

JOINT INITIATIVE FOR  
SUSTAINABLE HUMANITARIAN  
ASSISTANCE PACKAGING WASTE  
MANAGEMENT

---

---

# MANAGING PACKAGING WASTE SUSTAINABLY – LESSONS FROM HUMANITARIAN ORGANIZATIONS

COMPENDIUM | MARCH 2024

---

---



# TABLE OF CONTENTS

- INTRODUCTION ..... 1**
- SHELTERBOX’S SUCCESS IN ELIMINATING SINGLE USE PLASTIC ..... 2**
- ICRC AFGHANISTAN’S PILOT: REPLACING PLASTIC WITH  
CARDBOARD IN NFI DISTRIBUTIONS ..... 8**
- WORLD FOOD PROGRAMME: PLASTIC FREE E-VOUCHER SHOPS IN  
COX’S BAZAR, BANGLADESH ..... 12**
- ACTED LEBANON: A HOLISTIC APPROACH TO REDUCING AND  
MANAGING WASTE ..... 16**
- UNICEF: DISTRIBUTING LONG LASTING INSECTICIDAL NETS IN  
BULK..... 21**
- UNHCR: GREENING THE PACKAGING OF CORE RELIEF ITEMS..... 25**
- SAVE THE CHILDREN: PROMOTING SUSTAINABILITY THROUGH  
SUPPLY CHAINS..... 31**
- PALLADIUM & HSOT: REDUCING SINGLE USE PLASTICS..... 38**

*This document was prepared by the Joint Initiative project team, as part of its ongoing work to promote more responsible and sustainable packaging practices. This document does not purport to reflect the opinions or views of the Joint Initiative’s partners.*

# INTRODUCTION

With this Compendium of case studies, the Joint Initiative for Sustainable Humanitarian Assistance Packaging Waste Management (JI) documents the experiences of eight humanitarian organizations who have tried to reduce the environmental footprint of their packaging by testing solutions that are both upstream and downstream in the supply chain. It covers a variety of operating contexts and a range of different actors, and highlights both the positive results they have witnessed (e.g. financial, environmental) and the challenges they have faced. By sharing humanitarian organizations' experiences, the JI hopes to inform and inspire other actors in their journey toward more sustainable packaging and operations.

Humanitarian organizations are increasingly conscious of the importance of reducing their packaging and ensuring responsible management of packaging waste in the countries in which they operate. These case studies show us that there is no “one-size-fits-all solution” to the problem of packaging waste, and that much depends on the resources and capacity of individual organizations, as well as the availability and affordability of sustainable packaging materials.

When trying to identify sustainable packaging, humanitarian organizations may be faced with complex dilemmas and trade-offs between various environmental impacts. For example, “*Should our priority be to use less plastic, to reduce our greenhouse gas emissions, or to procure from sustainable/certified sources?*” Organizations often have difficulty reconciling the higher cost of more sustainable packaging with restricted humanitarian budgets.

A common success factor in the implementation of these initiatives was the dedication and motivation of individual staff members, many of whom went above and beyond, spending considerable time and effort analyzing different options to reduce the environmental footprint of their packaging.

Ultimately, the case studies teach us that organizational change is required if we want to significantly improve the way we work, and that the humanitarian sector needs to shift to a sustainability-centered mindset, in which we focus on both long-term strategies to prevent further environmental degradation and climate change *and* the urgent delivery of humanitarian assistance.

The publication of this Compendium was possible thanks to the generous support of USAID's Bureau for Humanitarian Assistance and the contribution of the following organizations:



**World Food Programme**



The JI brings together 26 humanitarian stakeholders with a shared goal of reducing the negative environmental impact of humanitarian action, focusing on packaging waste and enhancing coordination with key actors on sustainable supply chain management. The JI was created and is funded by USAID's Bureau for Humanitarian Assistance (BHA).



## SHELTERBOX'S SUCCESS IN ELIMINATING SINGLE USE PLASTIC

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 Assistance Packaging Waste Management](#) to compile best practices from aid organizations in their efforts to eliminate unnecessary packaging and support better packaging waste management.

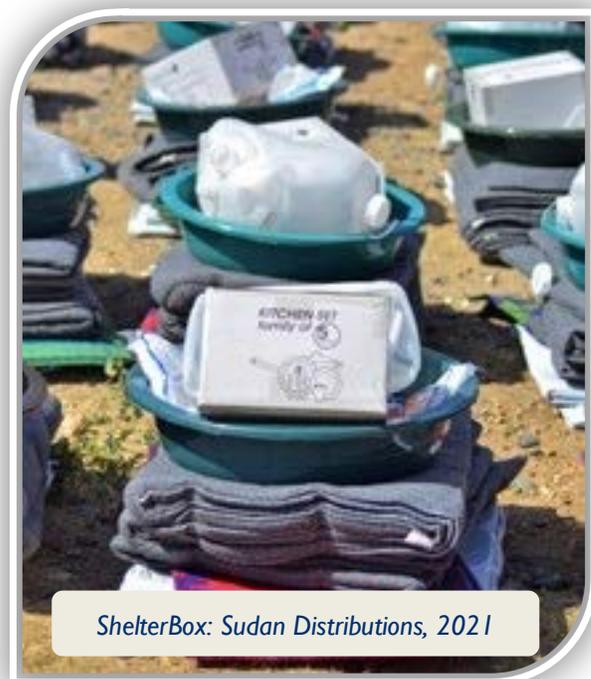


### INTRODUCTION

ShelterBox is a UK based humanitarian organization that provides emergency, life-saving shelter and essential tools and supplies (e.g., tents, tarpaulins, cooking sets etc.) to people affected by humanitarian crises around the world. Since being founded in 2000, ShelterBox has helped to shelter more than 2 million people globally.<sup>1</sup>

There are inevitable environmental implications throughout the course of humanitarian assistance, including the plastic generated in the packaging and delivering of relief items, - an issue of growing concern across the humanitarian sector. The importance and urgent impetus for the focus on plastics is partially due to the tightening international regulatory landscape on single use plastics (SUPs) and its implications on the delivery of humanitarian assistance.

For ShelterBox, the 2017 wholesale SUPs ban implemented in Kenya, has had direct consequences on the organization: for example, in 2018, it was unable to import a shipment of essential relief items until all SUPs were removed. This incident elevated plastics to a higher priority environmental consideration for the organization, given the likelihood that similar SUP policies could appear in other countries where ShelterBox works. Alongside the operational need to



*ShelterBox: Sudan Distributions, 2021*

<sup>1</sup> <https://www.shelterbox.org/> Their work is supported by a global network of ShelterBox affiliates and a variety of partners, including Rotary International. It is funded exclusively through public support, trusts, and foundations.

tackle SUPs, plastic reduction had also been recognized by the ShelterBox team as an area where the organization could make positive changes to reduce the environmental impact of their responses.

As a result of this, ShelterBox began exploring methods to reduce its environmental impact, with the creation of working groups aimed at finding collaborative solutions on issues such as plastics and CO<sub>2</sub> emissions. These groups comprised members of different teams (procurement, logistics, operations, communications, fundraising) to bring various perspectives and skills to the table.

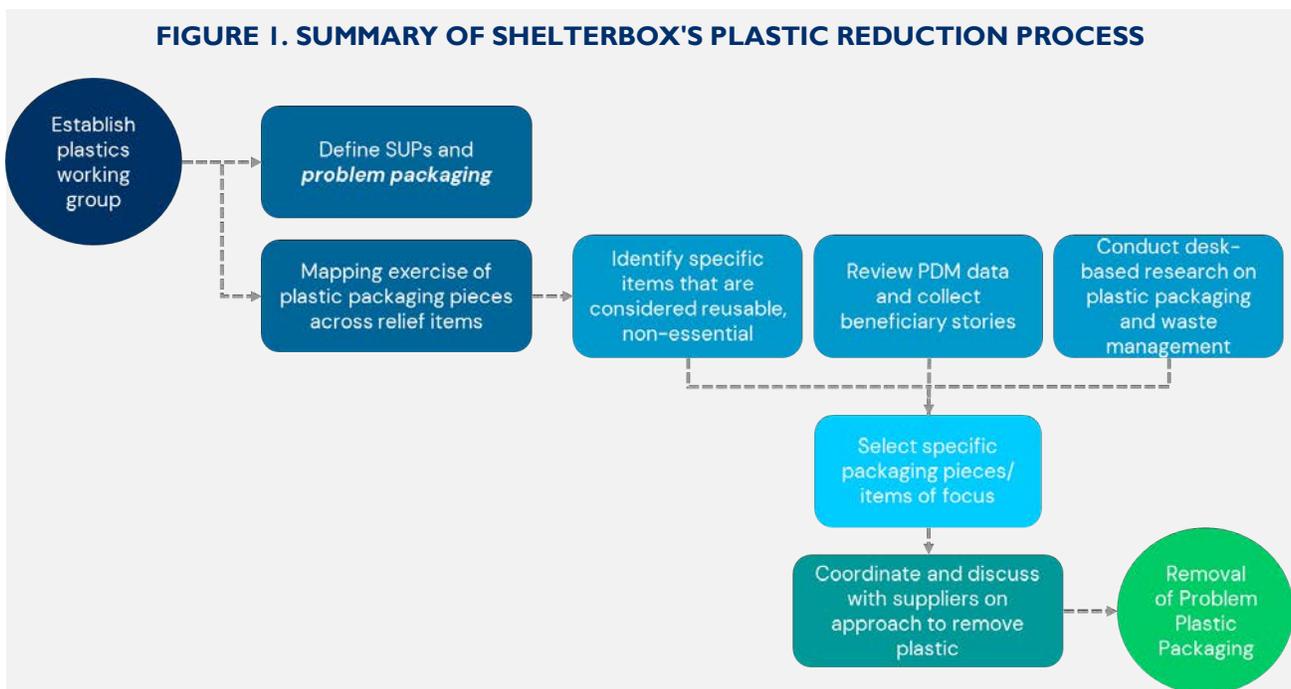


## WHERE TO BEGIN?

ShelterBox conducted a mapping exercise to understand which types of plastics were included in their aid items, what purposes they served, and what was their potential for reuse after distribution. This included reviewing post distribution monitoring (PDM) surveys<sup>2</sup>.

This exercise helped ShelterBox to reframe their issue as one of **Problem Packaging** defined as packaging that:

- Is not essential for the protection of an aid item;
- Is 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.



<sup>2</sup> For example, ShelterBox reviewed answers to questions such as: The mosquito net you received was in a plastic bag. What did you do with this bag? a) Burned it; b) Community Waste Disposal; c) Community Recycle Service; d) I re-used it myself; e) I gave it away; f) I left it on the ground (threw away); g) Other; or f) If other, please explain what you did with the bag.

Jointly with their suppliers,<sup>3</sup> ShelterBox identified 13 different types of packaging used in their relief items that could be revisited, highlighted four as non-essential, and labeled three others as potentially reusable.

ShelterBox examined the minute pieces of plastic (i.e., straps and sleeves) used to wrap individual items and ultimately targeted medium and small low-density polyethylene (LDP) bags, which were included in the sleeve covering for a hoe in a shelter kit for example.

