JOINT INITIATIVE FOR SUSTAINABLE HUMANITARIAN ASSISTANCE PACKAGING WASTE MANAGEMENT

PACKAGING MATTERS WEBINAR SERIES

Episode 1: "The journey to sustainable packaging: synergies between humanitarian organizations and the private sector", Tuesday 18th October 2022

OUTCOME DOCUMENT

Introduction

This webinar presented examples of how two private sector partners (Alpinter and Mondi) are helping humanitarian organizations to incorporate sustainability into their packaging, thereby reducing their environmental footprint and helping them to make savings.

1. **Key points from presentations and Q&A sessions** (*for more details please refer to the webinar recording and PowerPoint*)

Alpinter presentation

Greening of products

- Alpinter presented its new high thermal fleece blanket made of 100% recycled material (partners: Closed Loop fashion / GIZ / Nizam). Test production will begin shortly followed by analysis of impact on quality aspects. It is hoped that this will be ready for end of October. Although Alpinter has not carried out LCAs across several different types of blankets, they have conducted a LCA of the new blankets versus the old model.
- In general, Alpinter is increasing its use of recycled materials in packaging (e.g., recycled carboard)
- Alpinter presented its "greener" collapsible jerrycan (made to UNICEF standards). The cans will be lighter without compromising on quality or resistance. The jerrycan already has complete circular production with no waste.

Palletization optimization

- Alpinter presented its Core Relief Items (CRI) Pallet measuring 117 x 75 cm instead of 80 x 120 cm which helps increase container loadability by 25%, as well as its metal stackable pallet. These have led to reduced environmental footprint in terms of fewer containers being used, as well as savings for humanitarian actors.

Re-using production waste material as packaging

- Alpinter is producing tarpaulins bales and tent accessories bags made of production waste material

"Refusing"

- Alpinter has worked with partners such as Shelter Box to eliminate unnecessary and single use plastics in packaging (this process will be explored in detail in Episode 2 of the "Packaging Matters" webinar series).

Repurposing

- Alpinter presented how it is working with partners to re-purpose or "give a second life to" some of its packaging e.g., wooden boxes used for tents being reused as benches or storage, tables, metal stackable pallets being reused as shelves or tables

Question and answer session

Q: Do the organizations which procure Alpinter's items receive the material composition or recovery information of products? (ex. palettes contain x kg of HDPE per unit, tarpaulins contain x kg of other plastics)
A: Yes: Alpinter provides the material compositions of the goods it sells.

Q: Is the recycled material post-consumer use or reuse of plastics leftovers from the factory?
A: Alpinter uses both techniques. For example, recycled blankets are made from post-consumer waste (plastic bottles). Jerry Cans are made using leftover materials coming from the production line (when jerry cans come out of mold they leave traces of material, which is mixed with virgin low-density polyethylene /LDP and are mixed with virgin material).

Mondi presentation

- Packaging's primary function for the humanitarian sector is protection, keeping products safe and secure. If no packaging is used this would lead to serious implications in terms of waste, thereby increasing environmental footprints (e.g., if we consider food waste – the biggest cause of deforestation is the destruction of forests for agriculture and cattle grazing).
- Rather than viewing packaging as part of the problem, Mondi see it as part of the solution
- Important to consider: Are the right materials being used? Are there lighter-weight or less material-intensive alternatives? Promote materials which have high recycling potential.
- Important to take a holistic view: thinking from the start about end-of-life consideration, CO2 impacts, good waste, and damage; consider alternative raw materials (e.g., more paper-based innovations, recyclable mono-material, bio-based, compostable)
- We should explore various options: "there is no single road to sustainability"

Q: Is it harder to dispose of/recycle mixed material products?
A: Mixed material solutions are very challenging for recycling, which is why a key approach is to move to mono-material solutions in plastics (PE/PP). Overall, recycling infrastructure varies greatly even within countries and regions, but sorting technology is improving with new developments like watermarking on plastics that is not visible to consumers, but at the sorting facility.

Q: Has Mondi developed internal knowledge about the existence of a specific recycling method in a given country?
A: Mondi monitors the evolving landscape on recycling in different countries and also the related fees applied to different types of packaging solutions (i.e., EPR - Extended Producer Responsibility). We collaborate with our customers and others across the value chain to find the best possible solutions for a given market or markets. Requirements for waste streams / recycling can vary greatly - e.g., in some Nordic countries packaging with 50% fiber content can be disposed of in the paper waste stream, while in Germany it is 95% or in Austria 80%. Levels vary depending on local infrastructure, legislation, etc.

