Humanitarian Response to COVID-19 and the Environment

Operational Guidance Overview[1]

Version 1

Information provided in this document does not indicate specific approval or recommendations by any organization or contributors to this Overview.

Introduction

The COVID-19 Pandemic has placed extraordinary demands on the humanitarian sector. The Pandemic has added a new disaster to each humanitarian response while also stopping or severely limiting normal crisis management methods and approaches.

Pandemic control measures focus on limiting personal contact, mobility, manufacturing and commerce to control the spread of COVID-19. These limitations create gaps in addressing both the Pandemic and other humanitarian crisis by:

- Stopping or severely limiting interventions which prevent or reduce negative environmental and other impacts of the crisis,
- Triggering environmentally damaging coping strategies due to shortages of basic supplies and limitations on movement, and,
- Triggering urgent assistance which does not consider possible negative long term impacts.

This **Operational Guidance Overview** summarizes key environment-focused response guidance based on the impact of COVID-19, as a disease and from the measures implemented to control the spread of the disease, for each of the eleven Humanitarian Clusters as well as energy. The measures identified, as environment-based humanitarian responses, are intended to improve the conditions of those experiencing humanitarian crisis while avoiding or minimizing negative environmental impacts. The overall environment-humanitarian response to Covid-19 and impacts on other humanitarian operations will increase the demand for remote analysis and support mechanisms, operationalizing existing support mechanisms in new ways.

The **Overview** is focused on practical and effective field-level measures to address the environment-related impacts COVID-19 and other humanitarian crises. It is anticipated that the

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[1] Produced through the Global Shelter Cluster Environment Community of Practice in collaboration with the UNEP/OCHA Joint Environment Unit and the Global Plan of Action for Sustainable Energy in Displacement Settings. Please send comments and updates to C. Kelly, havedisastercallkelly@gmail.com

Operational Guidance Overview will be updated periodically to incorporate emerging practices and experiences from the field.

COVID-19 Response Information Sources

A listing of sources of information linked to the environmental aspects of COVID-19 or humanitarian response in the context of COVID-19 is provided below. While some of these sources may not focus directly to COVID-19 and the environment, they can aid in understanding the COVID-19 crisis within the broader humanitarian response context.

- **Environmental Emergencies Center**: https://www.eecentre.org/COVID-19/. This site is a portal to COVID-19 materials available from WHO, OCHA, UNEP, the Geneva Environment Network, and the Environment and Humanitarian Action Connect, with specific links on health care waste management and disaster debris and waste.
- **COVID-19 ACAPS Resources**: https://www.acaps.org/projects/COVID19, including response scenarios, updates for Yemen, Sierra Leone, Cameroon and the Rohingya situation as well as a dashboard of COVID-19 related government responses including Governance and socio-economic measures, Movement restrictions, Lockdowns, Public health measures, Border controls and Declared State of Emergency.
- **Global Shelter Cluster COVID-19 Web page**: https://www.sheltercluster.org/response/COVID-19-and-shelter.
- **FAO COVID-19 Web pages:** http://www.fao.org/2019-ncov/highlights/en/, including sections on COVID-19 and animals, food chain data analysis, food price monitoring and policy briefs (http://www.fao.org/2019-ncov/resources/policy-briefs/en/) covering Legal considerations and food insecurity, social protection in rural areas, migrant workers and COVID-19, and impact of the COVID-19 crisis on humanitarian and food crises
- **COVID-19: Guidance for employers and business to enhance migrant worker protection during the current health crisis**: https://iris.iom.int/sites/default/files/IOM-COVID%2019_Employer_Guidance_V1.pdf.
- **Briefing Note on Sustainable Energy in the Context of COVID-19:** https://www.humanitarianenergy.org/assets/resources/Briefing_Note_on_Energy_in_the_COVID-19_Humanitarian_Response.pdf

Expert Assistance and Support

This and other guidance on responding to humanitarian needs in the context of COVID-19 may not be sufficient to address all operational challenges encountered in the field. Where this is the case, field staff are recommended to contact one of the following with specific questions or for guidance on specific operational challenges:

- WWF/US Environment and Disaster Management Help Desk
- Global Shelter Cluster Environment Community of Practice
- UNEP/OCHA Joint Environment Unit
- Global Plan of Action for Sustainable Energy in Displacement Situations

Each help facility has links to the other three. Contact with only one will trigger a response from across the environment-humanitarian assistance network.

Operational Guidance

NOTE: Proper hygiene and spatial distancing should be followed for all Response Options listed.