**Ultimately ShelterBox was able to remove six pieces of packaging<sup>4</sup>** from each shelter tool kit, which led to considerable plastic reduction given the high volume of shelter kits distributed annually. This was in addition to previous plastic reduction work which focused on kitchen sets, children’s clothing and hygiene items including soap. In 2021, in total, ShelterBox **avoided the use of 173,396 pieces of plastic** as a result of their efforts.<sup>5</sup> Notably, since they simply removed the plastic, these changes incurred **no financial costs to ShelterBox or their suppliers.**



## LESSONS LEARNED

### ENSURE APPROACHES ARE TRULY “GLOBAL”

Definitions of “single use” vary across countries and contexts: what Western countries see as single use may be perceived differently in communities where aid is being delivered. These important contextual considerations influenced how ShelterBox defined “problem packaging” and its approach considering the voices of receiving communities through PDM (post distribution monitoring) feedback and anecdotal evidence from partners.

### ENVIRONMENTAL CONSIDERATION VS. THE HUMANITARIAN IMPERATIVE

The imperative and priority of any humanitarian organization is to provide life-saving assistance to people in need. This assistance may interfere with the achievement of environmental goals for long-term development. There are instances in which addressing environmental considerations might even clash with this life-saving imperative. These complexities mean that environmental issues, like packaging, should be looked at holistically.



*ShelterBox: Vanuatu 2020, Cyclone Harold*

<sup>3</sup> Attention was first given on items purchased globally from ShelterBox’s supplier, Alpinter Humanitarian Relief Products, due to the high quantity purchased as opposed to regional/local procurement.

<sup>4</sup> The six pieces of packaging removed included: 1) LDPE plastic bag packaging around the shovel; 2) LDPE plastic bag and elastic band packaging around the claw hammer; 3) LDPE plastic bag packaging around the mutt hoe head; 4) Brown paper packaging around the hoe head; 5) LDPE plastic bag packaging around the curved sewing needles x2; and 6) Retail plastic and cardboard around the shears.

<sup>5</sup> ShelterBox Video

## **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.

## **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 require 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.

## **UNDERSTANDING, ASSESSING, AND MAKING DECISIONS WILL ULTIMATELY HAVE ENVIRONMENTAL TRADE-OFFS**

ShelterBox learnt that there are inherent and unavoidable trade-offs in decision making, even those related to environmental sustainability. It is challenging to balance climate implications (e.g. carbon emissions) with other environmental impacts like plastic waste. For example, while ShelterBox was able to easily remove the plastic packaging for several aid items at no added cost, this may become more complicated with more complex items in the future. Items that are currently packaged and transported in a sealable plastic package would need to be replaced by something like a cardboard box. However, moving to rigid, larger packaging could result in an increase in the freight space used, which could translate into an increase in the number of trips required to deliver the goods – and consequently more carbon emissions.

For a humanitarian organization like ShelterBox, which does not necessarily have the time nor the capacity at this stage to carry out life cycle analyses for each of their distributed items and packaging, **making informed trade-offs and prioritizing positive impact is perhaps the only approach to help make sustainable progress.**

## **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.**

---

<sup>6</sup> Although efforts to reduce tertiary packaging are scarce, Alpinter is currently trialing a type of stretch wrap for tertiary packaging in Belgium. Power stretch foil is 60% lighter than standard plastic foil. The foil is ultra-thin, though equally strong compared to standard foil due to internal structure (built up out of more layers). This also results in a more compact waste product (waste foil after de-palletization), which makes transport of waste materials more efficient.

**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.

## 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.



*Using the plastic strapping that packages the bales of mosquito nets and blankets, Samuel was able to create shopping baskets, sleeping mats and baskets/trays.*

*Photo by CARE Mozambique, 2022.*

## SUSTAINABILITY CAN BE OF ADDED VALUE TO ORGANIZATIONS

Sustainability and positive environmental practices are becoming increasingly attractive and important to individual persons and organizations around the world, which means that actively incorporating sustainable practices into organizational and programmatic operations can be beneficial beyond the environmental outcomes; it can add value to an organization and even generate additional funding by demonstrating a commitment to addressing environmental priorities. Research has also shown that a commitment to sustainability also enhances employee engagement and loyalty to the organization.<sup>8</sup>

## SOLUTIONS SHOULD BE COLLABORATIVE

Solutions to plastic packaging should be developed collaboratively, gathering input and ideas from a range of parties, including from the communities receiving assistance. These communities often reuse plastic packaging in an innovative manner – something that should be captured. There are skills, knowledge, and expertise in the receiving

<sup>7</sup> Clothing Kits for Syria – an example of good supplier relationships. Plastic has been removed from children’s clothing kits because of ShelterBox and supplier discussions.

<sup>8</sup> <https://www.mckinsey.com/~media/McKinsey/Business%20Functions/Strategy%20and%20Corporate%20Finance/Our%20Insights/Five%20ways%20that%20ESG%20creates%20value/Five-ways-that-ESG-creates-value.ashx>

communities that are often undervalued and underrepresented. The inclusion of these perspectives needs to be a larger consideration in the important conversations where decisions are made.



## CONCLUSIONS

ShelterBox's success demonstrates that even as a relatively small organization, dedicated staff, and sustained support from across and up the management chain can contribute to a cultural shift within an organization and as a result have a resoundingly positive impact on sustainability. The steps they took to reduce their plastic packaging are **replicable and achievable measures that could be taken by other organizations**. Imagine the scale of positive environmental impact if every humanitarian assistance organization mirrored these efforts.



# ICRC AFGHANISTAN'S PILOT: REPLACING PLASTIC WITH CARDBOARD IN NFI DISTRIBUTIONS



## INTRODUCTION

The ICRC ensures humanitarian protection and assistance for victims of war and armed conflict. It takes action in response to emergencies and promotes respect for international humanitarian law. As part of this work, the ICRC visits detainees to monitor their conditions of detention and ensure that their fundamental judicial guarantees, dignity, and well-being are respected.

Since 2012, the organization has been actively involved in reducing the environmental and carbon footprint of its programs and offices. As part of the [SSCA](#) (Sustainable Supply Chain Alliance) project, significant changes have been made to make their supply chains more environmentally friendly, including developing sustainable [specifications](#) for their relief items and packaging.

One example of these efforts is in Afghanistan where the ICRC has been delivering non-food items (NFIs)<sup>9</sup> to 30,000 detainees twice yearly for the past 10 years. (i.e. 60,000 kits a year). The case study is part of a wider effort led by the [Joint Initiative for Sustainable Humanitarian Assistance Packaging Waste Management](#) to compile best practices from aid organizations in their efforts to eliminate unnecessary packaging and support better packaging waste management.



*ICRC originally packaged NFI kits in single-use plastic bags.*

<sup>9</sup> Content: toothbrush, toothpaste, soap, washing powder etc.



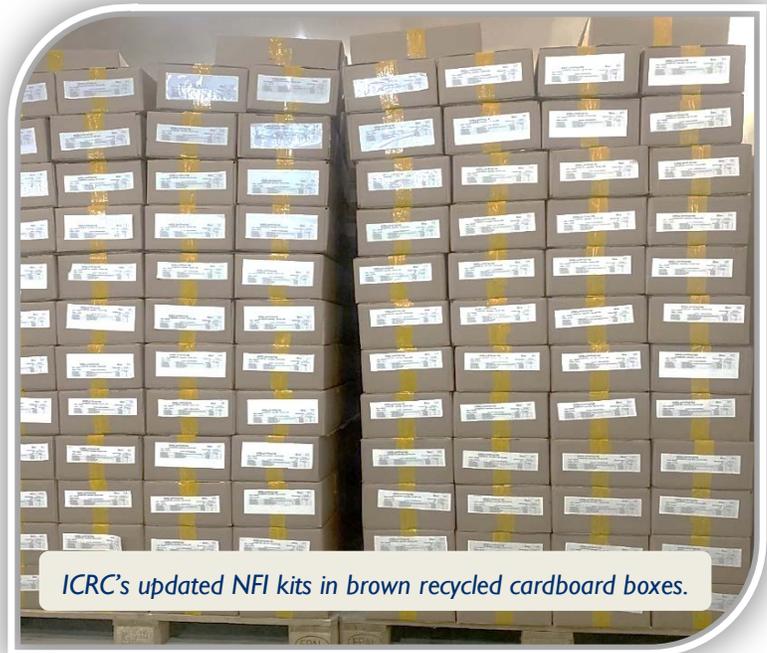
## PROCESS

In 2021, the Afghanistan team revisited the secondary packaging used for these NFIs to move away from clear, single-use plastic (SUP) bags (see picture). This process generated a lot of plastic waste which then had to be disposed of by the prison authorities. There was **no real opportunity for reuse or reverse logistics** as bags were ripped open upon receipt, and plastic bags are not easily recycled in Afghanistan given their low economic value.

In 2021, taking advantage of some left-over budget from another program, the team decided to pilot a shift to brown recycled cardboard packaging. This involved substantial negotiation with prison authorities to approve the new opaque cardboard box. The transparent SUP bag used previously was preferred and historically required by the prison security because it was easier to scan and search.

When implementing this change, ICRC also modified their distribution routes to have items purchased and delivered closer to the project sites to avoid unnecessary layovers in Kabul.

In 2022 the project was scaled up to include all detention facilities where ICRC works in Afghanistan.



*ICRC's updated NFI kits in brown recycled cardboard boxes.*



## BENEFITS

- Environmental:** The shift away from single use plastic helped reduce the volume of plastic waste generated and the associated pollution (linked to burning or landfill). Now that the kit packaging has been changed to recycled and unbleached cardboard, ICRC is looking into ways to reduce packaging for the items inside the kits, for example, by purchasing some items in bulk.
- Reuse of packaging:** Beneficiaries were happy with the switch to cardboard boxes because they can use them as floor mats or as storage.
- Team mobilization:** With the success of the pilot and the decision to scale up the use of cardboard boxes, the ICRC team has become increasingly engaged and interested in opportunities to improve the sustainability of their operations. The team has been exploring other opportunities to integrate sustainability into ICRC's standard procurement practices in Afghanistan.
- Co2 emission:** As mentioned above, the change made in the packaging triggered reflection on ICRC's distribution routes. Reconfiguring the transportation logistics for distribution of these items has reduced the environmental/climate impact of operations by cutting down on fuel consumption (approx. 1000 liters per distribution) and associated emissions (approx. 3000 KG of Co2).



## CHALLENGES

- **Cost:** While some changes in packaging specifications can be done without cost, the shift from plastic bags to cardboard incurred an extra cost of approx. \$38,000 per year for the 60,000 kits distributed<sup>10</sup>. Boxes are more expensive (\$0.56 per box as opposed to \$0.08 per plastic bag)<sup>11</sup>. Although the changes made to ICRC's distribution routes generated some savings (e.g.: fuel), this did not cover the overall additional budget required.
- **Added distribution time:** Another challenge was the added distribution time in the prisons, as staff can carry considerably fewer boxes than plastic bags at a time. The initial trial showed it took nearly twice the amount of time to distribute.<sup>12</sup>

Nevertheless, ICRC is looking into making changes to the delivery method by asking prisoners to take part in the distribution, which would reduce the overall time needed. The transition from bags to boxes did not lead to an increase in the storage space needed, nor an increase in the number of vehicles required. The boxes can be stacked higher than the plastic bags without being damaged.

