

DPRK, 2019. Red Cross volunteer Kang Song Ok in a greenhouse in South Hamgyong province. Greenhouse systems can improve growth conditions, which can reduce the need for pesticides and increase yield. However, it is important to ensure they are sustainable, as many greenhouse systems use significant amounts of fossil energy and water (Marcelis and Heuvelink, 2019).

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GOING GREEN



**Strengthening
the climate and
environmental
sustainability of
response and
recovery operations**

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Definitions

Sustainability: Achieving a balance between environmental, social and economic demands. Sustainable development refers to development that meets the needs of the present without compromising the ability of future generations to meet their own needs ([World Commission on Environment and Development, 1987](#)).

Environmental sustainability: A state in which the demands placed on the environment can be met without reducing its capacity to allow all people to live well, now and in the future (GEMET, 2020b). While environmental sustainability is broader than climate action, limiting climate and environmental impacts can both contribute to mitigating climate change, for instance by reducing emissions and greening practices, and to strengthening people's resilience to climate change ([GEMET, 2020b; IUCN, no date; IUCN 2015](#)).

Environmental degradation: A process through which the natural environment is compromised in some way, reducing biological diversity and the general health of the environment. It can be entirely natural in origin, or accelerated or caused by human activities ([GEMET, 2020a](#)). Environmental degradation is both an impact of climate change, and a compounding risk to communities affected by climate change.

Environmental footprint or impact: The impacts which activities can have on the environment, including through greenhouse gas emissions (the latter also known as 'carbon footprint').

Climate-smart programming: There is no universally accepted definition of climate-smart programming. For the purpose of this report we use the Red Cross and Red Crescent definition which equates this to 'good and sustainable programming': supporting inclusive green development and making use of available weather forecasts and climate science to enable people to anticipate, absorb and adapt to climate shocks. It also includes our efforts to reduce our climate and environmental impact during humanitarian programming, response and recovery operations.

INTRODUCTION

Until recently, the humanitarian sector and other disaster responders have largely perceived their role in relation to climate change as being at the receiving end: at the frontlines of the climate crisis, addressing the disasters that are already exacerbated by climate change. There had been much less attention to our own climate and environmental footprint. After all, there is an incredible urgency to save lives with always-insufficient resources.

In recent years, however, there has been a shift.

First of all, humanitarians have realized that we can make a contribution to greenhouse gas mitigation, albeit a modest one. Certainly, the emissions from humanitarian response activities are hardly as polluting as some sectors of industry. Precise numbers are lacking, but very crudely, using the cost of international humanitarian assistance as a proxy,¹ the humanitarian sector could be responsible for up to 0.03% of global emissions. Modest, but not negligible.

The humanitarian sector has a responsibility to be part of the solution – otherwise we are part of the problem. This also means raising our voice – based on the humanitarian impacts of the rising risks we observe every day – as a means of contributing to a wider cultural shift to a more sustainable world. A world where our humanitarian voice can hopefully have a much wider impact than just our own footprint.

Perhaps even more importantly, our footprint also extends beyond just greenhouse gas emissions and their long-term impact on the global climate. Our response and recovery activities also affect other, much more local aspects of the natural environment, often with direct impacts on the future well-being of the very communities we serve. By neglecting these aspects, we may well be breaking the fundamental promise to do no harm, putting communities at further risk and undermining longer-term resilience and development objectives.

There is an increasing understanding in the sector of the climate impacts and environmental costs of response and recovery operations themselves, often borne by the communities who are meant to be assisted and the most vulnerable groups ([Brangeon and Crowley, 2020](#); [JEU, 2014](#); Johnson et al, 2020).

Moreover, reducing our own environmental footprint does not just come at a cost to effective response and recovery. There are many cases where we can be both more environmentally sustainable and more cost effective. Furthermore, response and recovery operations that effectively integrate climate and environmental risks and prioritize sustainable approaches can not only address the immediate life-saving needs of communities, but also reduce exposure and vulnerability in the longer term.

¹ The global cost of international humanitarian assistance was estimated at 28.9 billion US dollars (approximately 28.3 billion Swiss francs) in 2019 (OCHA, 2020). The global economy was estimated at 87.7 trillion US dollars (86 trillion Swiss francs) in 2019 (World Bank, 2019).

There may be trade-offs to be dealt with. While in some cases, the more environmentally friendly solution can be cheaper and more efficient than our current practices, this is not always the case. We need to understand these trade-offs and navigate them consciously, reducing the negative impact of our activities where we can.

This chapter seeks to draw attention to the global and local environmental impacts of our response and recovery operations and possible solutions to strengthen environmental sustainability. Although the recommendations are targeted towards humanitarians, long-term recovery and climate-smart development should happen concurrently and recommendations are equally relevant for the development and climate sectors.



Cambodia, 2020. The local red cross branch in Svay Rieng province, Cambodia uses solar energy to operate the pumps for two water schemes. By providing more sustainable energy solutions, climate and environmental risks and impacts can be mitigated.

© Cambodian Red Cross



Mozambique, 2020. In many urban communities in Mozambique, waste management is a serious issue, raising the risk of disease. The Mozambique Red Cross is delivering community clean-up campaigns in collaboration with the authorities.

