

# Environmental Consequences of the Syria Crisis



Coordination Workshop

*25 January 2016*

Organized by the Joint UNEP/OCHA Environment Unit  
and  
the UNHCR Environment Unit

## EXECUTIVE SUMMARY

---

The United Nations Office for the Coordination of Humanitarian Affairs (OCHA), the United Nations High Commissioner for Refugees (UNHCR) and the United Nations Environment Programme (UNEP) jointly organized a coordination workshop in Geneva, Switzerland on 25 January 2016 to take stock of the ongoing efforts by partners to identify, assess and where possible mitigate environmental consequences of the ongoing crisis in Syria and its neighbouring countries. Prior to the meeting an Issue Brief was developed and shared in an effort to provide an initial overview of conducted studies and ongoing initiatives related to the Syrian conflict and corresponding humanitarian response. Coverage aimed to include the refugee response in Jordan, Lebanon, Iraq and Turkey and the on-going humanitarian response in Syria. This note provides an overview of the discussions and suggested follow-up actions.

Meeting participants recognized the need to understand the role of environment along the entire conflict curve – from environment as a conflict driver, to environmental impacts of the crisis and associated humanitarian action, to environment as a peacebuilding opportunity. At the same time, the meeting recommended that joint work focus on operationalizing environment in humanitarian action. Work inside Syria should mainly aim to further strengthen links to local actors and to support the gathering of data that can eventually inform recovery and peacebuilding.

### Outcomes include:

1. The Joint UNEP/OCHA Environment Unit (JEU) and the UNHCR Environment Unit agreed to **strengthen coordination and collaboration on environment in humanitarian action**, focusing on Syria as a priority crisis. A second workshop should be organized in one of the affected neighbouring countries to better harness the activities undertaken by local actors, in particular the NGO community.
2. **Improve the common understanding of environment** – crisis linkages through a desk review and key stakeholder interviews, and summary report which:
  - Provides an overview of environment issues and capacities of organisations working in Syria and in the refugee hosting countries in the region.
  - Clarifies the role and capacity of Ministries of Environment or other agencies involved in environmental regulation in Syria, Iraq, Jordan, Lebanon, Turkey.
  - Identifies information gaps on the current state of the environment and ongoing environmental interventions in the region and propose approaches to filling the gaps.
  - Document the who/what/where of local environmental actors.
  - Highlights programmes with (potential for) significant negative environmental consequences.
  - Outlines priority environmental interventions and associated short and long-term

efits.

- Identifies entry points in current ongoing processes (Regional Refugee and Resilience Plan, Syria Response Plan, Jordan Response Plan, and others) and coordination architecture, including entry points and timelines for linking to the implementation of these plans.

### **3. Actions to raise the profile of environmental issues in the Syria crisis:**

- OCHA/UNEP/UNHCR to raise awareness for environment in the Syrian context by releasing a joint press statement prior to 5 year anniversary of conflict (March 11, 2016)
- Reach out to civil society organisations and key governments to address the link between conflict related environmental damages in outreach and work when and where possible.
- Identify opportunities for joint advocacy at high-level for a such as the UN Economic and Social Council, the UN Environment Assembly and the World Humanitarian Summit.

### **4. Improve information sharing between UN organisations, humanitarian actors, civil society and experts through existing platforms and forums**

- Existing humanitarian data-sharing platforms like the Humanitarian Response, to be used for sharing information on environmental issues in the Syrian context.
- A Syria sub-group of the informal Environment in Humanitarian Action (EHA) Reference Group to be established and to further explore:
  - a. Help desk options, including providing support to responders and operational agencies
  - b. Data gathering and repository options, using a site-based approach
  - c. Engagement with additional actors including regional organizations, UN agencies and programmes, development banks, non-governmental organizations and environmental agencies
  - d. Links to existing national projects and initiatives, including community initiatives, to strengthen data gathering
  - e. Developing potential response mechanism including a variety of tools for both structural and ad-hoc based identification, analysis and remediation work.
  - f. Seeking funding opportunities to carry out the type of work described in previous points.

