Food and Agriculture Organization of the United Nations

SUSTAINABLE DEVELOPMENT GOALS

SAVE FOOD – Regional Initiative on Food Loss and Waste Reduction

Food Loss and Waste Reduction in Europe and Central Asia

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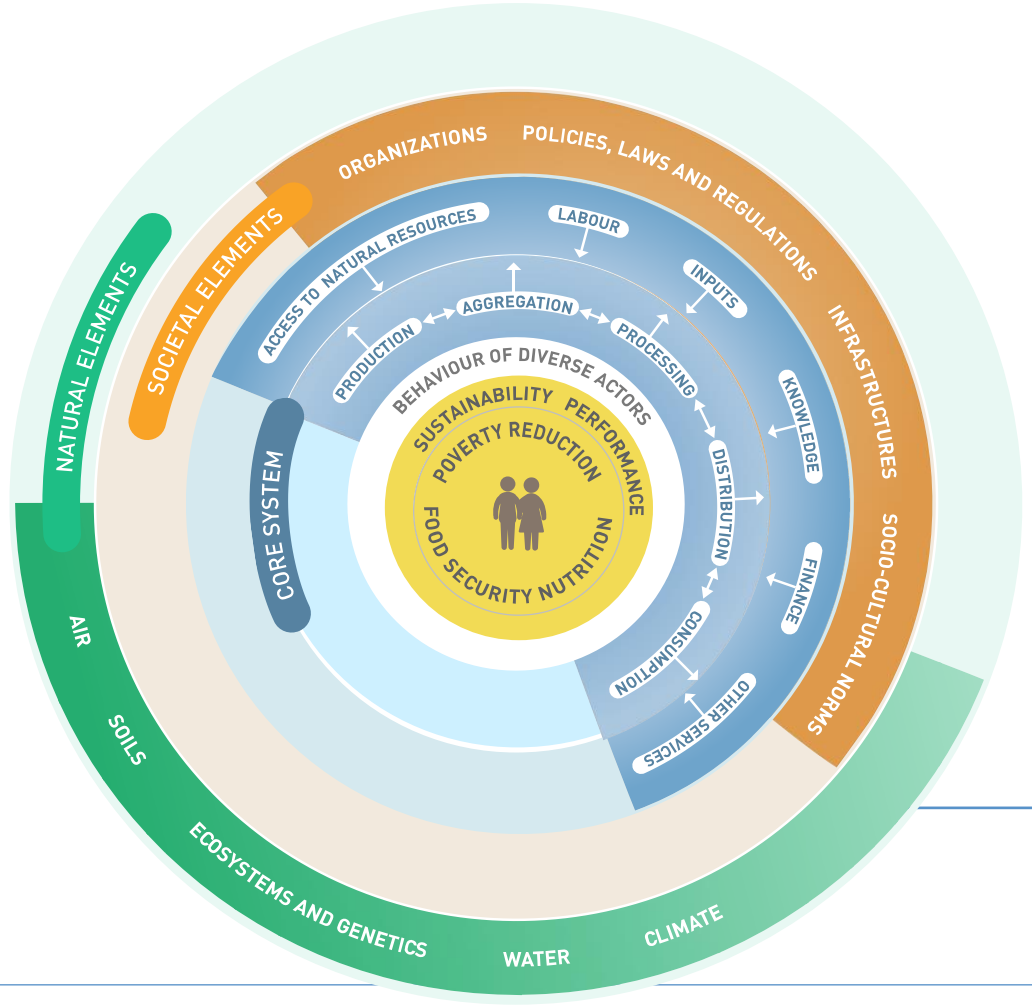
SUSTAINABLE DEVELOPMENT GOALS

Food System



The **interconnected set of actors and activities** involved in the production, aggregation, processing, distribution, consumption and disposal of food products,
as well as the **broader** economic, environmental and societal **context,** that is **coherently organized** with the overall **function/ purpose** to provide food and nutrition security for all people.

A Sustainable Food System does not compromise the economic, environmental and societal bases for providing food now and for future generations. It is resilient to external shocks in the economic, environmental and societal context.

