



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

POST-DEMINEING IMPACT ASSESSMENT

REPORT - 1399/2020



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Abbreviations

AMAS	National Mine Action Standards
ANDMA	Afghanistan National Disaster Management Authority
AP	Anti-Personnel
AT	Anti-Tank
DMAC	Directorate of Mine Action Coordination
EO	Explosive Ordinance
EORE	Explosive Ordinance Risk Education
ERW	Explosive Remnants of War
GIS	Geographical Information System
IMAS	International Mine Action Standards
ITF	International Trust Fund – Enhancing Human Security
KG	Kilogram
MAPA	Mine Action Programme of Afghanistan
MRRD	Ministry of Rural Rehabilitation and Development
PDIA	Post-Demining Impact Assessment
PM	Political and Military Affairs
Sq. m	Square meter
Sq. Km	Square Kilometer
SSA	Small Arm Ammunition
UNMAS	United Nations Mine Action Service
US	United States
USD	United States Dollars
WRA	Weapons Removal and Abatement

Directorate of Mine Action Coordination (DMAC)

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

Introduction

Post Demining Impact Assessment (PDIA) refers to the process of determining the value and importance of demining activities, projects and services through a well-organized and comprehensive assessment of the impact of the areas cleared from the Explosive Ordinance (EO) on the livelihood of people within communities. Value and importance of demining is assessed primarily in terms of intended use of the areas cleared and changes in the livelihood of people including men, women and children in previously EO affected communities. The activities and direct outputs of demining interventions are considered in PDIA, mainly as means to promote the desired results in terms of enhanced safety and livelihood of the target beneficiaries.

PDIA is referenced in International and National Mine Action Standards (IMAS and AMAS) which improves the confidence and trust of mine action donors and stakeholders on the efficiency and effectiveness of the utilization funds, contribution enhancing safety and livelihood of affected communities.

The Post-Demining Impact Assessment (PDIA) is an evaluation of the mine action impact on livelihoods and developments of the communities and how to further enhance the outcome and impact of mine action intervention in the communities. It also assesses the quality and appropriateness of demining intervention through physical observation of the cleared areas from the perspectives of beneficiaries and end users.

PDIA assesses whether humanitarian demining operations have achieved their objectives of minimizing or eliminating the problem of communities, which are caused by mines and ERW contamination on affected communities, and whether the cleared land is in use by the beneficiaries as intended. PDIA also assesses the accuracy of the information upon which demining operations were prioritized and therefore helps in improving the future planning processes.

The Directorate of Mine Action Coordination (DMAC) conducts regular PDIA of land that is released after mine action operations. Cleared hazardous areas are selected randomly in different regions and provinces to measure the socio-economic impact and outcome of demining operations after the land was handed over to the communities.

The 1399/2020 PDIA findings show that mine action operations had many significant impacts on the visited tasks. Clearance operations have made considerable areas of land available to the communities for grazing, fuel wood and fodder collection in addition to the development interventions that are now possible in lands cleared. This has had major social and economic impact across in the communities visited and is an indication of the positive impact, mine action operations has on the livelihood of people and communities. Moreover, it was also found that many people have received EO risk education and are satisfied with the risk education provided by the Mine Action Programme of Afghanistan (MAPA).

The Post-Demining Impact Assessment (PDIA) 1399/2020 was funded by the U.S. Department of State, Bureau of Political-Military Affairs Office of Weapons Removal and Abatement (PM/WRA), through ITF- Enhancing Human Security.

Objectives

PDIA objective is to measure the immediate to medium-term humanitarian and socio-economic impact of demining operations. PDIA assesses whether humanitarian demining operations have achieved their objective of minimizing or eliminating the impact of EO on affected communities, and whether the cleared land is in use by the beneficiaries as intended

PDIA is to evaluate the impact of demining interventions in a systematic and objective analysis of the completed tasks for informed and proper decision-making, using lessons learnt to improve the planning, prioritization, implementation and results of demining activities on continual basis.