- **Negotiation with prison authorities:** While there was immediate internal agreement within ICRC on transitioning to cardboard, this change was met with initial resistance from prison authorities, requiring additional time and effort from ICRC staff to gain their approval.



## LESSONS LEARNED

There are several lessons learned from ICRC's transition from SUP bags to cardboard boxes that may be useful for other humanitarian assistance organizations:

- The financial implication of shifting from plastic to cardboard needs to be budgeted for in advance, particularly for organizations with smaller programs and less financial autonomy. This case study shows that revisiting procurement in a holistic way (in this case reviewing the distribution routes) can help generate savings which can be used to absorb additional costs.
- In addition to financial considerations, introducing sustainable changes to organizations' supply chains requires a change in mind-set, time, investment from staff and a willingness to “do things differently”. Although these types of changes are difficult to envisage when efforts are focused on responding to humanitarian needs in emergency settings, sustainability may be considered for items which are purchased and stocked in advance.
- When replacing plastic with cardboard, it is important to also consider the composition of cardboard, i.e. ensuring that unbleached cardboard is selected over white (bleached) cardboard to eliminate water and soil contamination generated during the recycling process, or when cardboard is burnt/deposited in landfills. Use recycled cardboard or certified sustainably sourced cardboard (i.e. FSC) if available and/or economically viable.
- This case study demonstrates that suppliers, including those operating in complex socioeconomic and conflict

<sup>10</sup> 30,000 kits x \$0.56 x twice yearly distributions = \$38,000 as opposed to 30,000 kits x \$0.08 x 2 = \$5,440.

<sup>11</sup> Estimated at \$0.56 per kit.

<sup>12</sup> The ICRC team is currently re-analyzing the method of distribution to see if delivery time can be reduced.

impacted contexts such as Afghanistan, are open to adjusting make their products more sustainable. ICRC suppliers have voiced continued interest in working on additional sustainability initiatives.

- Bringing changes to specifications requires organizations to carry out trials with their suppliers. ICRC found that it was more efficient, cheaper, and easier to do a single test run with one cardboard box supplier located in Kabul for the required 30,000 items, rather than various smaller tests with different suppliers. This ended up being easier to scale up.



## CONCLUSIONS

From a waste management perspective, **unbleached cardboard (when brown) is better than plastic** as it helps reduce air pollution (when plastic is burnt), as well as soil and water contamination (plastic particles which take thousands of years to decompose). Shifting away from plastic to cardboard presents opportunities for humanitarian organizations to reduce their environmental footprint caused by poor waste management practices.

Nevertheless, this shift comes at a cost and covering this cost is only possible for organizations which have some level of **financial autonomy or those which have anticipated these costs in their budgets**.

While a “good enough” approach is most suitable in difficult humanitarian contexts such as Afghanistan, it is important to keep in mind that **cardboard is not the “perfect” solution** and can generate other environmental impacts: the transport of cardboard is often more **carbon intensive** (as much heavier than plastic) and the use of cardboard from non-sustainably managed forests can also have **an impact on biodiversity**. If possible humanitarian organizations should adopt a **holistic approach** and analyze various environmental impacts to be able to make informed choices when comparing different options.



# WORLD FOOD PROGRAMME: PLASTIC FREE E-VOUCHER SHOPS IN COX'S BAZAR, BANGLADESH



## INTRODUCTION

With an annual consumption of around 87,000 tons of single use plastic (SUP).<sup>13</sup> Bangladesh and its refugee camps are no exception to the global plastics crisis. As in many places in the world, innovative yet simple solutions are piloted to support the transition away from plastics.

The case study presented below illustrates the role that organizations can play in mainstreaming environmental sustainability into their life-saving humanitarian responses. It is part of a wider effort led by the Joint Initiative for Sustainable Humanitarian Assistance Packaging Waste Management (Joint Initiative) to compile best practices from aid organizations in their efforts to eliminate unnecessary packaging and support more sustainable packaging waste management.



## PROCESS

In Cox's Bazar refugee camps, the World Food Program (WFP) provides 100% of its food assistance through e-vouchers. Each month, beneficiaries receive e-vouchers with which they can purchase essential commodities<sup>14</sup> from selected local and national retailers inside the camps. While such programs are essential to promote the local economy and to empower and restore the dignity of refugees, significant packaging waste is generated through these retailers. In 2020, it was estimated that 400,000 plastic bags<sup>15</sup> per month were generated by WFP as a result of its e-voucher program.



<sup>13</sup> <https://esdo.org>

<sup>14</sup> Oil, sugar, salt, rice, fruits/veg etc.

<sup>15</sup> <https://reliefweb.int/report/bangladesh/plastic-free-wfp-food-assistance-outlets-towards-durable-sustainable-solutions>

In 2020, encouraged by the enforcement of plastic bans by the government of Bangladesh, as well as WFP's plan to phase out 90% of SUP by 2026, WFP decided to step up efforts to reduce its environmental footprint and to explore alternatives to SUP.

In its food assistance program channeled through 12 retailers in various locations in Cox's Bazar camps, WFP worked with the retailers to put into place a zero-plastic policy. Retailers receive commodities in large quantities and then **repack them individually for households in either jute or paper bags or simply without any packaging when possible. Rice is distributed in large reusable Polypropylene bags (PP bags)**, and eggs are distributed using reusable buckets. Beneficiaries are also encouraged to bring back this reusable packaging for their next visit to the retailer.

Only for a small number of items, such as salt, anchovies and flour, retailers working within the WFP e- voucher program are still using the original plastic packaging to protect these products from humidity especially during the monsoon season. **Oil is also being distributed in PET bottles because no sustainable alternatives have yet been found.**



## BENEFITS

- The transition away from SUP has had significant impacts on the local environment. WFP estimated that this shift **helped save approximately 5 million plastic bags per year**, possibly even more considering the probability that some items were previously double bagged.
- Despite some initial resistance, beneficiaries have welcomed the shift to reusable packaging as a contribution to keeping their local environment clean. **Some recyclable waste is also being collected and sold to the local recycling markets** (e.g., PET plastic oil bottles and cardboard), which has contributed to generating a small income for some beneficiaries and local entrepreneurs.
- This transition away from SUP has influenced other stakeholders to adopt green practices (e.g., retailers/vendors have in some cases followed the same policy of waste control in their own warehouses) or has been applied to non-food items (e.g. soap distributed without packaging).
- By respecting local legislation and supporting the government's effort to move away from SUP, this shift has also contributed to WFP's acceptance within local governments, in a complex operational context.



## CHALLENGES

- This experience has shown that transitioning to reusable alternatives or no packaging is not a straightforward process, and that **disposable packaging is sometimes still required**, particularly for quality, health, and safety reasons. As mentioned previously, in some WFP's retailer shops, SUP is still needed for food items such as salt, anchovies, and flour, which need to be protected from humidity during the monsoon season.
- Shifting to **alternatives to conventional plastics has a cost**, and WFP has had to subsidize part of this transition to biodegradable paper bags to ensure initial local retailers' buy-in. In the case of Cox's Bazar, paper bags cost 1.7 times more than plastic bags.<sup>16</sup> Similarly, jute bags are 3.5 to 4 times more expensive than

<sup>16</sup> 0.15 taka per kg to 0.25 taka per kg

plastic bags. This cost needs to be anticipated by humanitarian organizations.

- Considering the size of WFP’s programs, this shift has had a considerable impact on the local environment but remains quite limited in the greater scope of things. Despite the national ban, plastic is still largely used by private-sector retailers inside the camps, and widely in local communities. **The plastic packaging challenges in Cox’s Bazar, as everywhere else in the world, can only be solved if addressed in a holistic manner.**



## LESSONS LEARNED

One of the lessons learnt from WFP’s experience in working with shops in Cox’s Bazar, is that alternatives to conventional plastics are not “silver bullets”, or automatic fixes.

- The use of substitutes such as wax-coated paper bags and jute bags, is not always straightforward to implement, and raising awareness and providing information for beneficiaries is necessary. In addition, these substitutes or alternatives present their own environmental challenges, which need to be mitigated. In this case, wax-coated paper bags are made of mixed materials (wax and paper) that are not easy to recycle (both from a technical and economic perspective). The same also applies to jute bags, which, in addition to not being sufficiently available in various countries, present a high overall environmental impact. For example, producing jute is carbon dioxide-intensive and involves significant water consumption).
- WFP’s experience in working with retailers also showed that suppliers are often flexible to changes and have a strong capacity to adjust their practices, particularly when they are already strongly established private sector companies. In Cox’s Bazar, WFP has had strong purchasing power, and as a result, has had significant leverage in encouraging its suppliers to adopt sustainable practices. And with the large scale, small measures, such as recycling all plastic packaging used by these retailers could result in a considerable volume of waste to sell to recyclers.
- Encouraging beneficiaries to bring back their reusable packaging (rice sacks/jute bags/PP bags) each time they go shopping is not easy and requires changes to knowledge, attitudes, and practices that can take a long time. In a difficult and humid context, such as Cox’s Bazar where living conditions are harsh, it is not always possible for beneficiaries to keep reusable bags clean and dry. Reusable bags are only a sustainable alternative to SUP if they are regularly reused. Otherwise, the environmental footprint<sup>17</sup> and financial cost<sup>18</sup> of producing the materials does not necessarily justify the investment.
- WFP’s transition away from SUP was made possible and easier and was more effective **because of the project modality that was used** (i.e., e-voucher assistance). Had it been in-kind distributions in the camps, this would have been more challenging and potentially more expensive to organize (as there is potentially a need to be more rapid and efficient in distributions). Furthermore, working with a set of specific retailers meant it was easier to influence their practices in a positive way, a change that will hopefully continue after the departure of the organization.

<sup>17</sup> Depending on the material used, reusable packaging production can be water and carbon intensive.

<sup>18</sup> Jute bags are, for instance, 5 times more expensive than plastic bags (reference: NGO Forum for Public Health, an NGO involved in the production of jute bags in Bangladesh).



## CONCLUSIONS

WFP's zero-waste approach in its e-voucher programs illustrates how modest, low-technology changes can considerably reduce an organization's environmental footprint and can possibly be replicated in other areas or by other actors.

Moving away from SUP in Cox's Bazar has helped WFP to significantly reduce the amount of waste generated by its operations. As a result of this success, the organization has started adopting this approach in other locations, such as Afghanistan.



# ACTED LEBANON: A HOLISTIC APPROACH TO REDUCING AND MANAGING WASTE



## INTRODUCTION

ACTED has been committed to reducing its environmental and carbon footprint for some years. As early as 2017, ACTED carried out an organization-wide carbon accounting exercise, which identified that approximately 60 to 70% of its total footprint resulted from its supply chain. In line with the organization's [3 Zero World vision](#) (Zero Exclusion, Zero Carbon, Zero Poverty), ACTED started to explore ways to introduce sustainability measures into procurement both for office supplies and for programs.

