The Global FoodBanking Network

June, 2024
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The Global Hunger Crisis & The Global FoodBanking Network
GFN Strategy 2022-2026: Three Pillars

1. Foster Network connections to energize innovation, increase nutritious food sourcing, and support excellence in service.

2. Strengthen food banks in places disproportionately impacted by chronic hunger and climate change.

3. Increase food banking’s recognition as a key partner to accomplish food security and climate goals.
2023 Reach & Impact

<table>
<thead>
<tr>
<th>Partner countries</th>
<th>Food banks &amp; networks</th>
<th>Local Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>54</td>
<td>63</td>
<td>75k</td>
</tr>
<tr>
<td>People served</td>
<td>Children served</td>
<td>Women and girls served</td>
</tr>
<tr>
<td>41M</td>
<td>16M</td>
<td>21M</td>
</tr>
<tr>
<td>Kgs of food distributed</td>
<td>Meals provided</td>
<td></td>
</tr>
<tr>
<td>654M</td>
<td>2B</td>
<td></td>
</tr>
</tbody>
</table>
Food Loss and Waste Across the Supply Chain

Source: UNEP
FLW Circular Economy hierarchy

**Background**

<table>
<thead>
<tr>
<th>Most Preferable</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Avoid surplus food generation throughout food production &amp; consumption</td>
</tr>
<tr>
<td>• Prevent FW generation throughout the food supply chain</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Least Preferable</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Waste ingredient; product for sewage disposal</td>
</tr>
<tr>
<td>• Waste sent to landfill</td>
</tr>
<tr>
<td>• Waste incinerated without energy recovery</td>
</tr>
</tbody>
</table>

**Prevention**

- Avoid surplus food generation throughout food production & consumption
- Prevent FW generation throughout the food supply chain

**Re-use**

- Human Consumption
- Animal Feed
- By-Products
- Food Waste

**Recycle**

- Nutrient Recovery
- Energy

**Disposal**

**Loss of food nutritional density**

Original Source: European Commission, 2021
FLW worsens the problem of hunger and climate change

31% of all food is lost or wasted, amounting to 1.3B tons per year

Up To 2.5 billion people are facing food insecurity

If 25% of the food currently lost or wasted globally could be saved, it would be enough to feed 828 million hungry people in the world.

(Source: FAO Food Loss Index)
How Food Banking Works

Farms → Collect & Distribute Food → Community Service Orgs → Nourish People Facing Hunger

Surplus Food

Food Banks

Deliver to People Facing Hunger

Community Service Orgs

Nourish People Facing Hunger
Categories with high nutritional value

**Fruits and vegetables**
- Low in fats, calories and sodium.
- Important sources of many nutrients, such as potassium, dietary fiber, folic acid, vitamin A, and vitamin C.

**Grains and grain products**
- Source of complex carbohydrates, dietary fiber, iron, and B complex vitamins and minerals (magnesium, iron, and selenium).

**Dairy and dairy products**
- Sources of high-quality proteins, calcium, zinc, potassium, Vitamin A, D, and B12, among others.

**Animal Proteins**
- Source of high-quality proteins and easily-absorbed iron, unlike those of vegetable origin.
- Fish are a source of essential omega-3 fatty acids.

**Water**
- It regulates body temperature, transport nutrients and oxygen, helps convert food into energy, etc.
- 60-70% of the body is water.

**Legumes: beans, dried peas, and lentils**
- Important sources of dietary fiber, protein, folic acid, potassium, iron, and zinc.

Over 60% of the food distributed with a higher nutritional value.
As we already know, reducing methane emissions is the fastest way to reduce greenhouse gas effects; at the same time, recovering and redistributing food is the most effective and faster way to reduce food loss and waste.
Quantifying and Increasing Methane Reductions through Community-led Food Recovery & Redistribution

2024
Reducing METHANE gas is a promising way to address climate change in the short term.

30% of current global warming emissions comes from methane (CH₄)

86x Methane is 86x more potent than CO₂ as a greenhouse gas*

*Over a 20-year period; it is 28x more potent over a 100-year period.
Reducing methane emissions from waste is key.

Methane Emissions from Human Activities

- 60% from human activities
- 36% from fossil fuel extraction
- 42% from agriculture
- 18% from waste
- 4% from other

Global Methane Emissions
Developing a methodology to measure methane emissions avoided & study economic instruments.

- **Methodology:** To demonstrate GHG-avoided emissions and other externalities such as social and nutritional impact.
- **Technology:** With Microsoft, to implement the methodology on Power Automates, Microsoft Sustainability Manager, and Environmental Credit Service.
- **Organic Waste Policy (OWP):** Will publish an issue brief summarizing findings in three countries. Produce and share detailed internal report summarizing research, findings, pilot study analyses, and recommendations for the next phase.
- **Food bank subgrants to test the methodology and technology:** Mexico (Monterrey, Puebla, Merida, Guadalajara, and Morelos), and Ecuador (Quito.)
- **Economic Instruments Analysis:** Analysis of possible economic instruments and submission of a roadmap outlining the landscape and understanding inputs needed to support growing, effective, and efficient food bank activities that lead to increased emissions mitigation.
Methodology

How the methodology showcases externalities: SDGs

This methodology set out to provide a methodology to calculate the avoided emissions of foodbanks, but to present the other sustainability impacts foodbanks have the SDG framework was utilized.

- **SDG13: Climate action**
  - Met by calculating the avoided emissions – including methane.

- **SDG2: Zero hunger**
  - Met by calculating the nutritional impact foodbanks have for food insecure beneficiaries.

