



# ShelterBox



## PROBLEM PACKAGING REDUCTION IN THE SUPPLY CHAIN

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ShelterBox and Rotary are project partners in disaster relief. ShelterBox is a charity independent of Rotary International and The Rotary Foundation.

Rotary





# Plastic Packaging: Where Did It All Begin?

- In 2018, ShelterBox was planning a response to flooding events in Kenya.
- However a ban on Single Use Plastics introduced by the Kenyan Government meant that we were unable to import any aid items until SUP was removed.
- This added additional time and delayed us being able to get our aid to the people who needed it.
- This experience led to ShelterBox prioritising plastic packaging as an urgent area that needed examining, due to the high possibility that other countries could also introduce similar bans.



# Why Do We Have A Plastics Working Group?



At least 30 diseases can be associated with uncollected waste, of which plastic is a growing component...

...Research by Tearfund suggests that between 400,000 and 1 million people die each year in low- and middle-income countries because of diseases related to mismanaged waste.'



...30 double-decker busloads of plastic waste are burned or dumped in developing countries

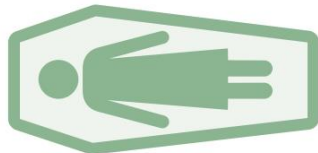


## Impacts of plastic...

- Flooding caused by blocked waterways and drains, resulting in waterborne diseases
- Breeding grounds for disease vectors
- Increased diarrhoeal disease
- Air pollution through burning waste
- Landslides
- Polluting water and soil, and entering the food chain

...one person dies from diseases caused by mismanaged waste

Diseases such as diarrhoea, malaria, heart disease and cancer. That's up to a million people every year.



(No Time To Waste: © Tearfund 2019  
[J32121 No time to waste web.pdf \(ids.ac.uk\)](#))

