Guidelines for Rapid Environmental Impact Assessment in Disasters

Version 5 - 2018

Credit: Christophe Illemassene/OCHA

2018 technical update prepared by Moritz Hauer for the Coordination of Assessments for Environment in Humanitarian Action Initiative in consultation with Charles Kelly

Originally prepared by Charles Kelly with support from Benfield Hazard Research Centre, University College London & CARE International

2018 update funded by US Agency for International Development

Originally funded by:

US Agency for International Development

United Nations Environment Programme / United Nations Office for the Coordination of Humanitarian Affairs Joint Environment Unit

Royal Norwegian Ministry of Foreign Affairs

Acknowledgements

This publication and the 2018 technical update were made possible through support provided by the US Agency for International Development's (USAID) Bureau for Democracy, Conflict and Humanitarian Assistance. The opinions expressed herein are those of the author(s) and do not necessarily represent the views of USAID or the original donors including the United Nations, the Government of Norway, or CARE International.

The 2018 technical update (version 5) was led by Moritz Hauer, in close consultation with the author Charles Kelly, and with contributions from a range of individuals including Mandy George, Erika Clesceri, Emilia Wahlstrom, Michael Minkoff, Raymond Von Culin, Anita Van Breda and Judy Oglethorpe. The update was made as part of the Coordination of Assessments for Environment in Humanitarian Action "Joint Initiative", a collaborative effort between USAID, the United Nations Refugee Agency (UNHCR), World Wildlife Fund (WWF), the United Nations Environment Programme / United Nations Office for the Coordination of Humanitarian Affairs Joint Environment Unit (JEU), Swedish Civil Contingencies Agency (MSB), Norwegian Refugee Council (NRC) and the International Union for Conservation of Nature (IUCN). The work of InterAction in developing training materials for the REA also led changes of the REA over time. The Joint Initiative updated and developed environmental assessment tools and methodologies for humanitarian action between 2016 – 2018, with the goal of sustaining and improving the lives and livelihoods of crisis affected populations through the integration of environment in humanitarian relief operations.

The original 2003 version was prepared with the input from a range of individuals and organizations. These included Mario Pareja, John Twigg (Benfield Hazard Research Centre), Sigrid Nagoda (CARE Norge), Patricia Charlebois, Louise Sperling (The International Center for Tropical Agriculture, or CIAT), Anshu Sharma (SEEDS), Walter Knausenberger, Becky Myton, Gaspard Bikwemu, Franklin J. McDonald, Debbie Williams and Julio Galvez Tan. The development of the REA also profited from extensive work by UNHCR on refugees and the environment, led by David Stone, and the development of a UNHCR Handbook for Environmental Assessment by Ron Bisset, formerly of Benfield Hazard Research Centre, provided input into early REA drafts. Suggestions and comments on the Rapid Environmental Assessment (REA) were also received from staff at Action Aid, The British Red Cross, CARE Norway, CARE US, Children's Aid Direct, Church World Service, Cooperative Housing Foundation, The UK Department for International Development, European Commission's Civil Protection and Humanitarian Aid Operations, InterAction, The International Federation of Red Cross and Red Crescent Societies, Mercy Corps International, Nature Club, Organization of American States, Save the Children US, The Sphere Project, USAID, VOICE, World Vision, and WWF.

Use and Structure of the REA

The *Guidelines for Rapid Environmental Impact Assessment in Disasters* (REA) provide a means to define and prioritize potential environmental impacts in disaster situations. The *Guidelines* are composed of four main parts and six supporting Annexes. The main parts include an **Introduction to the REA**, and modules on **Organization** and **Community Level Assessments**, as well as **Consolidation and Analysis** of assessment results. The Annexes include information sources, forms used in the assessment and information useful in managing the REA process.

Good planning and preparation are important to a rapid execution of the REA. It is strongly recommended that the *Guidelines* **Introduction** be fully reviewed before an assessment. At a minimum the **Organization Level Assessment** and **Consolidation and Analysis** modules should be used in any disaster impact assessment, while completion of the **Community Level Assessment** is strongly recommended.

The *Guidelines* provide a comprehensive description of the REA process together with background information on key tasks needed to complete the assessment. A *Guidelines*-based REA can be conducted as a stand-alone exercise or as part of, and using information collected during, other standard disaster impact assessments. When done as part of another type of assessment the REA process should not result in any significant increase in workload in the field or during analysis.

Module	Outcomes
Organization Level Assessment	Identification of critical environmental issues related to the disaster from the perspective of organizations providing relief and recovery assistance.
Community Level Assessment	Identification of critical environmental issues related to the disaster from the perspective of communities and groups affected by a disaster.
Consolidation and Analysis	Identification and prioritization of environmentally-linked issues involving significant immediate threat to lives, well-being and the environment.

Executive Summary

The *Guidelines for Rapid Environmental Impact Assessment in Disaster* (REA) is a tool to identify, define, and prioritize potential environmental impacts in disaster situations. A simple, consensus-based qualitative assessment process, involving narratives and rating tables, is used to identify and rank environmental issues and follow-up actions during a disaster. The REA is built around conducting simple analysis of information in the following areas:

- The general context of the disaster/conlict.
- Disaster/conlict related factors which may have an immediate impact on the environment.
- Possible immediate environmental impacts of disaster/conlict agents.
- Unmet basic needs of disaster/conlict survivors that could lead to adverse impact on the environment.
- Potential negative environmental consequences of relief operations.

The REA is designed for natural, technological or political disasters or crises, and as a best practice tool for effective disaster assessment and management. The REA does not replace an environmental impact assessment (EIA), but fills a gap until an EIA is appropriate. The REA can be used from shortly before a disaster up to 120 days after a disaster begins, or for any major stage-change in an extended crisis. Since the design of the REA in 2003, it has been used in a range of ways, from a compressed and rapid version in the first days of a disaster to a more thorough process involving many stakeholders that has overlapped with the recovery stage of a large-scale disaster. The tool is flexible and adaptable to different scenarios.

The REA does not provide answers as to how to resolve environmental problems. It does provide sufficient information to allow those responding to a disaster to formulate common sense solutions to most issues identified. Where solutions are not evident, the REA provides sufficient information to request technical assistance or to advocate action by a third party. The REA contributes to activity and environmental monitoring and evaluation (M&E) but does not replace a formal M&E system.

The REA does not necessarily require expert knowledge. Primary REA users are people directly involved in disaster response operations, with a basic knowledge of the disaster management process but no background in environmental issues. Although the REA can be completed without expert knowledge, a certain level of environmental expertise and experience helps with the analysis and consolidation of the assessment findings. The REA process can also be used by disaster survivors with appropriate support. The best results are expected to come when the REA is completed with structured input from disaster affected people and organizations providing relief assistance. Sections of the REA can also be used for needs assessment and environmental impact screening during relief project design and review.

The REA guidelines and background materials can be accessed at

https://ehaconnect.org/resource/rea/

Acronyms

BMEG	Building Material Selection and Use: An Environmental Guide
CEDRA	Climate Change and Environmental Degradation Risk and Adaptation Assessment
EHA	Environment and Humanitarian Action
EIA	environmental impact assessment
FAO	Food and Agriculture Organization
FEAT	Flash Environmental Assessment Tool
FRAME	Framework for Responding, Assessing, Monitoring and Evaluating the environment in refugee-related operations
GIS	geographic information systems
GRRT	Green Recovery and Reconstruction Training
HPC	Humanitarian Programme Cycle
IASC	Inter-Agency Standing Committee
IFRC	International Federation of Red Cross and Red Crescent Societies
IOM	International Organization for Migration
IPCC	Intergovernmental Panel on Climate Change
IUCN	International Union for Conservation of Nature
JEU	UN Environment/Office for the Coordination of Humanitarian Affairs Joint Unit
LLIN	long-lasting insecticide-treated nets
M&E	monitoring and evaluation
MSB	Swedish Civil Contingencies Agency
NEAT	Nexus Environmental Assessment Tool
NGO	non-governmental organizations
NRC	Norwegian Refugee Council
OCHA	Office for the Coordination of Humanitarian Affairs
PCNA	Post-Conflict Needs Assessment
PDNA	Post-Disaster Needs Assessment
QSAND	Quantifying Sustainability in the Aftermath of Natural Disasters
REA	Rapid Environmental Assessment
UNHCR	United Nations Refugee Agency
USAID	US Agency for International Development's
WASH	water, sanitation and hygiene
WFP	World Food Programme
WHO	World Health Organization
WWF	World Wildlife Fund

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Overview of the process

The *Guidelines for Rapid Environmental Impact Assessment in Disasters* (REA) process involves completing three modules according to the specific tasks indicated below, preferably though a group-based process. The REA process should begin with a review of the material contained in the **Introduction to the REA** section of the *Guidelines* and proceed through the three modules summarized below.

MODULE ONE: ORGANIZATION LEVEL ASSESSMENT (ANNEX B)

1. Collect background information and identify assessment participants.
2. Draft three paragraphs describing the disaster for Section One.
3. Complete Section One covering the **Context Statement**.
4. Complete Section Two covering **Factors Influencing Environmental Impacts**.
5. Complete Section Three covering **Environmental Threats of Disasters**.
6. Complete Section Four covering **Unmet Basic Needs**.
7. Complete Section Five covering **Negative Environmental Consequences of Relief Activities**.
8. Rank issues by importance within each section as indicated in the *Guidelines*.

Note that Sections Two to Five can be completed in break-out sessions.

MODULE TWO: COMMUNITY LEVEL ASSESSMENT (ANNEX C)

1. Decide on how information on community perceptions of the environment will be collected.
2. If a questionnaire or focused discussion method is used, plan, test and administer the method in communities.
3. Compile the results of the community level assessment into usable form (a report or completed questionnaire) for each community.
4. If data from other assessments are used, ensure that all the information needed for this module is collected or extracted from existing assessment reports.
5. Complete the Community Assessment Summary Form based on the information collected or drawn from other assessments.
6. Rank the issues by relative importance within each section of the form.

MODULE THREE: CONSOLIDATION AND ANALYSIS (ANNEX D)

1. Include three to five issues from each section of the Organization and Community Level Assessments on the Issues Consolidation Table and consolidate the issues into a single list.
2. Place the single list of issues on the Issues and Actions Table and identify critical issues and actions.
3. Prioritize these issues and actions according to the impact on life, livelihoods and environmental hierarchy.
4. Review the potential environmental impact of the actions and make changes are appropriate.

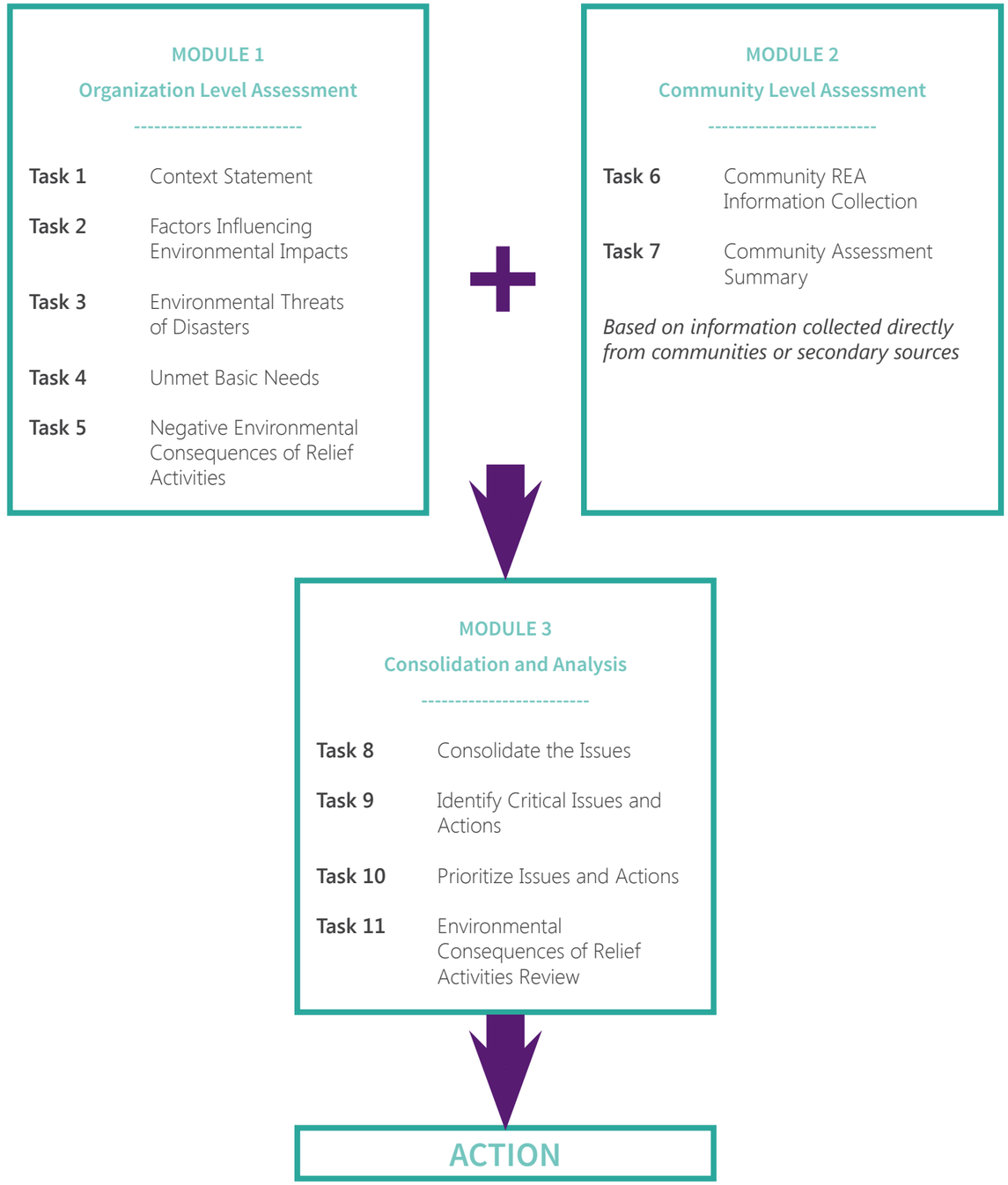


Figure 1. REA Process Overview

The REA guidelines and background materials can be accessed at

https://ehaconnect.org/resource/rea/

Introduction to the REA

Background

There is a strong link between environmental damage and disasters. Natural, anthropogenic and technological hazards (or a combination of these1) often directly damage the environment, causing subsequent harm to the lives, livelihoods and the well-being of affected populations. The environment can also be damaged by humanitarian operations themselves or in pursuit of basic needs by disaster affected people. Natural resource depletion, environmental pollution and increased natural hazard risk are often the consequences of failing to give due consideration to environmental concerns throughout disaster response and recovery. There is growing recognition that environmental considerations need to be consistently and appropriately addressed in humanitarian action for effective, holistic relief and recovery in post-conflict and post-disaster situations. Identifying, evaluating and responding to critical environmental issues during a disaster are key to effective disaster response and recovery operations.

In normal, non-disaster situations, an environmental impact assessment (EIA) is used to identify possible environmental impacts and mitigation measures. However, as indicated in the adjacent box, a disaster context is quite different from normal conditions, making an EIA inappropriate.[2]

Contextual Differences:

Normal & Disaster Environmental Assessments

Normal Conditions	Disasters
• Considerable lead time	• Sudden onset
• Legal requirement often exists (country &/or donor)	• Rarely a legal requirement but some donors may ask for it
• Deliberate & pro-active	• Reactive
• Takes time to be thorough & extensive: comprehensive data collection	• May need to be partial in coverage
• "No project" option is a possible outcome	• "No project" outcome is not an option
• Location chosen	• Unpredictable location
• Duration planned	• Uncertain duration
• Beneficiary population identifiable & static	• Beneficiary population are heterogeneous & dynamic
• Environmental goals may be made compatible with socio-economic ones	• Priority given to "life-saving" activities sometime difficult to reconcile with environmental goals
	• Need to link environmental data with HPC

Source: United Nations Refugee Agency (UNHCR) and CARE International

Most governments and humanitarian assistance organizations specifically allow for not doing an EIA in emergencies, recognizing that a full EIA could considerably slow emergency assistance.

These REA Guidelines fill a gap in the range of tools available to assess environmental impacts during disasters. The REA is designed to provide input on environmental conditions in disaster situations in a way that is convenient for the time compressed nature of disaster response. The tool provides crucial environmental input to the various elements of the Humanitarian Programme Cycle (HPC), where relevant, and thus, strongly contributes to the integration of environmental concerns into humanitarian action.

1. Different types of disasters are discussed on page 8 (section on applicability)
2. For further information on environmental impact assessments, see www.iaia.org

The REA in the Humanitarian System

Similar to other disaster response assessment tools, the REA is intended to be used during the critical disaster response period, normally within 120 days after a trigger event. It can be used shortly before a disaster when a warning is first received. As such, it primarily contributes to the needs assessment and analysis phase of the HPC[3], and its findings provide input for strategic response planning.

The REA can also contribute to the monitoring and evaluation (M&E) of relief activities and environmental impacts. The REA provides a baseline on environmental conditions, and updates provide information useful to monitor progress toward objectives and changes in impact on the environment. This, in turn, can be used to identify environmental issues to be included in the follow-up to emergency interventions. As part of emergency response preparedness, preparations for the REA (such as trainings and collection of background information) can be made to ensure a faster REA process.

The REA is one of several initiatives to improve the linkages between sustainable environmental management and disaster response. These include:

- Environment and Humanitarian Action (EHA) Connect – an online toolkit connecting environment and humanitarian action (www.ehaconnect.org) developed under the Coordination of Assessments for Environment in Humanitarian Action and run by the UN Environment/ Office for the Coordination of Humanitarian Affairs (OCHA) Joint Unit (JEU).
- The JEU's Environment and Emergencies Centre: http://www.eecentre.org
- Environment in Humanitarian Action page on Reliefweb: http://reliefweb.int/topics/environment-humanitarian-action
- Environment in Disaster Management website run by World Wildlife Fund (WWF) (http://envirodm.org/) including a help desk.

EHA CONNECT

EHA Connect is a digital tool spanning the humanitarian-environment nexus. It allows environmental actors to get involved in the disaster management space and humanitarian actors to mainstream environmental considerations in disaster preparedness, as well as crisis response and recovery.

For extensive guidance on mainstreaming environment in humanitarian action and to support the outcomes of the REA, see www.ehaconnect.org

The REA is one of various tools that exist to assess both the environmental consequences of a crisis as well as those caused by humanitarian action. Choosing what tool to use will depend on various criteria including the type of disaster, the stage at which the assessment is conducted, the sector or type of project or intervention being assessed, the human and financial resources available and level of access to environmental expertise. For a list of other tools and their uses see the section on Assessments in EHA Connect. In addition to these tools, there are various sector-specific tools to assess environmental impact and improve the integration of environmental issues into program or project design. See Cluster specific pages on EHA Connect for more information.

3. See the Inter-Agency Standing Committee (IASC) Reference Module for the Implementation of the HPC, and here for an introduction to the HPC. Guidance on linking environmental considerations and the HPC can be found on EHA Connect.

Updating the REA – Version 5 - 2018 Update

The REA was originally developed in 2003 as a collaborative effort of the Benfield Hazard Research Centre, University College London, CARE International and JEU and funded by USAID, the JEU, the Royal Norwegian Ministry of Foreign Affairs and CARE International. The original REA development was guided by an international advisory board and in collaboration with over twenty non-governmental organizations (NGOs) and international organizations.

The 2018 update was funded by USAID and updated as part of the "Joint Initiative for the Coordination for Assessments for Environment in Humanitarian Action" (http://www.eecentre.org/assessments/). It was guided by extensive stakeholder consultation of both environment and humanitarian actors conducted under the Joint Initiative.

The 2018 Version 5 adjusts the REA to reflect changes that have taken place in the humanitarian system over the years since the tool was originally designed. The updates are based on research conducted by the Joint Initiative evaluating the use of the REA since 2003, as well as consultation with organizations and individuals who have used the methodology. The main updates in this version include:

- Removing outdated or less used sections, including the previous Module 4 (Green Review of Relief. Procurement). As organizations often follow their own green procurement methods, this module has been reduced to shorten the time needed to complete the REA.
- Updating modules to consider changing climatic conditions and risks.
- Updating module descriptions, rating forms and tables in the Annex, including the latest Sphere Standards (2018).
- Linking the REA to the HPC and existing platforms and tools for environment and humanitarian action, including the Flash Environmental Assessment Tool (FEAT), the Nexus Environmental Assessment Tool (NEAT+), the Framework for Responding, Assessing, Monitoring and Evaluating the environment in refugee-related operations (FRAME) toolkit and EHA Connect to place the REA in a broader context of tools, guidance and resources on environment and humanitarian action.
- Adding guidance on sharing the assessment results, accountability to affected people, the REA and disaster risk reduction.
- Updating existing resources and links throughout the document.
- Providing links to the different Annexes for easier navigation.

The REA guidelines and background materials can be accessed at

https://ehaconnect.org/resource/rea/

Credit: OCHA

Concepts and Outcomes

The REA is based on the concept that identifying and incorporating environmental issues into the early stages of a disaster response will make relief activities more effective and accountable and lay a foundation for a more comprehensive and speedy rehabilitation and recovery. The process and structure of the REA recognizes that those who respond to disasters have little time for in-depth research and are not likely to be environmental specialists.

Under these conditions, the first step in effective response is to identify and define the nature and importance of the challenges faced in dealing with the impact of a disaster. This is what the REA does: identify, frame and prioritize environmental issues in such a way as to allow the negative impacts to be minimized or avoided during the immediate response to a disaster.

A completed REA identifies critical environmental issues. Some issues arise from conditions existing before the disaster. Others are new to the location or population experiencing the disaster. The nature and impact of environmental issues will change during and after the disaster and new issues may arise. For these reasons, the output from a REA is not a static assessment but one to be reviewed and revised (and results shared) throughout the post-disaster period.

The REA **does not provide answers as to how to resolve the critical issues** identified in the assessment. A completed REA **does provide sufficient information to allow those involved in responding to a disaster to formulate common sense solutions** using information otherwise available to address, mitigate or avoid the issues raised in the assessment.

Where common sense solutions are not evident, or issues are complex or unclear, a REA **provides sufficient information to request appropriate technical assistance or advocate appropriate action** by a third party. Technical assistance can be secured by posing specific questions to specialists or developing simple terms of reference for on-site specialized technical or material assistance. Sources of technical advice and assistance are identified in **Annex A**. Technical assistance is often available locally and this source should not be overlooked.

