



Lives and Livelihoods

Impact Assessments of Abandoned Improvised Mines (AIM)
& Anti-Vehicle Mines (AVM) in Afghanistan



April 2021

CONTENTS

EXECUTIVE SUMMARY	4
<hr/>	
INTRODUCTION AND CONTEXT	6
ABANDONED IMPROVISED MINES – THE NEW KILLERS	6
ANTI-VEHICLE MINES – BLOCKING ACCESS TO LARGE TRACTS OF LAND	8
<hr/>	
IMPACT ASSESSMENT METHODOLOGY	9
<hr/>	
THE IMPACT OF ABANDONED IMPROVISED MINES (AIM) AND AIM CLEARANCE	10
1. AIM CLEARANCE SAVES LIVES	11
2. AIM CLEARANCE LINKED TO PEACE AND STABILITY	12
3. A SAFE RETURN HOME	13
4. IMPACTS ON LIVELIHOODS THROUGH AGRICULTURE, LIVESTOCK, RESOURCES AND MARKET ACCESS	14
5. TRANSPORT, ACCESS TO SERVICES AND A NECESSITY FOR OTHER INITIATIVES	16
6. IMPACTS OF AIM ON WOMEN AND CHILDREN	17
7. ROAD DAMAGE, REMAINING MINES AND RECONTAMINATION: NEGATIVE IMPACTS OF AIM CLEARANCE	19
<hr/>	
THE IMPACT OF ANTI-VEHICLE MINES (AVM) AND AVM CLEARANCE	21
1. LIVELIHOODS AND ECONOMIC GAINS	21
2. ACCESS TO ROADS, INFRASTRUCTURE AND SOCIAL SERVICES	23
3. SOCIAL IMPACTS AND COMMUNITY ENGAGEMENT	26
4. EMPLOYMENT OPPORTUNITIES AND MIGRATION PATTERNS	27
<hr/>	
CONCLUSIONS AND RECOMMENDATIONS	28
CONCLUSIONS: THE IMPACTS OF AIM AND AVM	28
RECOMMENDATIONS: POTENTIAL FOR ACTION ON AIM AND AVM	29
RECOMMENDATION #1 – EXPAND AIM OPERATIONS	29
RECOMMENDATION #2 – CONCERTED ACTION ON AVM	29
RECOMMENDATION #3 – CONTINUE TO ADDRESS AND REDRESS UNINTENDED NEGATIVES	29
RECOMMENDATION #4 – BOLSTER DATA, STANDARDS, AND RESEARCH	29
RECOMMENDATION #5 – A CALL FOR ADVOCACY, A CALL FOR ACTION	30
RECOMMENDATION #6 – FORGE MEANINGFUL PARTNERSHIPS TO MAXIMISE IMPACT	30
<hr/>	
BIBLIOGRAPHY	31
<hr/>	
ANNEX 1 – IMPACT ASSESSMENT RESEARCH QUESTIONS	32

Acknowledgements: The Samuel Hall team gives thanks to the people and communities that participated in the research, all who have been affected by anti-vehicle mines or abandoned improvised mines. The research team is also grateful to the stakeholders who supported the impact assessment.

Front cover photo: Samuel Hall 2020 ©. A community cleared of Abandoned Improvised Mines (AIM) in Nangarhar Province, Afghanistan

TABLE OF FIGURES

Photos

Photo 1 A HALO Trust vehicle leading the way in Nangarhar Province for the AIM Impact Assessment	7
Photo 2 HALO Trust Photograph: Mechanical clearance of anti-vehicle mines, Gorbuz	8
Photo 3 A female focus group discussion on AVM and AVM clearance impacts in Herat Province	9
Photo 4 A house compound in Nangarhar which had abandoned improvised mines cleared nearby	12
Photo 5 A checkpoint near to the AIM fieldwork location in Nangarhar. Government presence was felt to increase after AIM clearance and provide greater feelings of peace and stability for some local community members.	12
Photo 6 Agricultural fields with paths running alongside in Nangarhar, in a village recently cleared of AIM	15
Photo 7 A man cleaning recently cultivated wheat in a Nangarhar village cleared of AIM	15
Photo 8 High value saffron cultivation on lands released from AVM in Sarai Naw, Herat	22
Photo 9 A panorama of construction in Talab-e-Ulia, Herat, where AVM lands were released by the HALO Trust	25
Photo 10 A Nangarhar community where the HALO Trust conducted AIM clearance	28

Maps

Map 1 HALO Trust humanitarian AIM clearance and surveys have taken place in Helmand, Nangarhar and Kunar provinces	10
Map 2 Two children's drawing of their community before AIM clearance in Nangarhar from the Child Pair Interview.....	19
Map 3 Map showing Herat province where data collection took place	21
Map 4 HALO Trust spatial imagery of Jebrael and Sara Naw, Herat before AVM clearance	24
Map 5 HALO Trust spatial imagery of Jebrael and Sarai Naw, Herat after AVM clearance	24

Tables

Table 1 AVM Impact Assessment Tools	9
Table 2 AIM Impact Assessment Tools	9

Figures

Figure 1 AIM respondents who experienced improved physical security resulting from landmine/ERW clearance (n=60)	4
Figure 2 How safe did/do you feel about children playing and being involved in activities outside of the home before/after mine clearance? (n=60)	4
Figure 3 The economic cost of losing livestock to landmine incidents from lands previously contaminated by AVM	5
Figure 4 Afghanistan Landmine/ERW and Improvised Mine Civilian Casualties from 1995-2019. IMSMA Afghanistan.	11
Figure 5 AIM clearance and the impact on peace and coexistence (n=60).....	13
Figure 6 AIM clearance and the impact on stability and rule of law (n=60)	13
Figure 7 AIM casualties from 2011 - 2020, by gender and age category	17
Figure 8 The historical economic cost of losing livestock to landmine explosions on lands previously contaminated by AVM	23
Figure 9 The types of development projects witnessed after AVM clearance (n=79)	25
Figure 10 Transportation options which increased after AVM clearance (% of all respondents, n=79)	26
Figure 11 Unintended negative impacts of AVM clearance.....	26

LIST OF ACRONYMS

AIM	Abandoned Improvised Mines
AP	Anti-personnel (mine)
AVM	Anti-vehicle mines (also known as anti-tank mines)
CHA	Confirmed Hazardous Area
CLSSI	Community leader semi-structure interview
DMAC	Directorate of Mine Action Coordination (Afghanistan)
EORE	Explosive Ordnance Risk Education
ERW	Explosive Remnants of War
FGD	Focus Group Discussion
GFFO	German Federal Foreign Office
IMAS	International Mine Action Standards
IMSMA	Information Management System for Mine Action
KII	Key Informant Interview
MA	Mine Action
MAPA	Mine Action Programme of Afghanistan
MFA	[Netherlands / Dutch] Ministry of Foreign Affairs
SHA	Suspected Hazardous Area
SSI	Semi-structured interview
UN	United Nations
UNMAS	United Nations Mine Action Service
UXO	Unexploded Ordnance

EXECUTIVE SUMMARY

Abandoned Improvised Mines (AIM) and Anti-Vehicle Mines (AVM) in Afghanistan: Assessing the impact of two pressing categories of landmines

As mine action stakeholders in Afghanistan continue to address one of the largest contaminations in the world, two types of landmines and their clearance hold wide-reaching impacts across the country. Abandoned Improvised Mines (AIM) have caused over half of all landmine/explosive remnants of war (ERW) civilian casualties in Afghanistan over the past half decade, killing thousands of men, women and children. Anti-Vehicle Mines, while not as deadly, themselves comprise over half of the remaining suspected and confirmed hazardous areas in Afghanistan - blocking vast areas of land. The HALO Trust are the major clearance organisation for both types of landmines, with the resultant changes forming the basis for this impact assessment.

The impact assessments were based on primary research directly with communities affected by AVM and AIM and their subsequent survey and clearance. Working with community members in Herat, Nangarhar, Helmand and Kunar provinces, the research set out to better understand AVM and AIM and the multi-faceted impacts of their clearance.

The impacts of AIM and their clearance: Action against the new killers

Abandoned improvised mines are left over after conflict between armed opposition groups such as Daesh/Islamic State in Khorasan Province, the Taliban and the government. They contaminate roads, paths, fields, pastures, homes and even schools, posing grave risks to people's lives. AIM have killed thousands of Afghan civilians since the inception of their surging usage over the past decade.

The clearance of AIM creates immediate impacts in people's physical security. In all communities where there had been AIM clearance, community members had known of people in the area being killed or injured by AIM - 58 of 60 survey participants and all qualitative research participants in the community in Nangarhar. After clearance, these dangerous items could no longer impact people's safety, lifting a major threat and burden from people's lives.

This threat removal meant that people felt far safer to return to normal activities, including livelihoods activities. The communities where AIM removal took place are rural villages where people are predominantly reliant on agriculture and livestock for their livelihoods. Clearance of AIM meant people could return to their fields and pastures without fear. It also opened up roads and paths to get goods to markets, creating tangible differences in people's abilities to make an income and feed themselves. 18 out of the 60 survey participants across three provinces had roads surrounding their villages cleared of AIM.

Figure 1 AIM respondents who experienced improved physical security resulting from landmine/ERW clearance (n=60)

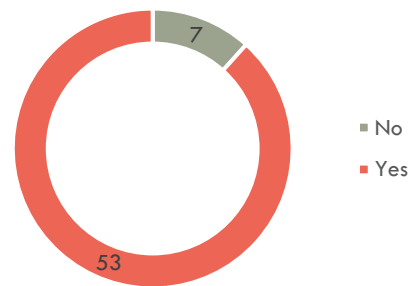
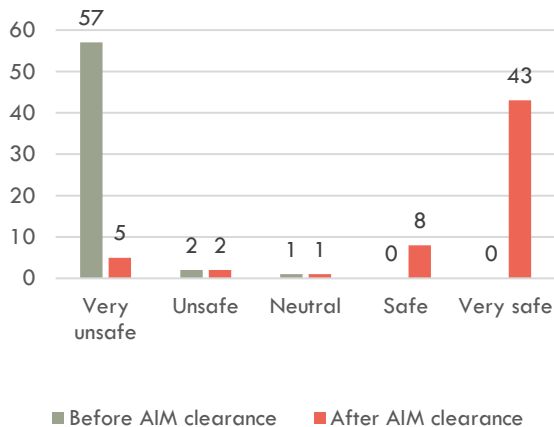


Figure 2 How safe did/do you feel about children playing and being involved in activities outside of the home before/after mine clearance? (n=60)



Markets were not the only place made more accessible by AIM clearance. Children who were not allowed to go to school out of fear of AIM before clearance were now able to pursue their education again. Accessing healthcare and transporting sick people to health facilities was now made much easier and safer. People could visit families again, attending culturally important events such as weddings and funerals in nearby villages. And children could again not only get to school and support households in livelihoods activities without fear, but also resume sports and leisure activities such as cricket in Nangarhar. There were also positive implications for peace and stability cited by community members. 47 out of the 60 survey participants had felt the stability and the rule of law had either increased (n=13) or increased a lot (n=34) as a result of the AIM clearance. However, the deeply-affecting conflict and improvised mine explosions were still causing people, especially women, long-lasting mental health issues long after their cessation.

People also discussed the negatives - there were risks and reports of recontamination in parts of Afghanistan where conflict has again flared, though the HALO Trust are limited in which IM they can clear due to active conflict. There was also widespread suspicion of remaining mines in the area, which also demonstrated the potential need for greater clearance as communities identified important and far-reaching positive impacts.

The impacts of AVM and their clearance: A view to productive use of lands

While AVM were less directly dangerous to people's physical security, AVM clearance had wide-ranging impacts on people's abilities to provide for their families and secure economic livelihoods. 94 out of the 118 (80%) of the AVM impact assessment survey participants in two villages in Herat responded that they or their households have more farmland to use as a direct result of landmine/ERW clearance. Just under half of survey participants reported an estimated additional income from agriculture resulting from AVM clearance of at least AFN 10,000 per year, (approximately USD 130), a significant amount for a rural Afghan household. Many people in the qualitative research cited being able to grow high value saffron and caraway seeds along with wheat and vegetables. Others said they could increase their livestock usage.