SAVE FOOD Initiative: Multi-disciplinary approach

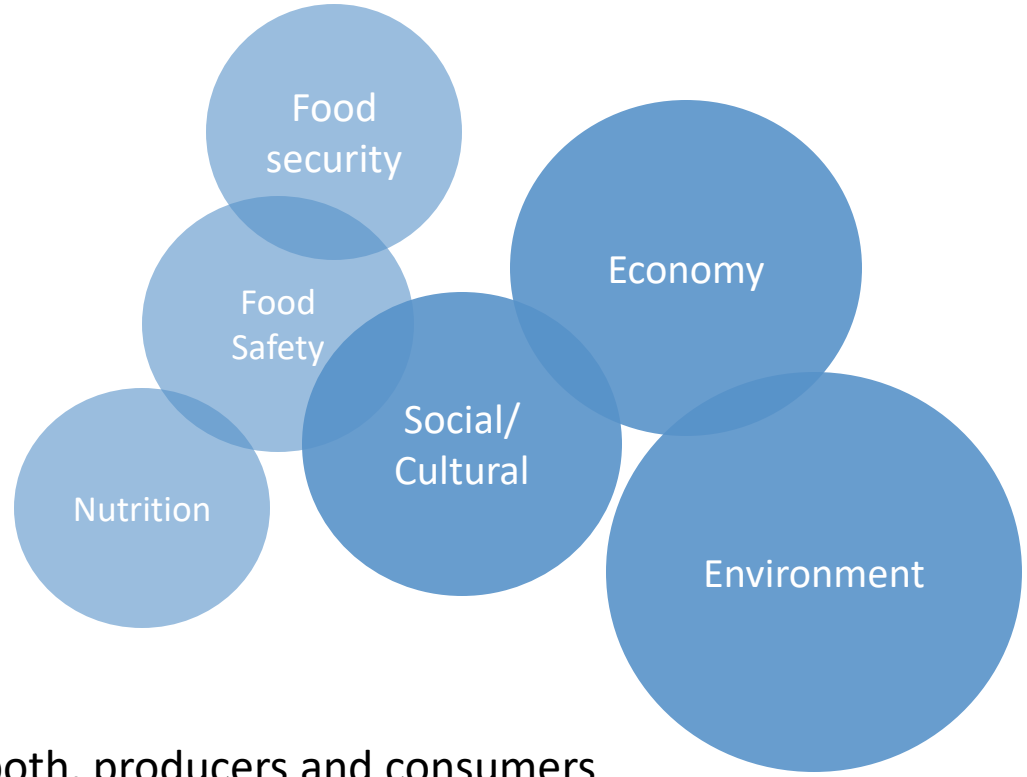
Due to the magnitude and complexity of the problem, a holistic multi-disciplinary response is required to address it, involving all actors and stakeholders affected by FLW.

Impact of FLW on the environment and climate change

- Use of natural resources – land and water
- Impact on biodiversity
- CO_2 emissions by the value chain

