For many years, Iraq has been one of the most contaminated countries by landmines and explosive remnants of war (ERW) – and remains so today. Legacy-mined areas account for most known contamination, and result from the 1980–1988 war with Iran, the 1991 Gulf War, and the 2003 invasion by the US-led coalition. They include barrier minefields along Iraq’s borders with Iran and Saudi Arabia.

The occupation of large areas of Iraq by Islamic State (IS) also resulted in extensive contamination, with improvised mines and other explosive devices (IEDs) deliberately left behind by IS. The conflict displaced more than 5.8 million people between 2014–2017 and the level of contamination continues to hamper safe, sustainable, dignified, and voluntary returns. Despite stabilisation efforts and the end of major military operations, as at December 2020 over 1.3 million individuals were registered as being internally displaced in Iraq, while 4.8 million were returnees (IOM 31/12/2020).

Several factors are challenging mine action operations in Iraq. The level and type of contamination is a challenge in itself, as it is complex and exceeds the capacity of existing resources to address it. While operators are focused on clearing legacy-mined areas, the conflict has raised strategic and operational questions from clearance organisations. Improvised mines and explosive booby traps represent a considerable technical challenge, especially as they are located in urban settings. Political instability, the persistence of disputes over territories, access, security concerns, and administrative constraints also continue to create challenges. Weak coordination between the national authorities and local and international operators and the multiplicity of clearance operators – both humanitarian and private – also result in overlaps and mismanagement of priorities for mine action. Finally, the spread of the COVID-19 pandemic across Iraq has forced many humanitarian actors to reduce their operations, including in mine action. Programmes have slowly been resuming since August 2020.

**KEY PRIORITIES**

**Explosive hazards**
are one of the main barriers to the safe, sustainable, dignified, and voluntary return of all IDPs. Clearance is an essential first step.

**Risk education activities**
are essential to reduce the number of injuries and deaths in contaminated areas. Currently, an estimated 8.5 million people in Iraq are vulnerable to the risk of landmines and IEDs.

**Victim assistance**
is a priority in mine action. Victims need health, rehabilitation, and psychosocial support, as well as livelihood and financial means and access to essential services, including inclusive social and education services.

**Rehabilitation and reconstruction of infrastructure**
are critical to re-establishing basic services and to get people home.

**METHODOLOGY AND LIMITATIONS**

This note consolidates information from a range of credible, publicly available sources, including UN agencies, governments, international and local NGOs, the media, desk reviews, and international monitors. Interviews were also conducted between August–September 2020 with humanitarian organisations working on mine action in Iraq. The main limitation to this briefing note is that mine-action information management and access to reliable data remain a major challenge in Iraq.

**ABOUT THIS REPORT**

This briefing note provides an overview of mine action needs and operations in Iraq.

It is structured in the following way:

- Level of contamination
- Most contaminated areas
- Mine action management in Iraq
- Response capacity and geographic coverage
- Mine action access constraints
- Affected population and humanitarian needs
**LEVEL OF CONTAMINATION**

Decades of conflict and subsequent contamination have made Iraq the most contaminated country in the world in terms of the extent of the mined areas, and the 4th most contaminated country in terms of cluster munitions contamination (The Guardian 07/07/2020; CTG 26/05/2020; ICBL 11/2019).


The difference between legacy and new contamination is not only geographical and temporal, but also relates to the type of explosives used. While legacy contamination consists mainly of landmines which are usually found buried in the ground in mostly remote areas, new contamination, in contrast, is characterised as three-dimensional and typically found in highly populated urban environments. Survey and clearance work in three-dimensional operating environments is very challenging as the boundary between safe and unsafe is narrow (UN News 07/02/2019).