Conversely, where AVM were still present in villages in Herat, agriculture, livestock herding and economic activity was largely constrained. In the two villages reflecting back before AVM clearance, major tolls in terms of livestock loss were remembered.

Figure 3 The economic cost of losing livestock to landmine incidents from lands previously contaminated by AVM



47% of AVM survey respondents said that cows had died due to landmine incidents

40% reported at least 5 cows were killed, worth an average equivalent AFN 250,000 (\$3,250)



33% of survey respondents reported that sheep they owned were killed by landmines in areas where there was high AVM contamination

65% of those said that at least 10 sheep were killed, or the equivalent of AFN 50,000 (\$650)

This impact is amplified given just how much land and how many communities have AVM suspected or confirmed contaminated land proximate to their locations, with over 50% of suspected or confirmed hazardous areas (SHA/CHA) in the whole of Afghanistan attributed to AVM, which have largely been blocking safe and productive uses for many decades.

AVM clearance unlocked building and construction, both of residential houses as well as infrastructure such as roads and electricity. The roads were a key part of access to surrounding villages and markets. The positive changes in livelihoods and economic activity saw cascading effects, such as on migration and return.

Recommendations: Addressing Abandoned Improvised Mines and Anti-Vehicle Mines

Six major recommendations were formulated based on the findings of the Impact Assessment.

1. **Donors and mine action organisations should expand AIM clearance**, given the lifesaving imperatives and the multifaceted positive impacts.
2. **Measures to address the widespread suspected and confirmed AVM hazardous areas should be accelerated**, including with progress on implementation of recommendations posed in the 2018 "AVM in Afghanistan Impact & MAPA Response" report¹.
3. **The HALO Trust and other mine action stakeholder should continue to redress unintended**, negative impacts such as mitigating against the degradation of soils and roads that may result from landmine/ERW clearance.
4. **Enhanced investments should be made into data and research**, for mine action in general but also on specific categories of landmines such as AVM and AIM. These investments should *improve* mine action.
5. **The HALO Trust should continue advocacy efforts**, including with potential advocacy partners, in order to call wider attention to the impacts of AVM and AIM as well as their clearance, and also to work towards prevention of widespread and deadly AIM use
6. **The HALO Trust should further develop meaningful partnerships** across the triple nexus of humanitarian, development and peace agendas - building bridges with actors who can amplify impacts such as on safe return from displacement, rebuilding infrastructure and transportation, longer-term rural development, and working to improve mental health and psychosocial wellbeing after conflict and landmines/ERW.

¹ Roberts, R. (2018). "Anti-Vehicle Mine Contamination in Afghanistan Impact and MAPA Response".

INTRODUCTION AND CONTEXT

Afghanistan remains one of the most landmine contaminated countries in the world.² In response, the Mine Action Programme of Afghanistan (MAPA), led by the Afghanistan Directorate of Mine Action Coordination (DMAC), supported by multiple international donors, and of which the HALO Trust is a driving force and implementing partner, has cleared thousands of square metres of landmines and ERW across the country. **Both the protracted and more recent landmine/ERW contamination, along with the efforts in mine action in response, have wide-reaching impacts on people across Afghanistan.**

Two categories of landmines create particular, often unique issues, and the subsequent need to address them. **Anti-Vehicle Mines (AVM)**, also known as Anti-Tank Mines (ATM) were predominantly laid in the 1980s during the Afghanistan-Soviet War by Mujahadeen fighters targeting Soviet military vehicles. **Abandoned Improvised Mines (AIM)** in contrast are much more recent. They have risen in prominence alongside and as part of the recent conflict which has intensified since 2014.

Samuel Hall was commissioned by the HALO Trust to conduct an impact assessment of AVM and AIM and their clearance in Afghanistan. The AIM component studies the effects of improvised explosive devices and their clearance on people's physical security, livelihoods, psychosocial welfare, and the ability to stabilise after conflict whilst guaranteeing the safe return of displaced people. The AVM component of the assessment works to gain a better understanding of how anti-tank mines and their clearance affect the lives and economic conditions of contaminated communities.

Evidence gathered through these impact assessments was designed to support these understandings of two critical categories of landmines. They were also intended to be used for the HALO Trust's AVM and AIM programming in Afghanistan, alongside informing mine action in other countries that face similar challenges.

Abandoned Improvised Mines – The New Killers

Between 2013 and 2020, over half of all landmine/ERW civilian casualties in Afghanistan were caused by improvised mines - 7,686 civilians injured or killed, almost 1000 each year. This includes thousands of children under the age of 18

Abandoned Improvised Mines (AIM) are recently responsible for over half of civilian casualties in Afghanistan and present grave risks to lives and livelihoods.³ 914 civilian casualties resulting from IM were recorded in 2020, making up 59.1 percent of the total national landmine and explosive remnants of war (ERW) victims last year.⁴ These casualty figures from AIM as well as landmines/ERW are almost certainly undercounted.⁵ Along with the humanitarian toll, AIM is also understood to create obstacles to safe return of displaced persons as well as barriers in access to resources, land, and social services.

AIM are victim-operated improvised-explosive devices (VOIED), which notably fall under the *Anti-Personnel Mine Ban Convention*.⁶ The Convention makes no distinction between mines of an improvised nature and those manufactured in a factory. Improvised mines (IM) adhere to the Convention's definition of 'a mine designed to be exploded by the presence, proximity or contact of a person and that will incapacitate, injure or kill one or more persons,' with the term 'mine' referring to 'a munition designed to be placed under, on or near the ground or other surface area and to be exploded by

² Landmine & Cluster Munition Monitor (2020). Afghanistan.

³ Directorate of Mine Action Coordination (DMAC) Afghanistan (2021). Information Management System for Mine Action (IMSMA), Afghanistan.

⁴ Directorate of Mine Action Coordination (DMAC) Afghanistan (2021). Information Management System for Mine Action (IMSMA), Afghanistan.

⁵ Suzanne Fiederlein and SaraJane Rzegocki (2019). The Human and Financial Costs of the Explosive Remnants of War in Afghanistan. Costs of War.

⁶ Tan, Alexander. (2019). "The Development of a Humanitarian IED Clearance Capacity in Afghanistan". Journal of Conventional Weapons Destruction. Vol 23, Iss 3, Art 12; also: Wen Zhou and Andrea Raab (2019). "IEDs and the Mine Ban Convention: a minefield of definitions?" ICRC, Humanitarian Law and Policy. September 17, 2019.

the presence, proximity or contact of a person or a vehicle.’ In Afghanistan, it was agreed to add the term 'abandoned' for when the improvised mines are no longer part of the active conflict.^{7,8}

Armed opposition groups (AOGs) such as Islamic State or Daesh – Khorasan (ISKP) and the Taliban place improvised mines to target government-aligned military troops. Improvised mines are often placed during conflict and remain after the conflict ceases, which means they are often mixed with explosive remnants of war (ERW), unexploded ordnance (UXO) and small arms ammunition (SAA) in areas where there was fighting. Community members in an area cleared of AIM in Nangarhar province said that along with AIM, unexploded grenades were also commonly found.⁹

“We lived in a situation where from one side the Taliban and from the other side the government trapped us. Behind our house, landmines were planted, and every day and night the sound of blasts and fires awoke us. These landmines were from the times of Daesh when Taliban, government, and Daesh were all fighting each other.”

Female Community Member, Nangarhar [FGD5]

The HALO Trust are currently the only mine action organisation able to clear AIM for humanitarian purposes in Afghanistan. The HALO Trust commenced AIM surveys and clearance in 2018 in Helmand Province, later expanding AIM operations to Nangarhar and Kunar Provinces in the country's east. The HALO Trust have conducted AIM clearance in Helmand and Nangarhar, and non-technical surveys in Kunar. The Netherlands Ministry of Foreign Affairs (MFA) and the German Federal Foreign Office (GFFO) financially support the ongoing AIM operations. This support helps address the significant unmet humanitarian needs that result from AIM contamination.

Photo 1 A HALO Trust vehicle leading the way in Nangarhar Province for the AIM Impact Assessment



⁷ Tan, Alexander. (2019). "The Development of a Humanitarian IED Clearance Capacity in Afghanistan".

⁸ The "abandoned" definition importantly signifies the humanitarian clearance of the landmines and makes clear distinctions with military-security work to clear improvised mines or improvised explosive devices, as discussed in: MAG (2016). Humanitarian Response, Improvised Landmines and IEDs - Policy issues for principled mine action

⁹ FGD5 [Female FGD, Nangarhar] and FGD6 [Male FGD, Nangarhar]

Anti-Vehicle Mines – Blocking Access to Large Tracts of Land

Anti-vehicle mines make up over 50% of suspected or confirmed hazardous areas in Afghanistan, according to the calculations of the Afghanistan Directorate of Mine Action Coordination (DMAC)

According to the Directorate of Mine Action Coordination (DMAC), anti-vehicle mines (AVM) represent over 50 percent of landmine-contaminated land in Afghanistan, covering an estimated 350 million square metres of land.¹⁰ While AVM do not account for high numbers of civilian casualties in comparison with other explosive ordnance, they block expansive areas of land from potential productive use, including farming, grazing, construction and access to social services. In addition to hindering access to livelihoods opportunities, AVM-contaminated land prevents large infrastructure and development projects intended to improve the living conditions and resilience of local communities.

Principally laid beginning in the 1980s during the Soviet war without location documentation, large tracts of land have suspected or confirmed hazardous AVM areas, including across Herat and Kandahar provinces. These areas comprise of difficult-to-detect, dispersed anti-vehicle mines. Like abandoned improvised mines, AVM may also be part of mixed contaminations: The UNMAS Handbook notes that “AP mines are often used to prevent AV mines from being removed, and the technique of laying AP mines and AV mines together in clusters is common.”¹¹ This was also the case in the GICHD, Kings College London and SIPRI 2019 AVM impact study in Angola.¹²

In her 2018 report on AVM in Afghanistan, Rebecca Roberts noted that “qualitative and quantitative information available about the impact of AVM contamination and clearance at the local socio-economic level and macro-economic level [remains] limited.”¹³ While the Afghan government has designated AVM clearance as one of its top priorities to ensure national security, to this day little evidence exists to this day on the varied impacts of AVM contamination on the lives of Afghan communities.

Photo 2 HALO Trust Photograph: Mechanical clearance of anti-vehicle mines, Gorbuz¹⁴



¹⁰ Roberts, R. (2018). "Anti-Vehicle Mine Contamination in Afghanistan Impact and MAPA Response". Roberts also notes however that different data on the extent of contamination and clearance are used, highlighting the need to resolve discrepancies for credible public information.

¹¹ UNMAS (2015). Landmines, explosive remnants of war and IED Safety Handbook

¹² Geneva International Centre for Humanitarian Demining (GICHD), SIPRI and King's College London (KCL), (2019). The Socio-economic Impact of Anti-vehicle Mines in Angola.

¹³ Roberts, R. (2018). "Anti-Vehicle Mine Contamination in Afghanistan Impact and MAPA Response".

¹⁴ HALO Trust photograph. HALO Trust (nd.). The Impact of Anti-Vehicle Mines in Afghanistan. Accessed at: <https://www.halotruster.org/the-impact-of-anti-vehicle-mines-in-afghanistan/>

IMPACT ASSESSMENT METHODOLOGY

Impact Assessment Objectives

- Assess the impact of anti-vehicle mines (AVM) and of AVM clearance on people, communities, sustainable development and access opportunities
- Assess the impact of abandoned improvised mines (AIM) and of AIM clearance on people’s lives and livelihoods, psychosocial welfare, ability to stabilise after conflict and the safe return of displaced people.

Research Approach: Impact from the community perspective

The research for both the AIM and AVM impact assessments used a mixed methods approach, combining qualitative and quantitative tools and data. The research was framed and informed by literature, including mine action research and HALO Trust documentation, but the focus was on gaining an understanding of impact from communities who had experienced abandoned improvised mines or anti-vehicle mines as well as their clearance.¹⁵

Mixed methods tools and sampling

A range of research tools were used to work directly with community members living proximate to AVM and AIM contamination and clearance. Primary data collection took place in **two communities in Herat for the AVM component**, and in **one community in Nangarhar for the AIM component**. The AIM study conducted phone surveys with participants across eight communities and three provinces, Nangarhar, Kunar and Helmand, where the HALO Trust have implemented AIM operations. The AVM quantitative surveys were conducted in-person in the two primary research communities in Herat. The qualitative in-person research consisted of focus group discussions (FGDs) with men and FGDs with women; semi-structured interviews (SSI) with community leaders, displaced people or returnees, as well as pairs of children in order to gain an understanding from different members of the communities afflicted by AVM and AIM.