Q: Do you use compostable plastics for packaging? If so, how much more in % does this increase product price (range)?
A: Mondi does offer compostable solutions, although it considers the waste hierarchy (refuse, reduce, reuse/repurpose, recycle, recover, responsible disposal) and always aims first for avoidance of waste, then recycling to keep materials in circulation and then compostability to keep nutrients circulating. For compostability, Mondi always acquires external certification if suitable for industrial composting (for industrial solutions) or home composting. Mondi does not offer oxodegradable plastics.

Q: Can you please explain more about the substitute for aluminum
A: Aluminum offers one of the best barriers for (food) packaging, but it is a knock-out criteria for recyclability when used with other materials. So, we look to use other barriers like (Ethylene vinyl alcohol) EVOH to provide such a barrier but enable recycling where feasible.

Q: Please could you share more information on the paper stretch-wrap for logistics purposes? How widely is this being used currently, and do you have examples?

A: You can read more about Mondi's paper-based pallet wrap solution called Advantage StretchWrap here: https://www.mondigroup.com/en/products-and-solutions/speciality-kraft-paper/speciality-kraft-paper-products/advantage-stretchwrap/ It is an alternative to the plastic stretch film (62% lower greenhouse emissions compared to a pallet wrapped in conventional virgin plastic film).

WFP presentation

- WFP have noted that poor packaging can lead to poor sealing quality, micro perforations, low barrier properties, pest infestations, inefficient sizes – leading to food loss and food waste. This increases the environmental footprint and inefficiency of the supply chain.
- One concrete example is the leaking sachets for LNS (Lipid-based Nutrient Supplement). WFP has been working with Mondi to solve this and other issues.
- WFP are still working on the function of the packaging to preserve the food as too many leakages with current sachet. They are exploring potential recommendations to present to manufacturers and ask them to solve the issue. With regards to material composition: discussions will begin next year (mono-material possible).

II. Key messages from the webinar

Private sector partners are drivers for change in terms of packaging sustainability and reducing environmental footprint

As demonstrated by the webinar, actors such as Mondi and Alpinter are playing a leading role, alongside their humanitarian partners in making packaging more sustainable. The impetus for these changes has often come from the private sector itself rather than the humanitarian partners. Many of these alternatives help to keep material in circulation through recycling and composting and can lead not only to reduced GHG emissions/environmental footprints but also cost savings.

Packaging has a role to play

In the humanitarian context, the main function of packaging is to protect the life-saving assistance being provided. No or poor packaging leads to waste – of both resources used to produce the item and the materials used for the packaging itself. However, we need to find the "right packaging" and consider what we need it for exactly. We should use the waste hierarchy to consider whether we can refuse some types of packaging (e.g., single-use plastics), reduce the quantity of packaging used or find more sustainable materials which still perform the same function of protecting items, whilst taking into account – from the design state of the packaging - end of life considerations including recyclability, recovery, and repurposing.

Cost, lack of information on sustainable alternatives and lack of capacity in emergency contents continue to pose challenges

When asked *"What potential challenges are there in making humanitarian assistance packaging more sustainable"*, partners selected, in order of priority cost, followed by the lack of guidance on sustainable packaging options, a lack capacity/time to consider sustainability particularly when operating in emergency contexts, followed by functionality (i.e., sturdy packaging is needed to protect items) and packaging preferences among beneficiaries of humanitarian assistance. The webinar helped to break down the idea that making packaging more sustainable is more expensive, by showing that simple changes can make packaging more sustainable and save costs. Concrete examples provided by Alpinter are provided below:

High thermal fleece blankets: 15 units per bales instead of 12. 25% increased loading rate. Transport costs savings plus less packaging waste = 80 x 40ft containers saved on a year production

Sleeping Bags: 8 units per carton box instead of 4 units.15% increased loading rate. Transport costs savings plus less packaging waste = 20x40ft containers saved on a year production

Hygiene kits components: 1 shampoo bottle of 60ml instead of 2x30ml. body soap bottle of 60ml instead of 2x30ml. Less expensive and less packaging waste = 20 000 EUR / year saved on production

It is challenging but not impossible to measure the waste we produce as humanitarian actors

Questions were raised during the webinar regarding the humanitarian sector's efforts to measure the scale and impact of humanitarian assistance packaging and whether – by focusing on packaging waste – the Joint Initiative was not just tackling the most "visible" kind of waste.

