Research Terms of Reference
Humanitarian Situation Monitoring for the Lebanon response
LBN2403
Lebanon

October 2024
Version 1.0

REACH Informing more effective humanitarian action

1. Executive Summary

Type of Emergency	□	Natural disaster	X	Conflict	□	Other *(specify)*
Type of Crisis	X	Sudden onset	□	Slow onset	□	Protracted

Mandating Agency	*TBD*
IMPACT Project Code	LBN2403

Research Timeframe *Add planned deadline (if more than one cycle, you can use the template of the online product pipeline, available)*	1. Pilot/ training: 2/11/2024	6. Preliminary presentation: 15/11/2024
	2. Start collect data: 05/11/2024	7. Outputs sent for validation:
	3. Data collected: 11/11/2024	8. Outputs published:
	4. Data analysed: 13/11/2024	9. Final presentation: _ _/_ _/_ _ _ _
	5. Data sent for validation: 12/11/2024	

Number of assessments	□	Single assessment (one cycle)
	X	Multi assessment (more than one cycle) *TBD*

Audience & dissemination (who are you informing?)	**Audience**	**Dissemination strategy**
	Humanitarian actors	2-pager 'Situation Overview' report

Stakeholder mapping Please list any actors that will be directly involved in any of the stages of the research	LRC, OCHA

General Objective	Provide timely information on the level of access to essential services and the priority needs of populations remaining in conflict-affected cadasters across Lebanon to ensure effective prioritization of humanitarian responses.
Specific Objective(s)	• Evaluate the impact of the conflict on access to essential services in conflict affected areas such as markets, drinking water, sanitation, healthcare, education, electricity, housing, and communication infrastructures. • Provide timely information on the immediate needs of remaining populations and assess existing humanitarian efforts in conflict affected areas to guide humanitarian actors in prioritizing their response.

	• Assess the movement intentions of those remaining in conflict-affected areas, as well as any protection and safety concerns, they may face.
Research Questions	• How has the conflict affected access to essential services, such as markets, drinking water, sanitation, healthcare, education, electricity, housing, and communication infrastructure in conflict-affected areas? • What are the immediate needs of populations remaining in conflict-affected areas? • How effective are existing humanitarian efforts in addressing needs of populations remaining in conflict-affected areas? • What are the movement intentions of those remaining in conflict-affected areas, and what protection and safety concerns do they currently face?
Geographic Coverage	Conflict-affected areas nationwide
Secondary data sources (optional)	• IOM Flash Appeals (Updated regularly) • OCHA Flash Appeals (Updated regularly)

Population(s) *Select all that apply*	□	Entire population		□	Displaced population as a result of the event
	□	Host community		□	Pre-event displaced population
	X	Populations remaining in conflict-affected areas			

Stratification (if relevant) *Select type(s) and enter number of strata*	X	Geographical #: Conflict-affected areas 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
	[If relevant, add any information that could be relevant regarding the stratification]					

Data collection tool(s) :					
KII	X	Structured (Quantitative)		□	Semi-structured (Qualitative)
Observation tool	□	Structured (Quantitative)		X	Semi-structured (Qualitative)

	Sampling method	**Data collection method**
Structured data collection tool (s) # 1 *Select sampling and data collection method and specify tentative target # interviews* ***If more than 1 structured tool please duplicate this row and complete for each tool.*	X Purposive □ Snowballing □ [Other, Specify]	X Key informant interview (Target #):_ _ _ _ _ X Convoy Observtion Tool (Target #):_ _ _ _ _ □ Individual interview (Target #):_ _ _ _ _ □ Focus group discussion (Target #):_ _ _ _ _ □ [Other, Specify] (Target #): Observation Tool
Expected ouput type(s)	'Situation Overview' - a 2-pager report.	

