Research Terms of Reference

Northeastern Syria Agricultural Hazards Monitoring

SYR2505

Syria

July 2025
V1

REACH Informing more effective humanitarian action

1. Executive Summary

Country of intervention	Syria - Northeastern Syria					
Type of Emergency	□	Natural hazard	□	Conflict	□	Other *(specify)*
Type of Crisis	□	Sudden onset	□	Slow onset	X	Protracted
Mandating Body/ Agency	Swiss Development Cooperation (SDC)					
IMPACT Project Code	16BIB					
Overall Research Timeframe *(from research design to final outputs / M&E)*	01 February 2025 - 31 August 2027					
Research Timeframe	1. Pilot: **15/07/2025**			6. Preliminary presentation: N/A		
	2. Start collect data: **20/07/2025 tentative**			7. Outputs sent for validation: _ _/_ _/_ _ _ _		
	3. Data collected: **ongoing basis**			8. Outputs published: **20/07/2026 tentative**		
	4. Data analysed: **ongoing basis**			9. Final presentation: _ _/_ _/_ _ _ _		
	5. Data sent for validation: **monthly basis**					
Number of assessments	□	Single assessment (one cycle)				
	X	**Multi assessment (more than one cycle)** REACH will build a data collection tool for NES agricultural stakeholders to regularly submit reports on hazard occurrence and exposure				
Humanitarian milestones *Specify **what** will the assessment inform and **when***	**Milestone**			**Deadline (can be tentative)**		
	□	Donor plan/strategy		_ _/_ _/_ _ _ _		
	□	Inter-cluster plan/strategy		_ _/_ _/_ _ _ _		
	X	**Cluster plan/strategy**		_ _/_ _/_ _ _ _		
	X	**NGO platform plan/strategy**		On a monthly and near real-time basis between July 2025 and August 2027 (in line with the current funding coverage)		
	□	Other (Specify):		_ _/_ _/_ _ _ _		
Audience Type & Dissemination *Specify **who** will the assessment inform and **how** you will disseminate to inform the audience*	**Audience type**			**Dissemination**		
	X Strategic **X Programmatic** **X Operational** □ [Other, Specify]			□ General Product Mailing (e.g. mail to NGO consortium; HCT participants; Donors) **X Cluster Mailing (Food Security Sector (FSS), Early Recovery and Livelihoods (ERL)) and**		

				presentation of findings at next cluster meeting □ Presentation of findings (e.g. at HCT meeting; Cluster meeting) □ Website Dissemination (Relief Web & REACH Resource Centre) □ [Other, Specify]
Stakeholder mapping	X	Yes	□	No
General Objective	To support the identification of spatial and temporal patterns of climate-related hazard exposure of agricultural assets in northeastern Syria by combining remote sensing and field-level reporting, enabling timely emergency response, early warning, and climate-resilient programming within the Syria Food Security Sector (FSS).			
Specific Objective(s)	1. **Understand historical hazard exposure trends** - Conduct a structured baseline analysis of the geographic distribution and severity of key climate-related hazards in northeastern Syria over time. This will involve compiling and examining historical remote-sensing data to identify long-term exposure trends at the governorate, district and sub-district level. 2. **Establish a real-time hazard reporting system** - Design and implement a system that enables northeastern Syria agricultural stakeholders to consistently report real-time data on key sudden and rapid-onset climate-related hazards impacting agriculture at the community level. This will involve developing a data collection tool and engaging stakeholders, with the support of the Food Security Sector (FSS) and corresponding technical sub-working groups in northeastern Syria to independently submit timely hazard occurrence reports. 3. **Establish a multi-hazard monitoring system to identify hotspots in northeastern Syria-** Support the identification of hazard hotspot areas by integrating historical data and real-time monitoring inputs into an interactive, publicly accessible dashboard. This tool will combine historical and actual remote sensing data and agricultural stakeholder timely reports to map and visualize hazard exposure across northeastern Syria, helping to inform disaster rapid response as well as to identify risk reduction opportunities.			
Research Questions	1. What are the historical spatial and severity patterns of key climate-related hazards impacting agriculture across northeastern Syria, at the governorate, district, and sub-district levels? 2. How frequently are communities across northeastern Syria exposed to key climate-related sudden and/or rapid-onset hazards, as reported by agricultural stakeholders? 3. What is the severity, scope, and impact of key sudden and/or rapid-onset hazards on agricultural resources and productivity across communities in northeastern Syria, as reported by agricultural stakeholders? 4. Which communities, sub-districts, districts and governorates in northeastern Syria have most frequently and/or severely experienced climate-related hazards impacting agriculture over the long, medium, and short terms?			
Geographic Coverage	Northeastern Syria – The climate-related hazard monitoring system will be implemented in governorates, sub-districts, and communities across northeastern Syria, specifically in			

	areas previously covered by the Northeast Syria Food Security and Livelihoods (NES FSL) Working Group and its sub-working groups until April 2025. As the humanitarian coordination structure is being restructured to unify all regional coordination groups under a single Food Security Sector (FSS), the new framework will comprise six subnational working groups across Syria. This project will focus on areas covered by the northeastern subnational working groups of Qamishli and Deir ez-Zor. These groups are prioritized because the system's design and effectiveness depend on the active engagement of partners operating in northeastern Syria, who are both key data providers and the primary users of the system.
Secondary data sources	• Crisis Analysis – Syria, "Remote sensing technical guidebook", January 2025. • Crisis Analysis – Syria, "Agricultural health monitoring and land degradation Dashboard", April 2025. • Global Disaster Alert & Coordination System (GDACS). • IMPACT, "Guidance Note on Integrating Disaster Risk Analysis in Area-Based Approaches", May 2023. • IMPACT, "Unpacking Area-Based Risk Assessment methodology – Hazard Exposure Analysis", January 2024. • JRC - European Commission, "Inform – Index for Risk Management", 2017. • OIEWG, "Report of the open-ended intergovernmental expert working group on indicators and terminology relating to disaster risk reduction", 2016. • Think Hazard, Syrian Arab Republic. • UNDRR, "Hazard difinition & classification review", 2020. • UNDRR, "Hazard information profiles", 2021. • UNDRR, "Strengthening risk analysis for humanitarian planning", 2023. • UN General Assembly, Resolution adoption 69/283: "Sendai Framework for Disaster Risk Reduction 2015-2030", 2015.

Population(s) *Select all that apply*				
	□	IDPs in camp	□	IDPs in informal sites
	X	**IDPs in host communities**	□	IDPs [Other, Specify]
	□	Refugees in camp	□	Refugees in informal sites
	X	**Refugees in host communities**	□	Refugees [Other, Specify]
	X	**Host communities**	□	[Other, Specify]

Stratification *Select type(s) and enter number of strata*						
	X	**Geographical #:** **-Sub-district (Admin3)** **-District (Admin2)** **-Governorate (Admin1)** Population size per strata is known? □ Yes **X No**	□	Group #: _ _ _ Population size per strata is known? □ Yes □ No	□	*[Other Specify]* #: _ _ Population size per strata is known? □ Yes □ No

Data collection tool(s)				
	X	**Structured (Quantitative)**	□	Semi-structured (Qualitative)

	Sampling method	**Data collection method**
Structured data collection tool # 1 *Select sampling and data collection method and specify target # interviews*	X Purposive □ Probability / Simple random □ Probability / Stratified simple random □ Probability / Cluster sampling □ Probability / Stratified cluster sampling □ [Other, Specify]	□ Key informant interview (Target #):_ _ _ _ _ □ Group discussion (Target #):_ _ _ _ _ □ Household interview (Target #):_ _ _ _ _ □ Individual interview (Target #):_ _ _ _ _ □ Direct observations (Target #):_ _ _ _ _

					X **Self-reported structured survey tool** (Target #): N/A	
Disaggregation by gender and age *Are you planning to conduct sex/age disaggregated analysis?*	Gender				Age	
	□	Yes			□	Yes
	X	**No**			**X**	**No**
Data management platform(s)	X	IMPACT			□	UNHCR
	□	[Other, Specify]				
Expected ouput type(s)	X	**Situation overview #: 1 in English, 1 in Arabic**	□	Report #: _ _	□	Profile #: _ _
	□	Presentation (Preliminary findings) #: _ _	□	Presentation (Final) #: _ _	□	Factsheet #: _ _
	X	**Interactive dashboard #:1**	□	Webmap #: _ _	□	Map #: _ _
	□	[Other, Specify] #: _ _				
Access	X	Public (available on REACH resource center and other humanitarian platforms)				
	□	Restricted (bilateral dissemination only upon agreed dissemination list, no publication on REACH or other platforms)				
Visibility *Specify which* ***logos*** *should be on outputs*	***REACH***					
	Donor: *n/a*					
	Coordination Framework: Syria Food Security Sector (FSS)					
	Partners: *n/a*					

2. Rationale

2.1 Background

Northeastern Syria stands as the country's primary grain-producing region,[1] underpinning both national food security and the livelihoods of its population, an estimated 50 to 60 % of whom are directly or indirectly engaged in agriculture.[2] Yet, this vital agricultural landscape has become increasingly exposed and vulnerable to the impacts of climate change induced hazards. In recent years, drought, erratic weather patterns, and intensifying heatwaves have become recurrent threats, diminishing yields and straining the resilience of farming communities.[3] As these challenges converge with broader economic stressors, such as rampant inflation and increasingly limited access to adaptive resources, the capacity of farmers to sustain production has markedly declined.[4]

Findings from REACH's 2023–2024 post-harvest assessment underscored the urgency of this situation. Farmers across northeastern Syria reported widespread disruptions to wheat and barley cultivation, triggered by atypical seasonal temperatures, prolonged heat events, and pest outbreaks, many of which are closely tied to shifting climatic conditions.[5] Despite these mounting challenges, the same assessment reveals that access to timely and reliable early warning systems in northeastern Syria remains still limited. A majority of key informants (57%) reported that farmers had no access to any form of early warning, while the rest indicated reliance on different sources, such as local authorities and media, which are often inconsistent or delayed in delivering crucial information.[6]

[1] Mercy Corps, "Drought in focus – MEACAM Research Report", April 2025
[2] CGTN, "Hasakah farmers: US forces and the SDF are obstructing wheat from reaching Syrian government grain delivery centers", June 2022
[3] PAX for Peace, "We fear more war. We fear more drought", January 2022
[4] FAO, WFP, "Hunger Hotspots – FAO – WFP Early warnings on acute food insecurity: November 2024 to May 2025 outlook", 2024
[5] REACH, "NES wheat and barley post-harvest assessment – 2023/2024 agricultural season", January 2025
[6] Ibid.

Additionally, in the context of FSS humanitarian coordination, several monitoring systems are already in place, including seasonal forecasts,[7] hazard monitoring tools,[8] and hazard predictive models.[9] However, these platforms lack integration with direct, ground-level reporting from agricultural practitioners, combined with remote sensing components. As a result, while they offer high spatial granularity, their temporal resolution remains medium-term, limiting their ability to capture rapidly evolving, context-specific risks in real time.

2.2 Intended impact

During consultations held throughout 2024 with REACH, the Northeast Syria Food Security and Livelihoods Working Group (NES FSL WG) emphasized the increasing threats that environmental, biological, and hydrometeorological hazards pose to agricultural livelihoods and food security in the region. However, limited information management capacity constrains the WG's ability to analyze historical hazard trends, monitor real-time risks, and identify high-risk areas, leaving a critical information gap that hampers climate-resilient planning.

To help bridge this gap, REACH, in partnership with the Syria Food Security Sector (FSS), encompassing what formerly was the NES FSL WG up until April 2025, is launching a comprehensive monitoring system for agricultural hazard exposure in northeastern Syria. At its core is a dynamic hazard monitoring tool that allows agricultural stakeholders to self-report sudden, localized hazards such as pest outbreaks, extreme weather, and crop diseases. Data collected through this tool will feed into a multi-hazard exposure analysis, visualized through an interactive dashboard. Real-time stakeholders' inputs, combined with long-term remote sensing data, will provide a more detailed, more timely picture of evolving threats, enabling the identification of areas most exposed to recurring hazards.
The proposed monitoring system addresses this critical gap by combining objective remote sensing data with real-time reports from practitioners operating in the field. This dual-source approach captures not only the measurable exposure to agricultural hazards but also incorporates practitioners' first-hand assessments of severity and impact. This integration of perceived and observed data adds a unique layer of insight, enhancing the system's relevance, responsiveness, and operational value. This enhanced near-real-time data flow will enable agricultural stakeholders, including humanitarian actors and local authorities, to allocate resources more efficiently, respond to emerging risks with greater precision and time relevance, and adapt interventions to evolving agricultural and climatic conditions, thereby improving the overall effectiveness and relevance of their programming.

Finally, given the ongoing restructuring of humanitarian coordination mechanisms in Syria and the worsening drought conditions observed in Syria, strengthening the availability and accessibility of agricultural information systems is more crucial than ever to support evidence-based decision-making and enhance the relevance and impact of partner interventions.

3. Methodology

3.1 Methodology overview

This assessment will adopt a mixed-method approach combining historical remote-sensing analysis, real-time community-based reporting, and data integration through an interactive dashboard. First, a remote sensing-based assessment will be conducted to identify historical "hotspots" of key climate-related hazard impacting agriculture across northeastern Syria. By analyzing long-term spatial and severity patterns at the governorate, district, and sub-district levels, this component will help to map which areas have most frequently and/or severely experienced selected hydrometeorological and environmental hazards over time. Furthermore, building on the historical baseline analysis, a continuous data pipeline will be established to enable the regular monitoring of these selected remote sensing indicators moving forward.

[7] World Meteorological Organisation, Syria dashboard
[8] Mercy Corps, Agricultural health monitoring and land degradation dashboard
[9] Mercy Corps, MEACAM Dashboard

Secondly, to capture the short-term occurrence and impact of both sudden and rapid-onset hazards, a KOBO-based data collection tool will be rolled out to partners, enabling agricultural stakeholders to report real-time hazardous events affecting agriculture such as droughts, floods, storms, pests, or diseases. This self-reporting mechanism will allow the FSS and its subnational working groups to systematically track the frequency and severity of these hazards as experienced by communities. These real-time observations will feed into an interactive GIS dashboard, regularly updated to make incoming data accessible to FSL partners and coordination actors as close to real time as possible.

While the self-reporting mechanism offers significant potential to capture ground-level, real-time observations, its effectiveness will depend on the sustained participation of local partners and stakeholders. Acknowledging the risk of limited uptake intrinsic to voluntary self-reporting systems, the initiative will incorporate mitigation measures from the outset. These include:

- **Early engagement and sensitization of key informants and partner networks:** engage agricultural stakeholders and implementing partners from the start through targeted sensitization sessions, demonstrating the tool's purpose, benefits, and added value for their day-to-day work. Provide clear and accessible guidance and training materials to ensure users understand reporting procedures and feel confident using the system.
- **Integration of the reporting tool into existing coordination workflows:** align the tool with current reporting and coordination mechanisms, where possible, to embed it within routine data-sharing practices. This includes leveraging regular working group meetings, reporting cycles, or partner check-ins to encourage consistent use and reduce the perception of the tool as an "extra" or parallel reporting burden.