It is conducted to:

- Ensure that, the cleared hazards have been in line with the national priorities and, local needs are considered during the planning and implementation phases.
- Determine the level of beneficiaries' satisfaction from the released lands and from the Mine Action Program of Afghanistan (MAPA) as a whole.
- Determine ways in which released lands are utilized by landowners or local people and ensure that the lands are used as intended i.e. effectively by the beneficiaries.
- Observe improvements in the livelihood of the communities following demining operations to verify that demining brings about positive social and economic changes in the community.
- Note the requests, expectations and suggestions of the local people, and the needs of the governmental bodies linked to the planning and implementation of mine action operations.
- Ensure that donor funding is spent in an effective and efficient way and has brought about positive changes in the lives of programme beneficiaries.
- Verify that, the GIS coordinates on the map match the actual area on the surface of the ground.

PDIA Requirements

PDIA is carried out in six months to one year after hazardous areas released from EO to allow the users and beneficiaries with enough time for productive use of the released land. PDIA does not only cover those areas which had been released through clearance, but includes areas released through non-technical and technical surveys to verify the effectiveness and quality of land release operations outputs. A percentage of the released land is targeted and selected for PDIA in specific geographical locations and the findings are used as sample representative of the whole area.

The PDIA focuses on technical aspects of land release interventions and their outputs, and also on socio-economic outcomes and impacts of land released in the impacted communities. The assessment covers local context and situation before land release intervention and after its completion.

The Post-Demining Impact Assessment (PDIA) is undertaken at a task level, and mainly collects quantitative data on tasks.

Selection criteria of released hazards for PDIA

Selection of the released hazardous areas were done in a way to find out about the outcomes of mine action in lands with different types of contamination, blockages (agricultural, grazing or residential), hazards and different stages of clearance.

The following criteria and factors are taken into consideration for selection of released hazards for PDIA:

- Safe access to the areas in terms of security to ensure proper data collection.
- Areas cleared by different implementing partners.
- Areas from different geographical locations.
- A minimum of 6 months since land release.
- Minefields with varied terrains, such as flat or mountainous areas.
- Minefields with varied outcomes such as:
 - Quantity of crops produced on cleared land.
 - Number of families accommodated on cleared land.
 - Estimated amount of income villagers can secure as a result of their land cleared of mines.
 - Number of public works constructed on cleared land.

PDIA Team's Structure

The PDIA was carried out by three trained teams, each involving two staff from DMAC who had experience of previous assessments.

DMAC managed to deploy women surveyors only in the central region in the structure to ensure the views and insights of women and girls are obtained. This enabled the PDIA teams 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

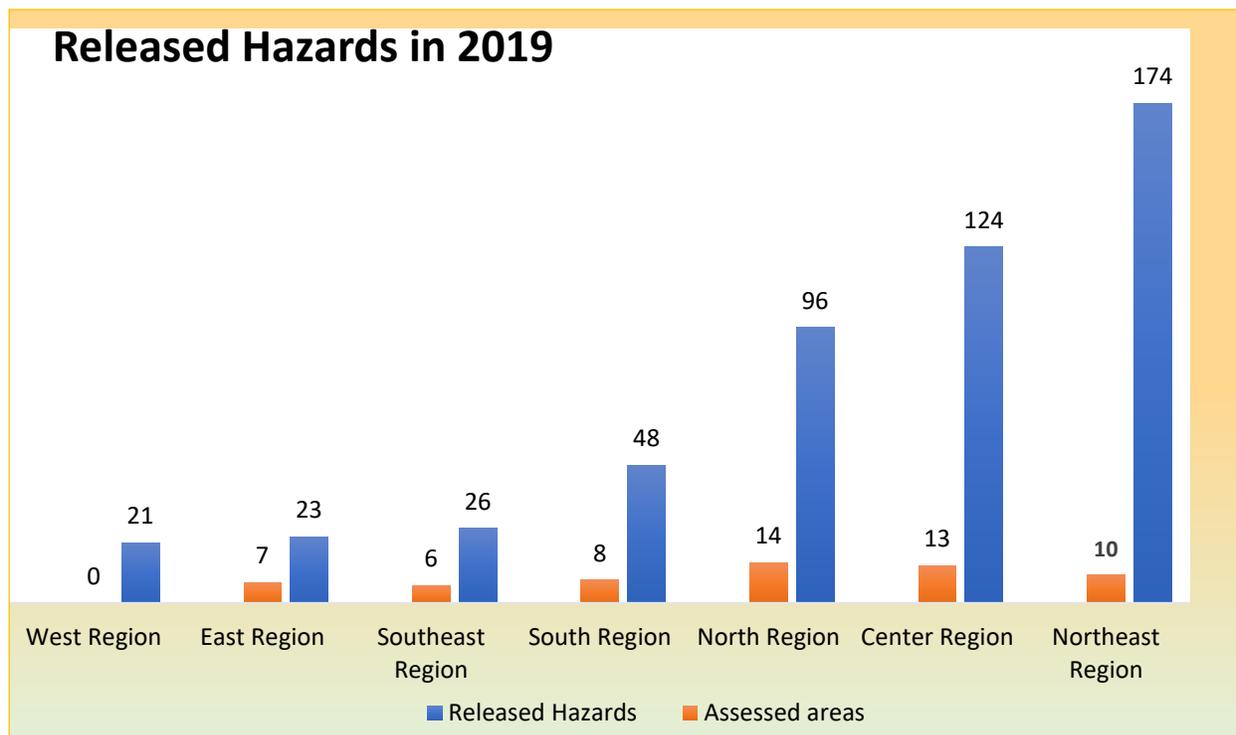
women, girls, boys and men. Two women were engaged in three provinces namely, Parwan, Kapisa and Panjshir.