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	IMPACT - REACH logo and template	

2. Rationale

Lebanon has been facing an escalating crisis since the conflict started in October 2023. Initially concentrated at the borders, the conflict has expanded to numerous regions, including South Lebanon, Beirut, Mount Lebanon and the Beqaa. Since then, the Ministry of Public Health reported over 2,169 conflict-related deaths and 10,212 injuries[1]. The International Organization for Migration (IOM) reported 689,715 displaced individuals, including more than 300,000 children. Affected populations include Lebanese, Syrians, Palestinians and migrants primarily departing from 14 heavily affected districts.

The conflict has resulted in widespread destruction of infrastructure and disruption of basic services. Over 4,000 residential buildings have been destroyed, with an additional 20,000 damaged. Essential services, including 25 water facilities and 37 health centres, have been severely impacted or closed. More than 978 collective centres for internally displaced people (IDPs) are at full capacity, with many displaced individuals forced to live in cars or on the streets [2]. The number of IDPs has exceeded 186,400, with the number expected to increase as the number of Israeli displacement order is covering wider areas. Nevertheless, people remain in affected areas, either unable to leave due to barriers, or not wanting to leave. Those remaining in these areas are the most vulnerable, being the most impacted by the conflict.

Due to ongoing safety and security concerns, both data collection and humanitarian operations are significantly constrained, limiting the scope and effectiveness of actions on the ground. Given the increased vulnerability of people remaining in active conflict zones, it is crucial to assess their priority needs, living conditions, challenges and the extent of any support received. Moreover, it is imperative to evaluate the impact of airstrikes and ongoing conflict on basic services, including their accessibility and availability. This information is vital not only for immediate humanitarian interventions, but also for planning long-term recovery and rebuilding efforts once the conflict subsides. A comprehensive assessment will ensure that interventions are well-targeted, addressing both urgent needs and the foundational services necessary for sustainable recovery.

In response to the conflict escalation, REACH, in collaboration with the Solidarites International, will implement a "Humanitarian Situation Monitoring (HSM) pilot" in crisis affected cadastres in South, Nabatieh, Bekaa and Baalbeck El Hhermel governorates followed by full implementation frequent nationwide monitoring (exact frequency will be discussed). This assessment will leverage global REACH methodologies in emergency contexts.

This HSM will leverage key informant networks and remote sensing to deliver findings on the impact of airstrikes on access to services within the affected cadastres. Within 2 weeks, from the start of data collection to information output production, REACH will be able to provide humanitarian actors with timely information that can be used for response prioritization in a complex volatile context with access constraints.

3. Methodology

A. Assessment of Land Damage Through Remote Sensing

REACH will employ remote sensing techniques to analyze satellite imagery and assess the level of damage caused by the conflict. A REACH GIS officer will compare pre- and post-conflict high-resolution satellite images from sources such as

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[1] OCHA: Lebanon: Flash Update #34 Escalation of hostilities in Lebanon, as of 10 October 2024
[2] OCHA: Lebanon: Flash Update #34 - Escalation of hostilities in Lebanon, as of 10 October 2024

Planet and Maxar's WorldView and GeoEye to evaluate infrastructure damage in the affected areas. This analysis will be supplemented by existing damage assessments from UNOSAT and the CUNY Graduate Centre.

While the assessment of infrastructure damage is dependent on access to accurate infrastructure data, key infrastructure features may still be interpretable directly from the satellite imagery in specific areas. Although specific crop damage will not be the focus, the extent of damage to agricultural lands will be estimated using the delta Normalised Burn Ratio (delta NBR), derived from Landsat or Sentinel data.

By integrating these findings with population density data from WorldPop, displacement data from the International Organization for Migration (IOM), and population data from the Lebanese Red Cross (LRC), REACH will attempt to identify regions with higher concentrations of vulnerable populations. Proxy indicators, such as emissions data, may also be considered to identify populations remaining in heavily damaged areas; however, this data will require triangulation with other sources to ensure accuracy.

