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EXPLOSIVE ORDNANCE CONTAMINATION AND IMPACT SURVEY IN NORTHEAST SYRIA

3iSolution information . innovation . impact

humanity &inclusion

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ITF ENHANCING HUMAN SECURITY

CONTENT

GLOSSARY AND DEFINITION

GLOSSARY

3iS: 3iSolution (Legally known as iMMAP France)

CHA: confirmed hazardous area

HI: Humanity and Inclusion

DCA: DanChurchAid

EOD: Explosive Ordnance Disposal

IEDs: Improvised Explosive Devices

LISs: Landmine Impact Surveys

MAG: Mines Advisory Group

NES: Northeast Syria

NESMAC: Northeast Syria Mine Action Center (NMAA representative)

NMAA: National Mine Action Authority

NTS: Non-Technical Survey

IMAS: International Mine Action Standards

IMSMA: Information Management System for Mine Action

ITF: ITF Enhancing Human Security (ITF) (previously named International Trust Fund for Demining and Mine Victims Assistance)

RMCO: Rojava Mine Control Organization (Local Mine Action Organization in NES)

SHA: Suspected hazardous area

DEFINITION

Clearance – Source: IMAS (2018)
In the context of mine action, the term refers to tasks or actions to ensure the removal and/or the destruction of all explosive ordnance from a specified area to a specified depth or other agreed parameters as stipulated by the NMAA/ Tasking Authority.

cleared area – Source: IMAS (2013)
Cleared land (m2)
A defined area cleared through the removal and/or destruction of all specified explosive ordnance hazards to a specified depth.

confirmed hazardous area (CHA) – Source: IMAS (2013)
Refers to an area where the presence of explosive ordnance contamination has been confirmed on the basis of direct evidence of the presence of explosive ordnance.

contaminated area – Source: IMAS (2009)
in the context of mine action, the term refers to ... an area known or suspected to contain explosive ordnance.

explosive ordnance disposal (EOD) – Source IMAS (2005)

the detection, identification, evaluation, render safe, recovery and disposal of EO. EOD may be undertaken:

1. as a routine part of mine clearance operations, upon discovery of EO;
2. to dispose of EO discovered outside hazardous areas, (this may be a single item of EO, or a larger number inside a specific area); or to dispose of EO which has become hazardous by deterioration, damage or attempted destruction.

explosive remnants of war (ERWs) – Source: IMAS (2005)
unexploded ordnance (UXO) and Abandoned explosive ordnance (AXO).

hazard area, hazardous area – Source : IMAS (2009)
a generic term for an area perceived to have explosive ordnance.

IMAS – Source: IMAS
International standards for humanitarian demining programmes were first proposed by working groups at an international technical conference in Denmark in July 1996. Criteria were prescribed for all aspects of demining, standards were recommended and a new universal definition of "clearance" was agreed. In late 1996, the principles proposed in Denmark were developed by a UN-led working group and the International Standards for Humanitarian Mine Clearance Operations were developed. A first edition was issued by the UN Mine Action Service (UNMAS) in March 1997.

The scope of these original standards has since been expanded to include the other components of mine action and to reflect changes to operational procedures, practices and norms. The standards were re-developed and renamed as International Mine Action Standards (IMAS) with the first edition produced in October 2001.

The United Nations has a general responsibility for enabling and encouraging the effective management of mine action programmes, including the development and maintenance of standards. UNMAS, therefore, is the office within the United Nations responsible for the development and maintenance of IMAS. IMAS are produced with the assistance of the Geneva International Centre for Humanitarian Demining.

improvised explosive device (IED) – Source: IMAS (2013)
a device placed or fabricated in an improvised manner incorporating explosive material, destructive, lethal, noxious, incendiary, pyrotechnic materials or chemicals designed to destroy, disfigure, distract or harass. They may incorporate military stores, but are normally devised from non-military components [IATG 01.40:2011].

Note: An IED may meet the definition of a mine, booby trap, and/or other type of explosive ordnance depending on its construction. These devices may also be referred to as improvised, artisanal, or locally manufactured mines, booby traps, or other types of explosive ordnance.

impact survey – Source: IMAS (2009)
an assessment of the socio-economic impact caused by the actual or perceived presence of explosive ordnance, in order to assist the planning and prioritisation of mine action programmes and projects.

Information Management System for Mine Action (IMSMA) – Source: IMAS (2007)
Note: This is the United Nation's preferred information system for the management of critical data in UN-supported field programmes. IMSMA provides users with support for data collection, data storage, reporting, information analysis and project management activities. Its primary use is by the staff of MACs at national and regional level, however the system is also deployed in support of the implementers of mine action projects and demining organizations at all levels.

intended use – Source IMAS
use of land following demining operations.

Note: Intended use: use of a product, process or service in accordance with information provided by the supplier. [ISO Guide 51:1999(E)

Note: Intended land use should be included in the clearance task specification and clearance task handover documentation.

International Mine Action Standards (IMAS)
documents developed by the UN on behalf of the international community, which aim to improve safety, quality and efficiency in mine action by providing guidance, by establishing principles and, in some cases, by defining international requirements and specifications.

Note: They provide a frame of reference which encourages, and in some cases requires, the sponsors and managers of mine action programmes and projects to achieve and demonstrate agreed levels of effectiveness and safety.

Note: They provide a common language, and recommend the formats and rules for handling data which enable the free exchange of important information; this information exchange benefits other programmes and projects, and assists the mobilisation, prioritisation and management of resources.

key informants- Source IMAS (2009)
all men, women and children who have relatively good knowledge on the hazardous areas in and around their community.

Note: Key informants may include, but are not limited to, community leaders, mine-affected individuals, schoolteachers, religious leaders etc

land release – Source: IMAS (2013)
in the context of mine action, the term describes the process of applying "all reasonable effort" to identify, define, and remove all presence and suspicion of Explosive Ordnance through non-technical survey, technical survey and/or clearance. The criteria for "all reasonable effort" shall be defined by the NMAA

mine action – Source IMAS (2009)
activities which aim to reduce the social, economic and environmental impact of explosive ordnance.

Note: Mine action is not just about demining; it is also about people and societies, and how they are affected by explosive ordnance contamination. The objective of mine action is to reduce the risk from explosive ordnance to a level where people can live safely; in which economic, social and health development can occur free from the constraints imposed by explosive ordnance contamination, and in which the victims' different needs can be addressed. Mine action comprises five complementary groups of activities:

EORE;
humanitarian demining, i.e. explosive ordnance survey, mapping, marking and clearance;
-mvictim assistance, including rehabilitation and reintegration;
stockpile destruction; and advocacy against the use of APM.

Note: A number of other enabling activities are required to support these five components of mine action, including: assessment and planning, the mobilisation and prioritisation of resources, information management, human skills development and management training, QM and the application of effective, appropriate and safe equipment.

national mine action centre (NMAC) ; mine action centre (MAC) ; mine action coordination centre (MACC)- Source : IMAS (2009)
organisation that, on behalf of the national mine action authority, typically is responsible for planning, coordination, overseeing and in some cases implementation of mine action projects. The NMAC/MAC/MACC acts as the operational arm of the NMAA.