The final layer of the methodology will integrate these two data streams, remote sensing-derived data and partner-reported hazard events, into a single, public interactive dashboard. This platform will visualize both long-term exposure trends and emerging threats, helping to identify high-exposure areas and inform timely, evidence-based responses. By providing partners with an accessible and dynamic tool, the assessment aims to strengthen northeastern Syria's overall agricultural early warning and risk reduction capacity.

REACH also intends to publish a situational overview approximately one year into the pilot phase, midway through the assessment timeline. This output, available in both English and Arabic, will synthesize findings from the first year of data collection and reflect on them in relation to the assessment's overarching research questions.

Table 1: Research questions and corresponding methodological components

Research question	Methodological component	Frequency
1. What are the historical spatial and severity patterns of key climate-related hazards impacting agriculture across northeastern Syria, at the governorate, district, and sub-district levels?	Remote sensing derived **baseline analysis** (hotspots) of selected long-term climate-related hazards	One time
2. How frequently are communities across northeastern Syria exposed to key climate-related sudden and/or rapid-onset hazards, as reported by agricultural stakeholders? **3.** What is the severity, scope, and impact of key sudden and/or rapid-onset climate-related hazards on agricultural resources and productivity across communities in northeastern Syria, as reported by agricultural stakeholders?	Publicly **available self-reporting structured KOBO tool** for agricultural stakeholders to report on selected climate-related hazard impacting agriculture	Reports are submitted as hazards occur
4.What are the key hotspots in northeastern Syria that have most frequently and/or severely experienced	**Public interactive dashboard** combining 1) agricultural stakeholders' self-reports on hazard exposure, 2) remote sensing baseline analysis	Updated on a bi-weekly basis

different climate-related hazards impacting agriculture over the long, medium, and short terms?	and 3) regularly updated remote sensing-derived hazard indicators	

3.2 Key definitions

- **Hazard:** A process, phenomenon or human activity that may cause loss of life, injury or other health impacts, property damage, social and economic disruption or environmental degradation.[10]
- **Climate-related hazard impacting agriculture:** For the purpose of this assessment, **climate related hazards impacting agriculture** are defined as any type of hazard that may impact agricultural production assets within a given community. This includes both the physical infrastructure related to agricultural production, such as storage facilities, transportation networks, and irrigation systems, as well as livestock, land and crops themselves.
- **Biological hazards:** Biological hazards are of organic origin or conveyed by biological vectors, including pathogenic microorganisms, toxins and bioactive substances. Examples are bacteria, viruses or parasites, as well as venomous wildlife and insects, poisonous plants and mosquitoes carrying disease-causing agents.[11]
- **Environmental hazards:** Environmental hazards may include chemical, natural and biological hazards. They can be created by environmental degradation or physical or chemical pollution in the air, water and soil. However, many of the processes and phenomena that fall into this category may be termed drivers of hazard and risk rather than hazards in themselves, such as soil degradation, deforestation, loss of biodiversity, salinization and sea-level rise.[12]
- **Hydrometeorological hazards:** Hydrometeorological hazards are of atmospheric, hydrological or oceanographic origin. Examples are tropical cyclones; floods, including flash floods; drought; heatwaves and cold spells; and coastal storm surges. Hydrometeorological conditions may also be a factor in other hazards such as landslides, wildland fires, locust plagues, epidemics and in the transport and dispersal of toxic substances and volcanic eruption material.[13]
- **Geological or geophysical hazards:** Geological or geophysical hazards originate from internal earth processes. Examples are earthquakes, volcanic activity and emissions, and related geophysical processes such as mass movements, landslides, rockslides, surface collapses and debris or mud flows. Hydrometeorological factors are important contributors to some of these processes.[14]
- **Risk:** The potential loss of life, injury, or destroyed or damaged assets which could occur to a system, society or a community in a specific period of time, determined probabilistically as a function of hazard, exposure, vulnerability and capacity.[15]
- **Exposure:** Hazard exposure refers to the presence of people, assets, or systems in locations that are subject to potential harm from specific hazards, such as droughts, floods, pests, or extreme temperatures. In the agricultural context, this includes croplands, livestock, infrastructure, and farming communities that are physically located in areas where these hazards are likely to occur.[16]
- **Vulnerability:** The conditions determined by physical, social, economic and environmental factors or processes which increase the susceptibility of an individual, a community, assets or systems to the impacts of hazards.[17]
- **Coping capacity:** the ability of people, organisations and systems, using available skills and
- resources, to manage adverse conditions, risk or disasters.[18]

[10] UNGA, "Report of the open-ended intergovernmental expert working group on indicators and terminology relating to disaster risk reduction", 2016.
[11] Ibid.
[12] Ibid.
[13] Ibid.
[14] Ibid.
[15] Ibid.
[16] Ibid.
[17] Ibid.
[18] Ibid.

- **Hotspot:** Hotspots are areas where a significant number of people are at risk from multiple hazards such as droughts, floods, cyclones, earthquakes, and landslides. These areas tend to concentrate risk due to physical, socio-economic, and environmental factors.[19]
- **Disaster risk reduction (DRR):** Activities aimed at preventing new and reducing existing disaster risk, managing residual risk, and which contribute to strengthening resilience and the achievement of sustainable development.[20]
- **Early warning system:** An integrated system of hazard monitoring, forecasting and prediction, disaster risk assessment, communication and preparedness activities systems and processes that enables individuals, communities, governments, businesses and others to take timely action to reduce disaster risks in advance of hazardous events.[21]
- **Anticipatory action:** Actions taken in anticipation of a crisis, either before the shock or at least before substantial humanitarian needs have manifested themselves, which are intended to mitigate the impact of the crisis or improve the response. [22]
- **Threshold:** In the context of anticipatory action, thresholds refer to the minimum specific levels of a predefined trigger mechanism which must be met in order to activate response activities.[23]

3.3 Population of interest

Target population of interest

The self-reporting tool, along with its associated interactive dashboards, will be fully public and accessible to ensure transparency and broad utility. Dissemination and promotion will be carried out through the FSS and its subnational working groups, and other relevant sectoral coordination bodies operating in northeastern Syria, including the WASH and ERL working groups. The tool is intended to be used by a wide range of agricultural stakeholders who hold operational, programmatic, or policy-related interests in northeastern Syria. These include farmers' associations, international and national NGOs, local agricultural authorities, research institutions, private agricultural companies, and community-based organizations. By targeting these actors, rather than individual farmers, the tool leverages the capacity of stakeholders who already operate at a broader geographic and institutional scale in the region. These stakeholders serve as effective intermediaries: they often work closely with groups of farmers, and typically possess technical expertise, a strong understanding of local agricultural dynamics, and well-established networks across communities. This positions them to provide more comprehensive, systematic, and reliable accounts of **climate related hazards impacting agriculture** as they occur at the community level, rather than self-reports at the individual farm level. Their involvement also supports data consistency and reduces the reporting burden on individual farmers, who may lack the time, connectivity, or confidence to engage directly with digital reporting platforms.

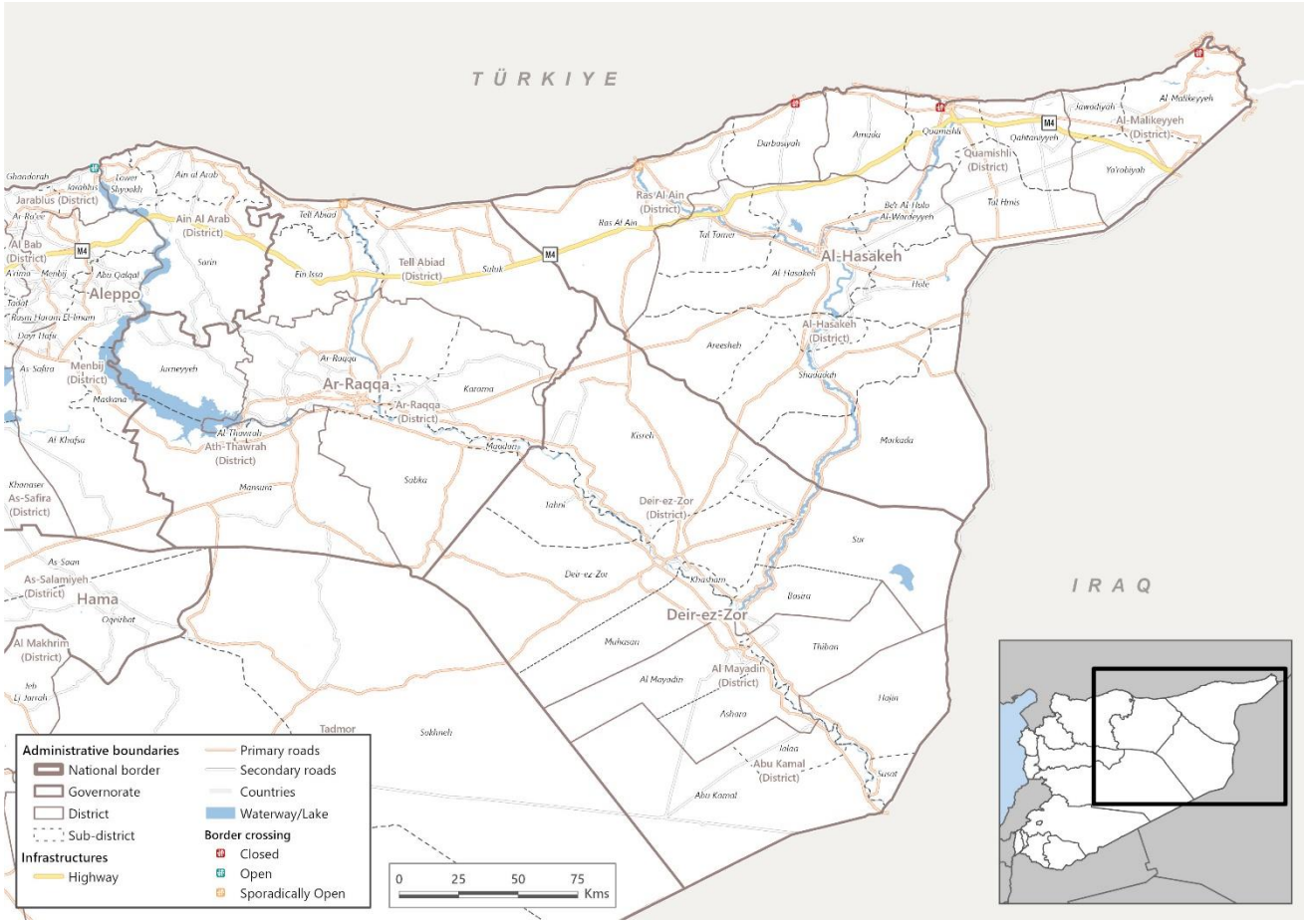
Geographical coverage

The climate-related hazard monitoring system will be implemented across areas formerly covered by the NES FSL Working Group (Figure 1) until April 2025, which now fall under the Syria Food Security Sector (FSS). As part of the ongoing restructuring of the humanitarian coordination system, all regional coordination groups are being unified under a single FSS framework, which will include six subnational working groups across Syria. This project will focus on areas covered by the northeastern subnational working groups of Qamishli and Deir ez-Zor. These groups are prioritized because the system's design, functionality, and long-term relevance are closely tied to the active engagement of partners operating in northeastern Syria, who are both **primary data contributors and the main audience of the system's**

[19] World Bank, Columbia University, "Natural disaster hotspots – A global risk analysis", 2005.
[20] UNGA, "Report of the open-ended intergovernmental expert working group on indicators and terminology relating to disaster risk reduction", 2016.
[21] Ibid.
[22] OCHA, 2019, as cited in de Wit, 2019.
[23] Ibid.

outputs. Given the localized and participatory nature of the reporting mechanism, the involvement of these stakeholders is essential to ensure the accuracy, utility, and sustainability of the tool. Despite movement towards consolidation of coordination structures, the above coverage will be maintained for this pilot. Should the pilot prove successful, it may be expanded to other regions in Syria.

Figure 1: Reference map of northeastern Syria, approximately corresponding to the coverage areas of the FSS Qamishli and Deir ez Zor subnational groups at the time of writing (01/6/2025)



Reporting unit

The reporting unit of the tool is at the community level (Admin 4). It is designed to capture one or more hazards that have occurred across one or several communities during the same hazardous event window. While the types of hazards reported may vary, such as pest outbreaks, sudden frosts, or flooding, they must have impacted all selected communities simultaneously and be understood as part of a single hazardous event. For example, if heavy rainfall led to prolonged flooding across multiple villages, this could be recorded as a single entry. This structure allows for both detailed and scalable reporting, ensuring that the collected data reflects real conditions on the ground and supports timely analysis and response planning across sectors.

3.4 Secondary data collection

Remote sensing data extraction

One of the two core methodologies used in this assessment is the extraction and analysis of remote sensing data. This approach will be implemented in two distinct phases.

The first phase focuses on establishing a baseline analysis of historical hazard exposure, aimed at identifying agricultural areas in northeastern Syria that have been consistently affected by climate-related hazards over time. This phase involves two key steps:

- Single-hazard mapping, where individual maps are created for each type of hazard (e.g., drought, flooding).
- Multi-hazard analysis, which overlays the different hazard maps to highlight the most hazard-prone agricultural areas.

The second phase will develop semi-automated data pipelines that allow for regular updates and ongoing monitoring of the selected hazard indicators. The frequency of these updates will depend on the specific hazard and the nature of its corresponding indicator. Following the pilot phase, which will take place during the first month of data collection (July/August 2025), REACH will initiate consultations with relevant agricultural stakeholders, including local authorities and experts, to explore the possibility of jointly defining context-specific threshold values (or "trigger points") for each remote sensing indicator monitored. These consultations will provide REACH's remote sensing and GIS specialists with insights into the environmental, agricultural, but also infrastructural, social, and policy characteristics of northeastern Syria, which will inform the development of comprehensive, region-specific thresholds. On the other hand, no threshold values will be assigned to field-based reports and indicators due to the high variability in measurement methods and reporting practices. The selection of key hazards and their corresponding indicators is based on a combination of internal remote sensing capacities and resources, as well as consultations with the NES FSL Working Group to ensure contextual relevance and alignment with local priorities. The remote sensing sources and types of these indicators are outlined in Table 2.