The REA directly contributes to various elements of the HPC, including needs assessment and analysis as well as strategic response planning. The findings of the REA can also be used to inform resource mobilization, guide implementation practices and inform M&E.[4]

The Environment Defined

DEFINITION

The REA uses the following definition of the environment, originally developed by the Sphere Project (www.sphereproject.org/):

> *The term "environment" encompasses all natural and human-made conditions and processes that surround and influence living things through physical, chemical and biological factors. These factors determine the life, development and survival of all organisms. The environment includes natural resources that play an essential role in support of human life. Examples are clean water, food, and materials for shelter and livelihood generation.*

4. Please refer to EHA Connect for detailed guidance on linking environmental considerations and the HPC.

The REA Process

The REA process is designed to:

1. Collect information needed to assess environmental impacts,
2. Provide simple steps for analyzing this information to identify important issues, and
3. Review relief activities to reduce the potential negative environmental impacts of emergency assistance.

The REA process focuses on the perceptions and concerns about environmental issues and disaster-environment linkages at two levels. The first level targets organizations involved in responding to a disaster. This level includes government, non-government and private organizations that provide external assistance and support in response to a disaster.

The second level targets communities and groups within communities which are affected by a disaster. Experience shows that those providing assistance after a disaster and those affected directly by a disaster often have different perceptions of the impact of a disaster and corresponding relief needs. Identifying organization and community perceptions separately and then consolidating these environmental concerns into one set of issues and actions will improve the efficiency of relief efforts by diminishing the perception gap between relief providers and disaster affected populations.

Approach

The REA uses a simple, guided, consensus-based qualitative assessment process incorporating focus group discussions, rating tables and action lists to develop an overall assessment of critical environmental issues and follow-up actions during a disaster. The REA does not call for any quantitative data collection, recognizing that this is both time consuming and operationally difficult in most disasters.

However, quantitative data should be collected and used whenever possible if data collection and use will not slow the overall relief effort. In addition, a clear documentation of the REA process and collection of environmental data during a disaster will make an EIA for post-disaster recovery planning easier and more accurate.

Assessments Modules

A complete REA is accomplished through three modules. The first two modules, an **Organization Level Assessment** and a **Community Level Assessment**, are designed to collect the basic information necessary to identify critical environmental issues. These modules focus on five topical areas:

1. The general context in which the disaster is taking place,
2. The identification of disaster related factors which may have an immediate impact on the environment,
3. The identification of possible immediate environmental impacts of disaster agents,
4. The identification of unmet basic needs of disaster affected populations that could lead to an adverse impact on the environment, and
5. The identification of negative environmental consequences of relief operations.

Information on the first two topical areas establishes the overall context of disaster-environment interactions. The next three topical areas focus on issues which have direct links to assistance operations. These topical areas are discussed in greater detail in the **Organization Level Assessment** module described below.

The information collection process differs between the two modules. The **Organization Level Assessment** uses a combination of narrative and rating tables, which correspond closely to the five topical areas summarized above.

The **Community Level Assessment** can use one of several sources, including a specifically designed questionnaire, focused discussions, or information collected during other types of assessments (e.g., a food security assessment). The tasks to complete these two assessments are described in more detail in the respective modules below.

It is possible to complete a rapid environmental impact assessment using only the **Organization** or the **Community Level Assessment** module. Using only the **Organization Level Assessment** is conceivable when there is no opportunity to collect information from communities, as is likely in rapid onset disasters. Given this possibility, the **Organization** level module also provides basic guidance on how to link assessment outcomes to immediate relief actions.

It is strongly recommended that if only an **Organization Level Assessment** is initially done, a **Community Level Assessment** should be completed as soon as possible to avoid any gaps between organization and community level perceptions of environmental issues and how these issues should be addressed.

On the other hand, sometimes only a **Community Level Assessment** can be completed and analyzed. However, limiting the REA to only community level input presumes those organizations (and their personnel) responding to a disaster do not have their own perceptions of environmental issues and will completely accept the community perceptions. The reality is that organizations (and especially their funding sources) usually hold strong views on the nature and modalities of relief assistance. Conducting both **Organization** and **Community Level Assessments** ensures that assistance providers and disaster affected people are, at the least, not working at cross-purposes.

The consolidation and analysis of issues identified in the assessment occurs in the two assessment modules and through a separate **Consolidation and Analysis** module. In the **Organization Level Assessment**, a preliminary ranking of issues occurs as the result of the issue rating process. In the **Community Level Assessment**, a preliminary ranking of issues occurs through the process of extracting information from a questionnaire, reports on focused discussions or from other assessment reports.

The **Consolidation and Analysis** module moves the analysis process further by providing simple procedures to help consolidate and prioritize the issues identified in the assessments. The consolidation and analysis process does not identify specific solutions to the issues identified but does provide a simple approach to initiate the process of addressing the issues identified.

A number of sources of information can be used to support the completion of the rapid environmental impact assessment. Annexes to these ***Guidelines*** include sources of information on environmental and disaster issues (Annex A), the REA's assessment forms and tables (Annex B – D) as well as general guidance on managing group meetings and the REA process (Annex E & F).

It is important that users fully complete the assessment process before taking any significant action to address identified environmental or disaster-related problems. The REA is an incremental process designed to draw together many diverse aspects of disaster-environment linkages. The most significant issues requiring highest priority action will not be fully evident until all the assessment results are consolidated and analyzed.

Good Practice and Standards

The REA has been developed as a good practice for rapid environmental impact assessment in disasters. The REA is expected to evolve to take into account changes in the way disasters are managed and new information sources and procedures.

The REA process has also been linked, where appropriate, to the minimum humanitarian assistance standards described in the Sphere Handbook (see http://www.sphereproject.org/) as well as the Core Humanitarian Standard on Quality and Accountability.[5] However, completing the REA is not dependent on Sphere or the Core Humanitarian Standards.

The principle of "do no harm" obliges humanitarian agencies to prevent and mitigate any negative impact of its actions on affected populations. Environmental degradation, including natural resource depletion, environmental pollution, land degradation, deforestation etc., can however pose further threats to disaster-affected populations. Thus, a healthy environment positively contributes to the effectiveness and accountability of humanitarian action.

Credit: OCHA/Vincent Tremeau

The REA and Disaster Risk Reduction

The information collected through a REA can be used to identify options to reduce disaster risks, particularly through environment - or ecosystem-based approaches. The REA input is likely most useful in planning and implementing recovery activities, which usually involve significant use of natural resources. The Green Recovery and Reconstruction Training (GRRT) Toolkit (http://envirodm.org/green-recovery) provides additional details on how to integrate REA results into recovery efforts, as does the EHA Connect Recovery section (https://ehaconnect.org/crisis-response-recovery/recovery/).

5. The importance of minimizing negative impacts of humanitarian activities on disaster affected communities and their environment is stipulated in the Core Humanitarian Standard Commitment 3. In addition, Commitment 9 emphasises the need for a responsible management of natural resources, with due consideration to the environmental impact of local and natural resource use.

Applicability

The REA is designed for use in all types of disaster situations, including those triggered by natural, technological and political events or hazards. The REA supplements specific technical assessments and actions initiated following a technological disaster, such as those developed using the Flash Environmental Assessment Tool (FEAT) process.

UNHCR has developed information and assessment tools for considering environmental impacts in refugee situations. These materials are useful for internal displacements and are a valuable supplement to the REA.[6]

In political disasters, such as a civil war, there may be considerable periods when the affected populations are in disaster-like conditions. The REA is most useful when there is a significant rapid change in these conditions, such as a change in the mode of conflict, livelihoods or mechanisms of assistance. For instance, the REA process would be extremely useful in developing a rapid response to assist returning populations following a peace agreement ending a civil war.

However, an assessment of rapid changes in a long-term situation needs to take into consideration that there may be overlapping short-and long-term environmental issues. Some of these issues can be addressed through immediate relief efforts, but others need more substantial long-term solutions. These longer-term solutions need to be based on a more detailed environmental impact assessment than that provided in a REA.

The results of the REA can inform more detailed or longer-term recovery or development assessments, such as a Post-Disaster (Environmental) Needs Assessment (PDNA (https://www.gfdrr.org/en/post-disaster-needs-assessments) or Recovery and Peacebuilding Assessment (RPBA) (http://www.worldbank.org/en/topic/fragilityconflictviolence/brief/recovery-and-peace-building-assessments) that helps to integrate environmental needs within early recovery programming to develop a more comprehensive and sustainable recovery strategy.

The REA can be used in multiple or concurrent disasters. In these situations, there is a need to differentiate between the impacts of the different disasters, and corresponding different relief options and operations. For instance, the human and environmental impacts of an earthquake and a drought are different. Addressing environmental issues arising from each disaster will occur in different time frames and require different types of assistance. These differences should be taken into account in the assessment process, and in the process of linking actions to issues identified during the assessment.

The REA can be used to provide input into an M&E system (as discussed further below). It also can be used as the basis for an environmental impact checklist in relief project design and as a basis for reviewing plans and operations. This process is best done in collaboration with the persons designing or running the relief operation.

The REA can be modified to reflect the typical disasters and relief and recovery modalities of a specific region or country. Such modification should focus on:

- Changing terminology to reflect local disaster risk management approaches.
- Eliminating unneeded items from various rating tables.
- Focusing the community assessment process on local conditions and established assessment procedures.
- Integrating the REA process and analysis into other routinely done disaster assessment procedures or protocols.

Significantly changing the REA process or eliminating modules is not recommended.

6. See http://www.unhcr.org/uk/protection/environment/4a97d1039/frame-toolkit-framework-assessing-monitoring-evaluating-environment-refugee.html

When to do a REA

The REA is designed for use during the critical disaster response period, from when a warning of a disaster is first received until conditions have stabilized, normally within 120 days after a trigger event. This 120-day period provides time to begin an EIA as part of the recovery and rehabilitation process. The REA, besides identifying immediate environmental factors relevant to the relief operations, provides data and insight that can be incorporated into the EIA if one is conducted, and into long-term recovery and development work.

The REA should be started as soon as practicable after a warning or start of a disaster. The initial (baseline) assessment should be followed by periodic updates to ensure the REA accurately represents current environmental and disaster conditions. The frequency of the updates depends on the nature of the disaster. They should be more frequent in large, quickly evolving events than smaller, more stable disasters.

The immediacy of disaster impact and urgency of relief should be taken into account in deciding whether to use a REA or a formal environmental impact assessment process. For instance, the REA can provide a quick identification of critical environmental issues following a major earthquake leading to considerable damage and relief needs over a large area. On the other hand, a REA may not be as urgent, or even appropriate, for a drought which develops over several years, where impacts are seasonal, and time is available to develop a formal EIA.

The REA can be used before a disaster to anticipate environmental issues and impacts. However, if there is any significant early warning (e.g., in excess of 60 days), it is more useful to initiate a more detailed assessment of anticipated environmental impacts as part of the pre-disaster planning and mitigation efforts.

The REA provides a 'snap-shot' of environmental conditions at the time it is completed. By setting out prioritized critical issues the REA allows for some anticipation of environmental impacts. These impacts, and the impact of REA-identified actions, can be assessed through revisions of the initial REA.

Because the REA is based on perceptions and (often) incomplete data, it should not be used to make hard-and-fast predictions of environmental impacts. The REA results, like much in the relief phase of a disaster, are subject to uncertainty and unanticipated changes.

Steps can be taken to prepare for a REA as part of disaster preparedness efforts. Pre-disaster tasks can include:

1. Training staff in the use of the REA,
2. Collection of background information (particularly for **Section One: Context Statement**),
3. Reviewing potential hazards and their impacts on potential disaster areas and disaster affected people (**Section Three: Environmental Threats of Disasters**),
4. Screening possible relief interventions for negative environmental impacts (**Section Five: Negative Environmental Consequences of Relief Activities**), and,
5. Developing skills and systems to quickly collect information from communities for the **Community Level Assessment** module.

Taking these steps will considerably shorten the time needed to conduct the REA during a disaster.

Link to a formal EIA

A REA does not replace a formal assessment of environmental impacts, as may be required by regulations or good practice. Rather, the REA fills the gap between the start of a disaster and when the formal EIA process can be initiated. This gap is expected to correspond closely to initial 120 days of the response to a disaster. In most cases, the EIA process comes into play with the design and planning of recovery programs.

Data collected, and data collection systems established through a REA can provide important inputs into an EIA. A well-documented REA will aid considerably in defining the scope and coverage of an eventual EIA, and data collected as part of the REA or subsequent M&E efforts may have use in completing a normal EIA.

The REA can also provide input into a Strategic Environmental Impact Assessment, which looks at the disaster response from relief to long-term recovery at the strategic and not individual project level. More on Strategic Environmental Impact Assessment after a disaster can be found at https://www.ucl.ac.uk/hazardcentre/resources/working_papers/working_papers_folder/wp29.

For a variety of reasons, EIAs or Strategic Environmental Impact Assessments are not always completed as part of the response to a disaster. Thus, a well-documented REA becomes even more important as it might remain the only comprehensive source of information on environmental issues and concerns.

REA Users

The REA is intended to be done by persons with no specific background in environmental issues and relatively little background in disaster management. The primary users of the REA process are expected to be government, NGO or international organization staff conducting field assessments or directly managing relief operations. However, and where possible under operational conditions, work to complete a REA should involve individuals with expertise in different environmental fields.

Whenever possible, host government officials and local environmental organization members should participate in a REA. Government officials can provide credibility to the results and open a channel for government advocacy on the results. Environmental organization members also provide credibility to the results, provide an advocacy channel and aid in surfacing local environmental issues, which may not be well documented or generally reported.

The REA can be used by communities experiencing a disaster, although this requires additional planning to ensure community participants understand the REA concepts and procedures. In any case, **community involvement in the REA should be sought whenever possible**. The **Community Level Assessment** module is specifically designed for this purpose.

The REA can be used by headquarters or donor staff to screen projects under design or review. In particular, Sections Four and Five of the **Organization Level Assessment** module can be used to quickly assess whether a proposed project has considered and is addressing salient environmental issues.








Personal Requirements

Ideally an initial REA will be completed by a group of persons directly involved in the disaster response. A group approach promotes the presentation of various views and perspectives on environmental issues and disaster impact. This limits the chance that issues or problems will be missed in the initial assessment or personal views result in a narrow perspective of environmental conditions. This group process should be managed by one person charged with leading the assessment process, collecting background information, and recording and keeping a file of the assessment results (See Annex E, **REA Leader – Key Criteria**.)

The REA can be done by a single person. In this case, care is needed to ensure that this person has adequate time and means to collect the information needed to accurately complete the REA modules. In addition, having one person completing all three modules of the REA (e.g., conducting field assessments) will likely take considerable time and detract from the rapid nature of the assessment. In most contexts, if a single person does the REA, they would focus on Module One, the **Organization Level Assessment**.

The assessment process laid out in the **Organization Level Assessment** module is best completed by a group of ten to twelve persons. This allows for a diversity of views and for the larger group to be broken-up into working groups for completing the rating forms. When the REA involves planned or on-going projects, the key staff of these projects should be involved in completing and updating the REA.

Collecting information for the **Community Level Assessment** can be done by one person, where the data is extracted from other assessment reports. Where the **Community Level Assessment** involves a field survey using the **Community REA Questionnaire** or question guide, it is recommended that two persons work together as a team to administer the questionnaire or guide, with one person asking questions and one person collecting responses.

To collect a diversity of information on the environmental aspects of a disaster, several teams should be deployed to complete a questionnaire or question guide. The number of teams involved should be based on the extent of the disaster, the logistics capacities available to support teams in the field and the time available to complete the assessment.

The REA results should be updated periodically and done by the same group which completed the original assessment. A single person can update a REA, although this person needs to have a good knowledge of how the disaster is progressing and of changes in impacts and relief requirements.

As noted, the REA can be done with (or even by) disaster affected people. This will involve more pre-assessment preparation to ensure the community understands the concepts and basis for the REA process, and adds to the time and workload of the overall assessment. However, the benefits, in improved understanding of local concerns for the environment and closer links between survivor needs and assistance plans, can be significant and warrant the extra workload.

Credit: OCHA / Vincent Tremeau

Time Required for Completion

The time needed to complete a full REA depends on:

- The nature of the disaster,
- Whether both **Organization** and **Community Level Assessments** are completed. Less time is needed if only the **Organization Level Assessment** is to be completed,
- The level of support which can be provided to the team completing the assessment. In many disasters, only a minimal level of support will be available and the assessment effort will need to balance the detail of the assessment with the time available to complete the assessment process, and
- The amount of training on the REA which has been provided.

The time needed to complete the **Organization Level Assessment** can range from under four hours to several days, depending on participant familiarity with the REA and the *Guidelines*, the need for translation and how much time is needed to assemble background information. As a rule of thumb, four to six hours should be allocated to preparation for the **Organization Level Assessment**, covering the collection of background information, drafting parts to the **Context Statement**, and translation of key materials as needed.

If a group is used to complete the **Organization Level Assessment** (the preferred approach), between three and four hours should be allocated for this work, with an additional hour to write up results. If the **Organization Level Assessment** is completed by an individual, up to two days should be allocated to collect background information, complete forms and write up results.

If a number of organizations are involved in the **Organization Level Assessment**, a second meeting of the participants in the initial assessment is recommended to validate results once the REA has been completed. This validation meeting can require up to two hours with a similar period of time for preparation of briefing materials.[7]

Time Needed for REA Completion

Organization Level Assessment: 4 hours to two days depending on preparation and how the work will be done. Allocating 4 to 6 hours of preparation will greatly shorten the time needed for group assessment. A follow-up validation meeting (recommended if several parties are involved the assessment) should require 2 hours.

Community Level Assessment: Up to 1 day per community, but between 3 and 6 interviews or group meetings per location or per team per day in densely populated areas. 1 to 2 days to extract and complete preliminary analysis of information, depending on source of information.

Consolidation and Analysis: 3 hours up to 2 days (if large group discussions are involved), including time to write-up results.

Time needed to complete the **Community Level Assessment** depends on whether the assessment can be based on existing information sources (i.e., other assessments) or whether there is a need for a separate community data collection effort. Experience indicates that administering a questionnaire or using group discussions with disaster-affected populations to collect information requires two to four hours. Less time is generally needed for individual interviews and more for discussions with groups.

In practical terms, this means that one team can collect information from between four and six interviews or group discussions in one location per day. Fewer interviews or group discussions are possible in smaller communities and where travel time between locations is more than an hour, in some cases making only one interview or discussion possible. More interviews or group discussions are possible in high-density locations, such as camps or urban locations.

7. Note that the REA is intended to provide input into planning as well as operations and will not necessarily generate a detailed assessment report. In the absence of a formal report, meeting with assessment participants may be the most effective way to share the results of the assessment.

The total number of interviews or group discussions which are possible depends on the number of teams deployed, the density of the survey population and the overall time available. A general rule of thumb is that five survey teams can conduct 25 interviews or group discussions over five days when locations are well separated, whereas 75 or more interviews or group discussions may be conducted in adjacent or densely populated areas.

The extraction and preliminary analysis of community information, whether from questionnaires, focused discussions or other assessment reports, requires anywhere from four hours to two days depending on how well records are kept and the number of groups covered in the assessment. Additional time may be required when teams must read several assessment reports to become familiar with the information available.

Completing the preliminary analysis at the end of each community visit can shorten the time required to complete a preliminary analysis. As with the **Organization Level Assessment**, good planning and preparations are critical to a rapid completion of the assessment process.

Dealing with Unknowns

Information is often scarce or unreliable in a disaster. It is likely that in most disasters there will be insufficient information to complete all the individual items in REA rating and ranking tables.

If there is insufficient information to rate or rank a REA item, or to answer a question posed in the rating process, the item involved should be identified as a priority for action. (The action to be taken will most likely be to collect more information to ascertain whether the item poses a threat to human lives or the environment.)

Completing the **Consolidation and Analysis** module can require from three hours to a day and a half of group discussions with an additional half-day to write-up results. The time needed for this module can be shortened by having the analysis done by one person, although the advantage of using a group process for validation and buy-in to the assessment results is significant.

When considering the time needed to complete the REA, it should be kept in mind that the REA is a rapid, not a comprehensive, assessment. The REA is not designed to clarify all possible environmental issues linked to a disaster, or to provide detailed answers to issues identified as being critical. Efforts to address issues identified during the assessment should take place after the assessment and not unnecessarily lengthen the assessment process itself.

Completion of the whole REA by a single individual will take somewhat longer than completion with group participation, particularly because of the time needed to contact and interview knowledgeable persons. Updating or revising an initial REA, if done regularly and by persons knowledgeable about the disaster and who participated in the initial REA, should take no more than a couple of hours.

The REA will generate follow-up activities. This work is closely related to tasks necessary for an efficient relief and recovery operations and should not add significantly to the disaster-related work load. However, these follow-up activities may lead to work in areas where relief or recovery operations have not been given sufficient attention and generate new workloads.

Gender, Diversity and Inclusion

The gender, social, cultural, ecological and economic diversity of the area covered by a REA should be considered in organizing and conducting the assessment. People experience hazards, crisis and humanitarian assistance differently depending on their gender and their social position within society. More women than men die as a cause of natural disasters (for example tsunamis or heat waves) but are also differently affected during recovery. After a disaster, women are more likely to become victims of domestic and sexual violence. Since they are often more involved in cooking and carrying water, the availability of natural resources in the aftermath of a disaster, as well as the stability of the climate, will directly influence the daily lives of women and girls. Moreover, disasters and crisis often cause increased burdens from taking care of the sick and wounded, which is considered a female responsibility in many societies.

Participants in the REA should reflect the gender, social and cultural diversity of the population within the area for which the assessment is being conducted. This is particularly true for the **Community Level Assessment** where contacts with communities should include an accurate representation of the different groups within a community. People participating in the REA should be aware of the diversity of groups within the assessment target area. The REA is of little value if it does not represent the social environment of the area affected by a disaster. For more information see: https://ehaconnect.org/themes/gender-inclusion/

Accountability to Affected People

Minimizing potential negative environmental effects of relief and recovery operations and integrating environmental considerations into the design of humanitarian response is strongly linked to quality and accountability approaches to humanitarian assistance. A best practice, quality approach to relief and recovery operations, requires that the views and needs expressed by disaster affected populations are taken into account. (See Sphere Project and the Core Humanitarian Standard).

The REA incorporates the views and needs of the affected populations as part of the methodology. While the **Organization Level Assessment** focused on an external view of the disaster, the rating tables and analysis incorporates the conditions of the affected populations. The **Community Level Assessment** specifically collects and analyzes the views of the affected populations.

REA results based on input from disaster affected people helps ensure an accountable approach to providing relief and recovery assistance. Integrating the views and needs of disaster affected communities makes the REA results more representative of the local perceptions of the disaster and its impacts (as opposed to the external organization level). The overall result is more effective relief and recovery operations with results tailored specifically to the needs and expectations of disaster affected people.