B. Key informant interviews through Area of Knowledge (AoK) Approach:

Given the challenges of accessing conflict-affected areas, which may include security risks and restricted mobility, the **Area of Knowledge (AoK)** methodology will be employed. This approach is used in hard-to-reach settings, particularly in conflict zones, where gathering accurate data is essential but traditional survey methods may not be feasible. The AoK methodology allows for a flexible and multi-layered approach to data collection.

Data collection within this approach will be adapted based on the level of access and the security conditions of the targeted areas:

1. Interviewing Key Informants (KIs) from the Area:

The research team will identify and interview KIs who are currently residing in the conflict-affected areas at the time of data collection. These KIs include 1) Local authorities such as Governors, Mayors, and Mukhtars; 2) Community leaders with direct engagement with affected populations; 3) Representatives of NGOs active in the target areas with specific knowledge of the conflict's impact.

These individuals are expected to have in-depth knowledge of the local context, events, and conditions in the targeted areas. Outreach will be conducted through various channels: 1) through **NGOs and Local Actors** that will be contacted with to obtain a list of potential KIs; and 2) through **IDPs in Safer Locations** that are residing in safer areas at time of data collection may also be asked if they are aware of anyone who remains in the affected zones and can provide reliable information.

Data collectors will contact KIs either remotely (via phone) or in person, depending on the access and security level. KIs will be asked to complete a structured survey providing insights into the current situation in the affected areas.

2. Direct Observation and In-Person Interviews:

Where feasible, the research team will employ direct observation and conduct interviews on-site. This is particularly relevant when humanitarian aid convoys enter the conflict-affected areas. This approach could be specifically implemented in the Southern Litani River area, within Bekaa and Baalbeck El Hhermel Governorates, where a de-escalation strategy is being applied. This process involves NGOs following an access clearance procedure, where international agencies coordinate with relevant authorities to ensure that humanitarian workers can safely operate in designated areas, ensuring these locations are not targeted during service delivery. Additionally, several cadasters in other affected governorates may also be targeted, depending on the partnerships established in those areas.

Data collectors from REACH will join convoys delivering assistance to the affected areas, allowing them to observe conditions first-hand and conduct interviews with any individuals encountered in the field. In cases where REACH data

collectors are unable to accompany these convoys, NGOs delivering aid may be asked to fill out surveys on behalf of the REACH team, reporting on the situation based on their observations and interactions with the local population.

3. <u>Interviews with Recently Displaced Persons</u>

IDPs who have recently fled (2 week) the affected areas may retain critical knowledge of what transpired before and during their departure. These IDPs will be asked if they remain informed about the situation in their place of origin. If they have up-to-date knowledge, the research team will conduct interviews with them to gather relevant data.

C. Joint findings validation workshop

Following the analysis of the collected data, REACH, in collaboration with the LRC, ISCG, and the RHSM Core Group, will conduct a joint analysis validation workshop to review and validate the findings. This workshop will ensure that the results are accurate, coherent within the context of the humanitarian situation, and are accepted by all stakeholders. It will also provide an opportunity to confirm that the data-driven conclusions align with on-the-ground realities and can be effectively used to inform response strategies Group.

Primary Data Collection:

<u>Cadastre Sampling Strategy:</u>

To effectively monitor the humanitarian situation amid the ongoing conflict, cadasters will be selected based on two primary criteria:

- o **Population Density Score:**

The population density score will be calculated using three key indicators: the IDP population (based on IOM DTM data), the remaining population in affected areas (from Lebanese Red Cross data), and overall population density (from GHS data). The scoring criteria for IDP population and remaining population are as follows:

- Low populated areas (≤ 1,000): Score = 1
- Moderately populated areas (1,001 - 10,000): Score = 2
- Highly populated areas (> 10,001): Score = 3

- o **Damage Levels of Cadastres:**

Damage levels will be assessed using remote sensing data, in conjunction with the Beirut Urban Lab interactive map and ACLED data, to provide real-time insights into conflict intensity. Additionally, damaged buildings identified through SAR analysis will be used to categorize the cadasters as follows:

