

# Innovative solutions towards environmental security: Input on the draft outline for the UNEA-4 Ministerial Outcome Document

## Submitted by:

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## Background

For many countries affected by insecurity or armed conflict, these are often *the* main environmental challenge that they face. Whether this is managing conflicts over resources, addressing the direct environmental damage caused by hostilities, or the collapse of the state's capacity for environmental governance and oversight, the consequences for people and ecosystems can be profound.

Resolutions [2/15](#) (2016) and [3/1](#) (2017) have helped secure UNEA's role as one of the leading global fora for addressing the environmental dimensions of armed conflicts. UNEA-4 should continue to build on this role, not only in monitoring the implementation of previous resolutions, but also by continuing to articulate the relationship between security, people, and the environment, and in promoting measures to address environmental security.<sup>1</sup>

The last decade has seen notable innovations in a field relevant to UNEA-4's theme of *Innovative solutions for environmental challenges and sustainable consumption and production*: the development of innovative methodologies for remotely monitoring the environment before, during, and after armed conflicts.

These approaches have been driven by new partnerships between governments, international organisations, academia, civil society, and affected communities, and are helping to radically transform our understanding of the environmental causes and consequences of conflicts. **The following identifies key benefits that these innovative approaches can provide for enhancing environmental security, and proposes possible language for inclusion in the draft Ministerial Outcome Document.**

This joint submission represents the views of five leading organisations working on the protection of civilians and the environment in relation to armed conflicts, on environmental security, and on environmental peacebuilding.

## Priority areas

**Main priority 1:** *Ensure the transparency, accountability, and comparability of global environmental data and develop science-policy-business partnerships on innovative data technologies and digital solutions.*

The recent expansion and refinement of remote environmental data collection methodologies for insecure settings has been facilitated by the growth in social media use in conflict-affected areas, new tools for quantifying environmental and health risks, and increased access to satellite imagery, via the

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<sup>1</sup> UN Environment describes environmental security as: 'a "conceptual envelope" including a variety of issues involving the role that the environment and natural resources can play across the peace and security continuum, including environmental causes and drivers of conflict, environmental impacts of conflict, environmental recovery and post-conflict peacebuilding.'

private sector and governments. This has led to, and complemented, developments in the field of open source investigation and data collection that are now being used to improve environmental security assessments. These approaches have significantly expanded the quantity of environmental data available for remote assessments, and its utility. Further innovations are in the pipeline that utilise big data platforms, such as the Map X project, aerial observation and participatory citizen science.

These data collection methodologies are being used to update and expand the development of risk assessment tools for areas affected by conflict, with international and civil society organisations, and academia, now developing partnerships to ensure that these innovative methodologies can be utilised to minimise harm to people and the environment. This is merely the beginning, just over the horizon lies the potential use of artificial intelligence, and with it the automation of data collection. Areas where these innovative approaches are already being used include:

- To provide early warning of developing environmental security risks as a tool for preventing escalation to violent conflict.<sup>2</sup>
- To provide a rapid assessment of the environmental causes and consequences of humanitarian crises and monitor the environmental footprint of the response.<sup>3</sup>
- To rapidly identify and remotely assess potential environmental risks from conflict pollution and the toxic remnants of war during post-conflict recovery, in order to help save lives and minimise health risks to the civilian population.<sup>4</sup>
- To help raise awareness of and communicate the environmental dimensions of conflicts and crises to policy-makers, the media and the public, and so inform the development of policies intended to minimise and respond to harm.<sup>5</sup>

**Proposed language for inclusion in draft Ministerial Outcome Document:**

***“We welcome the role that innovations in data collection can play in monitoring and responding to the environmental causes and consequences of crises and armed conflicts, and encourage the further strengthening of partnerships between governments, international and civil society organisations, academia and the private sector in this regard.”***

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<sup>2</sup> The UN Security Council’s increasing attention on climate change and security has highlighted the need for enhanced monitoring activities to provide data on environmental risks for the purposes of conflict prevention. Initial work in support of this objective is being undertaken by the civil society led Expert Working Group on Climate Related Security Risks: <https://www.sipri.org/research/peace-and-development/climate-change-and-risk/expert-working-group-climate-related-security-risks>

<sup>3</sup> For example the joint Coordination of Assessments for Environment in Humanitarian Action initiative is a collaborative effort to update key environmental assessment methodologies, enhance their online accessibility, strengthen the interconnectivity of available tools and pinpoint which ones are used at a particular stage of humanitarian programming or type of emergency: <http://www.eecentre.org/assessments/about.html>

<sup>4</sup> UN-Habitat’s Mosul Portal is intended to give an overview of the known rehabilitation efforts to support coordination and recovery planning in Iraq. Its early mapping of environmental risks made use of remote data collected by civil society actors: <http://unhabitatiraq.net/mosulportal/thematic-assessments>

<sup>5</sup> Environmental data gathered remotely by civil society actors was key to informing the negotiations on UNEA resolutions 2/15 and 3/1.