- **SDG8: Decent work & economic growth**
  - Met by calculating the FTE’s.
  - Under evaluation

- **SDG12: Responsible consumption & production**
  - Met by calculating the overall avoided FLW mass.
Microsoft and The Global FoodBanking Network

Rapidly scaling the volume of nutritious food the GFN network is able to recover and redistribute to food insecure communities.

Capturing data, proving efficacy of the model, visualizing impact, creating credibility, and driving transformative shifts in engagement of food companies, creation of value and informing policy and financial mechanisms. The methodology is being deployed in Microsoft Sustainability Manager.
Going further with artificial intelligence?

We need partnerships and expertise to understand and deliver the full value of food recovery and redistribution to deliver on its social and climate promise.

• Optimize our distribution networks
• Project FLW hotspots
• Understand beneficiaries needs and locations
• Drive insights from the data we are collecting through annual surveys and the methane methodology

• **Environmental Impact:** Deeper analysis of food waste prevention and GHG mitigation.

• **Social Impact:** Deeper analysis of the number of people fed through food waste prevention and co-benefits.

• **Private Sector Insights:** Project medium and long term scenarios for private sector engagement.
GFN Policy Framework

Dimensions
- Food donation policies
- FLW prevention policies
- National climate policies

Strategies
- Policy Analysis and Recommendations
- Policy and business engagement
- Advocacy/awareness

Partners
- Harvard FPLC, WRI, WWF, FAO, GMH, WEF

2.2. Methane mitigation financial flows

Less than 2% of climate finance tackles methane emissions, although it is responsible for half of net global warming.

Solid waste received 30% of total methane abatement global finance in 2021-2022.

Only the 1% of the solid waste global finance is dedicated to the organic waste management, while the rest is used on solid waste-to-energy projects.

Channeling Climate Finance Tools to Vulnerable Communities

"Carbon markets and financing mechanisms for food bank organizations" addresses the importance of food recovery as a key measure to mitigate climate change, emphasizing the significance of calculating the carbon footprint and quantifying the positive impact of food loss and waste (FLW) reduction.

- It highlights the generation of financing through the internalization of greenhouse gas (GHG) emission reductions attributable to food bank operations.
- Barriers such as regulations, scalability, waste modelling, time, liquidity, and price volatility in issuing carbon credits are explored.
- Methodologies available

Unlocking the potential of climate financing mechanisms and seize opportunities to sustainably and profitably finance of foodbanks food recovery initiatives. Collaboration among different stakeholders, transparency in processes, and the adoption of best practices are essential to overcome these challenges and achieve positive outcomes in the implementation of results-based financial instruments in the food banking sector.
Types of Financial Instruments

1. **Article 6 of the Paris Agreement**: With the Article 6.2 of the Paris Agreement quantified emission reduction outcomes can be traded between countries based on rules established within bilateral agreements.

2. **National or subnational regulated carbon markets**: Emission Trading Systems (ETS) and/or Carbon Taxes

3. **Voluntary carbon markets**

4. **Insettings**: Insetting may be understood as another financing mechanism, where an intervening company promotes projects aimed at reducing its emissions profile.

Based on the different financial mechanisms available to distribute, the *Result-based finance* stands out as the one that considers the project performance and the outcomes of its operation. Taking this concept one step further, there still some mechanisms that can directly translate the *environmental results* into *tradable assets* adding a new branch into the *result-based financing*.
Barriers and Challenges

Depending on the financing mechanism or scheme there are barriers and challenges to be addressed, such as:

- **Regulation and requirements**: National regulation, international agreements and technical guidelines and protocols may restrict some specific operations and the amount of reductions to be potentially claimed.

- **Scale**: Projects may not have sufficient scale to generate a number of credits that justify its costs, investments, and logistics necessary for the validation and verifications for issuing its credits.

- **Monitoring and technologies**: Tracing and tracking the operation of the FWL may not be as simple and straightforward as expected, especially if sophisticated baselines are set (based on food types, nutrients, usages and avoided food production).

- **Time**: In this context, time is also an important factor, as the time between the execution of activities that result in reductions and the issuance of credits may reach to several months or even years.

- **Liquidity**: The generation of assets for subsequent sale does not assure that there will be enough demand, or that the buyers will clearly express their intention to purchase from the moment of issuance.

- **Price volatility**: As detailed in Section 5.3, there are different markets and sales channels that can critically influence the selling price of the reductions. The choice of standards and access to markets with higher carbon prices is critical for the cost-benefit equation of the project.
Enabling strategies

1. **Price:** In general terms, selling credits in regulated markets may be the first choice to maximize the selling price of the credits.

2. **Quantity:** Ensuring the carbon accounting methodology and additionality assessment criteria are well-aligned with the operational reality and economic environment will directly impact in the amount of issued certificates.

3. **Methodologies and certification programs:** The choice of methodology and program may maximize the admissibility and recognition of Reductions.

4. **Monitoring, Reporting, and Verification (MRV):** MRV systems are appliable to all mechanisms, programs, and standards involved in results based environmental finance.

It is possible and urgent for climate finance mechanisms to reach the most vulnerable communities that are preventing food losses and waste.
Transformative Shift

We believe that with increased investments in data, technology, quantification, policy, capacity, and mobilization, food banks would make a step change in food collection and redistribution to move from collecting 1% to 5% of total food loss and waste by 2030.

<1% vs. ~5%

- 1.6 million tons of CO2e avoided
- 368M kilograms of food rescued
- 41 million people served

- 7.5 million metric tons of CO2e per year
- 1.93B kilograms of food rescued
- Over 50 million people served

The Global Food Banking Network®
Ana Catalina Suárez Peña
Strategy and Innovation Senior Director

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