Camp Coordination/Camp Management

COVID-19 Related Challenges	Environment-based Response Options	Notes
Limitations of movement within and outside a camp affecting trade and commerce.	Address associated negative coping strategies (such as collection of wood rather than use of LPG fuel for cooking).	
Reductions in commercial activities within a camp.	Address associated negative coping strategies (such as collection of wood rather than use of LPG fuel for cooking).	
Coordination across sectors.	Establish virtual coordination mechanisms which include environment as a cross-cutting issue. Support on environmental issues for a specific camp or camp setting can be provided from the **Expert Assistance and Support** sources noted above.	Due to travel restrictions and challenges, remote support may be the only viable option.

Education

COVID-19 Related Challenges	Environment-based Response Options	Notes
Closure of schools.	Consider intra-family (including student-teaching student) education using regularly distributed handouts and written guidance which use of practical education activities to improve local (household) environmental conditions.	Consider options to recycle or reuse handouts.
Stopping of physical classroom-based educational activities related to gardening, animal husbandry or other environment-related activities.	Transfer gardening, animal husbandry or other activities to student households and support with guidance and materials as needed. Include environmental education in at-home learning. Use COVID-19 as an opportunity to include lesson points on zoonotic disease, conservation and relationship with nature.	

Emergency Telecommunications

COVID-19 Related Challenges	Environment-based Response Options	Notes
Reduction in access to communication facilities for use in trade and commerce.	Provide phone use credits to traders and commercial enterprises to enable them to continue business, including requests for deliveries and ordering supplies.	Maintaining trade and commerce supports employment and access to essential supplies, reducing potential demands on the natural environment.
Lack of electricity supply for emergency telecoms of humanitarian operations as well as households	Consider use and provision of off-grid solar solutions.	- Procurement of Stand-alone Solar Kits for Humanitarian Aid: This Technical Note provides guidance on procuring pico-solar and solar home system (SHS) kits for humanitarian aid. - Guidance note: How to read a Specification Sheet for off-grid lighting products (Lighting Global)

Food Security and Livelihoods

COVID-19 Related Challenges	Environment-based Response Options	Notes
Reduced commercial food supplies available to affected populations.	Establish call-and-delivery food services. Provide advice on fast-growing nutritious crops for kitchen gardens for domestic consumption in different ecosystems to facilitate food security and minimize the need for affected-communities to go to shops and other trading points which might increase exposure to infection.	Reduced food supplies and related commercial activities may lead to environmentally damaging coping activities, by consumers and individuals who have lost work or income. Household level mini gardens can be produced at the household level for free distribution, or sale to other households, as an income generating activity. Examples can be found at https://reliefweb.int/sites/reliefweb.int/files/resources/MicroGarden-FAOFinalReport.pdf and https://lemontreetrust.org/crg/.
Reduced sales of prepared food to beneficiary populations.	Establish carry-out type facilities.	

Reduced frequency of deliveries of food aid.	Minimise distribution of foodstuffs with packaging or budget for collection and disposal (to avoid waste attracting vermin and becoming a breeding ground for mosquitoes). Ensure distributed food can be cooked quickly, to minimise possible deforestation for fuel and associated protection risks.	As above (negative coping strategies)
Limited Livelihoods support activities	Consider household-level livelihood activities to produce commodities which are in short supply and necessary during the crisis such as soap making (with appropriate formulas) to be effective against COVID-19 and limit effects of detergents in rivers and streams (minimise phosphates).	
	Consider specific vouchers for fuel in addition to cash. This will reduce the risk of beneficiaries maximising their spend on food and hygiene while then cutting down trees for fuel (increases deforestation, respiratory disease, disaster risk and conflict with host communities).	
	If cash support is provided to clinics to allow them to continue to function, provide distribution or voucher ringfenced for healthcare waste management items (appropriate containers, sharps boxes, etc.) and link them to appropriate healthcare waste management systems and disposal processes.	

Reduced supplies of cooking or heating fuel, leading to a risk of illegal or uncontrolled collection of vegetation.	Distribute LPG or other alternatives, directly or through a voucher-based modality.	Monitor fuel use to identify and address inappropriate use.
Reduced supplies of fuel or other energy for lighting and household-level commercial activities.	1. Distribute fuel to replace reduced supplies. 2. Cover the cost of household electricity supplies at a level which is adequate for minimum needs or justified by increased household commercial activities. 3. Install or distribute solar lights and small scale (household) solar powered electrical systems.	Use of electricity should be monitoring to keep use to a minimum which is adequate for basic needs and commerce. **Product databases for energy products and services:** - GOGLA (off-grid solar industry association) product database: https://www.gogla.org/member-product - Clean Cooking Alliance, Cooking solution / fuel product database:http://catalog.cleancookstoves.org/

Health

COVID-19 Related Challenges	Environment-based Response Options	Notes
Increased COVID-19 case load.	Where new or separate facilities are established or existing facilities expanded, develop a decommissioning plan and plans for providing water, waste water and waste and biohazard waste disposal. Also, consider cooking and personal hygiene requirements.	
Reduction on case load for other diseases.	Where existing facilities are allocated to COVID-19, establish separate facilities to treat non-COVID-19 cases, including a decommissioning plan and plans for providing water, wastewater and waste and biohazard waste disposal. Also, consider cooking and personal hygiene requirements.	Although the pandemic response is a health care priority, care for other diseases and illnesses should continue. It may be more practical to set up a temporary facility for the non-COVID case load than either caring for them in the same facility as COVID cases or setting up a new COVID case load facility, particularly if the non-COVID case load drops during the height of the pandemic.

