NATURE-BASED SOLUTIONS FOR DISASTER RISK REDUCTION AND CLIMATE CHANGE ADAPTATION IN HUMANITARIAN CONTEXTS

Outcomes from a Humanitarian Networks & Partnerships Weeks (HNPW) 2021 session, hosted by the cross network FEBA-PEDRR-EHAN Working Group on Ecosystem-based Adaptation (EbA) in Humanitarian & Post-Disaster Contexts

SESSION OVERVIEW

Ecosystem services, environmental health and safeguarding, and natural hazards are often overlooked within humanitarian crises. Degradation of ecosystems and their services exacerbates peoples' risk from the impacts of climate change, affects human health and undermines long-term development gains.

Greater collaboration between the humanitarian and environmental sectors can explore how nature-based solutions and environmental safeguarding can build immediate and long-term resilience through integration with humanitarian aid and development.

Transdisciplinary initiatives, such as the cross-network FEBA-PEDRR-EHAN working group on EbA in Humanitarian & Post-Disaster Contexts and this session at Humanitarian Networks and Partnerships Weeks (HNPW) 2021, help spur understanding, knowledge, support and action for nature-based solutions for disaster risk reduction and climate change adaptation in humanitarian contexts.

260+
attendees

Slide deck from session

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INTRO TO NbS IN HUMANITARIAN CONTEXTS

Summary of keynote speech by Sarah Henly-Shepard, MercyCorps

The increasing severity and frequency of climate-related disasters exacerbate underlying risks, stoke conflict, and undermine humanitarian and development gains. Humanitarian crises and Internally Displaced Persons (IDP) and refugee camps rarely consist of 1-3 year responses that transition to early recovery. Too often they evolve into multi-generational communities that struggle with environmental degradation and exposure to social, economic and environmental shocks and stresses while having limited pathways out of poverty and to self-reliance. Within these complex humanitarian response dynamics, the environment is often overlooked, not prioritized or is treated as an afterthought.

As a result, the local environment often becomes highly degraded during humanitarian crises and as a result of humanitarian response operations.

Degradation of ecosystems and their services cyclically exacerbates these already vulnerable populations' exposures to natural hazards, emergent novel zoonotic diseases (such as COVID-19) and impacts from climate change. Impairment of ecosystem services also reduces access to safe, sufficient natural resources needed for livelihoods and undermines long-term development efforts.

We must commit to a paradigm shift away from short-term, small-scale humanitarian response operations and approaches and toward long-term landscape-scale responses that integrate nature, risk reduction and affected peoples into the response strategy.
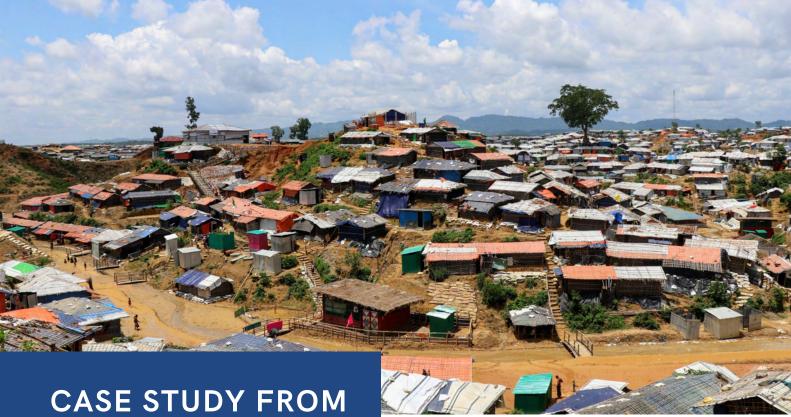
We must broaden the do-no-harm mandate to include the environment and intergenerational equity. Through refugee-, IDP- and community-centred approaches to integrating risk-inclusive, nature-based solutions and environmental safeguarding as a core component and strategy of humanitarian response, stakeholders will commit to answering the call for climate justice – restoring, protecting and fulfilling human rights, dignity and agency by reframing the power and decision-making structures of aid.

To transform how humanitarian aid and development are done, we need more transparent and collaborative cross-network and inter-institutional research, learning, tools and advocacy.

To address this challenge, the cross-network working group on EbA in Humanitarian & Post-Disaster Contexts, chaired by Mercy Corps and IUCN, was convened to unite stakeholders across the global networks of Friends of Ecosystem-based Adaptation (FEBA), Environment and Humanitarian Action Network (EHAN), and the Partnership for Ecosystem-based Disaster Risk Reduction (PEDRR) to collaboratively address how nature-based solutions and environmental safeguarding can be a core component of, and a strategy in, transforming humanitarian response and development.

Image Credit: European Union 2018, http://flic.kr/p/27PfMxB

Nature-based solutions are defined as "*Actions to protect, sustainably manage, and restore natural or modified ecosystems, that address societal challenges effectively and adaptively, simultaneously providing human well-being and biodiversity benefits*" (IUCN, 2016**). NbS includes a variety of approaches, such as Ecosystem-based Adaptation (EbA) and Ecosystem-based Disaster Risk Reduction (Eco-DRR).**

CASE STUDY FROM KUTUPALONG-BALUKHALI

Summary of flash talk by Raquibul Amin, IUCN Bangladesh

Kutupalong-Balukhali, the world's largest refugee camp, was established in an elephant corridor running through Cox's Bazar district in Bangladesh. **The camp provides a case study of the opportunities and challenges of a nature-based solution in a humanitarian context.**

Key takeaways include:
- Nature-based solutions require considerations of scale, both temporal and spatial.
- For example, after the massive influx of refugees in 2017 required an expansion of temporary shelters and led to denudation, a forest plantation in Kutupalong-Balukhali reduced landslides and improved soil quality.