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5.1 STATE OF PLAY – UNDERSTANDING CLIMATE AND ENVIRONMENTAL IMPACTS AND RISKS IN HUMANITARIAN ACTION

There is a growing momentum in the humanitarian sector to better identify, report and improve on organizational climate and environmental impacts and risks.² This includes an increasing prioritization of climate and the environment in longer-term humanitarian strategies.³ While recognizing significant progress over the last 10 years, the next decade will require even stronger commitment and a better understanding of the different aspects of the humanitarian sector's global and local climate and environmental footprint.

5.1.1 Global climate and environmental footprint: how humanitarian action risks contributing to climate change

While the countries and industries with the greatest emissions must do more to reduce their climate and environmental footprint, the humanitarian sector is recognizing the need to take responsibility for its own climate and environmental impacts. Commonly, this is focused on overall greenhouse gas emissions. How organizations choose to report on these emissions varies, as does how they define their boundaries – the scope of activities that are included in what an organization counts as 'their emissions' and over which they have a level of control and influence (Greenhouse Gas Protocol see [World Business Council for Sustainable Development and World Resources Institute, no date.](#))

The lack of consistent boundaries and reporting metrics, as well as different capacities and priorities across different humanitarian organizations, make comparisons difficult. It also makes it very difficult to provide an accurate estimate of the overall emissions of the humanitarian sector. But very crudely if we use the cost of international humanitarian assistance globally as a proxy – estimated at 28.9 billion US dollars (28.3 billion

2 Several processes, collaborations and platforms are seeking to improve environmental sustainability policy and practice in the humanitarian sector (see for instance, the [Red Cross and Red Crescent Movement Green Response Working Group, the Environment and Humanitarian Action \(EHA\) Network](#), the [Environmental Emergencies Centre and the Global Shelter Cluster Environment Community of Practice](#)). There is also the [UN Greening the Blue](#) campaign and a multitude of humanitarian organizations driving their own processes to limit and improve on their climate and environmental footprint.

3 For instance, the IFRC Strategy 2030 identifies climate and environmental crises as the top challenge for the next decade and makes strong commitments to strengthening environmental sustainability in how it delivers its services (IFRC, 2018a). The ICRC Strategy 2019–2022 includes a strategic orientation toward building sustainable humanitarian impact (ICRC, 2020a). The International Red Cross and Red Crescent Movement has also formulated its ambitions to reduce the current and future humanitarian impacts of climate change and support people to adapt to it (IFRC, 2020a). The International Council of Voluntary Agencies (ICVA) is developing its Strategy 2030. In a recent survey, 84% of participants stated that environmental change and its impact on creating and alleviating humanitarian needs must be a core focus area for ICVA; nearly 70% of participants stated that their organization already had a dedicated strategy or approach for integrating environmental change issues into their humanitarian action (IFRC and Swedish Red Cross, 2020a). These figures can be compared with the 2017 survey informing the ICVA's strategy 2019–2021, where mentions of environmental sustainability of humanitarian action and related issues were almost absent.

Swiss francs) in 2019 ([OCHA, 2020](#)) as a proportion of global GDP at 87.7 trillion US dollars (86 trillion Swiss francs) ([World Bank, 2019](#)), then the humanitarian sector could be responsible for up to 0.03% of emissions.

One recent example showing emissions from humanitarian programmes is from the water, sanitation and hygiene (WASH) sector. A life-cycle assessment of the standardized IFRC Water, Sanitation and Hygiene Emergency Response Unit, which can provide water treatment and distribution for 40,000 people for a maximum of 4 months, estimates that each deployment has the equivalent of 1.3 million kg CO₂ emissions (Berggren, 2020). Problem areas include transporting water from site for water treatment to the distribution point, producing the M40 (the nuts and bolts of the unit) and flying it around the world.

5.1.2 Local environmental footprint: actions that exacerbate short- and long-term vulnerabilities

The local environmental impact of humanitarian action, while not always having direct implications for climate change, can have a direct and long-term impact on people's health, livelihoods and ability to recover from disasters and rising climate shocks and stresses, and therefore has a compounding effect on vulnerability. The potential impact depends on the types of intervention undertaken, the approaches used (such as the type of waste management practices, how the shelter materials are sourced), and the scale and broader context of the response, including the fragility/strength of the environment and ecosystems. For example, a large WASH or shelter infrastructure project will generally have a more significant impact than a community-based public health messaging project.

There are many examples of adverse environmental impacts resulting from humanitarian response and recovery operations, including the over-extraction of natural resources such as water from aquifers and firewood and building materials from forests. For instance, the building of 20,000 houses as part of a post-conflict housing programme in Sri Lanka required an excess of 60,000 fully grown trees in the construction process. To reduce the costs of building, families were allowed to use suitable trees from their own land. Without significant mitigation measures, it is clear that this type of practice will result in unsustainable management of natural resources and have an adverse environmental impact, where a long-lasting conflict already had taken its toll on the environment and natural resources (bombs had destroyed many trees). The mid-project review identified this challenge, among others, and recommended a modified house design that used less timber as well as setting up a tree planting project to replace the trees being cut down (IFRC, 2020b, interview with humanitarian shelter expert). In eastern Chad, the additional needs for water, firewood, pasture and land for cropping around the 12 camps housing 360,000 Sudanese refugees since 2004 resulted in a deforestation radius of up to 20 km from the camps (EHAN, 2020; see also WeADAPT and SEI, 2020).

