Afghanistan National Disaster Management Authority (ANDMA)

Directorate of Mine Action Coordination (DMAC)

Livelihoods Analysis of Landmine/ERW Affected Communities Bamyan and Samangan Provinces, Afghanistan (16 July - 18 August 2016)

This survey is implemented by the Directorate of Mine Action Coordination (DMAC) with financial support from US PM/WRA and with the technical contribution from UNMAS.

Abdul Qudos Ziaee, UNMAS Operations R&D Manager in Support of DMAC
Fazel Rahman, DMAC/ITF Operations Project Manager

September 30th, 2016

Directorate of Mine Action Coordination (DMAC)

Directorate of Mine Action Coordination (DMAC), previously called 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. DMAC with technical support from UNMAS is responsible for the leadership, monitoring and evaluation of all mine action activities in Afghanistan including demining, mine risk education, surveys, accreditation and adherence to national standards.

DMAC receives support from the US Department of State Bureau of Political-Military Affairs, Office of Weapons Removal and Abatement (PM/WRA) through the "International Trust Fund (ITF) for Enhancing Human Security" a Slovenian Public International Organization in support of the national capacity development of the DMAC. ITF has signed a Memorandum of Cooperation with ANDMA.

Acknowledgements

The successful conduct and completion of this survey was a team effort involving ANDMA and DMAC staff with technical support from UNMAS. In particular, we would like to thank the US Department of State for providing financial support for the survey and also ANDMA provincial offices in Bamyan and Samangan for their endless support to the successful completion of the survey.

We are very grateful to logistical support provided by ITF and the communities that received us in a very friendly and hospitable way, and patiently provided the information required for attaining the objectives of the survey. We hope that the information in this report will benefit these and other mine-affected communities in Afghanistan.

It is worth mentioning that our special thanks go to the international independent livelihoods consultant Barry Pound who reviewed the report and provided helpful comments for improving the report.

Team involved in Samangan Survey

Team involved in Bamyan Survey

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ACRONYMS

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
BSC	Balanced Scorecard
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 Deming
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 Affair, 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 Ordinance
VTF	Voluntary Trust Fund

I- EXECUTIVE SUMMARY

This mine action and livelihoods survey (MA&LS) report is intended to contribute to more complete reporting to the Government of Afghanistan (GoA) and donors on the contribution made by the MAPA to Afghanistan's development and how to further enhance the focus of demining to the development outcome level.

The MA&LS was planned 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 to the communities.

DMAC, with technical support from UNMAS, trained and deployed four teams of Afghan men and women surveyors to visit the 21 selected communities within a Livelihoods Analysis approach in the two provinces.

The communities were selected in a way to give a contrasting sample of cleared and partially cleared situations, a mix of contamination types (UXO and/or mines), and urban and rural locations. The 21 villages surveyed cannot be fully representative of all affected communities in the region. However, 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 (village leaders, farmers and key informants), women and children.

Participation and Inclusion of the women surveyors considerably enhanced the breadth of the information obtained.
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 Samangan province during 16 - 25 July 2016 where 12 communities were visited and in Bamyan province from 11-18 August2016 where 9 communities were visited.

From the data collected by the survey teams, a variety 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 21 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.

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.

Development Outcomes

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 training.

Cleared land is mostly returned to its rightful owners and is quickly used for productive purposes. Only in one case, villagers are unhappy about the unfair and/or undemocratic way in which the land has been used (e.g. opportunistic land grabbing by some powerful people in Zenday Kot Village).

The cleared land is normally handed over by the demining teams to the owner of the land and the relevant community Shura. The land completion certificate contains a paragraph indicating that the certificate is only a document confirming that the land is cleared in accordance to Afghanistan mine action 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.

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.

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

- The freedom to go for sightseeing
- Access to historical heritage sites(Takhti Rustam, Shari Gholghula, Shari Zhohak historic heritage areas)
- Construction of township for over 2,000 families(Tayboti village of Bamyan)
- Solar energy system for electricity (Bamyan city)
- Rebuilding and improving gardens (e.g. almonds, melon, watermelon & grapes) and cropland (wheat, maize, alfalfa and a range of other crops)
- Ability to safely use the grazing land for cows, sheep and goats, both for villagers and nomadic Kuchis
- 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
- Cleared area used for building new houses (like in Zenday Kot village of Samangan)
- Resettlement of displaced people
- Transfer of drinking water through pipe scheme system from natural water sources to other locations (e.g. drinking water from Khoram Wa Sarbagh district to Aybak city of Samangan)

Socio Economic Benefits

Based on Afghanistan mine action national database, in total 3,844anti-personnel (AP) mines, 45 anti-tank (AT) mines, 51,142 Unexploded Ordnance (UXO) and 11,343 Small Armed Ammunitions (SAA) found and

destroyed by demining team in the 21 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.

The assets freed by demining include crop and grazing land, land for housing 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 etc. Most of these have a tangible economic impact at community and/or national level in the short, medium or long-term.

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

- Building school, clinic, mosque, electricity supply and water channel
- Productive agriculture areas for wheat, melon and watermelon
- Productive orchards, especially almond which is famous in Samangan
- Getting taxes by Government from visitors in historical sites both in Bamyan(Shari Gughula, Shari Zhohak, Bodah Status) and in Samangan (Takhti-Rostam)
- Safe grazing areas for tending animals
- Transfer of safe natural drinking water through pipe scheme from one district to other locations

People in all the communities mentioned that land values increased substantially after demining. The increase of land value is most prominent in Zenday Kot village of Samangan and Tayboti village of Bamyan where the contaminated land was used for building new houses.

Victim Assistance

According to information collected from the 21 villages surveyed, 202 people become victims of mine/ERW accidents. The survey teams could interview36 victims who told us how they become victim of mine/ERW accidents and also interviewed relatives of two 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 that there are more male victims compared 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, 19 victims told us that they receive 6,000 AFN (90 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

Based on information collected from the communities and also according to mine action national database, MRE teams provided risk education sessions to 15 out of the 21 villages surveyed.
The recent MRE for one village was conducted during 2016 and for 3 other villages during 2015. The other 11 villages received MRE between the years 2008 - 2014 and in six other villages no MRE was conducted, by MRE teams, but the men in these six villages told us that the demining teams informed them about danger of mines and ERWs.
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.

The children interviewed in 15 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. However, the coverage of MRE appears to be

very less during the recent years in the communities visited. Also there was no MRE visual aids (posters and leaflets) in any of the villages visited.

Prioritisation

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 need to be cleared first.

In all the communities visited, especially in the villages where there was 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 Chinar Gai village of Samangan where demining is still ongoing said that the demining team showed them the list of all recorded hazar areas of the village and then in consultation with them 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 how we will use the area after clearance and what outcome the areas would have for us"*.

However, none of the women in communities visited said that they have been consulted and no one asked them which hazard areas has importance to them.

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 outcomes of demining operations in the areas cleared by the demining teams.

Capacity Development

This fourth MA&LS was planned by DMAC and had limited time for design by a small group of national staff from UNMAS and 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 21 villages selected for survey. The DMAC staff felt that they are now capable of conducting similar surveys (with the support from UNMAS). However, the actual data collected by the survey is not as complete as it was expected**.** This indicates that there were some deficiencies in the training and in the process of selecting the survey team members for the survey.

Recommendations

- DMAC and UNMAS should continue to conduct regular landmines and livelihoods surveys each year in order to better understand the need for linking mine action work with the livelihoods and development projects.
- DMAC should ensure through implementation of the mine action 5 years strategic plan that communities' development needs and priorities are shared with development organizations to strengthen the link between mine action and development

- DMAC and UNMAS should assess the possibility of joining conduct of the PDIA and Livelihoods survey
- Inclusion of communities affected by PPIED contamination in future MA&L surveys will help to find out about impact of PPIED contamination in the communities,
- DMAC and UNMAS should conduct case studies of the national development projects implemented in areas cleared of mine and ERWs by demining teams.
- Provision of MRE sessions for women should be reinforced.
- Women need to be better and more directly informed about clearance activities and the safety status of land during clearance through employment of women surveyors in the structure of survey projects.
- DMAC and UNMAS should make sure of establishing a stronger and more methodical community liaison process involving not only men but also women and children.
- There should be a systematic monitoring system by DMAC QM staff to 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 DMAC should decide how long after clearance this monitoring should happen.
- The DMACA and UNMAS should focus more on quality of NTS operations, as it was found that despite completion of NTS operations in the villages still some hazardous areas remained un-recorded
- The DMAC and UNMAS should find a way to communicate the hotline number to all village Shuras so they could inform DMAC/UNMAS about possible mine and ERW problem in their villages
- 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 shuras will help most of the community members to be more familiar with Mine/ERW risks
- DMAC and UNMAS should assess possibility of providing vocational trainings to mine/ERW and PPIED victims.
- DMAC and ANDMA staff need experience and knowledge about survey design, selection of the communities, selection of surveyors, data analysis and report writing
- There is need for academic training on data analysis, especially the economic data analysis and reporting writing of such surveys for UNMAS and DMACA national staff involved in MA&L survey.

II- INTRODUCTION

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.

The first survey was conducted in 2010, through which 25 communities in Kabul, Parwan and Balkh provinces were surveyed. The second survey conducted in 2011through which four communities were surveyed in Herat, which is a province in the western part of the country.

In both the first and second surveys, two international consultants from GICHD and also national consultants from AIRD were involved. The involvement of the two international consultants contributed not only to successful completion of the survey, but also built the capacity of UNMAS and DMAC national staff to plan and conduct further surveys without direct involvement of the international consultants.

The third landmines and livelihoods survey was designed and conducted by two national staff of UNMAS and two national consultants from Ministry of Rural Rehabilitation and Development (MRRD). The third survey was implemented during September 2012 in Badakhshan, a province in the northeast region of the country.

Due to shortages of funds since 2012, no other such surveys were conducted by UNMAS and DMAC. But in 2015 DMAC included conduct of MA&LS in their 2016 work plan and requested financial support for a survey from the US Department of State. The US Department of State provided the budget and the survey was conducted in Bamyan and Samangan provinces through which 21 selected communities were visited during 16-25 July 2016 in Samangan and during 1-18 August 2016 in Bamyan.

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 the donor communities 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 to remove blockages caused by mine and ERW contaminations.

Survey Locations

The focus of this survey was the North and Center Regions of Afghanistan where 12 communities in four districts of Samangan province and 9 communities in three districts of Bamyan province were selected for survey.

