



**Islamic Republic of Afghanistan
State Ministry for Disaster Management and Humanitarian Affairs
Directorate of Mine Action Coordination (DMAC)**

**Mine Action Livelihood Survey
In Nangarhar and Takhar Provinces of
Afghanistan, 1396/2017**



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Directorate of Mine Action Coordination (DMAC):

The Directorate of Mine Action Coordination (DMAC), previously known as Department of Mine Clearance (DMC), was established in 1990 under the Prime Minister's Office. In 1994 it became part of the Afghanistan National Disaster Management Authority (ANDMA). The name of DMC was changed to DMAC on 20th May 2015. The DMAC, with support from UNMAS, is responsible for the leadership, coordination, monitoring and evaluation of all mine action activities in Afghanistan including demining, mine risk education, surveying, accreditation and adherence to national standards.

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Mine Action Livelihood survey team in Nangarhar

Mine Action Livelihood survey team in Takhar



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List of abbreviations:

ACAPIII	Afghan Civilian Assistance Programme - Phase III
AIED	Abandoned Improvised Explosive Device
AIRD	Afghanistan Institute for Rural Development
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
GMS	Gender Mainstreaming Strategy
GoA	Government of Afghanistan
HL	Hot Line
IASC	Inter-Agency Standard Committee
IDPs	Internally Displaced Persons
IED	Improvised Explosive Device
IMSMA	Information Management System for Mine Action
IPs	Implementing Partners
ITF	International Trust Fund
MA LS	Mine Action Livelihoods Survey
MAPA	Mine Action Programme of Afghanistan
MF	Minefield
MoLSAMD	Ministry of Labor, Social Affairs, Martyrs and Disability
MoPH	Ministry of Public Health
MRE	Mine Risk Education
MRRD	Ministry of Rural Rehabilitation and Development
NTS	Non-Technical Survey
PDIA	Post Demining Impact Assessment
PM/WRA	Political-Military Affairs, Office of Weapons Removal and Abatement
PPIED	Pressure Plate Improvised Explosive Device
PPSP	Project & Partner Selection Panel
PRA	Participatory Rural Appraisal
QA	Quality Assurance
QC	Quality Control
QM	Quality Management
QMS	Quality Management System
UNMACA	United Nations Mine Action Center of Afghanistan
UNMAS	United Nations Mine Action Service
UXO	Unexploded Ordnance
VTF	Voluntary Trust Fund

I- EXECUTIVE SUMMARY

Rationale and Methodology

This mine action livelihoods survey (MALS) 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 Strategic Plan (2016-2020) and in particular, the first of its four goals "Facilitating Development", the mine action livelihoods survey underscores how this facilitation of development is fulfilled in practice.

The MA LS was planned and implemented by the DMAC with financial support from the U.S Department of State, Office of the Weapons Removal and Abatement (PM/WRA).

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

DMAC, with support from the UNMAS, trained and deployed four teams of Afghan men and women surveyors to visit the 24 selected communities using a Livelihoods Analysis approach in two provinces. Participation and Inclusion of the women surveyors considerably enhanced the breadth of information obtained.

The communities were selected in a way to give a contrasting sample of cleared and partially cleared hazardous areas, a mix of contamination types (UXO and/or mines), and urban and rural locations. The 24 villages surveyed cannot fully represent all the affected communities in the region. However, this selection sought to contrast urban and rural settings, different types of contamination and different stages of clearance.

Focus group discussions were held separately with men, women and children, 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 in each of the two provinces.

Data was collected in Nangarhar province during 23-30 April 2017 and in Takhar province from 11-18 August 2017; 12 communities were visited in each province.

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

Summary & findings of the Survey:

The survey collected information and recommendations from 24 communities on: the impact of mine action on development; the economic returns from mine action, such as survey, clearance, prioritization, quality management, mine risk education and victim assistance activities. Gender and diversity (including: age, income levels 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 livelihoods surveys.

The cleared areas directly benefit 13,995 families; the cleared lands are used for agriculture, pastures, housing, schools, clinics, irrigation canals, roads and as a source of wood collection. In summary, land release activities created the following opportunities:

Agriculture and farming:

- Over the course of one-year, the 24 communities' surveyed have harvested the following products from cleared land; the value of these crops is equal to 294,987,400 Afghanis (AFN), which is equivalent to USD 4,338,050:
 - 3,016,400 kg of cereal crops (wheat, corn, rice);
 - 860,440 kg of green crops (alfalfa, fodder);
 - 1,104,600 kg of various vegetables;
 - 276,100 kg of various fruits; and
 - 6,952,000 kg of animal/dairy products.
- 2,400 Hectares of barren land was rehabilitated and turned into a fertile agriculture land as a result of clearance of contaminated canals in 7 village from mines/ERWs.
- Approximately 5,596 pistachio trees planted on cleared land, which makes the surrounding hills green and improves the local economy.
- Approximately 17,380 livestock (sheep, goats, cows) are fed in the cleared areas.
- Ability to safely use the grazing land for cows, sheep and goats, both for villagers and nomadic Kuchies.

Construction and development

- Construction of two health clinics on cleared land in Shahi Kot village Nangarhar and in Chinzai village of Takhar, which provides basic health services for all inhabitants of these two villages.
- Construction of seven (7) schools and one (1) university on cleared land and access to twenty-five (25) schools in 24 villages in Nangarhar and Takhar. This is providing education facilities for 37,400 students (23,250 boys and 14,150 girls).
- Construction of township for over 1,500 families in Shahikot village of Nangarhar.

- Construction of 3,965 new houses, in areas such as Camp Tagab village of Nangarhar and Chashma Sher village of Takhar.
- 412,000 cubic meters of construction materials (stone, gravel, sand & soil) over one-year period obtained from cleared borrow pits in Bingah, Daman, Darbanak, Charagaly, Shahikot villages of Nangarhar province & Chinzai village of Takhar province.

Access, connectivity and roads:

- Construction of asphalt roads on cleared land in Sultanpur village, Nangarhar connects four (4) districts with Jalalabad city; while, construction of asphalt road on cleared land in Dasht-i-Robah village of Takhar connects four (4) districts of Takhar and Badakhshan province with Taluqan city.
- Resettlement of 70 displaced families in Chinzai village of Takhar province, where internal conflict (between Northern Alliance & Taliban in 2001) displaced these families from their village.
- Installation of four (4) mobile phone antenna on cleared land, which improve social contacts of the communities.
- Extension of power transmission line for electricity in Taluqan city of Takhar province.
- Safe access to areas from which stone, sand and soil for building can be obtained.
- As a result of clearance people have more freedom of movement and in the areas cleared.

Table-1: Crops harvested from cleared land over one-year period:

S. #	Crop/Product Type	Annual Harvest in Kg	AFN value per Kg	Total AFN Value	Total Value in USD*
1	Cereal Crop (wheat, corn, rice)	3,016,400	30	90,492,000	1,330,765
2	Green Crop (alfalfa, fodder)	860,440	10	8,604,400	126,535
3	Various vegetables	1,104,600	15	16,569,000	243,662
4	Various fruits	276,100	20	5,522,000	81,206
5	Animal product/dairy	6,952,000	25	173,800,000	2,555,882
Total				294,987,400	4,338,050

Graph 1: Agricultural output from 24 communities surveyed in USD¹



¹Note: For the purpose of this table, one US dollar was calculated as equivalent to AFN 68

Table-2: Beneficiaries of cleared lands by household

S.#	Land/Facility Type	Number of households ² benefitting from the cleared land	Remarks/Description
1	Agricultural	4,770	10,216 livestock feeding from cleared agricultural lands.
2	Grazing /Wood Collection Sites	3,345	7,164 livestock feeding from cleared grazing lands.
3	Residential	3,965	3,965 houses and 15 mosques constructed on cleared lands.
4	Irrigation Canal	1,435	12,000 Jeribs (2,400 Hectares) barren land rehabilitated and turned into a fertile agriculture land with the result of clearance of contaminated canals from mines/ERWs.
5	Borrow-Pit (construction materials)	480	412,000 cubic meter construction materials (stone, gravel, sand & soil) over one-year period obtained from cleared borrow pit.
6	Road		Construction of asphalt road on cleared land in Sultanpur village Nangarhar, connect four (4) districts with Jalalabad city and construction of asphalt road on cleared land in Dasht-i-Robah village of Takhar, connect four (4) districts of Takhar and Badakhshan province with Taluqan city.
7	Clinic		Construction of two clinics on cleared land in Shahikot village of Nangarhar and in Chinzai village of Takhar, provide basic health services for all inhabitants of these two villages.
8	School & University		Construction of seven (7) schools on cleared land and access to (25) twenty-five schools in 24 villages Nangarhar and Takhar, provide education facility for "37,400" students [23,250 boys and 14,150 girls]. Furthermore, destruction of spot ERWs from an area in center of Talaqan city where then the Takhar university constructed.

²Note: Family with an average household size of 7 persons.

Graph-2: Beneficiaries of cleared land disaggregated by Outputs

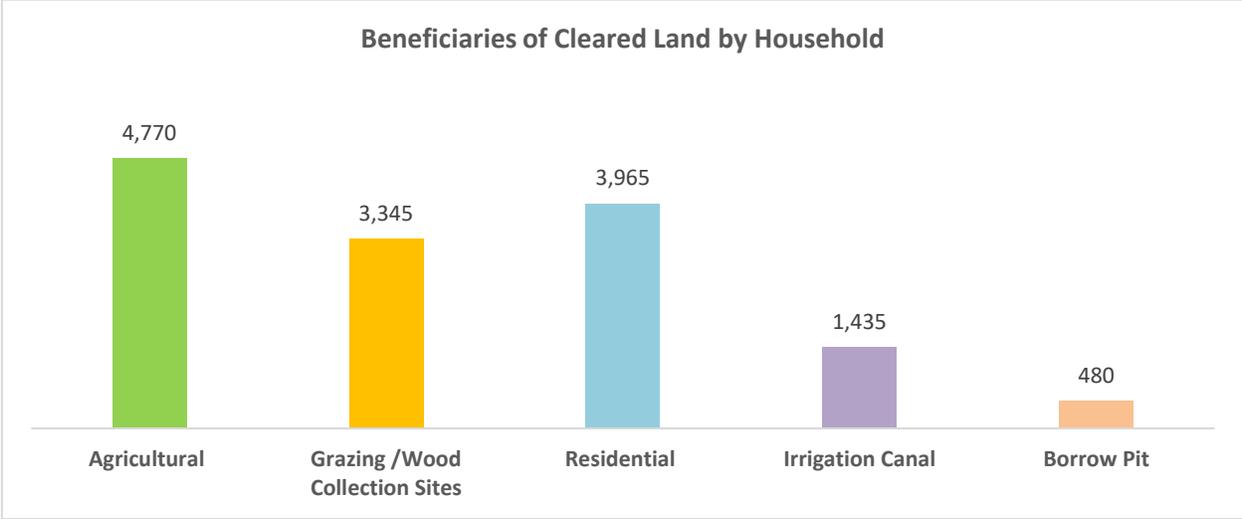


Table-3: Social and economic impacts:

S.#	Contaminated land type	Inputs	Outputs	Outcomes	Impacts
1	Agricultural	1. Technical Capacity (survey, clearance and monitoring teams). 2. Equipment. 3. Financial assets.	Cleared agricultural land	<ul style="list-style-type: none"> - Income increased; - Employment opportunities enhanced; - Cost of agriculture production reduced with activities taking place in the community - income generation - More production of livestock and agriculture crops. - Disaster risk reduced. - Human and asset lose control 	<ul style="list-style-type: none"> - Social activities improved; - Economic conditions Improved; - Sustainable social and economic activities in terms; - Peaceful and stable community in long terms; - Socio-economic development of the local community. - Environmental rehabilitation and asset creation.
2	Grazing	1. Technical Capacity (survey, clearance and monitoring teams). 2. Equipment 3. Financial assets	Cleared grazing land	<ul style="list-style-type: none"> - Income increased; - Dairy cost of production reduced; - More production of Livestock. - Disaster risk control and well manage pastures 	<ul style="list-style-type: none"> - 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	<p>1. Technical Capacity (survey, clearance and monitoring teams)</p> <p>2. Equipment</p> <p>3. Financial assets.</p>	Cleared Irrigation System	<ul style="list-style-type: none"> - 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. 	<ul style="list-style-type: none"> - Price of the key harvested crops reduced, - Water shortage for cultivated land reduced. - Cost of canal maintenance reduced. - Irrigation rehabilitation. - Empowering local community.
4	Road	<p>1. Technical Capacity (survey, clearance and monitoring teams).</p> <p>2. Equipment.</p> <p>3. Financial assets.</p>	Cleared Road	<ul style="list-style-type: none"> - Transportation Facilities Improved, - Access to The Nearest Markets. - Approach of Marketers Improved. - Access of Donors and Project Facilitators Improved. - More jobs and business facilities created. - Access to urban and public facilities. 	<ul style="list-style-type: none"> - Social contacts of the communities improved. - Economic condition improved. - Life standard with several accessories 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	<p>1. Technical Capacity (survey, clearance and monitoring teams).</p> <p>2. Equipment.</p> <p>3. Financial assets.</p>	Cleared Residential and public facility	<ul style="list-style-type: none"> - Resettlement of returnees. - Increased the number of educated people in the community - Literacy awareness improved. - Jobs and business careers improved - Developed educational institutions in the community - Medical expenditure reduced. 	<ul style="list-style-type: none"> - 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 stationary. - Cheaper medical treatment for the people.

Perception of safety:

Based on Afghanistan mine action national database, in total 4,802 anti-personnel (AP) mines, 174 anti-tank (AT) mines, 16,310 Unexploded Ordnance (UXO) and 14,849 Small Armed Ammunitions (SAA) were found and destroyed by demining teams in the 24 villages surveyed. Each device is capable of inflicting injury or death on individuals or groups. Reduced casualties have led to reduced medical costs and increased productivity.

This survey recorded **no casualties** as a result of mines/ERW in the cleared areas. The importance of mine action is understood by the locals, particularly in areas where there are mine and ERW contaminations. The locals have asked for demining activities to be increased.

Development outcomes

In each community visited, people mentioned that they are very pleased with the work of mine action teams. There was a perception within the communities that mine action encourages refugees and IDPs to return to their villages enabling them to cultivate their lands, tend their animals, collect fire wood, build their houses, schools and clinics, and walk free without fear, as well as creating opportunities for implementation of development projects.

While men surveyed emphasize the productive opportunities made possible by clearance plus the infrastructure installed to date, women emphasize the safety and recreational benefits that give them peace of mind and a better life for their men and children.

The cleared land is normally handed over by the demining teams to the owner of the land and the relevant community Shura (council). 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 standards (AMAS). It does not indicate ownership of the land, because ensuring the correct distribution of cleared assets or the follow-up of any commitments does not appear to have been part of the mine action process.

Villagers were satisfied with the conduct 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 culture related restrictions.

The released land has been used for grazing, housing and construction of facilities such as schools, mosques, markets and businesses for the local population. Moreover, access to construction materials, fuel, watercourses, roads and strategic structures such as phone masts, electricity pylons have resulted in tangible economic benefits at community and/or national level in the short, medium or long-term.

Results of the survey suggest that demining has directly benefited the local population in the following areas.

- Over the course of one-year harvested crops on the cleared land attained to (4,338,050 USD).
- The cleared areas directly benefit 13,995 families
- Some 17,380 livestock (sheep, goats, cows) are fed in the cleared areas
- Building school, houses, clinic, mosque, electricity supply and irrigation canal
- Productive agriculture areas for wheat, corn, rice, melon and watermelon
- Productive orchards, especially grape which is famous in Takhar
- Safe grazing areas for tending animals
- Safe access to areas from which stone, sand and soil for building can be obtained

People in all the surveyed communities stated that the value of land increased substantially after demining. The increase of land value is most prominent in Chashma Sher village of Takhar and Shahi Kot village of Nangarhar where the contaminated land was used for building new houses.