Table 2: List of remote-sensing derived hazard indicators initially selected for the historical multi-hazard baseline analysis

Hazard type	Hazard	Indicator	Calculation	Dataset	Frequency
Meteorological and hydrological	Drought	Drought severity (VHI)	% of agricultural land where VHI (Dec–May, 2021–2023) was classified as extreme/severe/moderate	MODIS	Monthly
Environmental	Soil degradation	Vegetation decline (NDVI)	% of agri. land with significant decreasing NDVI trend (Dec–May, 2002–2023)	MODIS	Annual
Meteorological and hydrological	Heatwave	Extreme air temperatures	Summer (Jun–Aug) monthly mean temp. > baseline mean (2000–2013)	ERA-5 / MODIS	Monthly
Meteorological and hydrological	Drought	Rainfall anomaly	% rainfall anomaly (2021–2023) during rainy season (Sep–Jun)	CHIRPS	Monthly

Table 3: List of remote-sensing derived hazard indicators selected for the monthly multi-hazard monitoring

Hazard type	Hazard	Indicator	Purpose	Dataset	Frequency
Environmental	Soil degradation	Vegetation decline (NDVI)	Monitor crop health and greenness	MODIS / Sentinel	Monthly
Meterological and hydrological hazards	Drought	Standard Precipitation Index (SPI)	Detect precipitation-based drought	CHIRPS	Monthly

Meterological and hydrological hazards	Drought	Rainfall anomaly	Track cumulative precipitation levels	CHIRPS	Monthly
Meterological and hydrological hazards	Heatwave	Land Surface Temperature (LST)	Monitor surface heat conditions	MODIS	Monthly

Literature review

IMPACT assessment staff conducted a preliminary literature review with two main objectives. First, the review aimed to contextualize the landscape of **climate related hazards impacting agriculture** in northeastern Syria by identifying the most pressing and recurrent hazards affecting the region. This process helped guide the selection of key hazards for inclusion in the assessment and supported the definition of relevant analytical frameworks and threshold values for each hazard.

Second, the literature review served to inform the assessment's methodology and technical design. It drew on existing disaster risk reduction assessments, area-based risk analyses, and relevant international standards and best practices. This ensured that the assessment approach is both locally grounded and technically aligned with global guidance in the field of climate and hazard monitoring.

3.5 Primary Data Collection

To capture the short-term occurrence and impacts of both sudden and/or rapid-onset climate-related hazards, REACH will roll out an online KOBO self-reporting tool designed for agricultural stakeholders across northeastern Syria. This tool will enable target users (please refer to section 3.3 for more details) to submit real-time reports on a range of selected hazards, including droughts, floods, storms, pest outbreaks, and crop diseases, as they occur. These submissions will feed directly into an interactive GIS dashboard, which will be regularly updated to ensure timely access to incoming data for FSS partners and coordination actors. The dashboard will support near real-time situational awareness and facilitate more agile, data-driven response planning. A core purpose of this tool is to fill a critical information gap by capturing hazard events at the community level that are not detectable immediately via remote sensing. While remote sensing methods are effective in monitoring medium- to long-term slow-onset hazards, they often cannot detect sudden or highly localized events such as pest outbreaks, flash floods, or hailstorms. The self-reporting tool is therefore a crucial complement to the remote sensing component of the assessment, allowing for a more comprehensive and real-time understanding of hazard exposure impacting agriculture across northeastern Syria.

Given the self-reporting nature of the system, the assessment does not rely on a traditional sampling frame. Instead, its success will depend on the level of engagement and the frequency of submissions from agricultural stakeholders. Target respondents include a wide range of actors with programmatic, operational, or policy interests in agriculture, such as local agricultural authorities, I/NGOs, farmers' associations, research institutions, private sector actors, and community-based organizations (please refer to section 3.3 for more details).

The development of the tool's content, namely the selection of hazards, measurement indicators, and threshold values, was informed by a combination of secondary literature review and a consultative process with the FSS. This approach ensured that the tool reflects locally relevant risks, while also aligning with available technical capacities and coordination needs (Table 3). For each reported hazard, the tool will collect standardized information on its geographic location, time of occurrence, duration, scale of exposure, and the severity and nature of its impact on agricultural systems.

To maximize participation, the tool will be disseminated through the FSS, its subnational working groups, and other relevant coordination fora (e.g., WASH, ERL). REACH will conduct training workshops and present the tool during coordination meetings to promote awareness, provide guidance, and encourage regular use. While the tool is intended for

ad-hoc use, allowing stakeholders to report when hazards are observed within their areas of operation, REACH will also issue regular engagement reminders through WG channels to encourage consistent reporting. The tool will be structured and available in both Arabic and English and will be designed with user-friendliness in mind. Respondents will not be required to have a KOBO account or login credentials; the tool will be accessible online, and completing the questionnaire will only require internet access and the survey link. Data from the reporting tool will be visualized and made accessible through the dashboard on a monthly or bi-weekly basis, depending on the volume of submissions and relevance of reported events.

Table 4: List of hazards included in the self-reporting KOBO Tool, categorized according to UNDRR Hazard Classification (2020)[24]

Hazard monitored through the self-reporting survey	Hazard type
High rainfall levels	Meteorological and hydrological
Floods (flash/riverine/urban)	Meteorological and hydrological
Low rainfall levels/drought	Meteorological and hydrological
Groundwater levels depletion	Meteorological and hydrological
Windstorms	Meteorological and hydrological
Heatwaves	Meteorological and hydrological
Cold wave/Frost	Meteorological and hydrological
Hailstorms	Meteorological and hydrological
Wildfires	Environmental
Plant pest/diseases	Biological
Livestock diseases	Biological
Earthquake	Geological or geophysical hazards
Landslides	Geological or geophysical hazards

3.6 Data Processing & Analysis

Remote sensing-derived baseline hotspot analysis

The multi-hazard historical baseline analysis will be carried out by the REACH GIS Manager in close collaboration with the REACH Remote Sensing Specialist. Unlike the dynamic and cyclical components of this assessment, this analysis will be a one-time, in-depth exercise aimed at establishing a robust historical reference point. Its primary purpose is to identify areas across northeastern Syria whose agricultural land has been consistently or severely exposed by selected climate-related hazards, based on remote sensing-derived indicators.

The results of this historical analysis will serve as the analytical foundation for the subsequent dynamic and regular hazard monitoring activity conducted through the dashboard. Findings will be compiled by the REACH assessment focal point (FP), jointly reviewed with the FSS, and disseminated in coordination with other relevant sectoral coordination bodies, such as WASH or ERL. Results will also be shared with local agricultural authorities to support evidence-based decision-making. These findings will also guide coordination-level recommendations on geographic areas where preventive or adaptive interventions should be prioritized, based on elevated historical exposure and trends. This initial analytical phase will also establish the methodological criteria for defining hazard hotspots, that is, areas most likely to continue facing high levels of exposure in the future (please refer to section 3.2 for more details on terminology definition). These hotspot

[24] UNDRR, "Hazard definition & classification review", 2020

classifications will, in turn, inform the design and prioritization logic of the interactive hazard monitoring dashboard, ensuring that ongoing remote sensing updates are both targeted and actionable.

Self-reported KOBO structured data

Although data submissions through the self-reporting tool will primarily occur on an ad-hoc basis, the data cleaning process will be carried out at a minimum on a bi-weekly schedule. This frequency may be adjusted depending on the volume of incoming submissions or in response to significant contextual developments, such as acute hazard events. The data cleaning and analysis will be led by the REACH Data Officer (DO), in close coordination with the REACH assessment FP, ensuring consistency and quality control.

In the framework of the self-reporting system, the identification and handling of potential **duplicate reports** will follow a contextualized approach. Reports submitted by different stakeholders that reference the same hazard event, that is, occurring in the exact same location and time period, will not be treated as duplicates if they provide distinct information, particularly regarding the nature or severity of impacts. Such instances will be considered complementary and will serve to enhance the reliability and granularity of the data. These reports will be grouped under a single hazard event for analytical purposes, contributing to a more robust understanding of exposure dynamics. Only reports that are identical or nearly identical across key variables (reporting organisation, location, time period, impact description) will be flagged as potential duplicates and reviewed accordingly by REACH assessment FP. This approach will ensure basic de-duplication checks to prevent inflating the frequency of events while ensuring that diverse perspectives and localized impact variations are retained and reflected in the analysis.

On the other hand, in cases of **conflicting reports**, where multiple submissions refer to the same hazard event and location but differ in timeline, reported intensity, or impacts, the cleaning script will consolidate these entries under a single hazard event. Rather than discarding discrepancies, the system will overlay reported timelines, severity levels, and impact descriptions to identify points of convergence. Dates, severity ratings, or impact narratives that appear across multiple reports will be considered more reliable and assigned a higher confidence level. This method enables the construction of a composite timeline, in which overlapping data strengthens the credibility of specific elements. For analytical purposes, these convergences may be visualized (i.e. through a shaded timeline where darker segments represent greater agreement), assigned confidence scores, or simply accompanied by figures indicating the number of reports per data point. This approach will enable a more nuanced and transparent understanding of how each hazard event unfolded and was perceived by different actors on the ground.

In cases of **highly conflicting reports** for the same event and location, the script will flag discrepancies for further review and triangulation using additional secondary data and FSS partners' consultations. Where possible, the assessment team will directly contact the respondent who submitted the entry, provided they have voluntarily shared their contact details and consented to follow-up communication, as outlined in the consent clause of the KOBO questionnaire. Highly conflicting reports that cannot be resolved or clarified through the review process will be retained with lower confidence and clearly noted as such, while those that are verified or clarified will be appropriately corrected or removed to ensure data integrity.

Clean datasets will be regularly transmitted to the GIS Officer for formatting and integration into the live monitoring dashboard. This workflow ensures that timely, accurate, and contextualized information feeds into the visual platform, supporting ongoing hazard tracking and coordination efforts.

Multi-hazard exposure monitoring dashboard

Data collected through the self-reporting tool will be aggregated across multiple geographic levels (community, sub-district, district, and governorate), as well as by hazard type and temporal occurrence. Remote sensing-derived data, including both the baseline analysis as well as the ongoing monitoring, will be aggregated at sub-district, district, and governorate, as well as by hazard type and temporal occurrence. The interactive monitoring dashboard will be regularly updated by the REACH GIS Manager through a dual-input system: (1) semi-automated integration of remote sensing-derived datasets

and (2) structured data submissions from the KOBO self-reporting tool. The update frequency of the dashboard will be maintained at a minimum of weekly intervals but may be increased depending on the relevant contextual developments, the volume of new agricultural stakeholders' submissions and the refresh rate of each remote sensing indicator. This dynamic update mechanism aims to ensure timely access to relevant hazard information for coordination actors and agricultural stakeholders.

It is important to note that some existing hazard monitoring platforms are not directly accessible from within Syria without the use of VPNs, creating additional barriers for local actors and stakeholders who require timely access to critical information. To address this, REACH plans to develop the monitoring dashboard using ArcGIS, ensuring online accessibility within Syria without the need for VPNs.

3.7 Limitations

This assessment faces several methodological and operational limitations, which must be taken into consideration when interpreting the data and its implications:

- **Lack of sampling framework**: given the self-reporting nature of the tool, there is no predefined sampling strategy in place. The assessment does not control for the size, distribution, or profile of the respondent population, which limits the ability to assess representativeness. As such, the resulting data cannot be considered statistically generalizable or reflective of the overall occurrence of **climate related hazards impacting agriculture** across NES. Rather, the findings offer indicative insights into the types and perceived severity of hazards, based on the experiences and observations of the stakeholders who voluntarily engage with the tool.
- **Voluntary participation and inconsistent coverage:** since the data collection mechanism relies on voluntary submissions from agricultural stakeholders, this may lead to inconsistencies in geographic or temporal coverage. Engagement levels may vary depending on organizational capacity, interest, internet access, and competing priorities, potentially leading to underreporting in certain areas or time periods.
- **Focus on exposure over vulnerability:** the assessment primarily focuses on the exposure dimension of risk, with limited ability to capture vulnerability or coping capacity. While the self-reporting tool includes questions on impact and severity that may offer indicative insights, these are qualitative, non-representative, and rely heavily on respondent interpretation. The remote sensing component, meanwhile, is restricted to environmental indicators and does not reflect underlying socioeconomic vulnerabilities. As such, the assessment offers a partial view of risk, centered on hazard occurrence and intensity rather than a comprehensive risk analysis.
- **Data literacy and interpretation challenges:** despite planned training sessions and the tool's user-friendly design, the effectiveness of the reporting tool depends on the respondents' understanding of the hazard indicators and the overall methodology. Differences in interpretation, technical familiarity, or contextual understanding may affect the quality and comparability of submitted reports.
- **Susceptibility to reporting bias**: self-reported data inherently carries the risk of subjective bias. Respondents may unintentionally overestimate or underestimate the severity or scale of hazard events due to personal or organizational perspectives, experience, or strategic interests.
- **Dependence on WGs coordination mechanisms:** the breadth and regularity of data submissions is also heavily reliant on the strength of outreach of the existing coordination infrastructure (NES FSL WG and others). Limited or disrupted communication channels or contextual changes in the coordination structure can impair timely reporting and reduce the overall effectiveness of the system.
- **Access and operational uncertainty**: the evolving political and administrative landscape in NES may lead to shifts in coordination structures, access, and operational presence, all of which may impact the geographic and institutional coverage of the tool.