PDIA Location

The Post Demining Impact Assessment (PDIA) for 1399/2020 included 58 released hazardous areas, located in 44 communities across 32 districts of 13 provinces namely; Baghlan, Balkh, Kabul, Kandahar, Kapisa, Khost, Kunar, Laghman, Nangarhar, Paktya, Panjshir, Parwan, and Samangan during June-October 2020.

During 1398/2019 a total of 512 hazardous areas were released from EO, out of which 58 released areas were assessed during the PDIA, which makes 11% of total tasks for 2019.

The total area assessed by PDIA was 8,664,688 square meters, from which a total of 22,220 explosive devices were found and safely destroyed by demining teams.



Implementation methodology

1. Desk Assessment

Desk assessment involves studying the land release documents coupled with data from IMSMA to thoroughly analyze the background information. Copies of the documents are made as packages concerning each location. The following land release documents were studied,

- a) Non-technical survey information;
- b) Land release completion reports;

- c) Projects completion reports;
- d) Demining Project proposals for assessing achievement of outputs and outcomes;
- e) External QA and QC results;

2. Meeting with Local Authorities and Communities

Meetings with local authorities help create a common understanding of what is intended by the PDIA, how the communities can contribute, and what the MAPA does in general. The meeting included a comprehensive introduction and information sharing on the objectives of PDIA, the potential (realistic) benefits that might come to the community, the methods and instruments to be used, people to be involved, and the schedule for the field visits. Both, the local authorities and communities' Shuras, were keen to know about the positive impacts of mine action on the country's development and at the same time they provided the required support to PDIA teams for the successful completion of the assessment.



3. Field Assessment and Review

During field assessment and review, the following important aspects were considered:

1. Comparison of land release completion reports with current status of the areas.
2. Identifying and documenting evidences of any changes that have taken place in the field including photographs.
3. Interviewing government authorities in the area.
4. Meeting and discussions with beneficiaries and community members about the benefits of released land and changes in their livelihood.
 - a) Interviewing beneficiaries including men, women and children, community elders, CDC and other relevant people with regard to completed demining interventions, based on PDIA questionnaire.
 - b) Physical observation of each selected single released area and collecting related information and evidences.



Main Findings

- The assessed areas directly benefited **3,423** families; all age groups men, women, boys and girls equally use and benefit from the released lands. The lands are used for agriculture, pasture, residential and as a source of wood collection. The safety of

women and children has been particularly enhanced by clearance, as they are often the shepherds caring for the livestock.

- Approximately **6,328** livestock (sheep, goats, cows) are fed in the cleared pasture lands; this contributes to the economic wellbeing of the communities and produces products that can be sold to the neighboring communities.

Table-1, Beneficiaries of Cleared Lands by Household¹:

S.#	Region	Number of Households Benefiting from the Released Areas			Number of Livestock feeding from Cleared Lands
		Pastures & Wood Collection	Agricultural	Residential	
1	Central	798	4	2	1,263
2	East	216	56	62	540
3	South	186	49	2	557
4	Southeast	178	130	10	850
5	Northeast	155	50	5	1,364
6	North	984	523	13	1,754
Total		2,517	812	94	6,328

- Over the course of one year, the communities have harvested crops and animal product/dairy from 58 released hazardous lands with a value of approximately USD **467,431**, which represents considerable growth in the local economy.