Victim Assistance

According to information collected from the 24 surveyed villages, prior to clearance ,286 people become victims of mine/ERW accidents. The survey teams could interview 77 victims who told us how they become victim of mine/ERW accidents and also interviewed relatives of eight victims who were killed by mine explosion. The majority of victims interviewed had lost their leg, some others lost a hand and some of them lost their eyes.

It was found that all of the victims interviewed received medical support after they became victim of mine/ERW explosion. Furthermore, those victims who lost their hand or leg received artificial lamb/s by ARCS.

The survey confirmed the national figures which depict more male victims compared to females. However, as women are the mothers, wives and sisters of men who make up the majority of mine victims, their role as care givers increases dramatically and earning capacity decreases with injured family members.

Among those interviewed, 13 victims told us that they receive 60,000 AFN (882 US dollar) per year from the Government and the rest said that they do not receive any assistance. Both male and female victims were interested to receive vocational trainings.

Mine Risk Education

It was revealed that the coverage of MRE was good during the recent years in the communities visited

Based on information collected from the communities and also according to mine action national database, MRE teams provided risk education sessions to 23 out of the 24villages surveyed.

The recent MRE for 11 villages was conducted during 2017 and for 3 other villages during

2016. 9 other villages received MRE between the years 2002 - 2014 and in one village no MRE was conducted, although the men in this particular village told us that the demining teams informed them about the danger of mines and ERW.

The level of MRE coverage for women appears to be less and based on findings of the survey, women in some of the communities said that they did not receive MRE at all. Also, there was no MRE visual aids (posters and leaflets) in any of the villages visited.

The children interviewed in 18 villages mentioned that they received MRE in their schools and it was found that they know about the danger of mine and ERWs and demonstrated knowledge of correct practices. They told us that they do not touch unknown items and instead inform their elders about such unknown items.

Prioritization

It was found that the villagers are satisfied with the prioritization of cleared areas within their communities and the 24 community elders stated that the demining teams prior to start of clearance operations consult with them about the areas that need to be cleared first.

In the villages where there were ongoing 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 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 head of village Shura, in Darbanak village of Nangarhar where demining is still ongoing said that the demining team showed them the list of all recorded hazard areas of the village and then in consultation with him filled out a paper (**Community Liaison Form**) in which their priority areas were reflected. *"I then signed this paper"* he added. *"We explained to them that how we will use the area after clearance and what outcome the areas would have to us"*.

However, none of the women in communities visited said that they have been consulted. From this, there is evidence that women in the communities have not been asked about the areas they want to be cleared, and this is a clear area for improvement.

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 also the cleared lands are being used for the purposes illustrated in project proposal of demining implementing partners.

DMAC is conducting regular Post Demining Impact Assessment (PDIA) of the cleared lands through which random hazard areas are selected in different regions and provinces in order to

find out about socio- economic impact and outcomes of demining operations in the areas cleared by the demining teams.

Capacity Development

This fifth MA&LS was planned, managed and conducted by national staff from DMAC, with support from UNMAS. The results indicate that the process of training and implementation had no major problem and the DMAC survey teams were able to visit all the 24 villages selected for the survey.

Although, the DMAC staff involved in the survey are now capable of conducting similar surveys, but still there is need to further improve their capacity on data analysis and report writing of such surveys.

Recommendations

- DMAC should ensure through implementation of the 5 year National Mine Action Strategic Plan (2016-2020) that communities' development needs and priorities are shared with development organizations to strengthen the link between mine action and development.
- DMAC should instruct its regional offices to conduct regular case studies of the development projects implemented in areas cleared of mine and ERWs by demining teams.
- DMAC should find practical ways such as increasing employment of female surveyors in the structure of survey projects, mine/ERW risk education teams and also for the PDIA so the women can be more directly informed about clearance activities and the safety status of land during clearance.
- DMAC should ensure the provision of risk education to women of the communities.
- PDIA should compare the expected clearance outcome reflected in demining project proposals with the actual outcome on the ground after the cleared areas are handed over to the communities.
- The crossed trained teams (Sur/EOD/MRE) operations should be properly monitored by DMAC QM staff, as it was found that despite conduct of operations by these teams in Gazestan village of Namakab district and Dashti Robah village of Farkhar district, some spot ERWs remained un-destroyed.
- There is a need for academic training on data analysis, especially on economic data analysis and reporting writing of such surveys for DMAC staff involved in MA&L survey.
- There should be an in-depth review and analysis of the MRE records in IMSMA and based on that the criteria for selection of communities to receive MRE should be further developed.
- Availability of MRE posters in village Shura will help most of the community members to be more familiar with Mine/ERW risks.

- DMAC should assess the possibility of including vocational trainings to mine/ERW and PPIED victims to be part of a demining project.

II- BACKGROUND

In pursuance to the series of Mine Action and Livelihoods surveys initiated by UNMAS in partnership with GICHD, the Directorate of Mine Action Coordination (DMAC) was interested to continue the conduct of regular mine action and livelihoods surveys in order to better understand the livelihoods and development outcomes resulting from mine action operations in the communities.

Two following mine action livelihood surveys were conducted from 2010 to 2017.

- The 1st survey was conducted in 2010, through which 25 communities were surveyed in Kabul, Parwan and Balkh provinces.
- The 2nd survey was conducted in 2011, through which four communities were surveyed in western province of Herat.
- The 3rd survey was conducted in 2012, through which four communities were surveyed in north eastern province of Badakhshan.
- The 4th survey conducted in 2016, through which 21 communities were surveyed in Bamyan and Samangan provinces.
- The 5th survey conducted in 2017, through which 24 communities were surveyed in Nangarhar and Takhar provinces.

Objectives of the survey

The objective of the survey was to find out about the impact of mine action operations on development and livelihoods of the communities and also how to enhance the socio-economic benefits accruing from mine action, particularly in rural Afghanistan.

The survey findings will contribute to better reporting to our donors and the government of Afghanistan as well as to the mine and ERW affected communities about the contributions made by mine action programme of Afghanistan.

Survey locations

The focus of this survey was the East and Northeast Regions of Afghanistan where 12 communities in five districts of Nangarhar province and 12 communities in five districts of Takhar province were selected for survey.

In total 24 villages were surveyed by four male and female survey teams. The communities were selected on the basis of security, accessibility, contrast between urban and rural settings, land type of blockages (agricultural, grazing or residential), contrast between types of hazard (mines and ERW), and cleared or on-going clearance sites.

Figure 1: Location of communities in Nangarhar Province

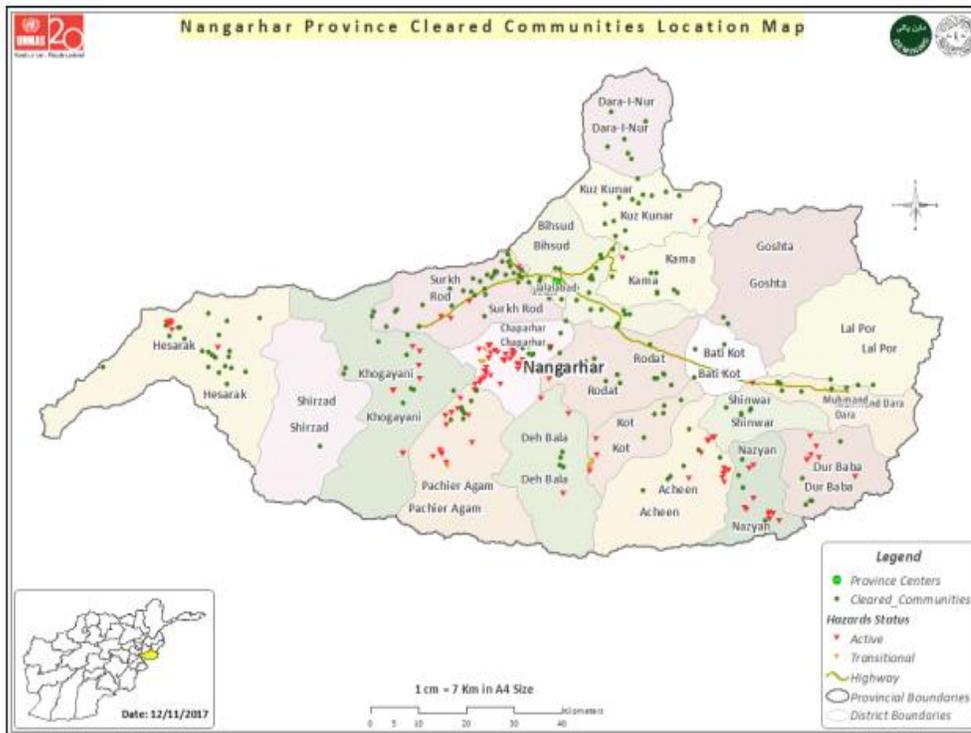
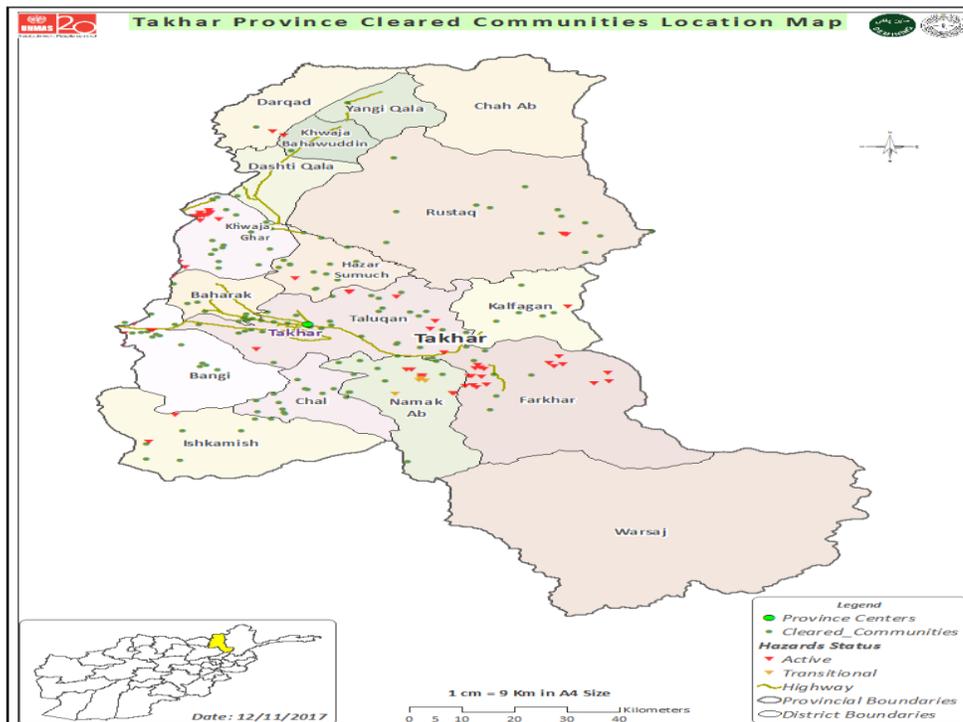


Figure 2: Location of Communities in Takhar Province



Criteria for selection of communities for inclusion in the survey

Selection of the communities in both provinces of Nangarhar and Takhar was in such a way to know the impact of mine action on both urban and rural communities. The 24 villages surveyed cannot be fully representative of all affected communities in the region. However, selection sought to contrast between urban and rural settings, different types of contamination and different stages of clearance.

The villages selected based on the below criteria:

1. Security & Access
2. Region (East and Northeast)
3. Contamination status:
 - Fully cleared
 - Partially cleared
4. Type of contamination problem:
 - Only ERW contaminated
 - Mine & UXO contaminated

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 livelihoods options
5. High/low numbers of victims in community

Table-4: List of Communities Visited by the survey teams

S#	Location			Number of Hazard Cleared		Hazard Area Cleared (Sq. m)	
	Province	District	Community	MF	BF	MF	BF
1	Nangarhar	Kuz Kunar	Abdul Khel	13	0	463,169	0
2	Nangarhar	Surkh Rod	ChaharbagheSafa	1	2	128	155,886
3	Nangarhar	Surkh Rod	Sultanpur	51	0	2,536,684	0
4	Nangarhar	Surkh Rod	Sawzabad	3	0	104,323	0
5	Nangarhar	Bihsud	Binigah	27	0	1,468,671	0
6	Nangarhar	Bihsud	Chora Galai	0	1	0	54,110
7	Nangarhar	Bihsud	Daman	14	2	1,012,709	886,536
8	Nangarhar	Bihsud	Qasemabad	13	2	37,439	155,807
9	Nangarhar	Bihsud	TangiTokchi	31	4	1,553,749	1,444,936
10	Nangarhar	Kama	Darbanak	5	0	315,689	0
11	Nangarhar	Rodat	Camp-e-Muhajerin	4	3	404,886	297,608
12	Nangarhar	Rodat	Shahi Kot	11	0	428,618	0

13	Takhar	Baharak	Baharak	4	2	27,034	11,730
14	Takhar	Baharak	Shash Tepa	21	0	13,184	0
15	Takhar	Farkhar	Dasht-i-Robah	21	0	1,521,523	0
16	Takhar	Farkhar	Kishaktan	8	0	189,386	0
17	Takhar	Kalafgan	Kalafgan	22	1	48,028	6,430
18	Takhar	Kalafgan	Gazestan	19	0	535,393	0
19	Takhar	KhwajaGhar	Hazar Bagh	20	0	3,529,629	0
20	Takhar	KhwajaGhar	Hawar Say	34	0	1,303,096	0
21	Takhar	Taluqan	Aqmasjed	13	0	403,178	0
22	Takhar	Taluqan	Chin Zai	21	0	656,012	0
23	Takhar	Taluqan	Chashma Sher	9	2	109,582	696,604
24	Takhar	Taluqan	Urta Baz	5	0	28,637	0
Total				370	19	16,690,747	3,709,647

III- SURVEY IMPLEMENTATION

Meeting with Nangarhar and Takhar Governmental Authorities

To ensure that the provincial authorities both in Nangarhar and Takhar provinces are involved, prior to start of the survey, the DMAC accompanied by the provincial director of ANDMA had meetings with the deputy governor of Nangarhar and Takhar provinces and briefed them about the survey and its objectives. The deputy governors of the two provinces were keen to know about the positive impacts of mine action on the country's development. They promised support of the governmental authorities for the successful completion of the survey.



The Deputy Governor of Nangarhar and Takhar were briefed about the survey objectives and the selected villages

Survey team training

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

The purposes of the training were to:

- Gain a common understanding of the task
- Understand the principles, approaches and tools to be used in the survey
- Practice the tools and skills that will be used in the survey
- Agree on teams, roles, equipment, timetable and logistics for the survey.



Survey teams during training

The training covered the following topics:

- The Sustainable livelihoods approach
- Gender and mine action
- Sustainable livelihoods analysis tools
- Quantitative data for the economic analysis of mine action
- Land allocation and land use questions
- Logistics of the survey



Survey teams during training



Survey team's group work during training

The Organizations involved

1. The Directorate of Mine Action Coordination (DMAC)
2. Afghanistan National Disaster Management Authority (ANDMA)
3. ANDMA provincial office
4. The United Nations Mine Action Service (UNMAS)

Gender

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 both females and males 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.



Survey teams interviewing with female community members

Cultural restrictions and norms prevent some women from travelling and working away from their family and home area; therefore, each female surveyor was accompanied by a Mahram (chaperone) when they were traveling away from home to other locations.