Just before IS lost the territories under its control, the group booby-trapped many buildings and essential infrastructure such as schools, hospitals, residential and government buildings, roads, and bridges (UN News 07/02/2019; ACAPS interview 08/09/2020). In January 2017, the Mines Advisory Group (MAG) reported that IS had produced improvised landmines of near-factory quality on a large scale. Some of these landmines were designed to be lethal, with a radius of up to 25 metres (The Guardian 07/07/2020; MAG 01/2017). Coalition airstrikes also left unexploded ordnances buried in building rubble (ICBL 11/2019; UN News 07/02/2019).

iMMAP data for 2020 shows that there is at least 3 billion m² of contaminated land in the governorates under federal control (Anbar, Babylon, Baghdad, Basra, Diyala, Kerbala, Kirkuk, Missan, Muthanna, Najaf, Ninewa, Qadissiya, Salah al-Din, Thi-Qar, and Wasit). The real figure is deemed to be much higher as the number of non-technical surveys conducted is low. The exact extent of the contamination in Iraq is very hard to establish for various reasons: there is no reliable national survey on suspected and confirmed contaminated areas, resulting in a lack of mapping; the presence of disputed territories and armed groups; and having to report to two mine action authorities. The overall contamination hinders free movement and renders the land useless for living and use. Currently, 8.5 million people in Iraq are vulnerable to the risk of landmines and IEDs (iMMAP 17/03/2020; iMMAP interview 09/08/2020; OCHA 17/11/2020; MAG 01/2017).

**MOST CONTAMINATED AREAS**

Given the widespread contamination, most governorates of Iraq are considered to be contaminated. The most affected regions remain the southern regions of Iraq, particularly around Basra, and the Kurdistan region.

Map of explosive hazards in the Iraqi Kurdistan region

Source: iMMAP 09/03/2020

Legacy contamination from the 1980–1988 Iran-Iraq war and the 1991 Gulf War is mostly located in border regions with Iran (in Al-Faw), in the south (in Basra), and in the north of Iraqi Kurdistan where there are an estimated 26,000 hectares of contaminated land across the region.

Mines were also laid on the border between Iraq, Kuwait, and Saudi Arabia during the second Gulf War, but the area is not considered as contaminated as the border with Iran (private communication with iMMAP 09/03/2020; Al Jazeera 02/07/2019; Iraq Business News 22/10/2014).

The region most affected by legacy contamination is southern Iraq, particularly Basra district in Basra governorate. 66% of the total recorded ERW hazardous areas in Iraq that block access to water resources are located in Basra. 58% of the total recorded ERW hazardous areas in Iraq that block access to agricultural land are also located in Basra (Al Jazeera 02/07/2019; Iraq Business News 22/10/2014; Reuters 24/04/2018; iMMAP 17/02/2016; ACAPS interview 28/08/2020; private communication with iMMAP 09/08/2020; DMA 06/2018).

New contamination left by the conflict with IS is scattered throughout northern and western Iraq. IEDs are mostly found in the former IS stronghold, Mosul (Ninewa governorate), where there are 8 million tons of explosives. Explosives are also found in and around Sinjar district (Ninewa governorate). Kirkuk governorate is also highly contaminated, especially southern Kirkuk province. Although Al Anbar governorate is one of the least contaminated by landmines, it has around 15,000 hectares contaminated with IEDs, mostly found in Al Ramadi and Fallujah city. Many of the IEDs were laid out during the battle for the city of Fallujah in 2016 (VOA 20/09/2016; iMMAP 08/2017; BBC 24/05/2019; HI 11/07/2018; The World Bank 01/2018).

**Mine action management: federal Iraq and the Kurdistan region of Iraq**

The 2005 Constitution of Iraq established Iraq as a federal state. It also granted the Kurdistan Region of Iraq (KRI) a significant level of autonomy. Today, Iraq is divided into 19 governorates, with the KRI consisting of Dohuk, Sulaymaniyah, and Erbil governorates, as an autonomous region governed by the Kurdistan Regional Government (KRG) (EASO 11/2018).