Note: In the absence of a NMAC, it may be necessary and appropriate for the UN, or some other body, to assume some or all of the responsibilities of the NMAC.

national mine action authority (NMAA)- Source: IMAS (2009)
government entity, often an inter-ministerial committee, in an EO-affected country charged with the responsibility for broad strategic, policy and regulatory decisions related to mine action

Note: In the absence of an NMAA, it may be necessary and appropriate for the UN, or some other body, to assume some or all of the responsibilities of an NMAA.

mine action organization- Source: IMAS (2009)
refers to any organisation (government, military, commercial or NGO/civil society) responsible for implementing mine action projects or tasks. The mine action organisation may be a prime contractor, subcontractor, consultant or agent.

non-technical survey- Source: IMAS (2013)
refers to the collection and analysis of data, without the use of technical interventions, about the presence, type, distribution and surrounding environment of explosive ordnance contamination, in order to define better where explosive ordnance contamination is present, and where it is not, and to support land release prioritisation and decision-making processes through the provision of evidence.

priority-setting – Source :IMAS (2009)
the process of deciding which tasks should be undertaken first, given limited resources and time. Priority-setting applies to all aspects of mine action (EORE, land release, stockpile destruction, and advocacy).

quality assurance (QA) – Source: IMAS (2005)
part of Quality Management focused on providing confidence that quality requirements will be fulfilled. [ISO 9000:2000]

Note: The purpose of QA in humanitarian demining is to confirm that management practices and operational procedures for demining are appropriate, are being applied, and will achieve the stated requirement in a safe, effective and efficient manner. Internal QA will be conducted by demining organisations themselves, but external inspections by an external monitoring body should also be conducted.

quality control (QC) – Source: IMAS (2005)
part of Quality Management, focused on fulfilling quality requirements. [ISO 9000:2000]

Note: QC relates to the inspection of a finished product. In the case of humanitarian demining, the ‚product' is safe cleared land.

reduced land – Source: IMAS (2013)
A defined area concluded not to contain evidence of explosive ordnance contamination following the technical survey of a SHA/CHA.

technical survey– Source: IMAS (2013)
refers to the collection and analysis of data, using appropriate technical interventions, about the presence, type, distribution and surrounding environment of explosive ordnance contamination, in order to define better where explosive ordnance contamination is present, and where it is not, and to support land release prioritisation and decision making processes through the provision of evidence.

unexploded ordnance – Source: IMAS (2013)
explosive ordnance that has been primed, fuzed, armed or otherwise prepared for use or used. It may have been fired, dropped, launched or projected yet remains unexploded either through malfunction or design or for any other reason.

Victim – Source: IMAS
<mine action> persons, either collectively or individually:
who have experienced physical, emotional and/or psychological injury, economic loss; whose recognition, enjoyment or exercise of their human rights on an equal basis with others has been hindered; or whose full and effective participation in society has been restricted by an accident with a confirmed or suspected presence of explosive ordnance.
Note 1 to entry: Victims include people killed, injured and/or impaired, their families, and communities affected by EO.
Note 2 to entry: The term "victim" carries legal significance with respect to the APMBC, CCW and CCM.

INTRODUCTION

The planning of safe, effective and impactful Humanitarian Mine Action (HMA) efforts, requires accurate, appropriate and timely information. With such objective, 3iSolution (Legally known as iMMAP France), coordinated the Humanitarian Mine Action sector in Northeast Syria (NES) since 2021, and led the Mine Action Information Management system. As part of it, Mine action data from all HMA organizations has been monthly collected, verified and consolidated by 3iSolution. While Mine Action data had been recorded as early as 2017, the lack of updated information on still openly contaminated areas and gaps of information in specific locations, prevents the implementation of a regional evidence-based strategy. The need to enforce and strongly prioritize mine action interventions is exacerbated by the extreme lack of fundings faced in NES by the HMA sector.

In this regard, the conduct of a comprehensive and regional contamination survey appeared vital to better define the entire problem in NES, in terms of scale, exact location, type of hazards, and socio-economic impacts upon communities.

Such extensive contamination and impact Survey is the most essential step in the understanding, planning and prioritization of a Humanitarian Mine Action (HMA) intervention in a given country or region. It aims at significantly improving the availability and quality of information for decision makers, such as HMA implementing organizations, Mine Action authorities and the donors' community. It also serves to establish a baseline, against which future achievement and progress can be measured.

Thanks to the EU financial support through its Foreign Policy Instrument (FPI), 3iSolution partnered with DCA, HI and ITF to complete a contamination and impact survey in NES. Additionally, a fourth HMA organization (MAG) contributed to the general effort, without contractually partnering to the project.

Over an 8-month period, from June 2023 to January 2024, 29 specialized survey teams were dispersed across NES communities. They first assessed the communities' contamination status

and further determined the exact location(s) and type(s) of Explosive Ordnance(s) when affected. The methodology is detailed in a dedicated chapter below.

This report presents the survey findings collected by DCA, HI and ITF. Information collected by MAG in parallel, was also added for specific analysis and clearly mentioned when doing so.

3iSolution consolidated the findings, verified data inaccuracy, and merged it with preexisting data, when necessary, to present in this report the most comprehensive Explosive Ordnance picture in NES.

Although this report's finding is a decisive tool for planning interventions at NES level, it cannot replace a regional operational plan that should be endorsed by the NES Mine Action authorities (currently represented by the NESMAC). This report should inform the NESMAC, HMA organizations and decision-makers, of the current Explosive Ordnance contamination status and advise on funding allocations, with the identification of prioritized areas. In that regard, the survey's exhaustive database is also being made available to the NESMAC and HMA organizations operating in NES.

Given the challenges and sensitivities of operating in Northeast Syria, the specific implementing locations of HMA organizations have been anonymized.

EXECUTIVE SUMMARY

Overall, the Explosive Ordnance contamination survey in Northeast Syria found a high impact in areas where armed fighting's has been ongoing the longest. In 2024, the level of contaminated areas waiting for technical or clearance interventions remain dramatic. Thanks to the survey results and combined with additional IMSMA based data, it has been recorded that a staggering number of 749 hazardous areas, totalling 38,012,478.08m2 and 570 Explosive Ordnance spots (single items) continue to cause immediate threats to civilians in NES. This figure is not considering new contamination being spread in areas still affected by this multi sided conflict. While this report is the most comprehensive and best- known picture known at this date in NES, gaps are to be expected, notably in areas where the access is hindered by security considerations.

Numerous districts such as Menbij, Deir Ez Zor, Al Mayadin, Raqqa and Ras Al Ain, have recorded an extreme level of contamination. As such, more than 50% of their communities are affected by the presence of Explosive Ordnance. Worryingly, the governate of Aleppo and Deir Ez Zor have witnessed very limited, close to non-existent, clearance capacities over the recent years. As a consequence, accidents and victims including children, are continuously recorded.

The districts of Abu kamal, At Thawrah and Ain Al Arab (Kobane) are also reportedly highly affected with respectively 41%, 43% and 47% of communities contaminated.

Based on a cost methodology developed by the NES Mine Action Sub Working Group in collaboration with the Whole of Syria Mine Action sector, a minimum of 150 000 000 USD is required to address the current open hazardous areas. This figure is not englobing parallel and mandatory activities such as surveying, risk education and victim assistance. Following the same methodology and considering that clearance capacities remain the same as in 2023, a minimum of 15 years will be required to address current issues. Such figures are also not considering additional contamination, that is inevitable due to the active conflicts in certain areas, proliferating further unexploded and abandoned ordnances.

The results of this survey should be used by the NES authorities and stakeholders to use the limited resources available to direct activities to those most at need. While this report highlights key figures, more work and commitment are required from the international community if Northeast Syria is to make realistic steps towards being free from mines and other Explosive Ordnance. Acting as a Mine Action authority and Center, the NESMAC (NES Mine Action Center) would be responsible for setting such priorities with different stakeholders and develop yearly operational plans.

SURVEY OBJECTIVE

The purpose of this Explosive Ordnance contamination impact survey, is to facilitate the prioritization of resources, supporting the Humanitarian Mine Actin response at NES level.

There is an expectation that this assessment will support the NES Mine Action Center in collaboration with the HMA implementing organizations, to develop a transparent and prioritizing system, leading to annual work plans.

OBJETIVES

01

To obtain updated and comprehensive contamination information at community level, across Northeast Syria.

Sub objective 1.1: Implementing Community survey/ Non-Technical Survey in communities never surveyed by HMA or commercial organizations, since 2017.

Sub Objective 1.2: Updating information in communities that have been previously surveyed with open status Suspected or Confirmed hazardous areas and/or Explosive Ordnance spots.

Sub objective 1.3: Merging survey results with pre-existing data, completing any information gaps.

02

To enhance information related to Explosive Ordnance victims and accidents across Northeast Syria

Sub Objective 2.1: Collecting additional information on victims and accidents.

Sub Objective 2.2: Merging survey results with pre-existing data, completing any information gaps.

Sub Objective 2.3: Analyzing victims' profile and accident's locations, to better prioritize Mine Action interventions and tailor Explosive Ordnance Risk Education strategies.