IV- METHODOLOGY USED IN THE SURVEY

The sustainable livelihoods approach

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

V- SCOPE OF CURRENT CONTAMINATION IN AFGHANISTAN

As of 1st April 2017, there were 3,820 recorded mine/ERW hazards covering an area of 587.6 sq. km and impacting 1,376 communities in 250 districts and 33 provinces of Afghanistan. The 36.6 % of remaining contamination is due to anti-personnel (AP) mines, while 47% is anti-tank (AT) contamination and 15.2% is ERW contamination and the remaining 1.2% is due to PPIED (see table 1 for a breakdown). Out of 587.6 sq. km area 52.8 sq. km are contamination from the post-2001, while the remaining contamination is from the 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 does not only impact the nearest one but also neighboring communities who are using the roads, using the land for agriculture and grazing.

In addition, contamination impacts people travelling between non-contaminated communities when they pass through the impacted community. Furthermore, if development projects aimed to assist a group of impacted and non-impacted communities are hampered due to

landmines, this has an impact on all nearby communities who might potentially benefit from the development project such as power lines and other infrastructures, rather than just the contaminated community.

Most of the AP contaminated areas are located in the North-East region, followed by the Central region, while the Eastern region has the fewest AP hazards. The Central region also remains the most affected in terms of the number of hazards and contaminated area. Note that the Central region has the greatest number of AT minefields, but the area of contamination is greatest in the South. The North, Northeast and East regions are notably less affected by AT mines than other regions. See tables 2 and 3 for breakdown.

The North region is the most affected in terms of the number of ERW hazards and contaminated area, followed by the East region. The Central region also remains the most affected in terms of the number of ERW hazards and contaminated area. While the Western region has the fewest ERW hazards and contaminated area. See table 4 for a breakdown.

Table 5 shows that the South region is the most affected in terms of the number of recorded PPIED hazards and contaminated area, followed by the North East region.

Table 1: Remaining contamination by device type April 2017

Type of Hazards	Number of Hazards	Remaining Area
AP	2,337	214,995,369
AT	1,140	276,392,994
ERW	309	89,150,435
PPIED	34	7,138,021
Total	3,820	587,676,819

Table 2: Remaining AP contamination by region in order of Area (Sq. Km)

Region	Device Type	Number of Hazards	Remaining Area
Central	AP	713	45,999,370
East	AP	127	10,026,060
North	AP	328	18,383,834
North East	AP	755	67,263,831
South	AP	138	26,771,124
South East	AP	212	19,044,969
West	AP	64	27,506,181
Total		2,337	214,995,369

Table 3: Remaining AT contamination by region in order of area (Sq. Km)

Region	Device Type	Number of Hazards	Remaining Area
Central	AT	353	52,971,580
East	AT	87	9,266,363
North	AT	29	505,572
North East	AT	16	544,865
South	AT	282	140,499,514

South East	AT	285	41,326,411
West	AT	88	31,278,690
Total		1,140	276,392,994

Table 4: Remaining ERW contamination by region in order of Area (Sq. Km)

Region	Device Type	Number of Hazards	Remaining Area
Central	ERW	55	12,072,041
East	ERW	42	14,894,003
North	ERW	111	42,940,814
North East	ERW	57	5,140,021
South	ERW	16	2,328,714
South East	ERW	24	11,476,817
West	ERW	4	298,025
Total		309	89,150,435

Table 5: Remaining PPIED contamination by region in order of area (Sq. Km)

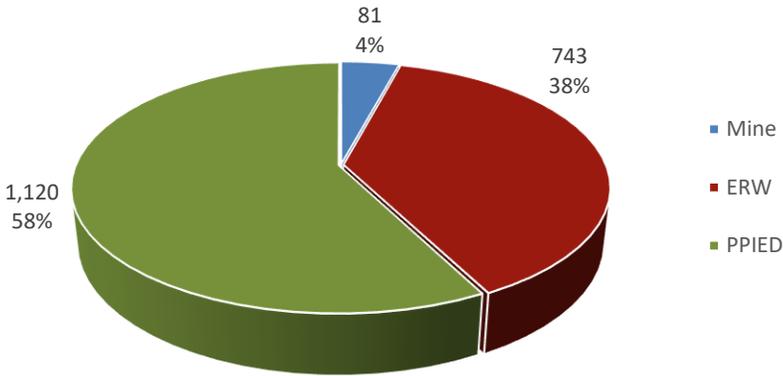
Region	Device Type	Number of Hazards	Remaining Area
South	PPIED	32	7,095,532
North East	PPIED	2	42,489
Total		34	7,138,021

Civilian Casualties

Based on MAPA annual report 2016, in total, 1,944 civilian casualties due to mine, ERW and mostly PPIED explosions were recorded. In 2016, the civilian casualties from PPIED made up 58% of all civilian casualties recorded by IMSMA this year (see Figure 1). PPIEDs are used by anti-government elements to target military personnel and convoys. However, since they are victim-activated (unlike remote-controlled IEDs), many PPIED 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 PPIEDs are not recorded precisely, so after every single PPIED incident, a vast area is suspected of containing more PPIEDs. This poses a long-term challenge for Afghanistan.

Figure 1: Civilian casualties, 2016



From April 2016 to March 2017, around 162 civilians were killed or injured on average every month by mines, ERW or PPIEDs. Table 6 below shows a summary of civilian casualties for (April 2016 to March 2017), demonstrating that PPIEDs and ERW have had a significantly higher toll, far greater than mines. The Southern region had the highest share of mine and ERW casualties, while the West, South East and North regions had the second, third and fourth highest number of recorded casualties in the country.

Table 6: Civilian casualties by regions

Region	Mine		ERW		PPIED ¹		Total
	Injured	Killed	Injured	Killed	Injured	Killed	
Central	2	0	43	14	15	13	87
East	1	2	38	21	22	14	98
North	16	5	61	19	69	36	206
Northeast	9	0	38	24	29	32	132
South	13	11	202	95	333	266	920
Southeast	8	12	54	18	58	76	226
West	2	0	81	35	89	68	275
Total	51	30	517	226	615	505	1,944

Gender and mine action

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 Mine/ERW- risk education and participation in prioritization of hazard land for clearance, gender determines the access to

and impact of activities and services, where females often face more restrictions compared to males. Gender specific roles and responsibilities can also mean that women, girls, boys and men have distinct clearance priorities.

To ensure gender is thoroughly mainstreamed throughout the programme, the MAPA 2014-2016 Gender Mainstreaming Strategy (GMS) was developed. DMAC and UNMAS were responsible for facilitating the implementation of the MAPA GMS and therefore, conducted a workshop for the gender focal points of the IPs.

The objectives for establishment of the working group were to start the implementation of MAPA gender mainstreaming strategy, to share the achievements, progress made and conduct continuous consultations.

The workshop brought together 23 gender focal points from 15 implementing partner organizations and two-line ministries (MoPH & MoLSAMD). The participants and DMAC-UNMAS team initiated the process of implementation of MAPA gender mainstreaming strategy and ensured clarity on the activities and responsibilities on how to mainstream gender based issues and activates into their programmers, plan and policies. The workshop was held as part of the capacity building program of stakeholders on MAPA gender mainstreaming strategy.

Furthermore, the standard operating procedures, HR policies, code of conduct, quality management, survey and community liaison forms, MRE materials and other relevant documents were reviewed by gender focal points both at DMAC, UNMAS and IPs levels. The purpose of the revision was to ensure that the documents are genders sensitive and bring the needed amendment based on gender strategy requirements in order to make MAPA gender sensitive.

According to the MAPA gender mainstreaming strategy, all projects within MAPA are required to consider the IASC gender markers. Therefore, the gender marker codes 2a and 2b are mandatory in the projects funded though the UNMAS VTF. The purpose of consideration of gender marker codes 2a and 2b is to mainstream gender in the entire project cycle management.

To ensure that the needs and priorities of all gender, social and age groups are considered in the proposal and that women are part of the implementation of projects, the DMAC-UNMAS gender focal point is a member of proposal review committee. All the victim assistance projects under ACAPIII, Mine/ERW risk education projects and some of the demining projects have been reviewed from a gender perspective.

Inclusion of female and male survey teams in this MA&L Survey was considered in order to better understand both perspectives.

VI- SURVEY FINDINGS

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

The survey collected information and recommendations from 24 communities on the impact of mine action on development, the economic returns from mine action, and the prioritization, quality management, mine risk education and victim assistance aspects of mine action.

The survey findings about each of the above-mentioned issues are reflected separately along with some case studies. There is also a part describing the conclusion on the capacity of DMAC personnel to be able to design, conduct, analyze and report on future landmines and livelihoods surveys. Gender and diversity (age, wealth and occupations) are cross cutting issues that have been integrated into the above sections.

Impacts of Demining on Development

The 24 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, and also laid during the mujahedeen war and in Taliban times. Many villages have been affected by the presence of landmines since the early 1980s. In most cases, clearance started 16 years ago and in several of the villages, clearance had only recently been completed. Clearance is still ongoing in three of the villages studied.

Example of timeline: Chinzai village, Takhar (according to community members)

- 1982 - Mines planted by Soviet forces
- 1998 - Mines planted during internal conflict
- 1995 - First accident happened on locals
- 2000 - Survey and demining started
- 2002 - Mine risk education
- 2003 - The cleared area used as grazing and agricultural land
- 2017 - Still there are mine contaminated areas in the village

The wide variety of assets freed and opportunities created following clearance operations in 24 surveyed communities include:

- Over the course of one-year harvested crops from cleared land attained to (USD 4,338,050).
- The cleared areas directly benefit 13,995 families.



A school being constructed on land cleared from mine/ERWs in Nangarhar

- Some 17,380 livestock (sheep, goats, cows) are fed in the cleared areas.
- Building school, houses, clinic, mosque, electricity supply and irrigation canal.
- Productive agriculture areas for wheat, corn, rice, melon and watermelon
- Productive orchards, especially grape which is famous in Takhar
- Safe grazing areas for tending animals.
- Safe access to areas from which stone, sand and soil for building can be obtained.



Road being constructed on land cleared from mine/ERWs in Sultanpur village of Nangarhar



After the canal was cleared by demining teams in Hawarsay village of Takhar province, it was rehabilitated and now used to irrigate the land.

Asset use following clearance & development priorities of the communities

According to Afghanistan mine action national database, **16,690,747** sq. m of minefields and **3,709,647** sq. m of battlefield have been cleared by demining teams in the 24 communities visited. As a result of clearance operations, in total **4,802 AP** mines, **174 AT** mines, **16,310 UXOs** and **14,849 SAA** were found and destroyed.

Once the threat of mines/ERW is removed, community members were theoretically able to use the assets cleared for productive purposes. During focus group discussion conducted separately with males and females 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 that clearance

should be completed in their communities.

Table 1. Communities visited in Nangarhar Province:

S.#	Community	Total Community Household	# of Household benefit	%age of households Benefit	Cleared land used for	Main Development Priorities	
						Male	Female
1	Abdul Khel	300	200	67%	<ul style="list-style-type: none"> - Productive crop lands and orchards. - Grazing of animals. - Irrigation system. 	<ul style="list-style-type: none"> - School - Electricity - Clinic - Safer drinking water 	<ul style="list-style-type: none"> - Girl school. - Clinic. - Vocational training (tailoring, embroidery & knitting).
2	Chaharbaghe Safa	1500	600	40%	<ul style="list-style-type: none"> - Productive crop lands and orchards. - Grazing of animals. 	<ul style="list-style-type: none"> - Electricity. - Clinic. - Protection wall 	<ul style="list-style-type: none"> - Vocational training (tailoring, embroidery & knitting) - Literacy training for women. - Clinic.
3	Sultanpur	4000	2400	60%	<ul style="list-style-type: none"> - Ongoing work on sealed road - Productive crop lands and orchards. - Grazing of animals. - Residential& mosques. 	<ul style="list-style-type: none"> - School - Clinic - Electricity - Safer drinking water 	<ul style="list-style-type: none"> - Vocational training (tailoring, embroidery). - Girl school. - Clinic.
4	Sawzabad	150	120	80%	<ul style="list-style-type: none"> - Building school. - Productive crop lands and orchards. 	<ul style="list-style-type: none"> - Clinic. - Library for school. - Laboratory for school. 	<ul style="list-style-type: none"> - Literacy & vocational training for women like embroidery & knitting - Poultry farms. - Kitchen garden
5	Binigah	3000	2000	67%	<ul style="list-style-type: none"> - Productive crop lands and orchards. - Irrigation system. - Grazing of animals. - Building houses& school. - Barrow pit (construction material). 	<ul style="list-style-type: none"> - Electricity - Clinic - Vocational training 	<ul style="list-style-type: none"> - Vocational training (tailoring, embroidery & knitting). - Girl school. - Clinic.
6	ChoraGalai (Camp Tagab)	700	700	100%	<ul style="list-style-type: none"> - Building school. - Building houses and mosques. - Grazing of animals. 	<ul style="list-style-type: none"> - Clinic. - Safer drinking water. - Protection wall 	<ul style="list-style-type: none"> - Clinic. - Safer drinking water. - vocational training for women (tailoring, embroidery & knitting).
7	Daman	1600	800	50%	<ul style="list-style-type: none"> - Building houses and mosques. - Grazing of animals. - Barrow pit (construction material). 	<ul style="list-style-type: none"> - School - Clinic - Electricity - Safer drinking water 	<ul style="list-style-type: none"> - School - Clinic - Safer drinking water.

8	Qasemabad	600	470	78%	<ul style="list-style-type: none"> - Productive crop lands and orchards. - Grazing of animals. - Building houses. - Building school. 	<ul style="list-style-type: none"> - Electricity. - Clinic. - Protection wall 	<ul style="list-style-type: none"> - Road - Electricity. - Women school.
9	Tangi Tokchi	960	780	81%	<ul style="list-style-type: none"> - Productive crop lands and orchards. - Irrigation system. - Grazing of animals. - Building houses. 	<ul style="list-style-type: none"> - Clinic - School - Electricity 	<ul style="list-style-type: none"> - Vocational training (tailoring, embroidery & knitting). - Poultry and animal (cows, sheep) husbandry farms.
10	Darbanak	250	160	64%	<ul style="list-style-type: none"> - Productive crop lands and orchards. - Grazing of animals. - Barrow pit (construction material). 	<ul style="list-style-type: none"> - Road - Clinic - Solar power (electricity) 	<ul style="list-style-type: none"> - Safer drinking water. - Clinic - Asphalt road.
11	Camp-e-Muhajerin	300	300	100%	<ul style="list-style-type: none"> - Building houses and mosques. - Grazing of animals. - Barrow pit (construction material). - Installation of towers (Antenna) for mobile phone. 	<ul style="list-style-type: none"> - Safer drinking water. - Clinic - School 	<ul style="list-style-type: none"> - School. - Well for drinking water. - Clinic.
12	Shahi Kot	1500	1500	100%	<ul style="list-style-type: none"> - Township for "1500" families including schools and clinic. - Grazing of animals. - Barrow pit (construction material). 	<ul style="list-style-type: none"> - Safer drinking water. - Hospital. - Asphalt/concrete of streets. 	<ul style="list-style-type: none"> - Well for drinking water. - Vocational training (tailoring, embroidery & knitting). - Poultry form.