Adverse environmental impact caused by humanitarian action also includes the improper management of waste, including hazardous waste, which particularly affects developing countries without sufficient infrastructure or waste management systems (see for example, Zhang et al, 2019; [IFRC and Swedish Red Cross, 2020b](#); [OCHA et al, 2013](#); [USAID, 2020](#)). Waste, in particular use of plastic, can be significant. For example, the Shelter Cluster reported that more than 12 million pieces of tarpaulin were distributed in

humanitarian shelter operations during 2018 (IFRC, 2020b, interview with humanitarian shelter expert).⁴ The recent reduction of plastic sub-packaging in IFRC kitchen sets has resulted in an estimated 250,000 to 300,000 fewer pieces of plastic annually. While this is a positive change, picture the environmental impact such a large number of plastic bags would have on communities, and the impact the packaging of other relief items still has (GRWG, 2019). Solid wastes, such as plastics, can clog waterways, increasing risks of flooding and waterborne diseases.

An inappropriate selection of a water distribution site during a 2011 flood response put communities at risk – it was in the middle of the local rubbish dumping ground and adequate drainage was not put in place – increasing risk of contamination of the water (such as jerry cans becoming contaminated) and health issues arising from stagnant water (such as mosquitoes carrying diseases) (Swedish Red Cross, 2020a, interview with humanitarian WASH expert). Poor waste management practices following the 2010 Haiti earthquake led to the largest cholera outbreak in recent history ([Cravioto et al, 2011](#)). Each of these situations has implications for the short- and long-term vulnerability of communities. Several of these situations could have been avoided had international humanitarian agencies better consulted communities, local environmental and ecosystem services experts and authorities and used environmental data to inform programming ([Crowley, 2019](#); [JEU, no date](#); [JEU, 2014](#); [Kelly, 2013](#); [Tull, 2019](#)).

Humanitarians are bound by a fundamental promise to seek to alleviate human suffering **wherever** it is found. Sometimes this means providing immediate humanitarian assistance to displaced communities living in areas of high environmental and climate risks. Sometimes it is just where people turned up; sometimes displaced people, asylum seekers or refugees are allocated to, or allowed to reside in, areas of already fragile or degraded land because these are uninhabited or less commercially attractive. In Cox's Bazar, Bangladesh, near the border with Myanmar, around 900,000 people displaced from Rakhine State, Myanmar, are living in congested camp settlements in areas highly exposed to flooding and landslides. Environmental impact assessments from Cox's Bazar highlight a number of common environmental issues caused by both the humanitarian crisis and the response. These include: rapid deforestation, including of protected areas (primarily due to firewood collection), alarming groundwater depletion and contamination, rapid biodiversity reduction and poor management of sewer sludge. There is also a gendered aspect to these environmental impacts, where women and girls are required to walk further to collect firewood, increasing protection needs ([IFRC and Green Response Working Group, 2017](#); [UNDP Bangladesh and UN Women, 2018](#)).

Climate and environmental risks and variations can significantly impact humanitarian response operations and put already vulnerable communities in harm's way. Often, we do not know the full impact of our actions on the environment or on the long-term vulnerabilities of communities. It can take several years or even decades to see the full environmental impact of response and recovery operations, in which time international humanitarian agencies will most likely have left and funding ceased, leaving the responsibility of environmental recovery to local authorities, civil society and communities.

The humanitarian project cycle is designed to be temporary and short term. However, with the average humanitarian crisis now lasting more than nine years (and some operations in protracted crises lasting over 36 years ([ICRC, 2016](#))), and an increasing number of people being displaced for longer periods of time ([OCHA, 2019, 2020](#)), short-term thinking is no longer an option.

⁴ Note this includes only what is coordinated through the Shelter Cluster and not locally bought tarpaulins or tarpaulins used for other sectors such as WASH and health.





Bangladesh, 2020. A mother and daughter search for debris from their electronics shop following Cyclone Bulbul. Electronic waste contains harmful substances which can pose significant risks to water, air, soil and human health if not properly managed.

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5.2 GETTING TO WHERE WE NEED TO GO – HUMANITARIAN ACTIONS THAT SUPPORT CLIMATE AND ENVIRONMENTAL SUSTAINABILITY

Taking a strong sustainability approach means focusing on strengthening climate and environmental sustainability as it encompasses and establishes the necessary conditions for economic and social sustainability and development ([Barua and Khataniar, 2016](#); [Pelenc et al, 2015](#)). Environmental sustainability is intrinsically linked to social and economic sustainability and any action to further one dimension should always include the others. To provide sustainable response and recovery efforts, it is vital to embed social sustainability principles and normative and regulatory frameworks, including those around protection, gender and inclusion, community engagement and accountability, and supporting and enabling local action.

