



Review of environmental impact of Cash Based Interventions and in-kind assistance

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This document presents the main findings and recommendations from an Arup review commissioned by UNHCR on the environmental impact of Cash-Based Interventions (CBIs) and in-kind assistance. It aims to fill a gap in humanitarian assistance knowledge, and to strengthen the ability of humanitarians to take informed decisions when selecting, planning and implementing assistance modalities (CBIs and Core Relief Items, CRIs), to better account for the environment in the planning and monitoring of interventions.

Targeting decision-makers and the multi-functional teams in operations, the study outlines how CBIs and CRIs impact on greenhouse gas (GHG) emissions, and what improvements are possible. The aim was to provide guidance and recommendations, including a practical 'environmental checklist' to be used in the planning and implementation of cash assistance. Conducted in three countries (Bangladesh, Rwanda and Greece), the study compared three typical CRIs used widely in humanitarian response – water buckets, sleeping mats and tarpaulin sheets – against cash alternatives.

LIMITATIONS AND STUDY BOUNDARIES

It should be acknowledged that the scope of the review focused on environmental issues and did not consider the added value of cash assistance to beneficiaries and communities such as providing dignity and choice, a multiplier effect on local economy, women's empowerment, social cohesion and other protection outcomes. **As such, findings regarding GHG emissions and wider environmental impacts need to be considered within this holistic context.**

This study focused on three relief items within specific country scenarios (non-emergency settings), and care should be taken when considering any wider implications regarding GHG emissions or environmental impacts of cash and CRIs.

Due to COVID-19, the research team did not go on mission to the countries as planned, and work was conducted remotely. Interviews and dialogue were held with UNHCR country offices, but direct survey and interviews with beneficiaries were not possible. This means the study did not consider in detail what the recipients of cash and in-kind assistance use their items for (for example, the frequency with which cash beneficiaries purchased the studied items; and the scale with which in-kind items might be sold on local markets).

KEY FINDINGS

Carbon footprint: where possible, maximise integration of refugees and others of concern into existing municipal infrastructure services; or use sustainably manufactured/locally supplied, natural materials which have durability that matches the context of need.

When comparing products, the factors which have the greatest impact on carbon emissions are the materials used and the manufacturing and supply chain activities from where they arise. The life cycle performance of the product and its fitness in terms of durability to the context of use is also important:

- ▶ **Production and supply chain:** The production stage of the product life cycle has the highest associated carbon emissions regardless of whether it is produced locally or internationally.
- ▶ **Transport:** At a product level, the total emissions associated with transport are commonly a small factor (excluding situations where air freight is used). Transport emissions for local products were lower than for products produced internationally, as expected. Transport emissions in countries without access to port or rail infrastructure were found to be higher due to reliance on road logistics.
- ▶ **Durability:** For the product categories studied in this work, the locally purchased items which refugees and others of concern accessed were often observed to be of a lower quality, and at times of a less durable nature, than those provided by CRIs (which meet a quality standard). The study found that this may lead to higher carbon emissions overall as they had to be replaced more often to fulfil user needs over time.
- ▶ **Materials:** Natural materials (characterised as timber and plant-based materials, or mineral products that require little or no industrialised manufacturing), will have lower associated carbon emissions. For shelter materials, this could include materials such as earth bricks or layered mud. In this case, however, training in production and maintenance is required to realise the benefits of these materials. Some shelter materials are likely to be recyclable e.g. corrugated steel sheets, providing additional benefits which should be considered.
- ▶ **Urban context:** Where displaced communities live in urban areas they often benefit from access to municipal and infrastructure services such as water and waste systems, and at time rental apartments. UNHCR would not normally deliver CRIs at scale in such settings. Notwithstanding this, when it comes to meeting basic

needs such as access to water or shelter, it was considered that CBIs would have a lower environmental impact than CRIs. This was on the premise that where urban infrastructure systems exist, and can be accessed, it will avoid the need to activate the UNHCR CRI supply chain, and thus the GHG emissions that would arise from this. In the Bangladesh and Rwanda camps examined for the study, such infrastructure systems were not available.

Wider environmental impacts: prioritise providing access to products with durability appropriate to the context of need, and consider if local production is contributing to unsustainable natural resource extraction.

For the three product categories examined, the potential environmental impacts associated with CBI distribution in refugee camps were waste production, biodiversity loss and landscape/land quality degradation. These impacts could arise from activities to secure raw materials for product production as well as end of life disposal.