In total 21 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 visited in Bamyan Province

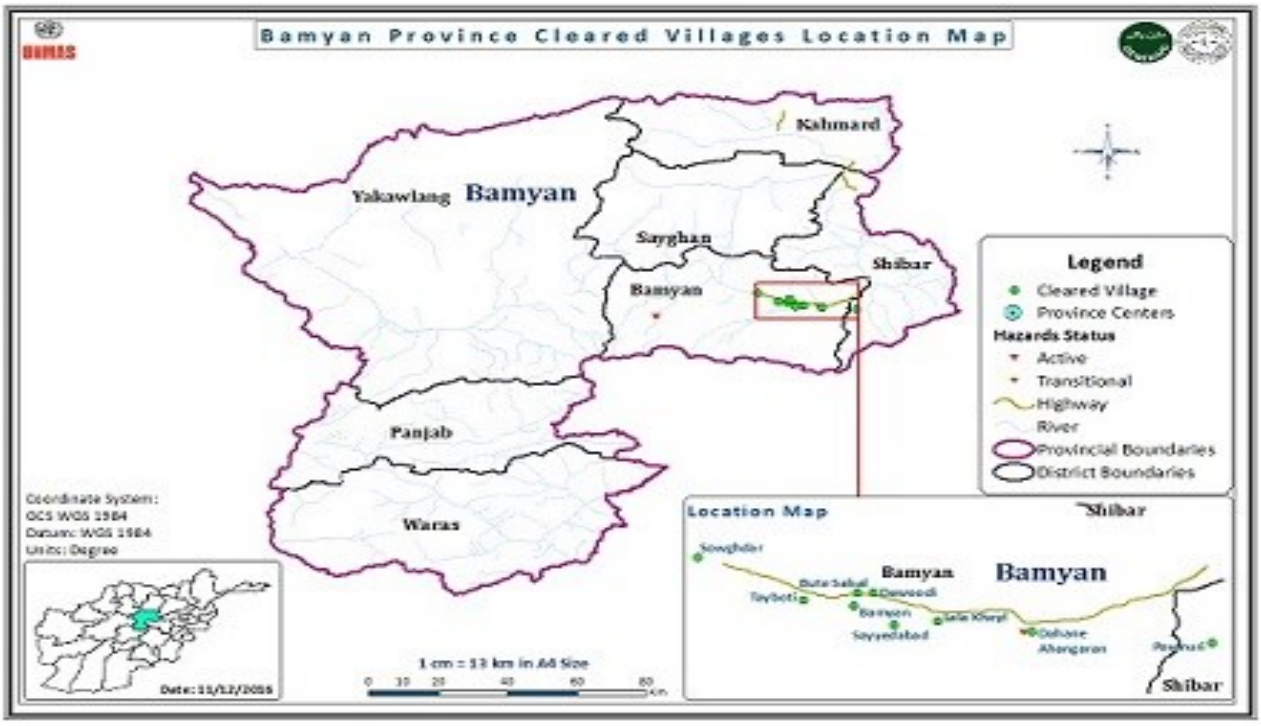
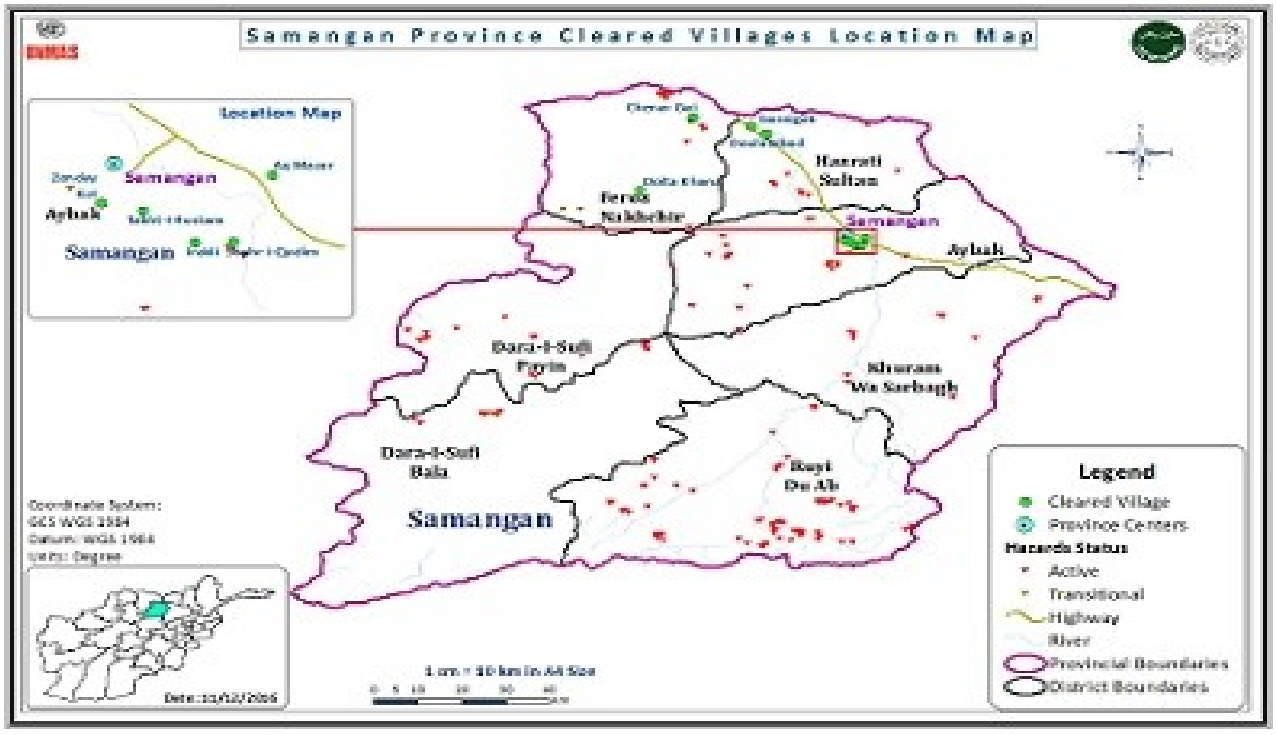


Figure 2: Location of Communities Visited in Samangan Province



Criteria for selection of communities for inclusion in the survey

Selection of the communities in both provinces of Bamyan and Samangan was in such a way to know the impact of mine action on both urban and rural communities. The 21 villages surveyed cannot be fully representative of all affected communities in the region. However, selection sought to contrast 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 (Central and North)
3. Contamination status:
    - Fully cleared
    - Partially cleared
4. Type of contamination problem:
    - Only ERW contaminated
    - Mine or 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 1: List of Communities Visited by the survey teams

S#	Location			Number of Hazard Cleared		Hazard Area Cleared (Sqm)	
	Province	District	Village	MF	BF	MF	BF
1	Bamyan	Bamyan	LalaKheyl	12	0	506,520	0
2	Bamyan	Bamyan	Dawoodi & ButeSalsal	3	0	94,687	0
3	Bamyan	Bamyan	Bamyan & Sarasyab	14	13	1,298,008	3,040,700
4	Bamyan	Bamyan	Dahane Ahangaran	8	0	325,869	0
5	Bamyan	Bamyan	Shahre Ghulghola& Sayyedabad	10	0	381,440	0
6	Bamyan	Bamyan	Sowghdar	27	0	1,009,775	0
7	Bamyan	Bamyan	Tayboti	4	1	200,762	297,022
8	Bamyan	Shibar	Paymuri&Shahr-e Zohhak	6	0	113,250	0
9	Bamyan	Yakawlang	Yakawlang (FirozBahar)	7	0	559,098	0
10	Samangan	Aybak	AqMazar	7	0	331,881	0
11	Samangan	Aybak	Jaga Banda	2	1	75,674	45,000
12	Samangan	Aybak	Irakli	2	0	153,543	-
13	Samangan	Aybak	Shahr-i-Qadim	11	0	127,260	-
14	Samangan	Aybak	Takht-I-Rustam	4	0	155,882	-
15	Samangan	Aybak	ZendayKot	5	0	173,100	-
16	Samangan	FerozNakhchir	ChenarGai	11	0	837,829	-
17	Samangan	FerozNakhchir	DoltaKhana	10	0	482,905	-
18	Samangan	Hazrati Sultan	Doulatabad	6	0	191,200	-
19	Samangan	Hazrati Sultan	Gaznigak	4	2	96,300	1,930
20	Samangan	KhuramWaSarbagh	Baba Qambar	5	0	29,760	-
21	Samangan	KhuramWaSarbagh	Langar	26	0	927,549	-
Total				**184**	**17**	**8,072,292**	**3,384,652**

III- SURVEY IMPLEMENTATION

Meeting With Bamyan and Samangan Governmental Authorities

To ensure that the provincial authorities both in Bamyan and Samangan provinces are involved, prior to start of the survey, the DMAC accompanied by the head of the ANDMA provincial office, had meetings with the governor of Bamyan and Samangan provinces and briefed them about the survey and its objectives. The Governors of the two provinces were very interested and highlighted how important mine action is for the development of the country. They promised support of the governmental authorities for the successful completion of the survey.

The governor of Bamyan and Samangan are briefed about the survey objectives and the selected villages for survey

Survey Team Training

As part of the survey plan, there was a three days 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.

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 team's group work during training

The Organizations Involved

1. The Directorate of Mine Action Coordination (DMAC)
2. The Afghanistan National Disaster Management Authority (ANDMA)
3. The 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, therefore, a gender perspective has been mainstreamed throughout the process of this survey.

Women surveyors were involved in the planning, training, implementation and data collection of the survey. In order to access both females and males in the affected communities' two female survey teams participated in the survey. This 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.

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- HUMAN RESOURCES

UNMAS staff

From the UNMAS side, Mr. Abdul Qudos Ziaee who gained experiences from conducting previous 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.

ANDMA & DMAC Staff

Two staff from DMAC, Mr. Abdul Habib Rahimi and Mr. Gul Aqa Mirzai and from ANDMA Mrs. Tamkeen Sharifi who took part in previous surveys were engaged in this survey to lead the survey teams in the field. 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 heads of ANDMA provincial offices in Bamyan and Samagan were involved in coordinating implementation of the survey with provincial/district authorities and with the community Shuras.

Survey Teams

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

The two staff of DMAC 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 - Samangan

Team-A (Female)

S.#	Name	Position
1	Mrs. Tamkeen Sharifi	Team Leader
2	Ms. Shakila Mohammadzai	Surveyor
3	Ms. Lilee	Surveyor

Team-B (Female)

S.#	Name	Position
1	Ms. Atri Gul	Team Leader
2	Ms. Nadera Naeebi	Surveyor
3	Ms. Maryam Rezaie	Surveyor

Team-C (Male)

S.#	Name	Position
1	Mr. Abdul Habib Rahimi	Team Leader
2	Mr. Abdul Manan	Surveyor
3	Mr. Shir Ahmad	Surveyor

Team-D (Male)

S.#	Name	Position
1	Mr. Gul AqaMirzai	Team Leader
2	Mr. Zafer	Surveyor
3	Mr. Noorullah	Surveyor

Survey team structure - Bamyan

Team-A (Female)

S.#	Name	Position
1	Mrs. Tamkeen Sharifi	Team Leader
2	Ms. Liqa "Ahmadi"	Surveyor
3	M.s Sima "Yaqubi"	Surveyor

Team-C (Female)

S.#	Name	Position
1	Ms. Khadija	Team Leader
2	Ms. Zerghouna	Surveyor
3	Ms. Ferzana "Qasimi"	Surveyor

Team-B (Male)

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

Team-D (Male)

S.#	Name	Position
1	Mr. Gul Aqa Mirzai	Team Leader
2	Mr. Mohammad Asif	Surveyor
3	Mr .Firoz "Samadi"	Surveyor

Mahram (Chaperones)

To make sure of the active participation of female staff for survey, each of the female surveyors who were to travel from their home to other province 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 Bamyan and Samangan 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.