Two main aspects of environmental sustainability should be considered in the humanitarian sector. First (as already discussed), a stronger emphasis on identifying and addressing communities' underlying social, economic and environmental vulnerabilities and exposure to past and future risks.

Second, addressing immediate humanitarian needs in a way that does not break the fundamental promise to 'do no harm' by putting communities at further risk, but rather reduces their vulnerability and exposure, so they are more resilient to the next hazard. This means identifying, reporting and improving on global and local climate and environmental impacts ([GRI, 2016b](#)). This aspect encompasses both internal practices and the entire humanitarian project cycle. Without it, the humanitarian sector cannot be a credible voice in the global climate action and resilience debate, nor a good partner to the communities it works with.

At global level, this means assessing and limiting the most significant climate and environmental impacts, calculating, reporting on and reducing emissions, and demanding higher quality and sounder practices along the supply chain. This also means considering accountability measures to reduce the transfer of risks – from present to future generations and from the people at the start of the humanitarian supply chain to the people at the end.

At local level, this means incorporating climate and environmental data and considerations in each step of the project cycle – including in programme design – across the disaster risk management (DRM) continuum and ensuring sustainable approaches to addressing humanitarian needs, for example water and sanitation, shelter, health and social protection. This should include training and awareness for communities on environmentally friendly practices, so that, for example, communities that receive plastic sheeting know how to reuse or properly dispose of materials to avoid creating more waste. It also means designing and implementing multi-sectoral recovery operations that encompass the principles of build back better and integrate risk reduction, climate action and environmental protection – in close collaboration with international, national and local development and climate and environment agencies (IFRC, 2020c).

Across these two aspects also lies a responsibility to enable local voices and the voices of the most vulnerable groups and those most impacted by climate change and environmental degradation to be heard at all levels of the climate and environment debate, and advocate for more effective action and investment. It includes calling on all states and actors to take urgent and large-scale action, not only to reduce emissions but also to strengthen investment in nature-based solutions and climate-smart development and programming, and to better integrate environmental and ecological dimensions in national adaptation planning processes (GCA, 2019; Griscom et al, 2017; Morgan et al, 2019; UN Environment, 2019).

1. Establish a common approach across all organizations

Without a common understanding and approach, it is difficult to establish concrete actions, indicators and standards. Interviews with humanitarians from the UN, World Wildlife Fund and across the International Red Cross and Red Crescent Movement, as well as recent reports, highlight that the concept of environmental sustainability is still poorly understood and environment and climate change are conflated, both within and across humanitarian organizations (Hartelius, forthcoming 2020; see also EHAN, 2020; Johnson et al, 2020).

A common approach enables definitions, standards, safeguards and reporting mechanisms to be established which in turn allows tools, guidance and resources to be shared across the humanitarian sector. A common approach must align to international sustainability industry standards and normative and regulatory humanitarian frameworks, standards and safeguards. This development will also enable donors to apply consistent standards and reporting requirements, which will support simplified and harmonized reporting for implementing partners. A common approach must also be flexible enough to allow for contextualization, including taking into account local and indigenous knowledge and practices.

There are several ongoing cross-organizational initiatives that will assist in establishing a common approach to environmental sustainability. Collaboration across these different initiatives is crucial to avoid duplication or different standards that complicate compliance. Sphere has published a factsheet on reducing environmental impact in humanitarian response ([Sphere, 2018](#)). The UN Environment Programme (UNEP)/ UN Office for the Coordination of Humanitarian Affairs (OCHA) Joint Environment Unit is supporting the integration of environmental considerations and indicators for the development of the Joint Intersectoral Analysis Framework, led by OCHA and the Global Cluster Coordinators Group. The Joint Environment Unit also convenes a remote environmental analysis cell that is activated immediately following a crisis to ensure that environmental risk and considerations are factored into the sector-wide remote analysis work coordinated by OCHA. The ICRC and IFRC are leading a consultative process to develop a Climate and Environment Charter for humanitarian organizations. UNEP is also developing sector-wide guidance to address the relationship between environment and humanitarian needs in humanitarian response planning.

2. Reduce our carbon footprint

As part of a common approach, the humanitarian sector has the opportunity to align its processes with industry standards to assess, report on and reduce its carbon footprint (see for instance, [GRI, 2016a](#); [Greenhouse Gas Protocol \(World Business Council for Sustainable Development\), no date](#); [ISO, 2018](#)). As already noted, the estimated contribution by the humanitarian sector to global emissions may not be significant. However, we all have a role to play, and we must show that we can move from words to actions.