Table 1 AVM Impact Assessment Tools

Tools	TOTAL
Key Informant Interviews	3
Community Leader Interviews	2
Focus Group Discussions	4
Child Pair Interviews	1
Community Member Interviews	4
Quantitative Surveys	118

Table 2 AIM Impact Assessment Tools

Tools	TOTAL
Key Informant Interviews	2
Community Leader Interviews	1
Focus Group Discussions	2
Child Pair Interviews	1
Community Member Interviews	2
Quantitative Phone Surveys	60

Photo 3 A female focus group discussion on AVM and AVM clearance impacts in Herat Province



¹⁵ The Impact Assessment research questions for both AVM and AIM can be found in Annex 1.

THE IMPACT OF ABANDONED IMPROVISED MINES (AIM) AND AIM CLEARANCE

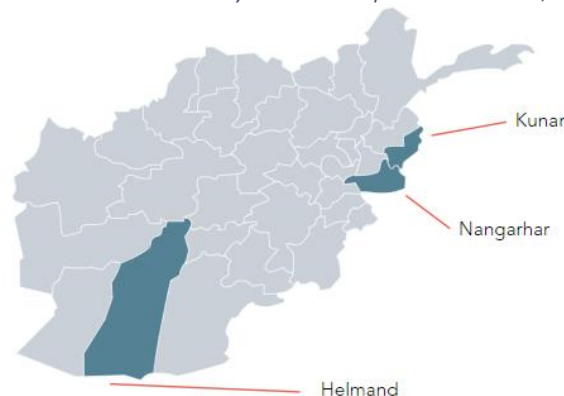
Abandoned Improvised Mines (AIM) and their clearance hold far-reaching impacts on people’s lives and in the communities where they are laid and removed. Since the AIM are placed to target troops in deliberate attacks, defend territory, and block or restrict movement, they are found in a wide variety of locations - next to roads, along walking paths, hidden within fields and pasturelands and inside people’s houses. Targeted attacks have also seen improvised mines used even against schools.¹⁶

Samuel Hall conducted sixty surveys with people living in communities cleared of AIM by the HALO Trust. Agricultural fields (n=42) and lands used for grazing (n=56) were identified widely as areas where AIM were found, along with pathways (n=34) and roads (n=27). The improvised mines placed on roads blocked access to district and provincial centres¹⁷, making movement and transportation extremely dangerous or needing long detours. Houses (n=13) were also confirmed by community members as areas where AIM were found. Survey participants also noted that improvised mines could be found in the hills and mountains surrounding their village (n=19). One community member who had returned to his village after being internally displaced explained *“These landmines were mostly buried in mountains and hills because Daesh was living in mountains.”*¹⁸ Finally, five survey participants responded that AIM were in schools in their area, and four survey participants responded that they were in healthcare clinics.

“From our village to the next, all roads, hills and deserts were covered by landmines. We were living in minefields, and it was very hard to spend our lives here, so due to the landmines, we were forced to leave and move to a different area. Before we left, every day and every moment we were expecting a landmine explosion. Daesh had control in the area until a few years ago. The landmines were in the shape of bricks, or hand grenades. When the mine action organisation arrived to clear the contaminated areas, we told them that we grow vegetables and wheat on these lands... Landmines have forced not only humans, but birds as well to leave the area.”

Female Community Member, Nangarhar - FGD5

Map 1 HALO Trust humanitarian AIM clearance and surveys have taken place in Helmand, Nangarhar and Kunar provinces



A woman living through conflict and improvised mines planted by Islamic State Khorasan Province (ISKP)

“The house we live in is the inheritance left by our forefathers. We grew up in this area, but when the Taliban and Daesh arrived, they even put mines on our doorsteps. The roads were covered in landmines, and vehicles were not allowed to pass. The Taliban and Daesh sent us warnings, which forced us to send our family to a different district. Me and my husband remained. I constantly recited the Holy Quran and prayed that Allah would protect my husband and I. Due to the constant fear, I became mentally unstable.

There was a police check point beside our house at one point. When the police asked us for water or food, we begged them to please leave this place. If Taliban or Daesh found out that you are based here, they will kill us. Previously, the militants threw a hand grenade into our compound which hit my chicken cage, killing some of the chickens. At another time, our house was surrounded by Daesh for several days, and they accused us of helping the government forces. It was five years ago when Daesh used to control our village. We were trapped between Daesh and government forces.

¹⁶ United Nations News (2018). Afghanistan: UN condemns latest school bombings as ‘repulsive acts of terrorism’. 11 September, 2018. Accessed at: <https://news.un.org/en/story/2018/09/1018982>

¹⁷ FGD5 [Female FGD, Nangarhar] and FGD6 [Male FGD, Nangarhar]

¹⁸ SSI2 [Male IDP-Returnee Semi-Structured Interview, Nangarhar]

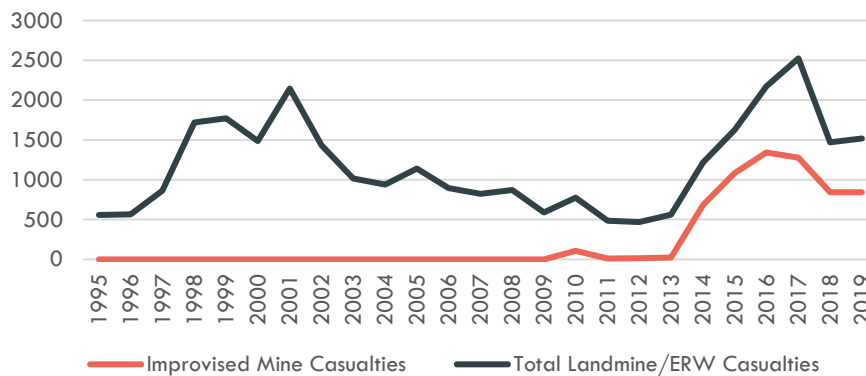
The mines came in different shapes such as bricks, remote controlled mines, barrel-shapes, and others. The explosives around our house were mostly hand grenades. The landmines caused us great trouble as we could not come out of our house, and I wasn't even able to go to my mother's house.

Later on, when the mine action organisation arrived, God bless them, they cleared our house, the roads and the fields."

1. AIM clearance saves lives

Improvised mines kill or maim hundreds of Afghans each year. In the five years from 2015, IM caused 5,391 civilian casualties, which total 57.9% of recorded civilian casualties from all landmines or ERW in Afghanistan.^{19,20} While overall civilian casualties from landmines/ERW decreased steadily in the decade after 2001 - largely attributable to mine action led by organisations such as the HALO Trust – improvised mines have been one of the driving factors in the sharp rise in casualties since 2015. This includes 1,538 total deaths in 2019 alone, the highest number of casualties for any country globally that year. Like the longer half-decade window from 2015, improvised mines were responsible for over half of the deaths. Many of these improvised mine civilian casualties are children: 3,704 Afghans under the age of 18 were casualties of improvised mines across the four years from the start of 2016 to the end of 2019 - making up just under half (48.1%) of overall civilian casualties.

Figure 4 Afghanistan Landmine/ERW and Improvised Mine Civilian Casualties from 1995-2019. IMSMA Afghanistan.



Out of the 60 survey participants living in areas cleared of AIM by HALO Trust, 58 knew someone who had been killed in the area. All except one of these 58 responded that there were multiple deaths resulting from improvised mines. The area in Nangarhar where qualitative research was conducted had seen three casualties from improvised mines in one community alone. "Before mine action, we had three mine incidents in this community, in which two people got injured and one of them got martyred."²¹ As one woman from the community stated: "Every day we saw death and we always feared that one of us would be killed by these landmines."²²

One of the largest impacts of AIM clearance is the improved physical security and safety of the communities in the area of clearance. "Before, there were a lot of mine incidents but now, there are none," stated one focus group discussion participant plainly.²³ **53 of the 60 survey respondents said they have experienced improved physical security as a result of the AIM clearance.** The seven who had not experienced improved physical security had seen the return of active conflict in their area. This sometimes also resulted in newly laid improvised mines. However, the large majority of people cited safety for themselves, their relatives and their children from AIM clearance.

¹⁹ Information Management System for Mine Action, IMSMA (2021), Afghanistan.

²⁰ Casualties of landmines and ERW generally are almost certainly undercounted; see: Suzanne Fiederlein & SaraJane Rzegocki (2019). The Human and Financial Costs of the Explosive Remnants of War in Afghanistan; and: Jo Durham, Peter S Hill, & Damian Hoy (2012). "The underreporting of landmine and explosive remnants of war injuries in Cambodia, the Lao People's Democratic Republic and Viet Nam". Bulletin of the World Health Organization 2013;91:234-236. AIM may be even more undercounted, as many areas with AIM are in non-government controlled or contested areas where the barriers to reporting deaths or injuries can be higher.

²¹ FGD6 [Male FGD, Nangarhar]

²² FGD5 [Female FGD, Nangarhar]

²³ FGD6 [Male FGD, Nangarhar]

"There have been a lot of changes in people's lives after landmine clearance. Before, the lives of people were endangered due to the landmines, but now they are safe. The places where people previously went were contaminated, including public roads. Now, our road is cleared of mines and we are safe and more secure."

Male Community Member, Nangarhar - FGD6

Photo 4 A house compound in Nangarhar which had abandoned improvised mines cleared nearby



2. AIM Clearance Linked to Peace and Stability

The impact assessment commenced initial exploration of the impact of AIM clearance on local sentiments on community stability, peace and the rule of law. Feelings of peace generally increased with the AIM clearance, though this often coincided with the cessation of conflict. However, research participants did draw a line between the AIM clearance and the increased feeling of stability in the area. Reduction in AIM was also connected to the increasing presence of security providers such as the police. *"After the demining, stability and peace returned to our village. Police forces have established a checkpoint and enforced law which is relieving for our people. Now, the police tell us that if you see a landmine immediately come and tell us so we can inform the mine action organisation. Presently, our ears don't hear the sounds of mine blasts."*²⁴

This police presence cited in Nangarhar can be correlated to trust in government which roundly rose as a result of the AIM clearance. 47 of the 60 participants said that the landmine/ERW clearance either had a positive (n=23) or a very positive (n=24) impact on their trust in government. 11 were neutral and two said it had a negative impact on their trust in government. Despite the majority citing increased trust, this result area should be taken with some caution given the fluid security dynamics and potential for areas to be recontested or for the government to lose control and authority. Caution should also be high because of the humanitarian imperatives of neutrality in AIM clearance, whereby the HALO Trust focus on mine action for lifesaving humanitarian purposes, rather than be seen as an agent of government in contested areas.

Photo 5 A checkpoint near to the AIM fieldwork location in Nangarhar. Government presence was felt to increase after AIM clearance and provide greater feelings of peace and stability for some local community members.



²⁴ FGD5 [Female FGD, Nangarhar]

The survey included a number of other different questions around these concepts of stability, peace and the potential for future violence.