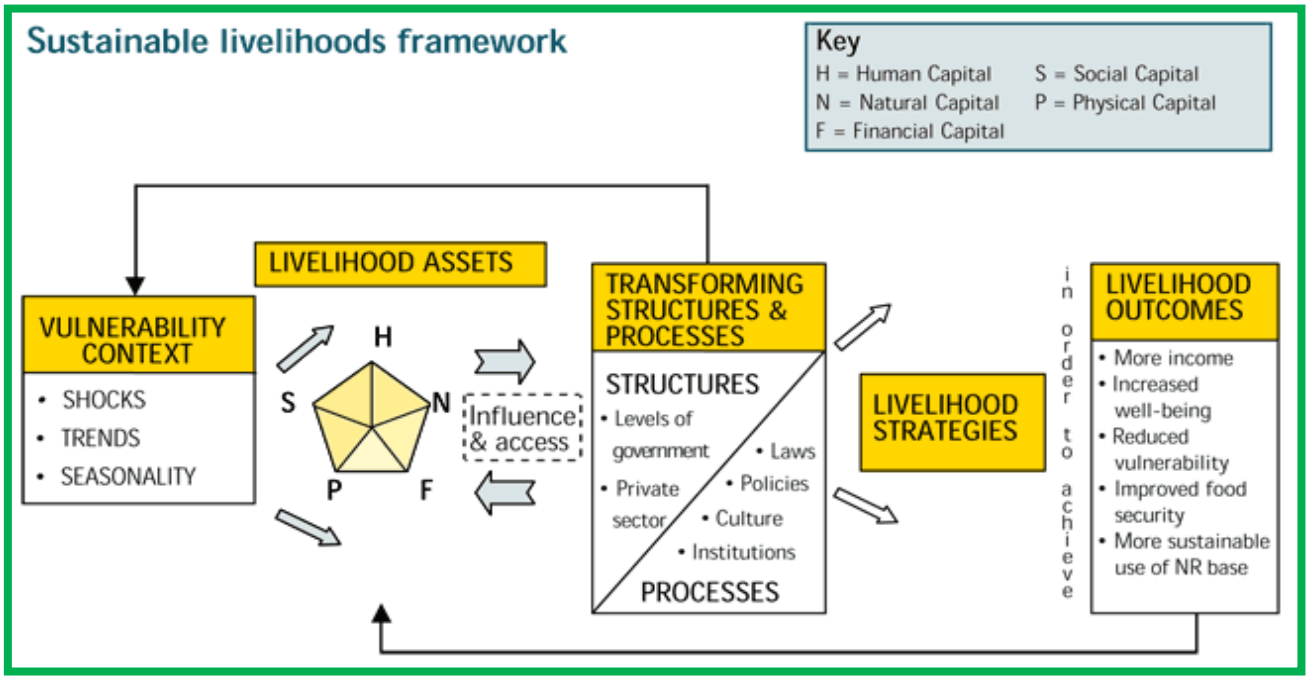
V- METHODOLOGY USED IN THE SURVEY

The Sustainable Livelihoods Approach

As in the previous surveys, the Sustainable Livelihood Approach was used for the Bamyan and Samangan survey as a basis for obtaining a balanced and holistic view of the situation in ERW/landmine-affected communities.

The Sustainable Livelihoods Framework, which is presented in Figure one 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 of Figure One. 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 environment. 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 Bamyan and Samangan 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 time table 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 was 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.

Data collection & Report Writing

The survey and data collection went very well in accordance to the plan first in Samangan and then in Bamyan 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.

Writing the report was a bit challenging, because Mr. Abdul Qudos, UNMAS OPS manager who gained good experience from conduct of same surveys in the past could not participate in Bamyan survey and therefore, he had to rely only on what information was provided by the team and frequent contact with DMAC staff.

VI- SCOPE OF CURRENT CONTAMINATION IN AFGHANISTAN

Based on the MAPA annual report for 2016, as of 1st April 2016, there are 4,279 recorded mine/ERW hazards covering an area of 617.3 sq km and impacting 1,577 communities in 256 districtsand32 provinces of Afghanistan. 40.4% of the remaining contamination is due to anti-personnel (AP) mines, 45.4% is anti-tank (AT) contamination and the remaining 14.2% is due to ERW. Out of 617.3 sq km area 35.9 sq km are contamination from the post-2001, while the remaining contamination is from the legacy contamination. Table 3 shows the breakdown of known contamination type in terms of number of minefields (MF) and battlefields (BF) and the area contaminated.

Table 2: Remaining Contamination

Contamination type	No. of MF/BF	Area (sq km)	% area
AP	2,723	249.40	40.4
AT	1,236	280.51	45.4
ERW	320	87.34	14.2
Total	4,279	617.25	100

Table 3: Remaining AP Contamination by Region in Order of Area (Sq Km)

Region	No. of AP MF	% of AP MF	Area of AP MF (sq km)	Population	% population	No. of communities impacted	% communities impacted
North East	831	30.52	70.95	48,583	14.32	279	27.62
Central	906	33.27	65.55	147,816	43.56	342	33.86
South	173	6.35	31.62	28,236	8.32	97	9.60
West	62	2.28	27.49	6,935	2.04	40	3.96
North	353	12.96	20.67	21,404	6.31	112	11.09
South East	206	7.57	18.68	56,437	16.63	104	10.30
East	192	7.05	14.45	29,918	8.82	36	3.56
Total	2,723	100	249.40	339,329	100	1,010	100

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, contaminated area, population and the number of impacted communities. Contamination in the Central region accounts for nearly 33.86% of the total, followed by the Northeast region with 27.62%.

Table 4: Remaining AT Contamination by Region in order of Area (sqkm)

Region	No. of AT MF	% of AT MF	Area of AT MF (sq km)	% AT MF area	Pop.	% pop.	No. of communities impacted	% communities impacted
South	318	25.73	140.46	50.07	52,668	18.20	116	22.83
Central	347	28.07	51.62	18.40	81,606	28.20	118	23.23
South East	310	25.08	42.56	15.17	107,747	37.23	161	31.69

West	103	8.33	34.03	12.13	5,853	2.02	39	7.68
East	86	6.96	9.27	3.30	32,120	11.10	31	6.10
North	55	4.45	2.02	0.72	7,808	2.70	30	5.91
North East	17	1.38	0.55	0.20	1,574	0.54	13	2.56
Total	1236	100	280.51	100	289,376	100	508	100

Table 3 shows how AT contamination is distributed regionally. Note that the Central region has the greatest number of AT minefields, but the area of contamination is greatest in the South. Although the Southeast region has the highest number of people impacted by AT mines, the Southeast has the highest number of communities impacted. The East, Northeast and North regions are notably less affected by AT mines than other regions.

However, 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.

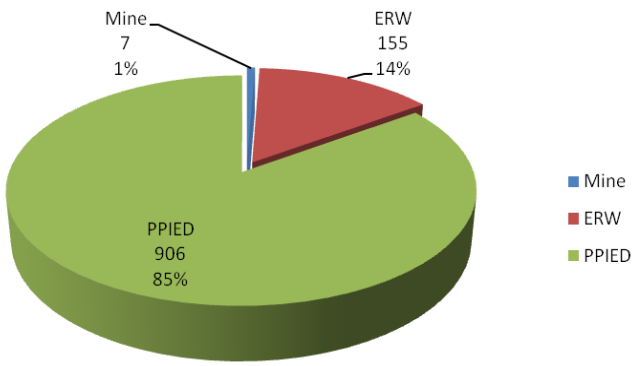
In addition, contamination impacts people travelling between non-contaminated communities when they pass through the impacted community. Furthermore, if development projects aimed to assist a group of impacted and non-impacted communities are hampered due to landmines, this has an impact on all nearby communities who might potentially benefit from the development project such as power lines and other infrastructures, rather than just the contaminated community. Thus, in reality the figure of 1,688 impacted communities is lower than the actual number of communities affected by mines and ERW contamination in Afghanistan.

The population figures presented in this data analysis are derived from 2010 Land Scan data. Land Scan uses the light intensity at night to approximate the population at a specific location. It is likely to underestimate the population figures, as many rural communities may not have electricity. The figures mentioned should therefore be viewed as the minimum number of people affected.

Civilian Casualties

Based on MAPA annual report 2015, in total, 1,068 civilian casualties due to mine, ERW and mostly PPIED explosions were recorded. There is decrease of mine and ERW civilian casualties comparing to 2014, but an increase of civilian casualties from PPIEDs was registered. In 2015, the civilian casualties from PPIED make up 85 % of all recorded civilian casualties recorded by UNMACA 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, 2015



During 2015, around 89 civilians were killed or injured on average every month by mines, ERW or PPIEDs. Table 5 below shows a summary of civilian casualties for 2015, 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 Southeast, East and west regions had the second, third and fourth highest number of recorded casualties in the country.

Table 5: Civilian Casualties by Regions

Region	Mine		ERW		PPIED		Total
	Injured	Killed	Injured	Killed	Injured	Killed	
Central	0	0	11	4	27	17	59
East	0	0	39	2	39	37	117
North	2	0	6	8	47	41	104
Northeast	1	1	31	16	7	2	58
South	0	1	1	7	231	149	389
Southeast	2	0	12	7	93	114	228
West	0	0	8	3	66	36	113
Total	5	2	108	47	510	396	1068

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. UNMAS and DMAC 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 to gather 23 gender focal points from 15 implementing partner organizations and two line ministries (MoPH & MoLSAMD). The participants and UNMACA 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 in to their programmes, 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 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 programme.

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 VTF. The purpose of consideration of gender marker codes 2a and 2b is to mainstream gender at 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 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.

VII- SURVEY FINDINGS

The findings from the survey are presented below. They represent what communities told us as accurately as possible.

The survey collected information and recommendations from 21 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 21 villages visited faced different threats from landmines and unexploded ordinance (UXO). 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 12 years ago and in several of the villages, clearance had only recently been completed. Clearance is still ongoing in six of the villages studied.