In Lebanon, these measures were aimed not only at lowering the organization's carbon footprint, but also reducing local pollution caused by low in-country waste management capacity. ACTED had ongoing projects responding to the waste crisis<sup>19</sup> in Lebanon such as supporting the collection, sorting and management of household solid waste<sup>20</sup> in Beirut and in the surrounding areas.

These efforts helped build greater awareness on waste management within ACTED Lebanon, and motivated staff to translate these efforts to reducing and **improving the organization's own waste management practices** (both office and program-related waste).

## STARTING WITH THE QUICK WINS AT THE OFFICE

### OFFICE

A logical start was to implement no-cost, "quick win" actions. The team began by implementing a **single-use plastics ban in the kitchen, at events, and training sessions**. Now, the office uses **reusable utensils, cups, and plates**. They also use exclusively non-packaged office cleaning supplies. **Double-sided printing** was



Lunch boxes for ACTED training participants.

<sup>19</sup>In 2015, the largest landfill in the country was closed and waste collection in the streets was stopped, creating accumulation of waste in the streets. Waste continues to cause a serious sanitary and environmental threat in Lebanon

<sup>20</sup><https://www.acted.org/wp-content/uploads/2018/01/acted-lebanon-circular-economy-final.pdf>

made mandatory to reduce paper consumption, and office notebooks are made of recycled paper. “Eco fonts”<sup>21</sup> which use less ink and **electronic signatures** are increasingly popular. Furthermore, ACTED’s 70 staff were each given reusable tote bags for grocery shopping.

### **VISIBILITY AND COMMUNICATIONS**

For an organization like ACTED, measures to reduce waste must be compatible with donor visibility requirements. To achieve this, ACTED worked on “greening” its **roll up banners** (where the names of the project/organization and donor appears, along with logo). Roll ups have a short life span - they can only be used during the lifetime of the project and cannot be **passed on** from one project to another for reuse. ACTED and their supplier reached an agreement enabling them to purchase only the banner itself and reuse the metal banner mount. In addition to prolonging the lifespan of materials in circulation, this change also generated cost savings for ACTED.

### **RECYCLING, REUSING AND REPURPOSING**

Following these waste reduction measures, ACTED Lebanon developed a **sustainable waste management** system for the office (separating recyclables, batteries, and household waste), and developed a partnership with a local waste recovery association<sup>22</sup>. Recyclables are collected from the office once every 2 weeks for free, and repurposed. The waste recovery association promotes a circular economy approach and employs people living with disabilities.

### **MOBILIZING SUPPLIERS**

In addition to reducing its own environmental footprint, ACTED has managed to positively influence its suppliers, encouraging them to develop approaches and plans to promote environmental sustainability. When assessing and scoring suppliers, **5-10 bonus points** are given to those who can demonstrate that they take environmental considerations into account. Although this was challenging for some suppliers, it gave a clear message that **sustainability was a priority for ACTED** and that there will be **growing expectations of its suppliers** in this regard in the coming years.

**Environmental sustainability** is also included in the **annual framework agreements** which ACTED signs with key suppliers and service providers. In response, some suppliers have **moderately increased their fees** to be able to comply with the environmental sustainability requirements and to anticipate price changes. However, ACTED has viewed this **as a necessary investment**.

### **PROJECT LEVEL SHIFTS TO PACKAGING WASTE REDUCTION**

Today, plastic packaged post-training beneficiary distributions, such as such as baby or family hygiene kits, or lunch boxes, have been replaced with cardboard or jute bags. Where possible, single use plastic secondary packaging was removed and replaced with more sustainable materials. Although plastic primary packaging is still present inside in some kits (ex: for individual food or NFI items), overall, this has helped significantly reduce plastic pollution

---

<sup>21</sup> “Eco” fonts include Century Gothic, Garamond, Times New Roman, and Courier.

<sup>22</sup> L’écoute <https://www.lecouite-lb.org>

in the distribution areas. Over the course of a year, ACTED estimates that approximately 2,000 pieces of plastic packaging were avoided.

Carton/jute bags were estimated to be 30 to 40% more expensive than their plastic counterpart, however, ACTED decided that the reduction in environmental degradation outweighed the increased cost. To overcome financial constraints for food distributions, a new call for tenders for catering services was launched in 2021, wherein suppliers were encouraged to offer fair prices and to propose plastic free packaging. The company that won the bid was able to meet ACTED's programmatic need for individually wrapped food by using craft paper instead of plastic. ACTED has also been successful working with its donors to finance the costs of environmentally friendly packaging.

In recent months, ACTED Lebanon has continued to work towards banning all plastic bottles at events and during distributions, by investing in portable and refillable water dispensers and reusable cups.



## CHALLENGES

### IDENTIFYING SUPPLIERS

In general, identifying suppliers which can provide sustainable packaging in Lebanon can be challenging. In addition, environmental awareness is generally low in the country, meaning it was more difficult to convince suppliers of the utility and potential impact of using more sustainable packaging. Finally, as environmentally sustainable approaches are more costly in the short-term, ACTED has had to strive for a balanced approach in order not to hamper its ability to work with smaller suppliers.

### THE ADDED COST OF ENVIRONMENTAL SUSTAINABILITY

Similarly, meeting the additional costs of “greening” has been difficult. Considering growing humanitarian needs exacerbated by climate change and the impact of Covid-19, donors are looking for ways to reduce administrative costs of programs. **While securing grants for projects focused on environmental protection is more straightforward, due to the possibility to clearly demonstrate direct results for the environment, obtaining funds for the “greening” of supply chains and ongoing projects (ex: water supply, income generation) is more of a challenge.** This requires continuous dialogue and negotiation with donors. Engagement with donor staff at local level is particularly important, as sometimes global approaches and policies adopted by humanitarian donors at head office level have not yet “trickled down” to field level.



## LESSONS LEARNED

### ANTICIPATING ADDITIONAL COSTS AND FOSTERING SUPPLIERS' BUY-IN ALLOWS FOR MORE SYSTEMATIC CONSIDERATION OF ENVIRONMENTAL ISSUES IN SUPPLY CHAINS.

The organization has now entered a “virtuous cycle” where all budgets consider the need for reduced waste from the initial stages of the project development. ACTED systematically includes additional costs for sustainable packaging and/or waste collection in its budgets and adds sustainable requirements in its framework agreements with suppliers. Thanks to the logistics team’s forward-thinking, sustainability is gradually being mainstreamed throughout all administrative and logistics processes. By taking a flexible approach – working with suppliers to explain the benefits of using more environmentally sustainable materials (including packaging) and rather than “penalizing” smaller suppliers who might find it more challenging to take this on board, ACTED has successfully fostered supplier buy-in.

### A POSITIVE IMPACT ON THE QUALITY OF ACTED’S WORK

ACTED’s gradual approach to “green” its practices has undoubtedly enhanced the quality of its work in Lebanon. The team is motivated, and keen to suggest further ways to reduce its environmental footprint at all levels (from small actions to bigger changes). By “walking the talk”, members of the ACTED team in Lebanon have become “ambassadors” for more environmentally sustainable practices. Furthermore, beneficiaries are happy to adapt to these changes: for example, the transition from plastic to jute bags was very well received by beneficiaries and has also allowed the organization to **strengthen its awareness-raising messages for beneficiaries.**

*“Mainstreaming environmental considerations across an organization takes time. Incremental changes and piloting new solutions allow for more feasible and evolving ambitions.”*

*Red Goes Green Report*

### A TWO-FOLD APPROACH: QUICK WINS AND LONG-TERM CHANGES

While some actions are easy to implement, others take longer. Positive results from short-term changes (“low-hanging fruit”) have helped the team to stay motivated and to continue exploring improvements and changes. In the case of packaging, while ACTED was able to change secondary packaging for distributions relatively easily, primary packaging - particularly for food items - is still a challenge and generates considerable amounts of waste. The team is currently working with suppliers, academics, and local organizations to identify innovative and sustainable solutions for individually packed items. ACTED’s experience has shown that a lot can be achieved easily **to reduce an organization or a project’s environmental footprint before addressing the longer term and more complicated challenges.**

### GLOBAL AMBITION AND WHOLE-OF-ORGANIZATION APPROACHES

ACTED’s experience shows that individual actions can go a long way, but they can only have a real impact if there are supported and encouraged by the organization as a whole. ACTED’s head office has been a strong driver of more environmentally sustainable practices for several years: it launched a **carbon footprint exercise in 2017,**

set up a monthly reporting system<sup>23</sup> on environmental sustainability issues, encourages country teams to set up inter-disciplinary (e.g., logistics, administrative, programs) working groups to design and monitor sustainable actions, and is also developing a greening reduction and adaptation support plan. Above all, ACTED's strategy promotes innovation, increased collaboration with actors outside the humanitarian sphere, and collective learning amongst country offices.



## CONCLUSIONS

ACTED's experience shows that sustainability can be achieved with limited extra costs (or no cost in many cases) and relies more on each organization's ambition and ability to encourage a green mindset across its staff. Thanks to a strong and continuous dialogue with its donors, and a general strive for exemplarity, the organization has worked simultaneously on greening projects, and offices building staff expertise and motivation on waste management and environmental issues.

---

<sup>23</sup> Ex: how much waste/what type of waste is generated, collected by recyclers



# UNICEF: DISTRIBUTING LONG LASTING INSECTICIDAL NETS IN BULK

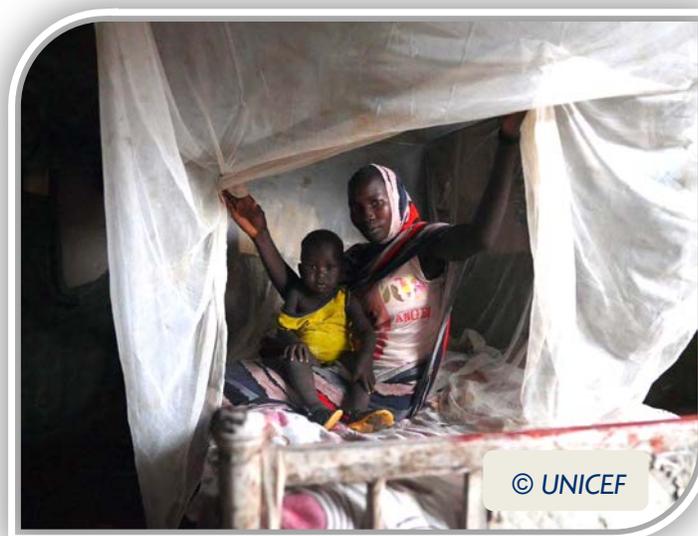


## INTRODUCTION

To survive and thrive, children need holistic solutions that address the consequences of sudden-onset disasters (increasingly exacerbated by climate change) and resilient solutions that promote long-term climate-smart development. This is why UNICEF strives towards impact on these issues throughout its global programs, advocacy, communication, operations, and supply chain. The organization's commitment is reflected in UNICEF's Strategic Plan 2022-2025 and UNICEF's [sustainable procurement procedures](#).