4 Key ethical considerations and related risks

The proposed research design meets / does not meet the following criteria:

The proposed research design…	*Yes/ No*	*Details if no (including mitigation)*
… Has been coordinated with relevant stakeholders to **avoid unnecessary duplication** of data collection efforts?	Yes	
… **Respects respondents, their rights and dignity** (*specifically by: seeking informed consent, designing length of survey/ discussion while being considerate of participants' time, ensuring accurate reporting of information provided*)?	Yes	
… Does not **expose data collectors to any risks as a direct result** of participation in data collection?	Yes	
… Does not **expose respondents / their communities to any risks as a direct result** of participation in data collection?	Yes	
… Does not involve **collecting information on specific topics which may be stressful and/ or re-traumatising** for research participants (both respondents and data collectors)?	Yes	
… Does not involve **data collection with minors** i.e. anyone less than 18 years old?	Yes	
… Does not involve **data collection with other vulnerable groups** e.g. persons with disabilities, victims/ survivors of protection incidents, etc.?	Yes	
… Follows IMPACT SOPs for management of **personally identifiable information**?	Yes	

5 Roles and responsibilities

Task Description	*Responsible*	*Accountable*	*Consulted*	*Informed*
Research design	Senior Assessment Officer (SAO)	Research Manager (RM)	GIS manager, Remote Sensing Specialist (RSS), FSS coordinator	Data officer (DO), Disaster Risk Reduction (DRR) Specialist HQ, RSS HQ
Supervising data collection	SAO	RM	Data officer (DO), GIS manager	FSS coordinator
Data processing (checking, cleaning)	GIS manager, DO, SAO	RM	Data unit HQ GIS unit HQ RSS HQ	FSS coordinator
Data analysis	GIS manager, DO, SAO	RM	Data unit HQ GIS unit HQ RSS HQ	FSS coordinator
Output production	GIS manager, SAO	RM	Data unit HQ GIS unit HQ	FSS coordinator
Dissemination	SAO	RM	FSS partners Other sectoral WG as relevant	

Monitoring & Evaluation	SAO	RM	FSS coordinator M&E unit HQ
Lessons learned	SAO	RM	FSS coordinator M&E unit HQ

Responsible: *the person(s) who executes the task*

Accountable: *the person who validates the completion of the task and is accountable of the final output or milestone*

Consulted: *the person(s) who must be consulted when the task is implemented*

Informed: *the person(s) who need to be informed when the task is completed*

6 Data Management Plan

Administrative Data				
Research Cycle name	Agricultural Hazards Monitoring			
Project Code	16BIB			
Donor	Swiss Development Cooperation (SDC)			
Project partners	N/A			
Research Contacts	Anais Momoli, FSL Senior Assessment Officer, anais.momoli@impact-initiatives.org Nida Ibrahim, GIS manager, nida.ibrahim@reach-initiative.org Daniel Davies, Resilience & Early Recovery Research Manager, daniel.davies@impact-initiatives.org			
Data Management Plan Version	*Date: 16/04/2025*		*Version: 1*	
Related Policies	• REACH Research Cycle Data Management at IMPACT: Personally Identifiable Information SOP			
Documentation and Metadata				
What documentation and metadata will accompany the data? *Select all that apply*	X	**Data analysis plan**	X	**Data Cleaning Log, including:** **Deletion Log** **Value Change Log**
	X	**Code book**	□	Data Dictionary
	□	Metadata based on HDX Standards	□	[Other, Specify]
Ethics and Legal Compliance				
Which ethical and legal measures will be taken?	X	**Consent of participants to participate**	□	Consent of participants to share personal information with other agencies
	□	No collection of personally identifiable data will take place	X	**Gender, child protection and other protection issues are taken into account**
	X	**All participants reached age of majority**		[Other, Specify]
Who will own the copyright and Intellectual Property Rights for the data that is collected?	**REACH**			
Storage and Backup				
Where will data be stored and backed up during the research?	X	**IMPACT/REACH Kobo Server**	□	Other Kobo Server: *[specify]*
	□	IMPACT Global Physical / Cloud Server	□	Country/Internal Server

	□	On devices held by REACH staff	□	Physical location *[specify]*
	□	[Other, Specify]		
Which data access and security measures have been taken?	**X**	**Password protection on devices/servers**	**X**	**RAW data access is limited to GIS Manager, Data officer, Senior Assessment Officer**
	□	Form and data encryption on data collection server	□	Partners signed an MoU if accessing raw data
	□	[Other, Specify]		

Kobo Access Rights

Account Name(s)	Person(s)	Type of Kobo access
anaismomoli	**Anais Momoli, SAO**	**X View** **X Edit** **□ Submit Data** **□ Download Data**
evelyn_gakinya	**Evelyn Gakinya, Data Specialist**	**X View** **X Edit** **□ Submit Data** **X Download Data**

Raw Data Access Rights

Raw Data Access	Reason	Person
Accountable	**Accountable**	**evelyn.gakinya@impact-initiatives.org**
Access	**Data cleaning follow-up and feedback**	**anais.momoli@impact-initiatives.org**

Preservation

Where will data be stored for long-term preservation?	**X**	**IMPACT / REACH Global Cloud / Physical Server**	□	OCHA HDX
	□	REACH Country Server	□	[Other, Specify]

Data Sharing

Will the data be shared publicly?	**X**	**Yes**	□	No, only with mandating agency / body
Will all data be shared?	□	Yes	**X**	**No, only anonymized/ cleaned/ data will be shared**
	□	No, [Other, Specify]		
Where will you share the data?	**X**	**REACH Resource Centre - DASHBOARD**	□	OCHA HDX
	□	HumanitarianResponse	□	[Other, Specify]

Data protection risk assessment

Have you completed the Indicators Risk Assessment table below?	**x**	**Yes**	□	No, no information that potentially allows identification of individuals is to be collected.

[Please complete the first 4 columns in the Indicators Risk Assessment table below]

Risk indicator (including direct and	Type of identification risk	Disclosure implications	Benefits	**Class**	**Required mitigation**

indirect identifiers)					
Respondent's name	Direct identification	Security & privacy concerns	Data cleaning follow-up / feedback requests Trigger mechanism follow-up	B1	Deleted directly after verification/cleaning
Respondent's phone number	Direct identification	Security & privacy concerns	Data cleaning follow-up / feedback requests Trigger mechanism follow-up	B2	Deleted after analysis/follow up
Respondent's email	Direct identification	Security & privacy concerns	Data cleaning follow-up / feedback requests Trigger mechanism follow-up	B2	Deleted after analysis/follow up
Respondent's organisation name	Direct identification	Security & privacy concerns	Data cleaning follow-up / feedback requests Trigger mechanism follow-up	B2	Deleted after analysis/follow up

Responsibilities	
Data collection	anais.momoli@impact-initiatives.org
Data cleaning	evelyn.gakinya@impact-initiatives.org
Data analysis	evelyn.gakinya@impact-initiatives.org
Data sharing/uploading	anais.momoli@impact-initiatives.org

7 Monitoring & Evaluation Plan

IMPACT Objective	External M&E Indicator	Internal M&E Indicator	Focal point	Tool	Will indicator be tracked?
Humanitarian stakeholders are accessing IMPACT products	Number of humanitarian organisations accessing IMPACT services/products Number of individuals accessing IMPACT services/products	# of downloads of x product from Resource Center	Country request to HQ	User_log	□ Yes
		# of downloads of x product from Relief Web	Country request to HQ		□ Yes
		# of downloads of x product from Country level platforms	Country team		□ Yes
		# of page clicks on x product from REACH global newsletter	Country request to HQ		X Yes
		# of page clicks on x product from country newsletter, friendly	Country team		X Yes
		# of visits to webmap/ dashboard	Country request to HQ		X Yes
IMPACT activities contribute to better program implementation and coordination of the humanitarian response	Number of humanitarian organisations utilizing IMPACT services/products	# references in HPC documents (HNO, SRP, Flash appeals, Cluster/sector strategies)	Country team	Reference_log	*All relevant documents*
		# references in single agency documents			*All relevant documents*
Humanitarian stakeholders are using IMPACT products	Humanitarian actors use IMPACT evidence/products as a basis for decision making, aid planning and delivery	Perceived relevance of IMPACT country-programs	Country team	Usage_Feedback *and* Usage_Survey template	
		Perceived usefulness and influence of IMPACT outputs			
		Recommendations to strengthen IMPACT programs			
		Perceived capacity of IMPACT staff			
		Perceived quality of outputs/programs			

	Number of humanitarian documents (HNO, HRP, cluster/agency strategic plans, etc.) directly informed by IMPACT products	Recommendations to strengthen IMPACT programs			
Humanitarian stakeholders are engaged in IMPACT programs throughout the research cycle	Number and/or percentage of humanitarian organizations directly contributing to IMPACT programs *(providing resources, participating to presentations, etc.)*	# of organisations providing resources (i.e.staff, vehicles, meeting space, budget, etc.) for activity implementation	Country team	Engagement _log	XYes
		# of organisations/clusters inputting in research design and joint analysis			X Yes
		# of organisations/clusters attending briefings on findings;			X Yes

8 Data Analysis Plan

Hazard type	Indicator	Instructions	Q_number	Question	Responses
	Introduction		Q_0_1	This questionnaire has been developed for the Northeast Syria Food Security and Livelihoods Working Group (NES FSL WG) to collect data on farmers' exposure to climate hazards and their impact on the agriculture sector. The tool includes questions on the location, dates, types of hazards, and their effects, aiming to establish a monitoring system that informs short- and medium-term programmatic and strategic decisions for actors supporting agricultural development and resilience in Northeast Syria. Completing the form is expected to take between 5 and 10 minutes.	
	Organisation _type		Q_0_2	What kind of organization do you represent?	International NGO National NGO / Local NGO UN agency Farmers' association / cooperative / union Local agriculture authority (e.g., Agriculture Directorate, local governance bodies) Research institution / university Private agricultural company (e.g., agro-input supplier, irrigation provider) Community-based organization (CBO) Individual expert / consultant Chamber of agriculture or commerce

					Other (please specify) Prefer not to say
	Organisation_name		Q_0_3	What is your organisation name?	
	Consent_contact		Q_0_4	Would you be willing to provide your professional contact details to allow for potential follow-up on the reported hazard and its impact on agriculture? Your contact information will be accessible only to REACH assessment staff and will not be shared externally.	yesNo
	Respondent_name	Q_0_3=yes	Q_0_5	Name	
	Respondent_position	Q_0_3=yes	Q_0_6	Position	
	Respondent_email	Q_0_3=yes	Q_0_7	Email address	
	Respondent_phone number	Q_0_3=yes	Q_0_8	Phone number	
	Instructions		Q_1	General Instructions: This tool is intended to record one or more hazards that occurred in the same time period across one or several locations. The hazards reported may vary in type, but they must have impacted all selected locations simultaneously as part of a single event (for example, heavy rainfall and prolonged flooding affecting multiple communities during the same event can be reported together). If you need to report hazards that occurred at different times or in different locations, please complete and submit a separate form for each event.	
	Location_governorate	select_single	Q_2	In which governorate is the hazard exposure that you would like to report on?	
	Location_district	select_single	Q_3	In which district is the hazard exposure that you would like to report on?	
	Location_sub-district	select_single	Q_4	In which subdistrict is the hazard exposure that you would like to report on?	
	Location_community	select-multiple	Q_5	In which community or communities did the hazard exposure occur?	
	Hazard_type_awareness	select-single	Q_6	Do you already know the specific hazard(s) you intend to report on, or would you prefer to describe observed changes or impacts reported by stakeholders?	Yes, I know the exact hazard(s) I want to report on. No, I am unsure about the exact hazard(s) but can report on observed climatic changes or events
	Shock_short-term_hazard_list	select-multiple Q_6=yes Q_7=shock/short term	Q_8	What is/are the hazards you would like to report on?	Heatwaves – Extended periods of extreme high temperatures that stress crops and livestock. Cold Waves/Frost – Sudden drops in temperature that damage crops and kill young plants. Hailstorms – Ice pellets from thunderstorms that physically damage crops and infrastructure. Heavy Rainfall & Flooding – Excessive rainfall leading to waterlogging, soil erosion, and crop losses. Windstorms (Including Dust Storms & Hurricanes) – Strong winds that damage crops, uproot trees, and increase soil erosion. Wildfires – Uncontrolled fires that destroy grazing land, crops, and farm

					infrastructure. **Floods (Flash/prolonged)– Sudden, intense flooding that washes away topsoil, crops, and farm infrastructure.** **River Flooding – Overflow of rivers leading to prolonged waterlogging and loss of crops.** Landslides – Collapse of land due to heavy rainfall or deforestation, damaging farmland. Pest Outbreaks – Locusts, armyworms, aphids, and other insects causing large-scale crop damage. Plant Diseases – Fungal, bacterial, and viral diseases (e.g., wheat rust, late blight in potatoes). Livestock Diseases – Foot-and-mouth disease, avian influenza, and other animal diseases. Air Pollution (Ozone, Sulfur Dioxide, etc.) – Damage to crops from industrial emissions. Earthquakes – Damage to irrigation infrastructure and soil displacement. Drought – Prolonged periods of below-average rainfall leading to water shortages. Groundwater Depletion – Overuse of groundwater reducing availability for irrigation.
	Observation_category_temperature	Q_6=no	Q_9	Would you like to report hazard exposure in an area affected by temperature change or unusual wind patterns (strong winds, wildfires)?	Yes No
	Observation_category_water	Q_6=no	Q_10	Would you like to report hazard exposure related to water availability and fluctuations in water levels?	Yes No
	Observation_category_disease	Q_6=no	Q_11	Would you like to report hazard exposure related to plant or livestock pests and diseases?	Yes No
	Observation_category_geological	Q_6=no	Q_12	Would you like to report hazard exposure related to geological events or phenomena (e.g., landslides, earthquakes)?	Yes No
		Q10=yes	Q_13	METEOROLOGICAL AND HYDROLOGICAL HAZARDS	
High rainfall levels		Q10=yes	Q_14	Agricultural stakeholders (farmers, farmers associations, local authorities) in the area are reporting an episode or period of higher rainfall levels than is usually typical this time in the year?	Yes No
	Hazard start date	Q_14=yes OR Q_8=high rainfall levels	Q_15	When did this period of increased rainfall start?	dd-mm-yyyy
	Hazard termination	select-single	Q_15_bis	At the time of reporting, has this event ended or is it still ongoing?	It has ended It is still ongoing
	Hazard end date		Q_16	When did this period of increased rainfall end?	dd-mm-yyyy
	Hazard exposure duration	calculate	Q_16_calculate	calculate number of days	

	Hazard technical identification	select-single	Q_17	Approximately how much rainfall was recorded in your area during this period of increased rainfall? (If known, specify in millimetres (mm). If unsure, provide an estimate.	Light rainfall: < 10 mm/day Moderate rainfall: 10–50 mm/day Heavy rainfall: 50–100 mm/day Extreme rainfall: >100 mm/day
	Agricultural assets affected	select-multiple	Q_18	Which agricultural assets were affected by the high rainfall levels? (Select all that apply)	Croplands (rainfed/irrigated) Orchards/tree plantations Greenhouses Grazing land/pastures Irrigation infrastructure Storage infrastructure Transport infrastructure(roads, trucks, etc) Other No agriculture asset/resource was negatively affected
	Crops affected	select-multiple	Q_19	What type of crops were mostly affected by the high rainfall levels? (Select all that apply)	Wheat (rainfed/irrigated) Barley (rainfed/irrigated) Vegetables (e.g., tomatoes, cucumbers, etc.) Fruits (e.g., citrus, apples, etc.) Legumes (e.g., lentils, chickpeas) Other (please specify)
	Tree plantation affected	select-multiple	Q_20	What type of tree plantations were mostly affected by the high rainfall levels? (Select all that apply)	Fruit orchards (e.g., citrus, apples, pomegranates) Olive groves Nut trees (e.g., almonds, walnuts) Forestry plantations Other (please specify)
	Type of impact_1	select-multiple Q18=Croplands/Orchards/Greenhouses/Grazing land	Q_21	You reported that high rainfall levels impacted Croplands / Orchard tree plantations / Greenhouses / Grazing land. What specific impacts did the increased rainfall have on these assets in the community/ies?	Waterlogging of fields affecting root oxygenation Root rot due to excessive moisture Increased fungal or bacterial diseases (e.g., blight, mildew) Rotting of fruits, vegetables, or grains in the field Soil erosion or nutrient loss due to heavy runoff Delayed planting or harvesting schedules Reduced germination or seedling establishment Crop or plant lodging (falling over due to soft soil or wind) Structural damage to trees (e.g., branch breakage, instability) Contamination of fields with debris or pollutants carried by water Other Do not know
	Type of impact_2	select-multiple Q18=Irrigation/Transport/Storage infrastructure	Q_22	You reported that high rainfall levels impacted Storage infrastructure / Irrigation infrastructure / Transport infrastructure. What specific impacts did increased rainfall levels have on on these assets in the community/ies?	Flooding of irrigation canals or distribution systems Water damage to irrigation pumps or motors Overflow or damage to water storage tanks/reservoirs Access disruption to irrigation infrastructure due to waterlogging Flooding of storage facilities (e.g., grain silos, warehouses) Structural damage to storage buildings (walls, roofs, floors) Spoilage or contamination of stored crops/goods Flooding of roads and paths used for transport of goods Surface erosion or collapse of transport roads/tracks