Example of time line: Chenar Gai village, Samangan (according to community members)

1981	Mines planted by Soviet forces
1996	Mines planted by Mujahedeen
2005	First accident happened on locals
2005	Survey and demining started
2006	Mine risk education
2010	The cleared area can be used as grazing and agricultural land
2016	Still there are mine contaminated areas in the village

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

- Access to historical heritage sites(Takhti-Rustam, Shari Gholghula, Shari Zhohak historic heritage areas)
- Construction of township for over 2,000 families(Tayboti village of Bamyan)
- Solar energy system for electricity (Bamyan city)
- Rebuilding and improving gardens (e.g. almonds, melon, watermelon & grapes) and cropland (wheat, maize, alfalfa and a range of other crops)
- Peace of mind and freedom of going safely for sightseeing
- Ability to safe use the grazing land for cows, sheep and goats, both for villagers and nomadic Kuchis
- Safe access to areas from which stone, sand and soil for building can be obtained
- Ability to areas used for building new Masjids, schools, and also drinking water

Takhti-Rostam Historical Site in Samangan

Gate to Takhti-Rostam to obtain entrance ticket

Cleared areas for building new residential areas (like in Tayboti village of Bamyan and ZendayKot village of Samangan)

- Return of refugees to their village
- Safe areas for tourists' visits (e.g. Buddha statues, Zuhak city, Gholghola city in center of Bamyan)
- Transfer of drinking water through pipe scheme system from natural water sources to other locations (e.g. drinking water from KhoramWaSarbagh district to Aybak city)

Natural drinking water in Khoram Wa Sarbagh

Asset Use Following Clearance & the Development Priorities of the Communities

According to Afghanistan mine action national database, **8,072,292** sqm minefields and **3,384,652** battlefield cleared by demining teams in the 21 communities visited. As a result of clearance operations, in total 3,844 **AP** mines, **45 AT** mines, **51,142 UXOs** and **11,343 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 Bamyan Province:

S #	Community	Population	Land Use After Clearance	Main Development Priorities	
				Male	Female
1	LalaKheyl	1,951	- The cleared land used for grazing while houses also have been built on cleared land.	- Construction of wash culvert & protection wall. - Construction of school. - Construction of Clinic. - Canal for irrigation.	- Vocational training (tailoring, embroidery & knitting). - Poultry farms.

2	Dawoodi& ButeSalsal	1,950	- Heritage site used by national/international tourist and local, as well as government receives tax from visitors. - Crop agriculture (wheat and potatoes) and houses also have been built on cleared land. - Construction of irrigation canal is ongoing on cleared land.	- Construction of wash & protection wall. - Providing of safe drinking water. - Construction of school for girls. - Construction of village road.	- Vocational training (tailoring, embroidery & knitting) - Literacy training for women. - Providing of safe drinking water. - Construction of school for girls.
3	Bamyan& Sarasyab	1,966	- Crop agriculture (wheat and potatoes) and for grazing livestock (cows, sheep and goats).	- Safe drinking water - Construction of irrigation canals - Construction of wedding hall	- Vocational training (tailoring, embroidery & knitting) - Literacy training for women - Kitchen garden.
4	Dahane Ahangaran	1,040	Crop agriculture (wheat and potatoes) and for grazing livestock (cows, sheep and goats).	- Construction of village roads. - Construction of school, clinic and protection walls	- Literacy & vocational training for women like embroidery & knitting - Poultry farms.
5	Shahre Ghulghola &Sayyedabad	2,405	- Access to historic heritage sites for locals and tourists - Crop agriculture (wheat and potatoes) - Building houses	- Water for irrigation - Construction of clinic, roads& culverts. - Vocational training	- Vocational training (tailoring, embroidery & knitting) - Poultry farms - Animal (cows, sheep) husbandry farms
6	Sowghdar	2,405	- On going construction of road, wash & protection wall - Orchard - Grazing livestock (cows, sheep and goats)	- Construction of irrigation canals, protection wall retention of dams.	- Kitchen garden - Literacy & vocational training for women (tailoring, embroidery & knitting).
7	Tayboti	1,462	- Ongoing construction of township for "2000" families including schools and clinic. - The sales value of the land increase day by day after clearance and construction of township.	- Electro power/Electricity - Providing of safe drinking water (pipe scheme) - Construction of irrigation canals. - Construction of big school or extension of current school.	- Vocational training (tailoring, embroidery & knitting). - Construction of school for girls - Construction of clinic
8	Paymuri& Shahr-e Zohhak	429	- Access to heritage site (Shahr-e Zohhak) for national/international tourists - Safe access construction materials (stone or sand)	- Construction of clinic, protection wall, asphalt road and culverts	- Literacy & vocational training for women. - Kitchen garden - Safe drinking water
9	Yakawlang (FirozBahar)	3,150	- Asphalt road on cleared land connecting Bamyan city with "National Park Bande Amir, Yakawlang and Warase districts" - Safe transfer of products to Bamyan city Access to stone or sand for building purposes.	- Electro power/Electricity Safe drinking water - Construction of village road, wash & protection wall.	- Electro power/Electricity. - Construction of clinic -Safe drinking water - Vocational training (tailoring, embroidery & knitting). - Poultry and animal (cows, sheep) husbandry farms

Table 2.Communities Visited in Samangan Province:

S#	Community	Population	Cleared Land Used For	Main Development Priorities	
				Male	Female
1	AqMazar	1,568	- Residential area, agriculture, orchards	- Sealed road - park for children - Clinic	No information provided
2	Jaga Banda	1,058	- Productive crop lands and orchards, grazing of animals	- School - Electricity - Clinic - Safer drinking water	- Electricity - Safe drinking water
3	Irakli	1,404	- Agriculture, orchards, residential	- Clinic - School - Safe drinking water - Clearance or remaining hazards	- Vocational training (tailoring, embroidery & knitting). - School
4	Shahr-i-Qadim	996	- Productive crop lands and orchards, grazing of animals	- School - Safe drinking water - Social area - Electricity	- Vocational training - School - Safe drinking water - Electricity
5	Takht-I-Rustam	1,610	- Historical area for visitors - Residential area, agricultural -	- Safe drinking water - School	- School - Safe drinking water
6	ZendayKot	1,293	- Residential, productive orchards and agriculture, grazing - Area for football - Building school	- Safe drinking water - Sealed road - Electricity - Park - Clearance of hazard areas	- Clinic - Safe drinking water - Clearance of remaining hazard areas
7	ChenarGai	1,377	- Tending animals, agriculture	- Clearance of remaining hazard areas - Water Dam - Safe drinking water - Work opportunities for villagers	- Clinic - School - Safe drinking water - Tailoring vocational training
8	DoltaKhana	1,352	- Building school - Ongoing work on sealed road - - Grapes Orchards, agriculture,	- Safe drinking water - Social area - Protection wall - Clearance of remaining hazard areas	- Safe drinking water - Vocational training - Clearance of hazard areas
9	Doulatabad	2,611	- Cleared land used for agriculture, grazing the animals, electricity poles, productive orchards	- clinic - school for girls - safe drinking water	No information provided
10	Gaznigak	1,904	- Agriculture, grazing, residential ,	- Electricity - protection wall in canal - Deep well - Clinic	No information provided
11	Baba Qambar	2,350	- Installation of tower for mobile - Productive agriculture and orchards, grazing	- Safe drinking water - Road - Dam for irrigation	- Vocational training on tailoring and rug knitting
12	Langar	2,755	- Safe road, productive orchards, agriculture, irrigation, electricity poles	- Construction of Bridge on canal, - Sealed road - Safe drinking water - Vocational training	- Vocational training - Support projects to victims

VIII- DEVELOPMENT OPPORTUNITIES ARISING FROM MINE ACTION

All 21 communities are distinct in terms of their physical, natural, human, social and financial assets, resulting in their facing different challenges and opportunities for development.

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

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

After the mine clearance, the irrigation water canal is being built in Dawoodi village of Bamyan

The Mine Action has also facilitated the safe return of refugees and IDPs back to their communities by enabling them to know about the danger of mines through MRE, and to clear residential areas so the IDPs and refugees are able to rebuild their residential areas after they were cleared of mines and ERWs.

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

The ongoing construction of 2,000 houses on cleared land in Taybuti of Bamyan, and also construction of new houses in Zenday Kot village of Samangan, are the prominent signs of infrastructural development as a result of mine action work**.**

In Doulatabad village of Samangan, the people were very grateful to the work of mine action and mentioned that apart from being able to go about their agriculture, road and residential areas safely, the work of mine action has enabled them to bring electricity to their village.

> *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 to the electricity department of Samangan 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"*
>
> ***Daulatabad Village- Samangan***

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 of 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 Zenday Kot village of Samangan and Tayboti village of

Bamyan where the contaminated land was used for building new houses.

Only in one case the villagers are unhappy about the unfair and/or undemocratic way in which the land has been used after clearance and when the land value increased (e.g. opportunistic land grabbing by “people of power” in Zenday Kot village of Samangan and building houses).

IX- CASE STUDIES

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

Case study 1: ZendayKot village (Samangan Province, Aybak District) – Before and after

The village is near to Aybak city and was on the front line of fighting between Mujahideen and Russian. There were 6 minefields in this village which caused blockages to residential area, agriculture lands and grazing areas.

Before clearance there were several mine and ERW accidents to locals. Survey and clearance was conducted in consultation with villagers and they showed the hazardous areas to the demining teams. 5 minefields were cleared by the demining team and they destroyed41 AP mines and 898 ERWs.The demining operation is still ongoing in one minefield.

One of the MFs cleared by demining is used by the villagers for residential area, because, due to increase of village population and return of refugees, there was need to expand the village. Also a school was 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 areas is being used for building new houses. There are new houses on the cleared land and new other houses have yet to be built. The price of land dramatically increased after clearance and when the people stared to build new houses in the areas. Some members of the community were unhappy about the powerful people who grabbed some of the land after the land was cleared of mine and ERW. A mine victim told us *“I am lucky, because after clearance of the area, I immediately started to build a new house in a portion of the area and now it is my own house and the price of my land and house become higher*".

A mine victim in the place he stepped on a mine

New houses and a school in cleared land

Case study 2: ChenarGai village – Feroz Nakhchir District of Samangan Province

The village is in the vicinity of the main road to FerozNakhchir district. ChenarGai village is heavily contaminated by mines and according to information from national mine action database, out of 35 recorded mine contaminated areas, only 14 hazard areas have so far been cleared of mine and still there are 23 other hazard areas to be cleared.

According to the villagers, there have been several mine accidents on locals and to their animals. Villagers told us that some of the areas which were close to the village cleared of mine, but were requesting clearance of the remaining hazardous areas.

As a result of demining operations, 225 mines, 77 AIEDs and 1,055ERWs were destroyed by demining team which is a clear sign of saving life of men, women, girls and boys of the community.The cleared hazard areas are being used by locals for agriculture and tending the animals.

According to women so far no MRE sessions were conducted to them. The men also said that no MRE team came to their village, but the demining teams told them about danger of mine and ERW.

What the villager said about MRE was right, because in mine action database there was no any record on conduct of MRE session 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 supported their village.

Some of the village men were working as daily wage workers for the road construction company which is busy building the road to district centre.