03

To assess the impact of Explosive Ordnance at community and regional level across Northeast Syria.

Sub objective 3.1: Collecting additional information on recorded blockages linked to Explosive ordnance affected areas.

Sub objective 3.2 Collecting additional information on affected direct population.

04

To develop prioritization strategies for enhancing Mine Action interventions in Northeast Syria.

Sub objective 4.1: Developing a scoring system to classify the impact of Explosive Ordnance at community level and at each Hazardous/EO spot reports.

Sub objective 4.2: Developing a cost methodology estimation for areas classified as high impact.

Sub objective 4.3: Developing clear and practical Mine Action response recommendations for the next 2-3 years.

SURVEY METHODOLOGY

BACKGROUND

Historically, surveying methodologies applied on landmines' affected environments, defined and quantified their scopes and impacts worldwide. Landmine Impact Surveys (LIS) were broadly developed by the Survey Action Center (SAC) in the 2000s, and implemented to a series of countries, such as Lebanon, Angola, Iraq or Kosovo. Twenty years later, such international coordinated effort is lacking. The development of local projects in consortium with HMA organizations, as achieved in NES, can be thus essential to achieve such vision.

Since LIS implementations in the 2000s, the environment of affected countries has greatly evolved, and the use/storage of conventional landmines scaled down, thanks notably to the International Mine ban convention' efforts. Explosive Ordnances being used in recent conflicts have diversified with an accrued use of Improvised Explosive Devices (IEDs). In the image of the Syrian conflict, heavily populated urban areas are not spared and continued hostilities make it unfeasible to obtain a static and final contamination picture.

In line with it, the International Mine Action Standards (IMAS) developed the Land release process to "identify, define, and remove all presence and suspicion of EO through non-technical survey, technical survey and/or clearance. The land release process is an evidence-based decision-making process that helps determine with confidence which land needs further action and which does not. It involves the identification of hazardous areas, the cancellation of land through non-technical survey, the reduction of land through technical survey and the clearance of land with actual EO contamination.

Non-technical survey is typically the starting point for the assessment of land, its categorisation as a suspected or confirmed hazardous area (SHA/CHA), and the associated processes of cancelling, reducing or clearing land for productive use. It involves a thorough investigation of new information about possible Explosive Ordnance (EO) contamination, or a previously recorded hazardous area, generally without the use of mine action assets inside the suspected area.
The term non-technical survey encompasses all non-technical means, including desk assessments, analysis of historical records and a wide range of other information gathering and analysis functions, as well as physical visits to field locations. All elements of the non-technical process revolve around identifying, accessing, collecting, reporting and using information to help define where EO is to be found, as well as where it is not, and to support land cancellation, reduction and clearance decision making processes" Source IMAS 7.11 Land release process.

The Explosive Ordnance contamination and impact survey in Northeast Syria applied a Non-Technical Survey standard, while endorsing a systematic community focus methodology, inherent to the LISs approach. This hybrid process enabled to update or add new hazardous area/Explosive Ordnance single spot into the existing NES Information Management System through thanks to the conduct of an NTS procedure. A simpler "community level survey "only" would have not permitted to report so.

Each HMA organization relied on its internal NTS SOP to implement this component, that should abide by IMAS. As such, DCA, ITF and HI individually trained their surveys'teams in link to the NTS component (as per their internal SOPs), while 3iSolution provided standardized trainings on the global process and Information Management system to be applied.

COMMUNITIES' DEFINITION AND SELECTION

A community is defined as per the OCHA-sourced administrative boundaries for Syria. It corresponds to the narrowest level of "location name and Location Pcode".

Example below of the community Khazneh C4331, as part of the OCHA division administrative system for Syria.

admin1	admin1	admin2	admin2	admin3	admin3	admin4	admin4	Location Name	Location_ Pcode
Name	Pcode	Name	Pcode	Name	Pcode	Name	Pcode		
Al-Hasakeh	SY08	Al-Hasakeh	SY0800	Al-Hasakeh	SY080000	Khazneh	C4331	Khazneh (Al-Hasakeh)	C4331

For urban areas, an additional level was set up to provide a division per district. In case such urban sub-division was lacking in the OCHA system, implementing organizations developed them, if required.

Note: Thanks to the survey implementation, several discrepancies were raised between the OCHA community location and actual name used by the community in English/Arabic and locations. For the sake of the survey's process, it was decided to abide by the OCHA Pcode system, even when they were not accurate in the field and further create sub location names with corrected elements. Notes were recorded when such irregularities were notified.

A total of 2223 initial communities (location name) within the Autonomous Administration of North and East Syria (AANES) boundary, have been recorded based on this OCHA Administrative system. To note that communities located in territories held by the Turkish army during the self-called operation peace spring in 2019, have been excluded. Furthermore, communities located in Manbij districts have not been considered, given limited access and funding restrictions.

Furthermore, due to resources and time' limitations, the survey protocol could not aim at covering all 2223 initial communities. Additionally, security constraints hindered access to communities located nearby conflict areas. Therefore, a prioritization setting per sub district was developed with the aim to cover high and medium communities at first. The prioritization approach relied on open sources data collected by 3iSolution, data shared by the Carter Center and IMSMA based data. The expected level of contamination was taken into consideration along with previous coverage. As such, areas that were never assessed since 2017 were also prioritized to expand information and fill gaps.

Each implementing partner was assigned per district. For safety concerns, the report will not mention the name of the implementing partner, allocated per district level.

See below the details of initial communities to be targeted as per prioritization and accessibility.

Province	District	Sub district	Prioritization	Number of communities as per OCHA Pcode system	Number of accessible communities following a security assessment.
Al Hasakeh	Al Malikeyyeh	Al-Malikeyyeh	LOW	108	108
		Jawadiyah	LOW	47	47
		Ya'robiyah	LOW	69	69
	Quamishli	Quamishli	LOW	81	41
		Tal Hmis	HIGH	151	121
		Amuda	HIGH	103	103
		Qahtaniyyeh	LOW	92	92
	Al Hasakeh	Be'r Al-Hulo Al-Wardeyyeh	HIGH	87	87
		Markadah	HIGH	66	66
		Shadadeh	HIGH	104	104
		Tall Tamer	HIGH	96	96
		hole	HIGH	27	27
		hasakeh	HIGH	158	147
		Areeshah	MEDIUM	62	62
	Ras al Ain	Darbasiyah	HIGH	96	96
		Ras al Ain	HIGH	27	27
Aleppo	Ain al Arab	Ain al Arab	HIGH	94	19
		Lower shyookh	HIGH	47	47
		Sarin	HIGH	189	189
Deir Ez Zor	Abu Kamal	Hajin	HIGH	9	7
		Susat	HIGH	8	8
	Al Mayadin	Thiban		11	0
	Deir Ez Zor	Deir-ez-Zor	HIGH	10	9
		Kisreh	HIGH	42	42
		Basira		16	0
		Khasham	MEDIUM	4	4
		Sur	HIGH	18	7
Ar Raqqa	Ar Raqqa	Ar Raqqa	MEDIUM	168	168
		Karama	MEDIUM	37	37
		Sabka	MEDIUM	5	5
	Tell Abiad	Ainissa	HIGH	56	28
		Suluk	HIGH	12	10
		Tell Abiad		17	0
	Ath Thawrah	Al-Thawrah	HIGH	2	2
		Mansura	HIGH	22	14
		Jurneyyeh	HIGH	82	82
TOTAL				2223	1971

ALLOCATED RESOURCES

A total budget of 1 200 000 EUR was allocated to the 3 implementing partners to complete the survey. This budget covers both support and programs' costs.

Each implementing partner (ITF, DCA and HI) was required to recruit 10 survey teams, composed of 1 female and 1 male member. As such, a total of 30 gender balanced survey teams were planned.

Additionally, each implementing partner allocated team leaders, Information Management officers and Project/technical managers as per their internal Human resources organizational chart to supervise and monitor activities.