Table-2, Crops Harvested from Assessed Areas Over One Year Period:

S.#	Crop/Product Type	Annual Harvest in Kg	AFN Value per Kg	Total AFN Value Gross Value	¹ Total AFN Expenses of Product/Yield	Total AFN Net Value	Total Value in USD*
1	Cereal Crops (wheat, corn, rice)	84,009	25	2,100,225	420,045	1,680,180	21,680

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

2	Various Vegetables	140,000	15	2,100,000	420,000	1,680,000	21,677
4	Various Fruits	70,000	40	2,800,000	560,000	2,240,000	28,903
5	Pistachio	5,798	400	2,319,200	463,840	1,855,360	23,940
6	Medical Herbs (Hing)	570	3,500	1,995,000	399,000	1,596,000	20,594
7	Animal Product/Dairy	849,200	40	33,968,000	6,793,600	27,174,400	350,637
Total				45,282,425	9,056,485	36,225,940	467,431

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

**Note: For the purpose of this table, one US dollar was calculated as equivalent to AFN 77.5. It is also worth mentioning that the above figures represent only 11 percent of the total revenue and crops harvested from the released land, the total revenue and harvests from the entire released lands will be approximately ten times more than the above calculation.*

Table-3: Released lands socioeconomic impacts on communities:

S.#	Land/Facility type	Outcomes	Impacts
1	Agricultural Land	<ul style="list-style-type: none"> - Income increased - Employment opportunities enhanced - Cost of agriculture production reduced - income generation and opportunity enhanced - More production of livestock and crops - Disaster risk reduced - Human and asset lose control. 	<ul style="list-style-type: none"> - Social activities improved - Economic conditions improved - Peaceful and stable community in long terms - Socio-economic development of the local community - Environmental rehabilitation and asset creation
2	Grazing Land	<ul style="list-style-type: none"> - Income increased - Food security increased as more food was produced, including meat and dairy - Dairy cost of production reduced - More production of livestock 	<ul style="list-style-type: none"> - Social activities improved - Economic conditions Improved - Sustainable social and economic activities in long terms - Peaceful and stable community in long terms - Socio-economic development of the local community

		- Disaster risk control and well manage pastures	
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- External QA visits were conducted during clearance operations on all released hazardous lands that were assessed.
- In all 58 (100%) released hazardous tasks that were assessed, the GPS coordinates on the map matched the actual released area on the surface of the ground.
- Residents of communities, land owners, land users or land requesters, and the local authorities who were interviewed by PDIA teams were fully satisfied with the clearance approach of 58 hazardous areas and other mine action interventions like EORE.
- The teams found nothing to report on recontamination or armed conflicts from released areas that were assessed.
- 100% of the assessed areas were properly handed over to the local people/local authorities. The users said that they have signed on the completion reports and attended the handover ceremony. Despite the evidences indicating that the men in the communities were invited to hand over ceremony, it was found that none of the women and girls in communities were invited to the handover ceremony. In center region, women reported that they, or others in their village, did not know which areas had been demined nor, in some cases, were they informed that demining was taking place. Women have been less informed about clearance operations and the status of minefields than men and children, despite their multiple roles in community life.
- According to villagers in all 58 hazardous areas selected for the PDIA, no incident happened within the released areas after clearance. Apart from confidence about the quality of demining output, the people were satisfied with the way demining teams liaised with them prior to the start of clearance operations. They said that the demining teams consulted them about which areas have priority for them and which hazardous areas should be cleared first.
- Nothing to report regarding the land dispute after clearance operations, the people interviewed during the PDIA, said that they do not have any land rights issue and none of the released hazards were found to be under dispute.
- The local people started using the land in all 58 assessed areas upon land release.
- The terrain of the visited release land mostly includes hillsides and pasture land so there are no linkages with development as of yet or in near future. The lands are primarily used for agriculture, building residential houses, and cattle-grazing that will contribute towards enhancing the living condition and providing trade opportunities within and outside the community.

Perception of safety

The clearance operations have enabled the residents of communities to have full access to their livelihood resources, farm their land efficiently, graze livestock and access other facilities without concern for their safety.

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

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

This PDIA recorded no casualties due to EO after clearance of the assessed released lands. Demining output resulted in quick use of the freed assets by men and a great feeling of relief on the part of women.