Increased health care waste.	Follow WHO and other guidance on handling of health care waste. Decide on reprioritisation of disposal measures (e.g., prioritisation of healthcare waste for incineration) and identification of temporary disposal sites as necessary, based on existing capacities, exposure of operators, etc.	See https://www.eecentre.org/COVID-19/ for links.
	Increase use of reusable supplies and equipment, whenever appropriate, to reduce the generation of health care waste. Use re-sterilization of equipment where appropriate. When building field hospitals and treatment centres include systems for management of healthcare waste to meet minimum standards (storage, transportation, final disposal). Include training on appropriate management of healthcare waste and development of appropriate systems meeting minimum standards in any new or temporary laboratories.	See https://apps.who.int/iris/bitstream/handle/10665/65012/WHO_EMC_ESR_98.2_%28sections5-6%29.pdf?sequence=2&isAllowed=y on options for reusable supplies and equipment and their decontamination (Do not follow guidance in Chapter 6, which is dated.), as well as https://apps.who.int/iris/bitstream/handle/10665/331695/WHO-2019-nCov-IPC_PPE_use-2020.3-eng.pdf on rational use of PPE and https://www.who.int/publications-detail/advice-on-the-

		use-of-masks-in-the-community-during-home-care-and-in-healthcare-settings-in-the-context-of-the-novel-coronavirus-(2019-ncov)-outbreak on the use of masks. . See also https://www.cdc.gov/niosh/topics/hcwcontrols/recommendedguidanceextuse.html on reusing PPE.

Consider associated negative coping strategies (such as collection of wood rather than use of fuel for cooking)	Follow WHO and ICRC guidance on handling deceased persons (See https://apps.who.int/iris/bitstream/handle/10665/331538/WHO-COVID-19-IPC_DBMgmt-2020.1-eng.pdf; https://www.icrc.org/en/doc/assets/files/other/icrc_002_0880.pdf and https://www.paho.org/disasters/index.php?option=com_docman&view=download&category_slug=tools&alias=545-pandinflu-leadershipduring-tool-18&Itemid=1179&lang=en	**Note:** 1. Bodies should not be buried in "Body Bags" as these will limit natural decomposition. 2. Cultural practices should be followed where possible considering health requirements.

Logistics

COVID-19 Related Challenges	Environment-based Response Options	Notes
Increased demand for good and logistics-related services.	Consolidate shipments of different items to the same destination. Explore local/regional logistics-services and suppliers.	Consolidated shipments will make air, ocean and road transport more energy efficient.
	Develop criteria for identifying the speed with which delivery is needed and selecting the best combination of speed of delivery and energy used. Consider local (at home) manufacturing of products such as soap and other immediate needs.	As maritime and land transport systems for commodities remain largely operational, these options should be considered where delivery is not urgent.
Packaging	Consider packaging options which can provide additional uses of the packaging after delivery. Minimise distribution of sanitizers in plastic bottles and provide guidelines for disposal. Budget for collection and appropriate disposal of packaging which does not have a use.	The use of plastics in packaging should be reduced to the extent possible.

Nutrition

COVID-19 Related Challenges	Environment-based Response Options	Notes
Reduced supplemental food supplies	Establish gardens to grow plants to provide micronutrients, including mini-household gardens (see Food Security, above).	Mini-gardens can be assembled off-site for delivery or on-site as a household income generating activity.

Protection

COVID-19 Related Challenges	Environment-based Response Options	Notes
Increased risk of violence from illegal or semi-legal activities seen as essential for survival (e.g., fuel wood collection).	Deliver fuel and other basic supplies to individuals and families reliant on natural environment for fuel and other needs.	