Percentage of households that benefitted from Cleared Areas in the communities visited in Nangarhar

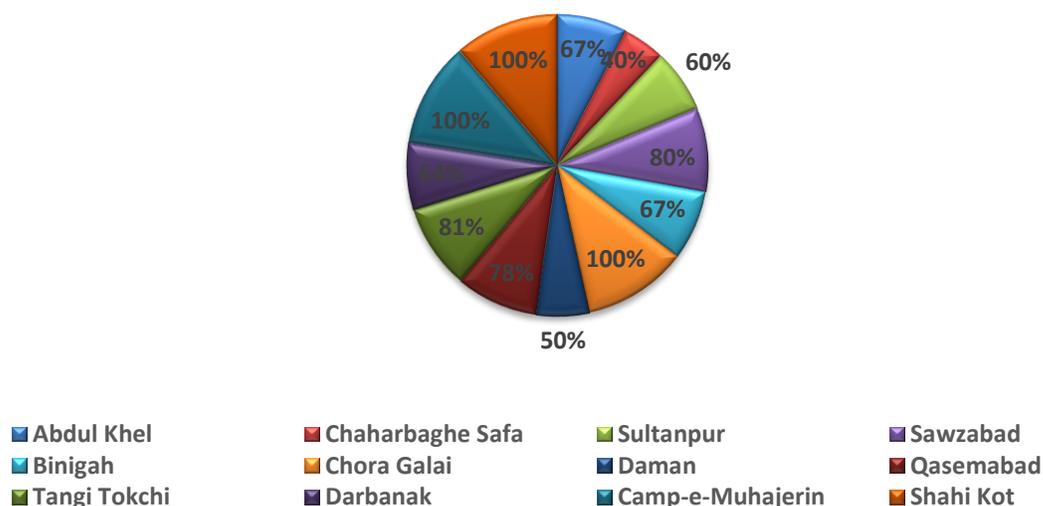
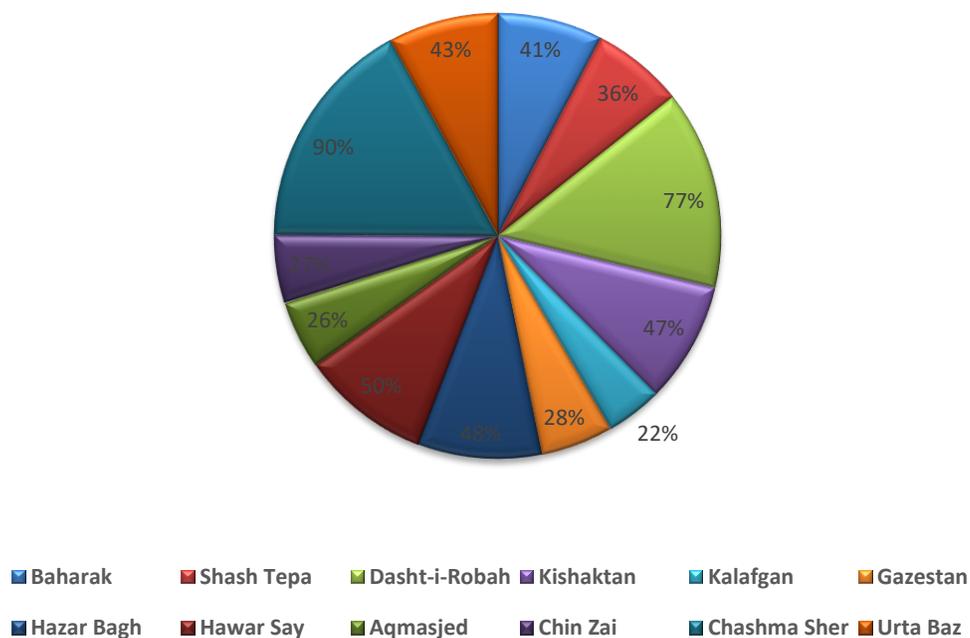


Table 2. Communities visited in Takhar Province:

S.#	Community	Total Community Household	# of Household benefit	%age of households Benefit	Cleared Land Used For	Main Development Priorities	
						Male	Female
1	Baharak	400	210	53%	<ul style="list-style-type: none"> - Productive crop lands and orchards. - Irrigation system. - Grazing of animals. 	<ul style="list-style-type: none"> - Micro hydro power. - Dan & intake weir. - Community centre. - Poultry & husbandry farms. 	<ul style="list-style-type: none"> - Vocational training (tailoring, embroidery & knitting). - Poultry farms. - Electricity.
2	Shash Tapa	600	265	44%	<ul style="list-style-type: none"> - Productive crop lands and orchards. - Irrigation system. - Grazing of animals. - Building houses. - Building school. 	<ul style="list-style-type: none"> - Asphalt road for village. - Well for drinking water. - Clinic. 	<ul style="list-style-type: none"> - Vocational training (tailoring, embroidery & knitting) - Literacy training for women. - Poultry farms.
3	Dasht-i-Robah	130	100	77%	<ul style="list-style-type: none"> - Building houses and mosques. - Grazing of animals. - Sealed road. 	<ul style="list-style-type: none"> - Safe drinking water. - Clinic. - Protection wall. 	<ul style="list-style-type: none"> - Vocational training (tailoring, embroidery & knitting) - Literacy training for women - Poultry farms.
4	Kishaktan	300	200	67%	<ul style="list-style-type: none"> - Rain fed crop lands. - Grazing of animals. - Building houses. - Barrow pit (construction material). 	<ul style="list-style-type: none"> - Clinic. - Protection wall. - Mobile phone towers (Antenna). 	<ul style="list-style-type: none"> - Vocational training (tailoring, embroidery & knitting) - Clinic. - Electricity.
5	Kalafgan	600	180	30%	<ul style="list-style-type: none"> - Productive crop lands and orchards. - Grazing of animals. - Building houses. - Building school. 	<ul style="list-style-type: none"> - Irrigation canal. - Electricity. - Clinic. 	<ul style="list-style-type: none"> - Vocational training (tailoring, embroidery & knitting) - Poultry farms - Electricity.
6	Gazestan	500	240	48%	<ul style="list-style-type: none"> - Rain fed crop lands. - Grazing of animals. - Installation of towers (Antenna) for mobile phone. 	<ul style="list-style-type: none"> - Safe drinking water. - Clinic. - Electricity. 	<ul style="list-style-type: none"> - Separate school for girls. - Clinic. - Electricity.
7	Hazar Bagh	250	170	68%	<ul style="list-style-type: none"> - Rain fed crop lands. - Grazing of animals. - Pistachio trees. 	<ul style="list-style-type: none"> - Safe drinking water. - Poultry & husbandry farms. - Gravelling of village roads. 	<ul style="list-style-type: none"> - Vocational training (tailoring, embroidery & knitting) - Poultry farms. - Safe drinking water.
8	Hawarsay	250	175	70%	<ul style="list-style-type: none"> - Productive crop lands and orchards. - Irrigation system. - Grazing of animals. 	<ul style="list-style-type: none"> - Safe drinking water. - Poultry & husbandry farms. - Solar power (electricity). 	<ul style="list-style-type: none"> - Vocational training (tailoring, embroidery & knitting) - Poultry farms. - Safe drinking water.

9	Aqmasjed	800	360	45%	<ul style="list-style-type: none"> - Productive crop lands and orchards. - Grazing of animals. - Building houses. 	<ul style="list-style-type: none"> - Safe drinking water. - clinic. - Electricity. 	<ul style="list-style-type: none"> - Vocational training (tailoring, embroidery & knitting) - Electricity. - Safe drinking water.
10	Chinzai	2000	1030	52%	<ul style="list-style-type: none"> - Productive crop lands and orchards. - Irrigation system. - Grazing of animals. - Building houses. - Building school and clinic. - Power poles. - Barrow pit (construction material). 	<ul style="list-style-type: none"> - Separate school for girls. - Safe drinking water. - Poultry & husbandry farms. 	<ul style="list-style-type: none"> - Vocational training (tailoring, embroidery & knitting) - Safe drinking water. - Separate school for girls.
11	Chashma Sher	800	770	96%	<ul style="list-style-type: none"> - Productive crop lands and orchards. - Grazing of animals. - Building houses. 	<ul style="list-style-type: none"> - Protection wall. - Bridge on Taluqan river. - Safe drinking water. 	<ul style="list-style-type: none"> - Vocational training (tailoring, embroidery & knitting) - Poultry farms. - Drinking water.
12	Urta Baz	600	265	44%	<ul style="list-style-type: none"> - Productive crop lands and orchards. - Grazing of animals. - Building houses. - Building university. 	<ul style="list-style-type: none"> - Clinic. - Gravelling of village roads. - Drinking water. 	<ul style="list-style-type: none"> - Vocational training (tailoring, embroidery & knitting) - Poultry farms. - Drinking water.

% age of household benefit from cleared areas of visited communities in Takhar



VII- DEVELOPMENT OPPORTUNITIES ARISING FROM MINE ACTION

All 24 communities are distinct in terms of their natural, human, social and financial assets, which means that they are faced with different challenges and opportunities for development.

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.



New township is being constructed on the land cleared of mine/ERW in Charagaly, village of Nangarhar

The blocked assets freed by demining include crop and grazing land, orchards, land for housing, and other local infrastructures and services such as schools, mosques, markets, businesses, access to construction materials and fuel, watercourses, roads and strategic structures such as phone masts, electricity pylons and etc.

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

The clearance of previous contaminated areas resulted in access of people to livelihoods sources, like farming, collecting firewood, tending animals, and building houses and shops.

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.

When there was plan to bring electricity pylon for our village, the first question was about the problem of mine and ERW and we told the electricity department of Takhar province that our village is cleared of mine and ERW by demining teams. If mined areas were not cleared, we could not have electricity in our village"
Chinzai Village- Takhar

The construction of 1,500 houses on cleared land in Shahikot village and construction of 900 new houses on cleared land for displaced families in two refugee camps (Tagab & Camp Muhajerien) of Nangarhar are the prominent signs of infrastructural

development as a result of mine action work.

In Chinzai village of Takhar, the people were very grateful to the work of mine action and mentioned that apart from being able to walk fearlessly to their agriculture, road and residential areas, the work of mine action has enabled them to bring electricity to their village.

Land value:

Land value has increased dramatically after clearance in all communities (see section on Economic returns to demining). The value of the land has been further enhanced by building houses, mosques, clinics, community centers, shops, schools, business, establishment of productive agriculture, and by the installation of facilities such as electricity, telephone mast and construction of canals and roads. The increase of land value is most prominent in Shahi Kot village of Nangarhar where the contaminated land was used to build new houses.

VIII- 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: Shahikot village, Rodat district, Nangarhar province, Residential areas and land value:

The village is located at about 45 km to east of Jalalabad city, next to Torkham main road, and has approximately 1,500 families with an average household size of 7 members. This village was on the front line of fighting between Mujahideen and the Russian troops. Before clearance, there were two AP minefields, one AT minefield, seven mixed AP/AT/ERWs areas and one battlefield in the village which blocked safe access for locals to their livelihood resources.

According to villagers, before clearance several mines/ERWs accidents happened on villagers and to their animals. In total, 13 people were killed, 79 people were injured. Moreover mine/ERW accidents killed around 50 animals (sheep & goats) and destroyed 5 of their vehicles/tractors, but after clearance no accident happened on locals. If the contaminated areas were not cleared, then it is likely that incidents due mines/ERWs would continue on the people and animals. All 11 hazardous areas were cleared of mine and ERWs by demining teams and according to mine action national database 179 AP mines, 42 AT mines and 90 ERWs were destroyed. The cleared land was handed over for safe use of the locals, in addition to that the locals now have access to 2 sq.km grazing land for construction of houses, tending animals and currently the villagers which enabled full access of villagers to livelihood resources.

The men and the women of the village were found to be very enthusiastic to provide information about the outcome of the demined land.

During the focus group discussions both men and women were asked how they are using the cleared land.

The immediate answer related to the construction of houses on cleared land. According to villagers after clearance was completed, due to increase of village population and return of refugees, there was need



The land cleared from mine/ERW is used to construct a township with capacity of 1500 houses with all facilities

to expand the village, based on government plan a new township called "Shahidano Mina" on which 1,500 new house plus green areas, masjids, schools, clinics and safe drinking water through digging well-constructed in demined land.

According to locals in Shahikot village, the cost of one Jerib (2,000sqm) land was 50,000 AFN (\$730) in a grazing land which was contaminated by mines and ERWs. But after the areas cleared of mine/ERW, and now there a township; the cost of only 300sqm land allocated for one family reached to 300,000 AFN (\$4400) and if we calculate it for one Jerib (2,000sqm) then it gives a figure of \$ 29,000/Jerib, the total size of the 1,500 houses (each 300sqm) indicates that 450,000 sqm (225 Jerib) area is allocated only for construction of the houses and the total cost will reach to \$ 29,000/Jerib X 225 Jerib = to \$6,525,000.

Case study 2: Sultanpur village, Surkhrod district, Nangarhar Province– Return to Farming and Asphalt road:

The village is located at about 12 km to west of Jalalabad city and has approximately 5,000 families with an average household size of 7 members. This village was a front line between Mujahideen and Russian troops. Before clearance there were seven AP minefields, three AT minefield, 36 mixed AP/AT/ERWs and five battlefields in the village which blocked safe access of locals to their livelihood resources.

According to local people, before clearance several mines/ERWs accidents happened on villagers and to their animals. In total 7 people killed, 12 people injured. Additionally, 56



Road construction-post mine clearance

animals (cows, sheep, goats) killed and 7 vehicles/tractors were destroyed, but after clearance no accident happened on locals. All the hazardous areas cleared of mine and ERWs by demining teams and according to mine action national database 1,349 AP mines, 52 AT mines and 568 ERWs destroyed. The cleared land was handed over for safe use of the locals.



The villagers expressed their gratefulness to demining and MRE teams. They showed the survey team the orchards, the road and agriculture areas where before clearance were full of mines and also the location of the areas where the mine explosions happened to villagers. They said “We were in urgent need of demining

teams and when they came to our village, we showed them the mined areas and as a result of their hard work, now the mined areas have now been put to productive use.”.

The clearance operations of AT mine contaminated areas paved the way for implementation of a development project which is the ongoing construction of 45 km of asphalt road. The road connects Jalalabad city with four districts, with construction of this road people travel with reduced fare and also transport their agricultural products sooner and with less cost of transportation. Some of the village men were working as daily wage workers for the road construction company.

Another portion of cleared land is used for crop agriculture and building houses.

Case study 3: Tangi Tokchi village, Bihsud district, Nangarhar Province– Multiple Benefits:

The village is located at about 15 km to northeast of Jalalabad city in the vicinity of the main



After the mine clearance, the irrigation canal is built several mines and ERW accidents to locals and their animals. Survey and clearance was

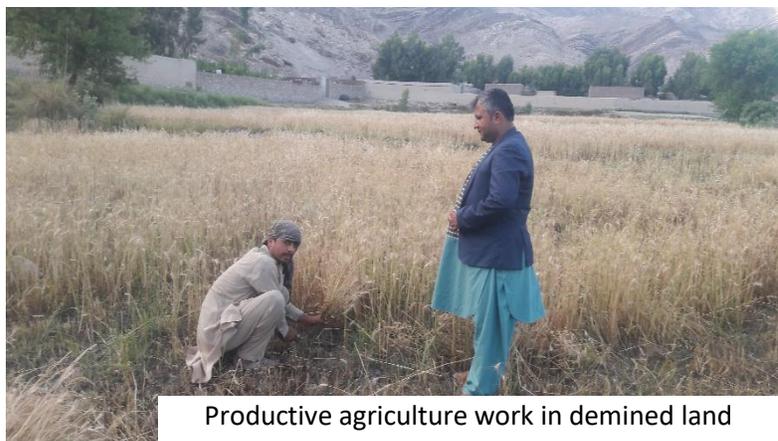
road to Kunar and has approximately 960 families with an average household size of 7 members. This village was a front line between Mujahideen and Russian troops. There were 35 minefields in this village which caused blockages to agriculture, grazing, residential areas and irrigation system.

Before clearance there were

conducted in consultation with villagers and they showed the hazardous areas to the demining teams. In total, 35 minefields were cleared by the demining team and they destroyed 482 AP mines, 5 AT mines and 3,689 ERWs. The cleared land was handed over for safe use of the locals, in addition to that the local access to 0.2 sq.km land for agricultural and grazing and currently the villagers have full access to their livelihood resources.

The clearance operations of AP mine contaminated areas paved the way for the construction of about 13 kms of irrigation canals.