Monitoring and Evaluation

The REA can contribute to the M&E of relief and recovery activities and environmental impacts. The initial REA provides a baseline on environmental conditions and issues, and an indication of possible environmental impacts of relief activities.

REA updates provide information useful to monitor progress toward objectives and changes in impact on the environment. This information can be used in evaluating humanitarian and environmental interventions. The REA can also point to environmental issues to be included in the follow-up to emergency interventions as well as identify possible indicators for a formal M&E system.

Users are cautioned that REA is not a stand-alone M&E system but a tool available to a formally organized and managed M&E process. Over time the REA results will likely become less important as formal M&E data collection systems are instituted. The UNHCR Environmental Indicator Framework provides a process and indicators for environmental management in refugee-related operations which can be adapted to most disaster response situations and complement monitoring data collected through the use of these ***Guidelines***.

Sharing the REA Results

The dissemination and communication on REA results will depend on the objective. REA results may be incorporated into proposals for relief or recovery projects or may be used to advocate for the inclusion of mitigation activities into existing projects. The following activities can support the uptake of REA results:

1. **Sharing the REA results in a targeted manner:**
   a. Scheduling debriefings during/after the REA.
   b. Utilizing Cluster and inter-Cluster coordination meetings.
   c. Having the Minister of the Environment or head of the environmental agency release the REA results.
   d. Directly approaching various actors including Cluster representatives, government authorities, and national and international NGOs.
   e. Sharing the information multiple times, with updated information in sit-reps to specifically targeted groups (for example Clusters).
2. **Making the information available publicly:**
   a. On wide platforms and using different dissemination channels (for example www.ehaconnect.org, operational pages on https://www.humanitarianresponse.info/ Reliefweb, Global Cluster or country operations websites, or www.envirodm.org).
   b. Remembering data protection issues and considering whether information may be sensitive and should not be widely disseminated.
3. **Developing buy-in for REA results:**
   a. Spreading the information locally (e.g., through national NGOs) can help to generate local follow-up action and lay the foundation for partnerships .
   b. By finding champions who are willing to put environmental issues on the humanitarian and relief/recovery agendas.
4. **Ensuring that other actors understand the findings correctly**
   a. Adapting the jargon depending on the actors – for example use wording typical of a relevant Cluster.
   b. By putting environmental concerns into a humanitarian context and using humanitarian language where possible.

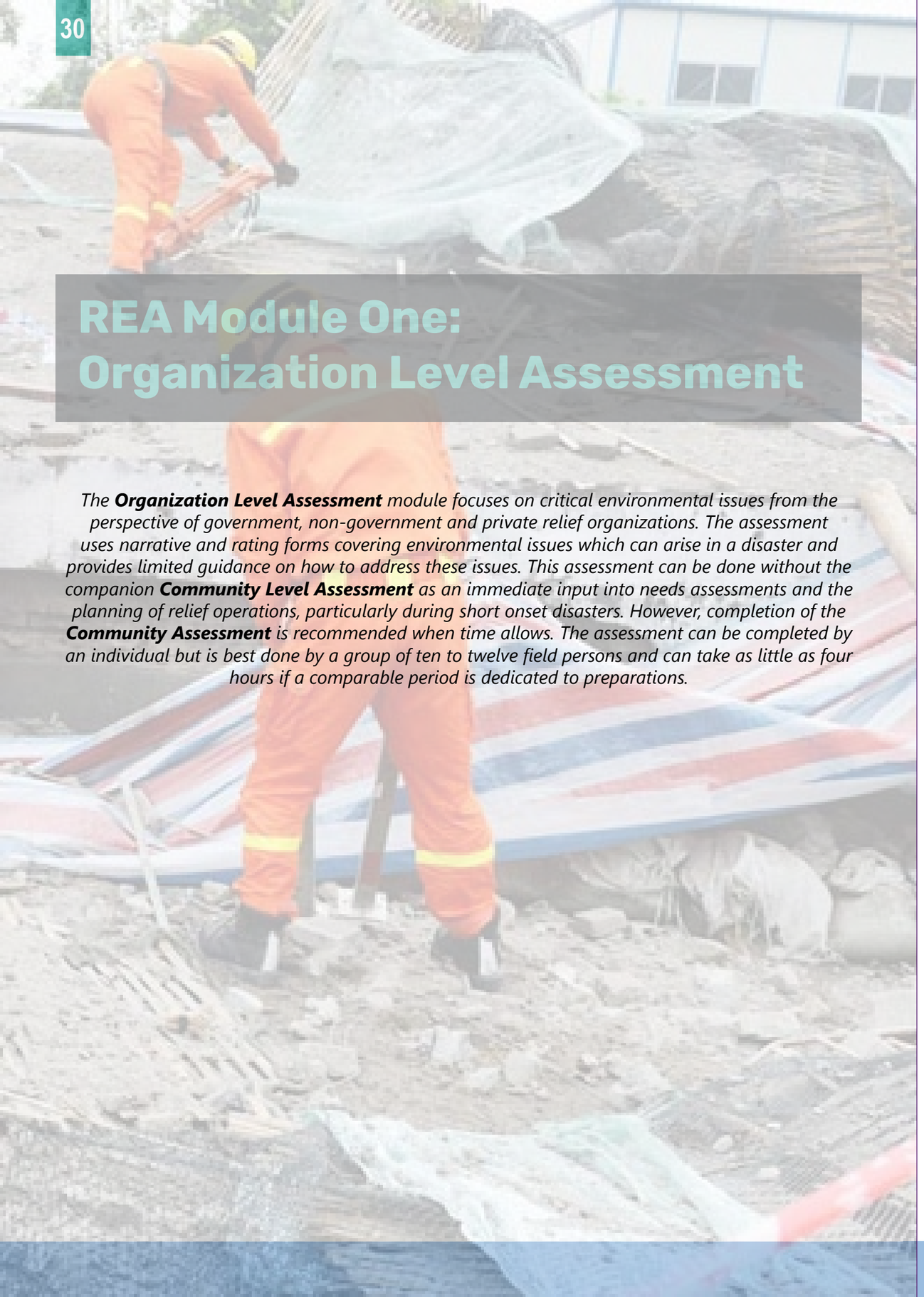
Credit: OCHA/ Vincent Tremeau

A Note on Rating Metrics

Although specific rating procedures and scales are set out in the Guidelines, these methods or scales can be changed to reflect local preferences. However, the original intent of the scaling should be maintained. Any new methods and scales should be used consistently during the assessment and any assessment updates. Numerical scales, used in previous versions of the REA, can lead to pseudo-statistical comparisons which have no validity.

A second consideration is the value assigned to specific rating steps in a rating range (e.g., low, medium, high). When the rating is done in a group setting, a common set of values for each step is established by consensus. However, these values may be different if a REA is updated by a group different from those who originally conducted the assessment.

Ideally, REA updating should largely be done by the same group that did the initial REA. If there is no significant continuity between the groups, it may be best to consider the "update" as a new REA, reflecting new conditions and new perceptions of these conditions. This process would mean that the original REA results would be reviewed, and the assessment procedures redone to capture any new information or the changing context of the disaster and response. In this process, the **Organization Level Assessment** should be completed more rapidly than for the original REA. The length of the **Community Level Assessment** would depend on whether new field work would be necessary, or more likely, whether information on communities could be extracted from other field assessments and feedback from field staff.



REA Module One: Organization Level Assessment

*The **Organization Level Assessment** module focuses on critical environmental issues from the perspective of government, non-government and private relief organizations. The assessment uses narrative and rating forms covering environmental issues which can arise in a disaster and provides limited guidance on how to address these issues. This assessment can be done without the companion **Community Level Assessment** as an immediate input into needs assessments and the planning of relief operations, particularly during short onset disasters. However, completion of the **Community Assessment** is recommended when time allows. The assessment can be completed by an individual but is best done by a group of ten to twelve field persons and can take as little as four hours if a comparable period is dedicated to preparations.*

Introduction

The **Organization Level Assessment** identifies critical environmental issues linked to a disaster from the perspective of staff working for government, non-government and private organizations providing relief and recovery assistance. The assessment is accomplished by completing a narrative and a set of rating forms covering most environmental issues which can arise in a disaster. The narrative and rating process, involving five Sections, is described below, with the purpose, process and expected outcomes for each Section covered. The narrative outline and rating forms are provided in Annex B.

How to complete the module

This module can be completed by an individual. However, it is recommended the module be completed by a group of between ten and twelve individuals. These individuals should have at least general knowledge of the disaster event or location in which the disaster is taking place. If a larger (or very diverse) group is used to complete this module, then additional preparation is recommended to minimize the actual group work time. It is also optimum for the group doing the assessment to be from a variety of backgrounds and diversity of experiences.

If more than seven people are involved in completing this module, a combination of single and break-out group sessions is recommended. With this approach, the **Context Statement** is completed in a single group of all the assessment participants. The remaining four module Sections are completed by break-out groups.

The results of the break-out group ratings can be compared and compiled into a single list for each Section, upon completion of each individual Section or once all the Sections are completed. The compilation process is accomplished by presenting the issues and rankings for each Section made by each break-out group in a single table (e.g., on a flip chart) and reaching agreement within the group as to a final rating based on the individual break-out group scores.

Break-out groups provide more opportunity for discussion and reduce the likelihood of a few individuals dominating deliberations. It is critical that all the break-out groups use the same rating scales and procedures. These scales and procedures need to be made clear at the beginning of the break-out sessions and monitored during the assessment by the assessment leader.

Once all the Sections of the **Organization Level Assessment** are completed by the break-out groups, a single group session is needed to compile a single ranked list of issues. For the **Context Statement** this involves participants identifying critical issues highlighted in the statement through a moderated discussion led by the assessment leader and agreement on the ranking of these issues from most to least important.

Ranking issues from the other four Sections in the module is based on ranking each issue within a Section by the rating it received. (Comparison of issues between Sections is done later in the **Consolidation and Analysis** module.) The ranking method for each Section is described below. In addition, a simple hierarchy for deciding importance is provided in the **Consolidation and Analysis** module.

Planning and Resources

Completing the **Organization Level Assessment** (Annex B) module can require anywhere from under four hours to one and a half days. Factors which can lengthen the module completion include a lack of preparation, the verbatim translation of these ***Guidelines*** during assessment sessions, a lack of unfamiliarity with the REA and its ***Guidelines*** on the part of the participants, and participation of a large and diverse group in the assessment.

Preparations for completing the module should cover the following points:

- Ensure it is clear who will lead the overall assessment, including coordination of follow-up actions, and integration of results into project design and management.
- Identify and collect key background information, including maps and reports.
- Draft a preliminary **Context Statement** for review by assessment participants. Providing a draft **Context Statement** helps participants to have a common understanding of the disaster under assessment and facilitates the identification of additional information to be included in the statement.
- Decide which parts of Rating Form 2 (**Environmental Threats of Disasters**) and Rating Form 4 (**Negative Environmental Consequences of Relief Activities**) do not apply to the disaster under assessment and can be eliminated. Care should be taken to avoid inadvertently eliminating any important aspect of the disaster-environment linkage. And it should be kept in mind that environmental impacts may change and evolve during a disaster. These changes should be taken into account when up-dating an assessment.
- Determine the appropriate rating scales for Rating Forms 1 and 3. See **A Note on Rating Metrics** above.
- Review Rating Form 3 and decide whether the assessment will focus on the twelve basic needs alone, or cover each indicator.
- Review Rating Form 4 to ensure it includes local coping mechanisms and actions if they are known.
- Identify assessment participants and ensure that they will be available as needed for group assessment sessions and follow-up activities.
- Review the terms used in the assessment and ensure that they are understandable to participants. This is particularly important if the assessment will be completed by persons who are not native English speakers.
- Provide rating forms, background information and a list of key terms to participants early enough before assessment sessions that time is available for review.
- At the start of the assessment, review the instructions for using the Guidelines to ensure they will be understood by participants.

The **Organization Level Assessment** requires minimal resources. Copies of the REA forms (**Annex B**) should be available to each participant, with extra copies to be used for summarizing results. A writing board or projector and flip charts will be useful. The following resources will also facilitate the assessment work:

- A map of the disaster area (several copies are recommended).
- Contact lists of persons and organizations involved in responding to the disaster and local environmental concerns (including a local phone directory). Note that this list forms part of the **Context Statement**.
- Disaster situation reports, development project documents and environmental impact assessments covering the area and population being assessed.
- Background information on the culture, economy, history and environment of the disaster affected area.

Credit: OCHA

Section One: Context Statement

ANNEX B1

The **Context Statement** (Annex B1) places the disaster in the context of overall impact, providing a summary of the emergency situation, response requirements and highlighting pre-existing salient factors which frame or impact an environmentally aware response. The **Context Statement** serves to ensure that all those working on the REA are "singing from the same sheet of music". To this end, the **Statement** identifies:

- The cause/s and impacts of the disaster,
- The potential role of climate change and associated climate risks in the region to exacerbate the disaster (see climatelinks.org for a knowledge portal on climate change),
- Whether changes to conditions at the disaster will affect environmental conditions and relief needs.
- Priority relief effort and areas of interest to the party completing the REA,
- Salient environmental issues existing before the disaster/assessment (see this article for more information),
- Sources of information and relevant national environmental regulations,
- Legal or policy requirements related to the management of environmental issues in a disaster,
- Environmental aspects of the emergency which may require actions only available from specialized organizations or companies,[8] and
- The need for further assessment/information collection and technical assistance[9] in addressing problems associated with environmentally unique locations.

The **Context Statement** is developed by providing a narrative summary of the disaster and answers to several questions. Comments on the significance of each section and guidance on addressing issues identified are provided in the form. These comments and guidance should be used as reference in the identification of critical issues to be considered in the **Consolidation and Analysis** module. The **Context Statement** should maintain a strong environmental focus to avoid repetition and too much overlap with other humanitarian statements.

It is most efficient for an assessment team leader (in the case of a team assessment) to draft sections which cover the narrative requirement and provide answers to the questions. This draft of the **Context Statement** can then be reviewed by the assessment team and changes made as appropriate. Note that most of the information needed for the **Context Statement** is the same as required for any disaster impact assessment.

Once the **Context Statement** is completed, participants should identify critical issues highlighted in the statement. This is best done through a moderated discussion led by the assessment leader and voting on the ranking of issues from most to least important. The critical issues thus identified are used in the **Consolidation and Analysis** module.

Specific notation of the geographic location of environmental problems, potential hazardous sites and locations where special attention is indicated should be made in completing the **Statement**. Marking key information on a map of the disaster area is recommended as a way to easily record and present the information assembled for the **Statement** and during the whole assessment process.[10]

8. A need for specialized response often arises from technology-related aspects of a disaster but can also be critical in dealing with bio-diversity and natural resource issues, such as a disaster which affects an area inhabited by an endangered species.
9. Technical assistance can be available from in-house experts or consultants providing advice from a distance or coming to the disaster site itself.
10. Computer-based geographic information systems (GIS) are invaluable in archiving and presenting data collected for the REA (see ehaconnect.org for more on maps and GIS sources). However, a simple hand-drawn map may be largely adequate in the early phases of most disasters and a lack of technological tools should not limit the mapping process.

Local sources of information, including communities, individuals and institutions, should be used whenever possible. The Field Operations Guide for Disaster Assessment and Response (US Office of Foreign Disaster Assistance) provides detailed guidance and checklists which can be helpful in completing this and other sections of the REA. When possible, quantitative data should be used in the REA and systematically collected for use in updating an initial assessment.

The **Context Statement** provides a good opportunity to explore the risks and concerns associated with slow-onset effects and climate change (see definitions in Table 1. below). Disaster risk may be magnified by climate change, increasing hazards and/or the vulnerability of communities. Make sure to explore the various elements of climate change and where the exact impacts associated with climate change may be caused by natural processes.

Climate Change	Climate Variability
A change in the state of the climate that can be identified (e.g., by using statistical tests) by changes in the mean and/or the variability of its properties and that persists for an extended period, typically decades or longer. Climate change may be due to natural internal processes or external forcings, or to persistent anthropogenic changes in the composition of the atmosphere or in land use.	Climate variability refers to variations in the mean state and other statistics (such as standard deviations, the occurrence of extremes, etc.) of the climate at all spatial and temporal scales beyond that of individual weather events. Variability may be due to natural internal processes within the climate system (internal variability), or to variations in natural or anthropogenic external forcing (external variability).

Source: Intergovernmental Panel on Climate Change (IPCC)

Table 1. Definitions of Climate Change and Climate Variability

Credit: UN Environment

Section Two:
Factors Influencing Environmental Impacts

ANNEX B2

There are a number of factors which may positively or negatively influence the severity of environmental impacts during and following a disaster. These factors are related to the spatial, social and economic conditions under which the disaster affected people live, and they indicate environmental impact issues which may need to be addressed as part of the disaster response. Identifying the importance of these factors aids in determining which relief activities to avoid or to use to mitigate negative environmental impacts, and where these interventions should be targeted.

The nature of these factors varies. Several factors, including population density, extent of the disaster area, whether the disaster affected people are displaced, or resource availability, are clearly spatial (geographic). Other factors, such as self-sufficiency, sustainability, social solidarity[11], or environmental resilience[12] are facets of how people and place interact, and therefore, also have a spatial element. A number of the factors relate to the disaster affected people themselves, for instance the density of settlements or social structure. Other factors, such as environmental resilience, sustainability and absorptive capacity, are essentially environmental but defined by human action.

The comparative subjective rating of Factors Influencing Environmental Impacts is accomplished using **Rating Form 1** (**Annex B2**). The rating process involves two steps.

STEP 1 A rating of each factor is completed based on the respective scale to indicate importance as a possible negative impact on the environment. Possible negative environmental implications for each factor are noted as guidance in the rating process. The rating scales are organized so that ratings of higher priority for action are to the right of the page.

The rating scales can be changed to suit user preferences. Specifically, the words used in the rating process can be changed to reflect local use and understanding. However, the same graduation of priority from left to right should be maintained on the form.

STEP 2 Once each factor is rated, the factors are then ranked from lowest to highest priority. There is no problem if several factors have the same priority as the priority factors will be reviewed further in the **Consolidation and Analysis** module.

Note, however, that not all priority issues identified in the rating process will become targets for immediate action. Some issues may not be easily susceptible to relief interventions or should be deferred to the recovery phase.

Alternately, the environmental impact of other factors may resolve themselves. This would be the case where the population density in a temporary shelter decreases as people return to their normal homes. Changes in the importance of the factors should be reviewed with each REA update.

11. The degree to which disaster survivors, and survivors and non-affected populations, work together.
12. The ability of the environment to recover from the impact of the disaster or other shock.

Section Three:
Environmental Threats of Disasters

ANNEX B3

Hazards associated with a disaster can lead to direct or indirect negative impacts on the environment. These negative impacts can, in turn, exacerbate existing or create new environmental drivers of disaster risk. Relief interventions to address impacts on the environment may be critical to eliminating threats to the lives or well-being of the disaster affected people. An example is a tidal surge that passes through a fertilizer factory, contaminating nearby ponds used for drinking water. Here the need is to quickly identify the environmental problem, solutions and need for further assessment.

In other cases, hazards may require immediate and long-term responses. An example is the collapse of a mine tailings retention dam due to heavy rains, with the tailings contaminating a drainage basin and river bottom sediment. Here the need is to identify the problem in sufficient detail so that: (1) immediate steps can be taken to avoid contact with the contaminated area, and (2) for remediation to be included in the post-disaster EIA and recovery plans.

The identification and rating of possible immediate environmental impacts of different hazards present during a disaster provides a quick way to focus on significant immediate threats to lives and well-being. Those threats with high rating values should receive greater and more immediate attention than threats with lower values.

The focus in this REA section is on hazards which can have an immediate impact on the environment. Hazards not normally associated with disasters are not explicitly considered. An example of what is not covered is the alkalization of soils due to improper irrigation, while soil contamination due to unusual flooding is covered.

Some hazards include a number of distinct threats to life, livelihoods or the environment. In this section, hazards are associated with specific threats to lives and well-being to aid in the assessment process. An example of a hazard/threat combination is flooding (the hazard) which leads to the deposition of contaminated sediment which can cause health problems (the threat) on farm land used for rice cultivation.

Hazards expected to have a major contribution to the cause or impact of the disaster are identified using **Rating Form 2** (**Annex B3**). The hazards, and threats posed by these hazards, should be rated and ranked according to the four-step process described below.

STEP 1 **Rating Form 2** should be reviewed. All hazards which are not appropriate for the disaster being assessed should be eliminated. This can be done by simply crossing out each row containing the inappropriate threat, or by deleting the appropriate rows from an electronic copy of the form and printing the shortened form. (Shortening the form before doing the rating will make this part of the assessment quicker.)

Note that **Form 2** does not include all possible hazards which could be found in all disasters. When necessary, new hazards should be added to the list, with information on the nature of the threat and ways to address the hazards also added.

Guidance on determining the significance of a specific hazard is provided to assess whether the threat should be eliminated. This guidance may refer to information not immediately available, for instance, the presence of chemicals exceeding acceptable levels. If it is not known whether a threat is real (an unknown threat), the threat should be not eliminated.

Discrete hazard combinations should be rated separately. For example, under disease, measles and malaria would be rated separately if both are considered to be threats following a disaster.

When possible, quantitative data relative to specific threats identified as important in the initial assessment should be collected and used to update the initial assessment whenever possible.

STEP 2 Once inappropriate threats are eliminated, the remaining threats should be characterized by whether they affect a large, medium or small area. Area affected is used as a determinant of significance of a threat for two reasons.

First, the larger the area affected, the greater the number of disaster affected people who are likely to be affected. Second, impacts affecting larger areas are likely to require more extensive responses and be significant within the overall disaster response. (Small intense threats from disasters and other sources are identified through the **Context Statement**.) Unknown threats should be assumed to affect a large area.

The determination of whether an affected area is ***large, medium or small*** should be made relative to the total area affected by the disaster. For instance, a hazard which affects only 10% of the total area of a disaster could be considered as affecting a relatively small part of the disaster area. A hazard which affects 80% of a disaster area can be considered as relatively large.

Note that setting the lower and upper limits to the size of the medium area also sets the upper limit to the small area and the lower limit for what is to be considered as a large area. The area size criteria can be changed to suit user preferences but should not be made overly complex.

STEP 3 Once an area affected has been identified for each hazard, the selected hazards should be ranked based on area affected (large, medium or small). Hazards which affect a large area have a higher priority than those affecting medium-sized areas, which should receive attention before hazards affecting small areas. The top priority hazards will be further ranked against other issues in the **Consolidation and Analysis** module.