When assessing their global environmental impact, humanitarian organizations commonly apply the established standards and parameters of energy, water and paper used in offices, waste management practices, procurement and transport and travel behaviours (see for example, [UN, 2019](#)). While such reporting is important, including emissions from the humanitarian supply chain (such as producing and transporting relief items such as tarpaulins, kitchen sets, hygiene kits, food and seeds) more accurately reflects the true global impact of a humanitarian organization (ICRC, 2018; IFRC, no date b; IFRC, 2018b). This is especially true as the humanitarian supply chain represents a material proportion of the overall climate and environmental footprint of the humanitarian sector (see for example, [Hasselbalch et al, 2014](#); [Salvadó et al, 2017](#); [Sarkis et al, 2013](#); [Van Wassenhove, 2006](#)). In 2018, ICRC mapped the environmental impact of its activities worldwide, including greenhouse gas emissions, from its activities and humanitarian supply chain. The assessment showed that acquiring and distributing relief items – primarily rice, vegetable oil and hygiene parcels containing cotton-based products – made the biggest contribution to the organization's footprint, accounting for nearly 30% of the total (ICRC, 2018).

There is growing interest among National Red Cross and Red Crescent Societies, supported by ICRC and IFRC, to learn from each other, share resources and align processes and procedures to reduce our collective carbon footprint within the Movement. Since 2017, the Costa Rican Red Cross has been working as part of the Blue Flag Initiative, a programme that awards eco labels to organizations that meet a range of criteria that reduce climate change effects. Among other activities, it has cut down its use of water, electricity and fuel, saving more than 81,000 Swiss francs. The next goal is to make the National Society carbon neutral by 2022. The British Red Cross has also made significant efforts to assess, report and significantly cut its carbon footprint, and aims to become carbon neutral by 2030 ([British Red Cross, no date a](#) and [b](#)). In 2019, the Swedish Red Cross exceeded its target of lowering its carbon emissions by 10% annually, reporting a 28% reduction in metric tons of carbon dioxide per employee ([Swedish Red Cross, 2019](#)). It is also working closely with the Lebanese Red Cross to share resources and knowledge on how to improve environmental sustainability across its internal practices and programme delivery, including improving office practices and piloting environmental assessments and green techniques for WASH programmes.

3. Design climate-smart and sustainable response and recovery operations

a. Use environmental risk data to inform programming

As already mentioned, all development, disaster risk reduction (DRR) and humanitarian efforts must be based on a sound risk analysis informed by present and future risks in a changing climate. This includes evolving risks and vulnerabilities of the surrounding environment and ecosystems, and the impacts of different response and recovery efforts. Certain aspects of environmental impacts are more due to the nature of a humanitarian crisis and the fragility of the ecosystem than the response. As outlined earlier, in an emergency phase, there may not be a choice of sensible location. However, humanitarians always have a responsibility to design interventions based on community needs and priorities, in a way that does not cause further harm or put communities at risk. Drawing on international, national and local environmental expertise, lived experience and local knowledge to identify and mitigate risk in programme design is crucial.

With limited time and resources, assessing and integrating environmental risks must be made simple for practitioners in the field. The Nexus Environmental Assessment Tool (NEAT+) was developed by the Coordination of Assessments for Environment in Humanitarian Action Joint Initiative to provide a practical and rapid project-level environmental screening for humanitarians to quickly identify issues of environmental concern (EEC, no date). The NEAT+ has been piloted by over ten humanitarian organizations in operations worldwide. This has included and emphasized the added value of community consultations in collecting more detailed contextual information, validating results and engaging community members in the planning and implementation process. The NEAT+ is a first step for humanitarian practitioners to flag climate and environmental risks, and highlights the need for further in-depth assessments that consider scientifically based current and future climate risks.

There are significant climate and environmental risks and impacts that can be mitigated by changing how we respond to humanitarian needs. This includes providing more sustainable energy solutions such as fuel-efficient stoves and solar lighting (reducing the need for firewood as well as emissions) and more sustainable WASH solutions including rainwater catchments (reducing over-extraction of aquifers), improved waste management practices and reducing the use of single-use plastics (reducing health risks).

There is an element of raising concerns with relevant authorities about longer-term needs and how to transition from immediate response to longer-term recovery that can incorporate principles of build back better and reduce exposure and vulnerability of communities. In contexts with expected longer-term camp settlements, this can include land-use negotiations.

As outlined in Chapter 4, it is vital to seek advice from specialists on the regional climate trends and projections and flood/drought modelling, as well as from sector agencies exploring adaptation options applicable to the area in question. While site-specific climate projections will not be available to the level of detail planners might want, general projections for the region or country on likely new extremes (in temperature, heatwave risks, rainfall extremes, possible new flood levels and so on) can at least be considered in the disaster preparedness planning. The alternative – just expecting and planning based on current risk levels – would, of course, be an unforgivable omission.

BOX 5.1: CHECKLIST FOR CLIMATE-SMART DESIGN OF RESPONSE AND RECOVERY OPERATIONS

1 Are camps and reconstruction sites positioned and planned with the changing local risks in mind – for example, in potential flood risk zones (new flood risk levels with climate change-induced extreme events)?

2 Are they set up to handle ever-increasing heatwave risks? For example, in the various camps managed by several agencies in the Middle East, how do they cater for vulnerable inhabitants' needs to stay cool and hydrated?

3 Are camps/refugee settlements established in wooded localities sensitive to local energy demand (wood fuel) that could lead to speedy depletion of forest cover (for example, the case of the Mantapala Refugee Settlement hosting thousands of Congolese refugees in Northern Zambia)? Is there a risk of inducing long-term variability of rainfall patterns?