- Low Affected Areas: Incidents > 0 and damaged buildings between 1 and 50
- Moderately Affected Areas: Incidents between 11 and 20 and damaged buildings between 50 and 100
- Highly affected Areas: Incidents > 20 and damaged buildings > 100

The below table provide a detailed Scoring Criteria:

	Indicator	Data source	Scoring			
			0	**1**	**2**	**3**
Population Density Score	**IDPs**	IOM (R52)	0	<=1000	1001 - 10000	>10001
	Remaining individuals	LRC	0	<=1000	1001 - 10000	>10001
	Population density	Calc. from GHS	0	<=1000	1001 - 10000	>10001
Damage level Score	**Damaged buildings**	CUNY	0	1-50	51-100	>100
	ACLED incidents		0	1-10	11-20	>20

Final scores are calculated as the average of all criteria. For the pilot phase, cadasters will be selected based on their final scores. Priority will be given to cadasters that are highly affected (scoring above 6) and moderately affected (scoring 6)

Key Informant Interviews (KII) Sampling:

Once cadasters are selected, the number of Key Informant Interviews (KIIs) to be conducted will be proportional to both the population density of each area and the number of Key Informants we can realistically secure for data collection. However, as an initial plan, the KIIs will be distributed as follows:

- o **More than 9000 residents**: 5 Key Informant Interviews.

- o **Less than 9000 residents**: 3 Key Informant Interviews.

Data Collection Method:

If data collection is conducted remotely with individuals residing in the affected areas at the time of the assessment, interviews will be carried out via phone using contact information from the Governorate's Emergency Unit. Remote data collection, conducted by the Assessment Officer and Field Officers, will take place over a span of four days. Phone calls will be made using a trusted phone number provided by the national crisis emergency unit, which is familiar to the local population, acknowledging the sensitivity of the situation in the assessed areas across Lebanon. This phone number will be used not only to schedule interviews with key informants but also to conduct the interviews themselves. The REACH Senior Field Officer will ensure smooth communication and liaising with the Lebanese Red Cross (LRC) and the corresponding Governor's office to facilitate access to Key Informants (KIs) as necessary.

For data collection involving IDPs who have recently moved to safer areas and possess updated knowledge of the situation in their places of origin, interviews will be conducted in person. In cases where humanitarian convoys are leveraged to access affected areas, data collection will also include direct observation in addition to interviews with individuals present on-site.

Data Collection Tool:

A standardized quantitative KII tool will be utilized to collect data on the communities' access to various services such as markets and food availability, drinking water sources, healthcare services, education facilities, electricity supply, housing conditions, and communication infrastructures (e.g., mobile networks, internet). KIs will also identify priority needs, barriers to services, movement intentions, and recent changes in service access in each of the assessed cadastres.

An additional observation tool will be developed to be implemented during convoys. This tool will enable the assessment of damage levels across various infrastructures within the cadasters.

The questionnaire will be administered via Kobo and designed to be completed within 20 minutes to ensure concise and efficient data collection. Where applicable, study questions will be derived from REACH's standardized KI indicator bank and will be adapted to reflect the local contexts in consultation with sector-specific stakeholders. Given the dynamic nature

of the conflict settings, the KII tool will be flexible. Modifications may be made to future data collection cycles to reflect changing conditions on the ground and emerging information needs.

Data Analysis Plan:

The data will be analyzed using an **aggregation approach**, where responses will be aggregated at the cadastral level. This means that each cadastral unit will have only one response value. A response will be considered **positive** if at least 40% of the responses (or 2 out of 5 responses) are positive.

Index Construction:

Three key indexes will be calculated to assess the overall situation in each cadastral unit:

1. **Damage Index**: This index reflects the proportion of reported damages across various sectors within the cadasters, as reported by the KIs. It includes information from multiple sectors to provide a comprehensive view of the damage in the area.

2. **Access to Services Index**: This index measures the proportion of access to essential services within the cadasters, including Water, Sanitation, and Hygiene (WASH), education, health, and markets. It highlights the level of availability and access to these critical services for the local population.