					Disruption of transport operations and delivery services Increased maintenance or repair costs for affected infrastructure Other (please specify) Do not know
	Stakeholders' impact severity rating	select-single	Q_23	How do agricultural stakeholders (farmers, farmers associations, local authorities) rate the severity of the impacts?	Minor: The increased rainfall caused minimal disruption, and recovery was quick with little to no impact on ongoing farming activities. Moderate: The increased rainfall caused some disruptions, requiring efforts to address the situation, but recovery was manageable and relatively fast. Major: The increased rainfall caused significant disruption, and recovery will take considerable time and effort. Many agricultural activities were affected. Severe: The increased rainfall caused major disruptions to farming, and full recovery may take a long time. Extensive efforts will be needed to restore agricultural activities. Catastrophic: The increased rainfall caused severe damage to agricultural activities, and recovery may take years, with long-lasting effects on the sector.
	Share of farm businesses affected	select-single	Q_24	How widespread was the negative impact of increased rainfall levels in the community/ies you are reporting on?	Less than 25% of farms affected 26% to 50% of farms affected 51% to 75% of farms affected More than 75% of farms affected Do not know
	Number of farm businesses affected	integer	Q_25	How many farms in the selected community/ies community were affected by this increased rainfall event? (Estimate based on your knowledge or community discussions)	N
	Extent of agricultural land negatively impacted (hectares)	select-single check coherence with Q_21	Q_26	Approximately how many hectares of agricultural land were affected by increased rainfall?	Less than 1 hectare (less than 10 donums) 1–5 hectares (10 - 50 donums) 6–20 hectares (51 - 200 donums) 21-50 hectares (201 - 500 donums) 51-75 hectares (501 - 750 donums) 76-100 hectares (751 - 1000 donums) More than 100 hectares (more than 1000 donums) Do not know
	Stakeholders already experienced impact on yield	select-single check coherence with Q_20	Q_27	To what extent have high rainfall levels already reduced crop yields of the majority of affected farmers?	No change in yield Slight reduction (less than 25%) Moderate reduction (26–50%) Severe reduction (50%-75%) Complete crop loss (more than 75%) Do not know
	Stakeholders expected impact on yield		Q_28	To what extent do you expect high rainfall levels to affect crop yields of the majority of affected farmers in the coming x months?	No change in expected yield Slight reduction (less than 25%) Moderate reduction (26–50%) Severe reduction (50%-75%) Complete crop loss (more than 75%)

Flooding (flash/prolonged)		Q10=yes	Q_29	Agricultural stakeholders (farmers, farmers associations, local authorities) in the area are reporting the occurrence of a flooding episode?	Yes No
	Hazard start date	Q_29=yes OR Q_8=Flooding	Q_30	When did this flood happen? Start date	dd-mm-yyyy
	Flood type	select_single	Q_31	How long did the floodwaters remain in the selected community/ies?	Flash flood - Less than 6 hours Flash flood - 6–12 hours Flash flood - 12–24 hours Prolonged flood - More than 1 day
	Hazard end date	Q_27= more than 3 days check coherence with Q27 (>3 days)	Q_32	When did this flood end?	dd-mm-yyyy
	Hazard exposure duration	calculate	Q_33	calculate number of days	
	Hazard technical identification	select-single	Q_34	What is the maximum water depth reported on farmlands?	Less than 0.5m / 0.5m–1m / 1m–2m / More than 2m
	Agricultural assets affected	select-multiple	Q_35	Which agricultural assets were affected by the flooding? (Select all that apply)	Croplands Orchards/tree plantations Surface water sources (Rivers/Lake/Dam) Irrigation infrastructure Grazing land/pastures Storage infrastructure Transport infrastructure (roads) Do not know Other No agriculture asset/resource was negatively affected
	Hazard technical identification rivers	Q_31=Surface water sources	Q_36	How much did the river/lake stage increase approximately?	Minor flood (0.5 - 1.5 m above normal) Moderate flood (1.5 - 3.0 above normal) Major flood (>3.0 above normal)
	Crops affected	select-multiple	Q_37	What type of crops were mostly affected by the flooding? (Select all that apply)	Wheat (rainfed/irrigated) Barley (rainfed/irrigated) Vegetables (e.g., tomatoes, cucumbers, etc.) Fruits (e.g., citrus, apples, etc.) Legumes (e.g., lentils, chickpeas) Other (please specify)

	Tree plantation affected	select-multiple	Q_38	What type of tree plantations were mostly affected by the flooding? (Select all that apply)	Fruit orchards (e.g., citrus, apples, pomegranates) Olive groves Nut trees (e.g., almonds, walnuts) Forestry plantations Other (please specify)
	Type of impact_1	select-multiple Q35=Croplands/Orchards/Greenhouses/Grazing land	Q_39	You reported that the flooding impacted Croplands / Orchard tree plantations / Greenhouses / Grazing land. What specific impacts did the flooding have on these assets in the community/ies?	Waterlogging and root damage to crops, trees, or plants Crop, tree, or plant rotting due to excess moisture or mold Poor germination or seedling failure due to saturated soil Delayed planting or harvesting due to field inaccessibility Soil erosion or nutrient loss from topsoil runoff Accumulation of silt or mud on crops, reducing quality Increased plant disease outbreaks (e.g., fungal infections) Trees or crops falling over due to saturated soil Stunted plant growth due to lack of oxygen in the root zone Other Do not know
	Type of impact_2	select-multiple Q35=Irrigation/Transport/Storage infrastructure	Q_40	You reported that the flooding impacted Storage infrastructure / Irrigation infrastructure / Transport infrastructure. What specific impacts did the flooding have on on these assets in the community/ies?	Damage to irrigation pipes, canals, or pumps due to floodwaters Submersion or malfunctioning of pumps, tanks, or wells Contamination of irrigation water sources (e.g., with sewage, debris) Structural damage to storage units (e.g., collapse, cracks) Flooding of crop storage facilities or silos Spoilage or loss of stored crops/seeds due to water damage Damage to transport vehicles (e.g., tractors, trucks) Inaccessibility due to washed-out or submerged roads Debris or mud blocking transport routes Increased maintenance or repair costs for infrastructure Do not know Other (please specify)
	Stakeholders' impact severity rating	select-single	Q_41	How do agricultural stakeholders (farmers, farmers associations, local authorities) rate the severity of the impacts?	Minimal impact – Some water pooling, but no visible crop damage or yield loss. Mild damage – Waterlogging for a short period (less than 3 days), some yellowing or stunting of crops Moderate damage – Extended waterlogging (3–7 days), plant stress, root rot, or disease increase Severe damage – Prolonged flooding (more than 7 days), significant crop failure, high disease risk Catastrophic – Fields completely destroyed, no harvest possible
	Share of farm businesses affected	select-single	Q_42	How widespread was the negative impact of increased rainfall levels in the community/ies you are reporting on?	Less than 25% of farms affected 26% to 50% of farms affected 51% to 75% of farms affected More than 75% of farms affected Do not know
	Number of farm businesses affected	integer	Q_43	How many farms in the selected community/ies community were affected by this increased rainfall event? (Estimate based on your knowledge or community discussions)	N

	Extent of agricultural land negatively impacted (hectares)	select-single check coherence with Q_39	Q_44	Approximately how many hectares of agricultural land were affected by increased rainfall?	Less than 1 hectare (less than 10 donums) 1–5 hectares (10 - 50 donums) 6–20 hectares (51 - 200 donums) 21-50 hectares (201 - 500 donums) 51-75 hectares (501 - 750 donums) 76-100 hectares (751 - 1000 donums) More than 100 hectares (more than 1000 donums) Do not know
	Stakeholders already experienced impact on yield	select-single	Q_45	To what extent has the flooding already reduced crop yields of the majority of affected farmers?	No change in yield Slight reduction (less than 25%) Moderate reduction (26–50%) Severe reduction (50%-75%) Complete crop loss (more than 75%) Do not know
	Stakeholders expected impact on yield		Q_46	To what extent do you expect the flooding to affect crop yields of the majority of affected farmers in the coming x months?	No change in expected yield Slight reduction (less than 25%) Moderate reduction (26–50%) Severe reduction (50%-75%) Complete crop loss (more than 75%)
Low rainfall levels/Drought		Q10=yes OR Q_8=Drought /Low rainfall levels check coherence with Q_14 & Q_25	Q_47	Agricultural stakeholders (farmers, farmers associations, local authorities) in the area are reporting an episode or period of lower rainfall levels than is usually typical this time in the year	
	Hazard start date	date Q_47=yes OR Q_8=Low rainfall/drought	Q_48	When did this period of decreased (compared to what is usually typical this time in the year) rainfall start?	dd-mm-yyyy
	Hazard timeline	select-one	Q_49	Did the drought terminate or is it still ongoing in the selected community/ies?	Terminated Still ongoing at the time of reporting
	Hazard end date	date Q_39_bis=terminated	Q_50	When did this period of decreased (compared to what is usually typical this time in the year) rainfall end?	dd-mm-yyyy
	Hazard exposure duration	calculate	Q_51	calculate number of days	
	Hazard technical identification	select-single	Q_52	Compared to an average year in your area, how much lower has total rainfall been over the past 3 months?	Slightly lower (10–20% less than normal) Moderately lower (20–40% less than normal) Significantly lower (40–60% less than normal) Extremely low (>60% less than normal)

	Agricultural assets affected	select-multiple	Q_53	Which agricultural assets were affected by the low rainfall levels/drought conditions? (Select all that apply)	Irrigated croplands Rainfed croplands Orchards/tree plantations Livestock Grazing land/pastures Groundwater reservoirs levels Surface water sources (Rivers/Lake/Dam) Do not know Other No agriculture asset/resource was negatively affected
	Crops affected	select-multiple	Q_54	What type of crops were mostly affected by the low rainfall levels/drought levels? (Select all that apply)	Wheat (rainfed/irrigated) Barley (rainfed/irrigated) Vegetables (e.g., tomatoes, cucumbers, etc.) Fruits (e.g., citrus, apples, etc.) Legumes (e.g., lentils, chickpeas) Other (please specify)
	Tree plantation affected	select-multiple	Q_55	What type of tree plantations were mostly affected by the low rainfall levels/drought? (Select all that apply)	Fruit orchards (e.g., citrus, apples, pomegranates) Olive groves Nut trees (e.g., almonds, walnuts) Forestry plantations Other (please specify)
	Type of impact_1	select-multiple Q53=Croplands/Orchards/Greenhouses/Grazing land	Q_56	You reported that the low rainfall levels/drought impacted Croplands / Orchard tree plantations / Greenhouses / Grazing land. What specific impacts did the low rainfall levels/drought have on these assets in the community/ies?	Reduced soil moisture affecting plant and tree health Delayed or failed germination of seeds Stunted growth of crops and trees Early maturation of crops, leading to lower yields Decrease in crop yields or harvest quality Wilting, yellowing, or dropping of leaves Dieback or death of tree branches or entire trees Increased pest or disease pressure due to plant stress Soil cracking and compaction due to dryness Abandonment of fields due to insufficient water Other Do not know
	Type of impact_2	select-multiple Q53=Irrigation/Transport/Storage infrastructure	Q_57	You reported that the low rainfall levels/drought impacted Storage infrastructure / Irrigation infrastructure / Transport infrastructure. What specific impacts did the low rainfall levels/drought have on on these assets in the community/ies?	Degradation or loss of pastureland due to dryness Reduced availability of fodder or forage crops Increased movement of animals in search of grazing Water shortages for livestock consumption Weight loss or reduced productivity in animals Drop in milk or meat production Increased risk of disease due to poor conditions Increased distress sale of livestock Livestock deaths due to extreme drought conditions Tensions or disputes over grazing and water sources Other Do not know

	Stakeholders' impact severity rating	select-single	Q_58	How do agricultural stakeholders (farmers, farmers associations, local authorities) rate the severity of the impacts?	Mild damage– Soil is drier than usual but still cultivable Moderate damage – Soil is cracked and hard, difficult to cultivate Severe damage – Vegetation cover is reduced but still present Catastrophic – Vegetation is completely dried out
	Share of farm businesses affected	select-single	Q_59	How widespread was the negative impact of decreased rainfall levels in the community/ies you are reporting on?	Less than 25% of farms affected 26% to 50% of farms affected 51% to 75% of farms affected More than 75% of farms affected Do not know
	Number of farm businesses affected	integer	Q_60	What is the estimated number of farmers impacted by this decreased rainfall level/drought period in the affected community/communities? (Estimate based on your knowledge or community discussions)	N
	Extent of agricultural land negatively impacted (hectares)	select-single check coherence with Q_59 & Q_60	Q_61	Approximately how many hectares of agricultural land were affected by increased rainfall?	Less than 1 hectare (less than 10 donums) 1–5 hectares (10 - 50 donums) 6–20 hectares (51 - 200 donums) 21-50 hectares (201 - 500 donums) 51-75 hectares (501 - 750 donums) 76-100 hectares (751 - 1000 donums) More than 100 hectares (more than 1000 donums) Do not know
	Stakeholders already experienced impact on yield	select-single check coherence with Q_58	Q_62	To what extent have the low rainfall levels/drought already reduced crop yields of the majority of affected farmers?	No change in yield Slight reduction (less than 25%) Moderate reduction (26–50%) Severe reduction (50%-75%) Complete crop loss (more than 75%) Do not know
	Stakeholders expected impact on yield		Q_63	To what extent do you expect the low rainfall levels/drought to affect crop yields of the majority of affected farmers in the coming x months?	No change in expected yield Slight reduction (less than 25%) Moderate reduction (26–50%) Severe reduction (50%-75%) Complete crop loss (more than 75%)
Groundwater levels depletion		Q10=yes check coherence with Q_14 & Q_25	Q_64	Agricultural stakeholders (farmers, farmers associations, local authorities) in the area are reporting reduced access to groundwater	Yes No
	Hazard technical identification	Q_42=ground water reservoirs levels	Q_65	How have groundwater levels (well/borehole depth) approximately changed compared to usually typical levels in the last 3 months?	No change in expected yield Slight reduction (less than 25%) Moderate reduction (26–50%) Severe reduction (50%-75%) Complete crop loss (more than 75%)
		Q_9=yes	Q_66	METEOROLOGICAL HAZARDS	

Windstorms		Q_9=yes	Q_67	Agricultural stakeholders (farmers, farmers associations, local authorities) in the area are reporting the occurrence of a windstorm event	Yes No
	Hazard start date	date Q_67=yes OR Q_8=Windstorm	Q_68	When did the windstorm start?	dd-mm-yyyy
	Hazard exposure duration (less than 24h)	date	Q_69	How long did the windstorm last?	Less than 1 hour 1–3 hours 3–6 hours 6–12 hours 12-24 hours More than 24 hours
	Hazard end date	Q_69=More than 24h	Q_70	When did the windstorm end?	dd-mm-yyyy
	Hazard exposure duration (days)	calculate	Q_71	calculate number of days	
	Hazard technical identification	select-single	Q_72	What was the estimated wind speed during the windstorm event? (If known, select the estimated range based on local observations or reports)	Less than 40 km/h (Mild breeze) 40–60 km/h (Moderate winds) 60–90 km/h (Strong winds) 90–120 km/h (Severe winds) More than 120 km/h (Destructive winds) Unknown
	Hazard technical identification	select-multiple	Q_73	Was the windstorm accompanied by other extreme weather conditions? *(Select all that apply.)*	Heavy rainfall Sand/dust storms Hailstorm Lightning/thunderstorm No other conditions observed
	Agricultural assets affected	select-multiple	Q_74	Which agricultural areas were affected by the windstorm? *(Select all that apply)*	Croplands Orchards/tree plantations Greenhouses Grazing land/pastures Irrigation infrastructure Storage infrastructure Transport infrastructure Do not know Other No agriculture asset/resource was negatively affected
	Crops affected	select-multiple	Q_75	What type of crops were mostly affected by the windstorm? (Select all that apply)	Wheat (rainfed/irrigated) Barley (rainfed/irrigated) Vegetables (e.g., tomatoes, cucumbers, etc.)

