,000	648,000	2,592,000	33,231
Total					**83,624,636**	**16,724,927**	**66,899,709**	**857,689**

**Note: For the purpose of this table, one US dollar was calculated as equivalent to AFN 75*

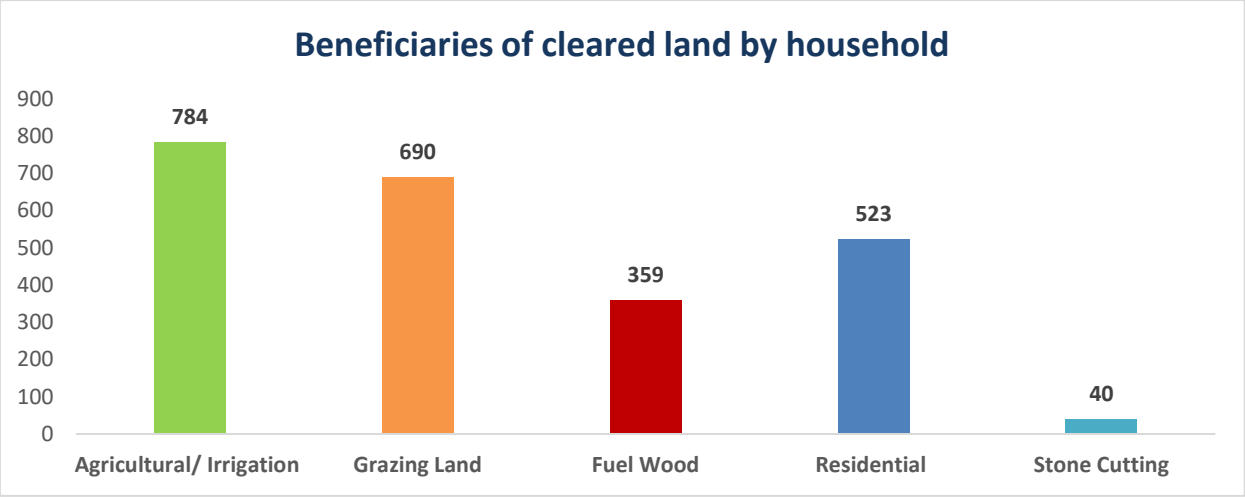
[1]*Net value is calculated as total gross value minus total expenses of product/yield, including seeds, chemicals, irrigation, tractor fees for/ground preparation, expense on Animal hay/medicine, wage of sheep herds, laborer wage and other expenses.*

Table-8: Beneficiaries of cleared lands by household

S.#	Land/Facility Type	Number of households[1] benefitting from the cleared land	Remarks/Description
1	Agricultural/ Irrigation	784	2,300 livestock feeding from cleared agricultural lands
2	Grazing Land	690	4,600 livestock feeding from cleared grazing lands.
3	Fuel Wood	359	In addition, grazing of animals, 89.7 metric ton fuel wood collected from cleared grazing lands over a year
4	Residential	523	523 houses constructed on cleared lands
5	Stone Cutting	40	6,480 cu.m stone extracted over one-year period from cleared land located in the mountains area.
6	Road	Construction of asphalted road with 6 Km length and 6 m width on the cleared land, which connects Mahmud-e-Raqi, the provincial capital with Nijrab and Tagab districts. This portion of road improved access to markets, reduced travel time and fuel consumption.	
7	Schools	Construction of two schools on cleared land and access to ten schools in 12 surveyed villages, provided education facilities for, 6,390 students (4,260 boys and 2,130 girls).	
8	Clinic	Construction of a clinic on the cleared land in Kuhnadeh village, provided basic health services for the villagers	

[1]*Note: Family with an average household size of 7 persons.*

Graph-2: Beneficiaries of cleared land disaggregated by Outputs:



Economic impact of reducing injury and death:

The effects of mines/ERW impact, directly and indirectly, human capital – through injuries and fatalities from mine/ERW accidents. In the case of mines/ERW, the 'dread' dimension includes fear of injury and fatalities from mine/ERW accidents which are seen as threatening to communities. The national database shows 86 casualties in total from the 12 communities but based on information provided by the villagers there were 176 casualties before demining, while none of the communities reported civilian casualties on the cleared areas since release. The absence of death and injury after demining, constitutes compelling evidence that risks are removed.

This survey confirmed that in the 12 villages visited no civilian casualties occurred after the clearance.

This validates that demining work has delivered a substantial humanitarian benefit in terms of reduced pain and suffering. There is also a significant economic benefit as the reduction in injury and death has led both to reduced medical and care costs, and to increased productivity. If the contaminated areas were not cleared, similar mine/ERW-related accidents may have happened to people and their animals.

Reduction on civilian casualties following clearance operations:

The people surveyed recalled in great detail those who were killed or injured due to mine and ERW explosions in their villages. According to the information collected from all the 12 communities, in total, there were 176 people injured or killed.

Based on the information given by the villagers, no accidents happened in the areas cleared by demining teams after the release of the land and also no one indicated that they found any

mine or ERW after the clearance was completed.

There was some difference in the number of mine/ERW victims between what was told by the villagers and the recorded data in mine action database. Table below demonstrates the differences.

Table 9: Victims before and after clearance

S#	Village	Victims before clearance according to IMSMA database	Victims before clearance according to villagers	Victims after clearance
1	Chashma-I-Mazullah	0	6	0
2	Gul Bahar	1	8	0
3	Muri	7	12	0
4	Kuhnadeh	1	16	0
5	Kham	0	11	0
6	Shawani	0	10	0
7	Badamali	0	7	0
8	Mahmud Raqi	70	81	0
9	MulaFaqir Khel	3	5	0
10	Shokhi	0	6	0
11	Sherwani Bala	4	8	0
12	Bagh Khana Bala	0	6	0
Total		**86**	**176**	**0**

The table shows significant discrepancies between the mine action database and villager's figures. In all of the cases, figures provided by the villagers are higher than those provided by the national database. This discrepancy may be due to several factors, including the date at which the data is given, the inaccuracy in the recollection and confusion over the area underestimation.

Impacts of demining on development:

The successful development of assets freed by demining depends on good leadership in the communities, and the capacity of communities to gather information, to consult different sections of the community, to make informed, socially-responsive decisions, to write proposals, and to follow these through with the degree of financial management and documentation that would be required by donors. These skills are lacking at present in most communities, and this "community empowerment" is seen as both an opportunity for donors, and also a pre-requisite for sustainable development at the community level.

Through the data collected by the survey teams, many observations on the livelihood and development outcomes after clearance were identified. The findings of the livelihood teams encouragingly point towards tangible livelihood gains being made by households after the clearance of areas blocked by mine and ERW contamination.

The 12 villages visited faced different threats from landmines and ERWs. Landmines of different types (AP and AT) have been used since the Soviet invasion of Afghanistan. Many villages have been affected by the presence of landmines since the early 1980s. In most cases, clearance started 26 years ago, and in several of the villages, clearance had only recently been completed.

Example of a timeline: Shokhi village (according to community members)

1984-Mines planted by Soviet forces and Mujahidin
1986 - First accident happened to the localpopulation
1993 -Survey and demining started
1993 - Mine risk education
1997 - The cleared area used as grazing, agricultural land, residential and irrigation system.
2019 - Still there are mine contaminated areas in the village

The impacts of demining for each of the cleared land type are summarized in Table 10.

Table-10: Cleared lands socioeconomic impacts on communities:

S.#	Land/Facility type	Outcomes	Impacts
1	Agricultural Land	- Income increased - Employment opportunities enhanced - Cost of agriculture production reduced - income generation and opportunity enhanced - More production of livestock and crops - Disaster risk reduced - Human and asset lose control	- Social activities improved - Economic conditions improved - Peaceful and stable community in long terms - Socio-economic development of the local community - Environmental rehabilitation and asset creation
2	Grazing Land	- Income increased - Food security increased as more food was produced, including meat and dairy - Dairy cost of production reduced - More production of livestock - Disaster risk control and well manage pastures	- Social activities improved - Economic conditions Improved - Sustainable social and economic activities in long terms - Peaceful and stable community in long terms - Socio-economic development of the local community
3	Irrigation System	- Improved irrigation system in the community - Agriculture system and sector improved, - Water management system improved, - Barren land rehabilitated and turned into a fertile agriculture land, - Disaster management and asset creation	- Price of the key harvested crops reduced, - Water shortage for cultivated land reduced - Cost of canal maintenance reduced - Irrigation rehabilitation - Empowering local community
4	Access Roads and Connectivity	- Transportation facilities improved, - Approach of marketers improved	- Social contacts of the communities improved. - Economic condition improved. - Life standard with several accessories

		- Access of donors and project facilitators improved. - More jobs and business facilities created. - Access to urban and public facilities.	improved. - Transportation cost from and to the community reduced - People transfer more fruits and vegetables to the market for sale. - Transportation business increased.
5	Residential and public facility	- Resettlement of returnees - Increased number of educated people in the community - Literacy awareness improved - Jobs and business careers improved - Developed educational institutions in the community - Medical expenditure reduced	- Peaceful and stable communities. - All segments of the life improved - Socially strong community. - Healthier and clean environment. - Developed and modern Society. - Access to the nearest school eliminated the transportation cost of the learners. - Free school supplies for learners reduced the burdens of books and stationery. - Cheaper medical treatment for the people.

Asset use following clearance & development priorities of the communities:

According to Afghanistan mine action national database, **12,561,853** square meter area has been cleared by demining teams in 12 communities visited. As a result of clearance operations, in total **3,211 AP** mines, **28 AT** mines, **5,496 UXOs** and **6,515 SAA** were found and safely destroyed.

Once the threat of mines/ERW was removed, community members were theoretically and practically able to use the assets cleared for productive purposes. During focus group discussion conducted separately with men and women of the communities, they identified their main development priorities, which are summarized in the table below. In addition, the people in communities where there is still mine/ERW contamination expressed the wish in clearance operations being conducted in their areas.