The head of village Shura told us that he has seen an unknown hazard item in area where people is tending animals and when he was asked that why he did not report it to mine action through **hotline number**, he mentioned that he does not know about this number. While according to mine action, this number is being shared with the villagers by survey, demining or MRE teams.

Safe area after clearance

The Mountain close to the village is still contaminated

Perception of safety:

The people were recalling those who were killed or injured due to mine and ERW explosion in their villages. According to the information collected from all the 21 communities, in total there were 202 people killed or injured.

Based on villager, 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 told by 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 MACCA database	Victims before clearance according to villagers	Victims after clearance
1	LalaKheyl	7	20	0
2	Dawoodi&ButeSalsal	0	7	0
3	Bamyan&Sarasyab	114	5	0
4	DahaneAhangaran	0	7	0
5	Sayyedabad (ShahreGhulghola)	1	19	0
6	Sowghdar	2	36	0
7	Tayboti	7	12	0
8	Paymuri&Shahr-e Zohhak	0	3	0
9	Yakawlang (FirozBahar)	0	5	0
10	AqMazar	2	14	0
11	Jaga Banda	0	4	0
12	Irakli	0	4	0
13	Shahr-i-Qadim	3	8	0
14	Takht-I-Rustam	4	3	0
15	ZendayKot	2	7	0
16	ChenarGai	1	6	0
17	DoltaKhana	0	4	0
18	Doulatabad	0	5	0
19	Gaznigak	1	12	0
20	Baba Qambar	0	8	0
21	Langar	0	13	0
Total		144	202	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 one case 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.

The women interviewed seemed very grateful to work of demining teams saying that they saved ours and our children and men life. 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 Chenar Gai village where still there are 21 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 out for work.

> *"We do not feel comfortable when our children and men go out for work or grazing the animals, because still there are mines in some areas."*
>
> ***Women in ChenarGai village-Samangan***

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 three of the villages in Samangan and 5 villagers in Bamyan, the villagers told that they faced spot ERWs in their village. In Bamyan the villagers showed the location of cluster munitions and also the location of an air drop bomb. 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 Bamyan about location of airdrop bomb, an EOD team from MCPA was deployed to Bamyan and destroyed the bomb.

In a war torn country like Afghanistan finding all the sport 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 are expected everywhere.

Case study 3: Doulatabad (Samangan Province; Hazrati Sultan District) – Multiple Benefits

Doulatabad is a beautiful and green village which was cleared of mines during 2003-8 by demining teams.

The villagers told us that before clearance mine accidents happened to locals which killed three and injured two members of the community. People said that mine contamination blocked their access to livelihoods resources and they could not walk freely.

All the mined areas were cleared by the demining teams and they destroyed 58 mines and 479 different types of ERWs. The clearance enabled people to safely use their lands for livelihoods and also put them in a better position to request development projects for their village.

The villagers were happy of mine action work and told us that many development work happened after the mined areas cleared. They also told us that a PDIA team visited the village in 2015.

There was an active village Shura for the village and they told us that the village has electricity, road and school for boys, but the school for girls is a bit far. During focus group discussion, it was found the villagers are not that much interested to continue talking more about mine action work and after saying that they are really thankful to demining teams started to talk more the need for having more development projects for their village like clinic, protective wall in the river, sealed road and deep well for safe drinking water.

Almond trees planted-post mine clearance

Mine Victim being interviewed

MRE was conducted in the schools for boys and girls. The children told us that they know about danger of mine and ERW and mentioned that there was a suspected object on their way to school which they think is an ERW and therefore, they did not touch it. They said "we informed the elders about it".

According to mine action database, there are nomine victims recorded for Doulatabad village, but in reality the survey teams interviewed 2 mine victims who lost their leg in mine accidents.

In most cases villagers were consulted on, and satisfied with, the prioritization of the clearance sequence. When asked for suggestions about the mine clearance process, only the 5 villages that still had contamination responded, *"The work of demining teams is admirable, but we are afraid of using the areas where there are still mines and we need support of demining teams to clear the areas where there are still mines".*

Case study 4: Langar (Samangan Province, Khoram wa Sarbagh District) – Return to Farming

Langar is one of the villages heavily contaminated by AP and AT mines, 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. Based on IMSMA, 26 minefields were surveyed and recorded, all of which were cleared of mines.

185 AP mines, 3 AT mines and 1,866 different types of ERW were destroyed by demining teams.

According to villagers, before clearance several mine accidents happened to villagers and in total there are 10 victims out of which 3were female, but after clearance no accident happened on locals.

The farmer is pointing the area where 3 female killed by AP mine accidents and now is productive orchard

The mines were in gardens, residential areas road and areas used for cultivation of wheat, melon and watermelon.

The women and men were recalling the tragic accident of an AT mine that happened to a truck on the road which caused to death of one and injuries of 4 others and also 3 AP mine accidents happened to two women and a girl in a garden which resulted to death of three of them.

The villagers expressed their gratefulness to demining and MRE teams. They showed us 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 turned to productive lands*"

Wheats grown on demined land

Case study 5: Tayboti village – Bamyan Province- Residential areas and land value

The village is located approximately 3 Km to the west side of Bamyan city.

Before clearance there were four AP minefields and one battlefield in the village which blocked safe access of locals to their livelihood resources.

According to the villagers, 12 people were killed and injured due to mine and ERW accidents before clearance and furthermore, they lost many animals in grazing areas.

All the 5 hazard areas were cleared of mine and ERWs by demining teams and according to mine action national database 36 AT mines and 1,364 ERWs destroyed. The cleared land was handed over for safe use of the locals.

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 ground discussions both men and women were asked how they are using the cleared land.

The immediate answer we got was about construction of new houses in cleared land. According to villagers after clearance completed, they were using the cleared land for tending their animals, but now based on government plan the construction work is ongoing on a new townships called "Baba Mazari" based on which 2,000 new house plus green areas, masjids, schools, clinics and safe drinking water through pipe scheme is going to be constructed in demined land.

Cleared land is used for a new township (2,000 houses, schools, clinics, parks and masjids)

According to locals in Tayboti village, the cost of one jerib (2000sqm) land was 20,000 AFN ($300), but when the areas cleared of mine/ERW, and now there is plan for building houses as part of a cityhood project, the cost of only 300sqm land allocated for one family reached to 80,000 AFN ($1200) and if we calculate it for one Jerib (2,000sqm) then it gives a figure of $ 8,000/Jerib. The total size of the 2,000 houses (each 300sqm) indicates that 600,000 sqm (300 Jerib) area is allocated only for construction of the houses and the total cost will reach to $2,400,000.

$8,000/Jerib X 300 Jerib= $ 2,400,000.

While apart from houses, there will also be construction of schools, clinics and parks too.

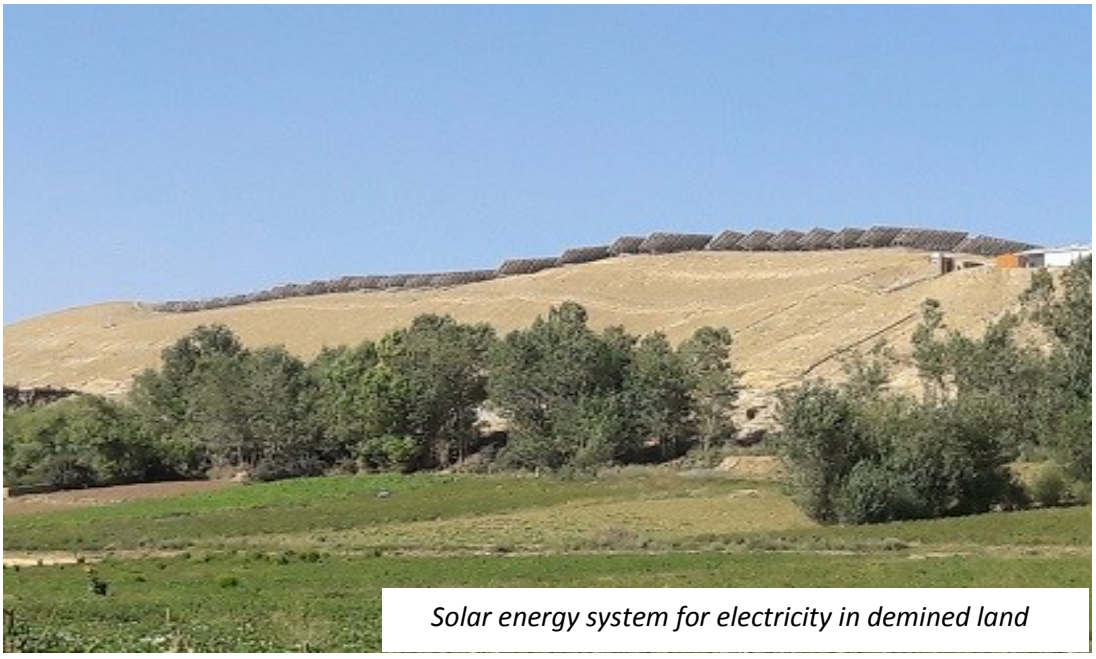
Case study 6: Sayedabad village, center District of Bamyan Province- Multiple benefit (Heritage site, solar electricity and productive agriculture land)

The village is in the center of Bamyan city and in the past was heavily contaminated by mine and ERWs.
According to villagers, 19 people become victims of mine and ERWs and they also lost lots of their animals due to mine explosions. The mine contamination had blocked the residential areas, the agriculture land, the historical site and the grazing areas of the villagers.

The demining teams cleared 10 minefields in this village and destroyed 129 AP mines plus 5,488 ERWs. The cleared land handed over to the communities for their safe use.
A portion of the cleared land is a historic heritage site called (Shahre Ghulghola) that is now fully used by national/international tourist andlocals, as well as government receives tax from visitors.
A further portion of cleared land is used for crop agriculture (wheat and potatoes) and houses also have been built on the cleared land.

Productive agriculture work in demined land

On top of a hill which in the past was heavily contaminated by mines now a solar system is installed which generate 24 hours electricity for Government institutions, locals and markets of Bamyan city.



Solar energy system for electricity in demined land

Case study 7: Yakawlang center village, Yakawlang District– Bamyan Province- Asphalt Road

This village is located 80km to the west side of Bamyan city. There were mainly AT contaminated areas in this village. According to mine action database before clearance 28 civilian casualties recorded as a result of AT mine and ERW accidents. The demining teams cleared 17 minefields and destroyed in total 5 AP mines, 11 AT mines and different ERWs including sub munitions.
The clearance operations of AT mine contaminated areas opened the way for implementation of a development project which was the construction of 94 km of asphalt road.
The road connects Bamyan city with Bandi Amir famous national park which is an interesting place for the locals and visitors.

With construction of this road people travel with reduced fare to other locations and also transport their agricultural products sooner and with less cost of transportation.
The people also talked about the location of cluster munitions not surveyed by demining and were asking For the survey and clearance of these sites.

Sealed road

Famous Bandi-Amir areawhich is an attractive place for tourist and national visitors

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, all 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 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.