Rating Form 2 also provides general indications as to response options and the need for specialized assessment, planning or response assistance. Each option requires further work to become an effective response. Other options may be identified in the course of further assessments and planning.

In some cases, information available locally combined with simple sampling methods will allow experts distant from the disaster to determine the significance of a threat and formulate plans for further assessments or response activities. Input from disaster affected populations and neighboring non-affected populations should also be solicited.

In other cases, local or expatriate technical assistance may be needed on-site to deal with the threats. This assistance may involve considerable time and expense. Organizations doing the REA need to consider how deeply they are willing to be involved in dealing with threats to the environment. **Advocacy**, particularly after clearly defining an environmental threat, with government or specialized organizations, **may be more effective over the long-term** than taking on a new and complex role in dealing with complex environmental problems during a disaster.

The following steps can be taken to facilitate the work on this Section and post assessment assistance planning process.

1. Marking on a map the area(s) which have been identified as affected by the hazard threats and likely source area of the threat if one exists. ***Example: area flooded and location of the fertilizer factory that was flooded. The affected area would be downstream from the factory, not the whole area flooded.***
2. Collecting contact information if the expected threat has a site-specific origin. ***Example: Names and phone numbers of factory managers.*** This information and information on local sources of technical assistance may already be collected as part of the **Context Statement**.[13]
3. Identifying sources of information on the physical nature of the threat. ***Example: Flow rates and levels of flood waters carrying possibly contaminated sediment.***
4. Identifying, if possible, sources of pre-disaster data on environmental and health conditions related to the expected threat. ***Example: Tests of soil and human blood levels of organo-chloride pesticides before disaster.***

13. Also see Flash Environmental Assessment Tool (FEAT) Pocket and Reference Guide (JEU, 2017).

This information should be included in a request for technical assistance. However, an initial alert report as to a possible threat should not be delayed while this information is being collected.

Some overlap between this **Section** and **Section One**, particularly Elements 3, 4, and 5, is to be expected. Responses to this **Section** and **Section One** should be cross-checked. This cross-checking will identify any small area but intense threats which should be identified as critical issues at the end of this assessment.

Credit: UN Environment

Section Four: Unmet Basic Needs

ANNEX B4

Identifying unmet basic needs highlights areas in which the disaster affected peoples' own relief efforts and external assistance are not likely to be adequate. Needs which are not being met may result in environmental damage from a survivor's efforts to cover basic needs. These impacts can be direct (e.g., cutting wood for cooking fires) or indirect (e.g., cutting and selling wood to buy water). Links between the way needs are being met and possible environmental impacts are generally obvious but may require quick investigation to ensure information is accurate and complete.

In some cases, the basic needs of a disaster-affected population were not being fully met before the disaster. Considering the change in how well basic needs are being met before and after a disaster can provide useful insight into the relative needs of those affected by the disaster and provide an indication of where recovery assistance can also be used to improve the pre-disaster level of development of the affected populations.

It is important to determine whether meeting a basic need is taking place in a way which could seriously deplete essential resources during relief and recovery periods. Excessive use will affect future supplies, and likely quality, of the resource. The result is that a resource may meet minimum needs at one point during the relief operation, but these needs will become unmet as the resource is depleted.

This will, of course, lead to problems with relief operations and may result in avoidable environmental damage. As a result, defining resource availability throughout the 120-day relief and recovery period is an important part of minimizing the environmental impacts of disasters.

It is important to note that in a disaster, damage to the environment can be accepted if this damage is an unavoidable consequence of saving lives and maintaining basic welfare. Noting this damage is important in planning remediation efforts as part of the recovery and rehabilitation phases.

Rating Form 3 (**Annex B4**) provides a list of fourteen basic need categories and related indicators. A simple three step process, described below, is used to identify how well the basic needs of disaster affected populations are being met. This form should be completed based on actual conditions and not expectations or promises of aid.

The indicators used in **Rating Form 3** are derived largely from the Sphere Standards and indicators contained in the Humanitarian Charter and Minimum Standards in Disaster Response (http://www.sphereproject.org/handbook/the-humanitarian-charter/) and Sphere handbook 2018 (https://spherestandards.org/handbook). The indicators help in deciding the degree to which a need has been met. The indicators are intended help those completing the form to identify and better understand the information available on whether a specific need has been met or not. In most disasters, information on some of the indicators will not be available at all, or information will be incomplete, only available for part of the disaster-affected area or part of the disaster-affected population. Indicators use may also vary and specific countries or regions may use higher indicators based on laws or tradition. This variability and uncertainty is inherent to the rapid assessment of conditions after a disaster and cannot be avoided.

Needs and Rights Based Approaches

Organizations assisting disaster survivors can take either a needs-based or a rights-based approach to determining unmet needs. A needs-based approach considers what was available to the survivors before a disaster and seeks to cover those needs created by the disaster. A rights-based approach is based on the basic human rights of an individual and seeks to use disaster assistance to ensure the human rights of the survivors are meet regardless of how well or poorly these rights were met before a disaster, even if this means providing more assistance than what was lost during the disaster.

The choice of needs and rights-based approaches can be very organization-specific and involve different types and quantities of assistance. The team doing the REA should agree on one approach or the other before completing the Unmet Basic Needs form to avoid confusion and to facilitate the rating process.

Four actions can be used to minimize the impact of incomplete or missing information on indicators:

1. Devote part of the assessment preparation (Step 1) to collecting the best information available on the indicators used in **Rating Form 3** and share this information with the assessment team.
2. Remove or substitute indicators from **Rating Form 3** which are not relevant, for which information is not available, that need to be adapted to the local context, or for which information is largely incomplete. Explain these changes to the assessment participants.
3. Review the indicators with the assessment team before completing **Rating Form 3** and agree how to treat indicators for which information is not available or largely incomplete, for example by removing the indicator.
4. Before completing **Rating Form 3**, discuss with the assessment team the fact that data after disasters is incomplete and often ambiguous but that the assessment needs to quickly reach agreement on the extent to which needs are or are not met to provide timely input into operational decision making. The assessment team needs to understand that they should use the indicators as guides in their decision making on each need, but make decisions based on their own understanding of the level of needs met or not. This understanding may come from the indicators or other sources such as field visits, conversations, news reports, etc.

As with the REA as a whole, the assessment process is a trade-off of time, accuracy and usefulness. While more time can be taken to provide more accurate results these results can arrive too late for use in decision making. The team completing Rating Form 3 should do the best job possible with the information available while producing rapid, useful results.

STEP 1 Each of the basic needs (e.g., water, shelter, food) is rated on how well the need was being met before the disaster and under current (disaster) conditions.

Rating Form 3 uses five categories – ***Not met at all, Lesser part of needs met than not met, Greater part of needs met than not met, Largely met, Totally met*** – to characterize each basic need. Alternate scales can be used but should maintain the transition from needs not being met to needs which are being totally met.

The indicators provided to the right of each basic need can be used in deliberations on how well a need is being met. The more an indicator is met, and the more indicators met for each need, the greater the score for a particular indicator.

Disaster situation and other reports are a good source of data and information on whether needs are being met. If quantitative data is used, the source of the data should be noted for future reference.

STEP 2 For each need, a yes or no answer should be provided to the question "Will the quality or quantity of the resources used to meet this need deteriorate significantly in the next 120 days?"

This question is intended to identify needs which are being met at the time of the assessment, but which may not adequately meet needs sometime in the near future. For instance, water supplies may be adequate at the time of the assessment, but the supply may run low (due to pumping) or deteriorate in quality in the near future. Thus, considering a need will continue to be met allows for planning and interventions to prevent a shortage or reduction in quality in the near future. This information is useful in identifying potential operational challenges for relief programs and negative environmental impacts.

STEP 3 A prioritized list of unmet needs which require action to limit environmental damage is created by:

- ✓ Ranking the rated needs from highest to lowest priority for action. Based on the rating scale used in **Step One**, the order of priority is:
  1. **Not met at all.**
  2. **Lesser part of needs met than not met.**
  3. **Greater part of needs met than not met.**
  4. **Largely met.**
  5. **Totally met.**

  (A similar priority sequence should be used if the rating scales are changed.)
- ✓ Identifying the use of resources to meet a basic need will likely deteriorate in quantity or quality over the next 120 days. (The answer to the question posed in **Step Two**.)

Needs at the top of the list have a greater priority for action as they are more likely to lead to negative impacts on the environment as disaster affected people attempt to meet these needs.

If a need is being met, but at resource use rates which will lead to a deterioration of quantity or quality, then there is a need for immediate mitigation measures to avoid future problems for relief operations and the environment.

Prioritizing needs which are being met in a way which can lead to resource deterioration in the ranked list depends on:

- How soon the deterioration is likely to occur and,
- How critical the need is for those affected.

An immediate deterioration affecting a highly critical need would lead to this need being ranked at the top of the list regardless of whether the need was being met at the time of the assessment.

A comparison of the level of needs met before and after a disaster is possible by comparing the rankings in columns two and three of the rating form for each need. The expectation is that the greater the difference in scores, the greater potential environmental impact, as well as need for relief assistance.

However, the ratings are subjective and not necessarily based on crisis affected people's own priorities and actions. Any comparison of scores should be used cautiously. Any resulting analysis should be confirmed with those affected by the disaster.

Some disaster relief operations focus on bringing conditions for an affected population back to the level existing before a disaster. This focus may generate an interest in using the difference between the before and after scores to define how much assistance is needed to recover from the impact of the disaster.

Since there may be significant gaps in whether basic needs were met before a disaster, this use of the rating information raises the question whether relief should be used to improve on pre-disaster conditions. Some funding agencies promote such a developmental relief approach. Other agencies limit relief assistance to only a return to pre-disaster conditions, no matter how poor they may have been prior to the disaster. However, even when pre-disaster inadequacies cannot be addressed using relief, the identification of these inadequacies provides input into focusing developmental efforts after the disaster.

ALTERNATE RATING PROCESS

A second option is available for the needs rating process. In **Step One**, each of the indicators for the fourteen basic needs (listed in the far-right column) is rated separately as to whether the indicator is being met or not. This rating uses the same procedures as for the twelve basic needs.

The thirty-four ratings are then assessed as described in **Step Two**. Also considered is whether minimum needs are being met in a manner which will reduce the quantity or quality of resources to a point where they are no longer being met in the 120-day period following the assessment.

Once both **Steps One** and **Two** are completed, the ranking process of **Step Three** is complete as described. The ranking of needs can be done for each indicator or for each related basic need based on the indicator rating. As the REA is intended to be rapid, the guiding concept of the rating and ranking process should be to keep it as simple as possible.

A more detailed rating process allows for a more specific targeting of relief to address specific unmet needs which may be linked to negative environmental impacts. This more detailed assessment is very useful in an initial disaster assessment when immediate decisions are needed on targeting immediate relief and no in-depth assessment is available.

At the same time, this process takes more time and information than only dealing with the twelve basic needs alone. The detailed assessment should only be done if specific information is available on each of the indicators.

Section Five: Negative Environmental Consequences of Relief Activities

► ANNEX B5

Disaster assistance activities, whether immediate relief or longer-term recovery, focus on saving lives and stabilizing well-being and living conditions. The need for an urgent response often does not allow time to assess possible negative environmental consequences or secondary impacts of emergency interventions. The rapid identification of potential negative environmental consequences of possible assistance activities provides a way to quickly recognize and mitigate these negative impacts.

This Section focuses exclusively on relief and recovery efforts. It anticipates that some (and possibly most) of these activities will not be developed based on detailed pre-disaster plans. The need to act quickly requires a process where the objectives and the conduct of relief operations are decided on a daily basis in the field. Activities may be developed and implemented by organizations with no pre-disaster familiarity with an affected population or area. These conditions create a strong likelihood that environmental consequences will not be fully assessed and mitigated before relief operations begin.

An identification of negative impacts of relief assistance can lead to three outcomes:

- A decision to postpone or cancel an action because it will result in unacceptable environmental damage. This decision should not be taken lightly, as it may result in more immediate hardship for disaster affected people.
- A change to ongoing activities or plans to incorporate environmental impact mitigation or avoidance measures. This outcome is preferred.
- An acceptance of negative environmental impacts due to assistance as unavoidable and preferable to not providing assistance. This could be the case, for instance, with the use of pesticides to control an insect-related disease outbreak. In this case, impact mitigation and remediation actions should be included in other elements of the relief effort or in post-disaster recovery programs.

The identification of potential negative environmental consequences of possible relief activities is accomplished by completing **Rating Form 4** (**Annex B5**) in a three-step process.

STEP 1 Each of the possible relief interventions listed are reviewed to determine (yes or no) whether the intervention is planned or underway as part of the disaster relief and recovery effort. This identification and elimination of interventions which are not planned or underway can take place before the assessment and will shorten the time needed to conduct the assessment in a group setting.

However, this pruning should not eliminate possible future interventions. If it is unclear whether a relief intervention is underway or planned, then the intervention should not be eliminated from the list.

The interventions summarized in **Rating Form 4** cover the most common types of relief or recovery assistance. Other types of interventions are possible and need to be assessed for negative impacts.

If a **Community Level Assessment** has not or will not be done, then the coping strategies employed by disaster affected people need to be added to the form and assessed in the same manner as the other interventions listed. Survivor coping strategies should not be ignored as they are likely to be significant in scale and scope (upwards of 80 percent of disaster relief can be provided by crisis affected people themselves), with consequent impacts on the environment.

STEP 2 Interventions which are planned or underway are screened to determine whether potential negative environmental impacts have been addressed in project design or operations. This screening takes place by answering the questions in the third column with a yes or no in the fourth column. If there is insufficient information to answer a question, then the answer should be no.

Potential negative impacts which have not been addressed, that is have no answers, become issues which require follow-up as a result of the assessment. (All interventions should be monitored in real time for negative impacts and this list amended accordingly.)

The form also includes possible avenues for consequence avoidance or mitigation. This information can help identify ways to address negative impacts when they are identified. Identify which of the interventions for which potential negative impacts have not been addressed should be:

1. Changed to avoid negative impacts,
2. Implemented despite negative impacts, which should be in turn addressed through other short-or longterm interventions, or
3. Canceled or avoided due to possible or actual negative impacts.

(See above for a summary of these options.)

These determinations will aid in the **Consolidation and Analysis** process (see **Module Three**) and in emergency project planning and design. Of course, canceled interventions do not need to be considered further unless they are judged to have already caused environmental damage.

STEP 3 Rank the interventions identified from most to least significant impact on the environment. This ranking should be based on the following criteria:

1. Canceled interventions which have already had negative impacts should be listed first, as addressing the negative impacts may be urgently needed.
2. Interventions which will have negative impacts, which need to proceed none the less and for which mitigation measures need to be identified and adopted.
3. Interventions which should and can be modified before implementation to avoid negative impacts. The prioritized interventions are carried over to the **Consolidation and Analysis** process.

To the degree possible, the disaster affected population and their neighbors should be involved in discussions about mitigating the negative environmental impacts of relief activities. Decisions to accept environmental damage as necessary for effective relief delivery should not be taken without consultation with survivor representatives, if at all possible.

The avoidance/mitigation options listed on the form are indicative and require further development, possibly involving specialists and requiring community involvement, to be used effectively in countering the negative impacts noted. The **Key Resource list** in **Annex A** as well as the guidance, tools and resources on ehaconnect.org should be consulted as a starting point for information and advice on ways to avoid or mitigate environmental impacts.

Humanitarian actors who would like to only conduct a rapid screening of environmental concerns in humanitarian operations, including the potential impact of planned shelter, WASH and Livelihoods interventions, can also consider using the Nexus Environmental Assessment Tool (NEAT+) (https://ehaconnect.org/resource/neat/). The tool assesses the current sensitivity of the crisis-affected environment, highlighting and categorizing any underlying risks and vulnerabilities to the environment and affected communities. The tool also identifies potential activity related environmental risks posed by humanitarian relief and recovery projects. The tool is not intended to assess the environmental impacts of a whole disaster or crisis like the REA does, but only on the project area(s) being assessed.

Credit: OCHA/Vincent Tremeau

REA Module Two: Community Level Assessment

*The **Community Level Assessment** focuses on critical environmental issues from the perspective of communities affected by a disaster. The assessment can either use the direct collection of information from communities or information collected through other assessments to complete a simple process to identify environmental issues which are most prevalent in disaster-affected communities. The process of identifying and prioritizing community level issues requires one to two days, depending on sources of information and should involve at least three persons. Approximately one day per community is needed to collect information direct from a community, with at least two persons in each group working in community.*

Introduction

Community input into the identification and prioritization of environmental issues during a disaster is critical to the success of the REA and to the effective overall relief efforts. At one level, a considerable part of the post-disaster relief and recovery effort is undertaken by the disaster affected people themselves. The REA needs to identify and assess these efforts to anticipate and help define ways to address any resulting negative environmental impacts.

At another level, a best practice for relief operations is that they take into account the views and needs expressed by disaster affected populations. A community level assessment of environmental issues serves to incorporate these views and needs into the REA. This makes the REA results more representative of the local (as opposed to external organization level) views of the disaster and its impacts. The overall result is for relief operations to be more effective since they will respond more closely to the needs and expectations of the people affected by the disaster.

The **Community Level Assessment** module is intended to assist those doing a REA to collect and perform a preliminary analysis of community level information to identify critical environmental issues. However, parallel and competing surveys should be avoided. The REA assessment should incorporate (or be incorporated into) other assessments whenever possible.

This module contains two sections, one dealing with information collection and the other proving a simple process for using the information collected to identify issues. These sections are described below.

Information Collection Options: Assessment type

There are two basic options for collecting information on community perceptions about the environment and related relief and recovery needs and expectations. The first is to use a specifically designed data collection tool and conduct community level data collection from a sample of the communities (and groups within these communities as appropriate) in the disaster affected area.

The second option is to use other assessment efforts to collect needed information, and later extract the information on environmental issues using a method set out below. Using another assessment process, for instance those used for a household food security or a water and sanitation assessment, is possible because most of the information needed on environment-disaster linkages is also collected as part of these types of assessments.[14] (Sources on other types of assessments are provided in **Annex A.**)

The advantage of a separate REA community level survey is that it can focus on a more detailed understanding of environment-disaster linkages from the community perspective. The disadvantages are the time and resources needed to conduct a representative survey of communities in the disaster-affected area. The urgency of responding to a disaster may mean that organizations involved in providing relief may not have the time, resources or skilled personnel to devote to an extensive community survey without compromising the overall objectives of the emergency relief effort.

14. There is a considerable overlap between the REA information needs and a generic livelihood assessment, although it is unlikely an extensive livelihoods assessment could be done in a rapidly evolving disaster.

The advantage of using another assessment (either planned or already conducted) to collect REA-related data lies in the efficient use of resources. One assessment serving two purposes is more efficient than two overlapping assessments. The major disadvantages are that:

- The other assessments need to cover all the information requirements for the REA (a particular problem if an already conducted assessment is used), and
- A depth of information on environmental issues may not be available from assessments which focus on other issues.

Further, to be compatible with the community assessment process set out below, data is needed for each community covered in the assessment. This level of information may not be available from summary assessment reports.

In summary, the information collected in another assessment needs to be sufficient to allow for the answering of the questions and identification of coping strategies covered in the **Community Assessment Summary** form (**Annex C**). Specific questions which can be used in other assessments can be gleaned from the **Community REA Information Collection Guide** in **Annex C1**.

The choice of one or the other option depends on policies, resources and capacities of the organization(s) conducting the REA. In most sudden-onset disasters, it is unlikely organizations will be able to devote time and resources to a stand-alone community level REA. In these situations, incorporating REA information requirements into other assessments may be most effective.

There is a greater chance that a stand-alone community level assessment can be done for slow-onset or protracted disasters because these types of disasters often clearly involve environmental issues and there is a more predictable timeline. The following sections of this module discuss a REA-only community assessment approach.

Data collection Options

Individual interviews or group discussions?

A key issue in deciding to collect REA information directly from communities is selecting which data collection method to use, with individual interviews using a questionnaire or a focused discussion the most likely options. In most cases, community-level information will be collected through group meetings (focus group discussions) rather than interviews with single individuals.

Group meetings allow for a broader selection of views and inputs on environmental issues than individual interviews and are thus more efficient in the context of a rapid assessment. The group-based approach reflects the rapid nature of the REA, where speed at collecting information is traded off with the detail of the information collected. In addition, group discussions allow participants to openly express their views without being closely guided by the interviewer.

The individual interview/questionnaire approach focuses the information collection effort, which can make the collection process more rapid than with open ended discussions. In addition, it takes less skill to administer a questionnaire than manage a focused discussion, an important consideration if there is limited time to train surveyors and complete the assessment. However, more individual interviews may be needed to collect the same scale of information as from group discussions, for instance, one group discussion verses 10 interviews in a specific village.

Questionnaire or question guide?

When collecting information, an issue is whether to use a formal questionnaire or a question guide. Both documents have the same technical content, but the questionnaire sets out a sequence of questions and expected answers. A question guide anticipates that respondents will not provide simple answers when asked a question but provide a narrative response.

In a narrative response, respondents provide a range of information in response to a single question. For instance, in response to a question on water supply, respondents may provide information on the supply, the seasonality of the supply, the quality of the supply and threats to the supply. In a question guide, all this information is collected as it is provided. If, later in a discussion, the question of water quality is raised again, the earlier response may provide all the information needed. In this case, either the question does not need to be raised again, or it is raised again to confirm the information provided.

The following section anticipates the use of a question guide (the **Community REA Information Collection Guide**) on the presumption that this approach is the most convenient to enable a rapid assessment. However, a questionnaire can be used if time and resources are available and the **Collection Guide** converted to a questionnaire without problem. In either case, the community assessment process will generate considerable information which is useful to the overall disaster response.

Automatic Data Collection Software

The use of tablets, smart phones and computers allows the use of software to collection and process field data. The general process is that data collection needs (questions) are entered into the software. The software then guides the person doing the data collection through the questions and structured selection of responses, with the data collection possible using anything from a phone to a computer. Once the data is collected, it is analyzed by the software and results combining multiple datasets are available for planning or further evaluation. Kobo® Toolbox (https://www.kobotoolbox.org/) is one program currently widely used in humanitarian assistance to collect and process field-level data.

The community-level assessment can use Kobo® (or similar software) to collect information in the field to increase the speed of the collection process and reduce the time needed for analysis and presentation of results. Use of Kobo® or similar software can also facilitate the sharing of data and analysis with other organizations, reducing the overall need for multiple assessments.

Community REA Information Collection Guide

ANNEX C1

The **Community REA Information Collection Guide** (**Annex C1**) can be used to rapidly collect information on environmental conditions in a community as well as the views of community members of these conditions. The guide is organized into seven sections:

1. General information about the community being assessed.
2. Information about the environmental and livelihood conditions in the community.
3. Information about disasters which may have affected the community.
4. Whether and how the basic needs are being met.
5. A conclusion section which asks participants for views on the future of their community and environmental conditions.
6. Specific collection of information on coping strategies which may not have been collected elsewhere.
7. Observations about the sanitary and general conditions in the community.