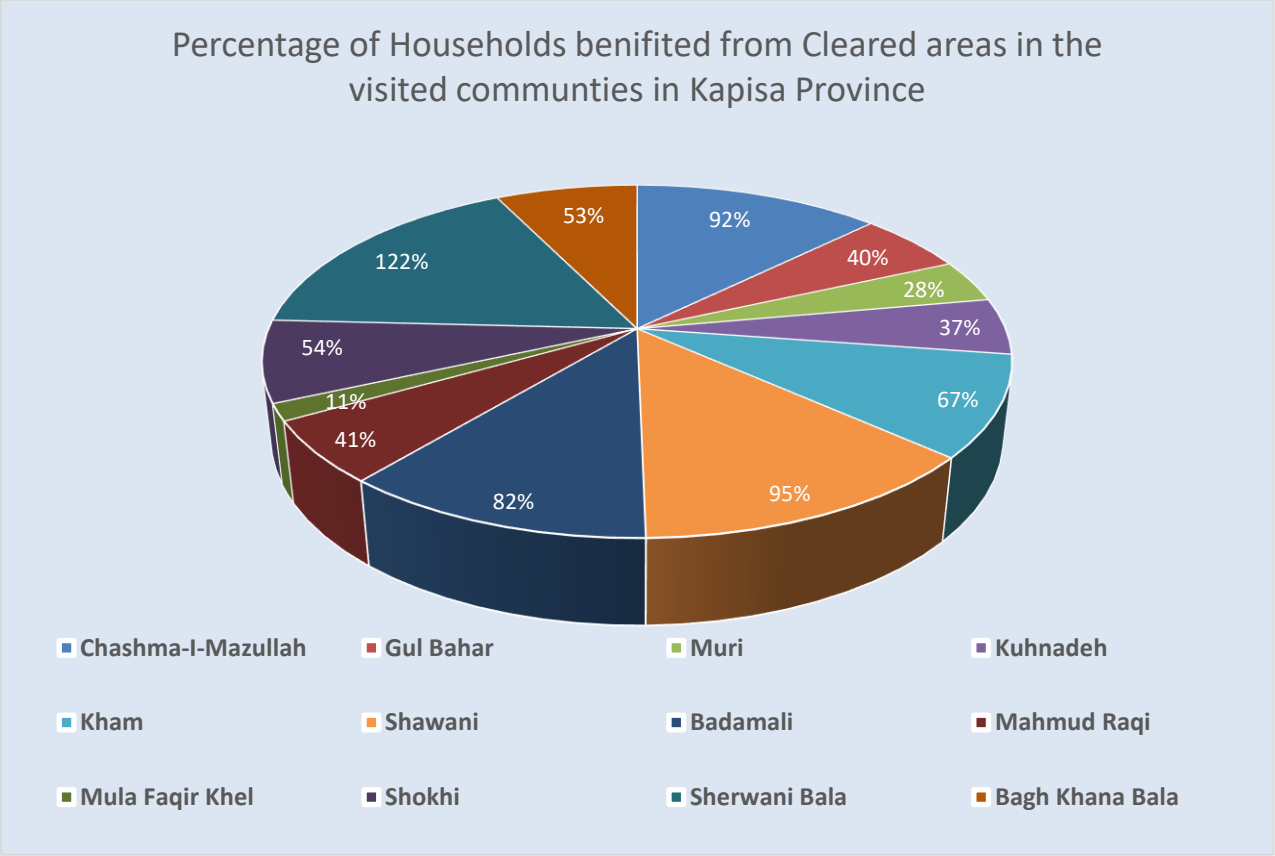
Table-11. Main development priorities of communities visited in Kapisa Province:

S.#	Community	Total Community Household	# of Household benefit	%age of households Benefit	Cleared land used for	Main Development Priorities	
						Male	Female
1	Chashma-I-Mazullah	170	156	92%	- Demined land brought back into productive agricultural use. - Grazing of animals/woods collection. - Building houses and mosque.	- Safe drinking water - Protection wall for flood control - Electricity	- Bakery - Vocational training (tailoring, embroidery &knitting). - Poultry farm
2	Gul Bahar	150	60	40%	- Demined land brought back into productive agricultural use. - Irrigation system. - Grazing of animals/ wood collection. - construction house.	- Safe drinking water - Asphalt road to village - Mosques construction	- Bakery - Vocational training (tailoring, embroidery &knitting). - Deep well for safe drinking water

3	Muri	500	141	28%	- Grazing of animals/ wood collection. - Residential. - construction of schools. - Stone cutting	- School building for boys and girls - Asphalt road - Health Clinic	- Health Clinic - Electricity - High school building for girls
4	Kuhnadeh	300	112	37%	- Productive crop lands. - Grazing of animals/ wood collection. - Residential. - Construction of school &clinic	- Water retention dam - Animal husbandry farm - Agricultural income generation projects	- Safe drinking water - Asphalt road inside village - Electricity
5	Kham	220	147	67%	- Productive crop lands. - Grazing of animals/ wood collection.	- School - Deep well for safe drinking water - Health Clinic	- Health Clinic - Electricity - Deep well for safe drinking water
6	Shawani	270	256	95%	- Productive crop lands. - Grazing of animals/ woods collection. - Residential.	- School - Deep well for safe drinking water - Health Clinic	- Building for girls' school - Health Clinic - Electricity

7	Badamali	200	165	82%	- Productive crop lands. - Grazing of animals/ wood collection.	- Deep well for safe drinking water - Health Clinic - Protection wall for flood control	- Health Clinic - Asphalt road inside village - School building for girls
8	Mahmud Raqi	600	246	41%	- Grazing of animals/ woods collection. - Productive crop lands. - Access road.	- Asphalt road inside village - Safe drinking water - Vocational training (tailoring, embroidery &knitting).	- Mobile phone Antenna - Deep well for safe drinking water Building for girls' school
9	Mula Faqir Khel	200	22	11%	- Grazing of animals/ wood collection. - Productive crop lands.	- Health Clinic - School building for girls - Asphalt road to village	- Electricity - Health Clinic - Asphalt road to village

10	Shokhi	1,000	640	64%	- Grazing of animals/ woods collection. - Productive crop lands. - Residential. - Stone cutting	- Asphalt road to village - Protection wall for flood control - School building for girls	- School building for girls - Vocational training (tailoring, embroidery &knitting). - Poultry farm
11	Sherwani Bala	300	266	89%	- Grazing of animals/ woods collection. - Residential (Township) - Road. - Extension of power transmission line.	- School - Safe drinking water - Health Clinic	- School for girls - Bakery - Vocational training (tailoring, embroidery &knitting).
12	Bagh Khana Bala	350	185	53%	- Grazing of animals/ woods collection. - Productive crop lands. - Residential houses	- School building for boys and girls - Asphalt road - Health Clinic	- School building for girls - Asphalt road - Health Clinic
Total		**4,260**	**2,396**	**56%**			



Development opportunities arising from mine action:

In all villages, the people highlighted the importance of mine action work in facilitating further development opportunities, they also stated that mine action is a pre-requisite for implementation of any other development projects.

Clinic is built on the land cleared in Kuhnadeh village

The blocked assets freed by land clearance include crop and grazing land, orchards, land for housing, and other local infrastructures and services such as schools, mosques, clinic, access to construction materials, roads and strategic structures such as electricity pylons and etc.

The Mine Action has also facilitated the secure return of returnees and IDPs back to their villages. Through efforts made by MRE teams, IDPs and returnees were informed about the presence and dangers of landmines and ERW. After the clearance, IDPs and returnees have been able to rebuild their communities.

The clearance of previously contaminated areas resulted in people having access to livelihood sources, like farming, collecting fuel wood, tending animals, and building houses.

Based on interviews conducted with women; apart from enabling the development possibilities, the clearance has provided peace of mind to community members, especially for the women. When describing the situation before demining, people in the communities talked of their fear of injury and fatalities from mine accidents. According to villagers, the most valuable outcome of mine action is eliminating the fear and concern of being killed or injured while working in the agriculture lands, tending animals and walking around.

The construction of 523 new houses on cleared lands, two school, a clinic and construction of asphalted road are the prominent signs of infrastructural development as a result of mine action work.

"At the time of road construction and extension of the power transmission line, the first question was about the problem of mine and ERW and we told the construction company that our village is cleared of mine and ERW by demining teams. If our village was not cleared of mines, we wouldn't have been able to have the transfer of electricity to our village".
Residence of
Sherwani Bala Village

In Sherwani Bala village, the people were very grateful to the work of deminers and mentioned that apart from being able to walk fearlessly in previously contaminated agricultural, infrastructural, and residential areas, the work of mine action will enable them to bring electricity to their village.

Land value:

This survey focused on community level and perceptions of benefits, based on the evidence land value has increased significantly after the clearance in all communities. Construction of houses, mosques, clinics, schools, establishment of productive agriculture, and by the installation of facilities such as electricity and construction of canals and roads are the factors that further increases the value of land in the surveyed areas.

The simplest way to assess the purely economic benefits is by collecting data on land values. The market value of a piece of land should approximate the expected value of discounted economic benefits flowing from that land in the future. People in all the communities mentioned that land values increased substantially after demining.

The increase of land value is most prominent in Sherwani Bala village of Nijrab district where the contaminated land was used for building new houses.

In Sherwani Bala village 790,280 sq m land was cleared of mine and ERWS. The locals in Sherwani Bala village stated that the cost of one Jerib (2,000 sq. m) land was 40,000 AFN ($530) in a grazing land which was contaminated by mines and ERWs. But after the areas were cleared of mine/ERW, and the plan for building new houses as part of a township (for teachers and disabled people) project; the cost of only 400 sq. m land allocated for one family reached to 40,000 AFN ($530) and if we calculate it for one Jerib (2,000sqm) then it gives a figure of $ 2,640/Jerib.

The total size of the 351 houses (each 400 sq. m) indicates that 140,400 sqm (70 Jerib) area is allocated only for construction of the houses and the total cost will reach to $184,800. While apart from houses, there will also be construction of schools, clinics and parks too.

Cost-Benefit analysis of freed assets:

The assets released by demining include agricultural and grazing land, land for housing, irrigation system and other local construction (mosques, schools, clinics etc.), access to construction materials, watercourses, roads and strategic structures such as extension of the power transmission line for electricity and energy system in the cleared land and etc. Most of these have a tangible economic impact at community and/or national levels in the short, medium or long-term.

As with previous mine action livelihood survey conducted in Afghanistan, the survey teams collected insufficient quantitative data to allow a proper economic analysis of the mine action activities in these 12 communities. Still, some partial analysis can be done, which provides insight into the magnitude of benefits and complements the qualitative data obtained through the other survey tools.

