

# Local reuse systems in Myanmar – reducing single-use plastics

## Overview

Throughout Myanmar, local communities reuse glass whisky and beer bottles to sell locally produced commodities. This practice helps to keep the commercially produced glass containers in circulation.



Credit: www.bbc.co.uk/news/world-asia-pacific-12990563



Juice sold in reused whisky bottles in Nyaung Oo

**“Reuse is not difficult. We practiced reuse for a long time. What is difficult is that plastic is so cheap it destroys our local systems”** – Yan Naing Tun, Community Mobiliser from Karenni State, Myanmar

## Local solutions

**Refillable glass containers** provide a perfect solution to local producers that do not have access to their own branded containers. Producers reuse glass bottles from large commercial brands, such as whisky, beer and instant mix powder, for their local products, including honey, juices and locally brewed alcohol.

**Keeping containers in circulation:** Used containers by local producers re-enter the larger waste picker collection system again, from where they are redistributed to local small and medium-sized enterprises, as well as the local brand that initially owned the container.

**Glass container value:** Empty glass containers have quite a high value, incentivising actors to keep the container in circulation.

## Examples of successful initiatives

In 2021, Lin Lar Pe began packaging their locally produced juice in repurposed whisky glass bottles. Committed to mitigating single-use plastic waste, they offer their products in reusable bottles and encourage their customers to return the bottle to them. Alternatively they purchase bottles from local junk shops. **Location:** Nyaung U Night Market.

**Street shops sell honey from Shan state in whisky bottles:** The use of reuse glass bottles for honey is very common. Local bee keepers often rely on this packaging because it is easily available.

**Location:** Hledan Market.

## Recommendations for the Plastics Treaty

- 1. Design criteria:** Design standards should be developed to allow multi-content use by different brands and different products. This would allow small loop return and refill since the container can be used by many producers rather than only the original producer. For example, in Myanmar the return and reuse glass bottle system functions well because reused glass is much more affordable than virgin glass (imported from Thailand) and is cheaper and more environmentally friendly than SMEs purchasing virgin plastic containers.
- 2. Just Transition:** The waste picker system is the key mechanism to distribute containers to local producers and therefore needs to be supported and strengthened.

## Local impact of plastic pollution

In Myanmar's rural area, 83% of plastic (480 tons per day) directly leaks to the environment by either being burnt or disposed to land and water. A Fauna & Flora study (2019) revealed that over 100 tons per day of plastic enters the Irrawaddy River, making it one of Asia's most polluted rivers.

- **Species:** The Irrawaddy River, Myanmar's largest river, is a biodiversity hotspot, home to several endangered species, including the critically endangered Irrawaddy dolphin, turtles, fish and water birds. These species rely on the river for feeding, breeding and shelter – making it crucial for their survival. However, plastics in the river can entangle species and can cause injury, suffocation and death.
- **Ecosystems:** Plastics in the river can release chemical additives and adsorbed pollutants into the water. These pollutants can negatively impact organisms, disrupting their hormonal balance, immune systems and reproductivity. These pollutants can also impact agricultural activities through soil contamination. Microplastics are also prevalent and can be ingested by many species and can bioaccumulate through the food chain.
- **Livelihoods:** Plastic pollution contaminates water sources – impacting communities reliant on river water for drinking and cooking. Plus, fishers may experience declines in fish stocks and/or may eat contaminated fish – impacting food security and increasing health risks.

***“Plastic is highly destructive to rural communities. They don't need more plastic to develop. They want to ensure that their local systems and products are not destroyed by cheap, industrial, plastic packaged products”***  
– The Su Aye, Thant Myanmar

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### Lessons learnt

- Compared to plastic, glass containers show nearly no pollution effect. This is due to effective return systems coupled with local repurpose mechanisms. Plus, glass provides local cottage industries with valuable packaging for their products.
- Local producers with small production units that sell locally are likely to reuse packaging if it is available and fit for purpose.
- Consumers are willing to accept reused glass packaging because it is generally perceived as hygienic. Plus, consumers are willing to partake in return systems especially when financially incentivised.
- Waste picker infrastructure is well equipped to redistribute reusable packaging. Standardised, well-designed packaging would greatly benefit the Just Transition from 'picking for recycling' to 'picking for use'.

### Challenges:

- Nyaung U is a popular tourist area, but lacks a proper waste collection system and most waste ends up in the Irrawaddy River, thus heavily impacting biodiversity, health and livelihoods.
- Large scale centralised production in factories has little incentive to switch to reusable glass since refillable glass bottles are often more expensive than virgin plastic containers.
- Marketing and branding requires specific packaging identification which is not provided in a system where different producers use the same packaging.