The sections of the guide broadly follow the outline of assessment information needs presented in the **Introduction** to these *Guidelines* and collected in the **Organization Level Assessment**. As a result, assessment information from organization and communities can be compared in the **Consolidation and Analysis** module.

Information collected during the early parts of a community level meeting may answer questions posed later in the guide. These later questions can be skipped if information collected earlier in a session makes them redundant.

Community assessment meetings are managed through a group discussion process led by someone who is not a community member, aided by a translator when appropriate. Of various methods available, a moderated group discussion using the **Community REA Information Collection Guide** is considered the quickest, requiring the least complicated data collection process. Other methods can be used when appropriate. For more on information data collection methods see the Humanitarian Needs Assessment "The Good Enough Guide" (available at this link: https://reliefweb.int/report/world/humanitarian-needs-assessment-good-enough-guide-0)

Ideally, the information collection guide should be used with a broad cross section of a community. This cross section should include men and women, people with disabilities, youth, senior citizens, community elders and others to represent the social, cultural and economic variability of the community surveyed and the objectives of the assessment.

Collecting data (based on the same questions) from community elders, men, women and young people, separately, helps to identify if there is a diversity of views about the environment and disaster impact within the community. Meetings with other well-defined groups within a community are appropriate if time allows. Group meetings should be complemented by narrative observations by the team conducting the assessment.

> Two approaches have proved useful in complementing the large group meeting approach when time is not available for an in-depth assessment. The first is a walk-though of the community (normally after the group meeting), with time taken to speak to different members of the community. In this way, the representation of gender, age and social strata in the assessment can be increased.
>
> The second approach is to hold side meetings during large group meeting. In this approach, one assessment team member sits apart from the rest of the team and engages people present at the meeting but who are not speaking by repeating the questions raised by the leaders of the assessment. This approach tends to work best in large meetings where discussions are dominated by an individual or small group.[15]

15. The side meeting approach was used effectively to collect women's views during community assessment work in Indonesia.




However, immediately after a disaster, it is unlikely that a rapid assessment will be able to conduct more than one group meeting in each community surveyed.

The most efficient approach is to hold a single community meeting where as many distinct groups in the community as possible are present and to manage this meeting in such a way as to draw out the views of these different groups.

It is expected that a single group meeting in a community will take two hours. This time limit anticipates the need for translation and clarification and that there will be a moderate level of discussion within a group in establishing a single answer to any questions posed. Based on experience, the total time in a community (formalities, meeting and follow-up) where only one group meeting takes place will be no more than four hours.The administration of the questionnaire should follow standard community assessment practice, including transparency and non-discrimination. When possible, personnel conducting the community sessions should have practical or theoretical background in community assessment methods. The Humanitarian Needs Assessment "The Good Enough Guide" contains useful information on how to conduct an assessment in a community.

As with the **Organization Level Assessment**, the community assessment process is intended to be rapid and lead to an identification of issues related to the environment and the disaster. These issues may require additional investigation and clarification but serve (initially or later) as input into disaster response planning and operations management.

The minimum staff requirement for the community-level data collection is one person. However, in most cases a team of at least two persons should conduct the community meetings, aided by a translator if needed. Ideally, the team administering the questionnaire will include men and women, with experience in collecting information at the community level using participatory methods. Where only two people administer the questionnaire, one should lead the discussions and the second record the answers and observe the group participating in the session.

A good approach to speeding up the community data process and including as many communities as possible is to have several teams administer the questionnaire concurrently to several communities. This approach is useful in increasing the number of communities reached, particularly when local conditions mean that only one community can be covered per team per day.

Persons administering the questionnaire should do so in a similar manner. A short training in participatory data collection methods and the REA process, including a role play with the questionnaire, is recommended to ensure that all staff involved in the assessment have a similar background and will use similar methods.

The selection of communities in which to conduct the questionnaire will depend on several factors, including access, the impact of the disaster, time available to do the assessment and staff availability. It is recommended that communities be selected with input from locally knowledgeable persons and represent a cross-section of physical, cultural and social characteristics of a disaster-affected area.

Specific attention should be paid to the logistics and organization of conducting the community assessment. At a minimum:

- The questionnaire or question guide should be translated into the language in which it will be administered, and terms and concepts clarified for the team and translator doing the community visits.
- The administration of the questionnaire or guide should be tested before general use and those using the document should practice administering the questionnaire or guide through a role play or other technique to work out how the questionnaire will be administered, and answers to expected questions from community members.
- Copies of blank questionnaire/guide forms, writing paper and similar supplies should be available to each team. Adequate supplies of other resources such as flip chart paper or maps should be available before the community sessions begin.

- A logistics and security plan should be developed before the community visits begin and reviewed and shared with appropriate parties. This plan should include call-in and contact procedures if problems are encountered during or while traveling to and from communities.
- Each team using the questionnaire or guide should establish roles and tasks within the team, including who will lead in administering the questionnaire or guide, who will record information and who will deal with the cultural and courtesy aspects of meeting with a community group. This can include arranging drinks or contacting local security officials to explain the nature of the meeting.
- It is best if the assessment results are formally recorded and discussed by the team at the end of each day. If this is not possible, then a specific time in the assessment schedule should be set aside for compiling, recording and reviewing the results of the community level meetings.

Recording and Using Information Collected in Communities

Any well-done community assessment generates considerable information about past problems, immediate conditions and plans and expectations of community members about the relief and recovery process. This information has considerable value beyond the REA. It has specific uses in project design and recovery planning and in framing longer-term developmental objectives.

As a result, it is necessary that information collected in communities be recorded in a form and format which permits future use. The results of each community assessment should be written-up, preferably using a standard data form. A full narrative and statistical report of assessment results may not be possible immediately after a disaster. But a short summary of findings should be prepared and circulated to all potentially interested parties. The findings are most likely to be used if they come in the form of short, targeted situation reports. In addition, it is more effective to formulate environmental concerns in terms of thematic issues to target specific Clusters. The Clusters are more likely to deal with an environmental issue if it falls within their area of responsibility.

Each assessment should also have a mechanism to note and pass on issues and information from communities relating to the effectiveness, transparency and appropriate allocation of relief and recovery assistance. Any assessment will identify operational gaps and successes. These need to be signaled to the responsible parties to ensure that the disaster recovery effort is as effective as possible.

Generating Condensed Community Assessment Information

Information generated through the community assessment needs to be assembled and condensed into a format similar to that used in the **Organization Level Assessment**. With the community and organizational information in a similar format, the results of the two assessments can be consolidated for analysis, as described in the following module.

The condensation and prioritization process is accomplished through a three step process using the **Community Assessment Summary** form in **Annex C2**. The form contains a set of questions based on possible environmental issues which may be affecting a community.

STEP 1 Answer each question with a yes or no using the information from the community questionnaire. The questions are divided into seven sections. The document should be reviewed before use and modified as appropriate for the community being assessed and the circumstances of the disaster being investigated.

STEP 2 The resulting identification of the prevalence of issues is then prioritized by scoring each answer according to whether the response for a community is a yes or no, as indicated in the form. Note that the significance of yes and no answers and the respective scoring changes between different sections of the form.

These scores are then totaled. Questions with the highest frequency of yes or no answers (depending on the respective section of the form) are considered to be the issues with the greatest prevalence and expected importance from the community perspective.

STEP 3 Once the scoring and ranking is completed, the final section of the summary form, dealing with coping strategies and actions, can be completed. In this section, assessment results are used to identify relief and coping strategies used by the community and enter these actions in the first column of the form. Each action should be judged as to whether it is having a positive or negative impact on the environment (second column). Some actions can have both impacts concurrently or at different times. Details on the actions and strategies should be provided to understand the scope and overall impact of each action.

The rating and ranking process is overly simple as it is intended to quickly extract the information from the questionnaires for use in the overall REA. The issues identified in the assessment should be validated with the communities (or community representatives) through community meetings or other methods as part of a formal project design process.

The same method can be used with the results of other assessments. Based on a review of the assessment reports or supporting documentation, the questions on the **Community Assessment Summary** form are answered and scored as described above and information on coping strategies and actions entered as indicated.

Personal Requirements

The **Community Assessment Summary** form should be completed by a team of at least three persons. The process works best when all involved have reviewed all the questionnaires (or other assessment reports) and participate in the consolidation and ranking process. Ideally, members of the teams which conducted the assessment should complete the **Community Assessment Summary**.

The staff, resources and time needed to complete the **Community Level Assessment** depend on whether a REA questionnaire or question guide is used and the number of communities visited. At a minimum, two information collection teams of two persons each and a vehicle are recommended (and translator if appropriate). Each team can complete at least one community per day, with the total time needed to collect data dependent on the number of communities visited. Information collection in a camp or in dense urban setting is much quicker than for separate rural communities, with one team often able to conduct several group meetings and ad hoc individual discussions during walks through a camp or urban area. Completion of the assessment summary can take up to two days and often more, depending how close the communities are to each other, depending on how well the questionnaires are processed or if other assessment materials need to be reviewed. However, with good preparation, the assessment summary should not take more than one half of a day.

REA Module Three: Consolidation and Analysis

*The **Consolidation and Analysis** module focuses on critical environmental issues from the perspective of government, non-government and private relief operations. The assessment uses simple tables to list and rank environmental issues identified in the **Organization** and **Community Level Assessments** or one assessment alone. The consolidation and analysis process can be completed using only one assessment, but it is recommended that both assessments be incorporated into the consolidation and analysis process when possible. The consolidation and analysis process can be completed by an individual but is best done by a group of ten to twelve field personnel. The process can take as little as four hours if a comparable period is dedicated to preparations.*

Introduction

The purpose of the **Consolidation and Analysis** module is to develop a single prioritized list of environmental issues which should be addressed in relief and recovery efforts. This module is not intended to generate a detailed report on the REA assessment but provide a simple tabular presentation of critical issues identified in the assessment and an indication of further action to address these issues.

Four types of actions are anticipated as a result of the consolidation and analysis results:

1. The **modification or redesign** of existing relief or recovery efforts, often involving common sense changes to address negative environmental impacts.
2. The **design of new projects** to resolve or mitigate critical issues. An example is changing the location and manner in which building waste is disposed of following an earthquake to limit groundwater and air pollution.
3. The **acquisition of additional information** to determine the nature, extent or importance of a specific issue. This information can come from local sources, from within an organization or from external experts. When additional information is available, a decision on further action can be made (see 1 or 2 above or 4 below). An example is a concern that chemicals in drinking and washing water are toxic and pose an immediate threat to health. When the nature and level of this issue is defined, a decision can be made as to whether the issue needs to be addressed through a project format or advocacy. (See **Annex A** for sources of information.)
4. **Advocacy** on behalf of disaster affected people with appropriate authorities or organizations to address a critical issue. This type of action would be taken when an issue is outside the scope of ongoing or planned relief or recovery efforts, or where an issue is directly related to the mandate or legal responsibilities of another organization. An example is when local government authorities are not enforcing regulations governing logging and sustainable extraction of forest resources to the disadvantage of indigenous populations.

Decisions on which action to take with respect to individual critical issues depend on the mandate, policies and resources of a specific organization. However, it can be anticipated that there will be at least one organization with a potential role in addressing any critical issues arising during a disaster and that communities have an important role to play regardless of the nature of the issue.

Consolidating Issues

STEP 1 The consolidation and analysis process starts with development of a simple listing of critical issues identified in the **Organization** and **Community Level Assessments**. This is accomplished by filling in the **Issue Consolidation** table in **Annex D1**. Ideally three, but no more than five, of the top ranked issues from each assessment form developed in the two assessments should be entered into the respective column in the form. Critical issues identified during the assessment which may not be covered by the issues listed on the two assessment forms can be entered under **Other Critical Issues**. These types of issues are often specific to a location and a particular disaster.

STEP 2 Issues which may not be immediately critical but need to be considered for long-term recovery should be listed under **Long-Term Recovery Issues** (in the **Issues Consolidation Table**, **Annex D1**). Long-term recovery issues are environmental issues which need to be addressed through planning for two- to five-year recovery and reconstruction planning and programs. Such issues might include environmental concerns caused by climate change, which may take longer to materialize and require a more complex solution.

Long-term issues might include the gradual process of desertification, including the loss of productive land, the risk of biodiversity loss and diminishing ecosystem services. Sea level rise and increased coastal erosion can cause human displacement, and changes in water availability for human consumption, food security as well as energy generation might pose considerable risks in the long term. The contrast is with shorter-term recovery, which can be addressed during on-going or near-term operations.

For example, sustainably sourcing sand for rebuilding communities that are far apart would be a short-term issue, while sustainably sourcing sand to rebuild a large city would be a long-term issue. These longer-term issues will not be addressed as part of the REA but passed on for consideration in the design of longer-term recovery programs.

The point of the consolidation process, and the whole REA effort, is to identify environment-related issues which need immediate attention as part of critical disaster relief and recovery operations. Overloading the consolidation list will prevent the most important issues being addressed and waste the limited resources available to respond to a disaster.

STEP 3 Once the **Issue Consolidation** table has been completed, any duplication between sections should be eliminated. This duplication can be both from within each assessment (e.g., water being mentioned several times in the community assessment) and between assessments (e.g., water being mention as an issue in both community and organization assessments). Duplicate items should be marked (e.g., with a star) as they indicate issues which have a higher frequency and are likely more important in terms of disaster-environment linkages.

Identification of Critical Issues and Actions

The results of the consolidation process should be transferred to a second form dealing with **Issues and Actions** (**Annex D2**). This form has three columns, one for the issues consolidated from the previous form, a second for an initial identification of actions to address these issues, and a third for an overall prioritization of the issues listed. A fourth column can be added to indicate who will have responsibility for specific actions, if this is appropriate.

The identification of actions to respond to the critical issues should be based on the four types of actions summarized above (modify an existing project, design a new project, collect more information, advocacy) and use of a rapid brainstorming approach to quickly identify the next steps in addressing the issues. Reference should be made to the original assessment documents if there is a need to clarify the origin and nature of an issue.

An Alternative Method

During a training on the REA in Nairobi, one group doing the consolidation and analysis process divided issues into conceptual and practical sections on the Issues and Actions table. This allowed the group to more easily focus on how to address the practical problems identified in assessment and to clearly identify which issues would need to be addressed in project design or advocacy efforts.

This "Nairobi Method" can be a useful way to segregating a large number of issues into groups that are easier to manage. This approach is useful when groups encounter difficulties in prioritizing or identifying actions for a number of apparently complex or contrasting issues.

At this stage, the focus of the REA is not to completely resolve issues which have been identified, but to simply identify how best to start addressing an issue. A tendency to make this step more complicated than necessary should be recognized and avoided.

The process of identifying actions is less of a challenge for issues which relate directly to physical tasks and activities, and more of a challenge for issues which are more conceptual in origin. For instance, identifying an action to address a critical issue caused by poor water quality and quantity is more straightforward than identifying how to address a critical issue related to environmental resilience or climate-related hazards.

In most cases, conceptual issues (which generally come from the **Context Statement** and **Factors Influencing Environmental Impact** sections of the assessments) are addressed by incorporating them into the manner in which relief and recovery assistance is provided.

For instance, if self-sufficiency is identified as a critical issue, then relief and recovery activities should be designed and implemented in a way which promotes self-sufficiency.

The items listed under the **Long-Term Recovery Issues** section should be documented in a separate short report to those overseeing the relief and recovery process. Documentation and referral is important to ensure that information collected during the assessment is not lost and can have the most positive impact on recovery, reconstruction and development efforts following a disaster.

In addition to a report, passing on the medium and long-term issues identified in the assessment can be facilitated by holding a short meeting on the REA results for representatives of organizations that focus on medium- and long-term post-disaster assistance. These organizations typically include government planning and disaster management offices, regional and international lending organization, the UN system and donors.

Of course, front-line assistance organizations themselves should incorporate medium- and long-term issues in their own planning and program development. The report-and-meeting approach can generate interest and funding for in-house efforts to address these issues. This approach also provides an opportunity to advocate with other front-line organizations for the adoption of issues which may be outside an organization's own mandate.

Prioritizing Issues and Actions

Once actions have been identified, the next step is to prioritize the actions based on the nature of the corresponding issues using the last column of the **Issues and Actions** table (**Annex D2**). This step may not be necessary if only a few issues are listed. However, some level of formal or informal prioritization is usually necessary to identify where to focus attention and actions following a REA.

The simplest approach to prioritization is to review the issues and actions based on three questions:

- Does the issue pose an immediate threat to life?
- Does the issue pose an immediate threat to livelihoods? or
- Does the issue pose an immediate threat to the environment?

Issues for which the answer is yes to the first question, Does the issue pose an immediate threat to life? are given top priority. Among these issues, the ones involving the greatest threat to life are given the highest priority. Where appropriate, indicate whose life might be threatened – this can include people living at a specific location or a general group of the affected, for instance, women and girls collecting water.

Issues with yes answers to the other questions have correspondingly lower priority for action and can be ranked according to the level of threat to livelihoods (second priority) or the environment but not life or livelihoods (third priority), as appropriate. The environment but not life or livelihoods grouping includes environmental issues such as biodiversity or threats to endangered species which are not directly linked to the immediate survival and livelihoods of disaster affected people.

The prioritization process should give attention to issues which were mentioned more than once at the consolidation stage (e.g. marked with a star). These issues are more likely to be of greater importance to communities and assistance providers and should be given priority within each priority category (i.e. threat to life, livelihoods or the environment).

If a large number of critical issues remain after an initial REA this may be due to the lack of information on the issues and factors covered in the assessment. However, if a large number of issues remain after several revisions of the REA, this may indicate that relief and recovery operations are facing significant operational problems or that little or no attention is being paid to environmental issues.

This situation should be called to the attention of senior management within the organization doing the REA and those overseeing the overall assistance operation. These operational problems and lack of attention to environmental issues may themselves become a topic of advocacy.

Reviewing Environmental Consequences of Relief Operations

A review of possible environmental consequences of on-going or planned relief operations is conducted in **Section Five** of **Module One**. This review needs to be conducted again once the specific actions are identified as a result of the consolidation and analysis process to avoid any unanticipated negative impacts on the environment from the proposed actions.

The review process is the same as set out in **Section Five/Module One** and based on completing **Rating Form 4** in **Annex B5**. Unanticipated or unwanted negative environmental impacts should be addressed by changes to the manner or nature of proposed actions and interventions. The environmental impact review should be conducted for each new action or intervention identified in the consolidation and analysis stage of the assessment.

For specific projects, the NEAT+ environmental screening tool can be used (https://ehaconnect.org/resource/neat) support the review of relief operations set out in Section Five/Module One by highlighting environmental risks and potential negative impacts.

Planning and Resources

The consolidation and analysis process can be done by a single individual but is recommended to be done by the persons who participated in the **Organization** and **Community Level Assessments.** An open forum discussion format is ideal for presentation of the issues to be consolidated, brainstorming on actions and prioritization. The use of flip charts, or computer-generated projections will facilitate the consolidation and prioritization process and the recording of the final results.

The time needed to complete the consolidation and prioritization process can range from several hours (the norm) to several days, if more extensive discussions on the issues identified and actions to address the issues takes place. Factors affecting the length of this process include participant familiarity with the assessment information, the complexity of the issues identified, the extent of preparation for the group session, the group management skills of the assessment leader and time needed to write up the results. Good preparation and group management skills should reduce the consolidation and prioritization process to less than half a day even in a disaster resulting in a number of complex environmental issues.

Using Assessment Results

Using the REA results in project planning and design is the same as using the products of other assessment tools. The results of the ***Guidelines***-based assessment should be combined with other assessments (for instance, of household food security or health and sanitation) to develop a clear problem statement, goal and objectives addressing the specific problems which have been identified.[16]

In many cases, issues identified in a REA relate directly to issues identified in other types of assessments, although the resulting problem statements and solutions (objectives) are not always specifically environmental in approach or process. Where the REA distinguishes itself and adds value in the project design process is through a continued attention on environmental impacts and the provision of an environmental focus for relief plans and projects.

Updating the REA Results

Updating the REA results involves a relatively simple process of verifying whether new issues can be classified as priorities by the three questions (impact on life, livelihoods or the environment) presented above. As a disaster evolves, the nature and importance of environmental issues will change, as will priorities for relief and recovery efforts. As a result, the whole **REA needs to be updated regularly**, and would ideally evolve into a formal EIA for longer term-recovery and reconstruction programs. Additionally, the REA can provide vital input for further assessments such as a Post-Disaster Needs Assessment (PDNA) and longer-term response and recovery programs.