Based on average current cost per square meters ($0.50/square meters) of demining in Afghanistan, about USD 6.3 million, has been spent in demining of 12,561,853 square meters minefields in these 12 villages. A further USD 34,130 will be required to clear the remaining 68,259 square meters of contamination in the 12 villages surveyed entirely. Ignoring the fact that the size of the hazards in each of the surveyed villages is different, it shows that the cost of clearance of an “average community” is of the order of USD 526,255.

Cost of survey:

This survey cost was approximately USD 11,000. While the estimated cost of demining in the 12 communities is about USD 6.3 million, and another USD 34,130 is needed for the clearance of the remaining hazardous areas left in these communities. Thus, the survey represents approximately 0.17 per cent of the demining costs.

IX- Case studies

Below are some case studies which provide a snapshot of the situation after clearance and the outcome of the demining work.

Case study-1: Shokhi village, Mahmud Raqi district of Kapisa Province – Multiple benefits (productive agriculture land, grazing land and Stone Cutting): Shokhi is a large-sized village close to the Mahmud Raqi -Nijrab road, located at about 16 km to the southeast of Mahmud Raqi city. It has approximately 1,000 families with an average household size of 7 members, of which 64% have directly benefited from using the cleared land. The village has shops, a community center building, high schools (separate schools for girls and boys), mobile phone coverage and other amenities. The area was originally mined during 1980s by Soviet troops, because this village was one of the several villages being at the forefront of fighting between Mujahideen and the Soviet troops. A number of heavy fights between both parties resulted in severe destruction of the village and migration of its inhabitants. There were 34 minefields, totaling nearly 4.2 sq. km. These minefields were located close to the village on agricultural, residential, grazing/fuel collection land, and access paths. In these minefields cleared, 546 AP mines, 8 AT and 1,965 UXO and 767 SAA were found and safely destroyed by demining teams. There are still 2 hazardous areas remaining to be cleared in this village. The villages expressed their concerns about these hazards and requested the survey team to convey their message to DMAC management in order that their village's remaining hazards are taken in to account for clearance in the years to come.

According to villagers, before clearance several mine/ERW accidents happened to villagers and to their animals, in total 6 civilians were killed and injured, furthermore 127 animals (cows, sheep, goats) were also killed and four vehicles/tractors were destroyed. But after the area was cleared of mines/ERWs, no accidents have been recorded. Haji Abdul Aziz Khan, a resident of Shokhi, said, "*we have large agricultural and grazing lands and these were the main source of income for our village, but we weren't able to make any productive use of our lands due to the presence of landmines/ERW in the past. We weren't able use our land for agriculture and animals grazing. He added on Demining has positively impacted our economic development. After demining operations, agricultural lands have become available for cultivation and tending animals. There is an improvement in security and stability of the area, before young*

boys were threatened by the existence of mines, but after demining operations started in our village, there is improvement in the economy. Currently the local economy depends on cultivation of crops, livestock raising (mainly by women and children), wage labor outside the village and some petty trading (mainly by men). Cereal and livestock production are sufficient to cover household needs and the economic returns from these are good. He acknowledged the significant support of MAPA in demining activities and said that the benefits from demining have been the greater utilization specifically access to grazing land. We are also feeling more secure because there have been no mine explosions since demining. In addition, we have benefited from stone collection for house construction and trading".

On portion of cleared land, a school has been constructed which provides education facilities for 1,500 students (1,000 boys and 500 girls). In addition to that, due to the expansion of village 104 houses have been built on the cleared lands. Furthermore. 20 hectares of barren land is rehabilitated and turned into a fertile agriculture land as a result of clearance of a contaminated canal from mines/ERWs and now we cultivate wheat, vegetable and corn in the land.

Case study 2: Sherwani village, Nijrab district of Kapisa Province- Development (Residential areas and land value, road and power line):

Sherwani is a medium-sized village close to the main Mahmud Raqi -Nijrab road, located at about 35 km to the southeast of Mahmud Raqi city in a strategic location. Due to its strategic location, this area was on the front line of fighting during Russian time and internal conflicts' 1990, a number of heavy fights happened between different groups and the village has fallen several times under the cross control of different groups. It has approximately 300 families with an average household size of 7 members, of which 89% have directly benefited from using the cleared land There were 10 minefields totaling nearly 0.8 sq. km areas and were situated fairly close to the village on grazing/fuel wood collection land and near to road. In all the area cleared, a total of 154 AP mines and 2 UXO were found and destroyed by demining teams and villagers are very happy about that and about the performance of the demining teams.

During the focus ground discussions both men and women were asked how they are using the cleared land. The immediate answer we got was about construction of new houses in cleared land. According to villagers after clearance completed, they were using the cleared land for

tending their animals, but now based on government plan the construction work is ongoing on a new townships called "teachers & disable people" based on which 351 new house plus green areas, masjids, schools, clinics and safe drinking water through pipe scheme is going to be constructed in demined land. As the community expand due the increase of population and settlement of refugees and IDPs, without mine/ERW clearance the houses could not have been built. According to locals in Sherwani village the cost of one Jerib (2,000 sq. m) land was 40,000 AFN ($530), but when the areas cleared of mine/ERW, and now there is plan for building houses as part of a cityhood project; the cost of only 400 sq. m land allocated for one family reached to 40,000 AFN ($530) and if we calculate it for one Jerib (2,000sqm) then it gives a figure of $ 2,640/Jerib, which represent a 5-time increase.. The total size of the 351 houses (each 400 sq. m) indicates that 140,400 sqm (70 Jerib) area is allocated only for construction of the houses and the total cost will reach $184,800. While apart from houses, there will also be construction of schools, clinics and parks too.

Haji Abdul Mutalib, a resident of Sherwani village, said "Landmines and other unexploded ordnance have killed and injured 8 civilians in our village, moreover, we have lost over 50 animals due to the same reason. He added the clearance operations paved the way for implementation of a development project (construction of asphalted road with 6 Km length and 6 m width), which connects Mahmud-e-Raqi, the provincial capital with Nijrab and Tagab districts. This portion of road improved access to markets, reduced travel time and fuel consumption. The people travel with reduced sense of fear and also transport their agricultural products in lesser time with less cost of transportation. Some of the village people worked as daily wage workers for the road construction company. He said beside of that extension of the power transmission line on cleared land, which connected Mahmud-e-Raqi, the provincial capital with the hydroelectric dam Naghlu Surobi, located in south of Kapisa, this improved access to electricity, reduced the need for fuel wood and the use of generators and overall had a positive environmental effect".

Further portions of the cleared land were used for tending animals and collection of fire woods.

Case study 3: Gul Bahar village, Hisa-i-Awali Kohistan, Kapisa Province – Return to Farming:

Gul Bahar is a medium-sized village with approximately 150 families with an average household size of 7 members, located at about 18 km to the North of Mahmud Raqi city. The village has shops, a community center building, high schools (separate schools for girls and boys), mobile phone coverage and other amenities. The mine/ERW contamination restricted the residents from collection of fire wood and other natural resources and refrained them from constructing buildings because they feared of accidently detonating mine/ERW. People made long journeys to avoid contaminated areas to get to market, access healthcare and for the children, to get to school. Eight hazardous areas, covering about one square kilometer area, were cleared of mine/ERW. Following the clearance operations, in total, 818 AP mines, 474 UXO and 933 SAA were found and safely destroyed by demining teams.

The clearance has enabled the population to farm their lands efficiently in order to grow enough food to support their families, graze livestock and to access other facilities without concern for their safety or that of their children. A school building was built and children report that they are able to play and take direct routes to school. Their gardens produce enough vegetables for the consumption and sale purposes for the villagers, which ultimately have positive impact on the living condition and economy of these villagers.

According to villagers, before clearance 8 people were injured/killed and around 25 of their animals (sheep & goats) were killed due to the mine/ERW accident. But after these mines/ERWs were cleared from their village, no mine/ERW accident were recorded in the mentioned village.

The clearance operations of mine/ERW contaminated areas facilitated the way for the construction of about 4 km long

water irrigation canal.

The Shura head of Gul Bahar Village stated, "Our village's economy depends on agriculture which suffered a lot before the construction of the irrigation canal, our fertile lands and gardens turned into barren deserts due to contamination of the irrigation system. But today we are very happy that the irrigation canal has been built for the community. I am grateful to Mine Action Programme of Afghanistan for the clearance of mines/ERWs from our village and MRRD that made efforts in the construction of the canal. As a result of the irrigation canal revitalization, most of our social and economic problems have been solved to a great extent."

- 100 hectares of barren land rehabilitated and turned into a fertile agriculture land as a result of clearance of a contaminated canal from mines/ERWs and now we cultivate wheat, vegetable and corn in the land.
- Our living standards improved through the income generated from the yield of crop.
- We relinquished cutting of green trees of forest and maintained beauty of the nature against pollution.

- While there was no canal, people in the community fought over water and with construction of this canal all these social problems are solved.

Case study 4: Shawani village, Koh Band district, Kapisa province-Before and after mine clearance:

Shawani is a medium-sized village with 270 families and around 1,890 inhabitants, located in a remote mountainous area, at about 48 km to the Northeast of Mahmud Raqi city. The area was originally mined because military camps/out posts was positioned on the village land during the mid-1980s. The landmine and ERW problem had a serious impact on access to critical resources, blocking access to grazing land, agricultural land and water sources for drinking and irrigation. During the period when the mines/ERW were there, some exploded, killing/injured ten people and over 100 livestock from the village at different times. The areas was a battleground during the Russian time and internal conflicts 1990s, so it resulted in the migration of its around 80% inhabitants outside of the village and country, because the village assets were blocked by mine/ERW and negatively impacted the areas on hillsides previously used for grazing, firewood collection and building stone; min/ERWs around water sources or water channels blocking access to water for domestic and agricultural use as well.

According to national mine action database, out of 29 recorded mine contaminated areas, 28 hazardous areas covering about 1.3 square kilometers area have been cleared of mines/ERWs, that resulted in the disposal of 236 AP mines and 4 UXOs. There are still one hazardous area remaining to be cleared in this village. The villages expressed their concerns about these hazards and requested the survey team to convey their message to DMAC management in order that their village's remaining hazards are taken in to account for clearance in the years to come.