Long-lasting insecticidal nets (LLIN) are one of the two main tools for malaria prevention and control and one of core relief items used by UNICEF. From 2021-2022, UNICEF delivered 60 million<sup>24</sup> LLINs to 36 malaria endemic countries for distribution to households, schools, and health care institutions. UNICEF acts on behalf of governments and partners and places purchase orders with qualified manufacturers who produce and pack LLINs for direct shipment to countries. Each order is customized to a receiving country's specific requirements including size, type of insecticide, artwork, and packing. For many years, most governments and partners have been requesting that LLINs were packed in single use, individual plastic bags - considered as the default packing option.

Concerned about the end of life of the single use plastic bags in countries where the waste management capacity is on average low <sup>25</sup>,



<sup>24</sup> UNICEF is one of the largest public procurers of LLINs. Every year, global partners, such as UNICEF, Global Fund and PMI, send about 220 million LLINs to malaria endemic countries, 88% of deliveries are to sub-Saharan Africa.

<sup>25</sup> It is even less in remote areas that LLIN distribution campaigns reach.

UNICEF managed packing requirements in a way which reduced plastic waste in its LLIN deliveries and created savings in procurement costs.



## HOW DID IT WORK?

UNICEF promoted bulk packing as an alternative to individual packing of LLINs in its deliveries. In bulk packing LLINs - *without individual bags* - are baled by fifty into compact units, which are convenient for transport and distribution.

As the procuring agent for governments and partners, UNICEF had to rely on persuasion to influence others to change their packaging practices, using a two-stage approach.

UNICEF started with consistently offering bulk packing as an alternative to individual packing. In its cover letters to partners, UNICEF presented bulk packing as an ideal option, emphasizing sustainability issues, and highlighting benefits including cost-efficiencies.

Recently, UNICEF went a step further and shifted to offering bulk packing by default and requesting for a justification if a partner wished to revert to individual packing of nets instead. Based on the feedback received, UNICEF began working with governments and partners to address concerns, helping to remove actual or perceived barriers to accepting bulk packing. Lastly, in its estimates for governments and partners, UNICEF separates the cost of plastic bags from the cost of the actual procured commodity (i.e., LLINs) which helps to further promote bulk delivery.



## RESULTS

Offering bulk packaging as the default option was received positively by governments and partners, many of whom welcomed this change, as it helped to progress their own efforts to reduce pollution caused by plastic packaging (in this case polyethylene) which is rarely recycled and - since LLINs are distributed in remote areas - individual plastic bags that come with them are even more difficult to collect and manage appropriately.

While US\$317,000 in savings resulting from avoidance of individual packaging may seem small compared to US\$116 million (i.e., the total value of LLINs procured by UNICEF in 2021 and 2022), these savings enabled the procurement of a 160,000 additional LLINs for countries and regions in need of vector control tools and restricted by limited funding.

***As a direct result of the active guidance for bulk packing for LLINs, from 2021 to 2022, UNICEF avoided sending 11.5 million single-use plastic bags, while generating US\$317,000 savings in LLINs procurement.***



## CHALLENGES

### REDUCING PACKING WASTE IS NOT A PRIORITY FOR GOVERNMENTS AND PARTNERS WHEN ORDERING LLINs

Governments operate in complex environments, where multiple factors and competing priorities impact decisions when it comes to planning LLIN procurement and distribution. For too long, the environmental impact of LLINs packing has not been a priority. Decisions on procuring LLINs in bulk packing or individually packed have not been thought through exhaustively, as part of planning for distribution campaigns.

Rather than imposing decisions on governments and partners, UNICEF used advocacy to highlight environmental and financial advantages of bulk packing for LLINs, helping to convince them to make the paradigm shift.

### INDIVIDUAL PACKING IS PERCEIVED AS THE MOST SUITABLE / HIGH QUALITY OPTION COMPARED TO BULK PACKING

Individually packed LLINs are perceived as being better (as compared to bulk packaging), often for cultural reasons, or because people are accustomed to “super market” or “single use” culture with regards to packaging. The preference for individual packing can also stem from specific concerns around safety, transportability, accountability, visibility, etc. - and the use of individual bags is seen to mitigate them.

By asking partners to justify their requests for individual packing, UNICEF has been able to gather a better and deeper understanding of what drives partners to make these requests: this is helpful in shaping a new, attractive narrative around bulk packing.



## LESSONS LEARNED

- Small changes can go a long way: by simply swapping a default packing option in its offers to governments and partners, UNICEF triggered a more intentional decision-making around packaging requirements and helped avoid waste equal to 11.5 million single-use plastic bags.
- It is not possible to reduce the environmental impact of humanitarian work or effect a positive change working in isolation. When supply chains are concerned, market readiness and support can be key for successful sustainability initiatives. When pushing for reduction of plastic waste in its LLIN deliveries, UNICEF found that LLINs manufacturers were equally concerned about plastic packaging waste and environment: many came forward, offering additional discounts for orders with bulk packing requirements.
- Bulk packing may reduce both shipping costs and the CO<sub>2</sub> footprint from freight associated with reduced volume as a result of more efficient packing of LLINs. As plastic bags are removed, extra space is released, which potentially allows more LLINs to be loaded into shipping containers. An assessment of the potential impact - in terms of CO<sub>2</sub> and costs saved - does not exist but would be beneficial.
- When packed individually the important information for users on how to install, use, wash and dry the bed nets to ensure a maximum shelf-life appear on the packaging. The same information is also always included directly on the bed nets' care label, usually in the language of the country and this information can be consulted by users at any time (vs on the plastic packaging which is usually torn and thrown immediately after the LLIN is being received). In addition, National Malaria Programmes typically organize awareness sessions during distributions with demonstrations providing key information on how to use the nets to beneficiaries. Hence removing an individual bag should not be seen as affecting the effectiveness of the malaria campaigns.



## CONCLUSIONS

The wider environmental issues related to LLINs are complex and solutions require comprehensive thinking around waste management, recycling, social practices, and innovation. However, the reduction of plastic waste in LLIN distribution is already bringing significant impacts and can be a quick and early win.

This case study is a good example of how an organization can take responsibility to reduce its waste and environmental footprint, and how small changes in the way we work can go a long way, particularly in a large agency with multi-country operations.

Nevertheless, beyond organizations' strategies and plans, these practical changes can only happen with the motivation and initiatives of humanitarian staff who want to shift to a more sustainable humanitarian sector.

Finally, this case study demonstrates the engagement and willingness of industry to implement sustainability initiatives and work hand in hand with humanitarian organizations for a more environmentally sustainable response. Across the board, suppliers are supporting sustainability initiatives and, in some cases, are very advanced. **Our sustainability efforts as humanitarians can only happen if we work to ensure an ongoing dialogue with our suppliers.**

***“This was an obvious thing to do, when you consider the amount of LLINs we deliver each year. It created a huge impact, not only reducing plastic waste and saving the environmental impact but also saving costs.”***

*Valerie Markova, Contracts Specialist,  
UNICEF Supply Division*



# UNHCR: GREENING THE PACKAGING OF CORE RELIEF ITEMS



## INTRODUCTION

In its Operational Strategy for Climate Resilience and Environmental Sustainability 2022-2025, the United Nations High Commissioner for Refugees (UNHCR) commits, among other things, to improving the environmental sustainability of its end-to-end supply chain, as its core relief items (CRIs) represent collectively around 60 per cent of its greenhouse gas emissions.

By 2025, UNHCR is aiming for:

- An overall reduction of its emissions by 20 percent (including a 10 per cent reduction in emissions from international freight).
- A reduction of 20 percent of the proportion of plastic in CRI packaging.
- A 20 percent increase in the environmental sustainability of the relief items themselves (using recycled, recyclable, or sustainably sourced content).



To achieve these targets, UNHCR is in the process of conducting a comprehensive review of its supply planning, technical specifications, and sourcing of CRIs. As packaging was found to be an area where it was most straightforward to have an impact, efforts began here.



## APPROACH

UNHCR engaged sustainability professionals and plastic experts to explore how to make CRI packaging more environmentally sustainable. Almost all the emissions from UNHCR relief items stem from eight specific items (blankets, buckets, family tents, kitchen sets, jerrycans, mattresses, sleeping mats and

solar lamps) so work began by reviewing their packaging. UNHCR's identified three main courses of action to "green" the primary, secondary, and tertiary packaging of these CRIs: reduce, recycle, and optimize.

UNHCR has adopted a **flexible approach**, recognizing that it may not be possible to follow the three courses of action for all items. For example, recycled plastic packaging may not be available in all contexts where UNHCR works. **Innovative methods** are also used, such as promoting "reusable" packaging made from the CRIs themselves. This includes wrapping plastic tarpaulins around boxes containing kitchen sets or using family tents to protect them during transport. These tarpaulins and family tents can then be used upon delivery.

While looking at the size and design of CRI packaging, the possibility to **make the item itself more compact** is also considered. This was the case for solar lamps for example: the dimensions of the lamp have been reduced as well as its packaging, making it easier to use and transport.

## REDUCE

Reduce packaging where possible, helping to reduce the volume of packaging materials at source. In the future, UNHCR d to move wherever feasible to "nude packaging" (i.e., the essentials to ensure quality and protection of items).

## RECYCLE

Use recycled packaging where possible, helping to keep materials in circulation.

## OPTIMIZE

Make the packaging more compact where possible, reducing the space taken up by packed items in warehouses and containers. This includes increasing compression rates and optimizing packaging (e.g., more items per box), pallet sizes and loading capacities



## CHANGES & THEIR IMPACT

The improvements identified to date, which are progressively being implemented, can be found below together with some examples of their positive **environmental and financial impacts**.

### PACKAGING BOXES

- Recycled brown cardboard with black logos (made from water-based ink) is to be used, instead of bleached white cardboard with blue logos. This change has already been successfully piloted by UNHCR's Regional Asia Pacific Bureau. As a result, a life-cycle assessment revealed that the environmental footprint of the logo-marked boxes has been reduced by 70 per cent). This also helps to keep the cardboard in circulation and avoids the release of chemicals from bleached cardboard or non-organic inks.
- Plastic laminate and film are being removed from cardboard boxes to reduce the use of plastic and make boxes easier to recycle.

## SOLAR LAMPS

- Primary packaging: instead of single-use plastics to wrap solar lamps, small, recycled cotton bags were proposed by UNCHR’s suppliers and are now being used.
- Secondary packaging: lamps are placed in recycled natural brown cardboard boxes, which have also been reduced in size.
- UNHCR is also experimenting with different options to reduce the size of the lamps themselves. One compact design has so far been approved and fits into a one-liter cardboard box (made of recycled rather than virgin cardboard). This has made it easier to carry the lamps around the camps and positive feedback has been already received from refugees in Pakistan for example.