The Shura head of Tangi Tokchi Village Said: Our village economy depends on agriculture which suffered a lot before the construction of the irrigation canal, our fertile lands and orchards turned into barren desert due to contamination of the irrigation system. But today I am very happy that the irrigation canal has been built for the community. I am grateful to



Productive agriculture work in demined land

Mine Action Program 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 clearance of mines/ERWs and construction of the irrigation canal, most of our social and economic problems have been solved to a great extent;

- 1,200 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 standard will be 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.

A further portion of cleared land is used for crop agriculture, tending animals and houses also have been built on the cleared land.

Case study 4: Chinzai village, central district of Takhar Province- Multiple benefit (productive agriculture land, irrigation system and power line):

Chin Zai is located at about 18 km to west of Taluqan city in the vicinity of the main road to Kunduz and has approximately 2,000 families with an average household size of 7 persons. As

it was one of the several villages that were on the front line of fighting between the Taliban and Northern Alliance, most of the inhabitants were forced to evacuate to other locations due to severe fighting in the village. According to information from national mine action database, out of 21 recorded mine contaminated areas, 19 hazardous areas have been cleared of mine and still there are 2 other hazardous areas to be cleared.

Villagers told us that some of the areas which were close to the village cleared of mines but were requesting clearance of the remaining hazardous areas. According to villagers, before clearance several mine accidents happened to villagers and to their animals. In total 18 people were killed and injured. Furthermore, 156 animals (cows, sheep, goats) were killed and 2 vehicles/tractors destroyed. The women and men were recalling the tragic accident of an AT mine that happened to a truck on the road that caused one death and three injuries. 2 AP mine accidents happened on children which killed one child and injured two more children.



Power poles and playground in demined land

As a result of demining operations, 333 AP mines, 2 AT mines and 2,846 ERWs were destroyed by demining teams which is a clear sign of lives (men, women, girls and boys) saved in the community. The cleared hazard areas are being used by locals for agriculture, irrigation system, extension of power line, construction material and tending the animals.



School built on demined land

On top of a hill which in the past was heavily contaminated by mines, now power poles are installed which transmit 24 hours electricity for Government institutions, locals and markets of Taluqan city.

The clearance operations of AP mine contaminated areas paved the way for the construction of a canal through which 100 Hectare of barren land was rehabilitated and turned into a fertile agriculture land.

Two of the MFs cleared is used by the villagers for residential purposes, as due to an increase in the size of the village population as result of the return of refugees, there was a need to expand the village. Also, a school and a clinic were newly built in the areas cleared of mine and ERW. One member of the village who was victim of mine explosion showed us the area where the mine accident happened to him

and after the clearance the area is being used for building new houses

The villagers expressed their gratefulness to demining and MRE teams. They showed us the orchards, the power pole, irrigation canal and agriculture areas where before clearance were full of mines and also the location of the areas where the mine explosions happened to villagers.

Case study 5: Hazar Bagh village, Khwaja Ghar district of Takhar province – Before and after:

The village is located approximately 40 Km northwest of Taluqan city and has approximately 250 families with an average household size of 7 persons. There were 20 minefields in this village which caused blockages to agriculture, grazing, residential areas and irrigation system. Before clearance, there were several mines and ERW accidents causing deaths and injuries among the local population and their livestock.

Clearance operations were conducted in consultation with the villagers and they showed the hazardous areas to the demining teams. As a result of demining operations, 116 AP mines, 5 AT mines and 501 ERWs were destroyed by demining teams which is a clear sign of lives (men, women, girls and boys) saved. The cleared land was handed over for safe use of the locals, in addition to that the local were able to access to 0.5 sq.km of agricultural and grazing land and currently the villagers have full access to their livelihood resources.



Before clearance there was no schools in the village, but now there is a high school (for 400 boys and for 100 girls). Another important development as a result of clearance is the completion of demining attracts development organizations to plan and implement development projects in their communities. For example, apart from school and canal construction, the community asked a development organization to plant the surrounding hillsides of the village with the trees to transform them into a green area. Sides of the hill were previously a mine and ERW contaminated area which was cleared by a mine action organization.

Now they have succeeded to plant more than 5,596 pistachio trees there, these newly planted trees make the sounding hills green and will improve the local economy in near future. It was interesting when they told us that using donkeys, they carry big plastic barrels of water to irrigate these small trees. The villagers say that because the trees are small and need less water, they can manage to irrigate them. But the villagers are trying through the government to get a development organization to build a water supply system, so they could easily irrigate

these trees in the future.

A further portion of cleared land is used for crop agriculture, tending animals, houses and a canal also rehabilitated on the cleared land which turned a 200 Hectare barren land into a fertile agriculture land.

During the focus group both males and females said that their village has no access to drinking water, this especially is a major challenge and the villager provides drinking water from irrigation canal.



According to women, boys, girls so far, no MRE sessions were conducted to them only men said that they received MRE. Upon reviewing the mine action database records for MRE, the community was correct, as there is no any record of MRE session for women, girls and boys by MRE teams in this village.

The villagers were very happy about the demining teams and according to them mine action teams are the only organization that supported their village.

Case study 6: Gazestan village – Kalfagan district of Takhar province

Gazestan is located at about 25 km to the east of Taluqan city in the vicinity of the main road to Badakhshan and has approximately 500 families. As it was one of the several villages that were on the front line of fighting between the Taliban and Northern Alliance, most of the inhabitants were forced to leave their village and move to other locations due to severe fighting in the village.



After demining, the land is used for agriculture

There were 19 minefields in this village which caused blockages to a rain fed agricultural land, grazing, residential areas and coal mine. As a result of demining operations, 199 AP mines, 6 AT mines and 590 ERWs were destroyed by demining teams. The cleared land was handed over for safe use of the locals and currently the villagers have full access to their livelihood resources.

According to villagers, before clearance three mines/ERWs accidents happened on villagers and to their animals, but after clearance no accident happened on locals. If the contaminated



areas not cleared yet, it is likely that mines/ERWs incidents people and animals may have continued.

The clearance operations of AP mine contaminated areas opened the way for implementation of a development project which is the coal mine. The coal mine is income generation for this community and others neighboring communities as well as government receives tax from vendors and provide heating energy for four districts and Taluqan city, with low cost.

Some of the village men are working as permanent employees and some as daily wage workers in coal mine that has improved local people economy.

A further portion of cleared land is used for crop agriculture, tending animals and houses also have been built on the cleared land.

During the focus group discussion villagers told us that they see unknown hazard items (spot ERWs) in village where people is walking everyday here and when they were asked that why they did not report it to mine action through hotline number, they mentioned that they do not know about this number. While according to mine action, this number is being shared with the villagers by survey, demining or MRE teams. Based on information provided by villagers about the location of spot ERWs, a Survey/EOD/MRE team from HALO Trust was deployed and destroyed the spot ERWs.

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 explosion in their villages. According to the information collected from all the 24 communities, in total there were 286 people killed or injured.

Based on the information given by the villagers, no accident happened in the areas cleared by demining teams after handing over to locals.

There was huge difference in 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 3. Victims before and after clearance

S#	Village	Victims before clearance according to IMSMA database	Victims before clearance according to villagers	Victims after clearance
1	Abdul Khel	6	7	0
2	ChaharbagheSafa	5	8	0
3	Sultanpur	20	19	0
4	Sawzabad	2	2	0
5	Binigah	2	20	0
6	ChoraGalai	0	11	0
7	Daman	11	13	0
8	Qasemabad	2	6	0
9	TangiTokchi	7	10	0
10	Darbanak	1	2	0
11	Camp-e-Muhajerin	3	10	0
12	Shahi Kot	92	92	0
13	Baharak	7	10	0
14	Shash Tapa	0	6	0
15	Dasht-i-Robah	10	5	0
16	Kishaktan	1	4	0
17	Kalafgan	15	18	0
18	Gazestan	3	3	0
19	Hazar Bagh	2	5	0
20	Hawar Say	2	2	0
21	Aqmasjed	1	3	0
22	Chin Zai	0	18	0
23	Chashma Sher	0	3	0
24	Urta Baz	4	9	0
Total		196	286	0

The table shows major discrepancies between the mine action database and villager’s figures. In all of the cases villager figures are higher than those provided by IMSMA, and in two cases lower. This discrepancy may be due to a number of factors, including the date at which the data is given, the inaccuracy of recall and confusion over the area under estimation.

Women's perceptions of safety:

The women interviewed seemed very grateful to work of the demining teams saying that the teams have saved their and their children’s and men’ lives. The women in the villages where no hazard areas are left told us their feeling as below:

“The work of demining gave us peace of mind; if our children go out of the house or our husbands go to work, we feel relaxed because they are safe”.

But in those villages, especially in Chinzai village where still there are 2 recorded mine contaminated areas, the women said they still have concern about safety for themselves but mainly for their children and men who daily go

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

Women in Chinzai village- Takhar



out for work.

Men receive more information directly from de-mining 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, who say that they appreciate their hard work and wish them more successes. In those places where demining is on-going, the villagers are very keen to continue until everything has been cleared.

In two of the villages in Takhar, the villagers stated that they continued to face spot ERWs in their village and the villagers showed the location of spot ERWs. According to them these were not in cleared land, rather it was in other locations which initially was safe and, on the ground, there was nothing, but these ERWs emerged when the people were excavating the ground based on their need.

Based on information provided by locals in Takhar about location of spot ERWs, a cross trained Survey/EOD/MRE team from a nearby MAPA partner was deployed to those villages and destroyed the spot ERWs.

In a war-torn country like Afghanistan finding all the spot ERWs left 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.



Spot ERWs in two village of Takhar

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; men, women and children stated that they know that mines and ERW created many problems in the village and the mine/ERW damaged different livelihoods, assets of the communities.



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 less exposed to landmine/ERW risk. From spring through to autumn, men are more engaged in farming activities 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, therefore need MRE for their personal safety, women require MRE to give them a better feeling of safety and security (and how they conduct their house/child raising activities)

Men in 23 villages said that they received MRE in the past years, but women in 8 out of the 24 villages said that no MRE conducted for them (6 villages in Takhar and 2 villages in Nangarhar). Table 1 below provides a breakdown of the MRE situation based on IMSMA database for men, women and children separately for each village surveyed.

Table 1. MRE for the surveyed communities based on IMSMA

Province	Village	Last MRE	Women	Men	Girls	Boys
Nangarhar	Abdul Khel	2013	265	142	303	665
Nangarhar	ChaharbagheSafa	2017	481	245	1359	4178
Nangarhar	Sultanpur	2011	489	1445	4769	4610
Nangarhar	Sawzabad	2017	429	278	168	169
Nangarhar	Binigah	2017	323	2694	2369	3523
Nangarhar	ChoraGalai	2017	0	89	280	461
Nangarhar	Daman	2017	707	1518	1729	2193
Nangarhar	Qasemabad	2017	9	643	764	376
Nangarhar	TangiTokchi	2017	444	1993	3056	2942
Nangarhar	Darbanak	2017	195	189	184	392
Nangarhar	Camp-e-Muhajerin	2017	931	959	724	1567

Nangarhar	Shahi Kot	2017	37959	40350	38236	48106
Takhar	Baharak	2017	1360	4283	1471	4634
Takhar	Shash Tapa	2014	321	1525	1420	1786
Takhar	Dasht-i-Robah	2011	25	41	89	142
Takhar	Kishaktan	No MRE	0	0	0	0
Takhar	Kalafgan	2009	188	582	770	1784
Takhar	Gazestan	2016	480	609	1282	1845
Takhar	Hazar Bagh	2016	0	70	0	0
Takhar	Hawar Say	2016	0	80	40	216
Takhar	Aqmasjed	2014	37	170	191	485
Takhar	Chin Zai	2017	291	26	430	600
Takhar	Chashma Sher	2016	3	18	52	39
Takhar	Urta Baz	2002	0	501	909	2061

Based on information collected from the communities and also according to mine action national database, MRE sessions were provided to 23 out of the 24 villages surveyed.

The recent MRE for eleven villages were conducted during 2017 and for three other villages during 2016. The other 9 villages received MRE between the years 2002 - 2014 and in one village no MRE was conducted by MRE teams, but the men in this village told us that the demining teams informed them about the danger of mine and ERWs.

The level of MRE coverage for women appears to be less than men and based on findings of the survey, women in 8 communities said that they did not receive MRE.

The children interviewed in 18 villages mentioned that they received MRE in their schools and it was found that they know about the danger of mine and ERWs. They told us that they do not touch unknown items and instead inform their elders about such unknown items. The coverage of MRE appears good during the recent years in the communities visited.

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

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

Most of the mine/ERW victims during Interview said that they have not received MRE and some of the victims said that the incident happened as a result of playing with an explosive item. Survey teams interviewed victims and relatives of killed victims in some villages and found out they have not received MRE in the past, but they said that MRE session was 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 in order to make sure preventive measures are taken in this regard. This worth

mentioning that a workshop was held in Dec 2017 on revising MRE materials.

Victim Assistance

During the survey, the teams asked about the mine/ERW victims through focus group discussion with men and women and to the extent possible had interviews mine/ERW survivors in each of the 24-communities visited. Based on information from villagers, there were 286 mine/ERW victims in 24 villages visited. The survey teams interviewed 77 victims of mine and ERWs. 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 their being able to get to a suitable hospital, which is difficult for more remote villages, especially in winter.

10 women interviewed in 9 villages were able to recall people in their community who were landmine or ERW casualties and to give an estimate of the numbers of civilians killed or injured due to mine and ERW accidents. They confirmed that male victims outnumber those of females, and that young men make up the majority of these. The reason given for this is that men are more exposed through their work on the land and also from high-risk livelihood activities. In Kalafgan, Urta Baz villages of Takhar and Chora Galai village of Nangarhar a girl a boy and a man recalled the tragic stories who were injured as result of AP mine accidents.

IX- MINE VICTIMS CASE STUDIES

Case Study-1.

Name: Anar Bibi, residence of Kalafgan village, Kalafgan District, Takhar Province
Age: 15 years old, age at the time of incident 8 years old.
Gender: Female
Occupation: Student

I was going to our rain fed agricultural land in 1389 (2009), while I walked on the path the incident happened and I was injured and lost my right foot. The reason of my disability was the explosion of a mine inserted under the soil.

I did not receive any assistance, just the Red Cross provided me with an artificial foot. Following the incident, I could not work and could not walk and this caused a negative impact in my life. I am suffering because of disability and am disappointed and life does not have any meaning for me. My mother helps me with daily activities.



Currently I am a student and in future I want to be a teacher, so that I don't need to depend on others. Although I lost my foot, I want to have a job and work.

I want to be able to stand on my feet and walk normally and go to school to continue my education.

Vocational trainings (tailoring, embroidery, knitting) should be provide to mine/ERW and PPIED victims, so that they don't need to depend on others.

The contamination of mines/ERW areas should be cleared and the MRE training courses should be conducted, especially for children and student, to have no more mine/ERW victims.

Case Study-2.

Name: Ebadullah, residence of Urta Baz village, Taluqan city, Takhar Province

Age: 17 years old, age at the time of incident 9 years old.

Gender: Male

Occupation: Student

I was disabled due to the explosion of anti-personnel mine in 1388 (2008), while I was busy on my uncle's agricultural land. Due to this explosion I lost my right leg. I was dropped by the people of the village to Hospital for treatment.

The Swedish Committee provided me an artificial foot & Martyr and Disabled Department gave me a disability card and allocated the salary of AFN 60,000 / year. Following the incident, I could not work and could not walk and this caused a negative impact in my life. I am suffering because of disability and am disappointed and life does not have any meaning for me. My elder brother & father help me in daily activities.

Currently I am a student and in future I want to be a doctor, so that I don't need to depend on others. Although I lost my foot, I want to have a job and to work. I need financial support to be able to stand on my feet and walk normally and go to school to continue my education.