16. The subject of emergency project design is too broad to be covered in this document. Various organizations have project planning guidance and resources, including the International Federation of Red Cross and Red Crescent Societies (IFRC) (http://www.ifrc.org/Global/Publications/monitoring/PPP-Guidance-Manual-English.pdf).
For emergency response planning across the Cluster system see IASC guidance on the HPC:
https://interagencystandingcommittee.org/system/files/hpc_reference_module_2015_final_.pdf

Annexes

Annex A: Resources

- *Building Material Selection and Use: An Environmental Guide (BMEG)*. WWF Environment and Disaster Management, 2017. http://envirodm.org/post/materialguide
- *Climate Change and Environmental Degradation Risk and Adaptation Assessment (CEDRA)*. Tearfund: https://learn.tearfund.org/en/themes/environment_and_climate/cedra/
- *EHA Connect* – A comprehensive online platform with guidance, tools and various resources on environment and humanitarian action: www.ehaconnect.org
- *Environmental assessment tools and guidance for humanitarian programming*. OCHA. www.eecentre.org/library/
- *Environmental Needs Assessment in Post-Disaster Situations: A Practical Guide for Implementation*. UNEP, 2008. http://wedocs.unep.org/handle/20.500.11822/17458
- *Flash Environmental Assessment Tool*. OCHA and Environmental Emergencies Centre, 2017. www.eecentre.org/feat/
- *FRAME Toolkit: Framework for Assessing, Monitoring and Evaluating the Environment in Refugee-Related Operations*. UNHCR and CARE, 2009. www.unhcr.org/uk/protection/environment/4a97d1039/frame-toolkit-framework-assessing-monitoring-evaluating-environment-refugee.html
- *Green Recovery and Reconstruction: Training Toolkit for Humanitarian Action (GRRT)*. WWF & American Red Cross. http://envirodm.org/green-recovery
- *Guidelines for Rapid Environmental Impact Assessment (REA) in Disasters*. Benfield Hazard Research Centre, University College London and CARE International, 2003. http://pdf.usaid.gov/pdf_docs/Pnads725.pdf
- *Humanitarian Needs Assessment – The Good Enough Guide*. NRC, 2014. https://reliefweb.int/sites/reliefweb.int/files/resources/h-humanitarian-needs-assessment-the-good-enough-guide.pdf
- *Information and resources on impact assessments:* www.iaia.org
- *Information on current disasters,* background on past disasters and assistance, library of key documents and links to other organizations involved in disaster management: http://www.reliefweb.int
- Links to environmental background resources and ***APELL*** program on preparedness for technological emergencies: https://www.unenvironment.org/
- *Nexus Environmental Assessment Tool* (NEAT+) for environmental screening of humanitarian projects: https://ehaconnect.org/resource/neat
- Online source of many humanitarian assistance related documents: https://www.fmreview.org/
- Participatory rapid appraisal and related information: http://www.worldbank.org/participation/
- *Quantifying Sustainability in the Aftermath of Natural Disasters (QSAND)*. IFRC and BRE Global. www.qsand.org
- *Rapid Environmental Impact Assessment (REA)*: https://ehaconnect.org/resource/rea
- *Shelter Environmental Impact Assessment and Action Tool 2008 Revision 3*. Global Shelter Cluster, 2008. www.sheltercluster.org/resources/documents/shelter-environmental-impact-assessment-and-action-tool-
- *Sphere Project* materials and 2018 Handbook: http://www.sphereproject.org/
- UN Environment / OCHA Joint Unit's ***Environmental Emergencies Centre*** with various relevant information, tools, trainings and guidance: http://www.eecentre.org
- USAID global knowledge portal for climate and development practitioners: https://www.climatelinks.org/
- World Environmental Library, Medical and Health Library, Collection on Critical Global Issues (also available as CDs): http://www.humaninfo.org

Annex B: Organization Level Assessment Forms

ANNEX B1 - CONTEXT STATEMENT

A. Provide three short paragraphs which summarize the (1) cause/s and most evident impacts of the disaster, (2) whether the weather or other conditions at the disaster site will change and if these changes will affect environmental conditions and relief needs, and (3) priority disaster relief efforts and specific programmatic areas of interest to the party completing the REA.

These three paragraphs ensure that the group completing the REA is in agreement as to the nature of the disaster and response priorities. In addition, the paragraphs identify what types of assistance the group completing the REA anticipates providing (e.g., health care for a medical NGO). This organizational mandate defines which issues identified in the REA will receive direct attention and be flagged for the attention of other organizations.

B. What sources are likely to be able to provide information on the environment in the area affected by the disaster? Provide contact information and a description of the information available if possible. (A simple table with three columns covering information sources, a short description of the information and contact information is sufficient to answer this question.)

Relevant information on the environment in the affected area might include, among others, climate data, the location of protected areas, vegetation/land cover, measurements of pollution, topographical and hydrological data, biodiversity levels, availability of natural resources, and natural hazard data.

Sources to consider:[17]

- Affected communities and key local resource persons
- Local, regional and national government disaster management, environment, development and planning offices
- Project reports and previous environmental assessments from national and international environmental agencies
- Trade associations (local, national and international)
- Local industry
- Universities, including programs covering the Environment, Agriculture, Development, Urbanization, Planning, Geography, and Public Health, among others
- NGOs, particularly local and international environmental NGOs
- Clusters and their lead agencies: at time of writing - IFRC and UNHCR for Shelter; UNICEF for water, sanitation and hygiene (WASH), Education and Nutrition; World Health Organization (WHO) for Health; Food and Agriculture Organization (FAO) and World Food Programme (WFP) for Food Security; WFP for Logistics and Telecommunications; UNHCR and UNICEF for Protection; and UNHCR and International Organization for Migration (IOM) for Camp Coordination/Management.
- Other UN agencies
- Donors with development projects in the disaster area, including international financial organizations (e.g., World Bank, Asia Development Bank)
- National/international (online) environmental databases
- Satellite imagery and maps

List existing data collection systems and contact information for local specialists. The answers to this question should be updated as the relief operation progresses.

17. See the FEAT Checklist on Secondary Data Sources (Annex 2) for further information, and the EHA Connect Guidance on Information and Data Sharing.

C. Have there been, or are there currently, concerns about the release of potentially toxic substances affecting humans or the environment?[18] If yes, summarize the information available and indicate how additional information can be collected.

The answer to this question should include input from disaster affected people as well as local government and assistance organizations if at all possible.

If the answer is yes, it is likely that specialist technical advice and assistance will be needed to assess the impact and remediation of the releases.

Note whether these concerns are related to the disaster or not. It may be that after a disaster a community or group of disaster affected people are more worried about a pre-existing threat to their environment than the damage caused by the disaster. These pre-existing concerns may be major drivers in how those affected wish to respond to the disaster. A delicate balance may be needed between responding to the immediate disaster impact and problems existing before the disaster.

Consider whether this is an action you wish to initiate. If yes, formulate an initial request for assistance that briefly describes the disaster, the nature of the toxic substances released, or which may be released, the location of the release site, and local contacts.

D. Are there environmentally unique sites in the disaster area and have any been (or may be) affected directly or indirectly by the disaster?

An environmentally unique site is broadly any location where environmental conditions are significantly different from surrounding areas. These include concentration of industry, mines, nature reserves, natural parks, areas of unique biodiversity or natural resources, and in many cases, historical and cultural sites.

If the answer to this question is yes, it is likely that technical advice and assistance will be needed to assess and address environmental impacts in or arising from the uniqueness of these sites.

Note that this question can cover a wide range of sites. Impacts can be direct (damaged buildings) or indirect (lack of electricity), and include impacts arising from a site (a chemical release from a factory) or impacts on a site (chemicals flowing into a river containing an endangered species).

A list of the locations, uniqueness (e.g., nature of industrial process or endangered species), and expected or known impacts of the disaster should be developed. The list should include contact information for those persons or organizations responsible for managing or knowledgeable about the sites.

Consider whether you want to initiate a request for technical advice or assistance. If yes, formulate an initial request for assistance that briefly describes the disaster and the nature and location of concern. Before making a request for assistance, attempt to contact the organization or individuals responsible for the site and ascertain what other assistance may be available and whether additional assistance is required.

Note that mines and industrial sites may have in-house capacities to deal with potential environmental problems following a disaster. These capacities (and any from the government) should be taken into account in considering whether to initiate a separate response or to work collaboratively with the affected organization. Similar sources of in-house and government capacities are less likely for other environmentally unique sites but should be investigated.

See Section C for more on concerns before the disaster. Sections C and E may include overlapping information.

18. For industrial sites or technology-based problems see Flash Environmental Assessment Tool (FEAT) Pocket and Reference Guide (JEU, 2017).

E. Were there concerns about environmental conditions before the disaster? Briefly describe the nature and cause of the concern, and whether these concerns are linked to the current disaster.

Concerns about environmental conditions might include natural resource scarcity, environmental pollution and waste (e.g. plastic, hazardous materials etc.), vector- and/or water-related diseases, changes in animal behavior and biodiversity.

F. Are there any concerns about the major natural or man-made risks that may affect the region in the future? Which impacts of climate change are perceived to be most threatening at the moment and which specific impacts are thought to be of concern in the future?

Concerns regarding climate change might include changing weather patterns and temperature, extended dry spells and heat waves, water scarcity, changing precipitation patterns, sea level rise, more intense and flooding and/or storms etc. Keep in mind that climate-related hazards can vary greatly depending on the local context.

Note that responses to this question might also cover a community's means of disaster risk reduction, which are important to consider.

G. Are there any concerns about the environmental impact of the disaster on the part of the affected or neighboring communities? Are there any specific concerns about impacts on particular groups of (vulnerable) people, such as women, children and older adults? Briefly describe the nature and cause of the local concern and link to the disaster for each problem noted.

Answering this question requires contact with disaster affected people or those with close knowledge of those affected, for instance, staff of local environmental NGOs. The preference is for contact directly with people affected by the emergency through, for instance, a community level disaster impact assessment. Alternately, or before community level assessments can be completed, information on local concerns about the disaster and the environment can be available from those who are in close contact with the affected communities or groups.

Environmental concerns on the part of disaster affected populations or neighboring communities (the most immediate source of assistance) will be major drivers in framing the local response to the disaster. Disregarding these concerns risks creating a gap between external and internal response and reduces the effectiveness of relief operations. In addition, environmental concerns that existed before a disaster will likely be exacerbated by the disaster, and thus need to be taken into account for intervention priority areas.

H. Are there any local or national laws and regulations, or donor or organizational policies and procedures which impact how environmental issues will be assessed or managed? If yes, summarize the requirements and how they will be addressed.

Specific details of local and national laws and regulations, particularly those relating to environment or natural resource management, may not readily be known to those involved in a disaster, and therefore, will require additional investigation. Donor and organizational policies should be known, or easily accessible, to those completing the REA. Normal rules, regulations and procedures related to the environment are often waived in disaster situations but should be followed as closely as possible during a disaster.

ANNEX B2: RATING FORM 1 – FACTORS INFLUENCING ENVIRONMENTAL IMPACTS (1/2)

FACTOR	RATING			IMPLICATION
Number of persons affected (relative to total population in disaster area).	Hundreds	Thousands	Tens of thousands	The greater number affected, the greater potential impact on the environment.
Duration: Time from the onset of the disaster.	Days to weeks	Weeks to months	Months to years	The longer the disaster, the greater the potential impact on the environment.
Concentration of the affected population.	Low	Moderate	High	The more concentrated (or dense) the living conditions of the survivors, the greater potential impact.
Distance disaster survivors have moved since the beginning of the disaster.	Close to point of origin	Not close or far	Far from point of origin	The further survivors have to move, the greater the potential impact on the environment.
Self-sufficiency: After the start of the disaster, the ability of survivors to meet needs without recourse to additional direct extraction from the environment or external assistance.	High	Not high or low	Low	Low self-sufficiency after the disaster implies greater risk of damage to the environment.
Social solidarity: Solidarity between disaster survivors and non-affected populations.	Strong	Not strong or weak	Weak	Weak solidarity may indicate the likelihood of conflict over resources and limits to the ability of survivors to meet needs.
Cultural homogeneity: The similarity of cultural beliefs and practices between disaster survivors and non-affected populations.	High	Not high or low	Low	A lack of common cultural structure may result in disagreement over resource use.
Asset distribution: The distribution of economic and other assets within disaster affected population after the start of the disaster.	Equitable	Partially equitable	Not Equitable	Concentration of assets with one part of a population can lead to tensions with less well-endowed groups over use of environmental assets.

FACTOR	RATING			IMPLICATION
Livelihood options: The number of options that disaster survivors have to assure their livelihoods after the start of the disaster.	Many	Some	Few	The fewer the number of livelihood options indicates the disaster survivors may pose higher pressure upon fewer resources of the environment.
Expectations: The level of assistance (local/external) which the disaster survivors expect to need to survive.	Low	Moderate	High	In the absence of adequate assistance, high expectations can lead to high demand on local resources.
Availability of natural resources, or whether the available natural resources meet the needs of the disaster survivors in a way which can continue without degradation to the environment or future availability of the resources.	High	Moderate	Low	Excessive use of natural resources leads to environmental damage. Relief can be used to reduce excessive resource demand or repair damage done to the environment. The resources in question are, for example, water (for human consumption and for other uses), forest resources (timber, firewood), agriculture land (soil and water quality)
Capacity to absorb waste: The environmental, social and physical structures available to handle waste produced by the survivors.	High	Moderate	Low	Low waste absorptive capacity will lead to environmental damage.
Environmental Resilience: Ability of eco-system to rebound from the disaster itself and from relief and recovery activities which cause environmental damage.	High	Moderate	Low	Low resilience likely means high fragility and greater possibility of long-term environmental damage.
Climate-related hazards: Hazards that increase in intensity and frequency due to climate change, and which, can produce adverse effects on natural and human systems.	Few	Some	Many	The greater the frequency and intensity of climate-related hazards, the greater the threat to a safe and productive life in the short- and/or long-term.
Gender: Are activities of men, women, girls or boys linked to the environment potentially subjecting them to physical harm?	No	Limited	Extensive	Disasters often can place men, women, boys or girls in roles which can result in violence, such as collecting fire wood or water, or harvesting natural resources. For all ratings, the group affected (women, men, girls, boys) and why they are affected should be noted and used in the prioritization process.

ANNEX B3: RATING FORM 2 - ENVIRONMENTAL THREATS OF DISASTERS [19] [20] (1/4)

HAZARD	GUIDANCE AS TO WHETHER HAZARD CONSTITUTES A THREAT	PHYSICAL AREA AFFECTED: Large: 1st priority Medium: 2nd priority Small: 3rd priority	INITIAL RESPONSE OPTIONS
Flooding: Transport of contaminated sediment. Sediment contains hazardous organic or inorganic chemicals (including high levels of salt). Secondary risk from sediment when dried after a flood.	Chemicals (including salt) present at levels exceeding acceptable standards.		• Identify and assess level of chemicals present. • Limit use of water sources with contaminated sediment and plants and animals collected from these sites. • Specialized technical assistance likely needed for assessment and planning.
Flooding: Polluted Water. Water contains hazardous pathogens, or chemicals.	Pathogens or chemicals present at levels which exceed acceptable standards.		• Identify and assess level of pathogens or chemicals present. • Limit use of contaminated water and plants and animals collected from contaminated water. • Consider water purification to meet immediate needs. • Specialized technical assistance likely needed for assessment and planning.
Flooding: Transport of contaminated solids other than sediment. Flood waters contain physical items which pose a threat, including but not limited to, animal carcasses and hazardous materials containers.	• Presence of dead animals. • Presence of hazardous chemical containers. • Presence of significant level of floating debris in flood waters.		• Quantify number and volume of solids by three threat types (animals, hazardous chemical containers, other debris). • Develop and publicize ways to deal with solids. Consider special collection and safety activities, and ensure safe disposal procedures and locations. • Specialized technical assistance likely needed for assessment and planning and in handling disposal.
Flooding: Erosion (water). Flood waters remove usable soil and cover usable land with sediment.	• Loss of critical infrastructure, e.g. dikes, irrigation system. • Loss of immediately productive land, e.g., land for cultivation or harvesting natural resources.		• Remove or protect infrastructure under threat. • Remove plants and other productive assets from flooded land before loss or coverage with sediment. • Remove sediment after flooding. • Specialized assistance likely needed.

19. Note that Hurricane/Cyclone/Typhoon should be treated under each impact agent: flooding, sea surge, and wind.
20. Note that tsunami should be treated under each impact agent, e.g., sea surge, flooding.

HAZARD	GUIDANCE AS TO WHETHER HAZARD CONSTITUTES A THREAT	PHYSICAL AREA AFFECTED: Large: 1st priority Medium: 2nd priority Small: 3rd priority	INITIAL RESPONSE OPTIONS
Flooding: Damage to infrastructure (from erosion or force of flood waters). Flood waters damage or destroy built environment, limiting operation of critical functions (e.g. safe water delivery), or increasing risk of pollution (e.g. damage to sewage treatment plant).	Damage which (1) seriously limits or stops use of critical infrastructure, including roads, water treatment, power, emergency services, or (2) creates potential sources of pollution, e.g., industrial or mining sites, oil and gas transmission systems, garbage dumps, and chemical waste sites.		• Replace or remove infrastructure under threat. • Flood-proof and decommission sites at risk. • Identify nature of potential or actual pollution due to flooding/flood damage and develop response plans (see above). • Specialized assistance likely needed for any significant response.
Wind, including tornados. Damage/ loss of crops, land cover and infrastructure.	Reduced food supply, economic (exploitable) natural resources and infrastructure, specifically shelter and public and commercial facilities.		• Short-term food and economic assistance to assist affected people until vegetation/crops recover or are replanted. • Assistance to replace/repair damaged infrastructure. • Dispose of debris in manner that does not increase air, land or water pollution.
Wildfire: Damage to infrastructure. Wildfire can damage or destroy infrastructure, limiting operation of critical functions or increasing risk of pollution.	Damage which (1) significantly limits or stops use of critical infrastructure, including roads, water treatment, power, emergency services, or (2) affects control systems for industrial sites, e.g., power supply to a chemical factory.		• Remove or decommission infrastructure under threat. • Identify potential or actual pollution due to wildfire damage and develop response plans (see above). • Specialized assistance likely needed for any significant response.
Wildfire: Air Pollution. Air contains hazardous chemicals and high concentrations of particulate matter.	Chemicals and/or particulate matter present at levels which exceed acceptable standards.		• Identify and assess level of chemicals or particulate matter present. • Develop methods to purify air for individual and indoor use, with focus on persons with air-related health problem. • Technical assistance probably needed for assessment/response.

ANNEX B3: RATING FORM 2 - ENVIRONMENTAL THREATS OF DISASTERS (2/4)

HAZARD	GUIDANCE AS TO WHETHER HAZARD CONSTITUTES A THREAT	PHYSICAL AREA AFFECTED: Large: 1st priority Medium: 2nd priority Small: 3rd priority	INITIAL RESPONSE OPTIONS
Wildfire: Erosion (following fire). Wildfire removes land cover leading to increased erosion.	Immediate threat to (1) critical infrastructure, or (2) habitats providing food and income to disaster survivors.		• Institute erosion control measures. • Identify and reinforce/remove critical infrastructure under threat.
Wildfire: Loss of habitat. Wildfire damages or destroys habitat resulting in negative impact on species using habitat before fire.	Lack of alternative habitats for species under threat.		• Institute activities to restore or modify damaged habitat. • Make alternate habitats available to species under threat.
Drought: Wind. Unusually dry land more susceptible to aeolian (wind) erosion.	Significant dust clouds and evidence of wind movement of soils (e.g., soil forming dunes).		• Wind erosion control measures. • Shift to drought-tolerant crops/ground cover.
Drought: Wind. Chemical composition of dust.	Chemicals present at levels which exceed acceptable standards.		• Identify and assess level of chemicals present. • Limit movement of dust and institute measures to limit dust inhalation (see above and under wildfire). • Specialized assistance likely needed for assessment.
Drought: Wind. Drying effect of wind on vegetation (failure to mature, increased likelihood of fire).	Vegetation drying faster than normal.		• Institute modified cultivation or harvesting procedures, e.g., early harvesting, irrigation. • Develop fire management plan, including fire breaks, training and biomass reduction.
Drought: Drying of crops. Lack of water (from rainfall or irrigations) for normal crop development.	Insufficient water for normal crop grown. Note that impact can be due to a lack in total amount of water available, or periods of a lack of or an insufficient amount of water at critical crop development stages.		• As above. • Implement water conservation methods, e.g., mulching. • Consider temporary reallocation of available water supplies to ensure proper crop development (for irrigation-dependent crops). • Identify alternate used for crops which do not mature properly, e.g., as livestock feed.

HAZARD	GUIDANCE AS TO WHETHER HAZARD CONSTITUTES A THREAT	PHYSICAL AREA AFFECTED: Large: 1st priority Medium: 2nd priority Small: 3rd priority	INITIAL RESPONSE OPTIONS
Drought: Drying of water courses and lakes/ponds. • Lack of water supply for personal and commercial uses. • Increase health problems. • Decease in water quality. • Loss of income/food supply sources	• Water less than 15 liters per person per day. • Increase in skin and other sanitation-related diseases above pre-drought levels. • Water does not meet international/local standards. • Significant reduction of food supply or income.		• Improve supply and quality of water. • Monitor and respond to health problems. • Develop alternative sources of food and income.
Hail. Damage to crops and land cover.	Loss of food supply and economic (exploitable) natural resources.		• Short-term food and economic assistance to assist survivors until vegetation/crops recover or are replanted. • Dispose of damaged vegetation in manner that does not increase air, land or water pollution.
Snow, including associated high winds, and ice storms (unusually heavy or persistent). • Damage to infrastructure and natural resources. • Limiting access to fields and other natural resources. • Heavy runoff.	Snow or ice presence, in time or quantity, above average.		• Implement snow safety activities to protect infrastructure from damage. • Shift crops and planting methods to take into account late planting and soil moisture conditions. • Develop water management plan for runoff, including erosion prevention and flood management. • Develop management plan for damaged vegetation and snow removal.
Phytosanitary (Pest) Outbreak. Damage to economic crops from pests or disease.	Damage significantly above normal[21].		• Integrated pest management methods, with agro-chemical application as appropriate. Procedures for safer use of agro-chemicals should be followed (including user education) and containers disposed of according to international standards. • For medium to large scale pest disaster it is likely that special technical assistance and program management will be required.

21. "Normal" is usually defined as average recorded losses over specific period. Can also be assessed based on qualitative assessment of agriculture community as to whether losses are significantly above normal.

ANNEX B3: RATING FORM 2 - ENVIRONMENTAL THREATS OF DISASTERS (3/4)

HAZARD	GUIDANCE AS TO WHETHER HAZARD CONSTITUTES A THREAT	PHYSICAL AREA AFFECTED: Large: 1st priority Medium: 2nd priority Small: 3rd priority	INITIAL RESPONSE OPTIONS
Disease. Human mortality and morbidity reducing social and economic activity and increasing personal hardship.	Disease incidence significantly above normal. Note that specific criteria and methods exist to determine if an epidemic is occurring or a threat, and these should be used to assess threat significance.		• Hazardous waste management. • Disease control-related measures focusing on environmental factors such as water supply and quality, sanitation, pollution reduction and living conditions (e. g., other hazards like flooding or crowded conditions). Many responses are likely to be common sense and relate to other threats to disaster survivors.
Disease. Epizootia (animal, not human) mortality and morbidity of non-human animals affecting food intake, assets and increasing personal hardship.	Disease incidence significantly above normal. Note that specific criteria and methods exist to determine if an epidemic is occurring or a threat, and these should be used to assess threat significance.		• Improving water supply and quality, sanitation, pollution reduction and living condition, e. g., crowded conditions. • Safe and environmentally sound disposal of dead animals. • The general lack of experience with animal health emergencies indicates specialized technical assistance will be needed throughout the response. • Hazardous waste management.
Land Mass Movement, including landslides, slumps, and other down slope movement. • Direct damage to infrastructure and natural resources. • Direct or indirect pollution of water sources.	Damage to infrastructure or other resources. Significant increase in water sediment load.		• Remove infrastructure at risk. • Install containment structures and filtration systems for contaminated water. • Specialist assistance is likely to be required to plan response.