However, efforts in other sectors such as agriculture destabilised the soil, nullifying the benefit of restoration.
- In another example, restoration activities were carried out in part of a small adjacent wetland, while other parts of it were paved over by separate agencies.
- The environmental and humanitarian sectors can and should partner to develop integrated plans that support rather than undermine the multiple intended impacts. Collaboration can help determine when traditional methods and infrastructure are needed and when ecosystem-based approaches can offer an effective alternative.
- All sectors need to mainstream environmental considerations as well as understand the people and their culture in order to build refugees' resilience.

Image Credit: UN Photo/Tim McKulka, http://flic.kr/p/95GJmo

COVID-19, HEALTH, NATURE AND RESILIENCE

Summary of flash talk by
Catherine Machalaba, EcoHealth Alliance

Human, animal and ecosystem health are inherently intertwined. Understanding disease transmission cycles and interactions can give us early warning and help us get ahead of health disasters and reduce risk.

Key takeaways include:
- Human health fundamentally depends on the health of our environment. Degradation of ecosystem services and loss of biodiversity have many consequences for human health.
- Nature-based solutions including EbA can help us to get ahead of health disasters, especially as their drivers are intensifying.

Understanding natural disease transmission cycles and changes in interactions with wildlife and vectors that result in disease spillover can allow us to move upstream of the usual response at the peak of disease outbreaks in human populations and toward disease detection and prevention.
- Surveillance systems can move beyond hardware to incorporate ecological inputs. Partners and communities on the ground can provide relevant information such as reports of wild animal behaviour and interactions.
- One Health is a multisectoral approach which recognises the links between human, animal and environmental health to find value addition entry points.

- Early warning systems and disaster risk reduction have not been mainstreamed for human health and disease outbreaks. Disasters such as famine and drought can cause the movement of people and animals, resulting in new disease exposure. A holistic view of disease emergence and transmission can take into account the impacts of predicted events – such as El Niño - on critical factors for human health like food and water quality as well as waterborne and vector-borne disease prevalence.
- Biodiversity-sensitive risk communication in the field can shape community members' behaviour and attitudes to avoid long-term negative consequences for ecosystems and wildlife and, ultimately, the communities that depend on them.
- The COVID-19 response and recovery can allow us to take stock of where the environmental sector fits into One Health approaches and compare response and upstream prevention with the humanitarian sector. The spotlight on the relationship between human, animal and environmental health has generated momentum to seek synergies with global commitments: optimising the Sustainable Development Goals, aligning with the Sendai Framework to reduce not only impacts but also risks, and placing ecosystem-based adaptation front and centre in the health community with the Post-2020 Global Biodiversity Framework.
- We have an imperative and a myriad of opportunities to build back better and greener with an understanding of the interconnectedness of human, animal, and environmental health.

BREAKOUT GROUP 1: COVID-19, HEALTH, NATURE AND RESILIENCE

- There is a need for a *cultural* shift in the humanitarian sector in both awareness and investment in the environmental determinants of health and human well-being. Enhanced cross-sectoral collaboration, as well as targeted resource mobilisation, were identified as initial steps.
- The identified barriers to implementation included a lack of sector-specific tools, frameworks, and case studies of how integrated NbS approaches could be used for human health and well-being in humanitarian settings.
- As a key priority for building back better from COVID-19 and implementing NbS as part of recovery efforts, the group emphasized the need for further education, advocacy, and research across the humanitarian sector.

Image Credit: Emily Goodwin

BREAKOUT GROUP 2: BEST PRACTICES FOR IMPLEMENTATION

- There is a big range of environmental activities already being carried out in the humanitarian sector. Actors are greening humanitarian action through more sustainable procurement, renewable energy use, and waste management and recycling. NbS already being implemented include ecosystem restoration, urban gardening, watershed management and water source protection. Ongoing activities also highlighted the potential for hybrid green-grey options.
- To support further integration of NbS in humanitarian response and recovery, deeper understanding, knowledge and support are needed. The targets of different clusters and sectors as well as community priorities and ownership must be more clearly understood and placed at the centre of planning. Clear information on the impacts, effectiveness and costs and benefits of NbS is crucial, as is the clarity of entry points with specific actions, dedicated funding and environmental expertise, and longer term monitoring with links to reporting requirements.

NEXT STEPS

- A cultural paradigm shift is needed in the humanitarian sector, from short-term, small-scale response operations toward long-term landscape-scale thinking that integrates nature, risk reduction and affected communities into the strategy for response and resilience.
- Collaborative education, advocacy and learning between the environmental and humanitarian sectors are urgently needed.
- Dedicated resources, funding, expertise and sector-specific tools and knowledge are key to implementing and expanding NbS in the context of human health and humanitarian crises.

- A green recovery from the COVID-19 pandemic and synergies with global commitments such as the SDGs, Sendai Framework, and UN Decade on Restoration provide opportunities, support and an imperative to better understand how people can benefit from nature-based solutions in humanitarian contexts.

The FEBA-PEDRR-EHAN working group on EbA in Humanitarian & Post-Disaster Contexts convenes stakeholders across networks around collaborative research, learning and advocacy to transform humanitarian aid and development through the integration of nature-based solutions & environmental safeguarding as a core component and strategy.
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