JOINT INITIATIVE FOR SUSTAINABLE HUMANITARIAN ASSISTANCE PACKAGING WASTE MANAGEMENT

OUTCOME DOCUMENT: EPISODE 3, PACKAGING MATTERS

"Recycling humanitarian assistance packaging waste: challenges & opportunities."

Introduction

At a global level recycling rates are low: for example, of the 7 billion tons of plastic waste generated globally so far, less than 10% has been recycled.[1] For organizations working in contexts of crisis, waste management and recycling are challenging. This may be due to an absence of, or insufficient recycling infrastructure, or to a lack of competent recycling companies - in particularly those able to manage all the different steps involved in the recycling "chain". It is therefore important for humanitarian organizations to reduce waste at source as **we cannot recycle our way out of the waste problem**. Episode 3 explored the challenges and opportunities linked to recycling humanitarian packaging waste, including the development of partnership with recycling companies. This document is based on presentations from the JI, Groupe URD, World Food Programme (WFP) and the Danish Refugee Council (DRC).

The State of Play: Recycling in Humanitarian Contexts

- When recycling companies do exist, they often manage **limited materials** – frequently cardboard, paper, metal, and some types of plastics (PET). For other materials, humanitarian organizations will have to find other options for waste management (repurposing, transporting out of the country for recycling or disposal or - if these exist - disposal in controlled landfill sites).
- There are **different types of companies involved in the recycling "chain":** collectors, resellers (in-country and abroad), or those who process the recyclable materials to convert them into a new product. Very few companies offer the whole range of services, meaning that humanitarians will have to work with several different actors or look to options abroad.
- Companies are usually located in capital cities, meaning that humanitarian organizations will have to **move recyclable waste from other locations to the capital**: the transport involved contributes to higher carbon emissions and fuel use, and may be costly. This should be included in budgets.
- Local recycling companies often require waste to be sorted (and sometimes cleaned) and provided in large quantities, to make recycling economically feasible – as such organizations have to store waste until they have it in sufficient quantities to make recycling viable. Humanitarian organizations can, however, **work together e.g., pool waste and share transport, thereby saving costs and emissions.**
- The recycling sector is heavily reliant on the **informal sector**, meaning it is harder to operate **checks and controls** of all the steps in the recycling process.
- When there are no or weak capacities to recycle locally, organizations should focus on building capacities in the countries they are working in order to enable local recycling, thereby avoid transporting waste long distances, which creates emission. **Local solutions for downstream waste management** – be it recycling or repurposing – help to generate jobs and boost local economies. The choice of whether to transport recyclable waste (non-hazardous) to another country with stronger recycling capacity is context specific and will depend on calculations (potential benefit vs cost).

A word on packaging waste The JI packaging baseline[2] shows that to package the 6.77m tons of food and NFIs included in this baseline assessment, 33,000 tons of primary and 35,600 tons of secondary packaging were used (packaging represents on average 1% of the total weight of an item). For primary and secondary packaging combined, **corrugated cardboard** was the most used packaging material per weight (50%), followed by plastics packaging (32%), tin cans and metalized laminated sachets.

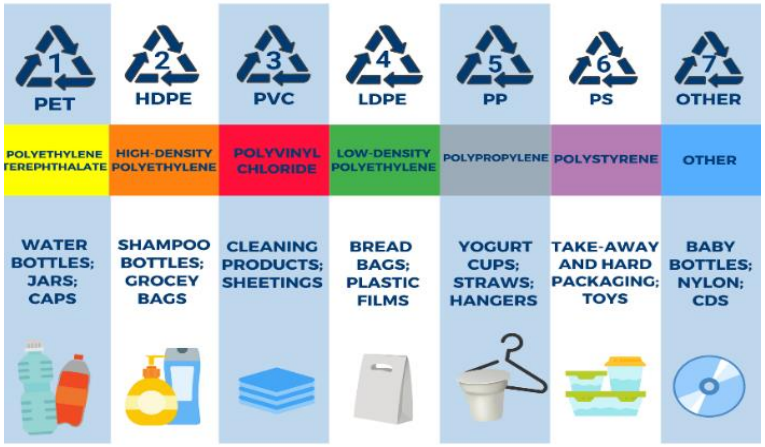
[1] UNEP - Beat Plastic Pollution Factsheet

[2] The baseline uses data provided by 13 organizations, corresponding to the packaging of 6.77 million tons of food and NFI distributed 2021.

Challenges & Opportunities for Recycling: lessons learnt by NGOs.

Five main challenges humanitarians face with recycling were identified by Groupe URD and include:

Is it recyclable? Humanitarian workers may not know if their waste is recyclable, due to **lack of knowledge** of the difference between types of waste. Training, visual aids (*see infographic developed by Groupe URD*) and guidance may help to overcome this. Our knowledge of what is recyclable should ultimately influence our procurement decisions and steer us away from materials which cannot be recycled.



If it is recyclable, is it recyclable locally? Although organizations may have identified that waste is recyclable, it may not be recyclable locally. If solutions do not exist, organizations can create **partnerships and innovative solutions**. For example, Precious Plastic helps to boost recycling by setting up small-scale recycling centers, whilst Waste 4 Warmth has developed a machine that transforms PP and PET plastics into insulation and a variety of products. The mapping of recycling facilities carried out by JI/WREC is a useful resource which specifies the types of waste treated by companies in 15 countries[3].

