## **REDUCING WASTE GENERATION**



# GLOBALLY



## Food Waste Reduction Initiatives

Reducing food waste has become a global imperative, driven by the staggering realization that around one-third of all food produced for human consumption—approximately 1.3 billion tonnes—is lost or wasted each year. This issue has profound environmental, economic, and social consequences, particularly as nearly 800 million people globally suffer from hunger and food insecurity. The waste represents not just discarded food but a massive loss of resources, including water, energy, labor, and land used for production. When food waste ends up in landfills, it generates methane, a potent greenhouse gas that contributes to climate change. Agricultural food waste is particularly problematic, with inefficiencies in harvesting, storage, and transportation leading to significant losses before food even reaches the consumers.

In response to this multifaceted crisis, governments, businesses, and NGOs worldwide are spearheading a range of initiatives aimed at curbing food waste. These efforts include technological innovations, policy reforms, and grassroots campaigns, all working together to address food waste at various stages of the supply chain—from production and retail to consumer habits. Various initiatives are addressing this issue across sectors. Food rescue and redistribution programs like FareShare (UK), and Food Forward SA (South Africa) collect surplus food from retailers and distribute it to those in need, combating both food waste and hunger. Technology has also played a key role, with apps such as Too Good To Go (Global), Chowberry (Nigeria), and TABETE (Japan) connecting consumers with discounted surplus food. Retailers are reducing food waste while selling cosmetically flawed produce at lower prices. National efforts, such as France's Food Waste Law and South Korea's Zero Hunger Initiative, have implemented policies to mandate food donations and reduce waste. Additionally, innovations like ColdHubs (Nigeria) and composting laws in San Francisco demonstrate how technology and policy can create sustainable solutions.

The global movement to reduce food waste not only seeks to alleviate hunger and food insecurity but also to mitigate environmental damage, improve resource efficiency, and create more sustainable food systems. By adopting innovative solutions and strengthening partnerships, these initiatives strive to address the root causes of food waste, providing hope for a more equitable and sustainable future.





#### FOOD RESCUE AND REDISTRIBUTION

**FareShare (UK)** is the UK's largest food redistribution charity, working to combat food waste and hunger simultaneously. Founded in 1994, FareShare collects surplus food from supermarkets, manufacturers, and farms that would otherwise go to waste. This surplus is then redistributed to frontline charities and community groups, such as homeless shelters, school breakfast clubs, and food banks, to provide meals for vulnerable populations. In 2020 alone, FareShare rescued enough food to provide over 132 million meals. The initiative works closely with major retailers and food producers, helping reduce waste in the food supply chain while addressing food insecurity. By efficiently redistributing surplus food, FareShare not only contributes to environmental sustainability but also plays a vital role in supporting those in need across the UK. In 2023-2024, FareShare have redistributed 56,000 tonnes of food, reached nearly 1 million people and prevented 2 tonnes of CO2e from waste with every tonne of food redistributed.

**FoodForward (SA)** is a leading food rescue organization in South Africa dedicated to reducing food waste and addressing hunger across the country. Founded in 2009, the initiative collects surplus food from manufacturers, retailers, and farmers, redirecting it to a network of over 2,750 beneficiary organizations, including shelters, soup kitchens, and schools. FoodForward SA operates on a large scale, rescuing more than 6,000 tonnes of food annually, which is then distributed to communities in need. Their innovative supply chain bridges the gap between excess food production and hunger, ensuring that edible surplus food is used to provide nutritious meals to millions of vulnerable South Africans. Through this impactful model, FoodForward SA not only combats hunger but also contributes to environmental sustainability by preventing food waste from ending up in landfills. During 2023-2024 financial year, Food Forward SA has distributed 87 million meals and reached 920,000 people daily through its network of beneficiary organisations.



Source: FareShare



Source: Food Forward SA



#### NATIONAL AND GOVERNMENTAL INITIATIVES

**France's Food Waste Law**: In 2016, France became the first country to pass a law specifically aimed at reducing food waste, particularly at the retail level. The legislation requires supermarkets larger than 400 square meters to donate unsold, but still edible, food to charities rather than throwing it away or destroying it. This law prohibits supermarkets from deliberately spoiling food, such as pouring bleach over unsold items to prevent their consumption, which was a practice some stores used to deter dumpster diving. Supermarkets that fail to comply face penalties, including fines of up to  $\in$ 3,750. The law also encourages the establishment of formal agreements between retailers and charitable organizations, facilitating the smooth transfer of unsold food to those in need. This initiative has significantly reduced the amount of food waste in France and has provided millions of meals to food banks and charities. It has also helped raise awareness about the issue of food waste and hunger, inspiring similar legislative efforts in other countries.