## KITCHEN SETS

- Paper sheets are now used instead of single-use plastics (SUPs) to individually pack items in kitchen sets. As a result, 100g of SUPs have been saved per kitchen set.
- Recycled brown cardboard with black logos is now used.
- As a result, kitchen sets are marginally (1.2 per cent) cheaper.
- Work is ongoing to see how the utensils’ size can be optimized.

## THERMAL BLANKETS

- Individual SUP has been removed from the thermal blankets. They are bound in bales of 15 and covered in polypropylene (PP) bales. Where possible, this PP is to be mixed with recycled plastic. The compression rate for blankets has been increased by 60 per cent. Medium thermal fleece blankets are now packed in 20 units per bale instead of 18, whilst high thermal fleece blankets are packed at 15 rather than 12 units per bale, leading to a 25 per cent increase in loading rates.
- In the case of high thermal blankets (unpalletized), this will mean a reduction of 15 per cent in shipping containers, and 20 per cent in the weight of packaging materials, representing a reduction in both monetary terms and 17 per cent in CO2 emission reduction.

## PLASTIC FILM / SHRINK WRAP

- This continues to be used when necessary to fix pallets together and protect them from



*Greener packaging is being used by UNHCR for blankets distributed to Afghan refugees in Pakistan*



moisture. However, where available, suppliers are encouraged to include at least 30 per cent recycled plastic. For many humanitarian organizations, it is difficult to reduce tertiary packaging etc. as they have little control over this.

## SLEEPING MATS

- It has also been suggested that packaging for sleeping mats be optimized so that 25 rather than 20 units are packed in a bale.



## CHALLENGES

There is sometimes a reluctance to modify packaging practices, as the impact may seem negligible, or there might be concerns about these changes. For some, it may be difficult to see the point of using brown instead of white cardboard boxes, whilst others may be concerned that using black rather than blue UNHCR logos will weaken the branding of the organization and reduce its visibility.

Furthermore, measuring the impact of these changes is not easy and it is therefore necessary to monitor and calculate results over a certain period, which can discourage some staff. Others may not fully appreciate the level of emissions linked to packaging or understand why packaging sustainability is a priority when there are more “bigger issues” to tackle related to climate change.

To support staff in adopting all these changes to packaging, UNHCR will:

- Organize meetings, small workshops, and information sessions with different units in procurement regularly and develop training materials for staff.
- Inform staff through monthly or bimonthly memos on upcoming changes and those in the pipeline, to help them anticipate and adapt.
- Raise awareness of the importance of these changes through the intranet and social media.
- Advocate for changes highlighting the overall impact, based on the total volume of items which the agency procures, emphasizing that this is just the beginning of its sustainability journey. For example, reducing the packaging of an individual kitchen set alone will not produce much impact, but the organization procures 2.5m kitchen sets annually, and these changes will be multiplied over several years.
- Hold regular meetings or small workshops/information sessions with different units in procurement to inform them of what is being implemented and what is coming up.
- Ensure the above changes are embedded within procedures and policies and become obligatory, whilst also maintaining a flexible approach - recognizing that the organization works in a range of contexts.



## LESSONS LEARNED

### MAINTAINING QUALITY OF THE CORE RELIEF ITEM FOR THE END USER

It has been important to pilot the changes to packaging to ensure their integrity in the field and – most importantly – preserve the relief item from any possible damage. Concerning the abovementioned increased compression rate for thermal blankets, tests were carried out and showed that it would effectively lead to reduced emissions and costs while maintaining the same thermal resistance. Based on laboratory test results, this new compression rate was used in the distribution of thermal fleece blankets in Bangladesh, Pakistan, and Uzbekistan in April 2023. This

led not only to positive feedback from the end users but, because of the new compression rate for blankets, UNHCR has calculated that the organization was able to make savings both in relation to CO<sub>2</sub> emissions as well as costs.

## **CONSIDERING THE END USER**

It is important to consult with and consider the end-user when exploring changes to packaging and core relief items themselves. This was a key factor in the decision to change the size of the solar lamps: the smaller model lamp should be easier for refugee families to carry around camps and will soon be piloted by UNHCR in Bangladesh and Colombia.

Many end-users have limited access to waste management options, and packaging solutions should be adapted to the local context. UNHCR is therefore striving to engage with them more holistically from the start and explore whether and how packaging can be properly disposed of.

## **COMMUNICATION REGARDING CRI PACKAGING**

When proposing changes to packaging, UNHCR paid particular attention to the need for end users to receive clear key information and instructions on how to dispose of CRI packaging. For this reason, biodegradable and compostable plastic packaging was avoided, as these terms can be misleading to the end-user who may think that this packaging can be disposed of in the natural environment<sup>26</sup>. Bio-degradable or bioplastics cannot simply be thrown away, and compostable items require facilities which do not exist in contexts where organizations like UNHCR work, including camp settings.

UNHCR uses labels to provide beneficiaries with more information on what CRIs are made of and what can be done with the packaging, including recycling information. QR Codes are added to labels and linked to a UNHCR Help page where more information can be found, including on safe disposal of packaging and protection from risks.

## **SUPPLIERS – THEY'RE ON OUR SIDE**

Discussions with suppliers have helped identify solutions to make packaging more sustainable. For example, UNHCR would propose a change to a supplier, and the latter would make several suggestions on how to implement this change. Listening to suppliers' feedback has helped to ensure that the changes proposed by UNHCR are feasible in reality. Supplier relations are therefore crucial and should be nurtured as part of a holistic approach to packaging sustainability. It should not be assumed that suppliers are reluctant to change or uninterested in environmental and climate issues.

## **COMPACTING AND COMPRESSING – PROVIDING EASY WINS**

Whilst one may not automatically think about palletization and compression rates in relation to packaging, UNHCR's experience has shown that changing the number of items packed into a bale, box, carton, or container can lead to significant reductions in the environmental footprint and cost.

---

<sup>26</sup> Biodegradable plastic only breaks down completely when exposed to specific conditions (humidity, high temperature and microorganisms). Meanwhile, compostable plastic only decomposes when exposed to high temperature applied over a period, and is generally suited to industrial composting facilities, which do not exist in contexts where humanitarian organizations like UNHCR are working including camp settings.

## LEARNING FROM OTHERS

Engaging with other humanitarian organizations has been particularly useful. UNHCR's frequent participation in the Joint Initiative's "Packaging Matters" webinar, has been an important source of information and helped to facilitate contacts with other stakeholders and to learn from them. Bringing in the perspective of non-humanitarian actors, including private sector suppliers and academics, has also helped the reflection and decision process.



## CONCLUSIONS

UNHCR's experience illustrates the benefit of involving all stakeholders in the process of greening packaging. Consultation with and involvement of end users as well as other humanitarians has been crucial and provided valuable feedback. In addition, suppliers have also proven to be key allies who should be engaged in the development of new practices and policies on packaging.

UNHCR and other United Nations agencies have the capacity and are well-positioned, through their strong purchasing power and global networks of suppliers and partners, to steer the humanitarian sector towards a more sustainable future. This case study highlights how deliberate planning and collaborative approaches can actively contribute to a more sustainable supply and carbon reduction.



# SAVE THE CHILDREN: PROMOTING SUSTAINABILITY THROUGH SUPPLY CHAINS



## INTRODUCTION

In 2019, Save the Children International (SCI) endorsed an Environmental Sustainability and Climate Change Policy to support improved environmental performance, noting the centrality of the supply chain in this work.

Since 2020, SCI has made considerable progress in making its supply chain more sustainable through the creation of a Supplier Sustainability Policy, a Sustainability Pledge, and Sustainability Criteria to evaluate suppliers. Through this work, SCI also aims to drive localization in the countries where it works, using sustainable procurement to create “a positive social, economic and environmental impact on the communities we serve, our suppliers and the planet.”

The policy, pledge, and criteria are part of SCI’s broader Supply Chain Sustainability

Strategy, a multi-year strategy aimed at elevating social, economic, and environmental sustainability to the core of decision-making for the organization and its suppliers.

SCI has 55 country offices and works with 30,000 to 50,000 suppliers. The Supplier Sustainability Policy sends a **clear message to SCI’s suppliers that sustainability is a priority for the organization**. It is hoped that this will put sustainability on suppliers’ “radars” and stimulate positive changes in the way that suppliers source, package, and transport humanitarian materials. In the medium to long term, adherence to this policy should contribute to more significant improvements in the humanitarian sector, with suppliers proactively taking initiatives on social, economic, and environmental sustainability.



Given the particular focus of the Joint Initiative for Sustainable Humanitarian Assistance Packaging Waste Management (JI)'s compendium of case studies, the present case study focuses on environmental—rather than social and economic—sustainability, although these three dimensions are closely interrelated. In terms of environmental sustainability, SCI's objectives are threefold: to reduce its negative environmental impact, to maximize the use of sustainable and natural resources, and to reduce waste through its supply chain.



## WHERE AND HOW DID THE JOURNEY BEGIN?

In 2020, SCI conducted an assessment to identify where to begin its sustainability journey, leading to the development of the Supply Chain Sustainability Strategy and related objectives. To ensure staff engagement and organizational “buy-in” on the issue of sustainability, SCI also created a staff Sustainable Supply Chains Pledge, aimed at driving sustainability through personal engagement. The pledge addresses all supply chain staff wishing to become Sustainability Ambassadors and asks them to commit to several statements to elevate social, economic, and environmental sustainability to the core of their and their suppliers' ways of working. The pledge was produced in English, French, Spanish, and Arabic and circulated towards the end of 2021 to 600 staff members (around 92% of the supply chain workforce).

To support the rollout of the pledge and improve staff awareness and knowledge of sustainability and its importance, SCI created a SharePoint resource page, hosted webinars, and launched a short explanatory video along with an online training module. By the end of 2022, over 100 staff had completed the sustainable training. In parallel, SCI began developing sustainability evaluation criteria to assess suppliers as part of the competitive bid analysis process, and staff began to use the criteria in July 2021. Finally, towards the end of 2022, SCI developed the Supplier Sustainability Policy. The policy sets forth the organization's expectations for suppliers and came into effect at the end of November 2022.



## SUPPLIER SUSTAINABILITY POLICY

### POLICY OVERVIEW

The Supplier Sustainability Policy sets out SCI's core values of creativity, accountability, integrity, collaboration, and ambition, to which suppliers of goods and services are expected to adhere. It reflects the minimum standards that the organization expects of its suppliers, although it is hoped that, over time, suppliers will exceed these standards. Suppliers are required to sign a declaration of compliance in all bid submissions and contract documents.

Before the Supplier Sustainability Policy, SCI requested suppliers to conform to six separate policies. Although these policies touched upon priority areas for the organization such as safeguarding, harassment, bullying, sexual exploitation, modern slavery, fraud and exploitation, the volume of documents (totaling 20 pages) made it difficult for suppliers to comply with requirements. **The new policy is a succinct and streamlined five-page document that lists SCI's expectations of its suppliers and the standards to which they must adhere.**

The new policy contains two types of provisions:

- Compulsory provisions with which suppliers must comply. Concerning environmental sustainability, suppliers “must, at all times, comply with existing environmental legislation and regulations.”
- “Should” provisions that suppliers should work towards. Suppliers are required to set clear goals and work plans to achieve “should” provisions. Generally, suppliers must demonstrate their goodwill to work toward achieving these provisions, otherwise their supply relationship with SCI may be called into question.