Impact of FLW on food security, nutrition, food quality and safety

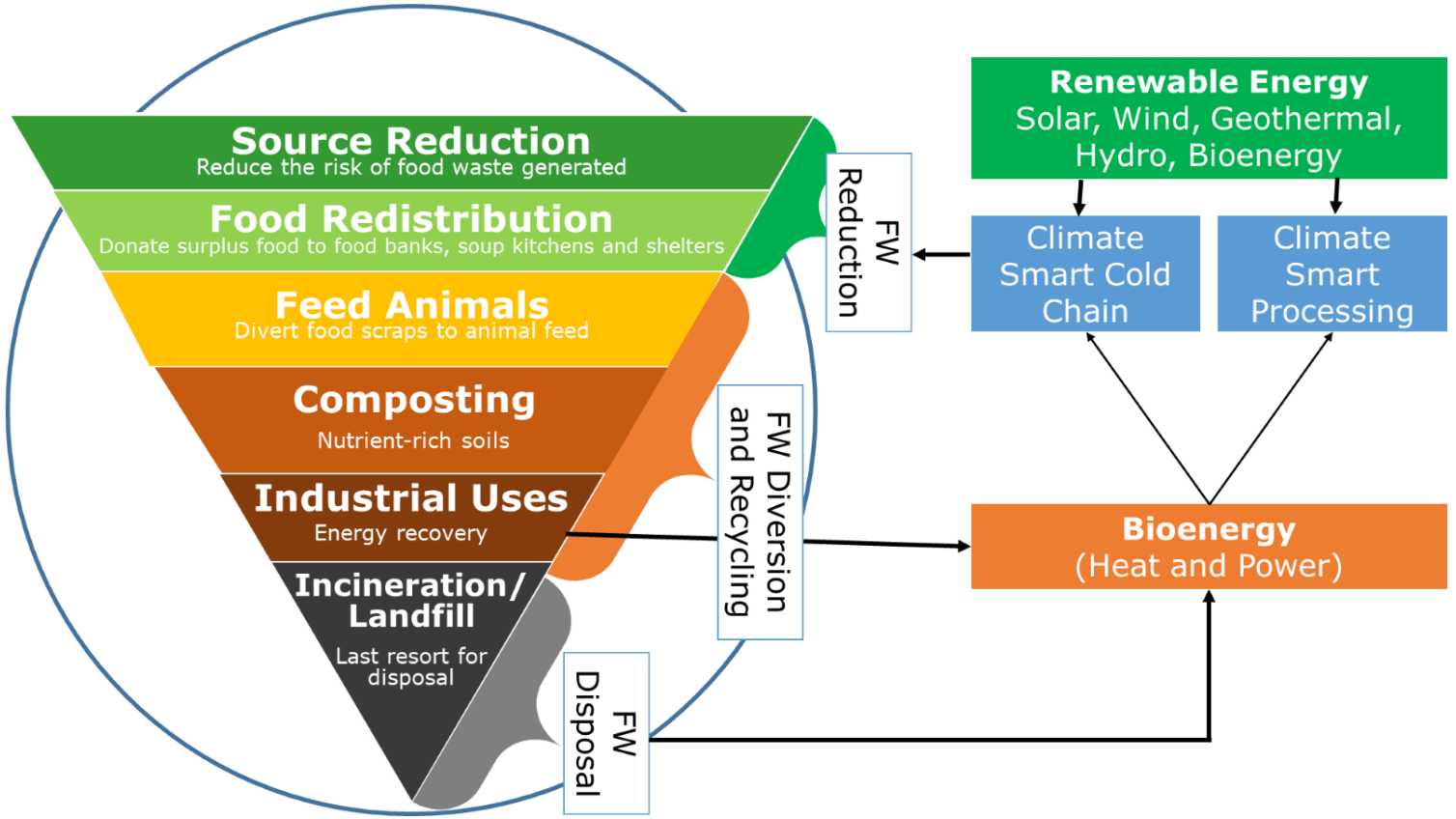
- Access to food (smallholder food producer)
- Higher prices (food insecure consumer)
- Qualitative food losses -> reduced nutritional value
- Unsafe products



Economic impact of FLW

- Income distribution in value chain
- Improvement in the efficiency of supply chains benefits both, producers and consumers

Food Loss and Waste Management Hierarchy



Why is FLW important?

To increase food availability, food loss and waste reduction is in principle far more efficient than increasing food production.

By 2050 need for 60% more food available:

When halving FLW, only 28% increase of production required.

What is food recovery and redistribution

- **Recovery of safe and nutritious food for direct human consumption** is to receive, with or without payment, food (processed, semi-processed or raw) which would otherwise be discarded or wasted from the agricultural, livestock, forestry and fisheries supply chains of the food system.

- **Redistribution of safe and nutritious food for direct human consumption** is to store and/or process and then distribute the received food pursuant to appropriate safety, quality and other relevant regulatory frameworks directly or through intermediaries, and with or without payment, to those having access to it for direct food intake.

What is food recovery and redistribution

The **main actors involved** in food recovery and redistribution operations are generally:

1. The **donor/supplier**: producers, food processors and manufacturers, hotels, restaurants, caterers and retailers

2. The **redistribution organizations**: food banks, food pantries, soup kitchens, school feeding programmes, NGOs and churches.

3. The **consumers/end-users** (the people in need).

4. In some cases, **facilitators** who simplify the recovery and redistribution process and act as intermediary organizations between donors and recipients of food products.