Men in all villages said that they received MRE in the past years, but women in 11 out of the 21 villages said that no MRE conducted for them (6 villages in Bamyan and 5 villages in Samangan).

Table4 below provides a breakdown of the MRE situation based on IMSMA database for men, women and children separately for each village surveyed.

Table 4. MRE for the surveyed communities based on IMSMA

Province	Village	Last MRE	Women	Men	Girls	Boys
Bamyan	Bamyan Buti Salsal	2014	0	200	0	0
Bamyan	Dahni Ahengaran	2008	0	0	15	260
Bamyan	Dawoodi	2011	238	179	76	58
Bamyan	Lala Kheyl	2013	0	16	145	108
Bamyan	Paymuri	2009	0	239	309	444
Bamyan	Sarasyab	2012	135	87	0	0
Bamyan	Sayedabad	2010	105	135	506	248
Bamyan	Shari Gholghola	2011	171	0	83	0
Bamyan	Shari Zhohak	**No MRE**	0	0	0	0
Bamyan	Soghdar	2011	4	2	175	79
Bamyan	Tayboti	2011	18	8	210	50
Bamyan	Yakawlang(Firoz Bahar)	**No MRE**	0	0	0	0
Samangan	Aq Mazar	2016	445	42	53	1331
Samangan	Baba Qambar	**No MRE**	0	0	0	0
Samangan	Chenar Gai	**No MRE**	0	0	0	0
Samangan	Dolta Khana	**No MRE**	0	0	0	0
Samangan	Doulatabad	2014	2	14	164	147
Samangan	Ghaznigak	2011	173	103	1246	1619
Samangan	Irakli	2015	33	54	221	253
Samangan	Jaga Banda	**No MRE**	0	0	0	0
Samangan	Langar	2012	0	73	2	92
Samangan	Shari Qaim	2015	16	11	344	225
Samangan	Takhti-Rostam	2012	58	0	62	0
Samangan	Zenday Kot	2015	17	31	291	298

Based on information collected from the communities and also according to mine action national database, MRE sessions were provided to 15 out of the 21 villages surveyed.
The recent MRE for one village was conducted during 2016 and for three other villages during 2015. The other 11 villages received MRE between the years 2008 - 2014 and in six other villages no MRE conducted by MRE teams, but the men in these six villages told us that the demining teams informed them about danger of mine and ERWs.
The level of MRE coverage for women appears to be less and based on findings of the survey, women in most of the communities said that they did not receive MRE.

The children interviewed in 15 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. However, the coverage of MRE appears to be very less during the recent years in the communities visited.

No signs 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).

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 21 community visited. Based on information from villagers, there were 202 mine/ERW victims in 21 villages visited. The survey teams interviewed 38 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.

Women interviewed in nearly all 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 Langar village of Samangan women recalled the tragic stories of two women and a girl who were killed as result of 3 different AP mine accidents.

Mine victim case study

Firoz Bahar village, Yakawlang District, Bamyan Province
Name: Zehra, Age: 16
Occupation: Student

I was going to our agricultural land in 1382 (2003), 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 as it should be and this cause negative impact in my life. I am suffering because of disability and am disappointed and the live does not have any meaning for me. My father and mother help me in daily activities.

I need to have a proper job, 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 want to be able to stand on my feet and walk normally and go to school to continue my education.

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.

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 lamb/s by ARCS.

Survivors with artificial limbs provided by the ICRC

Annex 1 is the list of the victims interviewed by the survey teams:
Nineteen victims interviewed said that they receive 6,000 AFN (90 US dollars) per year from Government which is insufficient, but some said that they did not receive any cash support.
The victims were asking the teams that mine action should provide vocational training to them.
Some female mine victims interviewed also said that they did not receive any assistance after they were injured by mine accident. Two of the women who lost their leg requested vocational trainings for mine victims.

Some over aged 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 21 communities visited, in total 38,44AP mines, **45 AT** mines, **51,142 UXOs** and **11,343 SAA** were found and destroyed which is clear evidence that the work of mine action clearance is justified as a life-saving operation. It is still valid and interesting to see to what extent the financial investment in demining is recouped by different types of economic return to the community or to the national economy.

A short "quantitative data questionnaire" was included in the survey tools, although getting accurate and complete data in a limited time was difficult. Most of the quantitative data showing benefits were associated with productive assets brought back into use for which proxy measures of potential market value of production could be imputed (e.g. land value changes with decontamination, crop yields on cleared land, value of materials for construction, reducing the cost of transporting the product to market because of construction of road and sealed road).

Economic impact of reducing injury and death

The IMSMA data show 144 casualties in total from the 21 communities, but based on villager there were 202 casualties before demining, while none of the communities reported civilian casualties on demined areas since release. This survey **confirmed that in the 21villages visited no civilian casualties happened after clearance in demined land**. This is clear evidence that demining works 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.

Cost-Benefit Analysis of Freed Assets

The assets freed by demining include crop and grazing land, land for housing, heritage sites 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, safer drinking water through pipe scheme system, installation of solar energy electricity 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 L&L surveys conducted in Afghanistan, the survey teams collected insufficient quantitative data to allow a proper economic analysis of the mine action activities in these 21 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 sqm ($0.65/sqm) of demining in Afghanistan, about USD 6.8 million has been spent in demining of 8,072,292 sqm minefields and 3,384,652 battlefield in these 21 villages. and another USD 2.2 million will be required to remove the remaining 3,406,395 sqm contamination 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 428,571.

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 Zenday Kot village of Samangan and Tayboti village of Bamyan where the contaminated land was used for building new houses.

In Tayboti village in total 500,000 sqm land was cleared of mine and ERWS. The locals in Tayboti village stated that the cost of one Jerib (2,000sqm) land was 20,000 AFN ($300) in a grazing land which was contaminated by mines and ERWs. But after the areas cleared of mine/ERW, and now there is plan for building new houses as part of a township project; the cost of only 300sqm land allocated for one family reached to 80,000 AFN ($1200) and if we calculate it for one Jerib (2,000sqm) then it gives a figure of $ 8,000/Jerib.
The total size of the 2,000 houses (each 300sqm) indicates that 600,000 sqm (300 Jerib) area is allocated only for construction of the houses and the total cost will reach to $2,400,000.
$8,000/Jerib X 300Jerib= $ 2,400,000.
While apart from houses, there will also be construction of schools, clinics and parks too.

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 water canals. Furthermore installing the solar energy electricity system in demined land was indicated by locals. In total 36,591 people in the 21 communities surveyed benefited from work of demining teams.

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

- Building school, clinic, mosque, electricity supply and water channel
- Productive agriculture areas for wheat, melon and watermelon
- Productive orchards, especially almond which is famous in Samangan
- Getting taxes by Government from visitors in historical sites both in Bamyan(Shari Gughula, Shari Zhohak, Bodah Status) and in Samangan (Takhti-Rostam)
- Safe grazing areas for tending animals
- Transfer of safe natural drinking water through pipe scheme from one district to other locations

Cost of Survey

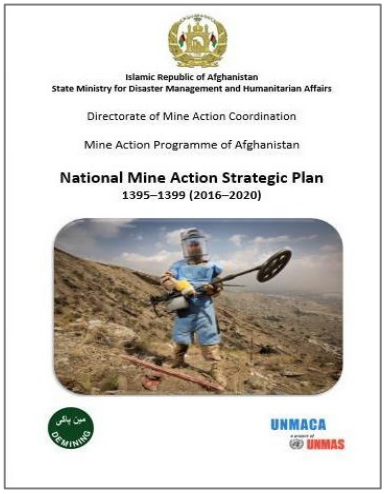
This survey cost was approximately USD 35,000. While the estimated cost of demining in the 21 communities is about USD 6.8 million, and another USD 2.2 million will be need clearance of the remaining hazard areas left in some of these communities. Thus, the survey represents approximately 0.39 per cent of the demining costs.

XI- PRIORITISATION IN MINE ACTION

The Present Priority-Setting Process

Planning and prioritization in mine action are based on collection, assessing, analysis and processing of information. Planning 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.

In 2016, DMAC and UNMAS with technical support from GICHD developed a five years strategic plan 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.



Prioritization in mine action requires accurate and timely information on the type, scale and impact of mine and ERW hazards, and the importance and urgency needed in provision of response. The sources of information for mine action planning and prioritization, include but are not limited to non-technical survey, assessment missions, technical surveys, and ongoing mine action projects provided that the national strategies, obligations and stakeholders requirements are considered.

In Afghanistan, determining the priority of hazard areas for clearance is based on specified impact indicators and scoring.

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 centres. 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, which are further illustrated in table below:

Table 1. Hazard planning indicators and weight scorings:

S-No.	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 Centers and Markets

4	Local authority/Communities request	2	The requested area assessed, confirmed and approved by related UNMAS 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 centers

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.

Table 2: Hazards Impact Classifications

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

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 xxx different demining projects. The number of hazard areas in each projects 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 was 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".*
>
> ***Irakli&ChenarGai Villages- Samangan***

The head of village Shura, in Chenar Gai village of Samangan 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 and no one asked them which hazard areas has importance to them.

Based on feedback from the men during focus group discussion, it was found that they are satisfied with the prioritization of the clearance sequence.

In response on how to improve the prioritization of mine action clearance operations, only those villages that still had contamination responded, as in Irakli and Chenar Gai villages.

In villages visited in Bamyan, the villagers were saying that this is the result of hard working of demining teams that now there are several development projects in their province.
In another example in Dolta Khana and village the locals says 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".*
>
> ***DoultaKhana Village, Samangan***

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 working very well. 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 reveals 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

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).

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.

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.

DMAC/UNMAS Quality Management System

XII- SURVEY FINDINGS

Generally it was found that the community members (men and women) are confident that the area is safe after it was cleared by demining teams.

In one village, a farmer said that although there was suspicion of mine problem in my land but I did not take it seriously to show my land to demining survey teams, but when I was cultivating my land, I faced an AP mine. He then laughingly said " *I was lucky that the mine did not explode*".

According to him, he then informed the demining team and asked them for clearance.

"*The demining team cleared my land from mines and now I am safely cultivating my land which is a source of livelihoods for my family*".

In Bamyan, although all recorded hazard areas cleared and the people were happy of the demining team work, they raised their concern about problem of subsurface spot ERWs which still can be found from time by time in some locations. They requested that mine action should find a solution for the problem of subsurface ERWs and also to increase conduct of MRE to the communities, because Afghanistan is a war torn country and possibility of subsurface 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.

Men:

"We know how hard and tough is the work of demining teams and therefore, we appreciate the hardworking of deminers who put their life at risk to clear our lands from mine and ERW 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 for working 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 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 regions and provinces in order to find out about socio economic impact and outcome of demining operations.

For example the PDID conducted in 2014 visited 95 cleared hazard areas in 14 provinces and 7 regions.
Also the PDIA conducted in 2016, visited 143 randomly selected cleared sites in 15 provinces of the seven regions.