As the scoping study which led to the development of the Joint Initiative points out "*Humanitarian assistance needs are rising in parallel to another global crisis: solid waste management, which is one of the most urgent and underfunded global development challenges that is only expected to grow. In development assistance, only 0.3% of total funding is directed towards solid waste management (International Solid Waste Association (ISWA) 2014). The solid waste management crisis is particularly acute for countries or communities receiving humanitarian assistance that often lack sufficient infrastructure or management systems to handle solid waste generated by the assistance*"[1].

Addressing the issue of humanitarian assistance packaging waste is therefore part of the humanitarian sector's efforts to make procurement and supply chain delivery processes more environmentally sustainable.

Measuring the waste created by humanitarian operations is an underexplored area, and the **Joint Initiative is working with the WFP to fill this gap**, strengthening the knowledge base on the scale, use and impact of current humanitarian packaging waste.

To this end the types and weights of packaging used for food and NFIs were identified; procurement and distribution data was gathered from several humanitarian actors[2] and – using a new packaging assessment tool – an analysis was conducted to identify the most frequent and problematic types of packaging and to define the highest receiving countries of packaging based on distribution data where this was available. Such data can help to shape decision-making and better direct resources

- Making sound waste management decisions
- Mapping packaging waste hotspots
- Communicating with donors on needs

Data collection is ongoing, and organizations are encouraged to get in touch and contribute their data.

Harmonization of technical specifications could promote environmental sustainability and cost-savings

At several points during the webinar, the question of sector-wide "sustainable" technical specifications of items and products including packaging was raised. It was noted that some actors have worked together to "green" their item specifications[3] and work was also undertaken as part of the Joint Initiative to develop sustainability criteria for packaging (looking at the composition, type, size of packaging and sub packaging as well as issues such as after use and transport). However, standards still vary across the sector perhaps due to the need to strengthen communication.

If humanitarian actors were able to agree on standard packaging specifications, this would help ensure that issues such as sustainability of materials and palletization are incorporated upstream, and suppliers' stock conforms to this and can be deployed rapidly across the board. In the context of the Ukraine war, Alpinter has sometimes received different specifications (including on packaging) for the same items from 5 or 6 NGOs in the same week. Alpinter also encouraged humanitarian partners to increase use of recycled cardboard in packaging, and to use black rather than colored ink for logos, noting that some humanitarian actors are still insisting on bleached cardboard and red logos.

[1] Sustainability in humanitarian supply chains a preliminary scoping of improvements in packaging

[2] WFP, UNICEF, ICRC and UNHCR

[3] Work carried out, for example among IFRC, UNHCR, UNICEF, and ICRC to design greener relief items or the Green Standard Products Catalogue for IFRC and ICRC

The Joint Initiative is working with the WREC project[4] to map and document ongoing initiatives, working groups, networks, and platforms on Green Procurement and to ensure that they work together in coordination and the need for green specifications around packaging will be discussed as part of this work.

The landscape is changing

The landscape is changing for humanitarian actors, and it is important now, more than ever, to think about packaging sustainability. National and international legislation which is increasingly regulating the use, production, and end of life of plastics for example, which is directly impacting humanitarian operations. In addition, donors are gradually requesting their humanitarian implementing partners to consider sustainability in packaging. For example, ECHO's minimum standards for sustainable supply chains include the requirement for partners to "*Reduce and optimise secondary and tertiary packaging. Reduce or eliminate SUP bulk packaging and individual items with SUP wrap unless essential. Encourage biodegradable packaging, where possible*")[5].

III. Where to go for further information

Joint Initiative Documents

Guidance Note on Regulatory and Legislative Frameworks for Humanitarian Workers (plastics) https://tinyurl.com/JI-r-l-frameworks

Packaging, Plastics and Climate Change Info Sheet: https://tinyurl.com/JI-CC-FactSheet

Case study "ShelterBox's Success in Eliminating Single Use Plastic" - English version https://tinyurl.com/WFP-Ba-EN, French version http://tinyurl.com/ShelterBox-FR

Case study "Plastic free e-voucher shops in Cox's Bazar, Bangladesh" English version, https://tinyurl.com/WFP-Ba-EN. French version https://tinyurl.com/WFP-Ba-FR

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[4] Waste management and measuring, reverse logistics, environmentally sustainable procurement and transport, and circular economy (WREC) project

[5] ECHO's minimum environmental requirements and recommendations for EU-funded humanitarian aid operations