I request personally from the government to increase the salary of disabled people. It is my opinion that all contaminated areas should be cleaned of mines/ERW and the MRE training courses should be conducted especially for women and children, in order to prevent mine/ERW accident in future.



Case Study-3.

Name: Gul Mohammad, residence of Chora Galai village, Bihsud district of Nangarhar Province

Age: 36 years old, age at the time of incident 15 years old.

Gender: Male

Occupation: Tailor

I had gone to the grazing area with animals and wanted to collect wood in 1381 (2002) and suddenly the mine incident happened and cut my right foot. I shouted for help, later on my brother arrived and he took me to Hospital for treatment. The main reason of my disability was poverty.

The Red Cross assisted me to get artificial foot. Previously I grazed animals, but now I cannot do and cannot fulfill a lot of work. Now I have a small tailoring shop in the village and run my life through my shop.

If the government and other assistance NGOs provide a small credit, I would be able to buy tailoring tools such (desk iron, scissors, etc.) for my shop and will extend my business, through this contribution.

I am ready and able to run the projects like embroidery, tailoring and hand sewing, to support our and others needed people life by these activities.

It is my request to clean all contaminated area of mines/ERW and conduct MRE training courses.



Support to Mine/ERW Survivors

There were more men Mine/ERW victims than for women in all 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 their being able to get to a suitable hospital, which is difficult for more remote villages, especially in winter. Furthermore, those victims who lost their hand or leg received artificial limb/s by ARCS and Swedish Committee for Afghanistan.

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



Following is the result of the interviewed victims:

- In total 77 (64 male and 13 female) victims were interviewed.
- 100% (all 77) victims received medical assistance/support.
- 20.3% (13 male) receive financial support (60,000 AFN = 882 USD) per year from Government.
- 79.7 % (51 male) received no financial support.

- 100% (13 female) indicated that they have not received any financial support.
- 18.8% (12 male) indicated that they want vocational support.
- 76.6% (49 male) indicated that they want financial support.
- 69.2% (9 female) indicated that they want vocational support.
- 7.7% (1 female) indicated that she wants financial support for literacy course.
- 35.9% (23 male) are employed and the rest 64.5% are jobless.
- 7.7% (1 female) is student and the rest 92.3% are housewife.

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

X- ECONOMIC RETURNS TO INVESTMENT IN MINE ACTION

Economic Returns to Investment in Mine Action

As a result of clearance operations in the 24 communities, the cleared areas directly benefit 13,995 families; the cleared lands are used for agriculture, pastures, construction of houses, schools, clinics, irrigation, roads and as a source of wood collection. In summary, land release activities created the following opportunities:

- Over the course of one-year, the 24 communities' surveyed have harvested the following produce from cleared land; the value of these crops is equal to 294,987,400 Afghanis (AFN), which is equivalent to US\$ 4,338,050 USD:
 - 3,016,400 kg of cereal crops (wheat, corn, rice);
 - 860,440 kg of green crops (alfalfa, fodder);
 - 1,104,600 kg of various vegetables;
 - 276,100 kg of various fruits; and
 - 6,952,000 kg of animal/dairy products.
- 2,400 Hectares of barren land was rehabilitated and turned into a fertile agriculture land as a result of clearance of contaminated canals in 7 village from mines/ERWs.
- Approximately 5,596 pistachio trees planted on cleared land, which makes the surrounding hills green and improves the local economy.
- Approximately 17,380 livestock (sheep, goats, cows) are fed in the cleared areas.
- Ability to safely use the grazing land for cows, sheep and goats, both for villagers and nomadic Kuchies.

Economic impact of reducing injury and death

The IMSMA data show 196 casualties in total from the 24 communities but based on information provided by the villagers there were 286 casualties before demining, while none

of the communities reported civilian casualties on demined areas since release. This survey **confirmed that in the 24 villages visited no civilian casualties happened after clearance in demined land.** This is clear evidence that demining work has delivered a huge 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 not be cleared yet, then the same accidents of mines/ERWs may happen on people and on their animals.

Cost-Benefit analysis of freed assets

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

As with previous MA&LS conducted in Afghanistan, the survey teams collected insufficient quantitative data to allow a proper economic analysis of the mine action activities in these 24 communities. Still, some partial analysis can be done, which provides some insight into the magnitude of benefits and complements the qualitative data obtained through the other survey tools.

Based on average current cost per sq. m (\$0.59/sq. m) of demining in Afghanistan, about USD 12.2 million, has been spent in demining of 16,690,747sqm minefields and 3,709,647 battlefields in these 24 villages. A further USD 0.14 million will be required to remove the remaining 243,393 sq. m contamination in the 24 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 507,493.

Land value

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 Chashma Sher village of Takhar and Shahi Kot village of Nangarhar where the contaminated land was used for building new houses.

In Shahi Kot village in total (428,618 sq. m) land was cleared of mine and ERWS. The locals in Shahi Kot village stated that the cost of one Jerib (2,000sq.m) land was AFN 50,000 (\$730) in a grazing land which was contaminated by mines and ERWs. But after the areas cleared of

mine/ERW, and now there a township project; the cost of only 300sq.m land allocated for one family reached to AFN 300,000 (\$4400) and if we calculate it for one Jerib (2,000sq.m) then it gives a figure of \$ 29,000/Jerib, the total size of the 1,500 houses (each 300s.qm) indicates that 450,000 sq. m (225 Jerib) area is allocated only for construction of the houses and the total cost will reach to \$6,525,000.

$\$ 29,000/\text{Jerib} \times 225 \text{ Jerib} = \text{to } \$6,525,000.$

Other economic benefits

Community residents provided additional evidence on economic benefits such as cultivation of agriculture land, establishment of productive orchards, access to construction materials, tending animals in demined land and construction of irrigation canals. Furthermore, installing of power transmission line for electricity energy system in demined land was indicated by locals. In total 13,995 families with an average household size of 7 persons (97,965 people) in the 24 communities surveyed benefited from work of demining teams.

The general descriptions suggest that demining contributed to some very significant benefits and enabled follow-on investments. For example:

- Building school, houses, clinic, mosque, electricity supply and irrigation canal.
- Productive agriculture areas for wheat, corn, rice, melon and watermelon.
- Productive orchards, especially grape which is famous in Takhar.
- Safe grazing areas for tending animals.
- Safe access to areas from which stone, sand and soil for building can be obtained.

Cost of survey

This survey cost was approximately USD 35,000. While the estimated cost of demining in the 24 communities is about USD 12.03 million, and another USD 0.14 million will be need clearance of the remaining hazard areas left in some of these communities. Thus, the survey represents approximately 0.29 per cent of the demining costs.

XI- 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 actions tasks are to be carried out and appropriate response to be provided.

DMAC with technical support from GICHD developed a five years strategic plan in 2016 and one of the main aim of this strategic plan is to facilitate the development projects and engaging with other sectors for better priority setting of mine action operations.

In Afghanistan, determining the priority of hazard 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, 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 having total score of 11 and above is classified as very high impact, 7 to 10 is high, 4 to 6 is medium and 1 to 3 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 hazard areas in each project different based on the location of the hazard areas.

Since information gathering is a continuous process, therefore, the impact classification of the hazards is being 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 hazard through providing justifiable reasons.

Survey findings on prioritization

In all the communities visited, especially in the villages where there were ongoing 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 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.

“There were mines in our village which were blocking our livelihood sources. 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”.
Binigah & Sultanpur Villages- Nangarhar

The other example of involving the community in selection of the priority areas for clearance, the head of village Shura, in Darbanak village of Nangarhar where demining is still ongoing said that the demining team showed them the list of all recorded hazard areas of the village and then in consultation with him filled out community liaison form in which their priority areas were reflected. *“I then signed this paper”* he added. *“We explained to them that how we will use the area after clearance and what outcome the areas would have to us”.*



Despite the evidence indicating that the demining team were consulting the men in the communities on priority, 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.

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

In villages visited in Takhar, the villagers were saying that this is the result of hard work of demining teams that now there are several development projects in their province.

In another example in Chinzai village the locals say that they are satisfied with what demining teams did for their community.

“We appreciate the hard work of demining teams, but we request that mine action should give priority to remaining mine/ERW contaminated areas of our village to be cleared soon and we can help by showing the hazard areas to them”.
Chinzai Village, Takhar

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 honestly. In some villages they stated that only demining teams have helped them with tangible outputs for their village (i.e. there were no other organizations helping their community the same as mine action). They wonder why demining is not followed up by implementing other development priorities of the communities.

The findings of the survey indicate that the priority setting process used by DMAC/UNMAS 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 on hazard areas which have blocked 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: peace of mind, 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.



Quality Management

The current DMAC/ UNMAS Quality Management process covers the accreditation of the demining organization, projects proposal review, monitoring, QA/QC, Balanced Score Card, PDIA and MA&LS.

These processes further improved after conduct of previous MA&LS.

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 hence to improving performance (especially if performance is defined in terms of attainment of community and national objectives).

In the past although the Quality Management was successful in terms of monitoring and controlling the technical processes and outputs of mine action, but there was no focus of QM on the outcomes and impact of 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 Takhar, although all recorded hazard areas cleared and the people were happy from the demining team work. However, during focus group discussions villagers in two communities raised their concern about problem of spot ERWs which still can be found from time by time in some locations not destroyed yet by demining teams.

The villagers of two communities (Gazestan and Dasht-i-Robah) showed the location of the spot ERWs to the MA&LS team. The team assessed the areas and as an immediate action asked MAPA partner near team for destruction of the ERWs showed by locals. The MAPA partner team destroyed a total of 5 ERWs in these communities and also conducted risk education for the communities.

It was found that the villages where the spot ERWs showed by locals have been covered by the MEIFCS teams. This raises a question how much the QM is successful in monitoring of the MEIFCS teams and why these spot ERWs were left in the villages where MEIFCS completed?

They requested that mine action should find a solution for the problem of spot ERWs and also to increase conduct 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 discussion with male and female 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 24 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:

"We know how hard and tough the work of demining teams is and therefore, we appreciate the hard work of deminers who put their life at risk to clear our lands from mines and ERWs so we should be able safely to use them for our livelihoods."

Women:

"After the demining teams cleared the mined areas, we became confident that there will not be any danger for our children and men who are going out of the house to work in the field. We feel relaxed because they are safe."

Apart from confidence about the quality of demining output, the people were satisfied that the 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 hazard areas should be cleared first. Furthermore, they were asking detail for which purpose we will use the land after clearance.

The findings of the survey indicate that DMAC, support from UNMAS, is conducting regular Post Demining Impact Assessment (PDIA) of the cleared lands through which random hazard areas are selected in different regions and provinces in order to find out about socio economic impact and outcome of demining operations.

The findings also indicate that the QM focuses not only on output of the demining operations but also the impact and outcome of the cleared land is taken into consideration during survey, designing the project proposal and through PDIA surveys.

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

Capacity development

This fifth MA&LS planned and designed by a small group of national staff from DMAC.

The results indicate that the process of training and implementation had no major problem and the survey teams were able to visit all the 24 villages selected for survey. The DMAC staff felt that they are now capable of conducting similar surveys (with the support from UNMAS). However, there is a need to provide training opportunities for DMAC staff to gain academic knowledge on proper design, data analysis and report writing of such surveys.

XII- CONCLUSIONS

It was found that the people are very grateful for the work of demining teams, which are perceived as saving lives, encouraging the refugees and IDPs to return to their villages, enabling them to cultivate their lands, tend their animals, collect fire wood, build their houses, schools and clinics, and walk free without fear, as well as creating opportunities for implementation of development projects.

In the communities where still there are mine/ERW contaminated areas, the villagers want demining activities to be strengthened. The people, especially women and victims requested vocational and literacy trainings.

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

The cleared land is normally handed over by the demining teams to 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 does not appear to have been part of the mine action process.

Villagers were satisfied with the conduct 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 culture related restrictions.

Perception of safety

In total 4,802 anti-personnel (AP) mines, 174 anti-tank (AT) mines, 16,310 Unexploded Ordnance (UXO) and 14,849 Small Armed Ammunitions (SAA) were found and destroyed by demining team in the 24 villages surveyed. This is a clear fact that the work of mine action clearance is justified as a lifesaving operation. The absence of casualties since clearance provides a significant economic benefit as the reduction in injury and death has led to reduced medical costs and increased productivity.

This survey recorded **no casualties** due to mines/UXO after clearance in demined 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 emphasize the productive opportunities made possible by clearance plus the infrastructure installed to date, women emphasize the safety and recreational benefits that give them peace of mind and a better life for their men and children.

Socio economic and development impact

The wide variety of assets freed and opportunities created following clearance include:

- The freedom to go for sightseeing
- Construction of township for over 1,500 families (Shahi Kot village of Nangarhar).
- 12,000 Jerib (2400 Hectare) barren land rehabilitated and turned into a fertile agriculture land.
- 412,000 cubic meter construction materials (stone, gravel, sand & soil) over one-year period obtained from cleared borrow pit.
- Construction of asphalt roads on cleared land in Sultanpur village of Nangarhar.
- Construction of two clinics on cleared land in Shahi Kot village Nangarhar and in Chin Zai village Takhar.
- Construction of seven (7) schools and one university on cleared land and access to (25) twenty-five schools in 24 villages Nangarhar and Takhar, provide education facility for "37,400" students [23,250 boys and 14,150 girls].
- Some "5,596" pistachio trees planted on cleared land, which makes the surrounding hills green and improve local people economy.
- Resettlement of 900 displaced families in two refugee camps (Tagab and Charagalia).
- Installation of four mobile phone antenna on cleared land.
- Extension of power transmission line for electricity (Taluqan city).
- Rebuilding and improving gardens (e.g. almonds, melon, watermelon & grapes) and cropland (wheat, corn, rice, alfalfa and a range of other crops).
- Ability to safely use the grazing land for cows, sheep and goats, both for villagers and nomadic Kuchies.
- Safe access to areas from which stone, sand and soil for building can be obtained.
- Ability to use areas for building new Masjids, schools, and also drinking water.

The general descriptions suggest the demining contributed to some very significant benefits and enabled follow-on investments. For example:

- Over the course of one-year harvested crops from cleared land attained to (4,338,050 USD).
- The cleared areas directly benefit 13,995 families.
- Some 17,380 livestock (sheep, goats, cows) are fed in the cleared areas.
- Building school, houses, clinic, mosque, electricity supply and irrigation canal.
- Productive agriculture areas for wheat, corn, rice, melon and watermelon
- Productive orchards, especially grape which is famous in Takhar
- Safe grazing areas for tending animals.
- Safe access to areas from which stone, sand and soil for building can be obtained

People in all the communities mentioned that land values increased substantially after

demining. The increase of land value is most prominent in Chashma Sher village of Takhar and Shahi Kot village of Nangarhar where the contaminated land was used for building new houses.

Victim Assistance

According to information collected from the 24 villages surveyed, 286 people become victims of mine/ERW accidents. The survey teams could interview 77 victims who told us how they become victim of mine/ERW accidents and also interviewed relatives of eight victims who were killed by mine explosion. Majority of victims interviewed had lost their leg, some others lost a hand and some of them lost their eyes.

It was found that all of the victims interviewed received medical support after they became victim of mine/ERW explosion. Furthermore, those victims who lost their hand or leg received artificial limb/s by ARCS.

The survey confirmed that there are more male victims comparing to females. However, women are the mothers, wives and sisters of men who make up the majority of mine victims, and their role as care givers for the injured should not go unmentioned.

Among those interviewed, 13 victims told us that they receive 60,000 AFN (882 US dollar) per year from the Government and the rest said that they do not receive any assistance.

Both male and female victims were interested to receive vocational trainings.