Almost all participants said that the impact of the AIM clearance on stability and the rule of law²⁵ as well as peace and coexistence²⁶ was positive. Just as resoundingly, 56 of the 60 survey participants responded that the AIM clearance indeed reduced the risk of violence and future conflict.²⁷

Figure 6 AIM clearance and the impact on stability and rule of law (n=60)

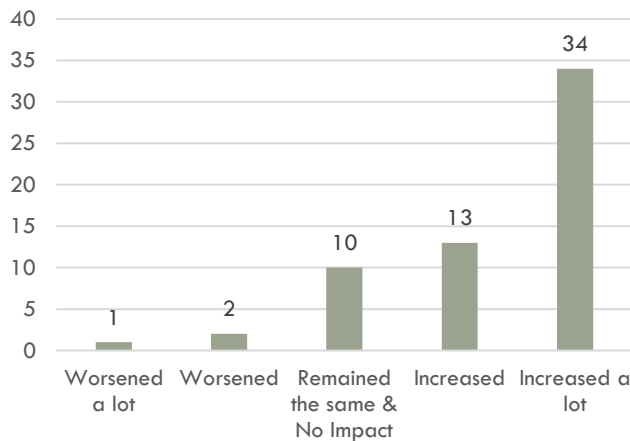
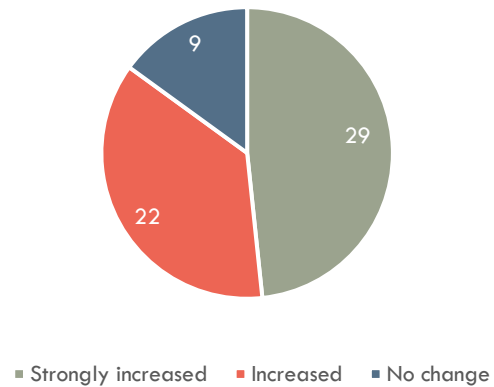


Figure 5 AIM clearance and the impact on peace and coexistence (n=60)



3. A safe return home

With improvised mines often laid as part of intense conflict, many people flee their homes to escape the fighting. After the conflict ceases, the abandoned improvised mines that are left behind present imminent dangers for those returning home alongside those who stayed. Over 20% of all civilian mine/ERW casualties recorded by DMAC up to 2015 were internally displaced persons (IDPs).²⁸

"We moved to Kabul due to Daesh and wars – we were scared of Daesh and conflict. We were also scared of landmines. It has been 2 years since we have returned here."

Male IDP-Returnee, Nangarhar - SSI3

The community leader in the Nangarhar community cleared of AIM noted that much of his village had previously fled during assaults by ISKP and fighting between militant groups and government forces. While some were still living elsewhere in Afghanistan or abroad, approximately 300 people had returned to the village. A male in a focus group discussion in the same community explained: *"After the landmine clearance, most of the people returned back here from the cities such as Kabul because they wanted to live in their ancestral homelands."*²⁹ This was a widespread experience across the different provinces where HALO had conducted AIM clearance. Only nine of the 60 survey participants were living in their homes and had never been displaced - 15 were currently internally displaced, 24 had returned from seeking refuge abroad, and 10 had returned from internal displacement.³⁰ The 15 people currently living in internal displacement is a common experience in Afghanistan where much of the country is on the move, having to flee conflict and disasters.

²⁵ The survey question was formulated: "As a result of the landmine/ERW removal, what has been the impact on the stability of the area and the rule of law?"

²⁶ The survey question was formulated: "Did the mine action work influence the level of peace and co-existence experienced in the village?"

²⁷ The survey question was formulated: "Does the AIM clearance reduce the risk of violence / future conflict?"

²⁸ Landmine & Cluster Munition Monitor (2015). Landmines/ERW, Refugees and Displacement: Briefing Paper for World Refugee Day. 20 June 2015.

²⁹ FGD6 [Male FGD, Nangarhar]

³⁰ Most of the IDP returnees and IDPs stayed within the province they were originally displaced from, either within Kunar, Nangarhar or Helmand.

“About 70 internally displaced families who fled to our village still live here. These families are almost all from insecure villages and they don’t have access to their lands. Their properties and livestock were taken by Daesh. When those lands were attacked by Daesh, they burned people’s houses, and they informed all the people to send any widows and virgins to Daesh. Likewise, they told people that if you have cows, goats, or sheep, you must give that to Daesh. Upon hearing this, people left their harvests and their houses. In order to protect themselves, they fled. They also feared that Daesh would kidnap women, which forced entire villages to leave.”

Community Leader in a village cleared of improvised mines in Nangarhar, CLS3

For those able and willing to return home, improvised mines were dangerous on both the journeys as well as after arrival. Of the 36 people who had returned back to their place of origin, 17 responded that landmines were an issue for them while travelling. 29 out of 43 survey participants found that landmines were a direct issue when they returned home, contaminating their lands, houses, and/or pathways around their homes. The returnee in Nangarhar explained: *“When we returned from Kabul, we didn’t know which lands were contaminated with landmines and we were therefore afraid. Those who stayed here told us about the contaminated lands. We limited our mobility. After a few days, we got to know better about the contaminated lands. But now that the deminers have come to our area, we are feeling safer as the area is currently being cleared of landmines.”* AIM clearance increases security for those returning to their areas of origin after conflict, both for those who have already returned and for those who are assessing whether they are able to.

Because AIM clearance makes the route and areas safer for return, it can play a role in decision-making for return. When survey participants were asked how many people have returned because of landmine clearance, only seven said there had been no change in the number of returns, 16 said there were “some” returnees because of clearance, while 37 said there were “many” returnees because of clearance. *“When the mine action organization came to demine our village, then people started to return, and today they live here as before,”* explained a community leader.³¹ Alongside the security benefits, a woman in an FGD discussed that people who have been able to return to their place of origin in the village have seen their economic situation improve too, partially because families do not have to pay rent like when they were displaced.³²

4. Impacts on livelihoods through agriculture, livestock, resources and market access

In addition to the fundamental impacts for people’s physical security, AIM clearance also allowed people to resume safe farming, livestock herding and resource gathering. The same number of survey participants who said they had experienced improved physical security, 53 of 60, also responded that had experienced improved livelihoods because of the AIM clearance.

A common lament in the qualitative research was how poor the economic situation was before AIM clearance. In addition to killing and maiming people, abandoned improvised mines were often responsible for the deaths of important livestock animals. Multiple qualitative research participants expressed their dismay at losing cows, sheep or goats, important sources of food and income for rural villagers.³³ AIM clearance removes the threat for both people and for a major source of their livelihoods in herded animals. AIM also contaminated agricultural fields, placed in areas to deter or kill soldiers but after cessation of conflict, threatening people needing to use the land for farming. In rural Afghanistan, where the large majority of people’s livelihoods and ability to provide for themselves stem from these two areas, AIM clearance takes on renewed importance. When asked about different community dynamics, a community leader described how most of the village is reliant on farming or livestock. He noted they grow wheat, corn, rice, tomatoes, cotton and other vegetables alongside herding cows, sheep, goats and chickens. Only a few people in the community work in other sectors, such as in education and health.

³¹ CLSS13 [Community Leader SSI, Nangarhar]

³² FGD6 [Male FGD, Nangarhar]

³³ FGD5 [Female FGD, Nangarhar] and FGD6 [Male FGD, Nangarhar]

Photo 6 Agricultural fields with paths running alongside in Nangarhar, in a village recently cleared of AIM



When asked what the land cleared of AIM is used for now, almost all survey participants cited productive livelihoods uses. 48 of the 60 participants said the lands were now used for pastureland, and 45 of the 60 participants said they were used for farming. “It is very good that our lands have been demined,” explained one woman in Nangarhar.³⁴ “Now, people come together and grow crops on these lands, which we share amongst each-other after harvest. We grow wheat, tomatoes, corn, and other vegetables on the cleared lands, and now we work without fear of landmines, which we were very afraid of previously.” More wheat was grown by 44 survey participants across Nangarhar, Helmand and Kunar. Also popular was corn, leafy vegetables and tomatoes on land made newly available by AIM clearance.

Photo 7 A man cleaning recently cultivated wheat in a Nangarhar village cleared of AIM



The AIM clearance is also often key to accessing markets for buying and selling goods. The village in Nangarhar where the qualitative research took place had the main road to the district capital Haska Meyna, and provincial capital Jalalabad, blocked by AIM. This made the road effectively impassable, with people having to seek longer and more difficult ways to move. The local market has approximately two dozen shops and was able to provide 20% of the goods needed by the village – but the provincial centre of Jalalabad is the most important market for buying and selling goods, with the village reliant on motor vehicles to transport goods along the road. With AIM clearance, the road to Jalalabad was again safe to use.

“Compared to the past, our economic situation has gotten better. For example, we can now carry our vegetables to the market, our ability to buy and sell has improved. Earlier, when we wanted to go somewhere, we were forced to pay high amounts, but now we commute for less money.”

Male Community Member, Nangarhar, FGD6

Community members also had increased access to resources such as wood for fuel. Removal of AIM from paths and from the hillsides surrounding villages makes these resources much safer to access. A small number of villagers earn some income from selling resources such as wood and stones. The large majority however use the resources which saves money

³⁴ FGD6 [Male FGD, Nangarhar]

from purchases and can supplement household amenity. A man in Nangarhar notes the village can now access a variety of these resources after AIM clearance. *“Before mine action, life was hard for people but now our life has been eased due to the mine action. For example, we collect wood and vegetables from the mountain and sell them in the market. Some people also extract rocks from the mountain and sell it in the market for their livelihoods. Besides, we collect sand and gravel from the river and sell it in the market and through these means, support our households. The whole community uses these resources.”*³⁵ Over half of those surveyed from across the three provinces collected wood (n=34), eleven collected stones, and nine survey participants said either they or their households gathered food such as chives, mushrooms or herbs from the areas made available through AIM clearance.

5. Transport, access to services and a necessity for other initiatives

Visiting relatives and accessing healthcare

One of the major benefits stemming from AIM clearance is increased freedom of movement and mobility, especially given that abandoned improvised mines are often placed on roads or walking paths. Where AIM were cleared from roads, which occurred in a number of the communities (n=18 out of 60 survey participants), there was profound feelings of change from before clearance to after. In Nangarhar, qualitative participants felt trapped by AIM blocking the main roads, making travel difficult and dangerous. A woman in Nangarhar noted: *“We were forced to stay home as there were landmines all around our house.”*³⁶ Many could not visit relatives or attend culturally important weddings and funerals in surrounding villages.³⁷ AIM clearance lifted this feeling of oppression and allowed people access to markets (described above in livelihoods), relatives, education and healthcare.

48 of the 60 survey participants responded that they had better or safe access to healthcare because of the AIM clearance. One community member summarised: *“Because before, we were carrying our patients on our back but now we carry them in cars.”*³⁸

“Landmine clearance was very effective because they cleared the main paths to the market. In the same way, the sub-roads connect villages because men and women use them to go from one village to the next in order to take part in funerals or weddings. Similarly, people use them to get to mosque on Friday. As a result, if the HALO Trust didn’t help us by decontaminating our village, we couldn’t have rebuilt our community.”

Community Leader in a village cleared of improvised mines in Nangarhar, CLS3

A requisite precursor to humanitarian and development assistance

The AIM clearance paved the way for other humanitarian and development initiatives to take place. Intuitively, communities where there was still a high presence of abandoned improvised mines are dangerous, especially for programmes such as road construction. When asked whether the AIM clearance led directly to programmes by government, NGOs or local civil society organisations, 38 of the 60 survey participants responded in the affirmative. A high number of these communities now had roads and infrastructure which were under construction or which had been completed (n=26). This included 10 people who said a bridge was being built in the area, made possible through landmine clearance. There was also a resumption of education initiatives (n=13). Finally, there were smaller numbers of agricultural programmes (n=9), construction building (n=6), and health activities (n=5).

Many of these programmes, including road construction, link to wider-scale initiatives such as the Citizens Charter National Priority Programming (CCNPP) which could either resume or commence after abandoned improvised mines were removed. Along with the government programmes, international and national NGOs distributed agricultural supplies as well as cash in some of the communities cleared of AIM. **When asked the reason that AIM clearance led to these activities, 31 respondents cited that it was too dangerous before.** A further 22 noted that there was now more land to conduct the activities, such as road building.