# Strategy 2022 -27: Five-year Focus

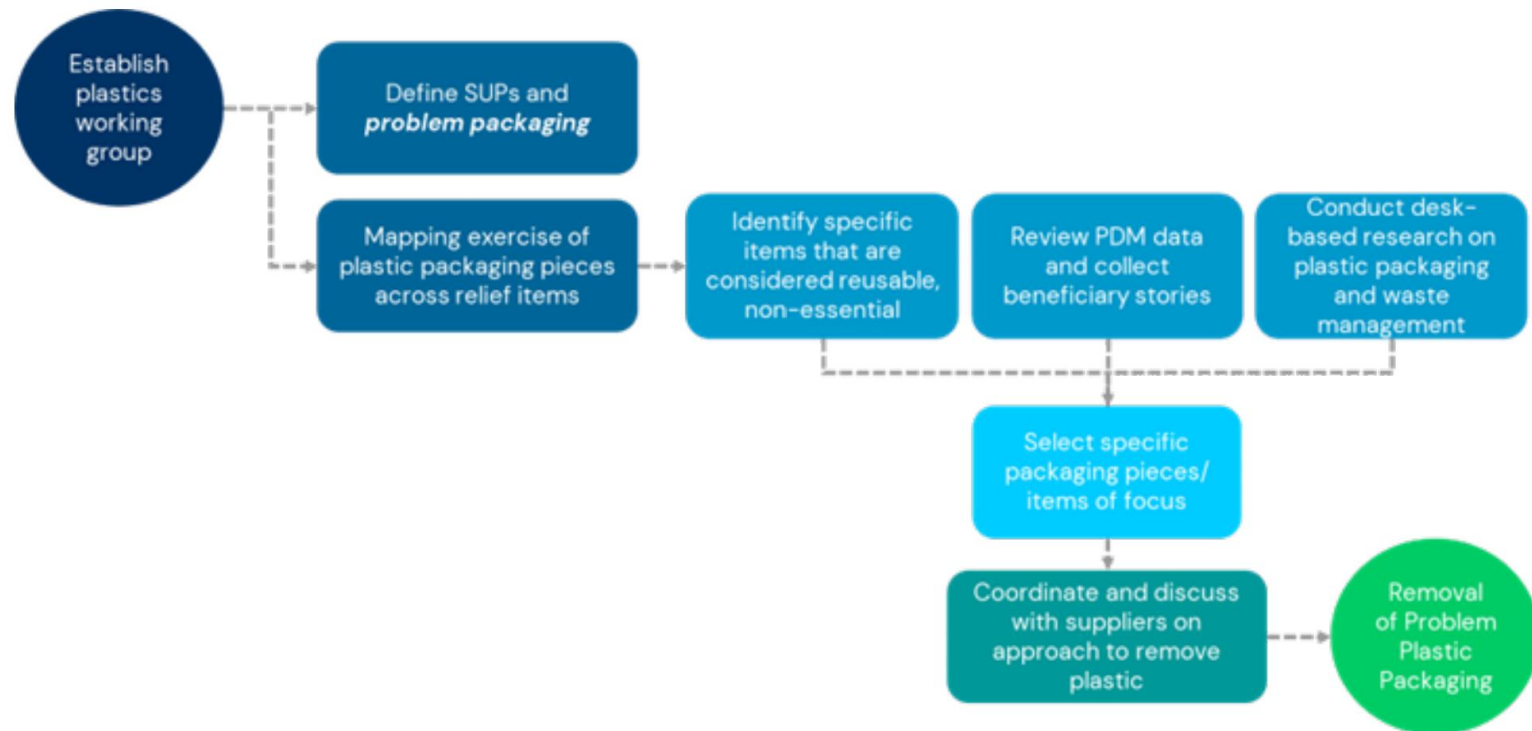


	DO MORE	DO IT WELL	DO IT TOGETHER
Strategic Objectives	Scale up to meet humanitarian need	Innovate to improve quality of shelter assistance	Address power imbalances in the global shelter system
Sub-Objectives	Grow programmatic capacity through partnership	Grow our expertise in emergency shelter delivery through innovation and knowledge creation	Support local and national shelter responders to strengthen their capacity through skills and knowledge sharing
	Achieve sustainable, flexible funding growth	Minimise our environmental impact	Build a diverse, global ShelterBox, representative of the populations we work with
	Expand emergency response capacity through emergency preparedness	Measure what we do and learn for the future	Listen to and amplify the voices of affected communities



# How to Solve the Plastics Packaging Problem?

*Figure 1. Summary of ShelterBox's Plastic Reduction Process*





## What is Problem Packaging?

**Problem packaging** is the definition for materials that:

- are not essential for the protection of an aid item;
- are not essential for the safe delivery, storage or use of an aid item;
- will not be meaningfully repurposed by those receiving aid; and
- may cause harm to the community or environment.



Image: NO TIME TO WASTE © Tearfund 2019



# We Categorise Our Packaging into Three Key Areas...

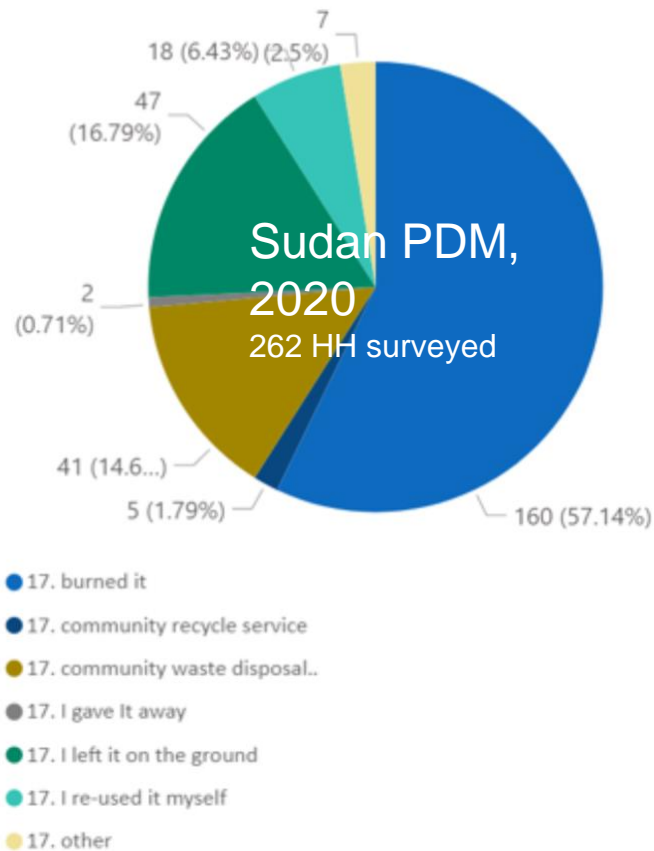
1. **Primary Packaging** – The packaging components are in direct contact with the product at the smallest unit of distribution.
2. **Secondary Packaging** – This packaging contains multiple primary packed products together.
3. **Tertiary Packaging** – This is the freight and logistics packaging used to facilitate shipping and storage.



# Collecting PDM Data on Problem Packaging



Mosquito Net: What did you do with the plastic bag?



‘According to the UNHCR, there is also a waste dump not far from the Minawao camp but there are no treatment facilities at the moment.

The essential waste is mainly plastics then cardboard boxes.’

Cameroon, IEDA Relief Project 9  
Final Narrative Report



# Initial PDM Findings

1. Most wrapping and packaging is removed before/during distribution
2. Affected communities and some partners have limited or no access to waste disposal or recycling facilities
3. A lot of packaging is re-used in resourceful and unexpected ways



*“Plastic bags can be used to transport and plant seedlings and wrap food in, such as cereals and beans...”*



# Mapping Problem Packaging

By better understanding our aid items, collecting PDM data and through discussions with suppliers we were able to identify the different types of problem packaging, for example....