The Government of Iraq (GoI) represents federal Iraq, while the KRG represents the KRI. In between are the disputed territories. These territories are located in northern Iraq, primarily in Erbil governorate in the KRI and in Kirkuk, Diyala, Salah al-Din, and Ninewa governorates (EASO 11/2018).

As a consequence, mine action in Iraq has two main authorities: the Directorate of Mine Action (DMA) is the authority in federal Iraq, while the Iraqi Kurdistan Mine Action Agency (IKMAA) is the authority for the KRI.

Mine action authorities release task orders assigning specific organisations to a specific site or even an area. Task orders are the sole authority for commencing operations and no one is allowed to conduct any mine action activities without these; this includes risk education, survey, and clearance. In this way, IKMAA and DMA control who works on what areas and avoid duplications.

The DMA represents Iraq internationally and oversees mine action for humanitarian purposes in 15 of Iraq’s 19 governorates. The DMA plans, coordinates, supervises, monitors,
and follows up all the activities of mine action. It draws up the national strategy and is responsible for setting national standards, accrediting, and approving the standing operating procedures of demining organisations and certifying completion of clearance tasks. It also manages three regional mine action centres in the centre and south of Iraq.

The IKMAA functions as a regulator and operator in the KRI. It reports directly to the Kurdish Regional Government’s Council of Ministers and coordinates four directorates in Dohuk, Erbil, Garmian, and Sulaymaniyah (ACAPS interviews 09/09/2020 and 11/09/2020; DMA 06/2018; Landmine & Cluster Munition Monitor 29/10/2014; UNMAS 2018; Mine Action Review 01/10/2019).

Since 2005, in Iraq UNMAS coordinates local and international mine actors in direct support of the GoI and UN humanitarian and stabilisation plans. UNMAS also provides training and technical assistance and supports risk education activities. UNMAS is one of the main channels for international mine action funding. It is funded bilaterally through contributions to the UN Voluntary Trust Fund.

Political developments after the defeat of IS in Iraq increased tensions between the GoI and the KRG and impacted the way mine action was managed. In October 2017, the Iraqi federal government launched an operation to restore Iraqi sovereignty over the disputed territories, including Kirkuk and its oil fields. Kurdish forces lost territory in the disputed areas to Iraqi security forces (ICG 17/10/2017; The Guardian 28/09/2017; Reuters 08/03/2018). As the Iraqi federal government imposed Iraqi sovereignty over the disputed territories, mine action operators had to switch their reporting agency from IKMAA to DMA (ACAPS interview 02/09/2020).

**RESPONSE CAPACITY AND GEOGRAPHIC COVERAGE**

Local and national demining operators are composed of:

- The Ministry of Defence; the Ministry of Interior: Civil Defense; EOD Directorate; the IKMAA; Akad International Co. for Mines; Al Danube; Al Fahad Co. for Demining; Al Khebra Co. for Demining; Al Safsafa; Alsiraj Almudhia for Mine Removal; Arabian Gulf Mine Action Company; Al Waha; Eagle Eye; Ta'az Demining; and IHSCO.

International demining actors include:

- The Danish Demining Group (DDG) has operated since 2003 in Erbil and Duhok governorates, and previously in Basra.
- The HALO Trust has operated since 2018 in Fallujah and Ramadi (Anbar governorate), and in Baiji and Tikrit (Salah al-Din governorate).
- MAG has operated since 1992 in Iraqi Kurdistan.
- Norwegian People’s Aid (NPA) has operated since 1995 in Basra (operations in Basra and Muthanna governorates), Ramadi (Anbar governorate), and Mosul (Ninewa governorate).
- The Swiss Foundation for Mine Action (FSD) has operated since 2015 in Makhmour (Erbil governorate) and Mosul and Al-Hamdaniya (Ninewa governorate), and operated in Kirkuk (Kirkuk governorate) until 2017.
- iMMAP has been working on information management since 2004.
- Handicap International (HI) has been working on mine action since 2002. Since 2017, HI has operated in Diyala, Sulaymaniyah, and Kirkuk governorates deploying clearance and survey teams.
- The ICRC.