It consolidates all of SCI’s existing sustainability-related policies and supplements these with the United Nations Code of Conduct, making it easier for suppliers to navigate the process. It makes clear that all of SCI’s work is guided by a “sustainability mindset.”

Regarding environmental sustainability, suppliers are asked to reduce their negative environmental impact, gain a better understanding of their own carbon footprint, and address these issues by revising their practices and processes by doing the following.

- Develop environmental impact goals and implement an environmental policy.
- Measure and reduce the negative impact of their organization and operations.
- Have a clear understanding of their carbon footprint and a plan to reduce it.
- Reduce waste and emissions throughout the lifecycle of their products and operations.
- Use materials sourced from sustainable origins.
- Review processes, operations, and supply chains to maximize efficiency and reduce waste.
- Use alternative/green energy sources (e.g., solar power).
- Minimize water usage/wastage and adopt water-saving technologies.

## PRACTICAL IMPLEMENTATION

Helping suppliers to meet these standards is an ongoing process, and SCI recognizes it may be easier for larger suppliers to comply with the standards. SCI encourages suppliers to continually improve their operations and provides training and support, to help suppliers develop corrective action plans where necessary.

To implement the policy, SCI first identified 35 suppliers from Nigeria, Nepal, Ethiopia, and key global suppliers. SCI then began to assess the feasibility of the policy in chosen locations, gathered feedback, and integrated its findings into the ongoing process towards the end of 2022.

However, no major changes were made to the policy before implementation. SCI supply chain staff were briefed on the policy and process, and support was provided and adapted to the different needs of each country office. SCI recognized that in some country offices, sustainability considerations were already integrated into the supply chain, whereas, for other offices, this was a fairly new concept. Supplier communication and training were also key in helping embed sustainability into supply chain processes.

At the end of 2022, it became mandatory for any new supplier registering with the organization to sign the Supplier Sustainability Policy. It is now inserted into invitations to tender, requests for quotations, and all terms and conditions. The policy will also be included as an appendix to all new and future purchase orders, contracts, and framework agreements, instead of SCI’s previous mandatory policies.

***“Save the Children’s aim is to guide its suppliers over the long term to meet these standards.”***



## SUSTAINABILITY CRITERIA

### CRITERIA OVERVIEW

To ensure that sustainability is considered when selecting suppliers with whom to work, SCI has developed nearly 200 example sustainability evaluation criteria spanning 31 categories of goods and services. These criteria are used to assess suppliers alongside other “commercial” considerations such as the quality and cost of goods and services.

#### PACKAGING

As an active partner of the Joint Initiative, SCI is particularly aware of the scale and impact of waste resulting from the packaging of humanitarian relief items and works with other humanitarian stakeholders to address this problem in a holistic manner. This is reflected in the sustainability criteria, four of which relate specifically to packaging.

- Demonstrate a packaging reduction strategy and/or an ecological strategy.
- Offer circular economy solutions.
- Use packaging materials that can be easily recycled and are made from recycled or natural content.
- Limit single-use products (plastic bottles, etc.).

### PRACTICAL IMPLEMENTATION

For single/simple quotations, the use of the sustainability criteria is encouraged but optional. For formal quotations and open tenders, the criteria are mandatory. Staff can choose the most useful and relevant criteria from a pre-defined list, or they use their own criteria. Sustainability (social, economic, and environmental) must contribute to a minimum of 10% of the total weighting for formal quotations and open tenders, although this percentage can be increased if necessary.

For each criterion, internal guidance is available for staff on how to score the potential supplier. For example, as to whether suppliers provide goods that are reusable or recyclable, SCI suggests that 10 out of 10 points be awarded to the supplier if all goods are reusable or recyclable, 5 out of 10 points should be awarded if goods contain some recyclable elements, and 0 points should be awarded to the supplier if their goods are not re-usable or recyclable at all.

Staff are encouraged to prioritize the use of criteria that can be concretely measured and scored objectively. However, if not possible, staff may ask suppliers qualitative questions and the answers can be evaluated by the Procurement Committee.

To promote localization and to avoid disadvantaging local suppliers—who might find it hard to conform to the sustainability criteria—SCI has been clear that a supplier’s inability to conform with all sustainability standards and criteria will not disqualify them as potential partners if they demonstrate a willingness to become more sustainable. To support suppliers’ transition to sustainability, SCI continues to conduct supplier training sessions, provide guidance, and help suppliers develop their own sustainability plans. Regarding the additional costs of providing sustainable materials and services, **the fact that sustainability criteria are weighted at 10% as standard helps mitigate the risk** of suppliers scoring lower on commercial criteria e.g., cost.



## RESULTS

Although the pledge, policy, and criteria are new and it is not yet possible to measure their full impacts, there are early signs of success. For example, of the 25,000 suppliers contacted at the end of 2022, not one replied that it was unable to comply with the organization’s Supplier Sustainability Policy. Encouraged by this result, as of December 2022, it became mandatory to use the sustainability criteria to evaluate any supplier for a contract of over 10,000 USD.

Furthermore, the Interagency Procurement Group—a network of logistics professionals from 31 participating organizations—has used SCI’s Sustainable Supplier Policy as the basis for its Supplier Sustainability and Ethical Code of Conduct shared with partners.



## CHALLENGES

Sustainability may be a new concept to some suppliers, meaning that it may be challenging for them to provide sufficiently detailed answers and supporting documents to “prove” that they are taking measures to promote sustainability. As a result, SCI supply chain staff stand ready to guide suppliers and will help suppliers complete paperwork through, for example, site visits, reference checks, and product samples.

To overcome this challenge, SCI is in the process of launching an initiative to start capturing sustainability benefits achieved through its supply chain activities. This will focus primarily on procurement but will also include benefits achieved from SCI’s own supply chain operations (e.g., fleet, warehousing). It will allow country offices to report, monitor, and track improvements in sustainability related to greenhouse gas emissions, waste reduction, etc. In addition, SCI is finalizing a Supplier Dashboard, which will monitor various sustainability metrics, allowing for live progress to be monitored, and for SCI to understand key metrics for its suppliers.



## LESSONS LEARNED

### BUILD MOMENTUM AND ENGAGE STAFF

Given the crucial role of supply chain staff in implementing the Supplier Sustainability Policy and criteria, it was essential to convince staff of the importance of this work and to ensure that they shared SCI’s sustainability ambitions. The staff sustainability pledge was critical to secure staff commitment and was supported by strong communication including webinars and videos, which demonstrated how small changes in staff behavior could have a positive impact on the organization’s overall sustainability. Sharing the results of its supply chain sustainability work internally also helped to build enthusiasm for this work. The organization is now exploring fun ways to ensure continued staff engagement on this issue by, for example, rewarding the office with the best environmental performance.

### BE PROACTIVE AND AMBITIOUS AND LEAD BY EXAMPLE

SCI was proactive and ambitious. Rather than waiting for donors to provide guidance or funding for increased supply chain sustainability, the organization developed its approach to supply chain sustainability and engages in ongoing dialogue with its donors. SCI was among the first humanitarian organizations to develop a policy on sustainability for its suppliers and to use sustainability criteria to evaluate suppliers.

## TAKE A LONG-TERM APPROACH: A JOURNEY OF CONTINUOUS IMPROVEMENT

Ensuring that suppliers meet sustainability standards is an ongoing process. SCI encourages its suppliers to continually improve their operations and supports them in doing so. The fact that a supplier does not meet all of SCI's sustainability standards does not mean that the organization will not partner with them, but rather shortcomings will be addressed collaboratively to help suppliers to transition to more sustainable practices.

## LINK ENDEAVOURS TO TOP-LEVEL STRATEGIES

SCI's work to increase its supply chain sustainability links directly to its top-level commitments and targets related to climate and localization and its social mission—something which is clearly outlined in the Supplier Policy and Sustainability Pledge. This has not only helped strengthen supply chain staff engagement and involvement in the sustainability “agenda”, but also ensured that supply chain staff are key allies in helping the organization achieve its overarching ambitions and targets related to climate and localization.

## SUPPLY CHAIN “MULTIPLIER”

Using the Supplier Sustainability Policy will ensure that more sustainable products are procured from suppliers who not only respect the environment but also protect children, uphold moral and ethical standards, and promote diversity, inclusion, and equality in their ways of working. Adhering to the policy will lead to positive results beyond the realm of procurement and contribute to a positive social, economic, and environmental impact on the communities SCI serves, thereby enhancing the impact of its programs.

## SUPPLY CHAIN STAFF “GET A SEAT AT THE TABLE”

Since the original drive by the Supply Chain Team to address supply chain sustainability in 2018, the team has grown and is now able to influence key decision-making processes within the organization. For example, the Supply Chain Team participates in SCI's Global Climate Change Task Force, has been included in the development of environmental response plans, and has made valuable contributions to the revision of the core humanitarian standards. These actions ensure that internal expertise is shared and that a whole-of-organization approach to tackling climate change and environmental issues is adopted. They reflect the centrality of suppliers and the supply chain in achieving SCI's overall impact.



## NEXT STEPS

For the remainder of 2023, SCI will continue, among other things, to reduce its greenhouse emissions from vehicles, through fleet rejuvenation, rightsizing<sup>27</sup>, and more efficient fuel consumption. In 2024, the organization will build on the foundations of the Supplier Sustainability Policy and further strengthen supplier capacity through its Supplier Sustainability Impact Programme (SSIP). The SSIP, which is tailored to different types of suppliers, focuses on the environment, ethical conduct, and safeguarding of suppliers and targets a selection of “priority” suppliers in each country where SCI operates. The programme is mandatory for selected suppliers, and they will have a year in which to complete it.

A lighter version of the SSIP will be offered to other suppliers, ensuring that a maximum number of SCI's suppliers are informed about the organization's sustainability work and aware of the need to address this issue. Training materials will be developed by SCI at a global level, with input from country offices, and implemented using a Train-

<sup>27</sup> Ensuring SCI's fleet is appropriately sized with the quantity and types of vehicles required to meet the needs of its operations.

the-Trainer process. Training will be delivered online, via webinars, or in person. Materials will be translated and can be customized and adapted to local contexts. Learnings from these training sessions will help SCI staff better understand the challenges and opportunities linked to sustainability at the local level and will inform the development of future work on this topic.



## CONCLUSIONS

Sustainability is a new area of focus for SCI and the wider humanitarian sector, and it will take time to embed this concept into ways of working. At times, it may be difficult to determine how best to integrate sustainability into policies, processes, and programs, but the key is to act with the best intentions. SCI has already made considerable progress towards achieving its supply chain ambitions. The coming 12 months will be an important phase in which SCI will work intensively with suppliers. Ongoing monitoring of the practical implementation of the policy and criteria among suppliers will be crucial, allowing the organization to learn, adapt, and target its efforts where support is most needed in the future.