# DETAILED MEETING NOTES

---

## Introductions – session one

JEU – Greg Grimsich

Greg Grimsich of the Joint UNEP/OCHA Environment Unit outlined the meeting objectives, mentioning the growing interest in looking at environmental consequences from different angles where a looming concern are the significant direct and indirect environmental consequences of the conflict. Environmental degradation, solid waste accumulation, liquid waste and energy needs are overwhelming national capacity in several locations.

UNHCR - Betsy Lipmann – Welcome

Betsy Lipmann of UNHCR welcomed the participants, mentioning how the meeting is a great opportunity to work towards ensuring energy and environment are embedded emergency and crises response globally.

## Session two: Environmental overview

Melanie Hutchinson - UNEP/ROWA

Melanie Hutchinson presented environment in the Syria context from the UNEP Regional Office of West Asia's (UNEP ROWA) perspective, with specific emphasis on the Jordan Response Plan (JRP). The JRP includes an environmental component with defined environmental impacts. UNEP ROWA is working with UNDP colleagues on the ground, focusing on assessing the environmental impacts on the host community. Some areas of concern include: protected areas in the north of Jordan encroached upon for grazing and firewood collection, increase of waste and medical waste with need for landfill upgrade and air quality problems as a cause of increased traffic. The environmental marker will be used to screen JRP projects across all sectors. To some extent, UNEP ROWA is also looking at the Lebanon crisis response, where they hope to enhance cooperation with colleagues of other organizations.

Martin Bjerregaard – UNDP Syria / Disaster Waste Recovery

Martin Bjerregaard of Disaster Waste Recovery works with the United Nations Development Programme (UNDP) Syria, who has been working on debris waste management in Homs since 2015. A key issue is the separation of hazardous waste and unexploded ordnances from the debris. UNDP is working with national authorities and local administration, who have established a reconstruction committee to develop debris and waste guidelines. The collection of solid waste forms the bulk of the work, but disposal of the waste is a big challenge. Landfills of Syria that were previously managed are now becoming dumpsites and have significant environmental issues. UNDP is developing a dumpsite assessment tool and looking to support more recycling, including making fuel briquettes for cooking and heating in winter period.

Wim Zwijnenburg - Humanitarian Disarmament, PAX

PAX are a peace organisation working in 15 countries for peacebuilding and conflict prevention. They have been working on Syria-related environmental issues since 2002. PAX has released a report to demonstrate the impact of conflict on public health and environment. The report aims to promote protection of civilians by improving responses to acute and chronic health risk of military related pollution, by better data collection and identification of potential environmental hotspots and strengthening political and legal dialogue on environmental impact of conflict. The lack of baseline data limited the study, with most data received through desk top studies, social media scans and

satellite imagery which tools were helpful for understanding which areas to focus on. The study found significant damage to industrial sites in northern Aleppo, Homs as well as damage to critical infrastructure like power plants, oil infrastructures and industrial sites. Other concerns include possible accumulation of weapons and ammunitions residues, the large quantities of conflict rubble, and collapse of environmental governance structures. PAX aims to improve data collection and sharing among humanitarian and UN organisations, providing information to local governments or governance structures when there is risk of exposure of civilians to toxic remnants of war. Organizations can use this information for long-term planning and reconstruction in order to have a faster response to conflict related environmental pollution.

Andrea Dekrout – UNHCR Environment group

UNHCR deals with refugees and host communities and is interested in learning more about the specific challenges of the Syria conflict. Refugee related environmental concerns are not unique to refugee situations, however the difference is the scale and speed at which environmental change happens, requiring unique solutions. Waste generation and energy demands put pressure on local environment and energy infrastructure. UNHCR is working on inclusive solutions and hopes to work with partners to prioritise and get expertise on the ground.

## **Concluding comments**

There are a number of national and regional response plans which give varying attention to environment. At the same time it is difficult to get a coherent picture of key priorities across the region. There are likely a number of shared environmental consequences and priorities across the three countries hosting refugees, and these should be identified. Advocacy and awareness raising also warrants more efforts.