**South Korea's Pay-As-You-Throw**: South Korea's innovative pay-as-you-throw (PAYT) system has made the country a global leader in food waste reduction. Implemented in 2013, the policy requires citizens to separate food waste from general waste, which is then weighed, and households are charged based on the amount they discard. Biodegradable bags are used to dispose of food waste, and the cost of these bags reflects the fee charged for waste disposal. The more waste a household generates, the more they pay, creating a direct incentive to minimize food waste. This system has drastically reduced the volume of food waste sent to landfills and incineration, cutting food waste by nearly 30%. The separated waste is now redirected to composting facilities and used to create animal feed or biogas, supporting sustainable waste management. The policy also promotes environmental awareness among citizens and has improved recycling and composting rates across the country.

#### **FOOD WASTE APPS**



**Too Good To Go (Global)**: Founded in 2015 in Copenhagen, the app enables users to purchase unsold food from restaurants, bakeries, and supermarkets at a reduced price. The app operates in over 15 countries across Europe, saving millions of meals from being wasted. Currently there are more than 1 million registered users and 170,000 business partners around the world. Since 2016, the app helped over 350 million meals to be saved from going to waste.

**Chowberry (Nigeria)**: This app works in collaboration with local grocery stores, where people can buy products near their expiration date at discounted prices. The closer the products are to their latest-possible selling date, the lower their price will be. The app alerts users about the lowered food prices. The app also works in collaboration with NGOs which facilitates the acquisition of discounted food products for people in low-income areas who may not be able to afford a smartphone to use the app. During the three-month trial run the app supported 200 families and 150 orphans to buy cheaper food.

**TABETE (Japan)**: One prominent app, TABETE, launched in 2018, partners with restaurants, bakeries, and cafes to sell leftover meals to consumers at reduced prices. Users can register and select their favourite restaurants and cafes and will get notified when the participants restaurants have some left-over items, being able to purchase these at a reduces price. There are more than a thousand shops registered with the service. Most of them are in Tokyo, but the app's reach has extended to other locations as well. The app has garnered recognition and commendation from various distinguished award-giving bodies and the Japanese government. During a trial period with six stores, 2,250 meals were rescued, 250 kg of food waste were reduced and 700 kg of CO2e avoided.

#### Chowberry app (Nigeria)



Source: smallstarter.com



Source: Carbon Care InnoLab



#### INNOVATIVE SOLUTIONS AND TECHNOLOGIES

**ColdHubs (Nigeria)**: is a pioneering initiative addressing food waste and post-harvest loss in Nigeria by providing solar-powered refrigeration units for farmers and food vendors. These innovative, "plug and play" modular walk-in cold rooms enable 24/7 off-grid storage and preservation of perishable foods, making them particularly valuable in rural areas where access to reliable electricity is limited. ColdHubs' flexible payment subscription model allows farmers to pay a daily fee for each crate of food they store, significantly reducing their financial burden. By extending the shelf life of perishable items by 2 to 21 days, ColdHubs has successfully reduced post-harvest losses by an impressive 80%. This not only enhances food security but also increases farmers' incomes and contributes to a more sustainable agricultural ecosystem.

**SAVE FOOD Mango project (Kenya)**: addresses the alarming loss of mango harvests, with studies revealing that approximately 300,000 tonnes were lost annually due to inadequate resources for timely processing. This significant waste results in substantial greenhouse gas emissions and financial losses for farmers. In response, the social enterprise Azuri Health, with international support, has developed a viable business model for processing dried fruits and vegetables. Starting as a small-scale operation, Azuri Health has grown into an export-oriented enterprise with 30 employees and a refined manufacturing line, producing about ten tons of dried mango and other fruits and vegetables monthly. This initiative not only reduces food waste but also empowers local farmers by providing them with a sustainable market for their produce, improving their livelihoods and fostering economic growth in the region.

### SOURCES



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