					Fruits (e.g., citrus, apples, etc.) Legumes (e.g., lentils, chickpeas) Other (please specify)
	Tree plantation affected	select-multiple	Q_76	What type of tree plantations were mostly affected by the windstorm? (Select all that apply)	Fruit orchards (e.g., citrus, apples, pomegranates) Olive groves Nut trees (e.g., almonds, walnuts) Forestry plantations Other (please specify)
	Type of impact_1	select-multiple Q74=Croplands/Orchards/Greenhouses/Grazing land	Q_77	You reported that the windstorm impacted Croplands / Orchard tree plantations / Greenhouses / Grazing land. What specific impacts did the windstorm have on these assets in the community/ies?	Reduced germination (poor seed sprouting or crop establishment) Wilting and leaf scorch (visible drying, curling, or browning of leaves) Early maturation (crops ripened faster but with lower yields) Lower grain fill or fruit size (grains/fruits were smaller than usual) Increased pest outbreaks (heat favoured insect infestations) Increased disease outbreaks (e.g., fungal infections due to heat stress) Soil moisture loss (crops struggled due to faster evaporation) Other Do not know
	Type of impact_2	select-multiple Q74=Irrigation/Transport/Storage infrastructure	Q_78	You reported that the windstorm impacted Storage infrastructure / Irrigation infrastructure / Transport infrastructure. What specific impacts did increased the windstorm have on on these assets in the community/ies?	Damage to exposed irrigation pipes or tubing Displacement or breakage of sprinkler systems Damage to water tanks or open reservoirs (e.g., cracks, leaks) Roof or wall damage to storage facilities or warehouses Spoilage of stored goods due to exposure Damage to transport vehicles (e.g., overturned, dented) Roads blocked by debris or damaged surface Partial or complete collapse of infrastructure structures Increased repair or maintenance costs Other Do not know
	Stakeholders' impact severity rating	select-single	Q_79	How do agricultural stakeholders (farmers, farmers associations, local authorities) rate the overall degree of impact the windstorm had on crops?	Minor (Minimal disruption, recovery is possible within a short period) Moderate (Significant disruption, recovery will take time) Severe (Major disruption, long-term recovery needed) Total destruction (Recovery may take years or may be unfeasible)
	Share of farm businesses affected	select-single	Q_80	How widespread was the negative impact of the windstorm in the community/ies you are reporting on?	Less than 25% of farms affected 26% to 50% of farms affected 51% to 75% of farms affected More than 75% of farms affected Do not know
	Number of farm businesses affected	integer	Q_81	What is the estimated number of farmers impacted by this windstorm event in the affected community/communities? (Estimate based on your knowledge or community discussions)	N
	Extent of agricultural land	select-single check coherence	Q_82	Approximately how much agricultural land was affected by the hailstorm in total? (If unsure, provide your best estimate.)	Less than 1 hectare (less than 10 donums) 1–5 hectares (10 - 50 donums) 6–20 hectares (51 - 200 donums)

	negatively impacted (hectares)	with Q_80 & Q_81			21-50 hectares (201 - 500 donums) 51-75 hectares (501 - 750 donums) 76-100 hectares (751 - 1000 donums) More than 100 hectares (more than 1000 donums) Do not know
	Stakeholders already experienced impact on yield	select-single check coherence with Q_79	Q_83	To what extent has the windstorm already reduced crop yields of the majority of affected farmers?	No change in yield Slight reduction (less than 25%) Moderate reduction (26–50%) Severe reduction (50%-75%) Complete crop loss (more than 75%) Do not know
	Stakeholders expected impact on yield		Q_84	To what extent do you expect the windstorm to affect crop yields of the majority of affected farmers in the coming x months?	No change in expected yield Slight reduction (less than 25%) Moderate reduction (26–50%) Severe reduction (50%-75%) Complete crop loss (more than 75%)
Heatwave		Q_9=yes	Q_85	Agricultural stakeholders (farmers, farmers associations, local authorities) in the area are reporting an unusually high and prolonged period of extreme heat	Yes No
	Hazard start date	date Q_85=yes OR Q_8=Heatwave	Q_86	When did the extreme heat start?	dd-mm-yyyy
	Hazard end date	date	Q_87	When did the extreme heat end?	dd-mm-yyyy
	Hazard exposure duration (days)	calculate	Q_88	calculate number of days	
	Hazard technical identification	select-single	Q_89	How much higher were daytime temperatures compared to normal for this time of year?	2-3°C higher 4-6°C higher More than 6°C higher
	Agricultural assets affected	select-multiple	Q_90	Which agricultural areas were affected by the heatwave? (Select all that apply)	Croplands Orchards/tree plantations Surface water sources (Rivers/Lake/Dam) Irrigation infrastructure Grazing land/pastures Storage infrastructure Transport infrastructure (roads) Do not know Other No agriculture asset/resource was negatively affected

	Crops affected	select-multiple	Q_91	What type of crops were mostly affected by the heatwave? (Select all that apply)	Wheat (rainfed/irrigated) Barley (rainfed/irrigated) Vegetables (e.g., tomatoes, cucumbers, etc.) Fruits (e.g., citrus, apples, etc.) Legumes (e.g., lentils, chickpeas) Other (please specify)
	Tree plantation affected	select-multiple	Q_92	What type of tree plantations were mostly affected by the heatwave? (Select all that apply)	Fruit orchards (e.g., citrus, apples, pomegranates) Olive groves Nut trees (e.g., almonds, walnuts) Forestry plantations Other (please specify)
	Type of impact_1	select-multiple Q90=Croplands/Orchards/Greenhouses/Grazing land	Q_93	You reported that the heatwave impacted Croplands / Orchard tree plantations / Greenhouses / Grazing land. What specific impacts did the the heatwave have on these assets in the community/ies?	Reduced germination (poor seed sprouting or crop establishment) Wilting and leaf scorch (visible drying, curling, or browning of leaves) Early maturation (crops ripened faster but with lower yields) Lower grain fill or fruit size (grains/fruits were smaller than usual) Increased pest outbreaks (heat favoured insect infestations) Increased disease outbreaks (e.g., fungal infections due to heat stress) Soil moisture loss (crops struggled due to faster evaporation) Other Do not know
	Type of impact_2	select-multiple Q90=Irrigation/Transport/Storage infrastructure	Q_94	You reported that the heatwave impacted Storage infrastructure / Irrigation infrastructure / Transport infrastructure. What specific impacts did the heatwave have on these assets in the community/ies?	Increased evaporation losses from open canals, tanks, or reservoirs Overheating or cracking of irrigation pipes or plastic components Reduced efficiency of irrigation systems due to high temperatures Melting or warping of plastic-covered storage units or equipment Structural stress on warehouses and storage facilities Heat damage to stored goods (e.g., spoilage of temperature-sensitive inputs) Increased fuel consumption or mechanical stress in transport vehicles Softening or damage to unpaved roads or asphalt due to extreme heat Other Do not know
	Stakeholders' impact severity rating	select-single	Q_95	How do agricultural stakeholders (farmers, farmers associations, local authorities) rate the overall degree of impact the heatwave had on crops?	Minor (Minimal disruption, recovery is possible within a short period) Moderate (Significant disruption, recovery will take time) Severe (Major disruption, long-term recovery needed) Total destruction (Recovery may take years or may be unfeasible)
	Share of farm businesses affected	select-single	Q_96	How widespread was the negative impact of the windstorm in the community/ies you are reporting on?	Less than 25% of farms affected 26% to 50% of farms affected 51% to 75% of farms affected More than 75% of farms affected Do not know
	Number of farm businesses affected	integer	Q_97	What is the estimated number of farmers impacted by this heatwave event in the affected community/communities? (Estimate based on your knowledge or community discussions)	N

	Extent of agricultural land negatively impacted (hectares)	select-single check coherence with Q_96 & Q_97	Q_98	Approximately how much agricultural land was affected by the hailstorm in total? (If unsure, provide your best estimate.)	Less than 1 hectare (less than 10 donums) 1–5 hectares (10 - 50 donums) 6–20 hectares (51 - 200 donums) 21-50 hectares (201 - 500 donums) 51-75 hectares (501 - 750 donums) 76-100 hectares (751 - 1000 donums) More than 100 hectares (more than 1000 donums) Do not know
	Hazard technical identification	select-single	Q_99	Were increased temperatures associated with the occurrence of wildfires over the same period of time?	Yes No
	Stakeholders already experienced impact on yield	select-single check coherence with Q_95	Q_100	To what extent has the heatwave already reduced crop yields of the majority of affected farmers?	No change in yield Slight reduction (less than 25%) Moderate reduction (26–50%) Severe reduction (50%-75%) Complete crop loss (more than 75%) Do not know
	Stakeholders expected impact on yield		Q_101	To what extent do you expect the heatwave to affect crop yields of the majority of affected farmers in the coming x months?	No change in expected yield Slight reduction (less than 25%) Moderate reduction (26–50%) Severe reduction (50%-75%) Complete crop loss (more than 75%)
Wildfires		Q_9=yes	Q_102	Agricultural stakeholders (farmers, farmers associations, local authorities) in the area are reporting wildfires	Yes No
	Hazard start date	date Q_102=yes OR Q_99=yes OR Q_8=Wildfires	Q_103	When did the wildfire start?	dd-mm-yyyy
	Hazard end date	date	Q_104	When did the wildfire end?	dd-mm-yyyy
	Hazard exposure duration (days)	calculate	Q_105	calculate number of days	
	Agricultural assets affected	select-multiple	Q_106	Which agricultural assets were affected by the wildfire? (Select all that apply)	Croplands (irrigated/rainfed) Orchards/tree plantations Surface water sources (Rivers/Lake/Dam) Groundwater reservoirs Irrigation infrastructure Grazing land/pastures Livestock

					Storage infrastructure Transport infrastructure (roads) Do not know Other No agriculture asset/resource was negatively affected
	Crops affected	select-multiple	Q_107	What type of crops were mostly affected by the wildfire? (Select all that apply)	Wheat (rainfed/irrigated) Barley (rainfed/irrigated) Vegetables (e.g., tomatoes, cucumbers, etc.) Fruits (e.g., citrus, apples, etc.) Legumes (e.g., lentils, chickpeas) Other (please specify)
	Tree plantation affected	select-multiple	Q_108	What type of tree plantations were mostly affected by the wildfire? (Select all that apply)	Fruit orchards (e.g., citrus, apples, pomegranates) Olive groves Nut trees (e.g., almonds, walnuts) Forestry plantations Other (please specify)
	Type of impact_1	select-multiple Q106=Croplands/Orchards/Greenhouses/Grazing land	Q_109	You reported that the wildfire impacted Croplands / Orchard tree plantations / Greenhouses / Grazing land. What specific impacts did the wildfire have on these assets in the community/ies?	Complete crop destruction – Crops were entirely burned, leaving no harvestable yield. Partial crop damage – Some crops were scorched but may still be partially harvested. Loss of soil fertility – Fire removed organic matter and nutrients, affecting future planting. Soil erosion risk increased – Vegetation loss exposed soil to wind and water erosion. Delayed planting for next season – The fire disrupted preparation for the next crop cycle. Smoke damage to crops – Crops were affected by excessive smoke, impacting quality. Increased pest infestation – Fire destroyed natural pest predators, leading to outbreaks. Livestock death/injury Destruction/damage of orchards or other perennial crops Other Do not know
	Type of impact_2	select-multiple Q106=Irrigation/Transport/Storage infrastructure	Q_110	You reported that the wildfire impacted Storage infrastructure / Irrigation infrastructure / Transport infrastructure. What specific impacts did the wildfire have on on these assets in the community/ies?	Partial burning of irrigation pipelines, hoses, or sprinklers Complete destruction of irrigation systems Damage to water tanks or reservoirs Melting or warping of plastic irrigation components Destruction of fuel-powered water pumps or generators Damage to access roads (e.g., blocked or burned paths) Burned or collapsed bridges or culverts Damage to grain silos or storage buildings Loss of stored agricultural inputs (e.g., seeds, fertilizers, pesticides) Damage to crop storage facilities (e.g., barns, sheds) Structural damage to cold storage units or cooling systems

					Other (please specify) Do not know
	Stakeholders' impact severity rating	select-single	Q_111	How do agricultural stakeholders (farmers, farmers associations, local authorities) rate the overall degree of impact the heatwave had on crops?	Minor (Minimal disruption, recovery is possible within a short period) Moderate (Significant disruption, recovery will take time) Severe (Major disruption, long-term recovery needed) Total destruction (Recovery may take years or may be unfeasible)
	Share of farm businesses affected	select-single	Q_112	How widespread was the negative impact of the wildfire in the community/ies you are reporting on?	Less than 25% of farms affected 26% to 50% of farms affected 51% to 75% of farms affected More than 75% of farms affected Do not know
	Number of farm businesses affected	integer	Q_113	What is the estimated number of farmers impacted by this wildfire event in the affected community/communities? (Estimate based on your knowledge or community discussions)	N
	Extent of agricultural land negatively impacted (hectares)	select-single check coherence with Q_112 & Q_113	Q_114	Approximately how much agricultural land was affected by the wildfire? (If unsure, provide your best estimate.)	Less than 1 hectare (less than 10 donums) 1–5 hectares (10 - 50 donums) 6–20 hectares (51 - 200 donums) 21-50 hectares (201 - 500 donums) 51-75 hectares (501 - 750 donums) 76-100 hectares (751 - 1000 donums) More than 100 hectares (more than 1000 donums) Do not know
	Stakeholders already experienced impact on yield	select-single check coherence with Q_111	Q_115	To what extent has the wildfire already reduced crop yields of the majority of affected farmers?	No change in yield Slight reduction (less than 25%) Moderate reduction (26–50%) Severe reduction (50%-75%) Complete crop loss (more than 75%) Do not know
	Stakeholders expected impact on yield		Q_116	To what extent do you expect the wildfire to affect crop yields of the majority of affected farmers in the coming x months?	No change in expected yield Slight reduction (less than 25%) Moderate reduction (26–50%) Severe reduction (50%-75%) Complete crop loss (more than 75%)
Coldwave/ Frost		Q_9=yes	Q_117	Agricultural stakeholders (farmers, farmers associations, local authorities) in the area are reporting unusually low temperatures, sudden or prolonged period of extreme cold	Yes No
	Hazard type	Q_117=yes OR Q_8=Coldwave/Frost	Q_118	What type of cold event affected your area?	Frost – Short-term temperature drop below freezing, causing ice formation on plants (usually at night). Cold wave – Extended period of significantly lower-than-normal temperatures, affecting crops, soil, and livestock. Both frost and cold wave occurred Other