The Shura head of Shawani village Sultan Mohammad said *"Our village's economy depends on fuel wood collection and raising animals which suffered a lot due to the contamination of the hillside grazing land. He said the deminers came to the village a while ago and camped here for almost two yeasr. They were removing mines/ERW in the mountains/hillside and agricultural land. We used to see them always and used to help them in identifying locations of mines. Following that, we were told that these areas were cleaned from mines. After this, we started feeling safe and secure. We started herding our animals without fear for the animals and for ourselves. We also started collecting fuel wood from the same area. The wood of this area is considered the best fuel wood. People from neighboring villages also come to collect fuel wood from our area. He went on to say demining operations enabled water harvesting from hillsides above cultivated land helps to enhance crop and fodder yields and reliability. Our village topography and sub-surface are appropriate, these hillsides could also be used for short-term storage for supplementary irrigation of fruit trees and crops. On above hillsides the villagers installed water tanks for drinking water that would then flow by gravity to village. Moreover, a number of our village people benefited from the employment in the mine action sector which provided regular inflow of salaries."*

Some of the cleared land is used for:

- Water collection and storage on cleared land for irrigation and drinking water.

- 21 houses have been built on the cleared land.
- A portion of cleared area is used for stone cutting.-A portion of cleared area paved the way for the construction of a retention dam, this retention dam will reserve water on its upstream side during the excess rain fall, snowmelt and flood period, and will be released gradually at a safe rate as and when it is needed for irrigation.

Further portions of the cleared land were used for crop agriculture

During the focus group discussion villagers told us that they see unknown hazard items (spot ERW) in village where people are walking every day. In response to a question on why they don't report these to MAPA hotline number, they replied that they weren't aware of this telephone number. While according to mine action IPs, this number is being shared with the villagers by survey, demining or MRE teams. Based on the information provided by locals about location of spot ERW, a nearby MAPA partner was deployed to this village and destroyed the spot ERWs.

X- Perception of safety

It is important to draw a distinction between an assessment of risk based on the presence of mine/ERW and on the number of accidents actually occurring, and local perceptions of risk and the behavior associated with these perceptions. The evidence from this survey is that clearance is almost completely effective in eliminating the risk of explosion from landmines and ERW.

When describing the situation before demining, people in the communities talked of their fear of injury and fatalities from mine/ERW accidents and of feeling permanently frightened and concerned about the safety of children. A reduction in this general fear and a feeling of relief was a notable outcome of the demining activity. The clearance operations have enabled the residents of communities to have full access to their livelihood resources, farm their land efficiently, graze livestock and access other facilities without concern for their safety.

The table below shows the explosive devices that were found and safely destroyed by demining team in the 12 villages surveyed. This is a clear fact that the work of mine action clearance is justified as a lifesaving operation. If the contaminated areas not cleared yet, then the accidents of mines/ERWs may happened on people and on their animals like before.

Table-12: Devices destroyed in the villages visited by the survey teams in Kapisa province.

Village	Devices Destroyed				Total
	AP	AT	UXO	SSA	
Chashma-I-Mazullah	224	11	167	1,227	**1,629**
Gul Bahar	818	0	474	933	**2,225**
Muri	57	0	296	235	**588**
Kuhnadeh	384	0	99	3,330	**3,813**
Kham	28	0	75	0	**103**
Shawani	236	0	4	0	**240**
Badamali	111	3	432	23	**569**
Mahmud Raqi	627	6	1,977	0	**2,610**
MulaFaqir Khel	2	0	3	0	**5**
Shokhi	546	8	1,965	767	**3,286**
Sherwani Bala	154	0	2	0	**156**
Bagh KhanaBala	24	0	2	0	**26**
Grand Total	**3,211**	**28**	**5,496**	**6,515**	**15,250**

This survey recorded no casualties due to mines/UXO after clearance in the released land. Demining output resulted in quick use of the freed assets by men and a great feeling of relief on the part of women. While men emphasized on the productive opportunities made possible by clearance plus the infrastructure installed to date; women emphasized on the safety and recreational benefits that give them peace of mind and a better life for their men and children.

"Clearing land has allowed an improvement in recreation, particularly for children who can now play in greater safety to the relief of their mothers they are safe".

<u>Women's perceptions of safety</u>:

The women interviewed seemed very grateful to the work of the demining teams saying that

"D*emining had brought them freer and safer access to areas*

for grazing and fuel wood, benefiting those carrying out the herding and fuel wood collection. Other benefits were the clearance of roads and paths, which has improved communications for the community and restored access to the market". "The safety of women and children has been particularly enhanced by clearance, as they are often the shepherds caring for the livestock"

The women in the villages, where no hazardous areas are left, shared with us their views and feelings as follows:

- Clearing land has allowed an improvement in recreation, particularly for children who can now play in greater safety to the relief of their mothers.
- Interviewed women in Badamali village pointed out that they “feel safe and secure”.
- Interviewed women in Mahmud Raqi village pointed out that clearance has meant that they can carry out their tasks and responsibilities such as bringing water and collecting firewood safely.
- A group of interviewed women in Shokhi and Kham villages highlighted moving around freely and safely, sending their children to school, and fetching water from the canal.
- Many women pointed out that the work of demining gave us peace of mind, when our children go out of the house or our husbands go to work, we feel relaxed because they are safe and we do not worry about our children having accidents.
- One of the most valued benefits from demining expressed by women was the enhanced feeling of safety and security for themselves and their families.

But in those villages, especially in Shawani, where there is still recorded mine contaminated areas, the women said they still have concern about their safety but more so about the safety of their children and men who go out for work and other activities on daily basis.

We do not feel comfortable when our children and men go out for work or when we collect firewood, fetch water or graze the animals, because there are still mines in some of the areas.”

Men receive more information directly from demining teams about the demining process and the areas that have been cleared. They are in the best position to judge safety and are generally more confident than women about safety.

The mine-action (survey, clearance and MRE) teams are well respected by community members, the communities expressed that they appreciate the hard work of deminers and wish them more successes. In those places where demining is on-going, the villagers are very keen to continue supporting the operations until everything has been cleared.

XI- Mine/ERW Risk Education

There was a questionnaire about MRE with the survey teams to know if the community received MRE and, in particular, what should be done if any suspicious device of any kind is found.

When asked about the negative impacts of mine/ERW, some groups of men, women and children stated that they know that mines and ERW created many problems in the villages and the mine/ERW damaged different livelihoods, assets of the communities.

Table 15: Over all summary of MRE situation in the surveyed communities

Women	Girls	Men	Boys
Women know about the danger of mines and ERW threats, but access to women in communities still seems to be difficult compared to men, boys and girls. There were still some women that didn't receive MRE. Women mostly received MRE through the female MRE team and family members.	Most of the girls have been aware of mine/ERW threats, in particular school girls, but there were still some girls that stated that they didn't receive any MRE. Many girls were informed of safe behavior and who to report while facing any dangerous items. Girls mostly received MRE through MAPA IPs and school teachers.	Men were mostly aware of the threats posed by landmines and ERW. Men have been informed about who to report and where the dangerous objects can be found. Men received MRE through MAPA IPs.	Boys were mostly aware of the threats posed by landmines and ERW. Boys, mostly youth, have been aware of risky behaviors and have mostly received MRE through their parents, MAPA IPs and school teachers. MRE was more useful for boys based on their knowledge. Boys shared MRE messages and leaflets with their family members and know about danger signs and to avoid entering destroyed and abandoned houses.

Information obtained through the daily clock (daily activities) and seasonal calendar tools reveals that men and women, boys and girls are differently exposed to risks from landmines/ERW, especially in spring, summer and autumn. However, winter is a quiet time when all are mostly at home, so they are less exposed to landmine/ERW risk. From spring through to autumn, men are more engaged in farming activities, grazing of animals, fuel wood collection than are women, and also in marketing and purchasing outside the village, which involves travel and possible risk from landmines/ERW. Boys are also involved in tending the animals, and, like men, are more exposed to risks from mines and ERW.

While men/boys continue to be more at risk, there is a need for MRE for their personal safety. Women also require MRE to give them a sense of safety and security.

Men, boys and girls in all 12 villages said that they received MRE in the past years, but women in 7 out of the 12 villages said that no MRE was provided for them.

Table 16 below provides a breakdown of the MRE sessions provided based on IMSMA database for men, women and children, separately for each village surveyed.

Table 16. MRE for the surveyed communities based on IMSMA

Province	Village	Last MRE	Boys	Girls	Men	Women
Kapisa	Chashma-I-Mazullah	2012	2,542	1,260	402	292
Kapisa	Gul Bahar	2007	1,806	795	523	93
Kapisa	Muri	2012	3,647	1,892	827	18
Kapisa	Kuhnadeh	2012	1,063	450	94	0
Kapisa	Kham	2013	402	157	42	0
Kapisa	Shawani	2012	750	261	73	0
Kapisa	Badamali	2008	498	234	82	0
Kapisa	Mahmud Raqi	2012	18,553	7,932	4,520	465
Kapisa	MulaFaqir Khel	2004	995	379	205	4
Kapisa	Shokhi	2008	2,557	872	832	0
Kapisa	Sherwani Bala	2012	1,729	503	174	0
Kapisa	Bagh KhanaBala	2008	843	316	97	0
Grand Total			**35,385**	**15,051**	**7,871**	**872**

Based on information collected from the communities and also according to the mine action national database, MRE sessions were provided to men, boys and girls in all 12 villages surveyed.

The recent MRE for one village was conducted during 2013 and for 6 other villages during 2012. The other 5 villages received MRE between the years 2004 - 2008.

The level of MRE coverage for women appears to be less than the coverage for men and based on findings of the survey, women in 7 communities said that they did not receive MRE.

The children interviewed in 12 villages mentioned that they received MRE in their schools and it was found that they know about the dangers of mine and ERWs. They told us that they do not touch unknown items and instead inform their elders. The coverage of MRE appears not to be good during the recent years in the communities visited.

No sign of MRE posters was observed in the villages visited and also no one, including the head of village Shura, in most of the communities were aware of the MAPA **hotline number** to report about mine and ERW problem.

In some villages, the women said that they received the MRE messages from their husbands and children. For those who said they had received MRE, there was good recall of the main safety messages such as what to do if you find a mine or UXO, and what the different colors represent.

Most (96%) of the mine/ERW victims during interviews said that they have not received MRE and most of the victims (80%) said that the incidents happen during grazing of animals, farming and during fuel wood collection. Survey teams interviewed victims and families of killed victims in some villages and found that they have not received MRE in the past, but they said that MRE sessions were delivered to them after the incidents. This demonstrates reactive action rather than proactive actions. Looking at the total figures of locals who received risk education so far and continuation of civilian casualties, it seems that the quality of mine/ERW risk education needs to be reviewed to make sure preventive measures are taken in to account in this regard.