³⁵ FGD6 [Male FGD, Nangarhar]

³⁶ FGD5 [Female FGD, Nangarhar]

³⁷ FGD6 [Male FGD, Nangarhar]

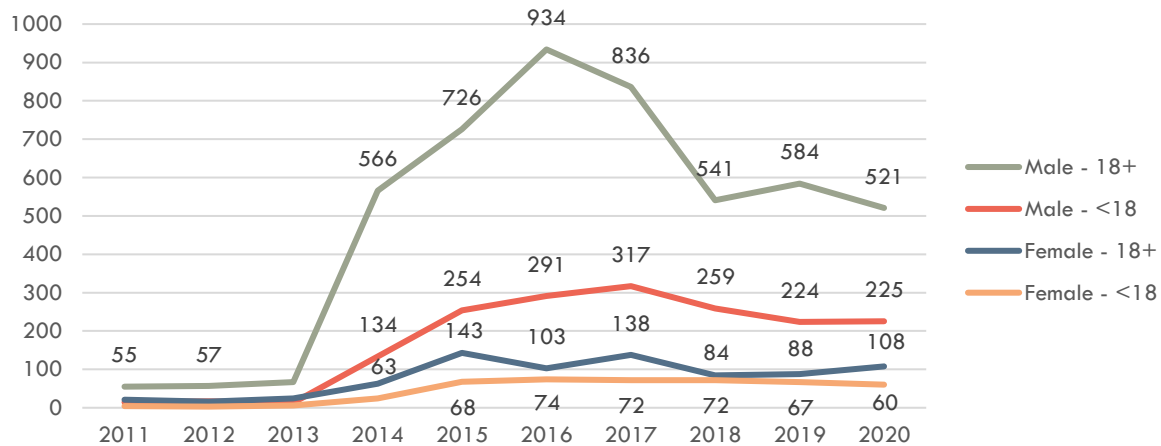
³⁸ FGD6 [Male FGD, Nangarhar]

6. Impacts of AIM on Women and Children

Improvised mines do not only impact Afghan men, but also have dire impacts on women and on children.

Female casualties of AIM - Men make up a higher proportion of AIM-caused civilian casualties compared to women - in Afghanistan, men have greater mobility and are at higher risk when farming, herding livestock and travelling. However, AIM have caused a large number of female victims. Historically, the Directorate of Mine Action Coordination (DMAC) of Afghanistan has recorded a total 8,019 improvised mine casualties to March 2021. These have almost entirely been recorded since 2010, the large majority after 2013. 6,758 (84.2%) of those injured or killed have been men. 1,261 (15.7%) of AIM casualties have been either women or girls - hundreds of Afghan women and girls each year for a decade.

Figure 7 AIM casualties from 2011 - 2020, by gender and age category



The perception of safety and physical security means that women are often restricted when AIM are present. This impacts women's mobility, mental health, and abilities to engage in livelihoods activities. When AIM are cleared, women experience enhanced freedom of movement, even in culturally gender-conservative areas where demining has taken place.

Demining has positively impacted women in our village. After the demining, women can freely go to fields near their houses to grow vegetables, and other grains. In the same way, women are very pleased with the mine clearance here in our village. When there were landmines, women couldn't even go outside their houses. We lived in confinement.

Female community member, Nangarhar - FGD5

Due to cultural sensitivities, men were the only participants in the quantitative survey. When asked if there were changes in women's conditions as a result of the AIM clearance, only eight participants said there was no change: 23 cited beneficial change for women, and 28 responded that there had been very beneficial change for women. Women were asked about any changes relating to gender in the qualitative research. Alongside the wider impacts for the community such as safety, livelihoods and access, there were gender-specific angles to these areas of change. Visiting relatives and friends was discussed, which represented opportunities to see family and get out of the house. One woman also noted that widows could better access resources including wood.

With the landmine clearance, we can more freely collect wood. After our lands were demined, people became happy because everybody, poor people, orphans, and widows, can all use the land without fear.

Female community member, Nangarhar - FGD5

Improvised mines and women's mental health

Women experienced profound mental health issues resulting from the improvised mines, which while ameliorated by clearance, continue to cause issues long after the cessation of conflict. While men who took part in the qualitative research described a change in people's feelings after AIM clearance, and noted that people experienced mental health issues during the AIM, women discussed their vulnerability in-depth.

Devastating tolls: Women's mental health after conflict and improvised mines

"I was cooking bread in the oven outside in the yard when a landmine exploded and I fell down upon seeing the smoke and broke my leg. Now, it hurts a lot and I cannot walk properly. These mines have made me addicted to sleeping pills. Every night I take two sleeping pills or else I can't sleep. Now, if anybody knocks the door forcefully, I think either a mine has exploded or Daesh has killed someone. Now it is peaceful, but I still take pills when I sleep."

"The landmines forced our people into depression and mental problems. One day, when a landmine exploded behind our house, my daughter was in the yard and she went into mental shock."

"We have spent our lives amongst the explosions and gunfire of the Taliban and Daesh. Once a landmine exploded which made a terrible and horrifying sound, suddenly a heart attack struck me. From that time on, I have had heart problems. In the same way, when I hear such sounds, I think someone is either killed or injured."

"Landmines and Daesh have made our people crazy. Everybody is mentally disturbed now. One day I heard the horrifying sound of an explosion, and suddenly the left side of my body stopped responding. Now, my left foot and left hand don't work. Even now, I hear the sounds of gunfire and mines, and whenever I close my eyes, I see explosions. Now, I thank God for the peace, but we are still deeply impacted."

The severe mental health impacts of the AIM align with Paterson, Pound and Ziaee's findings for landmines more generally in their 2013 Afghanistan Landmines and Livelihoods journal article, which saw women bearing high psychological burdens.³⁹ These effects were felt despite lower risk profiles and exposure to landmines/ERW and were heightened by women's seclusion and dependence on second-hand information. While there remains a paucity of data on mental health more generally in Afghanistan⁴⁰, the women's experience of conflict and improvised mines made clear the deep impacts on people's mental health and well-being. Despite removal resulting in positive changes in this regard, the negative impacts of improvised mines continue even after AIM are removed.

Dangers, inhibited education and no play: The impact of improvised mines on children

Children are deeply impacted by AIM and AIM clearance. Many Afghan children under the age of 18 are injured or killed each year by improvised mines. In the three years from 2018 to 2020, just under a third of civilian casualties of improvised mines were children (907 children and 1,926 adults over the age of 18). While this is lower than landmine/ERW as a whole across categories - where almost half of casualties each year are children - improvised mines are still deadly for children in Afghanistan.

Children often engaged in livelihoods activities, and are often the members of the households to fetch water and collect wood. Children also often herd livestock, placing them at high risk of improvised mines such as those placed along roads.

Children are also at risk along these roads and paths when trying to reach school. As part of the AIM Impact Assessment, the research team conducted a child pair interview with two sixteen-year-old boys in Nangarhar. One child envisioned a future career as an economist, the other as an engineer. *"I want to become an engineer in the future. I like all of my school subjects but my favourite ones are math and chemistry."* **Improvised mines inhibit children's education** - parents would keep children at home rather than risk them being endangered by hidden, abandoned improvised mines. This major impediment to education is removed when AIM are cleared. 44 of the 60 survey participants across the three provinces responded that it was safer or easier to access school because of the AIM clearance.

"Now, children go to schools. Patients can go to the clinics and hospitals. All these were made possible after landmine clearance. Before mine clearance, people were scared and they didn't go anywhere. We did not let our children go to school due to the fear of mine accidents."

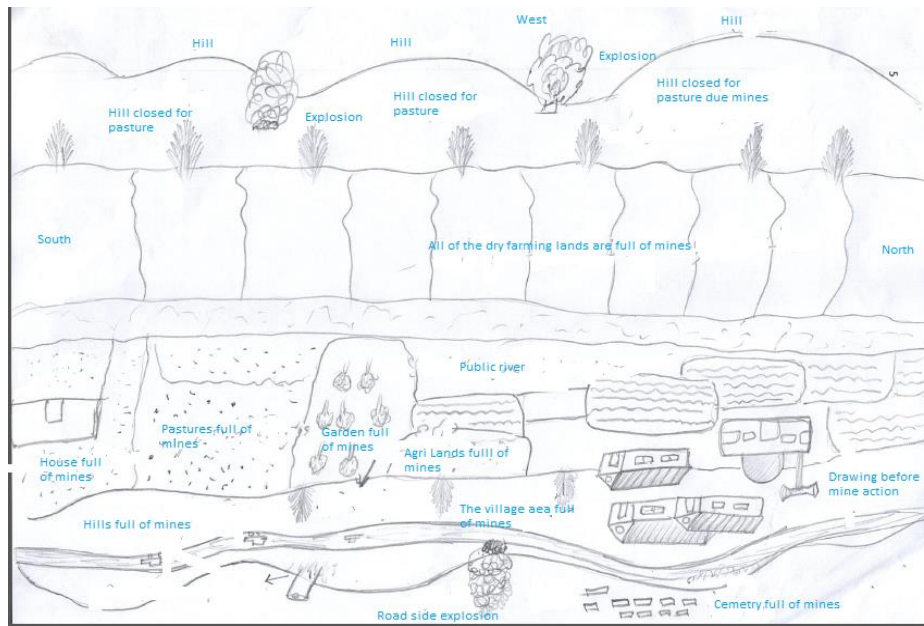
Male community member, Nangarhar - FGD6

The two children in Nangarhar were asked to draw the village and the situation of the abandoned improvised mines. Their visualisation depicts a dark picture, with landmines contaminating almost all areas in and surrounding the community.

³⁹ Paterson, Pound and Ziaee (2013), Landmines and Livelihoods in Afghanistan: Evaluating the Benefits of Mine Action.

⁴⁰ Jonathan Pedneault (2019). "Afghanistan's Silent Mental Health Crisis". Human Rights Watch. October 7, 2019.

Map 2 Two children's drawing of their community before AIM clearance in Nangarhar from the Child Pair Interview



As seen in the picture, both school and other activities were severely curtailed when there was abandoned improvised mines present. The two boys supported their families with household chores, on the farmlands (one boy described how he helped with the irrigation of crops), herding livestock and collecting wood to bring home. Both sixteen-year-old boys loved cricket. Being able to leave the home, see friends and play sport was understood to be a major impact in the lives of children. Survey participants were asked how safe they felt about children playing and being involved in activities outside of the home *before* AIM clearance. Two responded they felt it was unsafe, an almost total 57 people responded they felt it was very unsafe. This changed after AIM clearance. While seven respondents still felt it was unsafe or very unsafe for their children to play outside, mostly attributable to renewed active conflict, eight felt it was now safe and 43 now very safe for children to be involved in activities outside of the home.

We play cricket about 3-4 times a week. Before, we were not able to play cricket because there were landmines in the area. Now, we can play in our school because our school grounds are very big and it is cleared of mines.

Child Pair Interview, Nangarhar

7. Perceptions of road damage from probably security operations, remaining mines and recontamination: Negative impacts of AIM clearance

Both the quantitative and qualitative research found few negative impacts resulting from the AIM clearance activities. In the Nangarhar community where qualitative research was conducted regarding the impacts of AIM, there was widespread critique of the destruction of a road during AIM clearance, which actually matched the operations of an Afghanistan National Security Forces (ANSF) IED removal rather than HALO Trust abandoned improvised mine clearance.⁴¹ The quantitative research across the other communities revealed no other references to road damage, with the HALO Trust noting that their AIM clearance operations do not include active IEDs and should not result in destruction to paved roads. This suggests that clearer community liaison may preclude community confusion about who is responsible for the different landmine/ERW clearance operations in locations where AIM clearance is taking place.

⁴¹ Male community members in Nangarhar [FGD6] noted: "The only thing as negative was that our road was torn into pieces as a result of demining. I wish that our area needed to be decontaminated before the road was built... It is ok now, and I don't want to complain as it is far better, we have lost and injured a lot of people, and the destruction of a road is nothing compared to the lives saved...". Another participant responded: "Yes, the negative outcome of the mine action is that before mine clearance, our road was decent but post-mine clearance, it is damaged. This is because the mine action organisation had to dig into the road in order to extract the landmines, but no one has rebuilt it again yet."

Remaining landmines/ERW and risks of AIM recontamination

There were widespread reports of landmines still remaining in areas around the villages - either improvised mines which fell outside the priority areas of the HALO Trust or older landmines/ERW from previous conflicts. A community leader in Nangarhar stated: *"Land near our village still contains mines. The deminers were asked to clear that, but they said that this area is not in our program."* 50 of the 60 survey participants responded in the affirmative when asked if there were still remaining landmines/ERW in the area after the conclusion of the AIM clearance. This inhibits full and safe access and usage of land surrounding communities. The HALO Trust are restricted by insecurity, lack of continuous funding and also prioritisation of tasks, but the need for further clearance was clear from communities across Helmand, Nangarhar and Kunar.