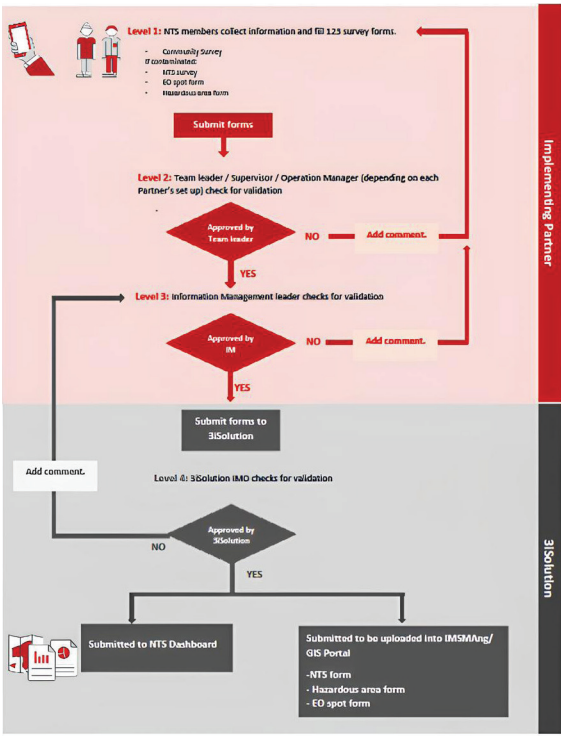
Due to challenges inherent in the recruitment process, a total number of 29 survey teams were effectively operative.

TIMELINE

Year	23												24				
Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Methodology development																	
Survey teams' recruitment																	
Survey implementation																	
Reception of final data from implementing partners																	
Data verification and analysis by 3iSolution																	
Development of final report																	

ALLOCATED RESOURCES

Annex 1: Information Management system workflow

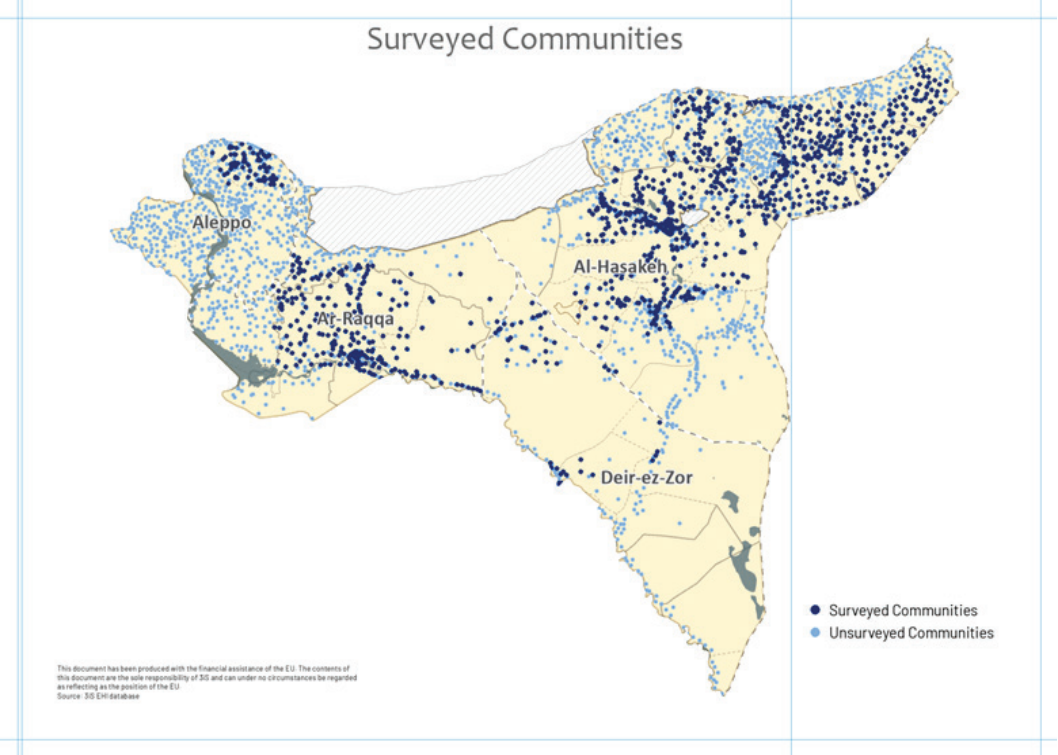


SURVEY COMMUNITIES ' COVERAGE AND DATA LIMITATIONS

As per OCHA coding system last updated in 2022, a total number of 2223 communities are recorded within the NES administrative territory. Amongst them, only 1971 were internally assessed are accessible, following security considerations. Through the conduct of this survey, the total number of communities visited between June 2023 and January 2024 by the NTS consortium partners (ITF, HI and DCA) reached 1139. This corresponds to a coverage rate of 51%, compared to the overall number of communities recorded. When combined with other data sources over the same period, a coverage of 1201communities in 4 different Governates, 8 districts, and 27 subdistricts were recorded - achieving a 54% rate of coverage from the OCHA community list. This indicates that just over half of the communities have been visited by NTS Consortium partners or covered by other HMA partners within the specified period. The coverage rates exhibit significant variability across different governorates and districts. The reason for this variability is due to several reasons which includes accessibility challenges (either due to security, logistical or administrative constraints), contamination levels and timeline restriction.

Summary table of global communities' coverage

Total number of communities in NES	Total number of accessible communities in NES	Total number of communities covered by the survey (by ITF, DCA and HI)		Total number of communities covered by the survey & additional data collected by MAG over the same period	
2223	1971	1139	51%	1201	54%



Detailed communities' coverage per region is as follows:

- Data indicates that several sub-districts have achieved complete or over-coverage in terms of community visits.
- In the Ar-Raqqa Governorate, the Ar-Raqqa Sub-district recorded 171 communities visited, equating to 102.40% coverage, while both the Karama and Sabka sub-districts achieved 100% coverage with 37 and 5 communities visited, respectively.
- In the Al-Hasakeh Governorate, the Hole Sub-district reported 28 communities visited, resulting in a 103.70% coverage rate, and the Ya'robiyah Sub-district had 66 communities visited with a 95.65% coverage rate.
- Additionally, the Deir-ez-Zor Sub-district in the Deir-ez-Zor Governorate noted an over-coverage rate of 110%, with 11 communities visited. Out of a total of 40 sub-districts listed in the dataset, 6 achieved complete or over-coverage, representing 15% of the total.
- The over-coverage is due to updates in the total number of communities survey in comparison to the OCHA Pcode classification within the AANES. Since the initial classification, some sub-districts have updated their community numbers or have increased the count by dividing existing communities or incorporating additional ones.
- Several sub-districts have experienced low coverage in terms of community visitations, with coverage rates below 10%.
- In the Al-Hasakeh Governorate, the Markada Sub-district recorded only 1 community visited, equating to 1.52% coverage. The Ras Al Ain District reported minimal engagement, with the Darbasiyah Sub-district having 2 communities visited at 2.08% coverage and the Ras Al Ain Sub-district also having 2 communities visited at 7.41% coverage. This low coverage is explained by time and financial resources limitations. These sub districts were nevertheless covered in parallel by an HMA organization and data reported will be used to complement the survey results.
- Additionally, in the Ar-Raqqa Governorate, the Jurneyyeh Sub-district in the Ath-Thawrah District had 5 communities visited, resulting in a 6.10% coverage rate. This low coverage is explained by time and financial resources limitations. These sub districts were nevertheless covered in parallel by an HMA organization and data reported will be used to complement the survey results.
- These figures indicate areas where survey efforts have been significantly limited, due to accessibility challenges, limited time and financial resources or other logistical issues.
- Out of a total of 40 sub-districts listed in the dataset, only 4 experienced low coverage (below 10% coverage), representing 10% of the total.
- The results show that most sub-districts have indeed been effectively covered, with only a small proportion experiencing low coverage rates below 10%. This suggests that the overall survey efforts have been comprehensive, reaching a vast majority of areas of interest.

Summary table of communities' coverage per sub district.