	Hazard start date	date	Q_119	When did the extreme cold start?	dd-mm-yyyy
	Hazard end date	date	Q_120	When did the extreme cold end?	dd-mm-yyyy
	Hazard exposure duration (days)	calculate	Q_121	calculate number of days	
	Hazard technical identification	select-single	Q_122	What were the lowest recorded temperatures during the event?	0°C to -2°C -3°C to -5°C -6°C to -10°C Below -10°C Don't know
	Hazard technical identification	select-single	Q_123	Compared to a typical year, how much lower were the temperatures during this event?	Less than 2°C lower than usual 2-5°C lower 6-10°C lower More than 10°C lower Don't know
	Agricultural assets affected	select-multiple	Q_124	Which agricultural assets were affected by the coldwave/frost? (Select all that apply)	Croplands (irrigated/rainfed) Orchards/tree plantations Surface water sources (Rivers/Lake/Dam) Groundwater reservoirs Irrigation infrastructure Grazing land/pastures Livestock Storage infrastructure Transport infrastructure (roads) Do not know Other No agriculture asset/resource was negatively affected
	Crops affected	select-multiple	Q_125	What type of crops were mostly affected by the Coldwave/Frost? (Select all that apply)	Wheat (rainfed/irrigated) Barley (rainfed/irrigated) Vegetables (e.g., tomatoes, cucumbers, etc.) Fruits (e.g., citrus, apples, etc.) Legumes (e.g., lentils, chickpeas) Other (please specify)
	Tree plantation affected	select-multiple	Q_126	What type of tree plantations were mostly affected by the Coldwave/Frost? (Select all that apply)	Fruit orchards (e.g., citrus, apples, pomegranates) Olive groves Nut trees (e.g., almonds, walnuts) Forestry plantations Other (please specify)
	Type of impact_1	select-multiple Q124=Cropla	Q_127	You reported that the Coldwave/Frost impacted Croplands / Orchard tree plantations / Greenhouses / Grazing land.	Damage to external part of plant (e.g., freezing of leaves, stems, or grains, fruits) Damage of root systems Delayed crop growth or maturity

		nds/Orchards /Greenhouses/Grazing land		What specific impacts did the Coldwave/Frost have on these assets in the community/ies?	Complete crop failure in frost-sensitive plants Increased prevalence of cold-related crop diseases Death or illness in livestock Reduced availability of water Other Do not know
	Type of impact_2	select-multiple Q124=Irrigation/Transport/ Storage infrastructure	Q_128	You reported that the Coldwave/Frost impacted Storage infrastructure / Irrigation infrastructure / Transport infrastructure. What specific impacts did the Coldwave/Frost have on these assets in the community/ies?	Frozen irrigation canals or pipes Cracking or bursting of irrigation infrastructure due to freezing Damage to water pumps or valves Blockage of irrigation systems due to ice or frost Structural damage to storage buildings (e.g. roof collapse due to ice/snow accumulation) Spoilage or damage of stored crops due to inadequate temperature control Inaccessibility of storage or agricultural areas due to snow/ice Frozen or damaged transportation roads Increased transportation delays due to icy or unsafe road conditions Damage to vehicles or machinery exposed to freeze Power outages affecting infrastructure use (e.g. irrigation systems, storage refrigeration) Other Do not know
	Stakeholders' impact severity rating	select-single	Q_129	How do agricultural stakeholders (farmers, farmers associations, local authorities) rate the overall degree of impact the heatwave had on crops?	Minor (Minimal disruption, recovery is possible within a short period) Moderate (Significant disruption, recovery will take time) Severe (Major disruption, long-term recovery needed) Total destruction (Recovery may take years or may be unfeasible)
	Share of farm businesses affected	select-single	Q_130	How widespread was the negative impact of the cold wave/frost in the community/ies you are reporting on?	Less than 25% of farms affected 26% to 50% of farms affected 51% to 75% of farms affected More than 75% of farms affected Do not know
	Number of farm businesses affected	integer	Q_131	What is the estimated number of farmers impacted by this frost/cold wave event in the affected community/communities? (Estimate based on your knowledge or community discussions)	N
	Extent of agricultural land negatively impacted (hectares)	select-single coherence with Q_130 & Q_131	Q_132	Approximately how much agricultural land was affected by the cold wave/frost? (If unsure, provide your best estimate.)	Less than 1 hectare (less than 10 donums) 1–5 hectares (10 - 50 donums) 6–20 hectares (51 - 200 donums) 21-50 hectares (201 - 500 donums) 51-75 hectares (501 - 750 donums) 76-100 hectares (751 - 1000 donums) More than 100 hectares (more than 1000 donums) Do not know
	Stakeholders already	select-single check	Q_133	To what extent have the Coldwave/Frost already reduced crop yields of the majority of affected farmers?	No change in yield Slight reduction (less than 25%)

	experienced impact on yield	coherence with Q_129			Moderate reduction (26–50%) Severe reduction (50%-75%) Complete crop loss (more than 75%) Do not know
	Stakeholders expected impact on yield	select-single	Q_134	To what extent do you expect the Coldwave/Frost to affect crop yields of the majority of affected farmers in the coming x months?	No change in expected yield Slight reduction (less than 25%) Moderate reduction (26–50%) Severe reduction (50%-75%) Complete crop loss (more than 75%)
Hailstorm		Q_9=yes	Q_135	Agricultural stakeholders (farmers, farmers associations, local authorities) in the area are reporting the occurrence of a hailstorm event	Yes No
	Hazard start date	date Q_8=Coldwave/Frost OR Q_135=yes	Q_136	When did the hailstorm start?	dd-mm-yyyy
	Hazard exposure duration (days)	select-single	Q_137	How long did the hailstorm last?	Less than 5 minutes 5-15 minutes 16-30 minutes More than 30 minutes Do not know
	Hazard technical identification	select-single	Q_138	What was the size of the hailstones?	Small (less than 1 cm, similar to rice grains) Medium (1-2 cm, similar to a pea/marble) Large (2-5 cm, similar to a golf ball) Very large (more than 5 cm, similar to a tennis ball or larger) Don't know
	Agricultural assets affected	select-multiple	Q_139	Which agricultural assets were affected by the hailstorm? (Select all that apply)	Croplands Orchards/tree plantations Greenhouses Grazing land/pastures Surface water sources (Rivers/Lake/Dam) Livestock Irrigation infrastructure Storage infrastructure Transport infrastructure(roads, trucks, etc) Other No agriculture asset/resource was negatively affected
	Crops affected	select-multiple	Q_140	What type of crops were mostly affected by the hailstorm? (Select all that apply)	Wheat (rainfed/irrigated) Barley (rainfed/irrigated) Vegetables (e.g., tomatoes, cucumbers, etc.) Fruits (e.g., citrus, apples, etc.) Legumes (e.g., lentils, chickpeas) Other (please specify)

	Tree plantation affected	select-multiple	Q_141	What type of tree plantations were mostly affected by the hailstorm? (Select all that apply)	Fruit orchards (e.g., citrus, apples, pomegranates) Olive groves Nut trees (e.g., almonds, walnuts) Forestry plantations Other (please specify)
	Type of impact_1	select-multiple Q139=Croplands/Orchards/Greenhouses/Grazing land	Q_142	You reported that the hailstorm impacted Croplands / Orchard tree plantations / Greenhouses / Grazing land. What specific impacts did the hailstorm have on these assets in the community/ies?	Physical damage to leaves, stems, or fruits due to hail impact Defoliation or leaf shedding from hail strikes Bruising or cracking of fruit, vegetables, or plant tissues Breakage of branches or young stems in trees and shrubs Reduced photosynthesis due to damaged foliage Loss of flowering or fruit-setting structures Increased risk of disease entry through hail wounds Delay in crop growth or reduced yield potential Seedling mortality or uprooting in early stage crops Cosmetic damage affecting market value of produce Other Do not know
	Type of impact_2	select-multiple Q139=Irrigation/Transport/Storage infrastructure	Q_143	You reported that the hailstorm impacted Storage infrastructure / Irrigation infrastructure / Transport infrastructure. What specific impacts did the hailstorm have on these assets in the community/ies?	Physical damage to irrigation pipes, sprinklers, or drip lines from hail impact Breakage or clogging of irrigation emitters due to hail debris Damage to water tanks or open reservoirs (e.g. punctures, contamination) Dents, cracks, or punctures to storage structures (e.g. tin roofs, plastic covers) Roof or wall damage to warehouses or crop storage units Spoilage or exposure of stored goods due to infrastructure damage Damage to transportation vehicles (e.g. cracked windshields, dented bodies) Road surface damage or debris blocking access routes Disruption to transport operations due to hazardous conditions Increased maintenance or repair costs for affected infrastructure Other Do not know
	Stakeholders' impact severity rating	select-single	Q_144	How do agricultural stakeholders (farmers, farmers associations, local authorities) rate the overall degree of impact the heatwave had on crops?	Minor (Minimal disruption, recovery is possible within a short period) Moderate (Significant disruption, recovery will take time) Severe (Major disruption, long-term recovery needed) Total destruction (Recovery may take years or may be unfeasible)
	Share of farm businesses affected	select-single	Q_145	How widespread was the negative impact of the hailstorm in the community/ies you are reporting on?	Less than 25% of farms affected 26% to 50% of farms affected 51% to 75% of farms affected More than 75% of farms affected Do not know
	Number of farm businesses affected	integer	Q_146	What is the estimated number of farmers impacted by this hailstorm event in the affected community/communities? (Based on your knowledge or discussions within the community)	N
	Extent of agricultural	select-single check	Q_147	Approximately how much agricultural land was affected by the hailstorm in total? (If unsure, provide your best estimate.)	Less than 1 hectare (less than 10 donums) 1–5 hectares (10 - 50 donums)

	land negatively impacted (hectares)	coherence with Q_145 & Q_146			6–20 hectares (51 - 200 donums) 21-50 hectares (201 - 500 donums) 51-75 hectares (501 - 750 donums) 76-100 hectares (751 - 1000 donums) More than 100 hectares (more than 1000 donums) Do not know
	Stakeholders already experienced impact on yield	select-single check coherence with Q_144	Q_148	To what extent has the hailstorm already reduced crop yields of the majority of affected farmers?	No change in yield Slight reduction (less than 25%) Moderate reduction (26–50%) Severe reduction (50%-75%) Complete crop loss (more than 75%) Do not know
	Stakeholders expected impact on yield	select-single	Q_149	To what extent do you expect the hailstorm to affect crop yields of the majority of affected farmers in the coming x months?	No change in expected yield Slight reduction (less than 25%) Moderate reduction (26–50%) Severe reduction (50%-75%) Complete crop loss (more than 75%)
		Q_11=yes	Q_150	BIOLOGICAL HAZARDS	
Plant Pest/disease outbreak		Q_11=yes	Q_151	Agricultural stakeholders (farmers, farmers associations, local authorities) in the area are reporting the occurrence of plant pest/diseases outbreaks	Yes No
	Hazard start date	date Q_151=yes OR Q_8=plant pest/disease	Q_152	When did the pest outbreak start approximately?	dd-mm-yyyy
	Hazard end date	select-single	Q_153	Did the pest outbreak terminate or is it still ongoing in the selected community/ies?	Terminated Still ongoing at the time of reporting
	Hazard exposure duration (days)	date	Q_154	When did the pest outbreak end approximately?	dd-mm-yyyy
	Hazard technical identification	calculate	Q_155	calculate number of days	
	Hazard technical identification	select-multiple	Q_156	What type of pest/disease outbreak occurred? Select all that apply	Aphids Wheat Weevil Wheat Midges Cereal Leaf Beetle White Grubs Termites Grasshoppers Hessian Fly Flea Beetles

					Armyworms Wheat Stem Sawfly Helicoverpa Armigera Pink Graminous Stem Borer Nematodes Smut diseases Rust diseases Root Rot Bacterial Sun Pest Other (please specify)
	Agricultural assets affected	select-multiple	Q_157	Which agricultural assets were affected by the selected pests/diseases? (Select all that apply)	Irrigated croplands Rainfed croplands Orchards/tree plantations Greenhouses Grazing land/pastures Other No agriculture asset/resource was negatively affected
	Crops affected	select-multiple	Q_158	What type of crops were mostly affected by the outbreak of the selected pest/disease? (Select all that apply)	Wheat (rainfed/irrigated) Barley (rainfed/irrigated) Vegetables (e.g., tomatoes, cucumbers, etc.) Fruits (e.g., citrus, apples, etc.) Legumes (e.g., lentils, chickpeas) Other (please specify)
	Tree plantation affected	select-multiple	Q_159	What type of tree plantations were mostly affected by the outbreak of the selected pest/disease? (Select all that apply)	Fruit orchards (e.g., citrus, apples, pomegranates) Olive groves Nut trees (e.g., almonds, walnuts) Forestry plantations Other (please specify)
	Type of impact	select-multiple check coherence with Q_102 Q_115!=No agriculture asset damaged	Q_160	What specific impacts did the outbreak of the selected pest/disease have on agricultural assets in the community/ies? (Select all that apply) (Select all that apply)	Physical damage to crops (Leaves, stems, roots, or fruits/grains were harmed by pests) Delayed crop development (Pest infestation extended the growth cycle, postponing harvest) Wilting or restricted growth (Plants exhibited weakness, including yellowing leaves, curling, or failure to reach full size) Partial/Total crop failure (A portion of the field died, reducing the harvestable yield) Increased production costs Other
	Stakeholders' impact severity rating	select-single	Q_161	How do agricultural stakeholders (farmers, farmers associations, local authorities) rate the overall degree of impact the heatwave had on crops?	Minor (Minimal disruption, recovery is possible within a short period) Moderate (Significant disruption, recovery will take time) Severe (Major disruption, long-term recovery needed) Total destruction (Recovery may take years or may be unfeasible)