It was by chance that in Doulatabad village, the head of Shura said that in 2015 a team visited their village and were asking questions about the areas cleared by demining team and for what purposes we use the cleared lands. "*We showed them the demined lands which before we were not able to use and now are safe residential area, productive agriculture land and orchards.*"

In Bamyan, apart from one hazard surveyed in August 2016,allother recorded mine/ERW contaminated areas were thought to have been cleared. However, during focus group discussions villagers in five communities raised their concern about mine and cluster munitions hazard areas not surveyed and recorded by demining teams.
The annex# 2 demonstrates the summary of the suspected hazard areas which needs support of mine action.

The villagers showed the location of the cluster munitions to the survey teams and were asking clearance of these hazard areas.
This raises a question how much the QM is successful in monitoring of the hazard areas survey process and why these hazard areas were left out from survey and record?

According to villagers in all the 21 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. In one village (Shari Gholghola of Bamyan) one girl was injured by spot ERW, but this was not in cleared land.

The findings indicate that the quality of demining operations was good and no accident happened in demining land after it was handed over to the communities. Furthermore, it was found 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 survey operations and that is why despite the NTS conducted in Bamyan, some hazard areas requested by locals in Bamyan remained unrecorded.

Capacity Development

This fourth MA&LS was planned by DMAC and had limited time for design by a small group of national staff from UNMAS and DMAC.
Based on the DMAC plan the survey had to be implemented by DMAC/ANDMA staff who were involved in previous surveys and also the ANDMA provincial staff.

From the UNMAS two national staff (Samim Hashimi and Qudos Ziaee) who gained good exposure to the practice of sustainable livelihood surveys during three previous surveys, now only Qudos Ziaee was involved in this survey who still need to get more experience on data analysis, especially economic data analysis and report writing.

The data analysis and report writing for Qudos was very challenging due to the following reasons:

- There was insufficient data provided by the survey teams and furthermore he himself was not involved in field implementation of the survey in Bamyan province
- Data analysis and report writing needs good academic knowledge but he only got experience from past surveys
- In the past survey of 2012, Samim Hashimi and also one national consultant from AIRD were involved in report writing with him plus remote assistance from Barry Pound and Ted Paterson who did the economic data analysis and writing this part for the survey report; but for this survey of 2016 he was alone.

The DMAC two staff (Gul Agha Mirzai and Habib Rahimi) are still working with DMAC. They got good experiences of being involved in three previous surveys and also this survey of 2016. They could help with delivering the training in local language and implementation of survey in the field; however, they still need to get knowledge and experience on design, planning, selection of communities for survey, data analysis and report writing of the survey.
There was another DMAC/ ITF project staff (Fazel Rahman) who was found to have very good potential for learning about the survey and implementation in the field as well as summarizing the findings of the hard copy data for easy use of the report writer (Qudos Ziaee).

The female staff of ANDMA (Tamkeen) who was involved in survey of Badakhshan in 2012,was found to be good during implementation of the survey in the field and could provide support to the female surveyors, but she is not able to design, plan or analyze the collected data and help with report writing of the survey.

The surveyors selected for this survey were mainly from ANDMA provincial staff where the survey was implemented.

Based on the plan, the survey was first implemented in Samangan province and some ANDMA male and female provincial staff were trained for survey implementation in the field. However, these surveyors did not take part in the survey of the communities in Bamyan, rather in Bamyan province other surveyors (male and female) were selected for the field implementation of the survey.

This approach indicates that in future surveys, there will not be well experienced surveyors apart from DMAC staff, and each time new surveyors will have to be trained for field implementation of the survey.

XIII- CONCLUSIONS

This survey of 21 villages in the two provinces of Bamyan and Samangan assessed the livelihoods and development outcomes of mine action during August/September 2016.

Four teams of Afghan men and women surveyors visited the 21 randomly selected communities within a Livelihoods Analysis approach in two provinces.
Focus group discussions were held separately with men (village leaders, farmers and key informants), women and children (boys and girls).
Including women surveyors considerably enhanced the breadth of the information obtained. Men and women have different mobility and ability to take part in the various mine action activities, different exposure to hazards due to their roles and mobility, different priorities for development outcomes and different experience of and attitudes to the hazards. Having both men and women surveyors allowed us to understand both perspectives.

Opportunities provided for the members of the teams to discuss the findings during debriefing sessions when the survey completed in each of the two provinces which helped ANDMA and DMAC staff to use the lessons learned from Samangan survey during survey implementation in Bamyan province.
The major finding in this survey comparing to previous surveys was that the teams were informed by local about locations of un-recorded hazard areas in 5 villages in Bamyan. The information about those unrecorded hazard areas immediately shared with the operations and planning department of DMAC and a survey/EOD teams deployed to Bamyan and they destroyed an air drop bomb and also surveyed and recorded some hazardous areas for further clearance operations. The detail is in annex 2 of this report.

Development Outcomes

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 training.
Cleared land is mostly returned to its rightful owners and is quickly used for productive purposes.
Only in one case, villagers are unhappy about the unfair and/or undemocratic way in which the land has been used (e.g. opportunistic land grabbing by some powerful people in Zenday Kot Village).
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.

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.

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

- The freedom to go for sightseeing
- Access to historical heritage sites(Takhti-Rustam, Shari Gholghula, Shari Zhohak historic heritage areas)
- Construction of township for over 2,000 families(Tayboti village of Bamyan)
- Solar energy system for electricity (Bamyan city)
- Rebuilding and improve the gardens (e.g. almonds, melon, watermelon & grapes) and cropland (wheat, maize, alfalfa and a range of other crops)
- Ability to safe use the grazing land for cows, sheep and goats, both for villagers and nomadic Kuchis
- Safe access to areas from which stone, sand and soil for building can be obtained
- Ability to areas used for building new Masjids, schools, and also drinking water
- Cleared area used for building new houses(like in Zenday Kot village of Samangan where new houses built)
- Resettlement of displaced people
- Safe heritage sites for visit by tourists' and locals (e.g. Buddha statues, Zuhak city, Gholghola city in center of Bamyan and Takhti-Rostam in Samangan)
- Transfer of drinking water through pipe scheme system from natural water sources to other locations (e.g. drinking water from Khoram Wa Sarbagh district to Aybak city of Samangan)

Socio Economic Benefits

In total 3,844 AP mines, 45 AT mines, 51,142 UXOs and 11,343 SAA were found and destroyed which is clear evidence that the work of mine action clearance is justified as a life-saving 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.

The assets freed by demining include crop and grazing land, land for housing 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 etc. Most of these have a tangible economic impact at community and/or national level in the short, medium or long-term.

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

- Building school, clinic, mosque, electricity supply and water channel
- Productive agriculture areas for wheat, melon an watermelon
- Productive orchards, especially almond which is famous in Samangan
- Getting taxes by Government from visitors in historical sites both in Bamyan(Shari Gughula, Shari Zhohak, Bodah Status) and in Samangan (Takhti-Rostam)
- Safe grazing areas for tending animals
- Transfer of safe natural drinking water through pipe scheme from one district to other locations

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

The increase of land value is most prominent in Zenday Kot village of Samangan and Tayboti village of Bamyan where the contaminated land was used for building new houses.

Victim Assistance

According to information collected from the 21 villages surveyed, 202 people become victims of mine/ERW accidents. The survey teams could interview 36 victims who told us how they become victim of mine/ERW accidents and also interviewed relatives of two 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 lamb/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, 19 victims told us that they receive 6,000 AFN (90 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 only for one of the villages surveyed during 2016 and for 3 villages during 2015. Furthermore, it was found that in six villages no MRE had been conducted at all and there was no record of MRE in these six villages.

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. However, the coverage of MRE appears to be very less 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 11 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 was 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.

The head of village Shura, in Chenar Gai village of Samangan 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 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 and no one asked them which hazard areas has importance to them.

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 fourth MA&LS planned by DMAC and had limited time for design by a small group of national staff from UNMAS and 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 21 villages selected for survey. The DMAC staff felt that they are now capable of conducting similar surveys (with the support from UNMAS). However, the actual data collected by the survey is not as complete as it was expected**.** This indicates that there were some deficiencies in the training and in the process of selecting the survey team members for the survey.

There is need to provide training opportunities for UNMAS and DMAC potential staff to gain academic knowledge on proper design, data analysis and report writing of such surveys.

XIV- RECOMMENDATIONS

- DMAC and UNMAS should continue to conduct regular landmines and livelihoods surveys each year in order to better understand the need for linking mine action work with the livelihoods and development projects.
- DMAC should ensure through implementation of the mine action 5 years strategic plan that communities' development needs and priorities are shared with development organizations to strengthen the link between mine action and development
- DMAC and UNMAS should assess the possibility of joining conduct of the PDIA and Livelihoods survey
- Inclusion of communities affected by PPIED contamination in future MA&L surveys will help to find out about impact of PPIED contamination in the communities,
- DMAC and UNMAS should conduct case studies of the national development projects implemented in areas cleared of mine and ERWs by demining teams.
- Provision of MRE sessions for women should be reinforced.
- Women need to be better and more directly informed about clearance activities and the safety status of land during clearance through employment of women surveyors in the structure of survey projects.
- DMAC and UNMAS should make sure of establishing a stronger and more methodical **community liaison process** involving not only men but also women and children
- There should be a systematic monitoring system by DMAC QM staff to 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 DMAC should decide how long after clearance this monitoring should happen.
- The DMACA and UNMAS should focus more on quality of NTS operations, as it was found that despite completion of NTS operations in the villages still some hazardous areas remained un-recorded
- The DMAC and UNMAS should find a way to communicate the hotline number to all village Shuras so they could inform DMAC/UNMAS about possible mine and ERW problem in their villages

- 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 shuras will help most of the community members to be more familiar with Mine/ERW risks
- DMAC and UNMAS should assess possibility of providing vocational trainings to mine/ERW and PPIED victims.
- DMAC and ANDMA staff need experience and knowledge about survey design, selection of the communities, selection of surveyors, data analysis and report writing
- There is need for academic training on data analysis, especially the economic data analysis and reporting writing of such surveys for UNMAS and DMACA national staff involved in MA&L survey.