4 Are camp management systems heeding early warnings to take early action in case of disaster, such as floods or heatwaves?

5 Are WASH facilities and water provisions able to handle water shortages in 'new extreme' drought scenarios?



b. Mainstream climate and environmental considerations into existing processes and tools

For climate-smart programming and environmentally sustainable practices to become part of the humanitarian sector's ways of working, the identification of climate and environmental risks and mitigating measures as well as other environmental considerations must be effectively integrated across existing processes and tools. This must be done in preparedness so that it can be effectively and efficiently rolled out during response and recovery operations. A wide range of useful tools, resources and guidance already exists (eg ehaconnect.org) but without effective mainstreaming, prioritization will almost inevitably become an issue, especially in a humanitarian context.

Learnings from deploying an environmental field advisor to support the Mozambique Tropical Cyclones Idai and Kenneth operation highlight the importance of timing milestones in the programmatic cycle. It is not enough to identify environmental risks and propose mitigating measures if the assessment does not align with the timing of the Emergency Plan of Action revision, or if longer-term local staff are not sufficiently trained and aware of how to drive the issues once the deployment has finished.

The IFRC global response to the COVID-19 pandemic highlights similar issues, including the importance of updating planning and reporting templates and allocating responsibilities. While recognizing the need for integrating environmental considerations into response and especially recovery planning, the lack of dedicated space, prompts and assigned responsibilities across technical areas in the Emergency Plan of Action template poses a challenge, further highlighting the continuing issue of thematic silos for cross-cutting issues (Swedish Red Cross, 2020b, interview with IFRC Disaster and Crisis Preparedness, Response and Recovery team staff members). A small adjustment is crucial – prompting the identification of environmental risks and opportunities into assessment, planning, budgetary and evaluation tools and templates, such as the Global Humanitarian Response Plan and the Emergency Plan of Action process.





Bangladesh, 2019. A drying bed being prepared at the British Red Cross faecal sludge management site in Cox's Bazar. Sewage collected from the latrines is treated with lime and dried out over a series of days. It can then be used to make ash fertilizer, or as rubble to help support walls and river banks.

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BOX 5.2: RED CROSS AND RED CRESCENT WORKING TOWARDS A GREEN RESPONSE

The Red Cross and Red Crescent Movement Green Response Working Group, chaired by the Swedish Red Cross, works with partners in and outside the Movement to progress initiatives seeking to improve the environmental sustainability of humanitarian action. Activities sit across the DRM spectrum, from more sustainable climate-smart DRR programming and resilience building, through to effective preparedness, response and recovery efforts.

The group collaborates with specialists from each thematic area of intervention (such as shelter, WASH, procurement and logistics, health) and with National Societies to assess, develop and action recommendations for improving practices in preparedness, building capacities and improving standards. It also seeks to support and promote more sustainable solutions during response and recovery operations, through deploying environmental specialists and developing and piloting new techniques in the field. For example, in recent responses, environmental specialists have been deployed to support the Mozambique Tropical Cyclones Idai and Kenneth operation and the Bangladesh Population Movement operation in Cox's Bazar. Over two years, the group has also been involved in refining the Aerobic Faecal Sludge Treatment Unit in Cox's Bazar, seeking to reduce risks to human health and the environment by improving excreta management in emergencies.

The group is part of the ICRC-IFRC Sustainable Humanitarian Response project which focuses on strengthening sustainability in humanitarian supply chain management and integrating environmental risk assessments into needs assessment, planning and evaluation tools. This includes taking learnings from the Red Cross and Red Crescent Movement's piloting of the Nexus Environmental Assessment Tool (NEAT+) in the Democratic Republic of the Congo and Lebanon in 2019 and 2020.

For more information on Green Response, see IFRC's website ([IFRC, no date a](#)). See also the publication on COVID-19 and Green Response ([Swedish Red Cross, 2020c](#)).



c. Build capacity within the humanitarian sector

The need to invest in dedicated staff and staff time at every level, from the headquarters to the field, has been highlighted in recent research reports on this topic ([Brangeon and Crowley, 2020](#); Hartelius, forthcoming 2020; Johnson et al, 2020). This requires investment in time, people, systems and technologies, which in turn requires clear commitment from our leaders.

There are two parallel approaches to the build capacity of humanitarian personnel for more climate-smart and sustainable response and recovery operations. One is environmental experts deployed to support response and recovery operations, such as those deployed to support IFRC operations in Mozambique and Bangladesh, or as part of the UN Disaster Assessment and Coordination team to support the Hurricane Dorian operation in the Bahamas (GRWG, 2019; [JEU, 2019](#)).

The other approach is to require and build environmental competencies as part of core competencies for national and international emergency response and recovery staff. For instance, the IFRC tiered Core Competency Framework for Rapid Response Personnel includes environmental competencies ([IFRC, 2019](#)) and the National Society Preparedness for Effective Response approach includes environmental considerations to support the strengthening of local capacities.