Mine Risk Education

MRE was provided to most of the surveyed villages during past years. But based on information collected from the communities and also based on the mine action national database, MRE was conducted for 11 of the villages surveyed during 2017 and for 3 villages during 2016. Furthermore, it was found that in one village no MRE had been conducted at all and there was no record of MRE in this one village.

The children interviewed mentioned that they received MRE in their schools and it was found that they know about the danger of mine and ERWs. They told us that they do not touch unknown items and instead inform their elders about such unknown items. The coverage of MRE appears good during the recent years in the communities visited. Not all children attend school to receive their awareness there, and many women have restricted mobility thus reducing their ability to attend meetings. The level of MRE coverage for women appears to be less and based on findings of the survey, women in 8 communities said that they did not receive MRE. Also, in none of the villages visited, were there any MRE visual aids (posters and leaflets).

Prioritization

The findings of this survey show that villagers are satisfied with the prioritization of cleared areas within their communities and they stated that the demining teams prior to start of clearance operations consult with them about which areas to be cleared first.

In all the communities visited, especially in the villages where there were ongoing demining projects, it was found that the community Shura was involved in selection of the priority

hazard areas for clearance. They mentioned that prior start of 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.

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 with technical support from UNMAS 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 also the cleared lands are being used for the purposes illustrated in project proposal of the demining implementing partners.

DMAC is conducting regular Post Demining Impact Assessment (PDIA) of the cleared lands through which random hazard areas are selected in different region and provinces in order to find out about socio economic impact and outcome of demining operations.

Capacity Development

This fifth MA&LS planned and designed by a small group of national staff from DMAC.

The results indicate that the process of training and implementation had no major problem and the survey teams were able to visit all the 24 villages selected for survey. The DMAC staff felt that they are now capable of conducting similar surveys (with the support from UNMAS). However, there is need to provide training opportunities for DMAC staff to gain academic knowledge on proper design, data analysis and report writing of such surveys.

XIII- RECOMMENDATIONS

- DMAC should ensure through implementation of the 5 year National Mine Action Strategic Plan (2016-2020) that communities' development needs and priorities are shared with development organizations to strengthen the link between mine action and development.
- DMAC should instruct its regional offices to conduct regular case studies of the development projects implemented in areas cleared of mine and ERWs by demining teams.
- DMAC should find practical ways such as increasing employment of female surveyors in the structure of survey projects, mine/ERW risk education teams and also for the PDIA so the women can be more directly informed about clearance activities and the safety status of land during clearance.
- DMAC should ensure the provision of risk education to women of the communities.
- PDIA should compare the expected clearance outcome reflected in demining project proposals with the actual outcome on the ground after the cleared areas are handed over to the communities.

- The crossed trained teams (Sur/EOD/MRE) operations should be properly monitored by DMAC QM staff, as it was found that despite conduct of operations by these teams in Gazestan village of Namakab district and Dashti Robah village of Farkhar district, some spot ERWs remained un-destroyed.
- There is a need for academic training on data analysis, especially on economic data analysis and reporting writing of such surveys for DMAC staff involved in MA&L survey.
- There should be an in-depth review and analysis of the MRE records in IMSMA and based on that the criteria for selection of communities to receive MRE should be further developed.
- Availability of MRE posters in village Shura will help most of the community members to be more familiar with Mine/ERW risks.
- DMAC should assess the possibility of including vocational trainings to mine/ERW and PPIED victims to be part of a demining project.

Annexes:

Annex 1: Human Resources:

ANDMA & DMAC Staff

From the DMAC/ITF, Mr. Fazel Rahman who is experienced in conducting landmine and livelihoods surveys, led the technical aspects of the exercise, including design, planning, practical training, and support during field work, analysis of community data, and report writing.

Three staff from DMAC, Mr. Mohammad Hamid Wardak, Mr. Abdul Habib Rahimi and Mr. Gul Aqa Mirzai and from ANDMA Mrs. Tamkeen Sharifi who took part in previous surveys as well were engaged in this survey. 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 directors of ANDMA offices in Nangarhar and Takhar were involved in coordinating implementation of the survey with provincial/district authorities and with the community Shura.

UNMAS staff

UNMAS Operations R&D Manager, Abdul Qudous Ziaee, provided technical support on design, planning, analysis of community data, and report writing.

Survey Teams

There were two male and two female survey teams from a mix of DMAC and ANDMA staff. The two staff of DMAC and also ANDMA female staff who got experience from previous surveys were roaming between the two male and two female survey teams providing help and advice to them.

Survey team structure - Nangarhar

Team-A (Male)

S.#	Name	Position
1	Mr. Gul Aqa Mirzai	Team Leader
2	Mr. ShirAqa	Surveyor
3	Mr. Mohammad Khalid	Surveyor

Team-B (Female)

S.#	Name	Position
1	Mrs. Farzana Niazai	Team Leader
2	Ms. Noorzia Zaheer	Surveyor
3	Ms. Atifa Omarkhil	Surveyor

Team-C (Male)

S.#	Name	Position
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Team-D (Female)

S.#	Name	Position
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1	Mr. Abdul Habib Rahimi	Team Leader
2	Mr. S. Naser Ahmadzai	Surveyor
3	Mr. Rohullah	Surveyor

1	Ms. Rabia Salamzai	Team Leader
2	Ms. Tabasum S eddiqi	Surveyor
3	Ms. Soma Ameni	Surveyor

Survey team structure - Takhar

Team-A (Male)

S.#	Name	Position
1	Mr. Gul Aqa Mirzai	Team Leader
2	Mr. ShirAqa	Surveyor
3	Mr. Mohammad Zubair	Surveyor

Team-B (Female)

S.#	Name	Position
1	Ms. Nazia Khaliqyar	Team Leader
2	Ms. Roya	Surveyor
3	Ms. Noria	Surveyor

Team-C (Male)

S.#	Name	Position
1	Mr. Abdul Habib Rahimi	Team Leader
2	Mr. M. Azim Nadery	Surveyor
3	Mr. Zafer	Surveyor

Team-D (Female)

S.#	Name	Position
1	Mrs. Tamkeen Sharifi	Team Leader
2	Ms. Seminta Shauyegan	Surveyor
3	Ms. Mahboba	Surveyor

Mahram (Chaperones)

To ensure an active participation of female staff for survey, each of the female surveyors who were to travel from their home to other provinces were accompanied by a Mahram during the survey period. The Mahram did not take part in data collection during the survey, but they were accompanying their family members (female surveyors). The female surveyors who were selected from Nangarhar and Takhar did not require Mahram, because they were going to communities for survey during the day and were back to their home at the end of each day.

List of Survey participants

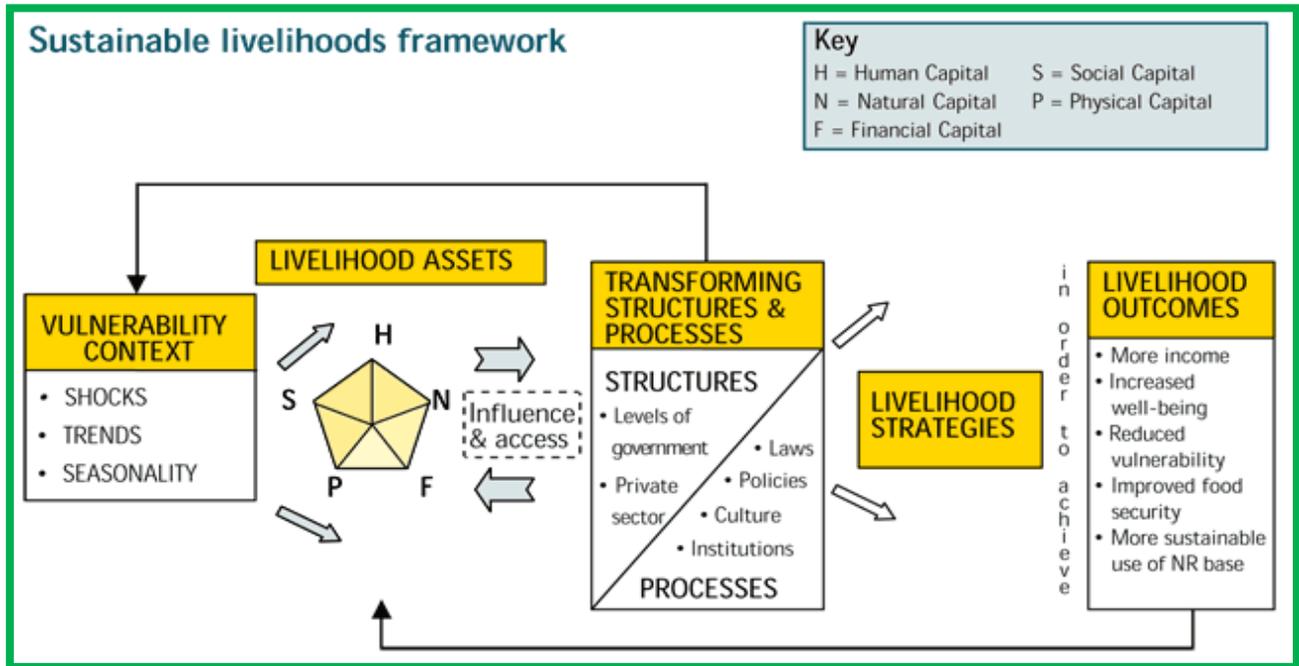
S. #	Name	Position	Organization	Duty station
Participants in the Nangarhar Mine Action and Livelihoods Training and Survey				
1	Mr. M. Qasim Samandari	Chief of Evaluation	DMAC	Kabul
2	Mr. M. Hamid Wardak	Sr. EOD Manager	DMAC	Kabul
3	Mr. Gul Aqa Mirzaee	Sr. SOP Manager	DMAC	Kabul

4	Mr. Abdul Habib Rahimi	Sr. Manual Manager	DMAC	Kabul
5	Mr. Fazel Rahman	OPS Project Manager	DMAC/ITF	Kabul
6	Mr. Shir Aqa	Surveyor	ANDMA	Kabul
7	Mr. Abdul Basir Sabawoon	Coordinator	ANDMA	Nangarhar
8	Mr. Sayed Naser Ahmadzai	Surveyor	ANDMA	Nangarhar
9	Mr. Rohullah	Surveyor	ANDMA	Nangarhar
10	Mr. Mohammad Khalid	Surveyor	ANDMA	Nangarhar
11	Mrs. Farzana Niazai	Team Leader	ANDMA	Nangarhar
12	Ms. Rabia Salamzai	Team Leader	ANDMA	Nangarhar
13	Ms. Soma Ameni	Surveyor	ANDMA	Nangarhar
14	Ms. Tabasum Seddiqi	Surveyor	ANDMA	Nangarhar
15	Ms. Noorzia Zaheer	Surveyor	ANDMA	Nangarhar
16	Ms. Atifa Omarkhil	Surveyor	ANDMA	Nangarhar
Participants in the TakharMine Action and Livelihoods Training and Survey				
1	Mr. M. Qasim Samandari	Chief of Evaluation	DMAC	Kabul
2	Mr. M. Hamid Wardak	Sr. EOD Manager	DMAC	Kabul
3	Mr. Gul Aqa Mirzaee	Sr. SOP Manager	DMAC	Kabul
4	Mr. Abdul Habib Rahimi	Sr. Manual Manager	DMAC	Kabul
5	Mr. Fazel Rahman	OPS Project Manager	DMAC/ITF	Kabul
6	Mr. M. Azim Nadery	Operation Assistant	UNMAS	Kabul
7	Mr. Shir Aqa	Surveyor	ANDMA	Kabul
8	Mrs. Tamkeen Sharifi	Team Leader	ANDMA	Kabul
9	Mr. Faizullah Mahfooz	Chaperon (Mahram)	ANDMA	Kabul
10	Mr. Zafer	Surveyor	ANDMA	Kabul
11	Mr. Abdul Razaq Zunda	Coordinator	ANDMA	Takhar
12	Mr. Mohammad Zubair	Surveyor	ANDMA	Takhar
13	Ms. Nazia Khaliqyar	Team Leader	Women Affairs Department	Takhar
14	Ms. Seminta Shauyegan	Surveyor	ANDMA	Takhar
15	Ms. Noria	Surveyor	ANDMA	Takhar
16	Ms. Mahboba	Surveyor	ANDMA	Takhar
17	Ms. Roya	Surveyor	ANDMA	Takhar

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.

The tools used

Below is a list of the tools that were used by male and female survey teams for collecting the data during survey:

- Review of IMSMA available data about status of mine/ERW cleared and remaining areas in Nangarhar and Takhar communities selected for the survey
- Meeting with community Shuras for a comprehensive introduction to provide information on the team, the objectives of the mission, the potential (realistic) benefits that might come to the community, the methods to be used, people to be involved and timetable for the visit
- A “Time-Line” to understand the community’s experiences from the time the area was contaminated with mines/ERW up to the present. Once the time-line has been drawn a

number of questions were asked about survivors/victims, MRE and the use and economic value of assets cleared

- “Community Maps” drawn-up with the villagers which was a rapid mapping exercise to show the relationship between the village and the contaminated/cleared areas. Once the map was drawn further questions were asked about the use and economic value of assets cleared
- Identification of groups of better-off and poor community households for interview using separate focus group discussions, daily clocks and seasonal calendars
- A series of focus group discussions with community leaders, and community members from different age, sex and socio-economic groups
- Daily clocks and seasonal calendars
- Case studies of landmine/ERW survivors and indirect victims
- Economic quantitative data collection questionnaire
- A review by all surveyors to share impressions and conclusions from the visit

Survey material

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

- Flip charts
- marker pens
- notebooks
- biro pens
- steel ruler
- Compass
- Digital camera

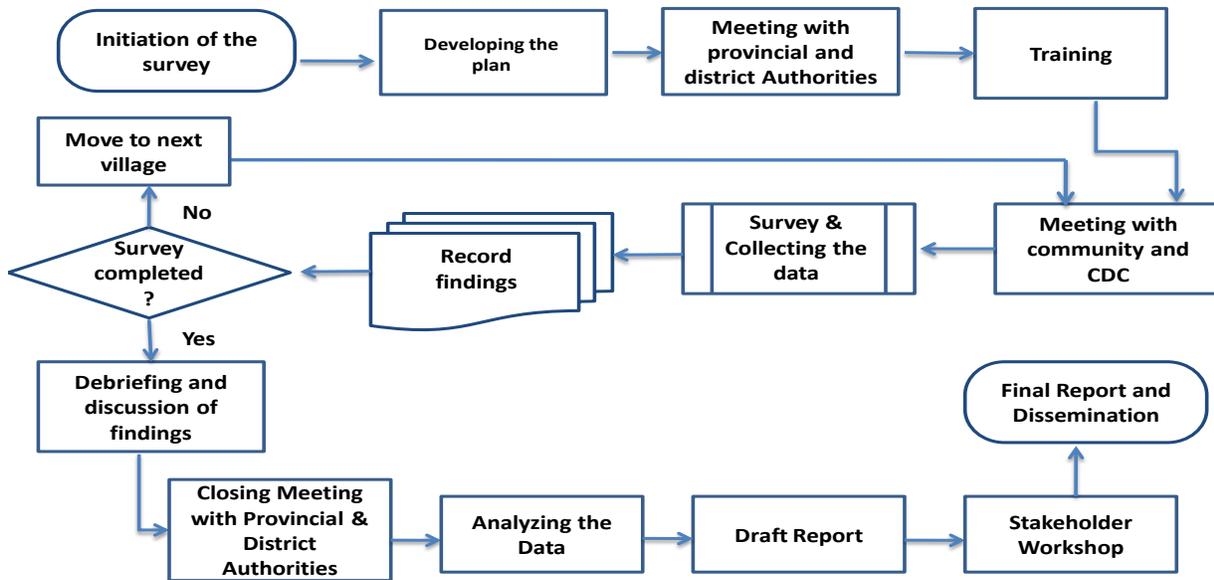
Stakeholders

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

Survey process

Each community was visited by a male and 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, taking care not to raise expectations among community members. The introductions were followed by the Time Line and Community Maps. During these processes, community members identified landmine/ERW survivors and indirect victims who were subsequently interviewed. In addition, the communities identified poor and better-off households, and the teams interacted with these socio-economic groups separately using focus group discussion, daily clock and seasonal calendar tools. A photographic record was taken of the village and the survey process.