Annexes

Annex 1 : List of Victims Interviewed

S#	Village	Name	Type of Injuries	Current Job	Support Received
1	Lala Kheyl	Gul Bibi	Lost her left leg	Housewife	She did not receive any assistance yet, just the Red Cross provided her an artificial foot.
2	Lala Kheyl	Ziauddin	Lost his right hand fingers	Farmer	The Martyr and Disabled Department gave him a disability card and allocated the salary of 6000 Afghani per year and also his father helping him to support his family.
3	Lala Kheyl	Letfullah	Lost his hand	Student	His father and mother support him to continue his education.
4	Bamyan & Sarasyab	Jan Ali	Lost his right leg	Mason	The Red Cross assisted him to get an artificial foot. The Martyr and Disabled Department gave him a disability card and allocated the salary of 6000 Afghani per year.
5	Dahane Ahangaran	Khudadad	Got injury on feet	Farmer	Jus his family member support him in daily activities.
6	Dahane Ahangaran	Hayatullah	Got injury on hands	Farmer	Jus his family member support him in daily activities.
7	Dahane Ahangaran	Allah Dad	Got injury on feet	Farmer	Jus his family member support him in daily activities.
8	Shahre Ghulghola & Sayedabad	Jan Mohammad	Lost his right leg	Jobless	His father support him , and he is depending on his father assistance.
9	Shahre Ghulghola & Sayedabad	M. Sakhi	Lost his right hand fingers	Farmer	His father and uncle support him.
10	Shahre Ghulghola & Sayedabad	Shad Mohammad	Lost his right leg	Civil Servant	The Red Cross assisted him to get an artificial foot. The Martyr and Disabled Department gave him a disability card and allocated the salary of 6000 Afghani per year.
11	Sowghdar	Mohammad Alem	Got injury on feet	Farmer	Not supported yet.
12	Tayboti	`Khuda Bakhsh	Got injury on body	Farmer	Not supported yet.
13	Paymuri & Shahr-e Zohhak	Abdul Samad	Lost his both eyes	Jobless	The Martyr and Disabled Department gave him a disability card and allocated the salary of 6000 Afghani per year.
14	Yakawlang (Firoz Bahar)	Zehra	Lost his right leg	Student	Just the Red Cross provided her an artificial foot and her father and mother helping her in daily activities.
15	Yakawlang (Firoz Bahar)	Jaweed	Got injured on right eye	Student	His father and mother helping him in daily activities.
16	Aq Mazar	Jahangir	Lost his right leg	Farmer	The Red Cross provided an artificial foot for him. The Martyr and Disabled Department gave him a disability card and allocated the salary of 6000 Afghani per year.

17	Aq Mazar	Mirza Mohammad	Lost his both legs	Jobless	The Red Cross assisted him to get artificial foots. The Martyr and Disabled Department gave him a disability card and allocated the salary of 6000 Afghani per year.
18	Aq Mazar	M. Sabir	Killed	N/A	Nobody helped his family yet, even the NGOs.
19	Irakli	Habibullah	Lost his right leg and hand	Shopkeeper	The Red Cross assisted him to get an artificial foot. The Martyr and Disabled Department gave him a disability card and allocated the salary of 6000 Afghani per year.
20	Irakli	Safar Mohammad	Lost his right leg	Shopkeeper	The Red Cross assisted him to get an artificial foot. The Martyr and Disabled Department gave him a disability card and allocated the salary of 6000 Afghani per year.
21	Irakli	Abdul Satar	Lost his left eye	Farmer	The Martyr and Disabled Department gave him a disability card and allocated the salary of 6000 Afghani per year.
22	Irakli	Qari Achaldi	Lost his both legs	Imam of Masjid	The Red Cross provided artificial foots for him. The Martyr and Disabled Department gave him a disability card and allocated the salary of 6000 Afghani per year.
23	Shahr-i-Qadim	Abdul Satar	Lost his left leg	Farmer	The Red Cross assisted him to get an artificial foot. The Martyr and Disabled Department gave him a disability card and allocated the salary of 6000 Afghani per year.
24	Shahr-i-Qadim	Abdul Hamed	Lost his right leg	Farmer	The Red Cross assisted him to get an artificial foot. The Martyr and Disabled Department gave him a disability card and allocated the salary of 6000 Afghani per year.
25	Shahr-i-Qadim	Ghosuddin	Lost his right leg	Farmer	The Red Cross assisted him to get an artificial foot. The Martyr and Disabled Department gave him a disability card and allocated the salary of 6000 Afghani per year.
26	Shahr-i-Qadim	Zinuddin	Lost his both legs	Farmer	The Red Cross assisted him to get artificial foots. The Martyr and Disabled Department gave him a disability card and allocated the salary of 6000 Afghani per year.
27	Takht-I-Rustam	Khanum Gul	Lost his left leg	Housewife	The Red Cross provided an artificial foot for her and also her husband help her in daily work.
28	Takht-I-Rustam	Abdul Qayum	Left hand wounded	Jobless	His sons support him.

29	Zenday Kot	Amir Mohammad	Lost his left leg	Farmer	The Red Cross provided an artificial foot for him. The Martyr and Disabled Department gave him a disability card and allocated the salary of 6000 Afghani per year.
30	Zenday Kot	Abdul Ghafar	Lost his both legs	Tailor	The Red Cross assisted him to get artificial foots. The Martyr and Disabled Department gave him a disability card and allocated the salary of 6000 Afghani per year.
31	Chenar Gai	Ghosuddin	Killed	N/A	Nobody helped his family yet, even the NGOs.
32	Dolta Khana	Naim Shah	Lost his right leg	Farmer	His family members support him.
33	Dolta Khana	Hakim Shah	Lost his right hand	Farmer	His family members support him.
34	Doulatabad	Abdul Khaliq	Lost his right leg	Farmer	The Red Cross assisted him to get an artificial foot. The Martyr and Disabled Department gave him a disability card and allocated the salary of 6000 Afghani per year.
35	Doulatabad	Omid Jan	Lost his right leg	Farmer	The Red Cross assisted him to get an artificial foot. The Martyr and Disabled Department gave him a disability card and allocated the salary of 6000 Afghani per year.
36	Gaznigak	Abdul Qadir	Lost his right leg	Farmer	The Red Cross assisted him to get an artificial foot.
37	Baba Qambar	M. Omer	Lost his left leg	Farmer	The Red Cross assisted him to get an artificial foot. The Martyr and Disabled Department gave him a disability card and allocated the salary of 6000 Afghani per year.
38	Langar	Ziauddin	Lost his left leg	Shepherd	The Red Cross assisted him to get an artificial foot.

Annex 2: List of Areas requested for survey and clearance by locals in Bamyan

S #	Location		Contact Person Details		New Hazards Description
	District	Village	Name	Phone #	
1	Bamyan	Lala Kheyl	1- Abdul Hamid	0785331578	Based on information collected from local people, they said that "a small portion of hazard about (8000 sq m) left from previous survey.
2	Bamyan	Dawoodi	1- Mobbin Ahmad 2- Gulabuddin	0799708840 0748986341	Locals were claiming that a portion of hazardous areas above "Budas" left from survey. Since the area is a heritage site therefore, the survey and clearance of this area should be coordinated with "Information/Culture and Youth" Directorate of Bamyan.
3	Bamyan	Dahane Ahangaran	1- M. Ibrahim "Frotan" 2- Burhanuddin	0796049681 0798276174	Based on information collected from locals two small size hazardous areas left from previous survey.
4	Bamyan	Sowghdar	1- M. Ibrahim 2- M. Naim 3- Cheragh Ali	0777517190 0771207261 0774653102	Based on information collected from locals, there are 3 sites located to South side of the village contaminated with cluster munitions and still remained unclear. Cluster munitions incident happened on animals.
5	Shibar	Paymuri	Haji Nasrat	0798902032	Based on information collected from locals, portion of a hazardous area surveyed & cleared during 2015, but portion of hazard left due to cold weather and the demining team said that they have plan to clear it next year. But so far no survey and demining team come for clearance.
6	Yakawlang	FirozBahar	1- Yaser Khan 2- Asadullah Khan 3- Sayed Rahim Shah	0771997854 0772032952 0771116773	Based on information collected from locals, cluster munitions still remained in an area and one incident happened on school students as a result of which 3 students killed and one injured. There is also a bomb near to the village about left from the "Russian" time.

Annex 3: List of Survey participants

S #	Name	Position	Organization	Duty station
Participants in the Samangan Landmines and Livelihoods Training and Survey				
1	Mr. Abdul Qudous Ziaee	R&D OPS Manager	UNMAS	Kabul
2	Mr. Fazel Rahman	OPS Project Manager	DMAC/ITF	Kabul
3	Mr. Habiburahman Kohistani	Chief of Operations	DMAC	Kabul
4	Mr. Mohammad Hamid Wardak	Sr. EOD Manager	DMAC	Kabul
5	Mr. Gul AqaMirzai	Sr. SOP Manager	DMAC	Kabul
6	Mr. Abdul Habib Rahimi	Sr. Manual Manager	DMAC	Kabul
7	Mrs. Tamkeen Sharifi	Team Leader	ANDMA	Kabul
8	Mr. Mohammad Zarif	Chaperon (Mahram)	ANDMA	Kabul
9	Mr. Zafer	Surveyor	ANDMA	Kabul
10	Mr. Rajab Ali Yosufi	Coordinator	ANDMA	Samangan
11	Mr. Noorullah	Surveyor	ANDMA	Samangan
12	Mr. Abdul Manan	Surveyor	ANDMA	Samangan
13	Mr. Shir Ahmad	Surveyor	Education Dept.	Samangan
14	Ms. Atri Gul	Team Leader	Provincial Council	Samangan
15	Ms. Shakila Mohammadzai	Surveyor	ANDMA	Samangan
16	Ms. Nadera Naeebi	Surveyor	ANDMA	Samangan
17	Ms. Lilee	Surveyor	Woman Affairs Dept.	Samangan
18	Ms. Maryam Rezaie	Surveyor	Civil Affairs	Samangan
Participants in the Bamyan Landmines and Livelihoods Training and Survey				
1	Mr. Fazel Rahman	OPS Project Manager	DMAC/ITF	Kabul
2	Mr. Abdul Hamid Ibrahimi	Assistant Director	DMAC/ITF	Kabul
3	Mr. Habiburahman Kohistani	Chief of Operations	DMAC	Kabul
4	Mr. Mohammad Hamid Wardak	Sr. EOD Manager	DMAC	Kabul
5	Mr. Gul AqaMirzai	Sr. SOP Manager	DMAC	Kabul
6	Mr. Abdul Habib Rahimi	Sr. Manual Manager	DMAC	Kabul
7	Mrs. Tamkeen Sharifi	Team Leader	ANDMA	Kabul
8	Mr. Mohammad Zarif	Chaperon (Mahram)	ANDMA	Kabul
9	Mr. Zafer	Surveyor	ANDMA	Kabul
10	Mr. Ahmad Reza "Rafat"	Coordinator	ANDMA	Bamyan
11	Mr. Eshaq	Surveyor	Information & Culture Dept.	Bamyan
12	Mr. Mohammad Asif	Surveyor	ANDMA	Bamyan
13	Mr. Mohammad Firoz "Samadi"	Surveyor	Governor Office	Bamyan
14	Ms. Khadija	Team Leader	Education Dept.	Bamyan
15	Ms. Zerghouna	Surveyor	Education Dept.	Bamyan
16	Ms. Liqa "Ahmadi"	Surveyor	Education Dept.	Bamyan
17	Ms. Sima "Yaqubi"	Surveyor	Woman Affairs Dept.	Bamyan
18	Ms. Ferzana "Qasimi"	Surveyor	Woman Affairs Dept.	Bamyan