	Share of farm businesses affected	select-single	Q_162	How widespread was the negative impact of the pest/disease in the community/ies you are reporting on?	Less than 25% of farms affected 26% to 50% of farms affected 51% to 75% of farms affected More than 75% of farms affected Do not know
	Number of farm businesses affected	integer	Q_163	How many farmers in your community were affected by this pest event? (Estimate based on your knowledge or community discussions)	N
	Extent of agricultural land negatively impacted (hectares)	select-single check coherence with Q_162 & Q_163	Q_164	Approximately how much agricultural land was affected by the pest/disease in total? (If unsure, provide your best estimate.)	Less than 1 hectare (less than 10 donums) 1–5 hectares (10 - 50 donums) 6–20 hectares (51 - 200 donums) 21-50 hectares (201 - 500 donums) 51-75 hectares (501 - 750 donums) 76-100 hectares (751 - 1000 donums) More than 100 hectares (more than 1000 donums) Do not know
	Stakeholders already experienced impact on yield	select-single check coherence with Q_161	Q_166	To what extent has the outbreak of the selected pest/disease already reduced crop yields of the majority of affected farmers?	No change in yield Slight reduction (less than 25%) Moderate reduction (26–50%) Severe reduction (50%-75%) Complete crop loss (more than 75%) Do not know
	Stakeholders expected impact on yield	select-single	Q_167	To what extent do you expect the outbreak of the selected pest/disease to affect crop yields of the majority of affected farmers in the coming x months?	No change in expected yield Slight reduction (less than 25%) Moderate reduction (26–50%) Severe reduction (50%-75%) Complete crop loss (more than 75%)
Livestock disease		Q_11=yes	Q_168	Agricultural stakeholders (farmers, farmers associations, local authorities) in the area are reporting the occurrence of livestock disease outbreaks	Yes No
	Hazard start date	date Q_8=livestock disease OR Q_168=yes	Q_169	When did the disease outbreak start approximately?	dd-mm-yyyy
	Hazard timeline	select-single	Q_170	Did the pest outbreak terminate or is it still ongoing in the selected community/ies?	Terminated Still ongoing at the time of reporting
	Hazard end date	date	Q_171	When did the pest outbreak end approximately?	dd-mm-yyyy
	Hazard exposure duration	calculate	Q_172	calculate number of days	

	Hazard technical identification	select-multiple	Q_173	What type of disease outbreak occurred? Select all that apply	Foot-and-Mouth Disease (FMD) – A viral disease affecting cloven-hoofed animals, causing fever, blisters, and production losses. Contagious Bovine Pleuropneumonia (CBPP) – A highly contagious bacterial disease affecting cattle, leading to severe respiratory issues. Brucellosis Sheep and Goat Pox Bluetongue Avian Influenza Rabies African Swine Fever (ASF) Tick-Borne Diseases (e.g., Babesiosis, Theileriosis) Johne's Disease Other
	Agricultural assets affected	select-multiple	Q_174	What livestock animals were reportedly affected by the selected disease?	Cattle Sheep Goat Poultry Donkeys Horses Camels Others
	Type of impact	select-multiple	Q_175	What specific impacts did the outbreak of the selected pest/disease have on livestock assets? (Select all that apply)	Reduced availability of animal products (milk, meat, hides, eggs) Decreased weight gain or growth Increased mortality rate in cattle Difficulty in breeding (reproductive issues) Culling or disposal of infected cattle Economic losses due to trade restrictions (unable to sell cattle or cattle products) Reduced labour capacity (due to the need for increased attention to sick animals) Veterinary treatment costs Other (please specify)
	Stakeholders' impact severity rating	select-single	Q_176	How do agricultural stakeholders (farmers, farmers associations, local authorities) rate the overall degree of impact the heatwave had on crops?	Minor (Minimal disruption, recovery is possible within a short period) Moderate (Significant disruption, recovery will take time) Severe (Major disruption, long-term recovery needed) Total destruction (Recovery may take years or may be unfeasible)
	Share of farm businesses affected	select-single	Q_177	How widespread was the negative impact of the pest/disease in the community/ies you are reporting on?	Less than 25% of farms affected 26% to 50% of farms affected 51% to 75% of farms affected More than 75% of farms affected Do not know
	Number of farm businesses affected	integer	Q_178	How many farms in your community were affected by this pest event? (Estimate based on your knowledge or community discussions)	N

	Share of livestock negatively impacted	select-single check coherence withQ_177 & Q_178	Q_179	What percentage of the total livestock in the selected community/ies was affected by the disease (showing symptoms but not necessarily dead)?	Localized to a few animals in the selected community/ies (0-10% of the herd) Spread across a portion of the herd (11-30% of the herd) Widespread across most of the herd (31-60% of the herd) Affected all livestock in the community (61-100% of the herd)
		Q_12=yes	Q_180	GEOLOGICAL HAZARDS	
Earthquake		Q_12=yes	Q_181	Agricultural stakeholders (farmers, farmers associations, local authorities) in the area are reporting the occurrence of a earthquake	Yes No
	Hazard start date	date Q_8=earthquake OR Q_181=yes	Q_182	When did the earthquake start approximately?	dd-mm-yyyy
	Hazard exposure duration (days)	select-single	Q_183	How long did the main earthquake event last? If multiple seismic episodes occurred in one event, please report on the longest episode	Less than 1 minute 1–3 minutes 4–10 minutes More than 10 minutes Do not know
	Hazard technical identification	select-single	Q_184	What was the estimated magnitude of the earthquake on the Richter scale? If multiple seismic episodes occurred in one event, please report on the main episode	Minor (less than 4.0) Moderate (4.0–5.5) Strong (5.6–6.9) Severe (7.0 or higher) Do not know
	Agricultural assets affected	select-multiple	Q_185	Which agricultural assets were affected by the earthquake? *(Select all that apply)*	Croplands Orchards/tree plantations Greenhouses Grazing land/pastures Livestock Irrigation infrastructure Storage infrastructure Transport infrastructure Other No agriculture asset/resource was negatively affected
	Crops affected	select-multiple	Q_186	What type of crops were mostly affected by the earthquake? (Select all that apply)	Wheat (rainfed/irrigated) Barley (rainfed/irrigated) Vegetables (e.g., tomatoes, cucumbers, etc.) Fruits (e.g., citrus, apples, etc.) Legumes (e.g., lentils, chickpeas) Other (please specify)
	Tree plantation affected	select-multiple	Q_187	What type of tree plantations were mostly affected by the earthquake? (Select all that apply)	Fruit orchards (e.g., citrus, apples, pomegranates) Olive groves Nut trees (e.g., almonds, walnuts) Forestry plantations Other (please specify)

	Type of impact_1	select-multiple Q185=Croplands/Orchards/Greenhouses/Grazing land	Q_188	You reported that the earthquake impacted Croplands / Orchard tree plantations / Greenhouses / Grazing land. What specific impacts did the earthquake have on these assets in the community/ies?	Uprooting or physical damage to crops and trees Soil cracking or destabilization affecting root systems Water supply disruption leading to plant stress or dehydration Reduced soil fertility due to mixing or loss of topsoil Crop loss due to falling debris or ground collapse Disruption of planting or harvest schedules Increased risk of disease or pest infestation due to plant stress Other Do not know
	Type of impact_2	select-multiple select-multiple Q185=Irrigation/Transport/Storage infrastructure	Q_189	You reported that the earthquake impacted Storage infrastructure / Irrigation infrastructure / Transport infrastructure. What specific impacts did the earthquake have on these assets in the community/ies?	Structural damage to irrigation systems (canals, pipelines, pumps) Damage or misalignment of drip and sprinkler components Cracks or collapse of water tanks and reservoirs Destruction or weakening of storage facilities (silos, warehouses) Loss or contamination of stored agricultural inputs (seeds, fertilizers) Damage to roads, bridges, or culverts affecting access Transport disruptions due to debris or damaged vehicles Increased repair and reconstruction needs for infrastructure Other Do not know
	Stakeholders' impact severity rating	select-single	Q_190	How do agricultural stakeholders (farmers, farmers associations, local authorities) rate the severity of the impacts?	Minor (The earthquake caused minimal damage, and agricultural activities were only slightly affected. The recovery process was quick and straightforward) Moderate (The earthquake caused some damage to agricultural assets, requiring efforts for repairs and adjustments. Some disruptions to farming activities, but most activities could continue after adjustments) Major (The earthquake resulted in significant damage to agricultural infrastructure or production. Recovery may take a long time and many farming activities were disrupted or significantly affected) Severe (The earthquake caused extensive damage to agricultural assets and farming activities. Full recovery may take a long time, and many agricultural operations were halted or permanently affected) Catastrophic (The earthquake led to catastrophic damage to agricultural assets and livelihoods. The agricultural sector may take years to recover, with long-term consequences on food production and local markets)
	Share of farm businesses affected	select-single	Q_191	How widespread was the negative impact of the pest/disease in the community/ies you are reporting on?	Less than 25% of farms affected 26% to 50% of farms affected 51% to 75% of farms affected More than 75% of farms affected Do not know
	Number of farm businesses affected	integer	Q_192	How many farms in the selected community/ies community were affected by this pest event? (Estimate based on your knowledge or community discussions)	N
	Extent of agricultural land	select-single Q185=Croplands/Orchards	Q_193	Approximately how much agricultural land was affected by the earthquake? (If unsure, provide your best estimate.)	0–10% of the total agricultural land 11–25% of the total agricultural land 26–50% of the total agricultural land

	negatively impacted (hectares)	/Greenhouses/Grazing land check coherence with Q_191 & Q_193			51–75% of the total agricultural land 76–100% of the total agricultural land
	Extent of agricultural infrastructure impacted	select-single Q185=Irrigation/Transport/ Storage infrastructure check coherence with Q_191	Q_194	How much of the agricultural infrastructure in the selected community/ies (e.g., roads, irrigation systems, storage) was affected by the earthquake?	0–10% of the infrastructure 11–25% of the infrastructure 26–50% of the infrastructure 51–75% of the infrastructure 76–100% of the infrastructure
	Stakeholders already experienced impact on yield	select-single check coherence with Q_191	Q_195	To what extent has the earthquake already reduced crop yields of the majority of affected farmers?	No change in yield Slight reduction (less than 25%) Moderate reduction (26–50%) Severe reduction (50%-75%) Complete crop loss (more than 75%) Do not know
	Stakeholders expected impact on yield	select-single	Q_196	To what extent do you expect the earthquake to affect crop yields of the majority of affected farmers in the coming x months?	No change in expected yield Slight reduction (less than 25%) Moderate reduction (26–50%) Severe reduction (50%-75%) Complete crop loss (more than 75%)
Landslides		Q_12=yes	Q_197	Agricultural stakeholders (farmers, farmers associations, local authorities) in the area are reporting the occurrence of a landslide	Yes No
	Hazard start date	date Q_8=landslide OR Q_197=yes	Q_198	When did the landslide occur approximately?	dd-mm-yyyy
	Hazard driver	select-single	Q_199	What was the primary trigger of the landslide based on observations?	Heavy rainfall Earthquake Deforestation/land degradation Construction activities Other (please specify) Do not know
	Hazard technical identification	select-single	Q_200	What is the estimated volume of material displaced?	Less than 10,000 cubic meters 10,000 - 50,000 cubic meters 50,000 - 100,000 cubic meters More than 100,000 cubic meters

	Hazard technical identification	select-single	Q_201	How fast did the landslide occur?	Very slow (few cm/day, creeping movement) Slow (few meters/day) Rapid (several meters/second, sudden failure) Do not know
	Agricultural assets affected	select-multiple	Q_202	Which agricultural assets were affected by the landslide? *(Select all that apply)*	Croplands Orchards/tree plantations Greenhouses Grazing land/pastures Livestock Irrigation infrastructure Storage infrastructure Transport infrastructure Other No agriculture asset/resource was negatively affected
	Crops affected	select-multiple	Q_203	What type of crops were mostly affected by the landslide? (Select all that apply)	Wheat (rainfed/irrigated) Barley (rainfed/irrigated) Vegetables (e.g., tomatoes, cucumbers, etc.) Fruits (e.g., citrus, apples, etc.) Legumes (e.g., lentils, chickpeas) Other (please specify)
	Tree plantation affected	select-multiple	Q_204	What type of tree plantations were mostly affected by the landslide? (Select all that apply)	Fruit orchards (e.g., citrus, apples, pomegranates) Olive groves Nut trees (e.g., almonds, walnuts) Forestry plantations Other (please specify)
	Type of impact_1	select-multiple Q202=Croplands/Orchards/Greenhouses/Grazing land	Q_205	You reported that the landslide impacted Croplands / Orchard tree plantations / Greenhouses / Grazing land. What specific impacts did the the landslide have on these assets in the community/ies?	Structural damage to irrigation systems (canals, pipelines, pumps) Uprooting or burial of crops and trees Loss of arable land due to soil displacement Soil erosion or degradation Damage to root systems from shifting ground Loss of planted areas due to slope collapse Disruption of planting or harvesting activities Reduced productivity due to soil instability or contamination Other Do not know
	Type of impact_2	select-multiple select-multiple Q202=Irrigation/Transport/Storage infrastructure	Q_206	You reported that the landslide impacted Storage infrastructure / Irrigation infrastructure / Transport infrastructure. What specific impacts did the landslide have on on these assets in the community/ies?	Destruction or blockage of irrigation channels or pipes Damage to reservoirs or water storage tanks Disruption of water flow to agricultural areas Destruction of rural roads or transport routes Damage or collapse of bridges or culverts Inaccessibility to farms or storage units due to debris Structural damage to storage buildings or warehouses Increased cost of repair and debris removal Other Do not know

	Stakeholders' impact severity rating	select-single	Q_207	How do stakeholders rate the overall severity of the landslide's impact?	Minor (limited impact, quickly recoverable) Moderate (some damage, but recovery possible within months) Severe (significant losses, long-term recovery needed) Catastrophic (major destruction)
	Share of farm businesses affected	select-single	Q_208	How widespread was the negative impact of the pest/disease in the community/ies you are reporting on?	Less than 25% of farms affected 26% to 50% of farms affected 51% to 75% of farms affected More than 75% of farms affected Do not know
	Number of farm businesses affected	integer	Q_209	How many farms in the selected community/ies community were affected by this pest event? (Estimate based on your knowledge or community discussions)	N
	Extent of agricultural land negatively impacted (hectares)	select-single check coherence with Q_208 & Q_209	Q_210	Approximately how much agricultural land was affected by the flood? (If unsure, provide your best estimate.)	Less than 1 hectare (less than 10 donums) 1–5 hectares (10 - 50 donums) 6–20 hectares (51 - 200 donums) 21-50 hectares (201 - 500 donums) 51-75 hectares (501 - 750 donums) 76-100 hectares (751 - 1000 donums) More than 100 hectares (more than 1000 donums) Do not know
	Stakeholders already experienced impact on yield	select-single check coherence with Q_207	Q_211	To what extent has the landslide already reduced crop yields of the majority of affected farmers?	No change in yield Slight reduction (less than 25%) Moderate reduction (26–50%) Severe reduction (50%-75%) Complete crop loss (more than 75%) Do not know
	Stakeholders expected impact on yield	select-single	Q_212	To what extent do you expect the landslide to affect crop yields of the majority of affected farmers in the coming x months?	No change in expected yield Slight reduction (less than 25%) Moderate reduction (26–50%) Severe reduction (50%-75%) Complete crop loss (more than 75%)