Given the limited environmental capacity among international actors on the ground, it is important to work together to improve planning processes and mainstream environment. Necessary resources and concrete areas where support is needed on the ground should be identified. A 3W would go a long way to link partners and capacities together. Baseline knowledge related to sustainable development and underlying environmental concerns can be utilized for sustainable recovery.

Participants reiterated their willingness to share data and agreed to discuss the concrete modalities at a later meeting.

## **CALL IN ENDS**

Working group discussions focused on: 1) refugee settings (Lebanon, Jordan and Turkey); and 2) environmental concerns in Syria. The working group outcomes are captured in the outcomes outlined at the front of the notes on the meeting.

## **MEETING END**

## PARTICIPANTS LIST

---

<b>Name</b>	<b>Organization</b>
Charles Kelly	Environment Community of Practice, Global Shelter Cluster
Carl Bruch	Environmental Law Institute
Annica Waleij	FOI
Evaristo De Pinho Oliveira	ICRC
Rene Nijenhuis	Joint UNEP/OCHA Environment Unit
Emilia Wahlstrom	Joint UNEP/OCHA Environment Unit
Greg Grimsich	Joint UNEP/OCHA Environment Unit
Brendan McDonald	Joint UNEP/OCHA Environment Unit
Adi Hadid	Mission of Jordan
Owen Grafham	Moving Energy Initiative
Katie Harrison	Norwegian People's Aid
Colin Bent	Norwegian People's Aid
Tanja Koch	OCHA Jordan office
Wim Zwijnenburg	PAX
Wilbert van der Zeijden	PAX
Vincent Annoni	REACH
Ben Truniger	Swiss Foundation for Mine Action (FSD)
Doug Weir	Toxic Remnants of War project
Hassan Partow	UNEP Post-Conflict Disaster Management Branch
Melanie Hutchinson	UNEP Regional Office for West Asia
Abdelmenam Mohamed	UNEP Regional Office for West Asia
Andrea Dekrout	UNHCR
Paul Quigley	UNHCR
Stephanie de Verteuil	UNHCR
Karen Hulme	University of Essex
Marija Bateman	UNOPS Hub in Amman
Einar Bjorgo	UNOSAT
Erika Clesceri	USAID

### **Environmental action in the context of the Syria crisis response**

*This issue brief provides an overview of conducted studies and ongoing initiatives related to the Syrian conflict and corresponding humanitarian response. The paper then outlines possible entry points for joint action in the areas of 1) Environment in humanitarian response and 2) Environment considerations in recovery. Geographic areas include the refugee response in Jordan, Lebanon, and Turkey and the on-going humanitarian response and recovery in Syria. The issue brief was developed as a background document for the 25 January 2016 workshop on the environmental impacts of the Syrian conflict, where open questions and next steps were further discussed.*

#### **1. Objectives**

The objectives of the issue brief and the January 2016 meeting on environmental action in the Syrian crisis are to: 1) Provide an initial mapping of ongoing environmental initiatives; 2) Identify gaps in current environmental response and 3) Agree on next steps to strengthen the environmental elements of the humanitarian response and provide a basis and link to environment considerations in recovery.

#### **2. Ongoing Initiatives**

*Please add information and links to ongoing initiatives, studies and reports by sharing them with the Joint Environment Unit ([wahlstrom@un.org](mailto:wahlstrom@un.org)). [Clearly indicate in case material is not public.]*

##### **The Moving Energy Initiative**

The Moving Energy Initiative (MEI) aims to change the way that energy is delivered to displaced people, improving health, environmental and development outcomes. The MEI addresses the specific conditions that refugees and displaced people face in terms of their energy needs for heating/cooling, cooking, lighting, electrification and access to clean water. The consortium includes UNHCR, NRC, GVEP International, Practical Action and Chatham House and is funded by the UK Department for International Development (DFID). In November, Chatham House has published the initiative's flagship report, which examines the role, management and impacts of energy use in global humanitarian responses. The research covered some of the countries involved in the Syria crisis, and carried out a separate (unpublished) assessment of the issues involved in energy use amongst refugee communities and potential for sustainable energy investments in Jordan.