Table 17. MRE by district based on IMSMA

Province	District	Last MRE	Boys	Girls	Men	Women
Kapisa	Alasay	2010	577	128	106	0
Kapisa	Hisa-i-Awali Kohistan	2014	17,575	9,067	5,450	1,225
Kapisa	Hisa-i-Duwumi Kohistan	2005	2,258	540	360	225
Kapisa	Koh Band	2005	8,374	2,727	733	0
Kapisa	Mahmudi Raqi	2004	30,001	12,851	7,107	641
Kapisa	Nijrab	2017	13,853	6,041	2,916	1,335
Kapisa	Tagab	2007	10,898	656	7,677	537
Grand Total			**83,536**	**32,010**	**24,349**	**3,963**

XII- Victim Assistance

The survey teams asked about the mine/ERW victims in focus group discussion with men and women and to the extent possible had interviews with mine/ERW survivors in the 12 communities visited. Based on information from villagers, there were 176 mine/ERW victims in 12 villages visited. The survey teams interviewed 56 victims of mine and ERWs. Disabilities due to mine/ERW included damage to hands, arms, legs and eyes. According to villagers, both male and female survivors received free medical treatment in most cases. Such treatments depended on them being able to get to a suitable hospital, which is difficult for more remote villages, especially in the winter.

Ten women interviewed in nine villages were able to recall people in their communities who were landmine or ERW casualties and gave an estimate of the numbers of civilians killed or injured due to mine and ERW accidents. They confirmed that young men make up the majority of mine/ERW victims. The reason given for this is that men are more exposed through their work in the lands and also from high-risk livelihood activities. In Mula Faqir Khel, Sherwani Bala and Gul Bahar villages victims who were injured due to mine/ERW accidents recalled their tragic stories as follows:

Mine victims case studies:

Case study of Bibi Liluma – a 52 years old survivor from Mula Faqir Khel village:

Bibi Liluma was 34-years old when she was engaged in agricultural activity with her husband which was later demined, she heard a sudden explosion. When she recovered, she realized that she lost her left leg and got serious injuries on her right leg. She did not faint. She realized what was going on. She was evacuated to the Hospital, she also had burns in different parts of her body because her clothes caught fire after the explosion. The burns were severe and complicated her situation further. Upon arrival at the hospital, she saw several more severe cases than her case. She thanked "Allah J" for the harm she suffered from. “It could have been worse”, she said, her husband played a vital role in helping her recovery. He took care of all the costs such as medical treatments, she said following the incident, I cannot fulfill a lot of work and this caused a negative impact on my life. I have three sons and four daughters. Currently, I am a housewife and Martyr and Disabled Directorate granted me a disability card and allocated the salary of AFN 60,000 / year. My family members help me daily activities. Although I lost my leg, but I want to have a job and work, if the government or other aid NGOs provide some amount of money, I would be able to run tailoring and poultry farm and will extend my business, and through this

contribution I will support my family. The only external support she got was an artificial foot provided by the Red Cross. No training was given to her. Bibi Liluma is surviving with a high morale and good spirit for the past 18 years. She said “in my opinion, all contaminated areas should be cleared of mines/ERW and the MRE training courses should be conducted especially for women and children to prevent such mine/ERW accidents in future”.

Case study of Gul Afghan – a 35 years old survivor from Sherwani Bala village:

Gul Afghan was 15 years old at the time of the incident. He is now married with four children. Gul Afghan said “I became disabled due to the explosion of anti-personnel mine, while I was grazing animals on a hillside, which was later cleared by demining teams. I stepped over a mine, following that, I shouted for help. Later on, my brother arrived and he found me lying on the ground with blood. He asked the villagers for help as I was very seriously injured. It was then that my eyes and ears stopped working for a while, and when I was able to open my eyes and look at what had happened, I could only see blood everywhere. I was taken to the hospital by my brother and some villagers for treatment. After that, due to severe pain, I don’t know what else happened and I was down for the count. When I opened my eyes for the second time, I was in the hospital and noticed that I didn’t have my right leg anymore”. This made me very disappointed and I started to cry. Following the incident, I could not go to school and this caused a negative impact on my life. Previously I was student, but now I am a farmer and cannot fulfill a lot of work overall. I am suffering because of my disability and am disappointed and life does not have any meaning for me. My elder son and wife help me in performing daily activities”. The ICRC provided me with artificial limb and no other external support such as vocational training was given to me. I am farmer, but in the future, I want to open a shop, so that I don’t need to depend on others, I just need financial support in this regard.

"I am looking forward to assistance to begin my own business and generate decent income for my family. I do not know of any association helping mine victims or survivors. I personally request from the government to provide financial support to disabled people. It is my opinion that all contaminated areas should be cleared of mines".

Case study of Sami Khan – a 39 years old survivor from Gul Bahar village:

Sami Khan was 20 years old at the time of the incident. He is now married with five children. Sami Khan said “while I was collecting fuel wood on a hillside, which was later cleared by demining teams, I stepped over a mine, a huge explosion took place and as a result I lost my left leg. I shouted for help, later on shepherds arrived and they took me to a clinic for treatment. After the incidence, I felt depressed and dependent on others, previously I was

farmer, but now I am a tailor and cannot fulfill a lot of work overall. My youngest child is working now and grazing animals and that is the way we support ourselves; I have two brothers and they helped me during the initial days of my treatment but now my children are supporting me although they are too young to work and earn. I did not get any assistance at all except The ICRC provided me with artificial limb, I need anything to help create my own business and to be self-reliant.

"I also request the Mine Action Programme of Afghanistan to help in clearing the remaining areas from mines/ERWs and help in avoiding further injuries or killing of our people".

Support to Mine/ERW Survivors:

Based on the findings of the survey team, there were more men being victims of mines/ERWs then women in the communities.

Disabilities due to mines included damage to hands, arms, legs and eyes. According to villagers, both male and female survivors received free medical treatment in most cases. Such treatment depended on the victims being able to get to a service center, which is difficult for more remote villages, especially in the winter. Furthermore, those victims who lost their leg received artificial limb/s by ARCS.

Annex 3 is the list of the victims interviewed by the survey teams.

Following is the result of the interviewed victims:

- In total 45 (35 men and 10 women) victims and family members of eleven (10 men and one woman) victims who were killed as a result of mines/ERWs explosion were interviewed.
- 100% (all 45) mine/ERW survivors received medical assistance/support.
- 9% (3 male) receive financial support (60,000 AFN = 770 USD) per year from the Government.
- 91% % (32 male) received no financial support from the Government
- 10% (one female) receive financial support (60,000 AFN = 770 USD) per year from the Government.
- 90% (9 female) indicated that they have not received any financial support.
- 71% (25 male) indicated that they want financial support.
- 20% (7 male) indicated that they want vocational training and opportunities.
- 9% (3 male) indicated that they want financial support for poultry farm and opening of shop.
- 70% (7 female) indicated that they want vocational training and opportunities.
- 30% (3 female) indicated that they want financial support for poultry farm.
- 54% (19 male) are employed and the rest 46% (16 male) are unemployed.
- 100% (all 10 female) are housewives.
- 41% victims at time of accident engaged in animals grazing.
- 24% victims at time of accident engaged in agricultural activity.
- 18% victims at time of accident engaged in fuel wood collection.
- 17% victims at time of accident engaged in house construction, playing and walking/travelling.
- 96% victims indicated that they have not received MRE prior to accident.

"Some elderly victims interviewed mentioned that they do not wish the future they have for their children and others."

XIII-Prioritisation in Mine Action

The present priority-setting process:

In Afghanistan mine action planning and prioritization are based on collection, assessment, analysis and processing of information. This also includes identification of the most suitable course of actions to proceed, and formulation of the detailed method through which mine action tasks are to be carried out and appropriate response to be provided.

DMAC with technical support from the GICHD developed a five years National Mine Action Strategic Plan (NMASP)in 2016 and one of the main objectives of this strategic plan is to facilitate the development projects and engage with other sectors for better priority setting of mine action operations.

In Afghanistan, determining the priority of hazardous areas for clearance is based on specified impact indicators and scoring (please refer to Annex 4).

The impact scoring is determined based on blockages such as blocking water sources, housing area, agriculture, pasture land, road, canal and infrastructure. The size of mine/ERW contaminated areas and their distance from the communities, IDP camps, and health centers. Types of devices is also an impact indicator with certain scores. For each type of blockages, based on its value and importance, a specific scoring weight is assigned.

Impact classification:

The impact scores from the assigned criteria are summed up making a total score of hazards. The total scores given to hazards are classified into very high, high, medium and low impacts. Hazard that has total score of 16 and above is classified as very high impact, 11 to 15 is high, 6 to 10 is medium and 1 to 5 is classified as low impact.

Based on the impact classification assigned to each hazard and taking into consideration the geographical location of the hazard areas, the hazard area project list is prepared in which all the hazard areas are included in different demining projects. The number of hazardous areas in each project is different based on the location of the hazardous areas.

Since information gathering is a continuous process, the impact classification of the hazards is updated regularly based on new mine or ERW accidents/incidents, new requests from communities, IDP movement and camping, new development projects, impact and other mine and ERW related data.

Once there are funds available for any project, then the project hazard list is shared with the IPs for submission of a proposal, but first of all they need to do an assessment of the project hazard through liaison with the communities. Based on the requirement of the relevant communities, they can suggest changing the priority of hazards through providing justifiable reasons.

The men interviewed said "When the demining team came to the village, we provided all kinds of help to make their mission a success, as landmines and other unexploded ordnance have killed and injured a significant number of civilians in our village and blocked our livelihoods resources. Demining teams consulted with us and we showed them the mine and ERW contaminated areas. They cleared our residential areas, the agriculture land and pasture, and now all those areas are returned to productive lands and we are also building new houses".

Residence of Mahmud Raqi village

Survey findings on prioritization:

In all the communities visited, especially in the villages where there were recently demining projects, it was found that the community Shura was involved in selection of the priority hazard areas for clearance. They mentioned that prior to the start of the survey and clearance operations, the survey and demining teams visited the village Shura and consulted them about prioritization of the mine and ERW contaminated areas for clearance.

The men interviewed said "*When the demining team came to the village, we provided all kind of help to make their mission a success*."