Interviews with humanitarians have highlighted that field personnel who understand the added value of increasing climate and environmental sustainability across operations and have the relevant competencies, not only promote more sustainable approaches to addressing needs, but build the capacity of their colleagues, a process which is then replicated across subsequent operations (Hartelius, forthcoming 2020). The ICRC and IFRC have developed an open access four-week course on Sustainable Development in Humanitarian Action ([ICRC and IFRC, no date](#)). UNEP, with support from partner agencies and organizations, is developing e-learning on the environmental dimensions of human mobility.

4. Invest in local environmental capacities

Local voices have not been adequately included in discussions on strengthening environmental sustainability of humanitarian action, missing the wealth of expertise across traditional knowledge systems and national scientific institutions. Indigenous and other local communities have a recognized vital role in environmental management and sustainable development.⁵ Women's leadership in addressing the climate crisis more generally has also been recognized (Figueres and Rivett-Carnac, 2020). However, too often these stakeholders are excluded from planning- and decision-making processes.

Aboriginal people were among those most affected by the 2019–2020 bushfires in south-eastern Australia. Following the bushfires, traditional Aboriginal burning practices as part of DRR measures for Australia were prominent in the public discourse, however the role of Aboriginal people in disaster recovery and planning more generally was largely absent ([Williamson et al, 2020](#)). Australian Red Cross made significant efforts to ensure that recovery efforts build on respectful partnerships with First Nations organizations and communities, leveraging their deep and long-standing knowledge of caring for the country and coping with disasters. This includes recruiting Aboriginal and Torres Strait Islander recovery officers in each affected state (Australian Red Cross, 2020).

⁵ See for example, the [Brundtland Report \(World Commission on Environment and Development, 1987\)](#); the UN Rio Declaration on Environment and Development and the Convention on Biological Diversity ([UN, 1992b](#)); and the UNDRR Sendai Framework for Disaster Risk Reduction 2015–2030 ([UNDRR, no date](#)).

BOX 5.3: SPANISH RED CROSS: STRENGTHENING ENVIRONMENTAL PRACTICES DURING COVID-19

Spain reported its first case of COVID-19 on 2 February 2020. The spread of the virus quickly escalated, reaching over 9,000 cases daily by 26 March ([Spanish National Centre for Epidemiology, 2020](#); [WHO, 2020](#)). The medical system was pushed to its limits and movement restrictions were imposed to slow down the spread of the virus. Since the crisis began, nearly 213,000 Spanish Red Cross staff and volunteers have worked tirelessly to help contain COVID-19 and care for the most vulnerable people.

For over 15 years, Spanish Red Cross has also actively focused on strengthening environmental sustainability of its programmes and practices. This includes integrating environmental aims and objectives in project planning templates and emergency plans of action. The COVID-19 response has been no different, including specific objectives to raise awareness of the environmental aspects of the pandemic and providing guidance and training on how to improve environmental practices at home. See environment and COVID-19 training module (in Spanish) ([Spanish Red Cross, no date a](#)).

COVID-19 has also had a compounding effect on people living in energy poverty. In Spain, around 4.5 million people could be at risk of this. In 2018, Spanish Red Cross launched a three-year programme targeting 40,000 families to assist them in improving the energy efficiency of their homes ([Spanish Red Cross, no date a](#)). This has become even more important as people are staying at home – and may need to do so during heatwaves or extreme cold events – and has been integrated into the COVID-19 response.

Spanish Red Cross is working closely with its public authorities and the private sector to ensure families do not have to choose between buying groceries and keeping the lights or heating on. “Our assistance is incomplete if we don’t attend to the environmental aspect of a person’s vulnerability” says Sara Casas Osorio, Spanish Red Cross Environmental Sustainability Advisor, emphasizing that effectively integrating environmental sustainability across the whole organization has been a long process, significantly enabled by senior leadership support, annual budget allocation and the establishment of an environmental department.

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Local humanitarian and civil society actors have the relationships, knowledge and longer-term capacities to work with national and international partners to ensure that the impact of humanitarian action is sustainable.

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Contextualized analysis for understanding existing and future climate and environmental vulnerabilities requires longer-term meteorological and environmental data. In contexts where such data and knowledge are available, local environmental agencies and authorities can provide the necessary longer-term perspective for environmental sustainability across the humanitarian–development nexus. In contexts with limited data and knowledge, the humanitarian, climate and development sectors should prioritize building up local data and capacities by establishing partnerships with local communities and relevant experts. Building this capacity, structures and systems longer term will allow international, national and local actors across the different sectors to access crucial information for reducing exposure and vulnerability. It will also assist humanitarian agencies in delivering emergency and recovery assistance that is informed by climate and environmental risks ([ICRC, 2020b](#)).

Local humanitarian and civil society actors have the relationships, knowledge and longer-term capacities to work with national and international partners to ensure that the impact of humanitarian action is sustainable. Crucial to this is the role of law and policy to create governance structures for increased coordination, empower local actors and hydrometeorological and scientific institutions, and enable community-driven solutions that promote indigenous knowledge and women’s leadership.