5. **Information and communication technology (ICT) networks** - platforms, websites and applications - can also be used.

Justification for setting up a food R&R program: towards an enabling regulatory and policy environment

SOCIAL AND ETHICAL

ENVIRONMENTAL

ECONOMIC

Barriers to food recovery and redistribution

- Tax barriers and the application of VAT (value added tax) on donated food.
- Liability issues.
- Date marking issues.
- The lack of a food bank

Role and importance of national legislation in FLW reduction

- **Analyse existing national legislation and policies related to FLW prevention and management**
  - Determine: legal basis for food disposal and secondary use of FLW, gaps in legislation, if the current framework favours or prevents innovative action in the management of FLW
  - Identify what model is to be applied at the national level and where, in legislation and policies, adjustments are needed
- **Create an enabling policy and regulatory environment**
  - Integrate the issue of FLW and their management in the relevant policy documents and programmes
  - Provide legislative changes if necessary
  - And/or draft and approve a new law on the prevention and reduction of FLW
- **Objective:** promote private investments, support innovation and technological development, avoid unfair trade practices and regulate the marketplace, incentivizes good practices and discourage practices that increase the levels of FLW, etc.

Food Waste – Social and Behavioral Science approach

Most of the *food waste* is the result of certain behaviour – therefore, there is a need for behavioural change, all along the food supply and consumption chain.

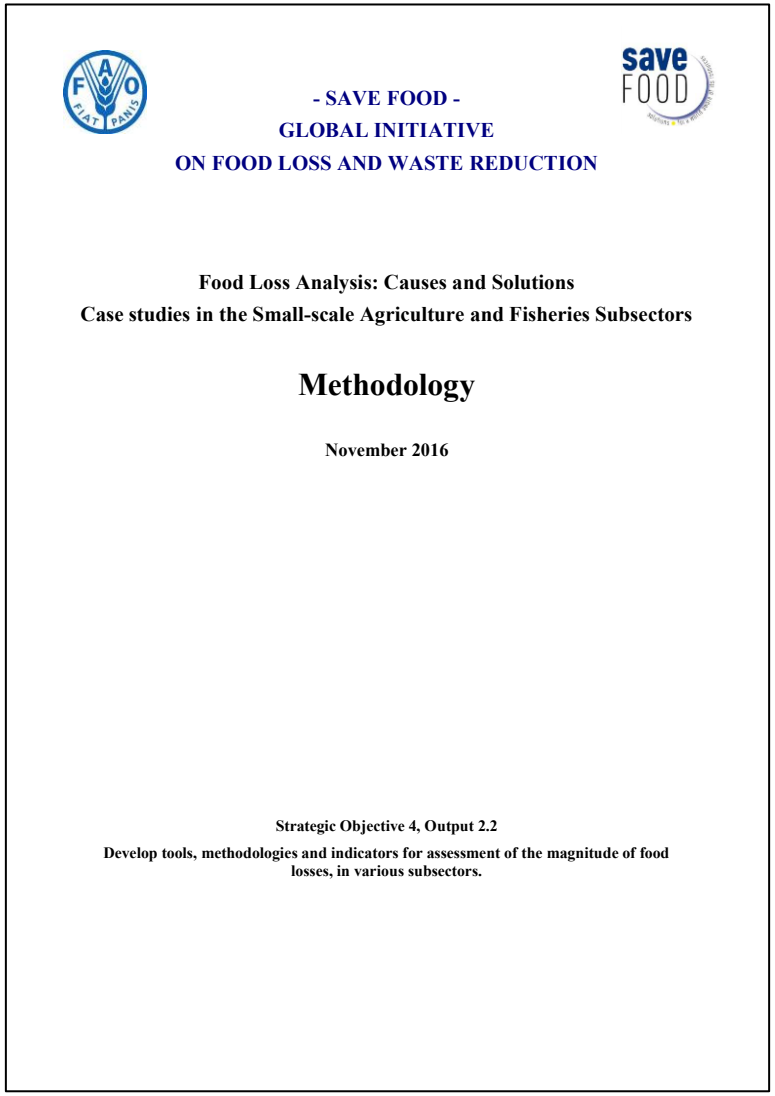
Project Objectives:

1. Defining the desired change as a series of target behaviours (change in socio-economic behaviour that is required by FSC actors and consumers)
2. Localizing and assessing food waste levels and causes along FSC
3. Diagnosing and prioritizing barriers to change in terms of what is impeding target behaviours

Methodology of FLW Causal Analysis multidisciplinary approach

Social and behavioural dimension of causal analysis of constraints in value chains

The example of the Methodology ”Food Loss Analysis: Causes and Solutions. Case studies in the Small-scale Agriculture and Fisheries Subsector”



- SAVE FOOD -
GLOBAL INITIATIVE
ON FOOD LOSS AND WASTE REDUCTION

Food Loss Analysis: Causes and Solutions
Case studies in the Small-scale Agriculture and Fisheries Subsectors

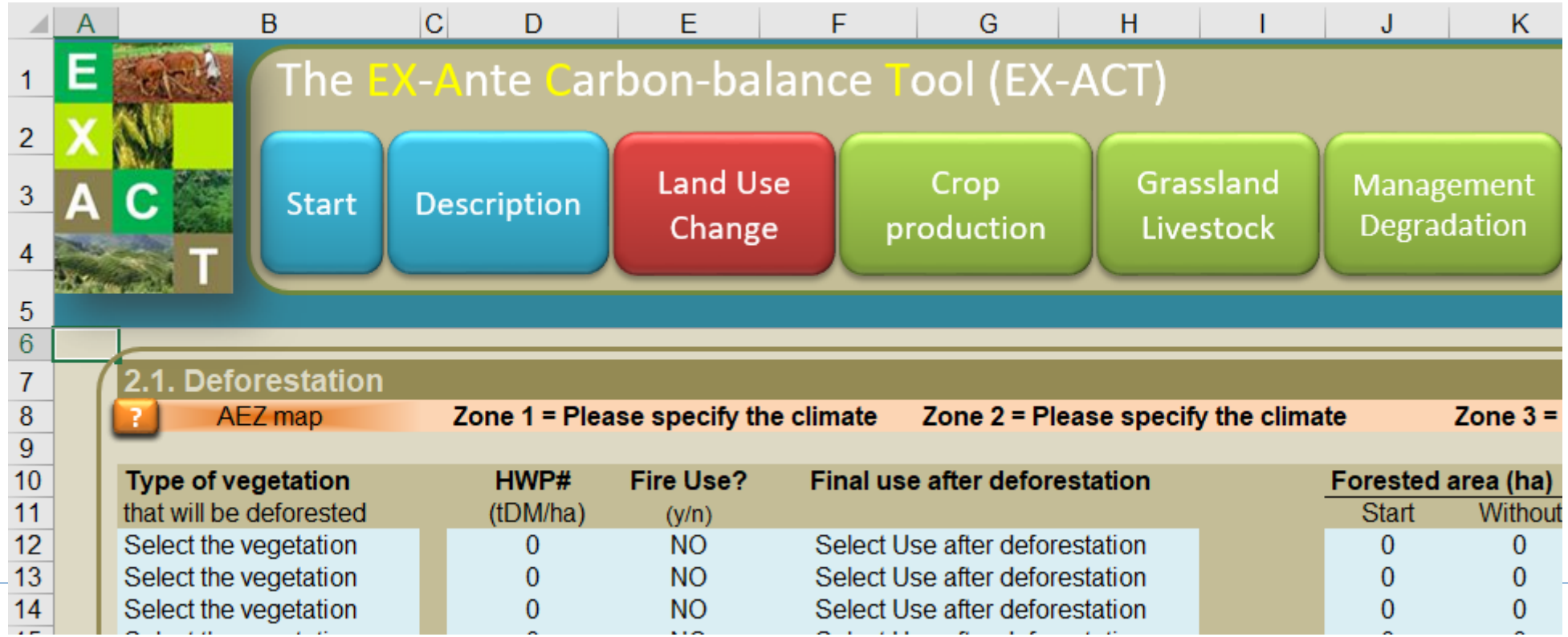
Methodology

November 2016

Strategic Objective 4, Output 2.2

Develop tools, methodologies and indicators for assessment of the magnitude of food losses, in various subsectors.