For-profit development companies – such as G4S, Global Clearance Solutions, Janus, Optimus, Tetra Tech, and SafeLane Global – are also demining actors.

**Private demining companies**

Among local and international demining agencies are private companies. While humanitarian demining operators aim at land release and consequently target residential and agricultural areas, private demining operators are often working for oil and gas companies to secure their installations or are contracted by donors/states to clear strategic locations (battlefields). The commercialisation of demining activities blurs the line between military, commercial, and humanitarian demining.

Despite having to get authorisation to operate from national authorities, these commercial companies do not necessarily coordinate with humanitarian actors and the UN system. They are also excluded from protection cluster meetings (ACAPS interview 11/09/2020).

**Geographic coverage**

Mine action operations have a major presence in Ninewa governorate, particularly Mosul and Sinjar districts. This presence started after the federal government regained control of areas that were previously under the control of IS. Battle area clearance operations are required there.

Mine action operations have limited presence in Salah al-Din and Diyala governorates because of the security situation, particularly in the Hamrin mountain region where IS still operates. The HALO Trust is the only operator in Salah al-Din, demining in Baiji and Tikrit. Diyala governorate has no operators despite high contamination (almost 36,000 hectares). To date, Iraqi security forces are still launching operations against IS cells in this area. Parts of Diyala governorate also fall within the disputed territories between the KRI and federal Iraq (CTC 09/2018; LSE 02/2019; Kurdistan24 11/04/2019; EPIC 30/07/2020; ACAPS interview 28/08/2020; Al-Monitor 04/11/2020).

---

1 A process of identifying, defining, and removing all presence and suspicions of explosive ordnance. Land is released after a designated task area is declared cleared. In Iraq, IKMAA and DMA are the official authorities that sign off land release.
The southern and northern regions of Iraq, which are most contaminated by landmines, count limited NGO presence (DDG, MAG, and NPA). There are ongoing clearance operations carried out by private companies contracted by oil and gas companies, but these operations do not include residential areas (ACAPS interviews 09/09/2020 and 11/09/2020; RFE/RL 21/07/2010; TNH 06/11/2014).

Coordination among operators

The overall coordination of mine action is very challenging in Iraq. There are overlaps and gaps in response. The different nature of clearance operations also results in areas being cleared but not used (e.g. there are no returnees), wasting time and resources. The lack of advocacy by the national government to highlight areas of reduced response leaves areas with no adequate response capacity (ACAPS interview 09/09/2020).

Coordination with mine action authorities and the army is also challenging. The army does not always have the capacity to manage the destruction of explosive ordnance, considering the scale of the contamination. This situation has improved but remains challenging (ACAPS interview 09/09/2020; Landmine & Cluster Munition Monitor 16/11/2018).

MINE ACTION ACCESS CONSTRAINTS

Humanitarian organisations face some administrative impediments in accessing affected populations and other related humanitarian activities. These restrictions began in late 2019, because of the discontinuation of previously agreed-upon access authorisation procedures, and the absence of viable alternative mechanisms. These restrictions on humanitarian activities and movement affected millions of people in Iraq in 2020. In order to ease a process that has hindered organisations’ timely response efforts, the federal government has established a new national access authorisation mechanism, and designated the Directorate of Non-Governmental Organisations as the country’s lead authority for processing humanitarian access letters. Despite this mechanism, administrative access challenges continue to be reported in some areas in Ninewa, Salah al-Din, and Kirkuk governorates as recently as October 2020 (USAID 30/09/2020; OCHA 15/11/2020; OCHA 07/2020).