Strengthening environmental sustainability should not become the privilege of well-funded, international humanitarian agencies. Donors have an important role in driving quality improvement through stronger environmental compliance and accountability requirements ([Brangeon and Crowley, 2020](#); [JEU, no date](#)). Yet there is a risk that instead of driving improved conduct by key responders, these approaches exclude local responders from funding due to challenging compliance requirements (Swedish Red Cross, 2020d, interview with the Alliance for Empowering Partnerships). Recent research by the Red Cross and Red Crescent Movement Green Response Working Group on barriers and enablers for effectively greening practices and strengthening environmental sustainability across the International Red Cross and Red Crescent Movement highlights similar issues. Implementing and less financially sustainable National Societies often have to prioritize limited organizational development funding on facilities, equipment and staff costs, rather than improving their environmental footprint. Similarly, projects – even climate smart and environmentally sustainable ones – are often limited by funding cycles, geographical locations and timeframes, with limited ability to scale up (Hartelius, forthcoming 2020). Donors must therefore allow for adequate budgeting to account for the true costs of different actions. It is important to invest in long-term support and predictable funding alongside compliance requirements, to strengthen policies and procedures for climate and environmental sustainability, and to build and especially retain local capacities and create genuine partnerships with local responders in the driver’s seat.

5.3 CONCLUSION AND RECOMMENDATIONS – MAKING IT BETTER, NOT WORSE

A climate-smart approach for the humanitarian sector (and others involved in DRM) requires us to take on our measure of responsibility for mitigating climate change as well as adapting to it. As a sector, we accompany communities struggling to avoid or withstand disasters and we have a particularly stark view of some of the worst consequences of climate change. This can inspire our efforts to be part of the solution.

Both the everyday activities of our organizations and our disaster response and recovery operations have impacts on the climate, and also on the local environment – some similar to other sectors and some particular to our context. Operations can be designed and implemented to support resilient community recovery, address underlying risks and vulnerabilities and support longer-term climate smart development objectives (IFRC, 2020c).

Also, as pointed out in Chapter 4, an environmentally informed approach is not only useful for reducing our negative impacts. Nature-based solutions to addressing climate-driven disaster risks are among the most efficient and effective ([GCA, 2019](#); [Griscom et al, 2017](#); [UN Environment, 2019](#)). By strengthening the environmental sustainability of response and recovery operations, we can meet immediate humanitarian needs and reduce vulnerability and exposure in the long term. Environmental considerations need to permeate the entire DRM cycle.

This includes establishing partnerships with local, national and international development, climate and environmental agencies and developing joint proposals with expanded time frames to allow for concurrent short-, medium- and long-term interventions. Such partnerships can enable a multi-sectoral programmatic approach that is data driven and risk informed, directed by communities' expressed needs and priorities, that meaningfully works towards achieving collective outcomes in line with the New Way of Working ([Joint Steering Committee to Advance Humanitarian and Development Collaboration, 2020](#)).

How we need to do things differently

Get serious, and professional, about the climate and environmental footprint of the humanitarian sector

- The humanitarian sector needs to scale up its ambitions to transparently report and improve on its global and local climate and environmental footprint and to invest in, and effectively mainstream, more environmentally sustainable approaches.
- There is a need for many in the sector to become more educated about the environmental impacts of their own activities, and about key tools (such as environmental assessment tools) and good practices that various organizations have successfully piloted.

- Establishing common approaches, indicators and standards across the sector will help to build an overall cultural shift and achieve a reasonable balance with other priorities.
- Donors can play a critical role in the success of these efforts, by encouraging and funding humanitarian organizations to put in place the necessary systems and tools (which can have significant up-front costs) and coordinating among themselves to avoid contradictions in their demands on funding recipients. This also means recognizing that greener products might be more costly, and that additional investment will be needed to support a more environmentally friendly response.

Support, and don't undermine, localization through environmental initiatives

- Working with local actors and communities must be recognized as central to a sustainable response. This includes incorporating local, traditional or indigenous knowledge into the design of the activities and actively investing in inclusive processes.
- International investment in 'greening' humanitarian action must reinforce our commitments to increase our investment in the leadership, delivery and capacity of local actors. Investments in analysis, monitoring and system improvement should take into account the quality, costs and environmental impacts of longer and shorter supply chains as well as the deployment of goods and foreign personnel across the world. Investments should also support local actors to be leaders in greening efforts.
- At the same time, it is important to ensure that local partners of international humanitarian organizations are not impossibly burdened by pass-through environmental requirements that are inadequately resourced and unrealistic in their contexts.

Invest in more environmentally sustainable approaches across the DRM cycle, including nature-based solutions and climate-smart programming

- Environmental sustainability cannot be an add-on to the humanitarian sector but must be the fundamental way in which we approach our work. We have an opportunity to advance our ways of working through more climate-smart, risk-informed programming, and through developing new technologies, combined with local and traditional knowledge and approaches, to more efficiently and sustainably address needs.
- In response and recovery efforts, we must identify and take into account evolving risks and vulnerabilities of the surrounding environment and ecosystems, as well as the impacts of different interventions. We must integrate the principles of build back better from the start.
- We need to work collectively – across communities, international, national and local development and climate and environment agencies – with resilience as a common goal, to support communities' own adaptation and mitigation efforts, including through promoting and investing in nature-based solutions.

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