Total number of communities in NES			Communities covered by the project survey		Communities covered by the project survey + additional surveys collected over the same period	
Governorate	District	Sub district	Number	%	Number	%
Aleppo	Ain Al Arab	Ain al Arab	81	86%	81	86%
		Lower Shyookh	0	0%	0	0%
		Sarin	0	0%	0	0%
Al-Hasakeh	Al-Hasakeh	Al-Hasakeh	145	92%	149	94%
		Areesheh	55	89%	55	89%
		Be'r Al-Hulo Al-Wardeyyeh	47	54%	47	54%
		Hole	28	104%	28	104%
		Markada	0	0%	1	2%
		Shadadah	28	27%	41	39%
		Tal Tamer	59	61%	83	86%
	Al-Malikeyyeh	Al-Malikeyyeh	53	49%	53	49%
		Jawadiyah	19	40%	19	40%
		Ya'robiyah	66	96%	66	96%
	Quamishli	Amuda	61	59%	61	59%
		Qahtaniyyeh	75	82%	75	82%
		Quamishli	30	37%	30	37%
		Tal Hmis	104	69%	104	69%
	Ras Al Ain	Darbasiyah	1	1%	2	2%
		Ras Al Ain	0	0%	2	7%
Ar-Raqqa	Ar-Raqqa	Ar-Raqqa	167	100%	171	102%
		Karama	36	97%	37	100%
		Sabka	5	100%	5	100%
	Ath-Thawrah	Al-Thawrah	0	0%	0	0%
		Jurneyyeh	0	0%	5	6%
		Mansura	0	0%	7	32%
	Tell Abiad	Ein Issa	26	46%	26	46%
		Suluk	6	50%	6	50%
		Tell Abiad	0	0%	0	0%
Deir-ez-Zor	Abu Kamal	Hajin	0	0%	0	0%
		Susat	0	0%	0	0%
	Al Mayadin	Thiban	0	0%	0	0%
	Deir-ez-Zor	Basira	0	0%	0	0%
		Deir-ez-Zor	11	110%	11	110%
		Khasham	0	0%	0	0%
		Kisreh	31	74%	31	74%
		Sur	5	28%	5	28%
TOTAL			1139	51%	1201	54%

DATA LIMITATIONS

The overall communities' coverage of the survey project displayed some gaps, contributing to data limitations in these specific areas. Nevertheless, through this report, 3iSolution combined sources with pre-existing IMSMA data, when communities had not been covered through the survey project. It is worth noting that this pre-existing IMSMA data, often did not have the same minimum reporting requirements. This has caused further limitations to combine data into a single set and provide extensive analysis. Despite this, the present report highlights the most comprehensive known and updated contamination picture at NES level. Additionally access challenges still exist affecting limitations of data in these areas.

AFFECTED COMMUNITIES

AFFECTED COMMUNITIES PROJECT SURVEY DATA ONLY

A total of 127 communities were reported as affected by Explosive Ordnances during the survey project. When combined data collected by MAG during the same period, a total of 154 communities were reported affected.

As such, 13% of the communities visited in NES from June 2023 to January 2024 were affected by the presence of Explosive Ordnances.

Warning: This figure corresponds to the communities visited through this survey and as such covers 1201 communities out of 2223 communities in total in NES. Communities that could not be reached through the survey due to security constraints are highly expected to contain Explosive Ordnances.

Additionally, the high number of communities covered in the Al Hasakeh district, where evidences of Explosive Ordnance were not found, lowers this average rate significantly.

In order to provide a most comprehensive picture, it is necessary to use the survey results and combine them when gaps exist, to pre-existing available IMSMA data. Such combined results will be presented in the section b. b Affected communities' – Consolidated data with pre-existing IMSMA source Size of hazardous areas and Explosive Ordnance spots.

Table: Contamination rate per sub districts, based on the project contamination impact survey source.

Total number of communities in NES			Communities covered by the project survey		Communities covered by the project survey + additional surveys collected over the same period	
Governorate	District	Sub district	Number	%	Number	%
Aleppo	Ain Al Arab	Ain al Arab	81	86%	81	86%
		Lower Shyookh	0	0%	0	0%
		Sarin	0	0%	0	0%
Al-Hasakeh	Al-Hasakeh	Al-Hasakeh	145	92%	149	94%
		Areesheh	55	89%	55	89%
		Be'r Al-Hulo Al-Wardeyyeh	47	54%	47	54%
		Hole	28	104%	28	104%
		Markada	0	0%	1	2%
		Shadadah	28	27%	41	39%
		Tal Tamer	59	61%	83	86%
	Al-Malikeyyeh	Al-Malikeyyeh	53	49%	53	49%
		Jawadiyah	19	40%	19	40%
		Ya'robiyah	66	96%	66	96%
	Quamishli	Amuda	61	59%	61	59%
		Qahtaniyyeh	75	82%	75	82%
		Quamishli	30	37%	30	37%
		Tal Hmis	104	69%	104	69%
	Ras Al Ain	Darbasiyah	1	1%	2	2%
		Ras Al Ain	0	0%	2	7%
Ar-Raqqa	Ar-Raqqa	Ar-Raqqa	167	100%	171	102%
		Karama	36	97%	37	100%
		Sabka	5	100%	5	100%
	Ath-Thawrah	Al-Thawrah	0	0%	0	0%
		Jurneyyeh	0	0%	5	6%
		Mansura	0	0%	7	32%
	Tell Abiad	Ein Issa	26	46%	26	46%
		Suluk	6	50%	6	50%
		Tell Abiad	0	0%	0	0%
Deir-ez-Zor	Abu Kamal	Hajin	0	0%	0	0%
		Susat	0	0%	0	0%
	Al Mayadin	Thiban	0	0%	0	0%
	Deir-ez-Zor	Basira	0	0%	0	0%
		Deir-ez-Zor	11	110%	11	110%
		Khasham	0	0%	0	0%
		Kisreh	31	74%	31	74%
		Sur	5	28%	5	28%
TOTAL			1139	51%	1201	54%

AFFECTED COMMUNITIES' – CONSOLIDATED DATA WITH PRE-EXISTING IMSMA SOURCE SIZE OF HAZARDOUS AREAS AND EXPLOSIVE ORDNANCE SPOTS

When combined with pre-existing IMSMA data since 2017, the overall number of communities surveyed in NES has reached 1489. Out of them, a total number of 432 communities were reported as impacted by Explosive Ordnances. As such, the NES average contamination rate has been estimated to 29%.

This figure constitutes an average at NES level and as such should be further detailed per region. Indeed, this average % appears low as it encompasses many communities located in the districts of Al Malikeyyeh and Quamishli, poorly impacted by Explosive Ordnances.

By deducting the districts of Al Hasakeh and Al Malikeyyeh, the average % of communities contaminated by Explosive Ordnance in NES is reported to be 38%. In other words, when conducting Non-Technical surveys, HMA organizations reported that more than 1 community out of 3 has been contaminated by Explosive Ordnance(s).

Governerate	District	Contamination level (%)
Aleppo	Ain Al Arab	47%
	Menbij	100%
Al-Hasakeh	Al-Hasakeh	22%
	Al-Malikeyyeh	2%
	Quamishli	3%
	Ras Al Ain	68%
Ar-Raqqa	Ar-Raqqa	59%
	Ath-Thawrah	43%
	Tell Abiad	25%
Deir-ez-Zor	Abu Kamal	41%
	Al Mayadin	67%
	Deir-ez-Zor	55%
TOTAL		29%

Table: Contamination level detailed per sub districts with consolidated data sources.