HAZARD	GUIDANCE AS TO WHETHER HAZARD CONSTITUTES A THREAT	PHYSICAL AREA AFFECTED: Large: 1st priority Medium: 2nd priority Small: 3rd priority	INITIAL RESPONSE OPTIONS
Earthquake • Damage to critical infrastructure, leading to (i) threat to or loss of life and injuries, or (ii) hazardous materials incidents. • Changes in land forms (e.g., mass movement).	• Human death or injury. • Any hazardous materials release. • Any damage that stops or significantly slows the delivery of critical services (water, health care, power, gas, heating, food). • Any land form changes due to the earthquake.		• Develop rescue plans (best done before the disaster). • Develop and implement hazardous materials response plans (best done before the disaster). • Respond to damage to infrastructure as per other disasters. • Respond to land form changes as per "**Mass Movements**". • Develop solid waste disposal plan, including procedures to maximize recycling, to minimize air and water pollution, and ensuring sanitary landfill standards are met. • Specialized technical assistance is likely to be required in design of waste disposal plan.
Volcano: Superheated ash, gas flows and large-scale explosions. Rapid destruction of environment.	Volcano producing ash/gas clouds or evidence of large scale explosions in the past.		• Establish safety zones around volcano and attempt to limit human and other access to high-risk areas. • Likely require specialized assistance to assess nature of volcano, high-risk areas and effective safety precaution.
Volcano: Ash falls (including materials deposited following a massive explosion) and lava flows. Covering and/or destruction of productive (natural) resources, damage or destruction of built environment, pollution of water resources, health impacts from air pollution.	• Significant loss of productive assets or infrastructure. • Air or water quality below standards. • Threat of sedimentation, flooding or erosion due to presence of ash or lava.		• Identity area at risk from ash falls and lava flows before eruption and implement evacuation and resource management plans. • Remove ash fall and lava. • Remove or maintain productive resources or infrastructure under threat. • Develop alternate uses for land covered with ash or lava, e.g., use for construction material. • Develop water and air quality monitoring program and remedial measures as appropriate. • Implement erosion and surface water management plan to manage sedimentation process and changes to water quality. • Specialized technical assistance likely needed to deal with water/air quality issues.

ANNEX B3: RATING FORM 2 - ENVIRONMENTAL THREATS OF DISASTERS (4/4)

HAZARD	GUIDANCE AS TO WHETHER HAZARD CONSTITUTES A THREAT	PHYSICAL AREA AFFECTED: Large: 1st priority Medium: 2nd priority Small: 3rd priority	INITIAL RESPONSE OPTIONS
Armed Conflict (between and within countries): Active fighting by military units ("conventional warfare"). Intentional damage to infrastructure, including power, water, sewage and industrial capacity due to active fighting. Limitations on ability to deliver basic supplies to non-combatant populations.	• Active military efforts to cause damage. • Inability or reduced ability to deliver minimum supplies of water, food, sanitation services and basic care due to fighting or infrastructure damage.		• Development of protected systems for delivery of minimum supplies of critical items (water, food, sanitation services, health care). • Use of neutral parties to deliver supplies and manage efforts to address damage caused by fighting. • Debris should be recycled or disposed in a way to minimize air, water and land pollution.
Armed Conflict: Unconventional warfare (including terrorism and ethnic cleansing). Disruption of normal social and economic support systems (i.e., threat to ability of populations to meet basic needs). Damage to and disruption of infrastructure systems.			Development of protected systems for delivery of minimum supplies of critical items (water, food, sanitation services, health care).
Armed Conflict: Use of chemical, biological, nuclear, radiation or high yield conventional explosives (in conventional and unconventional warfare). Immediate or delayed death to noncombatants and other living entities (e.g., cattle).	Releases of hazardous substances via air, water or land.		• Rapid response teams to limit releases of hazardous materials. • Decontamination of affected populations and areas. Note that decontamination efforts will require significant steps to properly dispose of contaminated materials.

HAZARD	GUIDANCE AS TO WHETHER HAZARD CONSTITUTES A THREAT	PHYSICAL AREA AFFECTED: Large: 1st priority Medium: 2nd priority Small: 3rd priority	INITIAL RESPONSE OPTIONS
Technological: Hazardous material release (fixed site and during transport, including road, water, rail or air accidents). Release of chemicals or compounds that pose immediate threat to life and well-being.	• Level of release above established norm (local or international, as appropriate). • Rate of release (e.g., explosion) poses significant threat to life or well-being.		• Limit additional damage by removing populations from affected areas and providing response teams with protective clothing and support. • Treat exposure symptoms as per standard medical response, taking care not to pass on contamination during treatment. • Dispose of contaminated items in way to limit additional land, water or air pollution. • Likely specialized assistance will be needed for all phases of the response.
Technological: Explosion, from fixed or mobile source (e.g., tank truck). Destruction of lives, productive assets and infrastructure.	• Humans at risk. • Potential or actual damage to productive assets (natural resources, commercial facilities or infrastructure).		• Before disaster, develop risk zoning and change land use to reduce risk from explosion. • Design facilities/vehicles to reduce risk of explosion. • Establish warning and evacuation plans and shelters. • After explosion, consider items in previous section.
Sand and Dust Storm (SDS)	• The duration or intensity of SDS contributing to increased mortality or morbidity in health, transport or other sectors, or affecting food production, including crops and livestock.		• Improve SDS warning systems to allow for preventive actions, particularly in the health and transport sectors.

ANNEX B4: RATING FORM 3 - UNMET BASIC NEEDS (1/4)

BASIC NEEDS	At what level were needs being met before the disaster?	Are needs being met at present?	Will the quality or quantity of the resources used to meet this need deteriorate significantly in the next 120 days?	INDICATORS (Based on Sphere indicators. The closer the indicators are met in full, the higher the score. These indicators **are only guides**. Use depends on available data and familiarity of users with Sphere Standards. The list of indicators is not exhaustive, but is based on the most relevant indicators for the purpose of the REA. See **Section 4** for more guidance on the indicators)
	ANSWER: * Not met at all. * Lesser part of needs met than not met. * Greater part of needs met than not met. * Largely met. * Totally met.		(Yes/no)	
WATER				**Minimum of 15 litres per person per day.** **Maximum number of people using water-based facility.** • 250 people per tap (based on a flow rate of 7.5 litres/minute) • 500 people per hand pump (based on a flow rate of 17 litres/minute) • 400 people per open hand well (based on a flow rate of 12.5 litres/minute) • 100 people per laundry facility • 50 people per bathing facility **Distance from shelter to water point no more than 500 meters.** **Queuing time at water sources.** • < 30 minutes **Percentage of water quality tests meeting minimum water quality standards.** • <10 CFU/100ml at point of delivery (unchlorinated water) • 0.2–0.5mg/l free residual chlorine (FRC) at point of delivery (chlorinated water) • Turbidity of less than 5 NTU **Affected population collects water from improved water sources.** **Households store drinking water in clean and covered containers.**

BASIC NEEDS	At what level were needs being met before the disaster?	Are needs being met at present?	Will the quality or quantity of the resources used to meet this need deteriorate significantly in the next 120 days?	INDICATORS
	ANSWER: (* Not met at all / * Lesser part of needs met than not met / * Greater part of needs met than not met / * Largely met / * Totally met			
FOOD				**Food supplies are accessible at affordable prices and supply and costs are stable over time.** **Food distribution is equitable, transparent, safe and covers basic needs (together with other food items available).** **Targeted households have an acceptable Food Consumption Score**. • > 35 per cent; if oil and sugar are provided, > 42 per cent. • > 5 main food groups regularly consumed. **Targeted households have an acceptable Coping Strategy Index.** **Targeted households receive the minimum food energy requirements (2,100kCal per person per day) and recommended daily micronutrient intake.** **Distance from dwellings to final distribution points or markets (in case of vouchers or cash).** • Target < 5 kilometres. **Targeted households have access to appropriate cooking utensils, fuel, potable water and hygiene materials.**

ANNEX B4: RATING FORM 3 - UNMET BASIC NEEDS (2/4)

BASIC NEEDS	At what level were needs being met before the disaster?	Are needs being met at present?	Will the quality or quantity of the resources used to meet this need deteriorate significantly in the next 120 days?	INDICATORS (Based on Sphere indicators. The closer the indicators are met in full, the higher the score. These indicators **are only guides**. Use depends on available data and familiarity of users with Sphere Standards. The list of indicators is not exhaustive, but is based on the most relevant indicators for the purpose of the REA. See **Section 4** for more guidance on the indicators)
	ANSWER: (* Not met at all / * Lesser part of needs met than not met / * Greater part of needs met than not met / * Largely met / * Totally met			
SHELTER & SETTLEMENT				**Shelters and/or settlement sites have safe access to essential services within an acceptable amount of time or distance.** **Settlement sites offer sufficient usable surface area to carry out private and public outdoor activities appropriate to the context.** • 45 square meters for each person in camp-type settlements, including household plots • 30 square meters for each person, including household plots, where communal services can be provided outside the planned settlement area • Minimum ratio between covered living space and plot size is 1:2; move as soon as possible to 1:3 or more **Affected population has adequate living space in and immediately around their shelters to carry out daily activities.** • Minimum 3.5 square meters of living space per person, excluding cooking space, bathing area and sanitation facility • 4.5–5.5 square meters of living space per person in cold climates or urban settings where internal cooking space and bathing and/or sanitation facilities are included • Internal floor-to-ceiling height of at least 2 meters (2.6 meters in hot climates) at the highest point **Shelters meet agreed technical and performance standards and are culturally acceptable.** **Shelter units are constructed, repaired, retrofitted, upgraded or maintained according to the agreed safe building practices for the specific context and hazards.** **Shelter recipients have security of tenure for their shelter and settlement option.** **Shelter recipients that have an appropriate agreement for security of tenure for their shelter option.** **Shelter constructions use low carbon emission construction materials and procurement methods.**

BASIC NEEDS	At what level were needs being met before the disaster?	Are needs being met at present?	Will the quality or quantity of the resources used to meet this need deteriorate significantly in the next 120 days?	INDICATORS
	ANSWER: (* Not met at all / * Lesser part of needs met than not met / * Greater part of needs met than not met / * Largely met / * Totally met			
PERSONAL SAFETY				**Assisted people (disaggregated by sex, age and disability) do not experience safety problems travelling to, from and at program sites.**
HEALTH CARE				**The affected population can access primary healthcare within one hour's walk from dwellings.** • Minimum 80 per cent **Healthcare facilities deliver prioritised health services.** • Minimum 80 per cent
WASTE MANAGEMENT (LIQUID AND SOLID)				**Affected households dispose of solid waste appropriately.** **Local environment is free of human and animal faeces.** **Solid waste on the site is reused, repurposed or recycled.** • Target > 70 per cent by volume. **There is no solid waste accumulating around designated neighbourhood or communal public collection points.** **Households have access to a designated neighbourhood or communal solid waste collection point at an acceptable distance from their dwelling.** **Households have appropriate and adequate waste storage at the household level.** **No contaminated or dangerous medical wastes in living or public spaces.** **There is an acceptable number of accessible toilets.** • Minimum: four in outpatient facilities (separated for men, women, children and healthcare workers) • Minimum: 1 per 20 inpatients (separated for men, women, children and healthcare workers)

ANNEX B4: RATING FORM 3 - UNMET BASIC NEEDS (3/4)

BASIC NEEDS	At what level were needs being met before the disaster?	Are needs being met at present?	Will the quality or quantity of the resources used to meet this need deteriorate significantly in the next 120 days?	INDICATORS (Based on Sphere indicators. The closer the indicators are met in full, the higher the score. These indicators **are only guides**. Use depends on available data and familiarity of users with Sphere Standards. The list of indicators is not exhaustive, but is based on the most relevant indicators for the purpose of the REA. See **Section 4** for more guidance on the indicators)
	ANSWER: (* Not met at all / * Lesser part of needs met than not met / * Greater part of needs met than not met / * Largely met / * Totally met			
ENVIRONMENTAL CONDITIONS				• **Shelters and/or settlement sites that are located in areas with no or minimal known natural or man-made threats, risks and hazards.** • **Environment is free from risk of water erosion, from standing water and a slope of no more than 6 percent.** • **Smoke and fumes pose no threat to human health.** • **Animal management minimizes opportunities for disease transmission, solid and liquid waste problems and environmental degradation.** • Uncontrolled extraction of natural resources by disaster survivors is not taking place • Graveyard(s) is appropriately located and sized
ENERGY AND FUEL				**The affected population has access to a sufficient, safe and affordable energy supply to maintain thermal comfort, prepare food and provide lighting.** **Stoves and sorting and sourcing fuel do not harm people.** **Fuel availability meets immediate needs.** **Low smoke and fuel-efficient wood stoves, gas or kerosene stoves and cooking pots with well-fitting lids are available.** **There is sufficient lighting to meet security requirements and for normal economic and social activities**
DOMESTIC RESOURCES				**People have sufficient and appropriate quality items for safe, healthy and private sleeping.** • Minimum: one blanket and bedding (floor mat, mattress, sheeting) per person. Additional blankets/ground insulation required in cold climates • Long-lasting insecticide-treated nets (LLIN) where needed

BASIC NEEDS	At what level were needs being met before the disaster?	Are needs being met at present?	Will the quality or quantity of the resources used to meet this need deteriorate significantly in the next 120 days?	INDICATORS
	ANSWER: (* Not met at all / * Lesser part of needs met than not met / * Greater part of needs met than not met / * Largely met / * Totally met			
DOMESTIC RESOURCES				**People have sufficient and appropriate items to prepare, eat and store food.** • Per household or group of 4–5 individuals: two family-sized cooking pots with handles and lids, one basin for food preparation or serving, one kitchen knife and two serving spoons • Per person: one dished plate, one set of eating utensils and one drinking vessel **All affected households have access to the minimum quantity of essential hygiene items.** • two water containers per household (10–20 liters; one for collection, one for storage) • 250 grams of soap for bathing per person per month • 200 grams of soap for laundry per person per month • Soap and water at a handwashing station (one station per shared toilet or one per household) • Potty, scoop or nappies to dispose of children's faeces
CLOTHING				**People have sufficient and appropriate quality clothing.** • Minimum: two full sets of clothing per person, in the right size and appropriate to culture, season and climate, and adapted to any particular needs
NUTRITION				**Target population can access dry ration supplementary feeding site within one day's return walk (including time for treatment).** • Target > 90 per cent

ANNEX B4: RATING FORM 3 - UNMET BASIC NEEDS (4/4)

BASIC NEEDS	At what level were needs being met before the disaster?	Are needs being met at present?	Will the quality or quantity of the resources used to meet this need deteriorate significantly in the next 120 days?	INDICATORS (Based on Sphere indicators. The closer the indicators are met in full, the higher the score. These indicators **are only guides**. Use depends on available data and familiarity of users with Sphere Standards. The list of indicators is not exhaustive, but is based on the most relevant indicators for the purpose of the REA. See **Section 4** for more guidance on the indicators)
	ANSWER: (* Not met at all / * Lesser part of needs met than not met / * Greater part of needs met than not met / * Largely met / * Totally met			
TRANSPORT				**Target population can access on-site programmes within one hour.** • Target > 90 per cent **Adequate to permit disaster survivors to reach goods and services at reasonable cost and convenience.**
LIVELIHOODS				**Households have access to adequate storage facilities for their produce.** **Households have physical access to functioning markets due to program interventions.** **Target populations improve their net income during a defined period.** **Households have access to credit.** **Target populations diversify their income-generating activities.** **Target population is employed (or self-employed) in sustainable livelihoods activities for a defined period of time (6–12 months).** **Affected population have physical and economic access to functioning markets and/or other livelihood support services (formal or informal).**

ANNEX B5: RATING FORM 4 - NEGATIVE ENVIRONMENTAL CONSEQUENCES OF RELIEF ACTIVITIES (1/5)

This rating form can be used to identify negative environmental consequences of planned relief activities. For a tool specifically designed to inform project level design and minimize negative environmental consequences of planned humanitarian activities see the Nexus Environmental Assessment Tool (NEAT+). Specific modules exist for identifying overall environmental sensitivities as well as Shelter, WASH and Food Security and Livelihoods programming.

ACTIVITY	Is the activity underway or planned? (Yes/No)	Questions on whether potential negative environmental consequences of activity have been addressed.	Yes/No answer to the question immediately to the left.	Selected Avoidance or Mitigation Options
If the activity is not underway or planned (Answer = No), directly move on to the next one				
AGRO-CHEMICALS		Is the danger to applicators and humans from exposure in the application, handling or storage of agro-chemicals addressed?		• Avoid or minimize use of agro-chemicals or use products with low toxicity. • Establish training and education programs on agro-chemical safety. • Establish system for safer handling, cleaning and disposal of containers and equipment. • Provide education and extension advice on use of agro-chemicals. Limit quantities available to actual needs for agricultural. • Use Integrated Pest Management approaches.
		Are negative impacts on non-target organisms in soil, water and air avoided or minimized?		
SEEDS[22], TOOLS AND FERTILIZER		Is the loss of agro-biodiversity prevented?		• Limit introduction of non-local seeds to varieties tested locally and known to local users. • Avoid introduction of genetically modified seed varieties not already in use in the country.[23] • Provide environmental education on use of tools and develop resource extraction plan which avoids negative environmental impacts where appropriate. • Provide education and extension advice on use of fertilizers. Limit quantities available to actual agricultural needs.
		Is the introduction of species or varieties which are invasive or cannot be used without locally unavailable inputs avoided?		
		Is damage to traditional seed management systems avoided?		
		Is the potential for increased resource extraction due to availability of more effective means of farming addressed?		

22. Note that food aid, if provided as whole grain, may be used as seed, and should be screened according to this section.
23. This option applies to food aid grain provided as whole grain.

ANNEX B5: RATING FORM 4 - NEGATIVE ENVIRONMENTAL CONSEQUENCES OF RELIEF ACTIVITIES (2/5)

ACTIVITY	Is the activity underway or planned? (Yes/No)	Questions on whether potential negative environmental consequences of activity have been addressed.	Yes/No answer to the question immediately to the left.	Selected Avoidance or Mitigation Options
If the activity is not underway or planned (Answer = No), directly move on to the next one				
SEEDS , TOOLS AND FERTILIZER		Is the potential for damage to soil and water from overuse of fertilizers addressed?		• Use seeds more resilient to climate change.
HARVESTING WILD PLANTS/ FRUITS		Are steps taken to avoid harvesting rates which exceed production capacity or reduces future production capacity?		• Establish harvest system based on a balance between rates of extraction and regeneration.
EXPANSION OF AREA OR TYPE OF CULTIVATION		Is the potential for the loss of habitats and reduced biodiversity addressed?		• Establish and use land use plans which take into account habitat diversity, sustainability of land use systems and climate change implications. • Re- and a- forestation programs. • Soil conservation activities.
		Is the possibility of deforestation addressed?		
		Is the potential for soil erosion addressed?		
EXPANSION OF LIVESTOCK USE		Is the potential for the loss of habitats and reduced biodiversity addressed?		• Develop and implement a land use plan which takes into account habitat diversity, sustainability of land use systems and climate change. • Establish/expand animal disease monitoring and control system.
		Is the potential for the introduction of new animal diseases or expansion of existing diseases addressed?		

ACTIVITY	Is the activity underway or planned? (Yes/No)	Questions on whether potential negative environmental consequences of activity have been addressed.	Yes/No answer to the question immediately to the left.	Selected Avoidance or Mitigation Options
NEW FARMING OR LIVESTOCK RAISING ACTIVITIES		Is the potential for loss of habitats and reduced biodiversity addressed?		• Develop and implement a land use plan which takes into account habitat diversity and sustainability of land use systems. • Establish/expand animal disease monitoring and control system. • Institute land conservation activities.
		Is the potential for the introduction of new animal diseases or expansion of existing diseases addressed?		
		Is the potential for land degradation and erosion from land clearing or grazing addressed?		
IRRIGATION (EXPANDED)		Is the risk of increased disease transmission addressed?		• Increase preventive and curative health care. • Increase disease surveillance. • Establish management plan for water use which assures adequate water for current and future needs. • Change types of crops/cropping systems and water use. • Establish filtering system for weed propagules. • Consider climate change.
		Is potential for soil degradation and water logging addressed?		
		Is the potential for aquifer depletion addressed?		
		Is the potential for weed dispersal through irrigation water addressed?		
INLAND AND OCEAN FISHING		Is harvesting which exceeds production capacity or reduces future production capacity prevented?		• Develop and follow a resource harvesting plan which assures adequate supplies for current and future needs. • Monitor aquatic resource use and undertake education program for resource users. • Limit or avoid introduction of new fish varieties and fish production methods.
		Is the potential for damage or destruction of habitats from fishing methods addressed?		
		Is the introduction of exotic species of fish, parasites and diseases prevented?		

ANNEX B5: RATING FORM 4 - NEGATIVE ENVIRONMENTAL CONSEQUENCES OF RELIEF ACTIVITIES (3/5)

ACTIVITY	Is the activity underway or planned? (Yes/No)	Questions on whether potential negative environmental consequences of activity have been addressed.	Yes/No answer to the question immediately to the left.	Selected Avoidance or Mitigation Options
If the activity is not underway or planned (Answer = No), directly move on to the next one				
CONSTRUCTION, including shelter, public buildings and infrastructure excluding roads		Are plans and procedures established to prevent scarce natural resources from being over exploited for construction activities?		• Develop and follow resource management and land use management plans. • Assess hazards in area where construction will take place and change siting or methods accordingly. • Ensure construction methods reflect known hazards and risks and are used to reduce vulnerability.
		Are plans and procedures established to ensure that the construction site is not in an area of increased hazard compared to location or conditions before disaster?		
		Are plans and procedures in place to avoid increases risk of flooding, erosion or other hazards due to the construction?		
		Do construction methods and procedures take into account the risk of disaster?		
ROADS, PAVED OR OTHER-NEW AND EXISTING		Are there plans and procedures designed to avoid the exploitation of new lands or increased exploitation of existing lands due to the road?		• Develop and follow land use plans. • Limit access to roads. • Verify road design against flooding/drainage risk assessment. • Incorporate erosion mitigation measures in road construction activities.
		Are procedures and plans developed to prevent flooding and drainage problems due to the road work?		
		Are there plans and procedures to avoid landslides and soil erosion due to the road work?		