The other example of involving the community in selection of the priority areas for clearance is the approach that was taken in the Shokhi village. The head of the village Shura, said "*that the demining team consulted with him a form in which their priority areas were selected, he said then I signed this paper". "We explained to them how we will use the area after clearance and what outcome the areas would have for us"*.

The focus group discussion held with men indicated that they are satisfied with the prioritization of the clearance sequence.

In nearly all cases, the villagers were very grateful to the work of demining teams, saying that they are brave people and worked hard and effectively. In some villages they stated that only demining teams have helped them with tangible outputs for their village, there were no other organizations that helped their community as much as mine action did. They wonder why demining is not followed up by implementing other development priorities of the communities.

Despite the evidences indicating that the demining teams were consulting the men in the communities on priority setting, it was found that none of the women in communities visited have been consulted and no one asked them which hazard areas has importance to them.

In several villages, women reported that they, or others in their village, did not know which areas had been demined nor, in some cases, were they informed that demining was taking place. *"We did not know when the area was demined. However, when we started seeing people going up and down the hill and we started seeing herders with their animals moving around in the area, we realized that the area was demined (shawani village).*

Women have been less well informed about clearance operation and the status of minefields than men and children, despite their multiple roles in community life.

The findings of the survey indicate that the priority setting process used by DMAC is good; however, this process needs to be further improved in terms of ensuring that women are also part of this process. The criteria used to select the contaminated areas for clearance are really useful for directing the focus of demining operations to hazardous areas which have prevented development of the communities and safe access of people to livelihood sources.

The findings of the survey reveal that, although the perception and preference of people on

priority of contaminated areas for clearance was different and based on the community need; overall the criteria respondents had in setting priorities were: reduction of risks, development of their community and safe access to agricultural, residential, road, water sources and grazing areas. These are all elements that have been considered in the priority setting criteria.

XIV-Quality Management

The Quality Management (QM) is to provide confidence to the beneficiaries, funding bodies, the mine action contractor(s) and the Government of Afghanistan that mine action quality requirements have been met and that cleared land is indeed safe for use. The current DMAC Quality Management process covers the accreditation of the demining organization, projects proposal review, monitoring, QA/QC, Post-Clearance Inspection and Balanced Scorecard. These processes further improved after the conduct of the previous mine action livelihood survey. Effective monitoring and controlling systems are essential for programme accountability and quality assurance, and for assessing the full value of outcomes and impact against the resources and money invested. But equally, they are fundamental to learning about processes and problems and thus, to improving performance (especially if performance is defined in terms of attainment of community and national objectives).

Location of spot ERW in Shawani village

In the past, although the Quality Management was successful in terms of monitoring and controlling the technical processes and outputs of mine action, there was no focus of QM on the outcomes and impact on communities.

But now the demining project proposal is evaluated to make sure the expected outcome and impact of demining operations is reflected in the IPs demining project proposals. This is being followed during monitoring, QA/QC and PDIA Surveys.

Survey findings on quality management:

The findings of the survey demonstrate that the community members (men and women) are generally confident that the area is safe after it was cleared by demining teams.

In the surveyed communities, although all recorded hazard areas cleared and the people were happy from the demining team work, during focus group discussions villagers in one community raised their concern about problem of spot ERW, which still can be found in some locations.

In Shawani village, the villagers showed the location of spot ERW to survey team. The team assessed the areas and as an immediate action asked MAPA partner near team for destruction of the ERW showed by locals. The MAPA partner team destroyed it and also conducted risk education for the subject community. According to villager the ERW was not in cleared land, rather it was in other location which initially was safe and, on the ground, there was nothing, but this ERW emerged when the people were excavating the ground based on their need.

In a war-torn country like Afghanistan finding all the spot ERWs underground without a record is very challenging and no one knows where it might emerge, therefore, possibility of such spot underground hazard items is expected everywhere.

Women

" The safety of our children has been particularly enhanced by clearance, as they are often the shepherds caring for the livestock, now we are confident that there will not be any danger for our children and men who leave the house to work in the field. Now we can carry out our tasks and responsibilities such as fetching water and collecting firewood collection easily and safely". "The demining of the area is a great relief to us and to our children. We feel safe and calm after an ordeal, which affected our lives for the past three decade".

It was found that the village where the spot ERW was identified by locals, had been covered by the MEIFCS teams. This raises a question of how successful the QM in monitoring of the MEIFCS teams and why these spot ERWs were left in the village where MEIFCS was completed?

They requested that mine action should find a solution for the problem of spot ERWs and also to increase provision of MRE to the communities, because Afghanistan is a war-torn country and possibility of spot ERW can be expected anywhere.

The result of focus group discussions with male and female members of the communities demonstrates that they are very grateful to the work of demining teams and expressed their trust and confidence that the areas cleared by mine action teams are safe for their use.

According to villagers in all the 12 communities selected for this survey, no incident happened within the cleared area after clearance was completed and the cleared areas were handed over back to the communities.

Men

"Clearance has made considerable areas of land available to the whole community for grazing, fuel wood and fodder collection. This has had major social and economic impact across the whole community. Crop land, water harvesting channels and stone collection areas have also been returned to safe use, to the great benefit of their individual owners. Clearance of roads and paths has enhanced access to land, to neighboring villages and to markets".

Apart from confidence about the quality of demining output, the people were satisfied with the way demining teams liaised with them prior to the start of clearance operations. They said that the demining teams consulted them about which areas have priority for them and which hazardous areas should be cleared first. Furthermore, they were asking about the future use of the land, after the clearance operation is completed.

The findings of the survey indicate that DMAC conducts regular Post Demining Impact Assessment (PDIA) of the cleared lands, through which random hazardous areas are selected in different regions and provinces to learn about the socio-economic effects and outcomes of demining operations.

The findings also indicate that the QM, in addition to focusing on outputs of the demining operations, focuses on the impact and outcome of the cleared lands and designs project proposals.

However, it was found that the QM was weak on proper monitoring of the Sur/EOD/MRE operations and that is why despite the fact that MEIFCS was conducted in all the surveyed villages, some spot ERWs, requested by locals, remained to be destroyed.

XV- Capacity Development

This seventh mine action livelihoods survey was planned and designed by a small group of staff from DMAC.

The results indicate that the process of training and implementation had no major problems and the survey teams were able to visit all the 12 villages selected for the survey. The DMAC staff felt that they are now capable of conducting similar surveys. Despite the DMAC staff being able to carry out such surveys, there are some areas that requires further improvement and opportunities need to be provided to fill in these gaps. The areas for improvement are the knowledge on conducting such surveys in an academic manner, designing and implementing the collection of data tools and producing quality reports on its findings.

XVI-Conclusions

The community acknowledged the significant support of MAPA in demining activities, they said that the benefits from demining have been the greater utilization of and access to their livelihood's resources. It was found that the people are very grateful for the work of demining teams, which are perceived as saving lives, and encouraging the refugees and IDPs to return to their villages. Clearance has made considerable areas of land available to the whole community for grazing, fuel wood, agriculture, and fodder collection. This has had major social and economic impact across the whole community. Crop land, water harvesting channels and stone extraction mines have also been returned to safe use, to the great benefit of their individual owners. Clearance of roads and paths has enhanced access to land, to neighboring villages and to markets.

In the communities where mine/ERW contaminated areas remain, the villagers wanted demining activities to continue. The people, especially women and survivors, requested vocational trainings.

Cleared land is entirely returned to its rightful owners and is used for productive purposes.

The cleared land is normally handed over by the demining teams to the owner of the land and the relevant community Shura. The land completion certificate contains a paragraph indicating that the certificate is only a document confirming that the land is cleared in accordance to Afghanistan Mine Action Standard (AMAS). It does not indicate ownership of the land, because ensuring the correct distribution of cleared assets or the follow-up of any commitments is not part of the mine action process.

Villagers were satisfied with the work and performance of the demining teams. The village men were often involved in deciding the sequencing of demining operations, but there is less opportunity for women, especially in rural areas, to be directly involved in priority selection of the hazardous areas for clearance due to cultural restrictions.

The overall findings of the survey indicate that mine action activities had many significant impacts on the visited communities. As a result of mine action activities, lands were cleared for growing crops, grazing of animals, building residential houses and other public facilities. It was also found that most of the community members (male/female from different ages) were aware of the mine/ERW risks and a number of mine/ERW victims were provided with physical rehabilitation services by the ICRC within the Kapisa province. They are also feeling more secure because there have been no mine explosions since demining intervention in the survey villages

XVII-Recommendations

- DMAC should ensure, through its regional offices and the mine action implementing partners as well as other possible approaches, that the community shuras have access to DMAC hotline number, so that they can contact DMAC when mine action support is required.

- DMAC should further increase its efforts to make sure communities' development needs and priorities are shared with development organizations to strengthen the link between mine action and development.

- DMAC should provide required trainings for capacity building of its regional offices field staff enabling them to conduct case studies of the development and socio-economic impacts of the areas cleared by mine action programme of Afghanistan.

- Keeping in mind the successful practice of Bamyan female demining teams, DMAC and the MAPA implementing partners should make sure to provide more opportunities for employment of female staff in the structure of their organizations as well as establishing more female survey and demining teams.

- DMAC should encourage its implementing partners to increase deployment of female EORE teams so that direct and first-hand information could be reached to female members of the communities.

- Since in most of the communities it was found that they are suffering from risk of spot ERWs, therefore, DMAC in consultation with the demining organizations should make sure to increase deployment of cross trained quick response teams for immediate destruction of spot ERWs through planning regular visit of the communities.

- DMAC in coordination with the implementing partners should make sure to accelerate inclusion of VOIED risk education messages in EORE packages.

- DMAC in consultation with the donors should include providing vocational trainings as part of survey and clearance projects to Explosive Ordnance (EO) victims in the affected communities where the projects are going to be implemented.

XVIII-Annexes

Annex 1: Human Resources:

DMAC and ANDMA Staff:

Five staff of DMAC, Mr. Mohammad Hamid Wardak, Mr. Fazel Rahman, Mr. Abdul Habib Rahimi, Mr. Gul Aqa Mirzai and Mr. Mohammad Azim Nadery, who took part in previous surveys were engaged in this survey and are experienced in conducting landmine and livelihood surveys. The mentioned team led the technical aspects of the exercise, including design, planning, practical training and support during field work, analysis of community data, and report writing. They coordinated implementation of the survey with the provincial and district authorities and also took part in the data collection process with the survey teams.