Governerate	District	Sub district	Total number of Communities as per OCHA Pcode classification	Number of communities surveyed since 2017	Number of communities reported contaminated	Contamination rate (%)
Aleppo	Ain Al Arab	Ain al Arab	94	84	37	44%
		Lower Shyookh	47	2	1	50%
		Sarin	189	17	10	59%
	Menbij	Menbij	N/A. initially not planned in the survey	8	8	100%
Al-Hasakeh	Al-Hasakeh	Al-Hasakeh	158	164	40	24%
		Areesheh	62	55	4	7%
		Be'r Al-Hulo Al-Wardeyyeh	87	54	1	2%
		Hole	27	26	8	31%
		Markada	66	22	19	86%
		Shadadah	104	75	31	41%
		Tal Tamer	96	102	9	9%
	Al-Malikeyyeh	Al-Malikeyyeh	108	52	0	0%
		Jawadiyah	47	18	0	0%
		Ya'robiyah	69	65	3	5%
	Quamishli	Amuda	103	57	0	0%
		Qahtaniyyeh	92	71	0	0%
		Quamishli	81	25	1	4%
		Tal Hmis	151	102	6	6%
	Ras Al Ain	Darbasiyah	96	3	1	33%
		Ras Al Ain	27	16	12	75%
Ar-Raqqa	Ar-Raqqa	Ar-Raqqa	167	217	125	58%
		Karama	37	37	24	65%
		Sabka	5	6	5	83%
	Ath-Thawrah	Al-Thawrah	2	3	1	33%
		Jurneyyeh	82	40	17	43%
		Mansura	22	17	8	47%
	Tell Abiad	Ein Issa	56	42	6	14%
		Suluk	12	13	6	46%
		Tell Abiad	17	10	4	40%
Deir-ez-Zor	Abu Kamal	Abu Kamal	0	7	1	14%
		Hajin	9	8	4	50%
		Susat	8	0	0	
		Jalaa	0	2	2	100%
	Al Mayadin	Thiban	11	3	2	67%
	Deir-ez-Zor	Basira	16	3	2	67%
		Deir-ez-Zor	10	14	10	71%
		Khasham	4	7	7	100%
		Kisreh	42	39	14	36%
		Sur	18	2	2	100%
		Tabni	0	1	1	100%
TOTAL			2222	1489	432	29%

Aleppo Governorate

Communities located within the AANES boundary in the governate of Aleppo are highly impacted by Explosives Ordnances. In the district of Ain Al Arab (Kobane), close to 1 community out of 2 is affected. The district of Menbij has recorded an extreme level of contamination (100% of the 8 communities visited were affected by Explosive Ordnance). While not underestimating this acute figure, only 8 communities in Menbij were visited, and this district was not included in the survey (access and resources limitations) which can bias the present result.

To note that clearance operations in this region are extremely low, close to non-existent. While its contamination level is high, concerns should be further raised to allocate resources in the area, preventing future accidents.

Al Hasakeh Governorate

The districts of Al-Malikeyyeh and Quamishli have suffered limited Explosive Ordnances contamination. Nevertheless, it is worth noting that 10 communities have been positively reported thanks to the survey. Such communities would have been never visited through normal activities, as they are not located in prioritized areas by HMA organizations. The survey permitted to record them and allocate technical actions in the future.

The district of Ras al Ain is severely impacted with 68% of communities reportedly contaminated by

Explosive Ordnances.

Lastly, the district of Al Hasakeh has been affected differently. The sub districts of Hole and Shadadeh are highly impacted with even a severe level of contamination for the district of Markada (86%). Other sub districts were not as impacted by the conflict with ISIS and as such suffer with limited impacts in link with Explosive Ordnance contamination. Nevertheless, it is worth mentioning that the active conflicts with different belligerents in this region, includes the risks of additional contamination, notably with Explosive Remnant of Wars (ERWs).

Ar Raqqa Governorate

Overall the governate of Ar Raqqa is extremely affected. The district of Ar Raqqa itself is the most severely impacted with 59% of communities reportedly contaminated. It is followed by Thawrah district with a community contamination rate of 43% and Tell Abyad with 25%. To note that the district of Tell Abyad is extremely limited in term of access due to the active conflict with the Turkish army. As such, this figure might be underestimated as it could not be properly assessed thought the survey project (only Ainissa sub district was partially accessible).

Deir Ez Zor Governorate

The governorate of Deir Ez Zor is currently one of the most affected in Northeast Syria, while clearance capacities are extremely limited in the region. 67% of communities located in the district of Al Mayadin has open contamination reports. Furthermore, more than 1 community out of 2 (55%) in the district of Deir Ez Zor itself is affected by Explosive Ordnances. This figure extends to 41% in the district of Abu Kamal.

SIZE OF HAZARDOUS AREAS AND EXPLOSIVE ORDNANCE SPOTS - CONSOLIDATED DATA WITH PRE-EXISTING IMSMA SOURCE

Table: Number of communities affected per Governorate, District and Sub district level reported during the general contamination survey and completed with preexisting IMSMA data (for communities not surveyed)

Include NTS data +MAG data + the communities that have not been surveyed during the NTS include data from existing IMSMA database.

IMSMA data of total affected areas are 713 and 387 spots.

Governerate	District	Total # Area	Total Area Size	Total # Spot
Aleppo	Ain Al Arab	32	613739.1084	2
Aleppo	Menbij	0	0	2
Aleppo Total		32	613739.1084	4
Al-Hasakeh	Al-Hasakeh	82	9971347.85	104
Al-Hasakeh	Al-Malikeyyeh	2		0
Al-Hasakeh	Quamishli	2		0
Al-Hasakeh	Ras Al Ain	7	127693.9613	18
Al-Hasakeh Total		93		122
Ar-Raqqa	Ar-Raqqa	396	4207359.337	129
Ar-Raqqa	Ath-Thawrah	58	6732509.244	14
Ar-Raqqa	Tell Abiad	29	2056290.785	20
Ar-Raqqa Total		483	12996159.37	163
Deir-ez-Zor	Abu Kamal	61	91837.81407	26
Deir-ez-Zor	Al Mayadin	2	10169.5773	0
Deir-ez-Zor	Deir-ez-Zor	42	922962.4023	72
Deir-ez-Zor Total		105	1024969.794	98
Grand Total		713	24733910.08	387

The NTS project total affected areas are 36 and183 spots found.

Governerate	District	Total # Area	Total Area Size	Total # Spot
Aleppo	Ain Al Arab	9	106382	26
Aleppo	Menbij	0		0
Aleppo Total		9	106382	26
Al-Hasakeh	Al-Hasakeh	7	6069546	5
Al-Hasakeh	Al-Malikeyyeh	1	52991	0
Al-Hasakeh	Quamishli	1	3850298	2
Al-Hasakeh	Ras Al Ain	0	0	0
Al-Hasakeh Total		9	9972835	7
Ar-Raqqa	Ar-Raqqa	17	3041800	135
Ar-Raqqa	Ath-Thawrah	0	0	0
Ar-Raqqa	Tell Abiad	0	0	3
Ar-Raqqa Total		17		138
Deir-ez-Zor	Abu Kamal	0	0	0
Deir-ez-Zor	Al Mayadin	0	0	0
Deir-ez-Zor	Deir-ez-Zor	1	157551	12
Deir-ez-Zor Total		1	157551	12
Grand Total		36	13278568	183

SIZE OF HAZARDOUS AREAS AND EO SPOTS REPORTED DURING THE GENERAL CONTAMINATION SURVEY AND COMPLETED WITH PRE-EXISTING IMSMA DATA (FOR COMMUNITIES NOT SURVEYED)

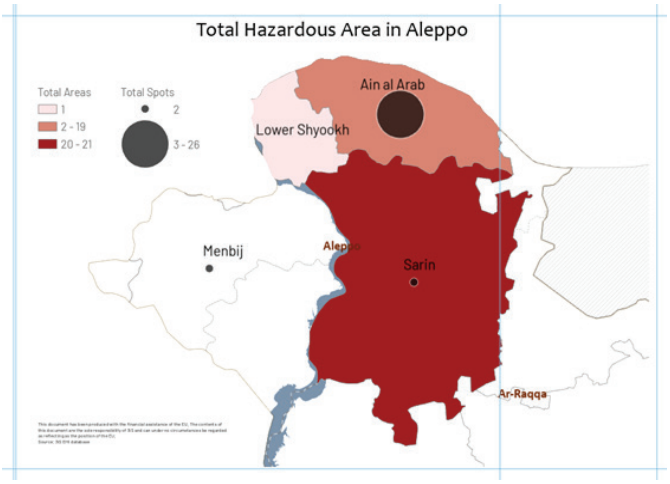
Detailed Analysis (IMSMA, survey project and all data combined)

Aleppo

In Aleppo, the district of Ain al Arab stands out with notable hazardous areas, particularly in sub-districts of Ain al Arab and Sarin. The sub-district of Ain al Arab reports 19 hazardous areas spanning 114,927.05m2 with 26 EO spots.