ACTIVITY	Is the activity underway or planned? (Yes/No)	Questions on whether potential negative environmental consequences of activity have been addressed.	Yes/No answer to the question immediately to the left.	Selected Avoidance or Mitigation Options
WATER SUPPLY		Are increased opportunities for disease transmission avoided?		• Establish and maintain water treatment system. • Design and maintain water supply structure to minimize standing water and vector breeding sites. • Plan water provision based on anticipated need and use plan for delivery area which allows current and future needs to be met, taking climate change implications on water supply into consideration. • Establish water resource use plan and monitor use and supply. • Consider economic incentives to conserve water. • Use hazardous chemicals as recommended and limit inappropriate use through education.
		Are there plans and procedures to avoid an increase in population density having a negative environmental impact?		
		Is the overuse of ground or surface water supplies avoided?		
		Are chemicals used to clean or purify water managed in such a way to avoid human health dangers or contamination of the environment?		
SANITATION, including latrines, waste treatment, transport infrastructure, and solid waste management		Is the creation of hazardous waste sites avoided?		• Establish and maintain sites for sanitary and safe waste disposal operating at international standards. • Limit waste movement through appropriate collection systems meeting accepted best practices. • Minimize opportunities for disease transmission and vectors. • Establish and maintain environmental monitoring program covering air, land and water pollution.
		Is additional pollution of land, water and air avoided?		
		Is an increase in disease transmission and presence of disease vectors avoided?		
HEALTH CARE		Is pollution from disposal of medical and other waste avoided?		• Establish system for safe disposal of all wastes (solid and liquid). • Develop a resource management plan for harvesting of local medicinal herbs and plants. • Consider the impact of climate change and rising temperatures on new and changing disease patterns.
		Is there an increased demand for traditional medical herbs and plants which exceeds sustainable yield avoided?		

ANNEX B5: RATING FORM 4 - NEGATIVE ENVIRONMENTAL CONSEQUENCES OF RELIEF ACTIVITIES (4/5)

ACTIVITY	Is the activity underway or planned? (Yes/No)	Questions on whether potential negative environmental consequences of activity have been addressed.	Yes/No answer to the question immediately to the left.	Selected Avoidance or Mitigation Options
If the activity is not underway or planned (Answer = No), directly move on to the next one				
INDUSTRY (NEW OR RE-STARTING)		Are plans and procedures in place to avoid an increase in air, soil and water pollution?		• Develop pollution mitigation and abatement plans, incorporating financial incentives where appropriate. • Develop site use plans incorporating transport and population support needs based on level of industrial operation. • Develop plans for the supply of services (e.g., water, education) for expected population in industrial area. • Develop and implement a sustainable resource use plan for target industry. • Develop emergency preparedness plans.
		Is the unplanned and unmitigated disposal of solid and liquid waste avoided?		
		Is an increase in road and other traffic avoided or mitigated?		
		Are there plans and procedures in place to address the environmental impact of increased population and demand for services?		
		Is an increased and unsustainable resource extraction avoided?		
CHANGE IN COOKING OR FOOD PROCESSING PROCEDURES		Is increased fuel harvesting avoided or mitigated?		• Use fuel efficient stoves and cooking methods. • Develop and implement a resource management plan for resources needed to cook or support costs of food preparation. • Consider organizing cooking process to reduce air pollution and fuel demand (e.g., communal kitchens, dining halls).
		Is increased air pollution avoided?		
		Is an increase resource harvesting to cover food preparation costs avoided?		

ACTIVITY	Is the activity underway or planned? (Yes/No)	Questions on whether potential negative environmental consequences of activity have been addressed.	Yes/No answer to the question immediately to the left.	Selected Avoidance or Mitigation Options
CREATION OF SMALL OR MEDIUM ENTERPRISES (SME)		Is unsustainable resource extraction avoided?		• Environmental impact review performed for each enterprise supported. A simple checklist may be sufficient if a number of similar types of SME are to be supported. • Waste disposal plans meeting appropriate standards incorporated into enterprise business plan and monitored. • Hazards and risks of location of enterprises assessed and appropriate mitigation measures identified before support provided.
		Is the waste produced disposed of properly?		
		Are steps taken to avoid siting enterprises in hazardous locations?		
RELIEF SUPPLIES		Are steps taken to ensure that relief packaging does not create a solid waste disposal problem?		• Use biodegradable, multi-use or recyclable packaging where possible. • Collect packaging as part of distribution program. • Develop program of education and facilities for safe disposal of personal hygiene materials. • Base assistance on needs assessment including survivor input. • Don't provide inappropriate materials. • Select assistance based on local social and economic conditions and sustainability of supply. • Source locally, where feasible.
		Are steps taken to ensure that personal hygiene materials are disposed of properly and pose no health and sanitation problem?		
		Are steps taken to ensure relief assistance is appropriate or acceptable to survivors and not discarded?		
		Is the use of single-use plastics minimized to the greatest extent possible?[24]		
		Are there procedures to ensure that relief does not create new and unsustainable consumption habits on part of survivors?		

24. Plans to collect packaging should consider whether the packaging has an additional value to those receiving assistance (e.g., the plastic jugs used to distribute vegetable oil) and whether appropriate disposal is available after the additional use is completed.

ANNEX B5: RATING FORM 4 - NEGATIVE ENVIRONMENTAL CONSEQUENCES OF RELIEF ACTIVITIES (5/5)

ACTIVITY	Is the activity underway or planned? (Yes/No)	Questions on whether potential negative environmental consequences of activity have been addressed.	Yes/No answer to the question immediately to the left.	Selected Avoidance or Mitigation Options
If the activity is not underway or planned (Answer = No), directly move on to the next one				
RUBBLE REMOVAL		Is the handling and disposal of rubble done in a way to avoid the creation of disease vector breeding sites, leading to increased disease levels?		• Develop and follow plans to recycle rubble and dispose of unusable materials in way which minimizes negative environmental impact. • Some rubble, such as asbestos sheets, is hazardous to humans and environment and will require special handling and disposal methods.
		Are rubble removal efforts also clearing obstructions to existing drainage/water flow systems so that flooding and sanitation problems can be avoided?		
		Is rubble being recycled so that greater natural resource extraction is not necessary?		
		Are individuals working in rubble removal provided with appropriate and adequate safety protection and training as needed to safely handle potentially dangerous materials?		
(RE)SETTLEMENT		Do resettlement plans address possible negative environmental impacts due to changes in land use, climate change and biodiversity?		• Develop and follow land use plan in reconstruction and siting of settlements. • Conduct hazard and risk assessment of existing and new settlements sites and incorporate results into site selection, planning and construction methods.
		Are assessments and mitigation procedures being used to ensure that new settlements are not subject to new or greater hazards than before disaster?		
TRAINING		Are steps taken to ensure that new skills do not lead to greater extraction of resources or production of waste?		• Include environmental education and waste management options in training programs.
DEMINING AND UNEXPLODED ORDINANCES		Do demining/ordinance removal plans include procedures to avoid environmental damage to lands and resources which had not been previously exploited due to mines and unexploded ordinance?		• Establish and follow land use plans for areas open to use following demining/clearance of unexploded ordnance. • Conduct environmental screening of ordnance disposal plans (e. g., controlled burning or explosions), control and monitor air pollution and conduct environmental remediation actions where appropriate.
		Does the disposal of ordnance create additional environmental pollutions, for instance through controlled burning or exploding ordnance leading to air and ground pollution?		
LOCAL COPING STRATEGIES		To be added based on specific disaster conditions. Negative environmental consequences often involve a loss of natural resources, bio-diversity or conflict over scarce resources.		• Avoidance/mitigation options should be developed specifically for each possible negative consequence. This process should involve input from survivors and can be facilitated with information collected through the Community Level Assessment module.

Annex C: Community Level Assessment Forms

ANNEX C1: COMMUNITY REA INFORMATION COLLECTION GUIDE

The following can be used as a guide in collecting information for the community level rapid assessment of environmental impacts. The information collected through this guide corresponds to the information required to answer the questions posed in the **Community Assessment Summary Form** (**Annex C**).

For further guidance on data collection methods refer to pages 53 and 54 of the Humanitarian Needs Assessment "The Good Enough Guide" as well as the Information and Data Sharing guidance on ehaconnect.org.

This document should be reviewed before use and modified as appropriate for the community being assessed and the circumstances of the disaster being investigated.

A. GENERAL INFORMATION (completed by data collection team)

1. Date:
2. Time Started:
3. Time End:
4. Name of Community:
5. Person/s conducting the assessment:
   a) Facilitator:
   b) Recorder:
   c) Observer:
6. Distance of community from main road and district capital:
7. Nature of access to the community: paved, all season, dirt track, no road.
8. Ethnic group/s and religion diversity present in the community:
9. Description of the community. Including physical location, types of housing, physical layout and natural environment (agro-climatic zone, presence of rivers, lakes, parks, nature reserves etc.). If possible, conduct a social mapping.
10. Description of the origin of the community (e.g., when settled and where first settlers came from).
11. Number of people currently living in the community:
12. Are there people who migrated/displaced from the area? If yes when, how many, in which direction and to where?

B. ENVIRONMENT AND LIVELIHOOD INFORMATION

ENVIRONMENT

13. How does the group describe the environment in which the community is located?

    Specifically ask about how the community has changed in the past ten years, noting changes to agriculture land, forests, pasture, supplies of raw materials, access and availability of water and pasture, and rainfall.

14. Is the community near any unique environmental areas (e.g., national park, industrial site)?

15. Are there any areas which the community consider as special, such as holy sites, locations of natural resources or places which are protected by tradition? (Where possible, identify exact location.)

    Specifically ask about whether/how these sites have changed over the past years.

16. Does the community have any specific concerns about the environment? Specifically ask about fire, drought, floods, water and air pollution and other hazards, and recent changes to environmental conditions.

    Specifically ask about whether there has been a noticeable change in frequency and magnitude of the climate-related hazards.

17. Have there been any noticeable changes in frequency and magnitude of the climate-related hazards?
18. Does the group see the location of the community as one that is safe from floods, erosion, and other problems?
19. What are the rules that the community has governing the use of natural resources (agriculture land, forests, pasture, water)? Is there any difference for males and females?
20. How does the community resolve a dispute over the use of natural resources (forest, pasture or land use) water or other natural resources?

LIVELIHOOD/ECONOMIC ACTIVITIES

21. Nature of livelihood system: herding, agro-pastoral, farming, industry, other wage labor (indicate what type of labor). Indicate if more than one system is used, and number 1 to 5 in terms of importance.
22. What are major means of incomes and which family members are involved? Describe major occupation in terms of importance.
23. What are the criteria for wealth classification?

    Do (1) most families have about the same wealth, (2) are there a lot of poor and a few wealthy families in the community, or (3) are there some poor and wealthy, but most families have sufficient resources for all needs?

24. Are families supported by only one type of work, or by several family members with different occupations?
25. Are there any development projects working with the community and what do they do?

C. DISASTER INFORMATION

26. Has the community been affected by any of the following events in the past year[25]?
    - ☐ Flood
    - ☐ Wildfire
    - ☐ Strong Winds
    - ☐ Erosion
    - ☐ Crop pests or diseased
    - ☐ Human diseases
    - ☐ Animal diseases
    - ☐ Conflict
    - ☐ Accidents (e.g., fire burning someone)
    - ☐ Drought
    - ☐ Ask if any similar events are not included in this list.
27. For each type of event identified, ask whether this event was considered a disaster, that is, why was it different than normal conditions?

25. This list should be revised to reflect a specific disaster event. See Annex B3- Rating Form 2 for additional hazards.

For each item identified as a "disaster" above answer the following questions:

28. What was the cause and impact of the disaster?
29. Was there some kind of warning before the disaster struck? (Prompt for use of early warning systems)
30. What damage happened as a result? Describe human and material damages.
31. How many people have left the community due to the disaster, where did they go and when are they expected back?
32. When did the disaster start and how long is it expected to continue?
33. Has the type of work that people do to support families changed since the start of the disaster? If yes, note changes.
34. What has the community done to address the disaster? What coping mechanisms have been used?
35. Since the disaster began, how do people in the community get money and have these sources changed? (List sources and changes.)
36. Has the community been able to address (1) most, (2) some, (3) few of the impacts of the disaster from their own resources?
37. Has the community received any assistance from the government or NGOs to deal with the disaster? (Yes/no). If no, skip to number 39.
38. What kind of assistance was received? (List, including origin – government, donor, NGO, other communities, people who have left the community-- if possible)
39. Was this assistance considered to be (1) a lot of assistance, (2) enough assistance, (3) just some assistance, (3) little assistance?
40. Has this assistance (1) improved, (2) stabilized or (3) not had much impact on conditions in the community?
41. Has the assistance provided caused any problems for the community? (Prompt for impact on the environment.)
42. When the disaster is over, how long does the community think it will take for environmental conditions to return to normal?

D. BASIC NEEDS

This section asks about conditions in the community affected by the disaster.

43. How did the community get water before the disaster: purchase, wells, cisterns, lakes, ponds etc.? (Indicate more than one if needed)
44. How does the community describe the water quality before and after the disaster?
45. Is there enough water for everyone in the community? Compare before and after the disaster.
46. What types of shelter does the community use and has there been any change after the disaster? If yes, describe major changes.
47. How did community members get materials to build a house before the disaster: purchase, collect from country side, receive as gift, etc.?
48. Does the community have any problems with shelter since the disaster? If there are problems, note what they are.
49. How does the community meet their clothing needs?
50. Are there any changes after the disaster? Describe.
51. How will additional clothing be secured: purchase, manufacture, and/or gift?
52. How do community members get food: own production, purchasing in market, gift etc.? (Indicate importance if more than one source.)
53. Do all the community members have enough food? If not, who is most affected by the lack of food?
54. Does the community have access to sufficient, safe and affordable energy supply to maintain thermal comfort, prepare food and provide lighting? (Note means of fuel procurement)

55. Have community members lost any household resources (utensils, soap for personal hygiene, bedding, tools etc.) due to the disaster?
56. How will these be replaced: sale of assets, gift, purchase, etc.?
57. Do people in the community have any concerns about personal safety, either in the community or when outside the community? If yes, who is affected and why?
58. Is there adequate health care for the community?
59. Has the availability of health care changed since the disaster?
60. Is health care free, including drugs?
61. If health care is not free, how do community members pay the costs involved?
62. Does the community use latrines? If yes, indicate their type, location and ownership (family, group of families, communal).
63. Are there enough latrines?
64. If no, why are there not enough latrines?
65. Is there any agro-chemicals use in the village? If yes, note type, sources and what purpose the agro-chemicals are used.
66. Have agro-chemical users received training on safe use?
67. Is the community aware of the dangers of excessive application of agro-chemicals?

E. CONCLUSION

68. How would the group describe a good future for the community? (Prompt for types of work, types of housing, access to water, electricity, roads, education and health status and changes to the environment.)

69. What suggestions do community members make as to how environmental issues in the community should be addressed?

F. COPING STRATEGIES & RESILIENCE

70. If not indicated elsewhere during discussions with the community, note specific coping strategies which are being used in response to the disaster. Some of these coping strategies may only become evident in one-on-one or small group discussions since they may be illegal or not socially acceptable.

71. If not indicated elsewhere during discussions with the community, consider why some communities have been more affected or are less resilient than others. For instance, is it 'simply' a matter of (geographical) exposure, or are key coping and risk management strategies absent?

G. OBSERVATIONS

Observation should be made as to the way that human, animal and other waste is disposed.

72. Is the community clean of human/animal waste and garbage? (yes/no).
73. Are waste sites (where people throw waste or use as a toilet) distant from the community (yes/no).
74. Are there obvious insect breeding sites (particularly for flies and mosquitoes) in the community? (yes/no).
75. Is the community graveyard distant from housing and water supplies? (yes/no)
76. If there is a health facility in the community, are medical wastes disposed of safely? (yes/no)

Additional observations by individuals conducting the assessment about disaster or environment-related conditions in the community.

ANNEX C2: COMMUNITY ASSESSMENT SUMMARY FORM[26]

#	Item/Question	Community 1	Community 2	Community 3	Community 4	Importance Ranking[27]
Context Questions: Score Yes = 1 ("bad") or No = 0 Corresponds to Sections One and Two of the Organization Level Assessment.						
1	Did the community report environmental concerns?					
2	Did the community report environmental problems?					
3	Are there unique areas near the community?					
4	Are a large number of persons affected by the disaster?					
5	Has the disaster been going on for a long time?					
6	Are the disaster survivors concentrated?					
7	Have the survivors moved a great distance?					
8	Is level of self-sufficiency low?					
9	Is social solidarity low?					
10	Is culturally homogeneity low?					
11	Are most assets concentrated with a few individuals?					
12	Is livelihood base limited (not diversified)?					
13	Are expectations high?					
14	Will current resource use reduce adequate availability in the future?					
15	Is the capacity to absorb waste limited?					
16	Does the environment have limited resilience?					

26. Add columns equal to the number of communities or groups who participated in the assessment.
27. The importance ranking is calculated by adding the total score for each question, and determining which questions received the highest aggregate score across the communities assessed.

#	Item/Question	Community 1	Community 2	Community 3	Community 4	Importance Ranking
Disasters/Hazards, Yes = 1 ("bad") or No = 0. Corresponds to Section Three of Organization Level Assessment. This section should be edited to include only the disasters/hazards discussed with the community.						
17	Is drought a reported problem?					
18	Is wildfire a reported problem?					
19	Is conflict a reported problem?					
20	Is animal disease a reported problem?					
21	Is human disease a reported problem?					
22	Are other hazards reported as a problem (note response for each hazard separately).					
Unmet Needs No = 1 ("bad") or Yes = 0. <u>Note change in scoring.</u> Corresponds to Section Four of the Organization Level Assessment.						
23	Are adequate supplies of potable water available for humans?					
24	Are adequate supplies of potable water available for animals?					
25	Is shelter adequate for local expectations?					
26	Is food adequate?					
27	Is fuel and energy adequate?					
28	Are household resources adequate?					
29	Is personal safety adequate?					
30	Are human health conditions adequate?					
31	Is waste management appropriate?					
32	Is the control of insects and breeding sites adequate?					
33	Are agro-chemicals used safely?					
Community Relief/Coping Strategies. Corresponds to Section Five of the Organization Level Assessment[28]						

28. Add additional rows as needed.

The assessment results should be used to identify relief and coping strategies used by the community. These actions should be entered in the first column.
Each action should be judged as to whether it is having a positive or negative impact on the environment. Some actions can have both impacts concurrently or at different times. Further details on the actions and strategies should be provided in the third column to understand the scope and overall impact of each action.

Strategy/Action	Indicate Positive (+) or Negative (-) Impact on Local Environment	Comments including whether the action is common for all or only a select number of communities or groups within the communities.

Annex D: Consolidation & Analysis Tables

ANNEX D1: ISSUES CONSOLIDATION TABLE

Organization Level Issues	Community Level Issues
CONTEXT STATEMENT	
FACTORS WITH IMMEDIATE IMPACT ON THE ENVIRONMENT	
ENVIRONMENTAL IMPACTS OF DISASTER AGENTS	
UNMET BASIC NEEDS	
NEGATIVE ENVIRONMENTAL CONSEQUENCES OF ASSISTANCE	
OTHER CRITICAL ISSUES	
LONG-TERM RECOVERY ISSUES	

ANNEX D2: ISSUES AND ACTIONS TABLE

ISSUES	ACTIONS	PRIORITY

Annex E: REA Leader – Key Criteria

The person who is tasked to lead a REA in the field or headquarters setting should meet, to the extent possible, the following criteria:

- Be knowledgeable of the geography, environment, social, economic, and political conditions in the area where the assessment is to be conducted.
- Have experience in disaster relief and recovery operations and knowledge of the humanitarian system and Cluster approach.
- Have field experience in rapid disaster impact assessment.
- Be familiar with concepts and approaches needed to create a team assessment effort and have demonstrated leadership capabilities and expertise.
- Have experience in rapid community-level assessment methods and procedures, and in particular, participatory methodologies. (A well-developed ability to listen actively, to show compassion and understanding of the disaster survivors, and be able to help assessment team members understand that these same abilities are important.)
- Be able to dedicate a full-time effort to the REA assessment, including time needed to develop new project proposals and seek funding for them. (Note that a full stand-alone assessment can require up to three weeks, and an additional dedicated week for proposal writing and review may be required.)
- Having experience with community assessments, participatory techniques and community engagement would greatly benefit the REA process.

Annex F: Managing REA Meetings

Individuals leading the REA process will be responsible for organizing and conducting meetings to undertake the **Organizational Level Assessment**. In order for these meetings to be run as effectively as possible, and to minimize the time necessary to achieve the objectives of the meetings, the following checklist may serve as helpful guidance. This checklist should be reviewed before each meeting. Additional points can be added to this list based on individual experience and local conditions.

- Review the **Guidelines** and develop a plan for the assessment and specific meetings needed to complete the assessment.
- Request that all participants of the meeting become familiar with the **Guidelines for Rapid Environmental Impact Assessment in Disasters** before they come to the meeting.
- Review the background of participants and tailor assessment sessions to the nature of the participants.
- Determine presentation methods and plans for each session.
- Anticipate issues which might arise during the assessment and collect any additional information which may help address these issues.
- Decide how questions will be handled. They can be taken during each session, at the end of the session, at the end of the day, and orally or in writing.
- Develop an agenda and schedule for the meeting.
- Schedule breaks at intervals of no more than 2 ½ hours.
- Decide whether food and drinks will be provided at breaks and how lunch will be provided.
- Assure the use of a common language for all participants or provide for simultaneous translation.
- Determine how to make break-out groups, including whether each group will remain together during the whole assessment or will be re-organized for each new task. Break-out groups should be no smaller than three persons and not larger than 10 persons if possible.
- Prepare handouts or slides in advance (which may require translation) and ensure there are sufficient copies for all participants.
- Ensure that there are sufficient copies of the **Guidelines** in appropriate languages for the participants. (It is recommended to provide copies of the **Guidelines** to participants before the assessment, but it is likely that not all participants will bring their copies to the meeting.)
- Ensure that there are an adequate number of flip charts (at least one flip chart per break-out group), pens, pads, and other expendable supplies needed by participants to do the tasks needed to complete the assessment.
- Ensure that there is adequate space for breakout groups. (If the space is too small, the work of the groups may interfere with each other.) Break-out groups can meet in well separated parts of a larger meeting area or move to separate rooms, although this does make monitoring harder. Having groups meet in public spaces, such as corridors or lounges, should be avoided if possible.
- Have a safety plan, including information as to where first aid can be secured.
- Decide what to do about mobile phones. They can be turned off or left with one person not attending the assessment who would take messages during the assessment sessions.
- Be early to the assessment meeting site to set-up the location and ensure there are no problems.
- Test all equipment. Have backup equipment at hand or quickly available to the assessment meeting site.
- Make sure people can find site, particularly ensuring that access is signed, security checkpoints know about the assessment and participants can be cleared through security sites and doors without difficulty.
- At the beginning of the assessment:
  - ✓ Review the agenda, schedule, logistics arrangements, and “ground rules”, such as the use of mobile phones and asking questions.
  - ✓ Ask for questions and clarify any outstanding issues before proceeding.
  - ✓ Review the plan for completing the meeting and whole assessment. This plan is different than the agenda and schedule, and covers how each part of an assessment-related meeting is to be conducted.