The table below shows the explosive devices that were found and safely destroyed by demining team in the 58 assessed released areas. This is a clear fact that the work of mine action clearance is justified as a lifesaving operation. If the contaminated areas relevant to this assessment were not cleared, then the accidents of EO would have continued to happen on people and on their animals like before.

Table-3, Mine/ERW Destroyed in 58 released areas assessed by PDIA:

No.	Region	Number of Areas Assessed	Area (Sq. m)	Device Destroyed			
				AP	AT	ERW	SAA
1	Center	13	1,725,315	91	0	1,436	0
2	East	7	665,817	80	8	489	0
3	South	8	3,225,165	60	14	106	0
4	Southeast	6	434,237	17	15	25	0
5	Northeast	10	892,103	254	0	34	0
6	North	14	1,722,051	259	0	2,835	16,497
Total		58	8,664,688	761	37	4,925	16,497

Land value

As most of the visited release land is located in hillside and covers pasture and rain-fed agricultural lands, following clearance the communities/beneficiaries used the land for agriculture and grazing of animals. These are the factors that further increases the value of land in the assessed areas. Based on the evidence land value has increased significantly after the clearance in 33 communities. The locals stated that the cost of one Jerieb (2,000sq. m) land was 45,000 AFN (\$580) in a grazing land which was contaminated by mines and ERWs. But after the areas were cleared of mine/ERW, and some people build new houses the cost of one Jerieb (2,000sq. m) land increased up to 90,000 AFN (\$1,160), this shows 100% increase the value of land in the assessed areas.

Explosive Ordnance Risk Education (EORE)

The EORE activities ensures contributing towards minimizing the threat of EO and ensures the safety of innocent life and limb in the visited communities. According to the assessment, EORE activities enhanced physical and mental well-being of the affected population.

There was a question about EORE to know if the community received EORE and, in particular, what should be done if any suspicious device of any kind is found; the respondents showed adequate knowledge. When asked about the negative impacts of mine/ERW, men and children stated that they know that mines and ERW created many problems in the villages and the mine/ERW damaged different livelihoods, assets of the communities

Based on the information collected from the visited communities, EORE sessions were conducted in the schools of the visited communities and 45,412 students (28,428 boys and 16,984 girls) received EORE in school. The teachers and school management know about EORE messages in the school books.

Based on the findings of the PDIA, four communities as listed below requested the EORE sessions.

Province	District	Village
Paktya	Shawak	Kheday Baba
Khost	Tani	Sangeray
Samangan	Khuram Wa Sarbagh	Koloro Dahshil(Khoram)
Nangarhar	Pachier Agam	Bamokhel

Case Studies

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

Case Study: Khvosh Ab village, Daman district, Kandahar province:

Khvosh Ab village is a medium-sized village located close to Kandahar air field, in what is considered a strategic location. Due to its strategic location, this area was on the front line of fighting during Russian invasion and internal conflicts. A number of heavy battles occurred among different groups and the village has seen a shift in being under cross control of different groups several times. As a result, the inhabitants were internally displaced – and the access to agricultural land and other resources remained blocked by EO. They have also resulted in accidents leading to fatal injuries and deaths.



Upon clearance of these EOs, the cleared land was handed over for the safe use of the locals, and currently the villagers have full access to livelihood resources. Currently, the community has been using the previously inaccessible land for cultivation of cereal crops and vegetables.

A resident of Khvosh Ab village, said, "we have large agricultural and grazing lands and these were the main source of income for our village, but we weren't able to make any productive use of our lands due to the presence of EO in the past. We weren't able to use our land for agriculture and animals grazing. He added on, demining has positively impacted our economic development.



After demining operations, agricultural lands have become available for cultivation and tending animals. There is an improvement in security and stability of the area, before young boys were threatened by the existence of mines, but after demining operations started in our village, there is improvement in the economy and a sense of safety. Currently the local economy depends on cultivation of crops, livestock raising (mainly by women and children), wage labor outside the village and some small-scale trading (mainly by men). Cereal and livestock production are sufficient to cover household needs and the economic returns from these are good. He acknowledged the significant support of MAPA in demining activities and said that the benefits from demining have been the greater utilization, specifically access to agriculture land. He requested the mine action programme to clear the remaining contaminated areas in their village as well.