Recovery

COVID-19 Related Challenges	Environment-based Response Options	Notes
Stalling of recovery operations due to COVID-19 related restrictions on personal contact, mobility, manufacturing and commerce.	Provide partial or full payments during periods when project participants cannot work to reduce illicit efforts to secure income or basic needs.	
	Redesign recovery-related work to allow for individual tasks as part of an overall plan which includes environmental or ecosystem-based elements	
	Redesign recovery-related work to incorporate distancing, masks and other measures to avoid COVID-19 spread while including guidance on proper use and management of health/bio-hazard waste	
Reduction in trade and commerce in settlements, impacting wellbeing and ability of residents to self-recovery.	Provide financial and materials support to small scale trade and commerce to allow operations during periods of limited movement, including call-in ordering and deliveries to households.	
Identifying recovery mechanisms which can work during COVID-19 related limitations on personal contact and movement.	Focus on household-level manufacturing of supplies for humanitarian response (e.g., face masks) and for retail sales within communities.	Equipment and supplies may need to be provided to workers.

Shelter and Settlements

COVID-19 Related Challenges	Environment-based Response Options	Notes
Constraints on provision or upgrading shelter based on limitations of personal contact, mobility, logistics and manufacturing and commerce.	Distribute basic shelter or up-grade supplies (based on self-assessments of needs) together with written and on-line guidance and advice.	Consider providing credit to "Smart" phone users so that they can access information and one-on-one guidance when movement is limited.
Need for new shelters for self-isolation or disinfection of existing shelters	1. Avoid deforestation 2. Control flow of disinfectants to avoid contaminating rivers/streams, as this may kill wildlife and affect livelihoods and biodiversity. 3. Minimize negative environmental impact of any temporary protection barrier to be installed in existing/new shelters for social distancing (cf. plexiglas barriers, etc.) throughout the supply chain (production, storage, transportation, final disposal)	
Reduction in trade and commerce in settlements, impacting well being and ability of residents to self-recovery.	Provide support to small traders and commerce to shift to call-in orders and household delivery.	Consider providing credit to "Smart" mobile phone users so that they can access traders and shops and make and pay for orders.

Lack of household access to electricity for lighting, heating/cooling, phone charging/communications, etc.	See livelihoods/food security and energy access sections.	

Water, Sanitation and Hygiene

COVID-19 Related Challenges	Environment-based Response Options	Notes
Lack of water for proper hygiene.	1. Decontaminate available water supplies using locally built slow sand filters and chlorine. 2. Collect rainwater to supplement other sources. 3. Drill wells, incorporating assessments of sustainable ground water extraction rates and plans to decommission wells when no longer needed.	Slow sand filters can be manufactured for household use constructed for large scale operations (e.g., clinics). With an increase in handwashing stations, avoid over-extraction of water. Control runoff / drainage to avoid wastewater contamination of rivers, streams and groundwater.
Lack of awareness of disease transmission	Increased hygiene promotion campaigns integrating environmental sensitisation messaging, e.g., provide appropriate messaging on how to dispose of tissues, old or contaminated medicines, vitamins or supplements, avoidance of wood as a cooking fuel (worsens respiratory problems, contributes to dehydration).	

Increased bio-hazard waste (e.g., tissues used when coughing or sneezing) households or public areas.	1. See **Health**, above. To be considered as healthcare waste. 2. Increase the use of public and household collection bins for contaminated materials and safe processing.	Persons collecting bio-hazard waste should have proper personal protection equipment.
Power supply for WASH services	Consider sustainable/reliable power supply for water services to maintain high levels of personal hygiene, (more specifically handwashing). See Solar Pumping Toolkit as guidance or reach out to solarquery@iom.int for further support.	

Energy

COVID-19 Related Challenges	Environment-based Response Options	Notes
Lack of energy sources for cooking, heating or lighting.	1. Distribute energy sources for cooking and heating, shifting from more to less environmentally damaging sources where possible. 2. Provide solar-powered lights, radios and televisions. 3. Upgrade energy supplies to main grid or mini-grid sources. 4. Consider alternative energy sources for powering health, water, hygiene and communications services.	The provision of energy sources is intended to reduce damage on the natural environment but can also improve local air quality if less polluting sources are distributed. This can also have a positive impact on protection concerns associated with fuel collection. Solar radios and televisions can be used for education, information services and to provide "how to" guidance on household activities, including income generation activities and shelter up-grading. Product databases:

		- **GOGLA (off-grid solar industry association) product database:** https://www.gogla.org/member-product
		- **Clean Cooking Alliance, Cooking solution / fuel product database**: http://catalog.cleancookstoves.org/
		Technical Guidance notes
		- Procurement of Stand-alone Solar Kits for Humanitarian Aid: This Technical Note provides guidance on procuring pico-solar and solar home system (SHS) kits for humanitarian aid.
		- Off Grid Lighting guidance note: How to read a Specification Sheet for off-grid lighting

		products (Lighting Global) - WASH: [See Solar Pumping Toolkit](#) as guidance or reach out to solarquery@iom.int for further support. Requests for Energy Expertise: email the GPA secretariat at energy@unitar.org