Food loss and waste in Egypt

What is food loss and waste (FLW)?

Food Loss is food that gets spilled or spoilt before it reaches its final product or retail stage, before it even reaches consumers.

Why does Food Loss happen?
Poor harvesting techniques; problems in storage, packing, transport, infrastructure; exposure to heat and sunlight; lack of processing and low value addition; inefficient marketing systems; and, weaknesses in policy and regulatory frameworks.

Food waste is fit for human consumption, but is not consumed because it is left to spoil or is discarded by retailers or consumers.

Why does Food Waste happen?
Habits, behaviors, customs and traditions. Significant wastage takes place during religious holidays, wedding ceremonies and family gatherings, and in the hospitality industry such as in restaurants and hotels.

Where does FLW happen?
From farm to fork! Food is lost or wasted throughout the supply chain, from initial agricultural production down to final household consumption.

FLW Natural Resource Footprint in Egypt

Carbon footprint:
(Greenhouse gas emissions) Almost 500 kg per capita of CO₂ emissions per year contributing to climate change.

Land footprint:
Over 8 000 m² per capita of land is used to produce food that goes to waste, which is equivalent to two feddans per person, per year.

Water footprint:
90 m³ of water per capita is lost each year due to the production and distribution of food that ends up lost or wasted. This number is the highest in the NENA region, followed by North America and Oceania, and South and Southeast Asia.

A lot of water is needed to produce food, for example:
- One tomato needs 13 litres of water
- One potato needs 25 litres of water
- One glass of apple juice needs 190 litres of water
- One glass of milk needs 200 litres of water
- One cup of coffee needs 140 litres of water
- One burger needs 2 400 litres of water
Why make food loss and waste reduction a priority?

Preserving the quantity and quality of food can make more food available with the nutrition, safety, and variety needed to feed the growing Egyptian population.

FLW Natural Resource Footprint in Egypt

Environmentally, FLW represent a waste of resources used to produce and distribute food, such as land, water, energy and inputs. Food produced and not consumed, as well as food discarded in landfill, lead to unnecessary CO₂ emissions and exacerbate the effects of climate change.

In Egypt, over 25 percent of the workforce are employed in the agriculture sector. Actions taken to reduce losses, such as improved technologies, postharvest handling, processing activities, and better marketing channels, can develop value chains and boost incomes and growth across the agriculture sector.

A glimpse on FLW projects in Egypt

Wheat

Wheat losses in traditional storage shona are estimated to be 10 to 20 percent, with further losses all along the value chain of balady bread. An FAO project in collaboration with the Field Crop Research Institute aimed to build capacity in wheat postharvest handling, to reduce losses and inefficiencies along the value chain of Egypt’s staple crop.

Grapes

As a fresh fruit, grapes are very delicate, and losses during harvest and distribution can be high. FAO project “Food Loss and Waste Reduction and Value Chain Development for Food Security in Egypt and Tunisia” funded by the Italian Agency for Development Cooperation has preliminary estimated grapes loss in the range of 25 to 35 percent, linked to factors such as price fluctuations, shifting international market demand, and poor postharvest handling, and is working to introduce processing in order to reduce FLW.

Tomatoes

Tomatoes are a key horticulture crop in Egypt, but preliminary estimates found more than half are fully spoilt, or exhibit quality loss and damage by the time they reach consumers. FAO project “Food Loss and Waste Reduction and Value Chain Development for Food Security in Egypt and Tunisia” funded by the Italian Agency for Development Cooperation is working on the causes; insect’s injuries, mechanical injuries, physical damage by sun or the use of palm crates as packing material.

Fish

Fish value chain and loss assessments were conducted through an FAO project in 2017, focusing on semi-industrial fisheries, small-scale lagoon fisheries and tilapia aquaculture. The project developed the capacity of various actors in the fisheries sector to identify solutions to FLW, such as the use of square mesh netting in trawls, the promotion of value addition and processing, and the use of aeration paddles to improve water quality in aquaculture production.