Case Study: Ghelgay village, Gardiz district, Paktya province:

Ghelgay is a medium-sized village located about 18 km south of Gardiz city in a strategic location called Sato Kandaw; the Paktya-Khost main road passes through this area and is the single point connecting Paktya to Khost province. Due to the strategic location of Sato Kandaw, this area was on the frontline of fighting between Mujahedeen and the Soviet troops. A number of conflicts have taken place in this area and thus, the area was contaminated with different types of AV mines. Mines were laid during 1984-1988 by Mujahideen against the Soviets and the pro-Russian governmental forces.

Prior to clearance, a mine accident happened in the area which resulted in restricting residents from collection of firewood and other natural resources because they feared for more accidents. Based on the request of local people, the village was cleared by MAPA implementing partners in 2019. Fortunately following clearance, the villagers safely use this area for cultivation of cearyl crop (wheat), collection of firewood and other natural resources without any fear about the existence of mines and other explosive devices.



Case Study: Dehe Khawak village, Paryan district, Panjshir province:

Dehe Khawak was a battleground during the internal conflicts' 1996-1999, a number of heavy fights happened between different groups. This resulted in migration of local people; what aided their intention to leave was the blocked access to pasture land and other natural resources as a result of EO contamination. The EO had also resulted in a few accidents which triggered a sense of fear among the community members.



Dehe Khawak village has vast areas of grazing lands, which, being important environmentally, provide livelihoods for herders. Both locals and nomads are using the land as pasture; it also involves full-time nomads and settled farmers who take their animals to pastures.



During the PDIA survey, it was found that the areas after clearance are used by nomads and settled farmers, they provided their feedback to PDIA team as follows:

These areas were previously mined and we were not able to use them. As our village's livelihood depends on manual labor and livestock, we were facing mine accidents both to ourselves and our animals. They said that, every time we were taking our livestock to the area, we were very afraid of mines and now that the area has been cleared, we are safely using it.

The community acknowledged the significant support of MAPA in demining activities, they said that the benefits from demining have been the greater utilization of and access to their livelihood's resources. They said the clearance of lands from EO has made considerable areas of land available to the whole community for grazing, fuel wood, and fodder collection. This has had major social and economic impact across the whole community.

Case Study: Matun village, Center district, Khost province:

Matun village is located in center district of the southeastern province of Khost, this village was a front line for battle between Mujahideen and Soviet troops. The EO contamination restricted the residents from collection of firewood and other natural resources and refrained them from constructing buildings because they feared of accidentally detonating EO. The mountains of the village were once contaminated with landmines left from the Soviet era and were



situated fairly close to the village on agricultural, residential and grazing/wood collection land. Subsequent to clearance with support from MAPA donors, these mountains are now a place where cattle roam and wild plants expand and grow. Locals use these plants to make various products such as brooms, bread baskets, mats, straws and various other products. Locals also now collect firewood from these mountains without fear of being injured or killed by a landmine or an explosive remnant of war. Wild plants of Matun mountains are used to make local products.

Conclusion

The overall findings of the PDIA indicate that mine action activities had many significant impacts on the visited communities. As a result of mine action activities, lands were cleared for growing crops, grazing of animals and building residential houses. Clearance has made considerable areas of land available to the whole community for grazing, fuel wood, agriculture, and fodder collection. This has had major social and economic impact across the whole community.

The communities acknowledged the significant support of MAPA in demining activities, they said that the benefits from demining have been the greater utilization of and access to their livelihood resources.

While clearance has clearly increased the economic well-being of the communities, it has also provided a sense of safety and addressed the potential long-term mental traumas. With EORE activities, the communities are now able to adopt safe behaviors and protect themselves should they face a life-threatening situation.

Recommendations

1. Although, female surveyors were deployed in PDIA data collection in central region, DMAC should increase employment of female surveyors in the structure of PDIA teams to ensure the views and insights of women and girls are taken into account in future interventions.
2. It is noted from the data that some provinces are not appropriately visited for impact assessment in relation to the number of hazards released. This needs to improve so the factual impact from all released hazards are reflected equally according to the criteria.
3. DMAC Gender & Diversity department should ensure, through regional offices and the mine action implementing partners, that the community women and girls are invited to the handover ceremony, so that women are informed about clearance activities and the safety status of land.
4. DMAC should further increase its efforts to make sure communities' development needs and priorities are shared with development organizations to strengthen the link between mine action and development.

End of report.