- ▶ **Waste production:** The quality of the locally purchased items reviewed in this study were considered poor. This was considered to have an impact on the waste generated, as lower quality items end up in the waste stream more frequently, and require replacement.
- ▶ **Biodiversity loss and landscape/land quality degradation:** CBIs can inadvertently encourage extraction of local resources (e.g. deforestation). Such alterations to the environment can change hydrological and soil systems, contributing to habitat loss.

These impacts are considered in reference to CBIs only, and no comparison with CRIs was made. However, CRIs may equally suffer from similar burdens, only that they are displaced to the locations where they were manufactured and supplied from.

In this regard, wider environmental impacts can occur regardless of modality and the focus must be to mitigate the potential environmental impacts, wherever they occur. UNHCR recognises that with the provision of cash comes economy, and that this creates consumption. The negative of this is that environmental impacts are likely to result. Therefore, the focus must be on meeting needs by supporting access to environmentally preferable products, through encouraging positive buying behaviours amongst beneficiaries.



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KEY RECOMMENDATIONS

Always consider environmental impacts when planning, designing and implementing CBIs and CRIs. Continue to monitor impacts on the environment over the life of the programme. Use the practical [environmental checklist](#) which includes these key recommendations:

- ▶ **Know better:** your supply chains, whether local or international, upon which humanitarian support relies in cash and CRI modalities. Transport related impacts are often small, and it is better to have environmentally preferable production of an item in any location rather than to choose a default local or international supply base.
- ▶ **Take advantage:** of the opportunity to reduce emissions from transportation in situations where local environmentally preferable production processes exist, and quality durable products are available, by encouraging displaced populations to purchase those local environmentally produced products.
- ▶ **Take into account:** end of life disposal of items, as some products may be biodegradable (if made of natural materials), or commonly re-used or recycled (e.g. corrugated steel sheets).
- ▶ **Be mindful:** that the durability of products is a key environmental influencer. Without incentives or increased awareness, cash recipients are likely to minimise cost rather than valuing durability, and thus matching product performance with the context of use.
- ▶ **Influence & encourage:** cash beneficiaries through increased information, awareness or targeted communication, to minimise environmental impacts in the purchasing choices that they make.
- ▶ **Consider:** in the market assessment, the potential environmental impacts of items available in local markets, as cash assistance may encourage extraction of local resources (e.g. wood), which can result in negative environmental impacts.
- ▶ **Investigate:** sustainable local supply chains and incentivise beneficiaries to use them if a significant increase in demand is likely for some materials (e.g. shelter materials).

UNHCR's [Policy on Cash-Based Interventions](#) commits the agency to seize any opportunity to maximise the use of cash assistance, contributing to the local economy and providing beneficiaries with choice. In doing so, and just like with in-kind assistance, there will potentially exist a broad set of environmental impacts, which become a reality in complex systems and context-specific situations. This challenge requires holistic understanding, considering UNHCR's overall environmental footprint of assistance programmes. Such understanding must be balanced with protection dividends and other positive outcomes for refugees and others of concern, in light of different modalities.



RELEVANT TOOLS AND GUIDANCE

There are other environmental assessment tools for staff responding to humanitarian crises.

- ▶ Flash Environmental Assessment Tool (FLEAT)
- ▶ Norwegian Refugee Council Environmental Assessment Tool (NEAT)
- ▶ More in-depth Environmental Impact Assessments

More information about these, and when they should be used, can be found here: <https://www.eecentre.org/2017/01/01/the-joint-initiative/>

AREAS FOR FUTURE RESEARCH

The following are areas that could be researched further to provide a greater knowledge base:

- ▶ Environmental impact assessments covering other core relief items to extend the knowledge base of impacts associated with UNHCR supply chains and the assistance they provide.
- ▶ Greater appreciation is needed of the durability and life cycle performance of commonly purchased products (e.g. local buckets, building materials, hygiene products), and the buying behaviours of recipients.
- ▶ The effectiveness of increased information or other incentives/strategies in stimulating more positive environmental choices for spending cash needs to be better understood.
- ▶ Development of a framework for environmental assessments in humanitarian camp settings would enable more robust and consistent assessments across contexts.

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The full review is available upon request and for any other questions, please contact hqcash@unhcr.org.

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