COVID-19 impact on access

Several INGOs working in Iraq reported disruptions in their humanitarian work because of the COVID-19-related lockdown and strict regulations (OCHA 21/07/2020; ACAPS interviews 28/08/2020 and 02/09/2020). Several projects were suspended or cancelled. The impact on NGOs varied by governorate however, depending on how quickly the local authorities responded to initial COVID-19 cases, and how quickly they engaged with humanitarian organisations to grant ad-hoc governorate-level exemptions for movement and COVID-19-related response activities (OCHA 21/07/2020; HIA accessed 13/01/2021; MSF 09/08/2020; Action Against Hunger 13/05/2020; ACAPS interview 28/08/2020).

The GoI and the KRG imposed strict lockdown measures in response to the first detection of COVID-19 cases in Iraq. From mid-March, the government imposed curfews and movement restrictions nationwide. International flights in and out of the country stopped. The KRG also put in place a curfew covering Dohuk, Erbil, and Sulaymaniyah governorates. In August, the GoI eased lockdown measures nationwide, re-opening its borders and airports. The KRG announced that inter-governorate travel between Erbil, Dohuk, and Sulaymaniyah governorates could resume (Health Cluster 03/2020; WFP 25/08/2020). Development and humanitarian programmes that were on hold have also restarted.

Landmines and IEDs continue to pose a threat even with COVID-19 containment measures and lockdown. Mine risk education programmes had to stop during the months of lockdown (May–July 2020) and, as at September 2020, some organisations had not resumed their activities. Such organisations now depend on distance learning and social media for risk education. With country-wide electricity shortages, it is unlikely that essential risk education is reaching as much of the affected population as before the pandemic (OCHA 21/07/2020; Al Jazeera 31/07/2018; The Arab Weekly 09/06/2019; Al-Monitor 07/08/2020; WHO 20/08/2020; ACAPS interviews 28/08/2020 and 02/09/2020).

ACCESS CONSTRAINTS SPECIFIC TO MINE ACTION

The security situation, especially in the disputed territories of Ninewa, Kirkuk, Salah al-Din, and Diyala, does not allow safe and unhampered passage of humanitarian personnel. The lack of clear civil and security control in disputed areas continues to enable non-state actors, including IS, to maintain a presence there (OCHA 17/11/2019). As the conflict continues, de-mining operations remain a challenge, because of the insecurity humanitarian workers may face. There is a real risk of becoming a target when conducting mine action activities (ACAPS interview 02/09/2020).

The political context also creates challenges. Mine clearance organisations operating in disputed territories had to suspend their work during the period of the independence referendum organised by the KRG in September 2017. When the Iraqi federal government imposed its sovereignty over the disputed territories, mine action operators had to switch their reporting authority to the federal government – meaning they reported to the DMA (ACAPS interview 02/09/2020). This sudden change in the political environment reflects the volatile circumstances under which mine action operators work.

Administrative requirements also affect access. NGOs do not cite any deliberate obstruction by the two governments, but they do have to go through a lengthy process to obtain necessary documents. For example, while a document authorising mine clearance issued by the federal government has to be renewed every month, another document from the KRG has to be renewed every week (LSE 02/2019; ACAPS interview 02/09/2020).
The movement of supplies is complicated in mine action. The importation of certain technical instruments from outside of Iraq can create delays, mainly because of importation licences and long lead times. Mine action entails sensitive material that is difficult to deliver to conflict-affected areas. Movements are also not streamlined between Kurdistan (the KRI) and federal Iraq, with different documents being requested at different times by security personnel at checkpoints. Demining operators say that coordination is unsystematic, and treatment at checkpoints can differ from one organisation to another. On some occasions, supplies are held up or turned back (Health Cluster 2018; ACAPS interview 02/09/2020).

AFFECTED POPULATION AND HUMANITARIAN NEEDS

From January 2014–June 2020 there were around 70,000 incidents involving explosive hazards in Iraq. Currently 8.5 million people in Iraq are vulnerable to the risk of landmines and IEDs (ICBL 11/2019; ACAPS interview 28/08/2020).