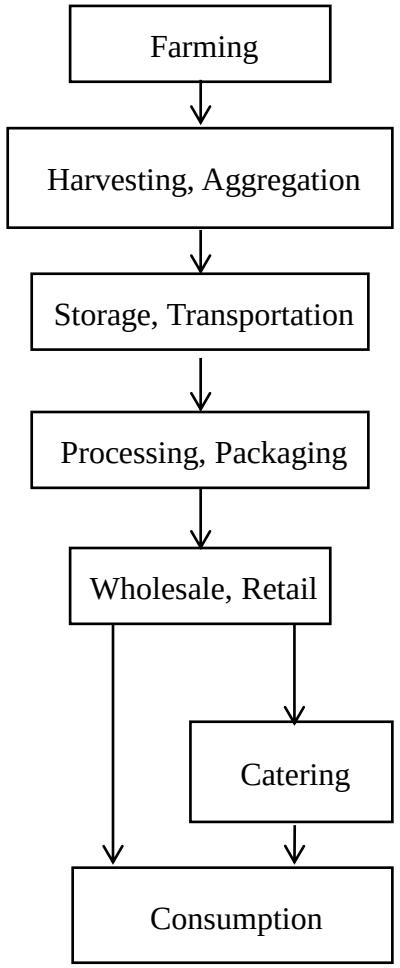
- **EX-Ante Carbon-balance Tool for value chains | EX-ACT VC** supports policy makers in identifying **off-farm sources of GHG emissions and farm-to-retail socio-economic benefits** when designing projects and policies for low carbon value chains.



Inputs Services

Land
Water
Chemicals
Materials
Equipment
Infrastructure
Labour
Energy
Transport

Value Chain activities



Measurements ExACT (basic scenario)

Quantification:

Inputs

Products

Losses

By-products
Disposals

Quantification:

GHG Emissions

Economic costs and revenue

Value Chain Causal Analysis

Analysis:

VC actors and activities

Reasons for activities

Causes of FLW
Reasons of wasting food

Solutions:

Good Practices

Enabling Environment

FLW reduction

Behaviour change

Assessment of **social** acceptability

Scenario 2 ExACT

Quantification:

Good Practices

Enabling Environment

Behaviour change

FLW reduction

Calculation of **environmental** (ghg) and **economic** ($) cost-effectiveness

Multi-disciplinary team of
Sociologist/ Behavioral Scientist, Technologist, Economist, Environment Expert

Resources

The State of Food and Agriculture (SOFA) 2019 Moving forward on food loss and waste reduction;
http://www.fao.org/publications/sofa/2019/en/

Voluntary Code of Conduct for Food Loss and Waste Reduction, Conference, FAO; http://www.fao.org/3/nf393en/nf393en.pdf

2018: Overviews of food systems and agro-industry, value chains, and food loss and waste in the countries of Eastern Europe and Central Asia;
http://www.fao.org/3/i9788en/I9788EN.pdf

Food recovery and redistribution a practical guide for favourable policies and legal frameworks in Europe and Central Asia;
http://www.fao.org/uploads/media/Food_recovery_and_redistribution_guide.pdf

E-learning Course on the SDG Sub-indicator 12.3.1.a – Food Loss Index
https://elearning.fao.org/course/view.php?id=605

E-Learning Course on the Case Study Methodology
http://www.fao.org/elearning/#/elc/en/course/FLA

Save Food – Global Initiative on Food Loss and Waste Reduction;
http://www.fao.org/save-food/en/

CA1170EN/ca1170en.pdf | Educational materials on food waste reduction Age group 1 (5 to 7 years)

CA1171EN/ca1171en.pdf | Educational materials on food waste reduction Age group 2 (8 to 9 years)

CA1173EN/ca1173en.pdf | Educational materials on food waste reduction Age group 3 (10 to 13 years)

CA0995EN/ca0995en.pdf | Educational materials on food waste reduction Age group 4 (14 years up)

http://www.fao.org/3/CA1475EN/ca1475en.pdf

Thank you!

Please visit our website:
www.fao.org/save-food

join the Community of Practice:
https://dgroups.org/fao/savefood/