The second phase of the initiative is due to begin soon and will involve the implementation of pilot projects in Irbid province in Jordan, as well as also in Kenya (Dadaab refugee camps) and Burkina Faso (Goudoubo Refugee Camp). Jordan requires a different approach, given the level of development, specific energy and water linkages, and large urban refugee population. Consultations are planned involving Jordanian government, relevant NGOs and UN agencies in the country, interested donor country representatives and local private sector companies with expertise in renewable energy and energy efficiency services. With the support of the Dutch government and the WANA institute, the Chatham House has already begun scoping for a workshop which would take place in Amman in Spring 2016 and is likely to discuss how to facilitate better coordination of investment in sustainable energy or water infrastructure and projects which cross the humanitarian-

national development divide, find ways to use these to help develop local renewable energy and efficiency markets and identify practical actions that the MEI can support.

More information can be found here: <https://www.chathamhouse.org/about/structure/ee-department/moving-energy-initiative-project>

### **Lebanon Environmental Assessment of the Syrian Conflict & Priority Interventions – September 2014 (MOE/EU/UNDP)**

While the Lebanese Government is aware of the dramatic consequences of this massive influx of Syrian refugees in the past two years, the humanitarian situation does not allow restricting the entry of Syrian refugees to Lebanon. Lebanon is ringing the alarm bell on all fronts: social, economic, and environmental.

As long as the environmental problems remain unaccounted for, finding solutions will not be flagged as a top priority of the Lebanese government and of the international community alike. This assessment aims at highlighting the extent of damage and degradation occurring across many environmental sectors. This report is a call for urgent action—to safeguard Lebanon’s fragile natural resources and ecosystems—so that Lebanon will be able to preserve its rich and diverse natural, social, cultural, and political heritage.

By supporting the Ministry of Environment in conducting this assessment, the European Union and the United Nations Development Programme have confirmed the level of damage facing the environment in Lebanon and indicated the way forward for responding to the environmental crisis. The Ministry of Environment is now calling upon all concerned stakeholders to join hands to remedy the environmental situation and ensure that intervention strategies and actions for the humanitarian response to the Syrian conflict have fully integrated environmental considerations.

Related information: <http://www.undp.org/content/undp/en/home/ourwork/ourstories/emergency-employment-yields-a-healthier-environment-in-syrians.html>

### **Amids the debris - A desktop study on the environmental and public health impact of Syria’s conflict (PAX/TRW)**

The desktop study does not provide a list of verified “hotspots” of environmental damage. The ongoing war in Syria does not currently allow for systematic field measurements in most areas of concern. What this desktop study does aim to do, is link known civilian exposure scenarios to known cases of possible or probable environmental pollution from the war in Syria. In doing so it considers pollution incidents in other conflicts and examples of peacetime military pollution. It also explores an experimental approach to assessing the toxic footprint of the constituents of conventional munitions.

This desktop analysis identifies four types of hazards - feasible scenarios in which the environmental impact of the conflict may have a direct and or long-term impact on the public health of the Syrian people.

<http://www.paxforpeace.nl/media/files/pax-report-amidst-the-debris-syria-web.pdf>



## **Post-Conflict Environmental Management - Planning Considerations for the Aftermath of the Syrian Conflict (C. Kelly)**

Recovery from conflict often puts considerable demand on natural resources, particularly to rebuild, or build anew, shelter and infrastructure, and re-establish livelihoods and the economy in general. Activities at the center of successful recovery, e .g, removing rubble, clearing munitions, cleaning damage to industrial sites, rebuilding damaged water and sanitation systems, need to be based on environmentally sound planning and implementation if recovery does not result in additional environmental damage, and hardship for survivors.