In Sarin, hazardous area of 604,615.72m2 still over 21 hazardous areas and 2 EO spots remain open.

These figures underscore the ongoing risk in these sub-districts, necessitating focused demining and safety measures.

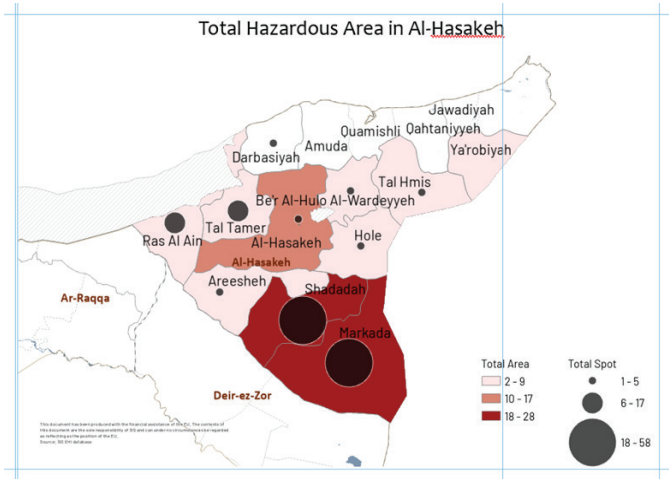


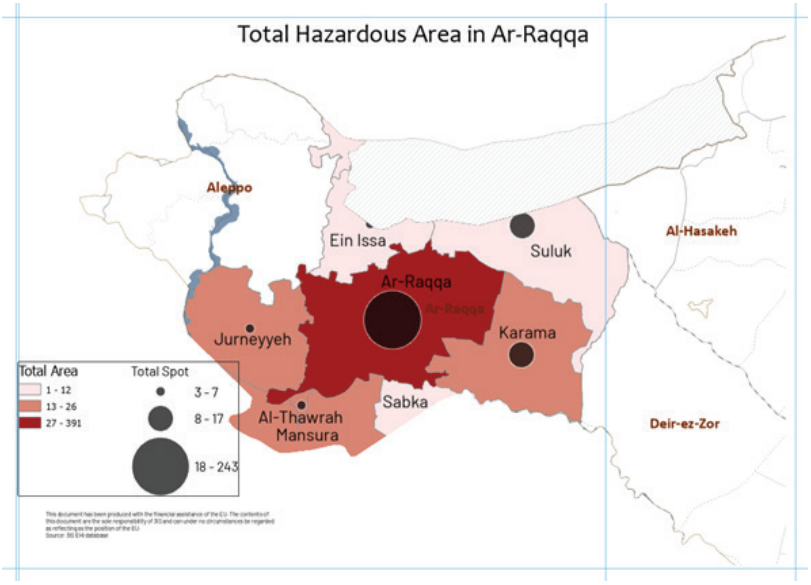
Al-Hasakeh

Al-Hasakeh emerges as a highly affected governate with significant hazardous areas, especially within its central district. The Al-Hasakeh sub-district alone reports 6,743,394.52m2 of hazardous areas, with 17 reported hazardous areas and 5 EO spots. Other sub-districts like Markada and Shadadah also reflect substantial risks, reporting 4,068,065.65m2 and 3,373,650.93m2 of hazardous areas respectively, along with several EO spots (Markada with 34 and Shadadah with 58).

Ar-Raqqa governate shows a widespread presence of hazardous areas, with the Ar-Raqqa district being particularly affected. This district alone reports 5,835,878.15m2 of open hazardous areas, with over 391 reported hazardous areas in the Ar-Raqqa City sub-district and 243 EO spots, making it one of the most heavily impacted regions. Sub-districts like Karama and Mansura also report significant hazardous areas, with Karama having 1,406,878.22m2 and Mansura 4,167,191.26m2.

These figures highlight Al-Hasakeh as a critical area requiring urgent demining operations.





The high number of hazardous areas and EO spots in these regions underscores the critical need for ongoing demining and risk mitigation efforts to ensure the safety of local populations.

Deir-ez-Zor

In Deir-ez-Zor, the districts of Abu Kamal and Kisreh (WHY KAMAL AND KISREH?) report substantial hazardous areas. Abu Kamal shows 16,092.26 square meters of hazardous areas with 14 EO spots, while Kisreh reports 659,285.01 square meters and 25 EO spots. Although some sub-districts like Basira and Tabni show fewer hazardous areas, the overall data for Deir-ez-Zor is heavily impacted by the lack of access. Given high conflict areas actual contamination is expected to be much higher.

IMPACT RESULTS

NUMBER OF AFFECTED PEOPLE

Number of direct affected people, reported during the general contamination and impact survey in NES

The data encompasses four key governorates: Aleppo, Al-Hasakeh, Ar-Raqqa, and Deir-ez-Zor. The total number of directly affected people across these regions amounts to 37,297. This figure underscores the substantial impact of contamination and hazardous conditions on the local population.

Detailed Breakdown by Governorate and District

- **Aleppo**
  In the Aleppo governorate, the district of Ain Al Arab stands out with 2,163 affected individuals in the Ain al Arab sub-district.

- **Al-Hasakeh**
  The Al-Hasakeh governorate presents a diverse picture across its districts. The Al-Hasakeh district itself reports 6,052 affected people, with notable figures from Al-Hasakeh (4,434) and Shadadah (1,010). Meanwhile, the Quamishli district exhibits the highest number of affected individuals, with 15,120 people primarily in Tal Hmis

- **Ar Raqqa**
  Ar Raqqa governorate shows significant numbers, with 21222 affected people, largely concentrated in Ar-Raqqa sub-district (12,440). Smaller figures are seen in Karama (357) and Sabka (100), reflecting a more uneven distribution of hazardous areas. Tell Abiad report a impact, with 155 affected individuals in Ein Issa.

- **Deir-ez-Zor**
  In Deir-ez-Zor, the impact appears minimal compared to other governorates but it should be noted that there is extensive conflict and limited access – distorting the analysis. In reality it is anticipated through analyisng conflict patterns that Deir-ez-zor is expected to be one of the highest affected areas.The total affected population is 860, with the Deir-ez-Zor district itself contributing 390 affected individuals, spread across Deir-ez-Zor, Kisreh (340), and Sur (130) sub-districts. The districts of Abu Kamal and Al Mayadin report zero affected people, indicating either negligible contamination or potential underreporting – given the amount of conflcict in Deir ez zor the latter is suspected to be the case.

VICTIMS

Governerate	District	Sub district	Total number of Communities as per OCHA Pcode classification	Number of communities surveyed since 2017	Number of communities reported contaminated	Contamination rate (%)
Aleppo	Ain Al Arab	Ain al Arab	94	84	37	44%
		Lower Shyookh	47	2	1	50%
		Sarin	189	17	10	59%
	Menbij	Menbij	N/A. initially not planned in the survey	8	8	100%
Al-Hasakeh	Al-Hasakeh	Al-Hasakeh	158	164	40	24%
		Areesheh	62	55	4	7%
		Be'r Al-Hulo Al-Wardeyyeh	87	54	1	2%
		Hole	27	26	8	31%
		Markada	66	22	19	86%
		Shadadah	104	75	31	41%
		Tal Tamer	96	102	9	9%
	Al-Malikeyyeh	Al-Malikeyyeh	108	52	0	0%
		Jawadiyah	47	18	0	0%
		Ya'robiyah	69	65	3	5%
	Quamishli	Amuda	103	57	0	0%
		Qahtaniyyeh	92	71	0	0%
		Quamishli	81	25	1	4%
		Tal Hmis	151	102	6	6%
	Ras Al Ain	Darbasiyah	96	3	1	33%
		Ras Al Ain	27	16	12	75%
Ar-Raqqa	Ar-Raqqa	Ar-Raqqa	167	217	125	58%
		Karama	37	37	24	65%
		Sabka	5	6	5	83%
	Ath-Thawrah	Al-Thawrah	2	3	1	33%
		Jurneyyeh	82	40	17	43%
		Mansura	22	17	8	47%
	Tell Abiad	Ein Issa	56	42	6	14%
		Suluk	12	13	6	46%
		Tell Abiad	17	10	4	40%
Deir-ez-Zor	Abu Kamal	Abu Kamal	0	7	1	14%
		Hajin	9	8	4	50%
		Susat	8	0	0	
		Jalaa	0	2	2	100%
	Al Mayadin	Thiban	11	3	2	67%
	Deir-ez-Zor	Basira	16	3	2	67%
		Deir-ez-Zor	10	14	10	71%
		Khasham	4	7	7	100%
		Kisreh	42	39	14	36%
		Sur	18	2	2	100%
		Tabni	0	1	1	100%
TOTAL			2222	1489	432	29%

Number of victims, reported during the general contamination survey in NES and completed with preexisting IMSMA data (for communities not surveyed)

Data collected during the survey project reveals that 414 communities had recorded accidents and a further 1820 accidents recorded in the IMSMA data culminating in a total of 2234 incidents. 683 victims identified from the NTS results and a further 2070 from IMSMA data, leading to a combined total of 2753 victims.

