

## 2.14 Reduce global food loss

### ***Investing \$1 trillion to reduce global food loss of high-impact commodities by 2025***

#### **What problem is your solution addressing?**

A food system imperative is to reduce commodity losses so we can improve agricultural yields that use finite natural resources. High-emission supply chains such as beef, dairy, and rice contribute at least 70% of agricultural emissions globally. In addition, FAO estimates 475 million tons of lost food could be saved through refrigeration alone, potentially improving the diets of millions. Food losses are different across regions, therefore different interventions must be implemented globally. We must reduce on-farm and post-harvest food loss, establish real-time loss measurement and diagnostics capabilities, and scale investment into interventions to ensure more food is made available from *existing* global food production.

#### **How does your solution address the problem?**

The aim of producing critical global commodities (both perishable and non-perishable) should be to produce increasing and regenerative yields, while also reducing carbon emissions, farm inputs and freshwater withdrawals. *Meeting these goals will require the reduction of on-farm and post-harvest losses.*

Reducing on-farm and post-harvest loss requires a multi-faceted approach including:

- Establishing *multi-billion-dollar global investment mechanisms to improve cold chains, farm technology, knowledge, and loss reduction solutions*;
- Scaling pilot projects that have already proven to increase food security while mitigating climate change;
- Establishing *real-time commodity loss measurement and establishing a country-level diagnostic information network*;
- Providing ongoing business case development for food loss interventions.

As an example, working with 700 smallholder rice producers in Nigeria, Wageningen Food and Biobased Research (WFBR) supported Olam to assess effectiveness of food loss interventions. Using WFBR's tool [ACE-calculator](#) to select the most prosperous interventions, annual impacts were:

- Loss Reduction of 920 kg of rice per farmer
- Increased income 338 US\$ per farmer
- 3 tCO<sub>2</sub>-eq greenhouse gas emissions per farm

These types of measurement and solution interventions, supported by global financial investments, will have an incredible impact on not only environmental outcomes, but also on livelihoods and global food security goals.

#### **Is this a new solution or an existing solution that needs scaling?**

Existing solution in need of scaling

#### **Which organization/s, institution/s or group of individuals are associated with the solution?**

WWF, World Bank, Rabobank, WFBR, IFPRI, WUR, CIAT, CGIAR-CCAFS, FAO, UNEP

**If selected as a game-changing solution, how will you leverage the UN Food Systems Summit to scale your solution?**

The UN Food Systems Summit will provide a platform to showcase the urgency for consistent supply chain data collection, transparency and scaling of food loss solutions. In addition, it will showcase the urgency for investment mechanisms to fund needed interventions in key geographies. Billions of dollars of technical assistance and solution investments will be needed to implement food loss and cold chain solutions. The UN Summit could provide a critical convening where that financial planning can occur.

**Is this idea applicable to a particular geography, demography, landscape or other type of setting (e.g. high- or low-income countries, aquaculture)? If so, please specify.**

This idea is global and will be adapted for use in regional contexts.

**Who are the main actors that would put this action into place?**

Policymakers (government), Farmers/fisheries, UN agencies

**Source and process:**

- Pete Pearson, WWF, WS3 member