Where can I dispose of my recyclable waste? Solutions may include setting up common collection points (for several humanitarian actors) or establish partnerships with recyclers (formal or informal).

How much does it cost? Collecting, sorting, and recycling requires human and financial resources. The cost varies and depends on the operating contexts, sizes of organizations, types of waste. Recycling or waste management lines should be **included in budgets**. Remember there is a cost to the environment of not recycling our waste!

Are the products effectively and correctly recycled? Assessing the quality of the recycling process (environmental but also socio-economic safeguards) and energy used is complicated. Solutions may include assessing recycling companies (*see below*) and sharing feedback among humanitarian actors.

Improving the quality of recycling

WFP has recycling operations in Sudan, Ethiopia, and Kenya, and is identifying recyclers in Uganda. It uses a comprehensive process (*see below*) to establish partnerships with recycler. Thanks to existing agreements – all of which are with local recyclers – WFP has managed to recycle cumulatively approximately 1200 MT of PP Bags, 300 MT HDPE[4] pallets, 500 jerricans, 3000+ metal tins and 213 MT paper / cardboard.

WFP follows five steps to establish partnerships with recyclers.

[3] Antigua, Bangladesh, Burkina, Cameroon, Ethiopia, Haiti, Kenya, Senegal, Niger, DRC, Iraq, Madagascar, Lebanon, Uganda, Liberia
[4] High Density Polyethylene is a polyethylene thermoplastic made from petroleum.

1. **Carry out market research**. This involves desk research, calling recyclers, sending emails.
2. **Launch an Expression of Interest**. EOI is published in local newspapers, sent to recyclers and announced on UN Marketplace. EOI are then evaluated against set criteria.
3. **Request for Proposal / Quotation.** Proposals/quotes are evaluated against detailed criteria incl. mandatory min requirements (e.g. does recycler have the necessary licenses? can it assure chain of custody?) and technical criteria.
4. **Award of Tender or contract.** Long-term agreement set up with chosen recycler(s)
5. **Engagement.** Continue to engage and monitor how much are we recycling? what are the end (recycled) products? what new technologies exist and could be used?

WFP assesses recyclers before entering a contract with them. Assessment forms are easy-to-use, designed for all staff (environmental and non-environmental) and cover hazardous and non-hazardous waste. They help to check that companies have the relevant licenses/ permits, experience and that they can ensure workers' health and safety among other things. A flexible approach is applied, whereby different standards and criteria are used in different contexts. Key lessons learnt are captured below:

- **Preliminary research** to confirm the existence of a recycling market, and **pre-assessment** to ensure that companies have the capacity the recycle the volumes we produce has been helpful. **Communicating expectations to potential suppliers from the beginning** has been important (e.g., processes must not create environmental harm).
- **Awarding contracts to more than one supplier** is often necessary, to ensure that the different waste streams are recycled appropriately by the companies with the right capacity.
- **Sorting waste before taking it to recyclers is appreciated by local recyclers.** Ensuring collection and transport of the waste is also helpful, particularly for those recyclers who might not have significant logistical/transport capacity.
- **Reducing the volume of the waste** by using for example bailors or crushers for example, makes the recycling process more economically feasible.

Ensuring that recycling is fair.

The recycling is heavily reliant on the formal sector. To comply with the "do no harm" principle, humanitarian organizations have a duty to ensure the socio-economic and environmental sustainability of the recycling processes they use. The vital role played by the informal sector – for example waste pickers – should be recognized, and measures taken to ensure the health, safety and social protection of workers.

With its Fair Recycling project in Kenya, DRC - in partnership with Mr. Green Africa[5] and Unilever – is helping to create a professional, fair and inclusive plastic recycling ecosystem, with several aims including:

- Increased income, resilience, and socio-economic development opportunities for informal waste pickers by integrating them in a professional, fair and inclusive plastics recycling value chain.

[5] Company that sells pre-processed recycling materials with a traceable social and environmental impact - fairly traded plastic.

- Removal of existing plastic waste from Kenya's environment and reduce the volume of waste in landfill and water courses.
- Increased consumer recycling and use of locally recycled plastics in the Kenyan goods industry.
- Making the social and environmental impact of recycling financially sustainable and scalable.

Waste pickers are trained, formally integrated into the value chain as "collector agents" and receive socio-economic benefits. Responsible business conduct activities are also helping to formalize the plastic recycling sector and reduced stigmatization of waste pickers. The project cannot work with all of the 10,000+ waste pickers in Nairobi, but by helping to formalize the sector (e.g. working to integrate waste pickers into Kenya recyclers associations) it is already helping to ensure their protection within these associations.

Conclusions

Improving recycling rates in humanitarian contexts requires proactivity and creativity, to find recyclers to work with. It is important to allocate the necessary financial and human resources to ensure that recycling is financially attractive for recycling companies (this may require presorting recyclables and transporting them to the companies). By working together, humanitarian organizations can reduce costs and emissions.

The JI, in coordination with the WREC project, is mapping recycling facilities with the help of humanitarian organizations and has mapped 15 countries to date (access the mappings here). **If you would like to contribute to this exercise, please contact the project team at Joint.Initiative@icf.com**