The paper identifies environment-related issues, challenges and opportunities once the conflict in Syria has moved to a recovery phase. The paper gives attention to planning considerations and actions to be taken before an actual recovery begins to ensure environmental challenges do not hinder the recovery process.

The conflict in Syria may become a stalemate where specific critical environmental issues need to be addressed on life saving/life sustaining grounds but a formal recovery program is not possible. Critical interventions in the case of a stalemate are noted.

The report is available through the JEU.

### **The SET4food pilot project - Lebanon**

The SET4food pilot project aims at both the validation of the decision support system and the testing of innovative energy technologies for food utilization for refugees and internal displaced persons (IDPs). A set of camps and informal settlements in four countries - Somalia, Central African Republic, Lebanon, Haiti - were assessed and selected to implement short pilot activities. The methodology was defined by the SET4food staff, considering the inputs coming from the field. Finally an extensive monitoring system was developed in order to collect data and evaluate the impact of such technologies.

### **Swedish Armed Forces Medical and Environmental Intelligence**

Within the framework of Swedish Armed Forces Medical Intelligence, country studies of Syria and neighboring countries are regularly produced. The Syria report is not for public release, but may be available upon individual requests.

Some general descriptions regarding content and methodology is however published and freely available on:

[http://elr.info/sites/default/files/vol.5\\_ch.4\\_liljedahl\\_et\\_al\\_colorandcoverpage.pdf](http://elr.info/sites/default/files/vol.5_ch.4_liljedahl_et_al_colorandcoverpage.pdf)

## **3. Harmonising environmental initiatives and potential areas for joint action**

Entry points are grouped under the area of 1) Humanitarian response in refugee and non-refugee settings and 2) Environment considerations in recovery.

Topic/Track	Organizations	Comment
<b>A. Humanitarian Response in Refugee Setting (in Jordan, Lebanon, Turkey, ...)</b>		
A1. Energy resources	UNHCR, MEI	
A2. Solid waste and wastewater management	UNHCR, MEI	
A3. Environmental issues around camps	MEI	A largely unexplored area, WWF may develop paper on environment in urban humanitarian settings. Links to IASC Urban Task Force?
Other proposals: - Impact on water resources - Impact on agricultural resources - Impact on geological resources (minerals/ores)		
<b>B. Humanitarian Response in non-refugee settings (urban and rural areas of Syria)</b>		
B1. Energy resources		Access to energy resources
B2. Solid waste and wastewater management		
B3. Environmental issues around urban/rural IDP settings		
B4. Conflict related damage and environmental emergencies <sup>1</sup>	PAX, JEU	Continue limited monitoring and updating existing work; outreach in cooperation with PAX's local/regional partners in Syria and promoting this various fora (WHS/UNEA) to get more traction and support.
B5. Protected / gazetted areas?		
B6. Suggested: Water resources		
B7. Suggested: Agricultural resources		
B8. Suggested: Geological resources (minerals/ores)		
B9: Suggested: Other industrial resources; Constructed environment (construction industry, existing buildings); Air quality		
<b>C. Mainstreaming environment in humanitarian programmes</b>		
C1. Development of context-specific guidance to humanitarian partners	UNEP ROWA	Environment marker
C2. Integration of environment / [affected environmental resources] into response plans		
C3. Greening operations		Joint proposal/concept note under

<sup>1</sup> An environmental emergency can be defined as a sudden-onset disaster or accident resulting from natural, technological or human-induced factors, or a combination of these, that cause or threaten to cause severe environmental damage as well as harm to human health and/or livelihoods (UNEP/GC.22/INF/5, 13th November 2002).

		consideration November 2015 (DFID preparedness project partners)
C4. Environmental impact monitoring		
<b>D. Environment considerations in recovery</b>		
D1. Conflict related damage	PAX	Promotion of link protection of environment with protection of civilians with UN fora (UNGA, WHS, UNEA); outreach within disarmament community. Update
D2. Solid waste management	UNDP	
D3. Supporting national environmental management capacity	UNEP	
D4. Post-conflict environmental needs assessment	UNEP	