Mine Action & Livelihoods Survey Process Map



Data collection & report writing

The survey and data collection went very well and was in accordance with the plan; first in Nangarhar and then in Takhar province.

People met with in the communities were very willing 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 honestly.

All the collected data and other materials and hard copy 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	Abdul Khel	Wahid Gul	Lost her left leg	Grazing of animals	Yes	Jobless	He did not receive any assistance yet, just the Red Cross provided him an artificial foot.	Vocational training (tailoring)
2	Abdul Khel	Matiullah	Lost his right hand fingers	Grazing of animals	No	Farmer	He did not receive any assistance yet.	Vocational training (tailoring)
3	Abdul Khel	Abdul Wakil	Killed	Playing with ERW	No			
4	Abdul Khel	Abdul Basir	Killed	Grazing of animals	No			
5	Chaharbaghe Safa	Shirullah	Got injury on hands	Scrap collection	No	Jobless	He did not receive any assistance yet.	Shop Financial support
6	Chaharbaghe Safa	Hanan	Lost his right leg	Scrap collection	No	Jobless	He did not receive any assistance yet, just the Red Cross provided him an artificial foot.	Financial support
7	Chaharbaghe Safa	Popal	Lost his left leg	Walking at previous military area	No	Shopkeeper	He did not receive any assistance yet.	Driver Financial support
8	Chaharbaghe Safa	Zalmi	Lost his right hand	Wheat harvest	No	Jobless	The Martyr and Disabled Department gave him a disability card and allocated the salary of AFN 60,000 / year.	Electrician Financial support
9	Chaharbaghe Safa	Zemary	Got injury on body and his left eye	Driving vehicle	No	Jobless	The Martyr and Disabled Department gave him a disability card and allocated the salary of AFN 60,000 / year.	Driver Financial support
10	Sultanpur	Nasim Khan	Lost her left leg	Engaged in agricultural activity	No	Jobless	the Department of Public Health provided him an artificial foot.	Financial support
11	Sultanpur	Habib Khan	Lost her left leg	Engaged in agricultural activity	No	Jobless	the Department of Public Health provided him an artificial foot.	Shop Financial support

12	Sultanpur	Ami Agha	Lost her left leg	Engaged in agricultural activity	Yes	Jobless	the Department of Public Health provided him an artificial foot.	Shop Financial support
13	Binigah	Abdul Qadir	Lost his right hand	Military service	No	Jobless	the government provided him an artificial foot.	Shop Financial support
14	Binigah	Khan Zaman	Lost his right leg	Grazing of animals	No	Shopkeeper	Just the Red Cross provided him an artificial foot.	Financial support
15	Binigah	Haji Gul	Got injury on body	Worked in his house	No	Jobless	Nobody helped him yet.	Shop
16	Binigah	Rahat Gul	Lost his left-hand fingers	Wood collection	No	Servant in a fuel station	Nobody helped him yet.	Vocational training (carpentry)
17	Binigah	Mano Gul	Lost his right leg	Engaged in agricultural activity	No	Jobless	The Red Cross provided him an artificial foot.	Shop Financial support
18	Binigah	Sayeda Jan	Lost his right hand	Wood collection	No	Jobless	Nobody helped him yet.	Shop Financial support
19	Binigah	Nazir Gul	Lost his right leg	Grazing of animals	No	Jobless	The Red Cross provided him an artificial foot.	Shop Financial support
20	Binigah	Habib Rahman	Got injuries	On vehicle	No	Jobless	Nobody helped him yet.	Shop Financial support
21	Binigah	Alam Jan	Lost his left-hand fingers	Wood collection	No	Farmer	Nobody helped him yet.	Shop Financial support
22	Binigah	Sahar Gul	Got injury on both hands	Wood collection	No	Jobless	Nobody helped him yet.	Poultry Financial support
23	Chora Galai (Camp Tagab)	Honer Bibi	Lost his left leg	Engaged in agricultural activity	No	Housewife	The Red Cross provided him an artificial foot.	Vocational training (tailoring)
24	Chora Galai (Camp Tagab)	Gul Mohamad	Lost his right leg	Wood collection	No	Tailor	The Red Cross provided him an artificial foot.	Vocational training (tailoring)

25	Chora Galai (Camp Tagab)	Shir Gul	Lost his right leg	Wood collection	No	Jobless	Nobody helped him yet.	Shop Financial support
26	Chora Galai (Camp Tagab)	Rohullah	Got series injuries on both feet.	Wood collection	No	Jobless	Nobody helped him yet.	Shop Financial support
27	Daman	Rahmanullah	Lost his left-hand fingers	Wood collection	No	Jobless	Nobody helped him yet.	Vocational training (carpentry)
28	Daman	Abdul Qadir	Got injuries	Wood collection	Yes	Student	Nobody helped him yet.	Financial support
29	Daman	Sardar Bibi	Lost his left-hand fingers	Wood collection	No	Housewife	Nobody helped her yet.	Vocational training (tailoring)
30	Daman	Sabz Pari	Killed	Wood collection	No			
31	Qasem abad	M. Shafiq	Lost his right-hand fingers	Construction work	No	Jobless	Nobody helped her yet.	Shop Financial support
32	Qasem abad	Hyatullah	Got injuries	Playing with children	No	Student	Nobody helped her yet.	To a doctor
33	Qasem abad	Shir Badar	Got injury on hands	Scrap collection	No	Shopkeeper	He did not receive any assistance yet.	Financial support
34	Qasem abad	Nasibullah	Killed	Playing with ERW	No			
35	Tangi Tokchi	Wasim	Got injury on hands	Construction work	No	Jobless	Nobody helped her yet.	Shop Financial support
36	Tangi Tokchi	Feda Mohamad	Lost his right leg	On the way	No	Jobless	The Red Cross provided him an artificial foot.	Vocational training (tailoring)
37	Tangi Tokchi	Saidal	Got injuries	Wood collection	Yes	Jobless	Nobody helped him yet.	Shop Financial support
38	Darbanak	Aslam	Killed	Grazing of animals	No			

39	Darbanak	Habibulah	Lost his right hand	Wood collection	No	Jobless	Nobody helped him yet.	Shop Financial support
40	Darbanak	Shakila	Got injuries	Playing with children	No	Housewife	Nobody helped him yet.	Literacy course
41	Shahi Kot	Sarferaz	Lost his left foot	Wood collection	No	Jobless	He did not receive any assistance yet.	Artificial foot & Financial support
42	Shahi Kot	Shahpiry	Got injuries on feet	Wood collection	Yes	Housewife	she did not receive any assistance yet.	Vocational training (tailoring)
43	Shahi Kot	Hamida	Got injuries on feet	Playing with ERW	No	Housewife	she did not receive any assistance yet.	Vocational training (tailoring)
44	Baharak	Gul Bigum	Lost her left foot	Grazing of animals	No	Housewife	The Red Cross provided her an artificial foot.	Vocational training (tailoring)
45	Shash Tapa	Mahjabin	Lost her left-hand fingers	Wood collection	No	Housewife	she did not receive any assistance yet.	Vocational training (tailoring)
46	Shash Tapa	Sardar	Lost her left foot	Engaged in agricultural activity	No	Jobless	The Red Cross provided him an artificial foot & Martyr and Disabled Department gave him a disability card and allocated the salary of AFN 60,000 / year.	Free of mines/ERWs Afghanistan
47	Shash Tapa	Shir Alam	Lost her right foot	Engaged in agricultural activity	No	Jobless	The Red Cross provided him an artificial foot & Martyr and Disabled Department gave him a disability card and allocated the salary of AFN 60,000 / year.	Shop Financial support
48	Shash Tapa	Mir Alam	Got injuries	Wood collection	Yes	Farmer	Nobody helped him yet.	Shop Financial support
49	Dasht-i-Robah	Nabila	Got injuries	Wood collection	No	Housewife	she did not receive any assistance yet.	Vocational training (tailoring)
50	Dasht-i-Robah	Rahim Bek	Lost his left hand	Grazing of animals	No	Jobless	The Martyr and Disabled Department gave him a disability card and allocated the salary of AFN 60,000 / year.	Shop Financial support
51	Kishaktan	Bahare	Got injuries	Wood collection	No	Housewife	she did not receive any assistance yet.	Vocational training (tailoring)
52	Kishaktan	Del Mohammad	Killed	Grazing of animals	No			

53	Kishaktan	Gul Murad	Lost her right foot	On the way	No	Shop keeper	The Swedish Committee provided him an artificial foot	Financial support
54	Kishaktan	Muhibllah	Killed	Grazing of animals	No			
55	Kishaktan	Rasol Khan	Killed	Grazing of animals	No			
56	Kalafgan	Anar Bibi	Lost her right foot	On the way	Yes	Student	The Red Cross provided her an artificial foot.	To be a teacher
57	Kalafgan	Gul Khan	Lost her left foot	Engaged in agricultural activity	No	Jobless	He did not receive any assistance yet.	Shop Financial support
58	Gazestan	Bibi Fatema	Got injuries	Wood collection	No	Housewife	she did not receive any assistance yet.	Vocational training (tailoring)
59	Gazestan	Rahmudin	Lost his right foot	Engaged in agricultural activity	No	Jobless	The Red Cross provided him an artificial foot & Martyr and Disabled Department gave him a disability card and allocated the salary of AFN 60,000 / year.	Shop Financial support
60	Gazestan	Najibullah	Lost his right foot	Engaged in agricultural activity	No	Jobless	The Red Cross provided him an artificial foot & Martyr and Disabled Department gave him a disability card and allocated the salary of AFN 60,000 / year.	Shop Financial support
61	Gazestan	Safer Mohammad	Lost his left foot	Engaged in agricultural activity	No	Shop keeper	The Red Cross provided him an artificial foot & Martyr and Disabled Department gave him a disability card and allocated the salary of AFN 60,000 / year.	Financial support
62	Gazestan	Mohibullah	Lost his left eye	Wood collection	No	Farmer	The Martyr and Disabled Department gave him a disability card and allocated the salary of AFN 60,000 / year.	Financial support
63	Gazestan	Abdul Kabir	Got injuries	Engaged in agricultural activity	No	Jobless	The Martyr and Disabled Department gave him a disability card and allocated the salary of AFN 60,000 / year.	Financial support
64	Gazestan	Nik Mohammad	Got injuries	Grazing of animals	No	Jobless	The Martyr and Disabled Department gave him a disability card and allocated the salary of AFN 60,000 / year.	Shop Financial support
65	Gazestan	M. Zakir	Got injuries	Wood collection	No	Jobless	The Martyr and Disabled Department gave him a disability card and allocated the salary of AFN 60,000 / year.	Shop Financial support

66	Gazestan	Khan Mohammad	Got injuries	Engaged in agricultural activity	No	Jobless	He did not receive any assistance yet.	Shop Financial support
67	Hazar Bagh	Noorul Haq	Lost his left foot	Engaged in agricultural activity	No	Tailor	The Red Cross provided him an artificial foot.	Financial support
68	Hawar Say	Ali Khan	Got injuries	Engaged in agricultural activity	No	Tailor	He did not receive any assistance yet.	Financial support
69	Aqmasjed	Nisar Ahmad	Got injuries	On the road	No	Jobless	He did not receive any assistance yet.	Financial support Shop Poultry farm
70	Aqmasjed	Abdul Shokur	Killed	Playing with ERW				
71	Chin Zai	Muhibullah	Lost his both eyes and right foot	On the road	No	Jobless	Just e Red Cross provided him an artificial foot.	Financial support
72	Chin Zai	Abdul Karim	Got injuries	In previous military base	No	Jobless	He did not receive any assistance yet.	Financial support
73	Chashma Sher	Sayed Baten	Got injuries	Grazing of animals.	No	Jobless	He did not receive any assistance yet.	Financial support Shop
74	Chashma Sher	M. Hassan	Lost his left hand	Wood collection	No	Jobless	He did not receive any assistance yet.	Financial support Shop
75	Urta Baz	Khalilullah	Lost his left hand	Wood collection	No	Jobless	He did not receive any assistance yet.	Financial support Shop
76	Urta Baz	Sangi Khan	Lost his left eye	Engaged in agricultural activity	No	Shopkeeper	He did not receive any assistance yet.	Treatment of his eye.
77	Urta Baz	Ebadullah	Lost his right leg	Engaged in agricultural activity	No	Student	The Swedish Committee provided him an artificial foot & Martyr and Disabled Department gave him a disability card and allocated the salary of AFN 60,000 / year.	Financial support to continue his education

S.#	Impact Indicators	Weight Factor	Descriptions
1	Known victims in recent two years linked to hazard	3	Any mine/ERW detonation within a known hazard which resulted human loss or casualty
2	Water blocked	3	Drinking water, irrigation systems
3	Critical infrastructure blocked	3	Mosques, Education facilities, Health Centres and Markets
4	Local authority/Communities request	2	The requested area assessed, confirmed and approved by related DMAC regional office
5	Agriculture blocked	2	Crop land, fruit farms and forest
6	Infrastructure blocked	2	Houses, Bridges and Roads
7	Small hazards	2	To release districts, provinces and or change the map with recorded hazards.
8	Community Centre	2	Hazards located in one km from the centre of the nearest community, cause high levels of psychological stress and increase the likelihood of incidents happening
9	AP MFs on flat land affecting high number of people	2	As flat land is mostly used by people, therefore, possibility of incident is high
10	Device type ERW	2	ERW cause the majority of casualties
11	IDPs around hazards	2	If IDPs settled within 5 km distance from the hazard
12	Known victims beyond two years linked to hazard	1	Any mine/ERW detonation within a known hazard area which resulted human loss or casualty
13	Non-Agriculture blocked	1	Grazing/pasture land
14	No. of affected families (200 family factor)	1	If hazard is affecting 200 families or more
15	Contaminated area size in the community 200,000 sqm or above.	1	The recent victim total increase 7% for each 10,000 sqm
16	Distance from health centre	1	for hazards located in more than 10 km distance from health centres

Annex 4: Hazards impact indicators and scoring:

Table 2: Hazards Impact Classifications

Impact Classification	Total Score	APMBT Ranking
Very High Impact	11 and above	1
High Impact	7 to 10	2
Medium Impact	4 to 6	3
Low Impact	1 to 3	4

The Ottawa Ranking is internally used for arrangement and sorting of the APMBT projects.

Annex 5: List of IED Accidents Points:

S.#	Location			Date	Description	Remarks
	Province	District	Community			
1	Nangarhar	Surkh Rod	Chaharbaghe Safa	Nov 2016	Under culvert an IED explosion happened on police vehicle in the village road at the result two police got injuries and vehicle partially damaged	The community is not affected by PPIED contamination
2	Nangarhar	Surkh Rod	Sultanpur	Sep 2013	Under culvert an IED explosion happened on police vehicle in main road at the result three police got injuries and vehicle partially damaged	The community is not affected by PPIED contamination
3	Nangarhar	Bihsud	TangiTokchi	Mar 2015 July 2015	Two IEDs explosion happened. 1. IED explosion happened in school on a dog no others causality. 2. IED explosion happened on police vehicle in main road at the result one police got injuries and vehicle partially damaged	The community is not affected by PPIED contamination

4	Nangarhar	Rodat	Shahi Kot	Feb 2017	IED explosion happened on police vehicle in a sub road at the result just vehicle partially damaged	The community is not affected by PPIED contamination