Breaking down the data by governorate, Aleppo's Ain Al Arab district reported 60 accidents, with 57 in Ain al Arab, 3 in Sarin, and none in Lower Shyookh, resulting in a total of 89 victims. In Al-Hasakeh, multiple districts have been affected. The Al-Hasakeh district itself reported 179 accidents across sub-districts such as Al-Hasakeh, Areesheh, Be'r Al-Hulo Al-Wardeyyeh, Hole, Markada, Shadadah, and Tal Tamer, resulting in 261 victims. The Al-Malikeyyeh district, including Al-Malikeyyeh, Jawadiyah, and Ya'robiyah sub-districts, reported a total of 6 accidents and 7 victims. The Quamishli district, with sub-districts like Amuda, Qahtaniyyeh, Quamishli, and Tal Hmis, had 16 accidents and 27 victims. Ras Al Ain district recorded 20 accidents in the Ras Al Ain sub-district alone, resulting in 35 victims. These figures indicate a widespread issue across Al-Hasakeh, with particular hotspots requiring urgent attention.

Ar-Raqqa Governorate, particularly the Ar-Raqqa district, has the highest number of total accidents (1110) and victims (1245), marking it as the most affected area. Sub-districts such as Ar-Raqqa, Karama, and Sabka reported significant numbers, with Ar-Raqqa alone accounting for 972 accidents and 1153 victims. The Ath-Thawrah district, including Al-Thawrah, Jurneyyeh, and Mansura sub-districts, had 20 accidents and 35 victims. The Tell Abiad district, encompassing Ein Issa, Suluk, and Tell Abiad sub-districts, reported 46 accidents and 69 victims.

Deir-ez-Zor also shows substantial figures, with the Deir-ez-Zor district itself contributing significantly to the total of 511 accidents and 798 victims. Sub-districts such as Basira, Deir-ez-Zor, Khasham, Kisreh, and Sur recorded notable numbers, with Deir-ez-Zor sub-district alone reporting 115 accidents and 156 victims. The Abu Kamal district, including Hajin and Susat sub-districts, reported 160 accidents and 181 victims. Al Mayadin district, with only Thiban sub-district, recorded 6 accidents and 6 victims. These figures highlight the need for targeted interventions in Deir-ez-Zor, particularly in the most affected sub-districts.

IMPACT SCORING

Impact scoring of hazardous areas found during the survey project shows the distribution of hazardous areas as follows:

XX High impact
XX Medium impact
XX Low impact

Admin 1	Admin 2	Admin 3	impact classification res	Count of impact classification res
Aleppo	Ain Al Arab	Ain al Arab	Low	5
			Medium	4
Al-Hasakeh	Al-Hasakeh	Al-Hasakeh	Low	3
			Medium	1
		Areesheh	Low	1
		Ber Al-Hulo Al-Wardeyyeh	Low	1
			Medium	1
	Al-Malikeyyeh	Yarobiyah	Low	1
	Quamishli	Tal Hmis	Medium	1

Admin 1	Admin 2	Admin 3	impact classification res	Count of impact classification res
Ar-Raqqa	Ar-Raqqa	Ar-Raqqa	High	1
			Low	8
			Medium	3
			No hazard	1
		Karama	Low	2
			Medium	1
			No hazard	1
Deir-ez-Zor	Deir-ez-Zor	Sur	Low	1
Grand Total				36

PRIORITIZATION RECOMMENDATIONS

After the conclusion of the survey project and subsequent data validation a prioritisation system should be established amongst all HMA stakeholders to efficiently and effectively respond to the HMA needs. While individual hazardous areas are given an impact rating, it has not yet been agreed upon to incorporate this into wider prioritisation needs. This impact rating of individual hazardous areas should be combined with other data, such as accidents, victims, blockages and stakeholders' priorities to come up with a prioritisation recommendation at admin level. A dedicated workshop was held on 20/05/2024 to begin discussions on this, and work should be continued to finalise this with the NESMAC taking the lead. This could also be combined with the unit costing methodology used in the HRP which was worked on by all HMA partners in NES and was coordinated with Whole of Syria Counterparts. Using this costing methodology an estimated cost can be put on the activity required to undertake clearance efforts. This should only be used as an estimate and only includes direct activity costs – not support costs.

Costing methodology

Mine Action AoR cost drivers / indicators for 2024

Activity	HRP Cost-drivers + their number in the HRP online module	Unit	Sector wide target	unit cost in $	Cost range (min-max)	Comment
Explosive ordnance risk education	EORE sessions by humanitarian RE actors **(CLPRO/CA130)**	# of people	792,000	$5	$1-$10	EORE delivered by humanitarian actors to civilians or humanitarian workers
	Direct EORE session by public service providers **(CLPRO/CA131)**	# of people	352,000	$5	$1-$10	EORE delivered by public service providers to civilians
	Training of persons delivering EORE **(CLPRO/CA132)**	# of people	1,320	$80	$50-$100	Training of humanitarians/community focal points and public service providers in EORE
Survey	Land surveyed **(CLPRO/CA133)**	Sqm of land	27,500,000	$0.4	$0-$1	Square meters of land surveyed (either through NTS or TS)
Clearance	Land cleared **(CLPRO/CA134)**	Sqm of land	5,280,000	$5	$3-$10	Square meters of land cleared (following any/all types of clearance methodology)
Victim Assistance	VA (Medical services - emergency, rehabilitation, psychosocial) **(CLPRO/CA135)**	# of services	88,000	$70	$65-$80	Emergency and continuing medical care, Rehabilitation and psychosocial support sessions
	VA (inclusivity activities - Inclusive education, socio-economic insertion and multi-purpose in kind assistance, including CVA) **(CLPRO/CA136)**	# of activities	8,800	$30	$30-$40	VA inclusivity (inclusive education, socio-economic insertion and multi-purpose in kind assistance)
	VA (prosthetics/orthotics) **(CLPRO/CA137)**	# of Devices[1]	176	$3500	$3500-$4000	Physical rehabilitation: prosthesis or orthosis (P&O) provided
	VA (other assistive devices) **(CLPRO/CA138)**	# of Devices[2]	35,200	$25	$20-$28	Physical rehabilitation: assistive products (other than P&O) provided

*unit costing methodolgy table developed by the MASWG partners and coordinated with WoS

Using this costing calculation methodology, it can be estimated that the open hazardous area in NES (estimated 38,000,000+m2) will cost in excess of 190,000,000 USD to clear – not including additional UXO spots, survey requirements, accompanying Explosive Ordnance Risk Education and Victim Assistance activities – this only includes the areas identified at present and not inclusive of additional contamination added during any ongoing conflicts. At current capacity based on previous years clearance capacities this would take an estimated 15+ years. However, due to the current funding situation and with current capacity expected to reduce by 70-90% beyond June 2024 then in reality this figure will be much higher and take much longer - unless there is a solid commitment to address the HMA needs in NES. Without this commitment then lives and limbs will continue to be lost and recovery and development perspectives will continue to be hindered.