- *High Density Polyethylene (HDPE) Bag*
- *Low Density Polyethylene (LDPE) Bag*



2021



**173,396 pieces of plastic packaging removed**

2022





**MANAGING PACKAGING WASTE SUSTAINABLY-  
LESSONS FROM HUMANITARIAN ORGANIZATIONS**

**SHELTERBOX'S SUCCESS IN  
ELIMINATING SINGLE USE PLASTIC**

This case study has been prepared by ShelterBox and the Joint Initiative for Sustainable Humanitarian Assistance Packaging Waste Management. It documents how, because of sustainable packaging practices, ShelterBox avoided the use of 173,396 pieces of plastic in 2021.

Shifting how the entire humanitarian sector manages the packaging of lifesaving items – and the waste these generate – towards greater sustainability is too huge a task for any single organization. For this reason, the partners of the Joint Initiative are working together to make the humanitarian community's packaging waste management more environmentally and socially responsible, by sharing knowledge and good practices – such as this case study – through continued collaboration and coordination, and by pooling resources.

The Joint Initiative's first phase was supported by USAID's Bureau for Humanitarian Assistance, UNHCR and the UNEP-OCHA Joint Environment Unit. The current phase is a collaborative effort spearheaded by leading humanitarian organizations, including ShelterBox. For more on the Joint Initiative, visit: <https://tinyurl.com/joint-initiative>

This case study illustrates how a relatively small organization with little purchasing power has managed to make a significant reduction to its packaging. The case study is part of a wider effort led by the [Joint Initiative for Sustainable Humanitarian Packaging Waste Management](#) to compile best practices from aid organizations in their efforts to eliminate unnecessary packaging and support better packaging waste management.

*Cover image:  
ShelterBox: Vanuatu 2020, Cyclone Harold*



# Lessons Learned

## 3. FOCUS ON PRIMARY AND SECONDARY PACKAGING AS A “LOW HANGING FRUIT”

ShelterBox realized over the course of their analysis that they would need to focus on primary and secondary packaging given the relative challenges in reducing tertiary packaging. Reducing tertiary packaging has proven particularly difficult in part because it goes beyond the organization’s direct sphere of influence<sup>6</sup>. Moreover, while humanitarian organizations can work alongside their direct suppliers to change items specifications, they do not necessarily have direct contacts with or access to transporters of aid items. In addition, tertiary packaging is less easily removable or modifiable given frequently long shipping distances, as well as being a cross-cutting issue that affects both the humanitarian and commercial shipping sectors.

## 4. INVOLVE SUPPLIERS FROM THE START TO GIVE THEM OWNERSHIP OF THE PROCESS

Suppliers’ engagement from the start of the process of reducing plastics was key to ShelterBox’s success. Coordination and discussions with relevant suppliers requires time and commitment, but getting their involvement and buy-in for plastic reduction was essential. Empowering Suppliers in the process and getting them interested and engaged in the impact of small changes in plastic packaging – which often supported their own environmental and sustainability issues - made this a win-win for all involved.

# Lessons Learned



## 6. ESTABLISH AN ORGANIZATION-WIDE APPROACH TO SUPPORT LONGEVITY AND SUSTAINED PROGRESS

Establishing a working group across multi-discipline teams, fostering support and buy-in from management, and facilitating consensus on definitions and strategies helped ensure progress was made. Garnering broader participation throughout ShelterBox also supported a distribution of effort, so that the time and workload required to keep this effort moving did not rest on one individual.

While there were no added financial costs associated with removing the plastic packaging, it did require substantial effort from ShelterBox staff and suppliers in addition to their primary roles. This was only possible due to the organization-wide approach used and desire to make positive change.

## 7. CONTEXT SPECIFIC CONSIDERATIONS FOR REGIONAL VS. INTERNATIONAL PROCUREMENT

ShelterBox focused their efforts on items delivered globally and sourced internationally for this initiative but have engaged in some preliminary conversations with regional suppliers about sustainability. Working with regional suppliers<sup>7</sup> can involve some nuanced cultural considerations and can require a different approach. For example, when working with suppliers based in the Middle East, ShelterBox found that removing the plastic packaging meant that the aid item may be seen as of a lesser quality, which could hinder assistance delivery and effectiveness. Discussions around plastic packaging reduction need to be managed considering these cultural differences to ensure positive progress can still be achieved.

# Key Takeaways

- **Supplier relationships are key to success.** Even small organisations have buying power, which can help influence supplier decisions.
- **Cost.** Whilst there was no additional cost associated with removing packaging from our items, there is a cost involved for the staff time needed to conduct packaging reviews and negotiate with suppliers.
- **Ensuring a community first approach.** From conducting PDM and asking for feedback on packaging use from partners, we found that the communities we work with have already found innovative solutions. Their skills, knowledge and voice need to be a key part of conversations going forward.



# ShelterBox Partner Case Study: CARE Mozambique





Any Questions?