3. **Accountability to Affected Population Index**: This index evaluates the extent of access to humanitarian assistance, taking into account disruptions in access to aid and the availability of assistance services. This is critical to understand the overall support available to affected communities.

Calculation of Subindexes and Final Indexes:

As the first step, subindexes are calculated for each sector within each index type, using multiple questions specific to each sector. These subindexes serve as key indicators, reflecting the conditions on service accessibility and functionality within each sector.

- Example: For the **education subindex** within the Access to Services Index, questions related to the availability and accessibility of education are utilized, including:
    1. "What proportion of school-aged children currently have regular access to education services?"
    2. "For those without access to in-person education services, are online learning options available to them?"

Each subindex is calculated by selecting the **maximum value** from the data corresponding the selected of questions.

After calculating the subindexes, the final **index values** for each of the three main indexes (Damage, Access to Services, and Access to Humanitarian Assistance) are determined by computing the **mean** of all the subindexes. This aggregation of subindexes provides a comprehensive score that reflects the overall status in each cadastral unit across the assessed sectors.

Limitations:

As the study employs a non-random sample approach, the findings will not be representative of the total population and cannot be relied upon to establish recurrence patterns or provide exact population figures. However, this approach will be used for assessing the severity of the situation, identifying hotspots, and determining the key drivers of the crisis. It is important to keep this limitation in mind when interpreting the data collected through this method. Additionally, the dynamic nature of conflict zones means that rapidly changing conditions could render collected data outdated quickly, limiting its relevance and usefulness over time. Additionally, remote data collection poses challenges, as it restricts in-depth, on-the-ground assessment, particularly in areas where access is unpredictable due to security risks. Limited opportunities for direct observation and in-person interviews can reduce the richness and reliability of the data collected. Small sample sizes may

not capture the full range of experiences or reflect the diverse conditions, especially in densely populated areas. Furthermore, selection bias may arise if KIs are primarily sourced through NGOs or local actors, who may have vested interests or incomplete perspectives on the situation. Interviews with internally displaced persons (IDPs) also carry the risk of recall bias, as their memories of the conflict zones they fled may be influenced by trauma or time.

To mitigate these limitations, several strategies can be applied. First, frequent data collection cycles or real-time updates could help ensure data remains relevant in rapidly changing conflict settings. To balance the limitations of remote data collection, integrating satellite imagery and proxy indicators with remote interviews can provide complementary data sources, enhancing overall reliability. Expanding the number of KIs per cadaster and diversifying the sources from which KIs are selected, such as including independent local actors, can help reduce selection bias and ensure broader representation. Additionally, training data collectors to recognize and minimize recall bias during interviews with IDPs, along with triangulating their reports with other data sources, can help ensure more accurate findings.

Country main research focal point:

4. Key ethical considerations and related risks

The proposed research design meets / does not meet the following criteria:	*Yes/ No*	*Details if no (including mitigation)*
… **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)?	No	The questions will be framed in a way that prioritizes the emotional well-being of both respondents. In addition, data collectors will undergo thorough training on best practices for asking questions in a sensitive and respectful manner, ensuring that participants feel comfortable and supported throughout the process.

… Does not involve **data collection with children** (i.e. anyone less than 18 years old) or **other vulnerable groups** e.g. persons with disabilities, victims/ survivors of protection incidents, etc? If yes, please clarify the mitigation per each group.	No	When collecting data from vulnerable groups such as IDPs and conflict survivors, there is a risk of traumatization and emotional distress. To mitigate this, data collectors will undergo training on referral pathways and protection protocols, ensuring respondents have access to support services if needed.
Follows IMPACT SOPs for management of **personally identifiable information**?	Yes	

5. Data Management Plan

Administrative Data		
Research Contacts		
Data Management Plan Version	*Date: 14/10/2024*	*Version: 1*
Kobo Access Rights		
Account Name(s)	Person(s)	Type of Kobo access