



Food and Agriculture
Organization of the
United Nations

Food loss and waste reduction and value chain development for food security in Egypt and Tunisia

Egypt component



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Concept

Food loss and waste (FLW) along food value chains in the Near East and North Africa (NENA) are estimated to reach 250 kg per person and over USD 60 billion annually. The social, economic and environmental impacts are serious for a region which relies heavily on global food imports, has limited potential to increase food production and faces scarcity of water and arable land. Roughly two-third of food loss occurs during the production, handling, processing and distribution of food and the other one-third at consumer-level.

Egypt is the NENA region's most populous country with over 92 million people and a projected 120 million by 2050. Rapid population growth, along with limited fresh water resources and arable land, is placing greater stress on Egypt's rural and urban food systems in terms of quantity and in terms of changing food preferences towards high-value, more perishable fruits and vegetables.

While food needs are growing, FLW in Egypt are high, especially for perishable products. Across the region, fruit and vegetable FLW are estimated to reach 45-55 percent of production annually. Baseline data for this project estimates quantitative loss of over 45 percent of grapes and over 50 percent of tomatoes in the production, retail and wholesale stages of the value chain alone, along with serious loss to quality.

The project aims to reduce FLW through a value chain development approach, focusing on the post-harvest, marketing and processing stages and promoting value chains that are better organized, have a reduced impact on the environment, more inclusive of smallholders, better able to generate added value, providing increased opportunities for rural off-farm and/or agro-industry employment.



Loss and waste along the value chain stages



Production and harvest

Crops damaged, bruised or left behind in fields due to poor postharvest handling practices and poor harvesting skills - crops sorted out because of the lack of awareness for standards and quality.

Storage

Deterioration in quality and pests/disease attacks due to inadequate storage facilities and techniques.



Transportation and distribution

Damage and spillage during transport because of inadequate transportation and distribution systems.



Processing and packaging

Spillage, damage or contamination causing quality and quantity loss due to inadequate processing and packaging methods.



Wholesale and retail markets

Spilled or damaged crops and products in market due to inadequate infrastructure and poor handling.



Consumption (Hotels, restaurants, catering and households)

Items not eaten for different reasons due to poor storage/stock management, lack of awareness and consumer behavior.



Objectives

1. Generate knowledge on the status, magnitude and extent of food losses and waste in Egypt.
2. Technical and managerial capacity of defined food value chain actors (farmers, traders, processors, transporters, laborers), with an emphasis of women-organizations, are increased to better coordinate, negotiate and organize in food chain activities.
3. Technologies and good practices to reduce food losses and waste are acquired and adopted by defined value chain actors, with a specific focus on Small and Medium Agricultural Enterprises (SMAEs), including food safety and quality improvement.
4. Improved linkages/business partnerships are activated to increase value addition in selected and defined value chains.



Main activities

In Egypt, the project is focusing on tomatoes and grapes value chains originating from the main areas of production with targeted support to postharvest handling, value addition and/or processing and marketing.

Studying the value chains for tomatoes and grapes and analyzing the levels and causes of food loss in value chains and developing a monitoring system for losses

Training in postharvest handling for value chain actors

Introducing value-addition activities and providing a package of technical, marketing, and business support to beneficiaries organizations

Supporting market information flows, access to knowledge and training, and vertical linkages among small-scale farmers, traders, transporters and buyers

Conducting awareness campaigns on the levels and impacts of losses and help generate demand for better quality products

Studying environmental effects of food losses and opportunities for reuse and recycling of grapes and tomatoes waste



Stakeholders

The main stakeholders in the project are the actors in tomato and grape value chains originating in Nubaria and Sharkia. In particular, small-scale farmers, small-scale traders and SMAEs, with cooperatives, associations and local communities, as well as support service providers to the specified food chains.

Project info

Project duration:

October 2015 – September 2018



ITALIAN AGENCY
FOR DEVELOPMENT
COOPERATION



Geographic coverage:

- Teeba Zone, Nubaria: Grapes
- Bangar el Sokor, Nubaria: Tomatoes
- Sharqia Governorate: Tomatoes

Donor:

Italian Agency for Development Cooperation

Project contacts

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