Furthermore, the Provincial Director of ANDMA in Kapisa was involved in the 7th Mine Action Livelihood survey. He was involved in coordination and implementation of the survey with provincial/district authorities and with the community Shuras.

Survey Teams:

There were two male and two female survey teams from a mix of DMAC and ANDMA staff.

The two staff of DMAC who got experience from previous surveys were roaming between the teams in order to provide support and expert advice to the rest of the teams.

Survey teams' structure:

Team-A (Male)

S.#	Name	Position
1	Mr. Gul Aqa Mirzai	Team Leader
2	Mr. Sana Gul Alokozai	Surveyor
3	Mr. Shafiullah Kohistani	Surveyor

Team-B (Female)

S.#	Name	Position
1	Mrs. Belqies Sadat	Team Leader
2	Mrs. Sabira Omeri	Surveyor
3	Ms. Toba Amiri	Surveyor

Team-C (Male)

S.#	Name	Position
1	Mr. Abdul Habib	Team

Team-D (Female)

S.#	Name	Position
1	Ms. Fatana Sharief	Team Leader

	Rahimi	Leader			
2	Mr. M. Azim Nadery	Surveyor	2	Mrs. Monesa Mohammadi	Surveyor
3	Mr. M. Sharief Amin	Surveyor	3	Ms. Wazhma Sediqi	Surveyor

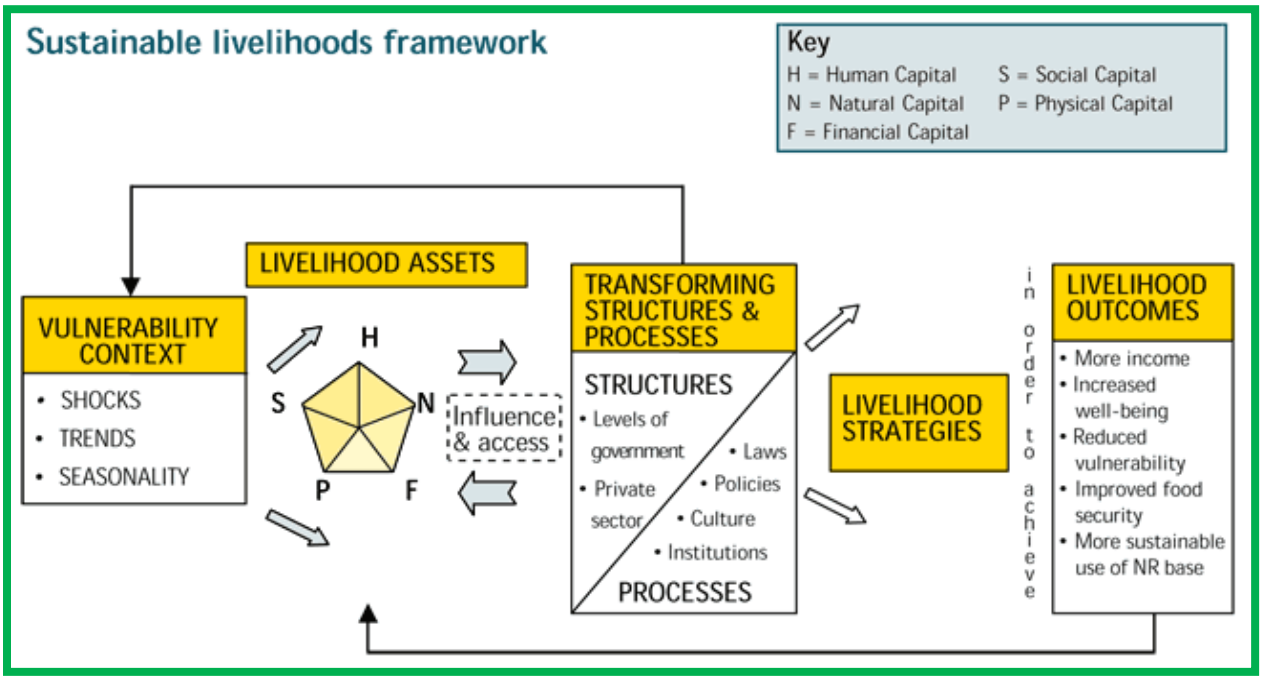
List of Survey participants:

S. #	Name	Position	Organization	Duty station
1	Mr. Fazel Rahman	Project/Task Manager	DMAC	Kabul
2	Mr. M. Hamid Wardak	Supervisor/Facilitator	DMAC	Kabul
3	Mr. Gul Aqa Mirzai	Team Leader	DMAC	Kabul
4	Mr. Abdul Habib Rahimi	Team Leader	DMAC	Kabul
5	Mr. M. Azim Nadery	Surveyor	DMAC	Kabul
6	Mr. Sana Gul Alokozai	Surveyor	ANDMA	Kabul
7	Mr. Shafiullah Kohistani	Surveyor	ANDMA	Kapisa
8	Mr. M. Sharief Amin	Surveyor	ANDMA	Kapisa
9	Mr. Ahmad Javeed Malikyar	Coordinator	ANDMA	Kapisa
10	Mrs. Belqies Sadat	Team Leader	ANDMA	Kabul
11	Ms. Fatana Sharief	Team Leader	ANDMA	Kabul
12	Mrs. Sabira Omeri	Surveyor	ANDMA	Kapisa
13	Ms. Toba Amiri	Surveyor	ANDMA	Kapisa
14	Mrs. Monesa Mohammadi	Team Leader	ANDMA	Kapisa
15	Ms. Wazhma Sediqi	Surveyor	ANDMA	Kapisa

Annex 2: The Sustainable Livelihoods Approach:

The Sustainable Livelihoods Framework, which is presented below, has been developed to help understand the result of mine action work on development and livelihoods of the communities.

Figure 1: Sustainable livelihoods framework



The framework views people as operating in a context of vulnerability, shown at the left-hand side of Figure 1. Within this context, they have access to certain assets or poverty reducing factors (human, social, natural, financial and physical capital). The levels and utilization of these assets are influenced by the external political, institutional and legal environments. Together people's assets and the external environment influence household's livelihood strategies in pursuit of beneficial livelihood outcomes that meet their own livelihood objectives. Within this asset-based approach, a number of PRA tools were applied.

Survey material:

Each male and female survey team were provided with the following equipment when going to the communities for survey:

- Flip chart paper
- Flip chart stands

- A4 paper
- Coloured marker pens
- Sell Tape
- Pens/Pencil and note book
- Scissors
- Stapler
- Steel/plastic ruler
- Post-it notes
- GI Community map
- Map legend
- Digital camera

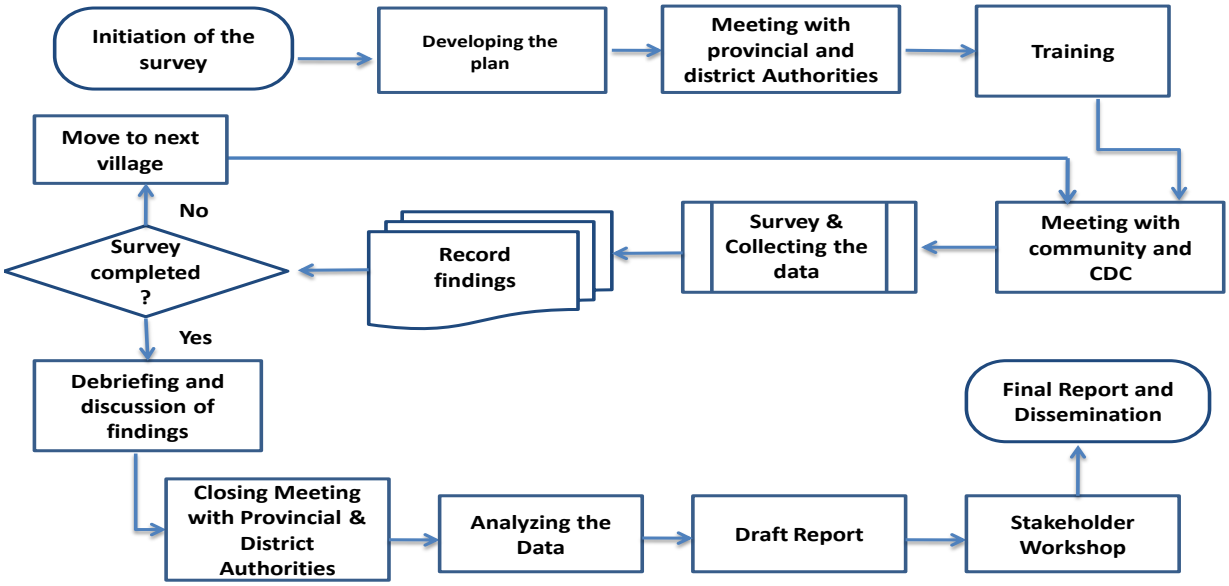
Stakeholders:

The principal stakeholders of the survey are affected communities, ANDMA, US Department of State (PM/WRA), UNMAS, mine action IPs, donors, the development organizations and the Islamic Government of Afghanistan.

Survey process:

Each community was visited by a male and a female team. The community was contacted prior to the team's arrival and the visit started with a formal introduction of the team and its objectives, without raising expectations among community members. The introductions were followed by the timelines and Community Maps. During these processes, community members identified landmine/ERW survivors and indirect victims who were subsequently interviewed. In addition, the communities identified households with sufficient and low incomes, and the teams interacted with these socio-economic groups separately using focus group discussions, daily clocks and seasonal calendar tools. A photographic record was taken of the village and the survey process.

Mine Action & Livelihoods Survey Process Map



Data collection and report writing:

The survey and data collection process went very well and in accordance with the plan. People in the communities were eager to participate, and provided detailed information related to survey objectives. The surveyors used questions from the checklists in the local language including follow-up key questions with supplementary "probing" questions (who, what, why, where, when, how). This helped the villagers to provide the detailed information correctly and accurately.

All the collected data, other materials and hard copies of original field materials were used for report writing.