Conflict recommenced in a small number of locations previously cleared of AIM. This was notably the case in Helmand Province. Where conflict recommenced, survey participants said that there were newly laid improvised mines, meaning that the positive impacts of clearance were no longer perceived. Many survey respondents and people participating in the qualitative research deemed that the risk of recontamination was low and that they would resist groups that wanted to lay improvised mines again. When asked whether the positive impacts could be guaranteed into the future, a man in Nangarhar captured both the tensions around future potential recontamination, but also the hope about the sustainability of positive impacts.

"It cannot be ensured by anyone that the positive impacts from landmine clearance will continue into the future because the situation in Afghanistan is not stable. Every day, there is war across Afghanistan. But still, there is the possibility that our area will be kept clear of landmines in the future, because we ourselves want this area to be cleared of mines so that our children can continue their education here. Besides, the level of local acceptance of mine action is really high because everyone wants the area cleared of mines."

Male Community Members, Nangarhar - FGD6

THE IMPACT OF ANTI-VEHICLE MINES (AVM) AND AVM CLEARANCE

Aligned with other categories of landmines and ERW, anti-vehicle mines have detrimental effects on contaminated communities' sense of security and access to income-generating options. While their humanitarian toll is not as high as that of other explosive hazards, they have nonetheless been responsible for human and livestock casualties in Herat province, with half of the impact survey respondents reporting 12 landmine incidents or more that they know of in the area. Estimating the land cleared at around 100 jerib (or the equivalent of 20 hectares), respondents stated that AVM were mainly blocking farmland and grazing land, suggesting that AVM act as severe inhibitors of local communities' development and ability to be self-sufficient. This is particularly relevant insofar as AVM, which were planted more than three decades ago, continue to resurface until today, sometimes accidentally⁴², and consequently block access to areas that were being used until their re-appearance.

"A few days ago, shepherds came to me and told me that they have found some landmines which got exposed by the rain. The rainwater washed away the soil and the landmines and revealed landmines unknown by the community. Different types of landmines can be found: anti-tank landmines planted by the Mujahideen for the government, and anti-personnel landmines planted by the government for the Mujahideen."

Community Leader, Kamana Gulran, Herat - PSSI2

While lands still suspected or confirmed to be contaminated with AVM prolong adverse impacts on proximate communities, community members living in areas where they have been cleared continue to praise the improvements they have witnessed in their physical security, livelihoods and resilience as a result of HALO Trust's mine action.

Map 3 Map showing Herat province where data collection took place



1. Livelihoods and economic gains

AVM clearance in Afghanistan's Herat province had significant impacts on local communities' economies and improvements in livelihoods. In the largely agricultural villages of Talab-e-Ulia and Sara Naw, privately-owned contaminated lands were smoothly handed over to their owners after landmine clearance. These private land holdings were predominantly used to carry out farming activities. 80% of impact assessment survey respondents confirmed that, as a result of AVM clearance, they have more farmland to use and almost 50% of respondents reported an estimated additional annual income from agriculture resulting from AVM clearance of at least AFN 10,000 per year (approximately USD 130, a significant amount in rural Afghanistan). This benefited both men and women with a large share of respondents stating that landmine clearance improved women's conditions mainly by granting them income opportunities in farming and livestock herding. The main crops that have been cultivated since the HALO Trust's mine action operations in the two Herat communities are wheat, barley and beans, along with high value saffron and caraway.

⁴² Like other landmines and ERW, AVM can shift with changing weather conditions such as rockslides and floods. See: The Arms Project of Human Rights Watch and Physicians for Human Rights (1993). "Landmines: A deadly legacy."

“A lot of changes have occurred since mine clearance. The main activity we do is cultivation: We plant wheat, barley, and beans. Agriculture is much improved. On top of that, some people cultivate vegetables such as cucumbers and then sell them on the local market. Overall, people work with peaceful minds since the anti-tank mines have been removed.”

Female Community Member, Talab-e-Ulia, Herat - FGD3

Photo 8 High value saffron cultivation on lands released from AVM in Sarai Naw, Herat



Conversely, communities where anti-tank mines are still present, such as the villages of Dahan Shoor bordering Iran, and Kamana Gulran, face ongoing livelihoods constraints. A community leader Dahan Shoor explained that community members who *“don’t have any other business or work other than agriculture and pastoralism”* were harshly affected by the AVM contamination of dry farmlands proximate to the village.

“People cultivate caraway and wheat in these lands, but AVM contamination has made any type of agricultural activity impossible and, consequently, limits our ability to generate income. For example, if the lands were freed from anti-tank mines, we would be able to exploit the land and yield about 70 kgs of caraway.”

Community Leader, Dahan Shoor, Herat - PSS11

The livelihoods of AVM-cleared communities were also improved as villagers could herd their livestock without the fear or stress of encountering any mines. Positive psychosocial impacts were also felt by women who feared for their husbands when they went to the fields: *“Whenever men went outside in order to graze livestock, we were really fearful regarding their safe return home. Now that the mines have been cleared, our situation is much improved.”*⁴³

70% of respondents claimed that they had increased access to pastureland thanks to AVM-clearance. Indeed, the risks of losing an animal to a landmine incident is particularly high for communities where mine action operations have not yet taken place. One research participant from Kamana Gulran explained: *“People in this village and in neighbouring villages are agro-pastoralists, which means that they regularly have to take their cattle to graze. If we were not contaminated, we would be able keep 500 sheep instead of only a hundred.”*⁴⁴ Survey respondents reported that the two main animals that have been killed by landmines/ERW in areas where there was previously AVM contamination were cows (47%) and sheep (33%).⁴⁵ Among those who reported their cows being killed, 40% (n=64) stated that they owned at least five cows killed on

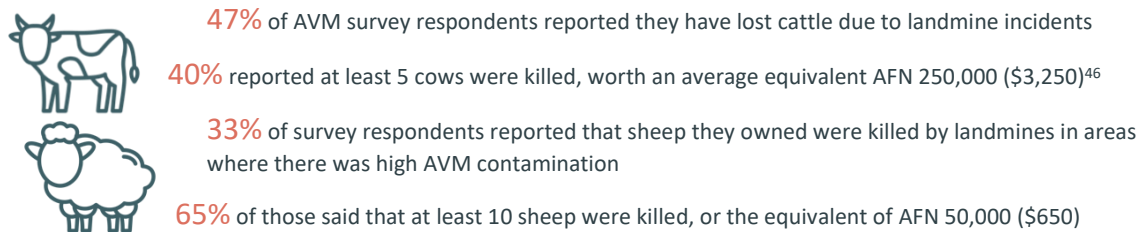
⁴³ FGD1 [Female FGD, Sara Naw, Herat]

⁴⁴ PSS12 [Phone Interview, Kumana Gulran, Herat]

⁴⁵ Self-reported livestock losses during surveys were in previous AVM-contaminated communities where there may be memory/recall and other biases. Losses were from landmines/ERW. It is often difficult to distinguish between anti-vehicle mines (AVM) and other landmines/ERW in mixed contaminations. The UNMAS Handbook notes that “AP mines are often used to prevent AV mines from being removed, and the technique of laying AP mines and AV mines together in clusters is common.” This means that both in practice and the perspectives beneficiaries, there may be difficulties in clear differentials between AVM clearance and broader landmine/ERW clearance. This was also seen in the GICHD/KCL/SIPRI 2019 AVM study in Angola. UNMAS (2015). Landmines, explosive remnants of war and IED Safety Handbook; & GICHD/KCL/SIPRI (2019). The Socio-economic Impact of Anti-vehicle Mines in Angola.

contaminated lands before clearance. As for respondents who claimed that sheep were killed, 65% (n=43) reported that more than 10 of their sheep had died from landmine explosions. The loss of livestock can be costly for farmers - the average price of a sheep in Herat is approximately AFN 5,000 (approximately USD 65) and cows AFN 50,000 (USD 650), significant losses considering the livestock killed as a proportion of rural household income. Viewing livestock herding as a bargain between economic necessity and security risks, some research participants shared that landmine contamination have forced them to sell their animals.

Figure 8 The historical economic cost of losing livestock to landmine explosions on lands previously contaminated by AVM



The increased investments and earnings in agriculture and livestock unlocked by AVM clearance were discussed by community members at the village level directly proximate or even on land that was released. However, there is also increasing evidence in different studies of cascading economic effects from improved agricultural and livestock production.⁴⁷ Improved economic production at the local level has ramifications on value chains further down the line, with transportation, processing and retail benefits, and overall economic performance for provinces and regions beyond the immediate surrounding communities becoming more evident from global research.⁴⁸

2. Access to roads, infrastructure and social services

Landmines and other explosive remnants of war inhibit rehabilitation and reconstruction, agriculture, health, education, water supply, infrastructure development, environmental protection, industrial and commercial growth, and domestic and foreign investment.

Harpviken and Isaksen, 2004. "Reclaiming the Fields of War: Mainstreaming Mine action in Development".⁴⁹

Beyond farming, the cleared land was used to for construction purposes. As the community leader of Talab-e-Ulia explained, some 500 new houses were built in the village as a result of AVM clearance. Not only did this expand people's access to residential options, but it also created new employment opportunities in the construction sector and encouraged the local recruitment of young people. *"I think people who owned a great number of lands benefited the most. For instance, they could build on their land and sell residential places, or they could harvest their land and generate significant returns"*⁵⁰ one male community member put forward during a focus group discussion.

Spatial comparisons of land cleared and released of AVM often show significant development. The township of Jebrael includes the nearby community of Sara Naw to the south-east. The satellite image comparison shows major housing construction in the areas cleared by HALO Trust in green from Map 4 before AVM clearance in 2010 and Map 5 ten years after AVM clearance (below).

⁴⁶ Prices are quoted as current-day market day approximations and are indicative based on self-reported historical losses.

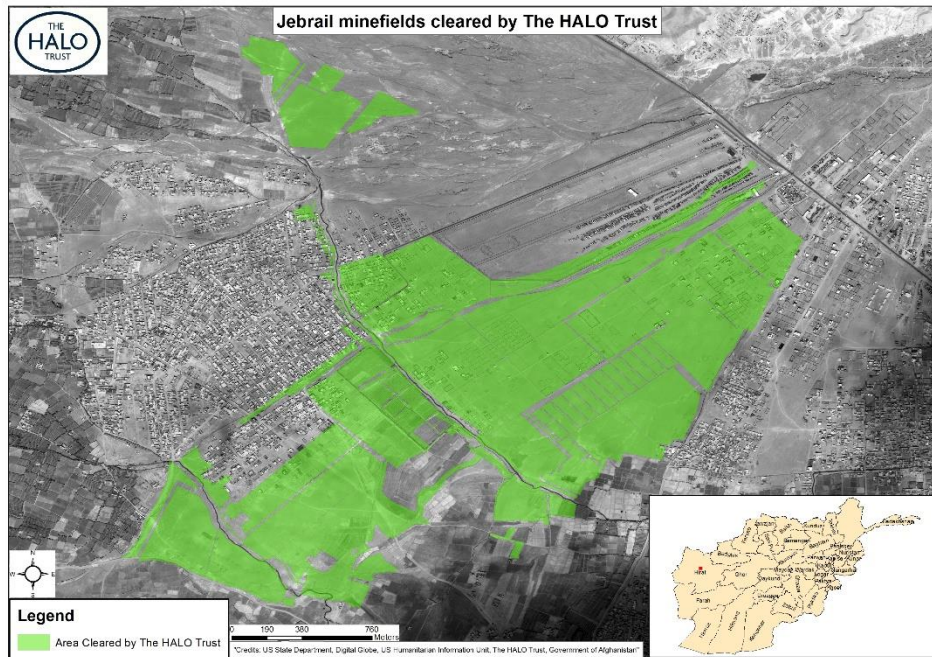
⁴⁷ Islamic Republic of Afghanistan, Afghanistan National Disaster Management Authority, and Directorate of Mine Action Coordination. "Post-Demining Impact Assessment 1396-2017," 2017.

⁴⁸ Chiovelli G, Michalopoulos S, Papaioannou E (2019). Landmines and Spatial Development. December 11, 2019.