# PALLADIUM & HSOT: REDUCING SINGLE USE PLASTICS



## INTRODUCTION

The United Kingdom (UK) aid-funded Humanitarian and Stabilisation Operations Team (HSOT) provides the UK government with capacity and specialist expertise to support effective responses to sudden-onset disasters, crises, and complex emergencies around the world. HSOT delivers this support as part of the Humanitarian Emergency Response Operations and Stabilisation (HEROS) Programme, which is funded by UK aid from the Foreign, Commonwealth and Development Office (FCDO) and managed by global impact firm Palladium. HSOT has been committed to increasing the environmental sustainability of its services for a number of years. Since 2019, a significant focus has been placed on reducing the environmental footprint of the packaging of aid items, and a number of measures have been taken to reduce the amount of plastics brought into recipient countries.



*Palladium's kitchen set before and after the change of specifications*



## APPROACH

After an initial assessment of the environmental impact of HSOT's aid activities, plastic packaging became a priority concern for the team. From the beginning, HSOT involved suppliers of non-food items (NFIs), inviting these suppliers to take stock of their practices and identify what improvements could be made. The approach was three-fold:

- Eliminating single-use plastic packaging from primary packaging for commodities where possible.
- Replacing plastic packaging with more sustainable options.
- Ensuring residual single-use plastics are essential, 100% recycled, and 100% recyclable.<sup>28</sup>

## ELIMINATING SINGLE-USE PLASTIC PACKAGING FROM PRIMARY PACKAGING FOR COMMODITIES WHERE POSSIBLE

Eliminating unnecessary plastic packaging and—where this packaging was still deemed necessary— replacing it with more sustainable materials, was a natural first step. This aimed at reducing the volume of single-use plastics ending up in affected communities, where open air burning or uncontrolled disposal can be common practices given the lack of adequate management systems.

As a result of discussions and negotiations with suppliers, **5 out of 11 items procured by Palladium on behalf of FCDO are now received without primary and secondary plastic packaging. These items include dignity kits, solar lamps, and kitchen sets**, and changes have now been embedded in specifications and purchase orders (see Palladium’s packaging specifications [here](#)). Since September 2022, it is estimated that the equivalent of **67,200 plastic bags and 62,000 plastic wrappers have been avoided** because of these changes.

Furthermore, the following packaging items have been excluded from Palladium/FCDO specifications, and they are working to increase the number of NFIs that are actively procured without these items.

- Polyethylene (PE) plastic bags
- Bubble wrap
- Degradable/compostable plastics
- Plastic cable ties
- Acrylic packing tape
- Any single-use plastic packaging

Additionally, laminated cardboard and non-ecological inks have been excluded.

## REPLACING PLASTIC PACKAGING WITH MORE SUSTAINABLE OPTIONS

Where a piece of packaging was seen as essential to protect the item it contained, plastic was replaced with cardboard—this change was included in the specifications for various items. The following alternative packaging items are now recommended.

- Cloth or other non-polymer biodegradable bags (i.e., fabric)
- Paper bubble wrap
- Solid board edge protection
- Paper tape
- String or metal/paper ties
- Paper void fill
- Carboard layer pads

<sup>28</sup> Residual packaging is packaging that cannot be removed.

## ALTERNATIVE PACKAGING MATERIALS



## ENSURING RESIDUAL SINGLE-USE PLASTICS ARE ESSENTIAL, 100% RECYCLED, AND 100% RECYCLABLE

For the remaining single-use plastic packaging that could not be replaced or eliminated, Palladium regularly reviews this issue with its suppliers that such packaging continues to be essential. For example, packaging remains essential when it provides waterproof protection for core relief items, preventing water damage.

Additionally, Palladium requires suppliers to provide **100% recycled** plastic packaging where possible— this is included in its specifications. Recognizing that such packaging is not always possible for suppliers (because of non-availability) a **minimum of 30% recycled plastic packaging material is nevertheless accepted**.

Finally, Palladium also requires that the packaging is **made of 100% recyclable material**. Whether opportunities for recycling exist in the field or not, this requirement means that Palladium provides packaging that is theoretically recyclable (e.g., mono material, not laminated).

To facilitate the recycling process, Palladium now requires its suppliers to provide Resin Identification Codes (RICs) so that packaging waste can be identified, collected, separated, and stored appropriately by implementing partners, and potentially sent for recycling. This need for suppliers to add RICs is also embedded in item specifications.

In some instances, the RICs are even molded into the items (this is the case for lifesaver cubes, buckets, and Jerrycans, for example). It is hoped that this new addition to the specification will help improve recycling downstream because the type of materials will be more easily identifiable, facilitating a planned reverse-logistics pilot.

In addition, suppliers are requested to communicate the volumes (in kilograms) and types of plastic packaging (polypropylene [PP], low-density polyethylene [LDPE], etc.) in the item delivered. This practice has helped

EXAMPLES OF RESIN IDENTIFICATION CODES						
PET	HDPE	PVC	LDPE	PP	PS	OTHER
POLYETHYLENE TEREPHTHALATE	HIGH-DENSITY POLYETHYLENE	POLYVINYL CHLORIDE	LOW-DENSITY POLYETHYLENE	POLYPROPYLENE	POLYSTYRENE	OTHER
WATER BOTTLES; JARS; CAPS	SHAMPOO BOTTLES; GROCEY BAGS	CLEANING PRODUCTS; SHEETINGS	BREAD BAGS; PLASTIC FILMS	YOGURT CUPS; STRAWS; HANGERS	TAKE-AWAY AND HARD PACKAGING; TOYS	BABY BOTTLES; NYLON; CDS

Palladium quantify the amount/volumes of packaging generated by its operations. In turn, sharing that information with its implementing partners and making this information visible can feed into partners' efforts to develop partnerships with recyclers in the field. All these changes have largely been implemented at no added cost.



## CHALLENGES

### MINIMUM ORDER QUANTITIES

Influencing suppliers' practices was sometimes a challenge for Palladium, particularly for items that were ordered in small quantities. Indeed, suppliers are often not in a position to adjust their processes (e.g., changing from plastic to paper tape) only for one buyer (a humanitarian organization), particularly if that buyer is ordering a small number of items.

Palladium did not always have leeway to influence suppliers compared to other humanitarian agencies and has worked with these agencies to help them adjust their packaging. **This practice highlights the potential benefits of harmonizing humanitarian organizations' specifications, to have additional leverage on suppliers and ensure that changes benefit a greater number of buyers.**

### SOLUTIONS FOR TERTIARY PACKAGING

Palladium's experience illustrates once more the difficulty for the sector to find sustainable alternatives for tertiary packaging because of the following reasons.

- Plastic wrap is very effective in protecting aid items (for example, waterproofing them or helping to prevent them moving around on pallets), and so it is difficult to find alternatives that are as effective.
- More sustainable alternatives have not yet been proven to be successful on a wider scale.
- This packaging is often selected and managed by external stakeholders (e.g., transporters) over which humanitarian agencies have less influence.

While increasing efforts are being made by the humanitarian community and its suppliers to remove primary and secondary (plastic) packaging, efforts should also focus on finding collective solutions for tertiary packaging and finding ways to influence transporters, despite the fewer quantities generated.<sup>29</sup>



## LESSONS LEARNED

### PERFORM INSPECTIONS

Specifications are important but not enough—inspection is key. Palladium's experience has shown that, while integrating environmental sustainability into specifications when ordering items is essential—as it gives a clear signal to suppliers that this is high on their list of priorities—this alone is not enough. **Checking items upon reception and making sure delivered items are compliant with specifications is equally important.**

---

<sup>29</sup> An analysis of a purchase of coverage kits conducted by Palladium identified that tertiary packaging represented only 10% of the total packaging for this specific procurement instance. This indicates that tertiary packaging may represent a small proportion of total packaging waste generated when compared to a prereduction baseline.

One of the lessons that Palladium has learned is if the requested changes are not embedded in suppliers' practices, suppliers will continue to do what they have always done.

Being strict with suppliers, making sure that they are actually following specifications, and taking action if they are not, is crucial. Nevertheless, organizations must have the capacity and the resources in house to run such checks.

## HAVE CLEAR AND PRECISE SPECIFICATIONS

Another key lesson learned is the importance of developing specifications that are clearly worded and precise. Clear wording would help limit suppliers' ability to interpret specifications in a more flexible way than what was intended by the purchaser (i.e., allowing for some "wiggle room"). For instance, phrases such as "where or when possible" or "if alternatives exist" should be avoided because they are open to interpretation. Rather, clear instructions such as "use 100% recyclable" should be used. If suppliers cannot meet the required standard, they should be encouraged to communicate and explain why; this can trigger positive discussions between the buyer and supplier. Unclear specifications are likely to be ignored, particularly when they require changes or additional efforts to be made.

## USE THE LEGISLATIVE FRAMEWORK AS AN INFLUENCING TOOL

Palladium's experience shows once more that **leaning on existing legislation can help influence** suppliers and obtain their buy-in. When changing its specifications, Palladium drew suppliers' attention to recent UK legislation on plastic imports (the [Plastic Packaging Tax](#)), whereby Palladium/FCDO risk becoming liable for additional taxation if the items they imported into the UK failed to comply with guidance on minimum recycled content. This also provided impetus for suppliers (located outside of the UK) to comply with Palladium's specifications. Palladium was also able to evoke the existence of plastic legislation in the countries targeted by its humanitarian assistance, to influence suppliers.



## CONCLUSIONS

Palladium's experience in working with its suppliers to include more sustainable practices has not been a linear process. It has involved continuous discussions with suppliers, adjusting processes, and finding solutions adapted to each supplier and each commodity, especially with smaller and/or local suppliers. While some suppliers are ahead of humanitarian agencies in their sustainability journey, others need more push and sometimes support in helping them embed sustainability into their practices. In these cases, bringing a critical perspective to what suppliers are suggesting is key to making sure that solutions are actually more environmentally sustainable and not green washing. This, nevertheless, implies that humanitarian agencies have the capacity in house to bring this perspective, which reinforces the case for greater dedicated environmental resources in the sector.

**JOINT INITIATIVE FOR  
SUSTAINABLE HUMANITARIAN  
ASSISTANCE PACKAGING  
WASTE MANAGEMENT**

A PARTNERSHIP OF



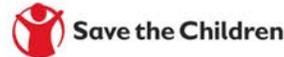
**Climate Action  
Accelerator**

**CONCERN  
worldwide**

**DRC DANISH  
REFUGEE  
COUNCIL**



**Global Shelter Cluster**  
ShelterCluster.org  
Coordinating Humanitarian Shelter



**JOINT  
ENVIRONMENT  
UNIT**

**TOGETHER  
FOR A BETTER  
RESPONSE**



**LEARN MORE AND GET INVOLVED**

Visit our webpage: <https://tinyurl.com/Joint-Initiative>

Subscribe to our newsletter: <https://tinyurl.com/JInews-subscribe>

Follow us on LinkedIn: <https://tinyurl.com/Joint-Initiative-LinkedIn>

Contact the project team: [JI@tetrattech.com](mailto:JI@tetrattech.com)