The communities most at risk from explosive ordnances

IDPs and returnees are among the most at-risk groups from explosive ordnances. There were around 1.3 million IDPs in Iraq as at December 2020, dispersed across all 19 governorates. There were also around 4.7 million returnees, mainly recorded in the governorates of Ninewa, Anbar, and Salah al-Din (IOM 31/12/2020).

IDPs and returnees need risk education programmes in order to identify, act safely around, and report to local authorities the presence of explosive hazards. In areas of Iraq previously controlled by IS, these explosive hazards include unexploded and abandoned ordnance as well as landmines and IEDs (U.S. Department of State 11/06/2020; GICHD accessed 13/01/2021; IOM 03/2019).

Children who are not provided with risk education are especially vulnerable to explosive hazards. Children pick up hazardous explosives as they walk to and from school, or as they play in sites that have not been cleared (OCHA 16/12/2018; OCHA 17/11/2019; ACAPS interview 02/09/2020).

The 2019 Humanitarian Needs Overview indicates that, of casualties whose sex and age were reported, 54% were men and 36% were boys, and the majority were civilians. Detailed information on the number of people directly affected by explosive ordinance is not reliably available, resulting in significant underreporting.

Victim assistance

Victim assistance (VA) is a crucial pillar of mine action. It comprises different components meant to help victims and survivors of incidents involving explosive hazards in reducing their trauma, overcoming their economic loss and social marginalisation, and reinforcing their rights. Among these components are medical care, physical rehabilitation, psychological and psychosocial support, social and economic inclusion, law, and policies.
VA services are scarce and not systematically available throughout Iraq. They are especially lacking in rural areas. As most stakeholders focus on demining activities, resources and funding are diverted away from VA. Funding available for VA is inadequate for meeting needs (IRIN 06/04/2011; ICBL 11/2019; ACAPS interviews 08/09/2020 and 09/09/2020; Global Protection Cluster 06/2019).

- Medical care: contamination obstructs access to community infrastructure and basic services including health services, while also increasing the need for adequate healthcare for those affected (UNMAS accessed 13/01/2021). The health system is fragile and recovering from destruction that occurred during the armed conflict with IS. With the exception of Tal Afar, Al-Miqdadiyah, and Al-Ramadi, at least half of all health facilities in all cities surveyed by the World Bank in 2018 had been either partially or fully damaged. Estimated damages incurred by Iraq’s health system because of the prolonged conflict total about USD 2.3 billion (The World Bank 01/2018). Hospitals were not prepared to receive so many injured people (Landmine & Cluster Munition Monitor 18/07/2018).

- The lockdown imposed from May–July 2020 to halt the spread of COVID-19 impacted access to healthcare to people in need, including for victims of explosives. During the lockdown period, the only people who went to medical centres were those suffering medical emergencies. People who live outside of cities had to negotiate multiple checkpoints to reach medical care, leaving many with no or delayed access. Some clinics providing prosthetics and offering rehabilitation care in Iraqi Kurdistan to survivors had to temporarily close because of the pandemic (MSF 05/08/2020; MSF 09/08/2020; The Guardian 22/07/2020).

- Physical rehabilitation: physical rehabilitation centres (PRCs) provide physiotherapy as well as assistive and mobility devices such as wheelchairs, prosthetic limbs, crutches, and hearing aids. The centres are limited in number (for prosthetic limbs the wait can be months long) and are mostly located in urban settings, forcing survivors to travel and spend money on transportation.

The exact number of PRCs for the whole of Iraq is difficult to establish. In northern Iraq there are PRCs in Erbil, Mosul, and Sulaymaniyah. The Rehabilitation and Social Reintegration Centre of Sulaymaniyah is the only centre serving the governorate, despite the significant contamination. It also produces prostheses and manages a vocational training centre (UK Home Office 01/2021; ACAPS interview 09/09/2020; Global Protection Cluster 06/2019). In Mosul (Nineveh governorate) – one of the cities that suffered the most destruction – the ICRC built a PRC that is now run by the Ministry of Health (The Guardian 22/07/2020; IOM 03/2019; OCHA 16/12/2018; MEMO 04/04/2018; Emergency accessed 13/01/2021; The World Bank 01/2018; ICRC 14/10/2018).