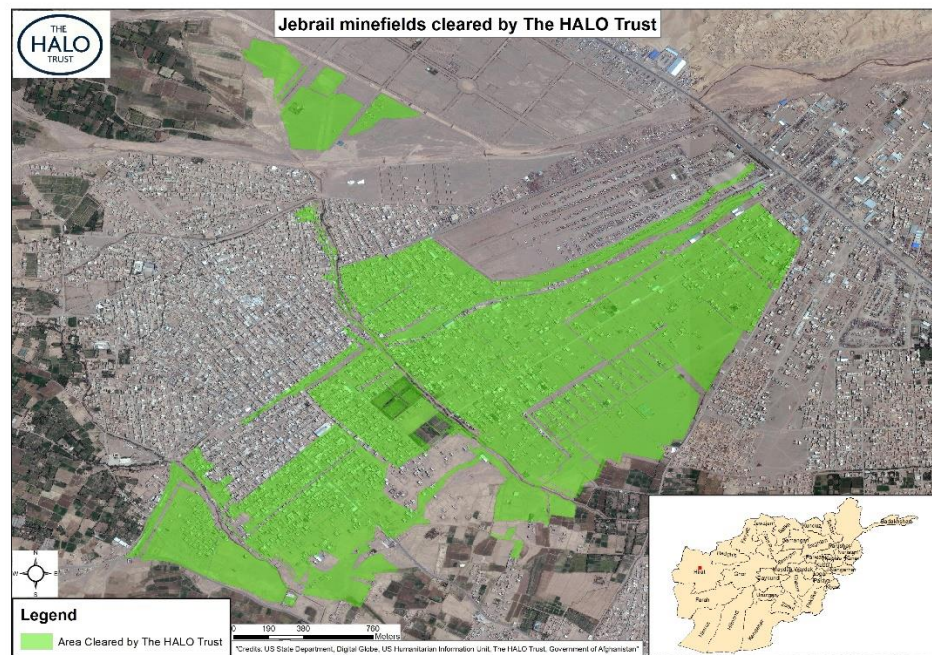
⁴⁹ Harpviken, Kristian Berg., & Isaksen, Jan., (2004). "Reclaiming the Fields of War: Mainstreaming Mine Action in Development." PRIO and UNDP.

⁵⁰ FGD2 [Male FGD, Sara Naw, Herat]

Map 4 HALO Trust spatial imagery of Jebrael and Sara Naw, Herat before AVM clearance



Map 5 HALO Trust spatial imagery of Jebrael and Sarai Naw, Herat after AVM clearance



Much-needed infrastructure and facilities were also built, offering communities access to social services that were not made available prior to mine action such as health, education and electricity.

“Since the area was cleared of anti-vehicle mines, we have been able to build a school and improve educational outcomes. I myself actually teach in this school and this has allowed me to secure an income. Likewise, before mine action, we did not have a clinic in the village and had to travel some time to get medical care. We also have a mosque now and we increased the number of houses built in the village.”

Female Community Member, Sara Naw, Herat - FGD1

Photo 9 A panorama of construction in Talab-e-Ulia, Herat, where AVM lands were released by the HALO Trust

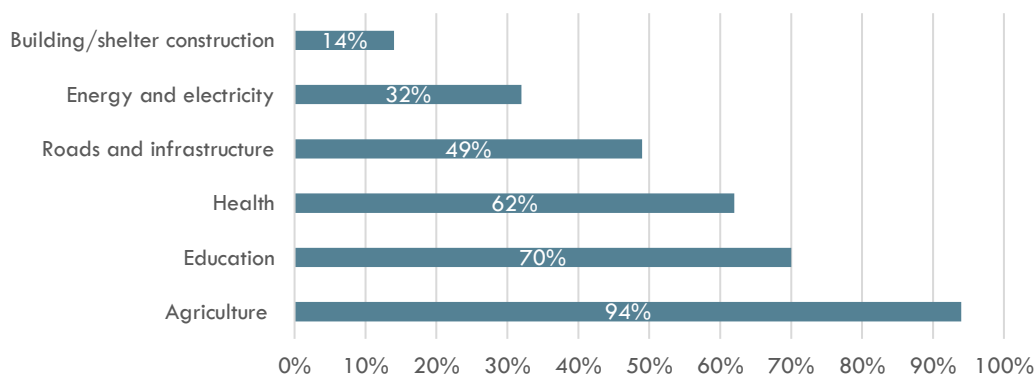


Respondents in both demined villages in Herat stressed that basic necessities were not available before the mine clearance: people did not have electricity as the electricity company was reluctant to build infrastructure in an area contaminated by AVM; people used to fetch water from the well while they now have solar water pumps and water pipelines; clinics and hospitals existed but were not safely accessible. Overall, community members noted that local facilities have improved, with the opening of leisure places such as sport centres. There was a general consensus among survey respondents on the increased and safer access to schools, healthcare and leisure.

As the released land was put to productive use, it gained greater value and even attracted people from other communities who moved to the cleared villages with the intention to buy the land. The community leader in Talab-e-Ulia noted: *“Previously, people didn’t have enough income because their agricultural lands contained mines. After the mine action, people started to grow and build on the land. This increased their income and equally boosted the value of the land. When they saw that land prices went up, some migrants even came to our village and bought land for residential construction.”*⁵¹

Alongside cleared land being used by local community members, 67% of survey respondents also attested to the implementation of NGO-led development projects in cleared areas. Development and community projects mainly focused on rural development, education, health, and roads and infrastructure.

Figure 9 The types of development projects witnessed after AVM clearance (n=79)



Transport and mobility

Research participants especially emphasised the critical role AVM clearance played in lifting mobility restrictions and improving people’s access to transportation options. There was a consensus among survey respondents that AVM clearance improve people’s mobility and the two main options that were deemed safer or more accessible were driving (45%) and walking (40%). In Sara Naw, the village leader put the ease of commuting and the expansion of usable farmland on an equal footing when summarising the positive impacts of AVM clearance. Meanwhile, the community leader of Talab-

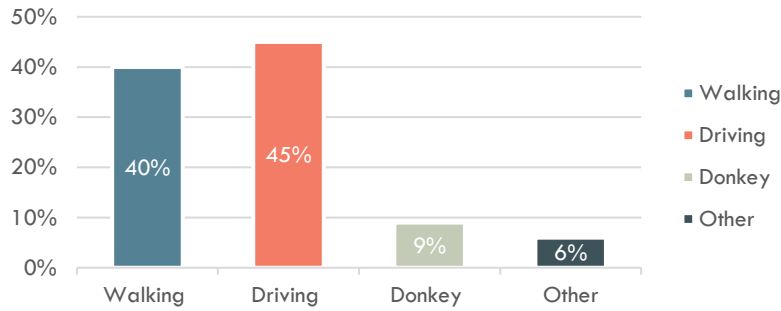
⁵¹ CLSS12 [Community Leader Interview, Talab-e-Ulia, Herat]

e-Ulia contended that by removing existing AVM, the HALO Trust ensured access to essential roads and favoured commercial transactions with other villages and towns by the same token. Thanks to the decontamination of roads, farmers have been able to move freely and sell their products and livestock at nearby markets at attractive prices.

“At the time of mines, all linking roads to city and villages were barricaded, but when mine action took place, roads were reopened for commuting. It helped connect people to bazaars in order to sell their goods. People take their dairy such as yogurt and cream to bazaars in order to sell them. Likewise, women tailors also take their products to bazaars. Finally, farmers are able to take their vegetables to the local market in order to sell them.”

Community Leader, Talab-e-Ulia, Herat - CLSSI2

Figure 10 Transportation options which increased after AVM clearance (% of all respondents, n=79)



3. Social impacts and community engagement

Almost all research participants noted positive impacts of AVM clearance on stability and the rule of law, as well as communities’ trust in government. Similarly, they explain that landmines removal has strengthened their sense of social cohesion.

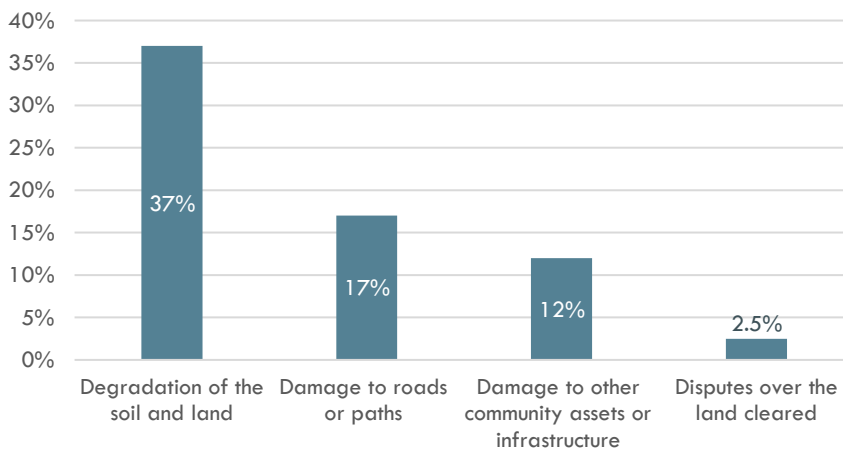
“Since mine action, peace and security have been guaranteed for our community. This has led to increased solidarity among community members. More so, people are now connected with neighbouring communities. All of this is thanks to the discipline and law that we retrieved after landmine clearance.”⁵²

Male Community Member, Sara Naw, Herat - FGD2

This can be explained by a generally high level of local acceptance of mine action at 95% and 75% of respondents reporting high levels of community consultation throughout the landmine clearance process. Research participants also found little negative outcomes of HALO’s mine action relating to social cohesion and coexistence – almost all participants did not witness any disputes over the cleared land.

However, survey participants did report some unintended negative impacts resulting from the AVM clearance. 37% of respondents reported soil and land degradation as a result of AVM clearance while 17% noted damage to roads.

Figure 11 Unintended negative impacts of AVM clearance



⁵² FGD2 [Male FGD, Sara Naw, Herat]

4. Employment opportunities and migration patterns

A key by-product of AVM clearance has been the return of young people who had migrated abroad, the majority to Iran, in the search for employment opportunities. Just as AVM removal has played a catalyst role in return migration, cleared lands have been a decisive factor in the mobility and settlement patterns of internally displaced persons (IDPs). Research participants witnessed the arrival of people displaced from unstable provinces or other areas of Herat, some of whom have chosen to relocate in Sara Naw and Talab-e-Ulia as a result of mine action. *"When my family and I moved here from Badghis province, my main concern was to ensure that my wife and children would not get injured or killed by a landmine. We moved here while landmine clearance was ongoing and I can tell you that our lives have considerably improved,"*⁵³ explained one IDP in Sara Naw.

The reverse tendency can be witnessed in villages that are still AVM-contaminated, such as Dahan Shoor and Kaman Gulran. Indeed, community leaders stressed how, in their contaminated villages, young people find themselves in a limbo. On the one hand, young people, who would largely work in agriculture, are unable to find employment opportunities in the sector as lands used for farming and grazing cannot be accessed. On the other hand, the prospect of migrating to neighbouring Iran is not as tempting as several years ago. With Iran experiencing an economic crisis, which also translates into the devaluation of the Iranian currency, the desire to cross the border to find a job has waned.

"Previously, our youths were going to Iran for work because at that time the currency value of the toman was high. For instance, we were able to buy 17 bags of flour against 1 million toman (1 bag containing 49 kilograms of flour). But now we can only buy two bags of flour against 1 million Toman. This means that the return on investment of migrating to Iran has become weak, discouraging young people to take this decision."

Community Leader, Kamana Gulran, Herat - PSSI2

In Dahan Shoor, a returnee from Iran insisted on the importance of risk education on the Iranian side of the border for people returning to AVM-contaminated provinces. These awareness-raising campaigns are particularly useful as the security situation can rapidly change and AVM can accidentally be discovered while people are abroad.

⁵³ IDP1 [Male IDP, Sara Naw, Herat]

Conclusions and Recommendations

Conclusions: The Impacts of AIM and AVM

The Abandoned Improvised Mine (AIM) and Anti-Vehicle Mine (AVM) Impact Assessment studied the effects of both these categories of mines along with their clearance. **While there remains pervasive landmine and ERW contamination in Afghanistan - including the extensive increase in AIM along with older AVM - responsive mine action continues to produce positive and beneficial impacts.**

Abandoned Improvised Mines (AIM) are the "new killers" - resulting in the death and injury of thousands of Afghans each year over the last half-decade. Their clearance leads to major changes in people's safety and security, addressing the major risks of physical harm as people return to their communities after conflict, enter houses, walk on paths, travel on roads, farm, herd livestock and even as children go to school. Beyond lifesaving humanitarian clearance of AIM, the category of landmines and their removal have multi-faceted impacts across the safe return of displaced people, livelihoods, transport, peace and security, and mental health. They also have specific impacts on different groups of people, including deep repercussions for women's mental health and on children's abilities to go to school and to play.