Annex 3: List of Victims Interviewed

S#	Village	Name	Type of injuries	Activity at time of accident	Did victim receive MRE prior to accident Yes/No	Current Job	Support Received	Victim Expectation
1	Chashma-I-Mazullah	M. Rafiq	Lost his left leg and eye	On the way	No	Unemployed	He did not receive any assistance yet.	Shop Financial support
2	Chashma-I-Mazullah I	Abdul Fazel	Lost his right leg	Engaged in agricultural activity	No	Unemployed	He did not receive any assistance yet, the Red Cross provided him an artificial foot.	Vocational training (tailoring)
3	Chashma-I-Mazullah	Aqa Gul	Got injury on both feet	Grazing of animals	No	Unemployed	He did not receive any assistance yet.	Financial support
4	Chashma-I-Mazullah	Habiba	Lost her right hand	Fuel wood collection	No	Housewife	She did not receive any assistance yet.	Vocational training (tailoring)
5	Gul Bahar	Abdul Hakim	Got injury on both feet	Engaged in house construction	Yes	Shop keeper	Just he received a wheelchair.	Financial support

6	Gul Bahar	M. Qasim	Lost his left-hand fingers	On the way to school	No	Mason	He did not receive any assistance yet.	Financial support
7	Gul Bahar	Khudadad	Got injury on both feet	Engaged in agricultural activity	No	Unemployed	He did not receive any assistance yet.	Financial support
8	Gul Bahar	Sami Khan	Lost his left leg	Fuel wood collection	No	Tailor	The Red Cross provided him artificial foot.	Tailoring shop Financial support
9	Gul Bahar	Muqbola	Lost his right-hand fingers	Grazing of animals	No	Housewife	She did not receive any assistance yet.	Vocational training (tailoring)
10	Gul Bahar	Gul Sharin	Lost his left hand	Fuel wood collection	No	Housewife	She did not receive any assistance yet.	Vocational training (tailoring)
11	Muri	Amir Mohammad	Lost his right hand	Grazing of animals	No	Unemployed	He did not receive any assistance yet.	Financial support
12	Muri	Bibi Sabro	Lost her right hand	Fuel wood collection	No	Housewife	She did not receive any assistance yet.	Poultry farm

13	Muri	M. Amin	Got injury on both feet	Grazing of animals	No	Shop keeper	He did not receive any assistance yet.	Financial support
14	Muri	Mirajuddin	Got injury on both feet and body	Grazing of animals	No	Shop keeper	He did not receive any assistance yet.	Vocational training (carpentry)
15	Kuhnadeh	Abdullah	Lost his left hand	Grazing of animals	No	Unemployed	He did not receive any assistance yet.	Poultry farm
16	Kuhnadeh	Naz Aqa	Lost his right eyes	Fuel wood collection	No	Unemployed	He did not receive any assistance yet..	Vocational training (carpentry)
17	Kuhnadeh	Sayed Akbar	Killed	Grazing of animals	No			
18	Kuhnadeh	Javeed	Got injury on both feet and body	Grazing of animals	No	Shop keeper	He did not receive any assistance yet.	Vocational training (carpentry)
19	Kuhnadeh	Bibi Naz0	Killed	Fuel wood collection	No			

20	Kuhnadeh	Halim Jan	Lost his right leg	Grazing of animals	No	Shop keeper	He did not receive any assistance yet.	Financial support for Shop
21	Kuhnadeh	M. Hashim	Lost his both legs	Irrigation of land	No	Unemployed	Did not receive any assistance.	Financial support
22	Kham	Amanullah	Got injury on eyes and head	Engaged in agricultural activity	No	Unemployed	He did not receive any assistance yet.	Financial support for Shop
23	Kham	Noor Khuda	Got injury on his head and his right ear is deaf	Engaged in house construction	No	Head of village Shura	He did not receive any assistance yet.	Financial support for Poultry farm
24	Kham	Jalaluddin	Got injury on his body	Fuel wood collection	No	Unemployed	He did not receive any assistance yet.	Financial support for shop
25	Kham	Humira	Lost his left leg	Fuel wood collection	No	Housewife	She did not receive any assistance.	Financial support for Poultry farm
26	Kham	Noor Wali	Killed	Grazing of animals	No			

27	Shawani	Sayed Ahmad	Lost his left-leg	Engaged in agricultural activity	No	Unemployed	He did not receive any assistance yet, the Red Cross provided him an artificial foot.	Vocational training (tailoring)
28	Shawani	M. Nabi	Lost his left eyes	Engaged in house construction	No	Carpentry Shop	He did not receive any assistance yet.	Financial support for his shop
29	Shawani	Abdul Shukoor	Got injury on right foot	Engaged in agricultural activity	No	Farmer	Just the Red Cross provided him an artificial foot.	Financial support
30	Shawani	Noor Gul	Lost his both eyes	Fuel wood collection	No	Unemployed	The Martyr and Disabled Department gave him a disability card and allocated the salary of AFN 60,000 / year.	Financial support
31	Shawani	Saber Bano	Lost her left leg	Fuel wood collection	No	Housewife	Just the Red Cross provided him an artificial foot.	Vocational training (tailoring)
32	Badamali	Ahmad Javeed	Lost his left leg	On the way to job	No	Civil Servant	Just the Red Cross provided him an artificial foot.	Financial support for Poultry farm

33	Badamali	Sayed Alim	Lost his right leg	On the way to job	No	Head of disabled people of Kapisa province	The Red Cross provided him artificial foot & the Martyr and Disabled Department gave him a disability card and allocated the salary of AFN 60,000 / year.	Financial support
34	Badamali	Aqa Mir	Got injury on both feet and body	Engaged in agricultural activity	No	Unemployed	The Martyr and Disabled Department gave him a disability card and allocated the salary of AFN 60,000 / year.	Financial support for Poultry farm
35	Badamali	Noor Aqa	Killed	Grazing of animals	No			
36	Mahmud Raqi	Painda Khan	Lost his right leg	Engaged in agricultural activity	No	Tailor	The Red Cross provided him an artificial foot.	Vocational training (tailoring)
37	Mahmud Raqi	Shir Padshah	Lost his left leg	Grazing of animals	No	Shop keeper	The Red Cross provided him an artificial foot.	Financial support for Shop
38	Mahmud Raqi	Khalil Rahman	Lost his left eye	Military service	Yes	Unemployed	He did not receive any assistance yet.	Financial support for a shop opening

39	Mahmud Raqi	Abdul Tawab	Lost his left leg	Grazing of animals	No	Farmer	The Red Cross provided him an artificial foot.	Financial support for a shop opening
40	Mahmud Raqi	Shrin Aqa	Lost his right foot and hand	Engaged in agricultural activity	No	Unemployed	The Red Cross provided him an artificial foot.	Financial support for a shop opening
41	Mahmud Raqi	Abdul Rahim	Killed	Grazing of animals	No			
42	Mahmud Raqi	Abdul Raqib	Killed	Grazing of animals	No			
43	Mahmud Raqi	Abdullah Jan	Killed	Grazing of animals	No			
44	Mahmud Raqi	Bibi Maimona	Lost her left hand	Engaged in agricultural activity	No	Housewife	The Red Cross provided her an artificial hand.	Vocational training (tailoring)
45	Mula Faqir Khel	M. Tahir	Lost his right leg and right eye	On the way	No	Unemployed	The Red Cross provided her an artificial hand.	Financial support

46	Mula Faqir Khel	Bibi Liluma	Lost her left leg and injury on her right leg	Engaged in agricultural activity	No	Housewife	The Red Cross provided her an artificial foot & Martyr and Disabled Department gave her a disability card and allocated the salary of AFN 60,000 / year.	Poultry farm & vocational training (tailoring)
47	Mula Faqir Khel	Murad Khan	Killed	Grazing of animals	No			
48	Shokhi	Gulzada	Lost his right hand fingers and got injuries on body.	Grazing of animals	No	Unemployed	He did not receive any assistance.	Financial support for opening a shop
49	Shokhi	Bibi Zakie	Lost his left leg	Playing with children	No	Housewife	The Red Cross provided her an artificial foot.	Wish to go to school
50	Shokhi	Gul Alam	Killed	Grazing of animals	No			
51	Sherwani Bala	Gul Afghan	Lost his right leg	Grazing of animals	No	Farmer	The Red Cross provided him an artificial foot. He did not receive any other assistance yet.	Financial support for opening a shop

52	Sherwani Bala	M. Alam	Lost his right eye	Engaged in agricultural activity	No	Unemployed	He did not receive any other assistance yet.	Financial support
53	Sherwani Bala	Abdul Sabor	Killed	Grazing of animals	No			
54	Bagh Khana Bala	Hayatullah	Got injuries on right arm and body	Grazing of animals	No	Unemployed	He did not receive any other assistance yet.	Vocational training (tailoring)
55	Bagh Khana Bala	Shir Gul	Killed	Grazing of animals	No			
56	Bagh Khana Bala	Manizha	Lost her right leg	On the way to garden	No	Housewife	The Red Cross provided her an artificial foot.	Vocational training (tailoring)

Annex 4: Hazards impact indicators and scoring:

S-No	Impact Indicators	Descriptions	Scoring Category				
			1 score	2 scores	3 scores	4 scores	5 scores
1	Detonation with human casualty	Any mine/ERW/AIM detonation linked to a known hazard which resulted human loss or casualty	1 score for detonation in community within recent two years	beyond 10 years back	between 4 to 10 years back	between 2 to 4 years back	within recent two years
2	Water blockage	Drinking water, irrigation systems					5 scores
3	Infrastructure blocked /Development	Houses, Mosques, Education facilities, Health Centers, Public buildings, Markets, roads and bridges, power lines etc				4 scores	
4	Local authority/Communities request	The request be confirmed by related DMAC Regional Office		Community request	authority request		
5	Agriculture blocked	Crop land, fruit farms and forest			3 scores		
6	Small hazards (up to 5,000 sq.m)	To release communities, districts, provinces and or change the map with recorded hazards.			3 scores		

7	Anti-Personal (AP) Hazards	prevention of civilian casualties		Mountain top	Mountain sides		Flat Land
8	Hazards with ERW device	prevention of civilian casualties		Mountain top	Mountain sides		Flat Land
9	IDPs around hazards	If IDPs settled within 5 km buffer zone from the hazard				4 scores	
10	Grazing/pasture land blockage	Grazing/pasture land	1 score				
11	No. of affected families (200 family factor)	If hazard is affecting 200 families or more	1-100 families	101-200 families	201-300 families	301 and above	
12	Contaminated area size in the community 200,000 sq. m or above.	If contaminated land within a community is 200,000 sq. m or above, create more tension to the residents	1 score				
13	Distance from health center	for hazards located in more than 10 km distance from health centers		2 scores			

Impact Classification	Total Score	Ranks
Very High Impact	16 and above	1
High Impact	11 to 15	2
Medium Impact	6 to 10	3
Low Impact	1 to 5	4