- Most PRCs were affected by the conflict with IS, with many technicians and personnel fleeing the facilities (ACAPS interview 09/09/2020). The number of assistive devices provided by the centres decreased by almost 30% from 2014 to 2015. As a result, assistive devices were either poor quality or sold at high prices, which made them unaffordable to people with low or middle incomes (Landmine & Cluster Munition Monitor 18/07/2018). People with disabilities face greater difficulties accessing care, although the law stipulates that the services provided to them should be free of charge.

- Psychological and psychosocial support: only limited psycho-social support services are available, and are mostly provided by private institutes – which are often unaffordable for many Iraqis – and located in urban centres (UK Home Office 01/2021; ACAPS interview 09/09/2020).

- Social and economic inclusion: survivors often lose their livelihoods. Economic and social inclusion programmes are an urgent need.

- Rights: the 1997 Anti-Personnel Mine Ban Convention and the Convention on Cluster Munitions – both of which Iraq is a signatory to – require States Parties to provide VA.

Iraqi national law does not prohibit discrimination against people with disabilities. People with disabilities remain among the most vulnerable people in their communities, facing numerous barriers to their full and equal participation in all facets of life. The situation for people with disabilities living outside major cities is particularly difficult, because of a lack of access to basic services. Implementation of a 2012 decree that all public buildings should be made accessible for people with disabilities is incomplete, and access to buildings as well as to educational and work settings remains limited. Local NGOs report that many children with disabilities drop out of public schools because of insufficient inclusive education services, including accessibility of buildings (Landmine & Cluster Munition Monitor 18/07/2018).

Mine action as a condition to safe and sustainable returns

Some IDPs cannot return to their areas of origin because of the presence of hazardous explosives, and because approximately 130,000 homes have been damaged or destroyed across conflict-affected areas. Mine action activities are required as a condition to safe, sustainable, dignified, and voluntary returns. According to a 2018 World Bank assessment, across affected areas an average of 22% of IDPs in camps say explosive hazards are a major reason for not intending to return to their areas of origin. This rises to 52% in some governorates. On average, 12% of IDPs not living in camps say the same (UNMAS accessed 13/01/2021; The World Bank 01/2018).

Impact on livelihoods and agriculture

Contamination impedes the resumption of livelihoods and access to agricultural land, grazing areas, and irrigation systems (UNMAS accessed 13/01/2021). Agriculture is an important source of employment and livelihoods for Iraqis. The armed conflict with IS damaged and contaminated agricultural lands and infrastructure (including food storage, equipment, and crop-processing infrastructure). Livestock production is an important pillar of Iraq’s agriculture sector, representing one-third of the total value of agricultural production. A significant
number of livestock was lost because of the conflict, and because contaminated grazing lands were no longer accessible. According to the 2018 World Bank assessment, the total damages to the agricultural sector were estimated at USD 2.1 billion. Farmers say that rebuilding herds requires improved security, temporary shelters for livestock, replanting of pastures, and clearance of unexploded ordnance (The World Bank 01/2018; FAO 02/2016; FAO 2017; Reuters 24/04/2018).

The unemployment rate in Iraq neared 13% in June 2020, and the GDP growth was expected to contract by 9.7% in 2020 as the Iraqi economy was severely impacted by the global crash in oil prices and by the COVID-19 pandemic. Limited employment opportunities force many residents of villages with contaminated areas to adopt risk-taking behaviour patterns to generate income (e.g. scrap metal collection and trade, collecting electric wires from military hardware left on the battlefields, truffle picking and trade, and farming in contaminated areas) (Reuters 24/04/2018; UN News 26/08/2020; OCHA 17/11/2019; The World Bank 04/05/2020; OCHA 21/07/2020).