Anti-Vehicle Mines (AVM) block access to vast tracts of land which could otherwise be productively used. While AVM do not hold the same direct threats to physical security, they do prevent the safe and productive use of land, including for all-important livelihoods uses such as farming and livestock grazing. The communities where AVM have been cleared in Herat have had profound changes in their economies, access to services and markets, and in the construction of buildings and infrastructure - all of which would be seemingly impossible had clearance not taken place. Conversely, communities still proximate to the large areas of land where suspected or confirmed AVM are present feel inhibited in multiple ways - their livelihoods, transport, and access to the wider region.

It is a critical juncture for mine action in Afghanistan. The amount of land blocked by AVM remains high, inhibiting rural livelihoods improvements and sustainable development. Improvised mines continue to be used in high numbers, causing pervasive death and destruction. AVM and AIM, and their clearance, have major impacts on both lives and livelihoods for many Afghan communities and people.

Photo 10 A Nangarhar community where the HALO Trust conducted AIM clearance



Recommendations: Potential for action on AIM and AVM

Recommendation #1 – Expand AIM operations

Humanitarian clearance of AIM is still in its early stages in Afghanistan, after their recent rise in prominence and the issues around the politics of clearance, access and operations or capacity. The HALO Trust have moved from the pilot stage in central Helmand province to survey and clearance of AIM in three provinces in Afghanistan - Helmand, Nangarhar and Kunar. This expansion should be continued. AIM are an issue in many provinces around Afghanistan, especially those that have experienced recent conflict.

Donors, such as the German Federal Foreign Office (GFFO) and Dutch MFA, as well as other mine action funding stakeholders, can see the results of their support: AIM clearance is seen to be critical by community members in terms of their physical security and safety. Community members also cite the many impact areas beyond the immediate lifesaving benefits, including the freedom to move, the ability for children to go to school and play outside without fear, and for the community to start to rebuild their livelihoods.

It is recommended that the HALO Trust continue working with the Afghanistan Directorate of Mine Action Coordination (DMAC) in addressing AIM. The HALO Trust should continue capacity building and working with local mine action implementing organisations, as the response to AIM accelerates in response to the urgent humanitarian needs.

Recommendation #2 – Concerted action on AVM

In 2018, Rebecca Roberts conducted a preliminary study on Anti-Vehicle Mine Contamination in Afghanistan - Impact and MAPA Response.⁵⁴ Roberts formulated a number of recommendations on: 1) Planning; 2) Non-Technical Survey; 3) Technical Survey; 4) Clearance; 5) Advocacy, and; 6) Policy. Many of the recommendations are targeted at Afghanistan DMAC and the Mine Action Programme of Afghanistan (MAPA), who the HALO Trust work closely with, and who HALO Trust are a core member of, respectively. This Impact Assessment study was not technical in nature, focussing instead on the impacts from the community perspective and gathering evidence of changes directly from people living near to current contaminations or past clearance. With this increasing evidence base, it is recommended that there be continued engagement and action on AVM, especially considering the amount of land that is blocked, and the long-term inhibitions on productive use of that land AVM entails. This recommendation for the HALO Trust, mine action stakeholders (including DMAC and other members of the MAPA), and donors renews calls to address the vast issues caused by AVM in Afghanistan, aligned with the 29 recommendations in the 2018 Anti-Vehicle Mine Contamination in Afghanistan - Impact and MAPA Response Report.

Recommendation #3 – Continue to address and redress unintended negatives

The HALO Trust should address unintended negative impacts resulting from their AIM and AVM work. Potential misperceptions such as those of road damage which emerged in Nangarhar, and was likely the result of ANSF counter-IED operations, should be addressed through community liaison so that community members know what HALO Trust are and are not responsible for. There was wider perceptions of soil and land degradation resulting from AVM which should also be mitigated. While noting the context and resource restrictions that often preclude full clearance, the HALO Trust should continue to provide clear timelines of clearance and operations where possible during the community liaison, with community members often commenting on remaining landmines/ERW and the impacts they have on the community.

Recommendation #4 – Bolster data, standards, and research

Mine action stakeholders should continue to invest in research into mine action in general, as well as specific categories of landmines/ERW such as AVM and AIM. As Rebecca Roberts (2018) wrote in the Anti-Vehicle Mine Contamination in Afghanistan Impact and MAPA Response report: “Qualitative and quantitative Information available about the impact of AVM contamination and clearance at the local socio-economic level and macro-economic level is also limited.”⁵⁵ There is even less evidence on the socio-economic impacts of improvised mines in Afghanistan and other countries experiencing high IM use such as Myanmar, Colombia, and Mali.

There are opportunities to better understand different categories of landmines/ERW and to build on the emerging evidence base of their impact. This must recognise that there are long-term effects from clearance that may occur years after the initial clearance. This can be seen in the AVM findings above where agricultural gains, building and infrastructure construction, and migration do not occur in the immediate months after clearance.

Increased funding and support for mine action research such as this Impact Assessment and other recent studies should contribute to what the “Measures for mines: approaches to impact assessment in humanitarian mine action” identified in

⁵⁴ Roberts, Rebecca (2018). "Anti-Vehicle Mine Contamination in Afghanistan Impact and MAPA Response".

⁵⁵ Roberts, Rebecca (2018). "Anti-Vehicle Mine Contamination in Afghanistan Impact and MAPA Response".

2003⁵⁶: 1) Right tasks (and use of scarce resources; 2) Adaptability: tailoring individual operations to the conditions of the communities hosting them or even adapting to changing circumstances in the course of a project, and; 3) Organisational learning, of using assessments of impact to modify procedures, strategies and policies. These three objectives go beyond “proving” impact to “improving” mine action.⁵⁷ Hence, donors should continue to fund monitoring, evaluation, and learning (MEL). Mine action organisations and stakeholders such as the HALO Trust, UNMAS and in Afghanistan, the Directorate for Mine Action Coordination (DMAC) should continue to collect robust socio-economic data and support targeted learning studies.

Recommendation #5 – A call for advocacy, a call for action

The HALO Trust excel at addressing both AIM and AVM in Afghanistan, including through mine clearance and explosive ordnance risk education (EORE). In addition to this, the HALO Trust should increasingly engage in advocacy, one of the five pillars of mine action, for renewed action against the use of AVM and AIM. For AVM and AIM, the HALO Trust can continue their work in getting stakeholders to recognise the deleterious impacts on people’s lives and the opportunities for development if they are addressed. For AIM particularly, the HALO Trust can work to prevent their use in the first place, especially given how damaging they are to people’s lives and livelihoods.

The HALO Trust is well-placed to engage in this work themselves or to strategically partner with other organisations that can advocate on these pressing issues - where it is safe to do so and where it will not compromise HALO Trust's humanitarian mine action work. The United Nations (UN) are in dialogue with non-state armed groups over their use of weapons, including improvised landmines. Other organisations also work directly with non-state armed groups, such as Geneva Call, working to improve the protection of civilians during armed conflict⁵⁸ The HALO Trust and other mine action stakeholders should continue to advocate their positions supported by evidence (recommendation #4) and for people affected by landmines in Afghanistan and beyond.

Recommendation #6 – Forge meaningful partnerships to maximise impact

The HALO Trust should develop partnerships around AVM and AIM mine action beyond advocacy, in order to build bridges with humanitarian, development and peace agendas (the triple nexus). The Impact Assessment found that AIM clearance is central in the safe return of displaced people and that AVM paves the way for the construction of roads and infrastructure which are, in turn, integral in market access and transportation. The HALO Trust should meaningfully link with humanitarian programmes that also work in areas after conflict ceases and AIM are removed, and with longer-term development initiatives after AVM clearance respectively. The impact assessment found that AIM clearance has led to the implementation of development initiatives such as the Citizens Charter National Priority Programmes (CCNPP). Linking to such development plans during AIM prioritisation, where possible, would help to maximise the immediate impacts of clearance.

Where possible, given access challenges and the fact that humanitarian mine action is often conducted in more volatile areas of the country, the HALO Trust should enhance their community liaison, especially with women in order to maximise the immediate benefits to people’s mental health from knowing that landmine/ERW have been cleared.⁵⁹ Beyond this, the HALO Trust can also examine opportunities to link with mental health providers to support communities recovering from conflict and AIM. While mental health providers are not always well-developed, there is expanding programming in the area and the long-term mental health concerns revealed by the Impact Assessment should be urgently addressed.

The HALO Trust are active in ad-hoc engagement and information sharing, and have also had more formalised links with development programmes such as the United Kingdom Conflict, Security and Stability Fund (CSSF) Mine Action and Livelihoods 2016-2020 project. Developing strong partnerships is only achievable with long-term and sufficient funding. Donors should explore how impact can be maximised after essential humanitarian mine action work is completed.

The HALO Trust should enhance their linkages with other relevant actors and donors should provide the scope to maximise the impact from mine action related to AVM, AIM and other categories of landmines/ERW.

⁵⁶ Harpviken, K. B., Millard, A. S., Kjellman, K. E., & Skaara, B. A. (2003). Measures for mines: approaches to impact assessment in humanitarian mine action. *Third World Quarterly*, 24(5), 889–908.

⁵⁷ Harpviken, K. B., et al. (2003). Measures for mines: approaches to impact assessment in humanitarian mine action.

⁵⁸ For recent research on non-state armed actors, see: Heffes, Ezequiel, and Somer, Jonathan, 2020. Inviting non-state armed groups to the table Inclusive strategies towards a more fit for purpose international humanitarian law. Overseas Development Institute (ODI).

⁵⁹ In previous research on mine action, Paterson, Pound and Ziaee (2013) found that women often bear higher perceptions of landmine/UXO casualties than men, and also special psychological burdens specifically related to their seclusion and dependence on second-hand information. See: Paterson, Pound and Ziaee (2013), Landmines and Livelihoods in Afghanistan: Evaluating the Benefits of Mine Action, and Samuel Hall (2020), Evaluation of the UK CSSF HALO Trust-led 2016-2020 Mine Action and Livelihoods Programming.

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Annex 1 – Impact Assessment Research Questions

AVM/AIM Impact Assessment Research Questions

Abandoned Improvised Mines (AIM) Impact Assessment Research Questions	
Primary Research Questions	What are the most significant impacts caused by AIM for peoples and communities experiencing contamination?
	What is the relationship between AIM clearance and improvement in the lives of proximate communities?
Secondary Research Questions	What are the impacts on physical security and safety of AIM and AIM clearance?
	How is AIM clearance related to changes in housing, pastoralism, agriculture, access to resources, transport and mobility, infrastructure, development projects, and access to social services?
	What are the impacts of AIM and AIM clearance on migration, displacement and safe return of displaced persons and populations?
	What are the gendered impacts of AIM and AIM clearance?
	What is the relationship between AIM clearance, peacebuilding and stabilisation in communities recently affected by conflict, and what is the role of AIM clearance, if any, in broader peace processes and people’s attitudes towards peace?
Anti-Vehicle Mine (AVM) Impact Assessment Research Questions	
Primary Research Questions	What are the most significant impacts caused by AVM in the lives of Afghans living proximate to AVM contamination, as well as more broadly in terms of socio-economic development?
	What is the relationship between AVM clearance and improvement in the lives of proximate communities and more broadly for the rural poor?
Secondary Research Questions	How is AVM clearance related to changes in pastoralism, agriculture, access to resources, transport and mobility, infrastructure, development projects, and access to social services?
	What are the gendered impacts of AVM and AVM clearance?

ABOUT SAMUEL HALL

Samuel Hall is a social enterprise that conducts research, develops programmes and designs policies in contexts of migration and displacement. Our approach is ethical, academically rigorous and based on first-hand experience of complex and fragile settings.

Our research connects the voices of communities to changemakers for more inclusive societies. With offices in Afghanistan, Germany, Kenya and Tunisia and a presence in Somalia, Ethiopia and the United Arab Emirates, we are based in the regions we study. For more information, please visit www.samuelhall.org.

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