



Food and Agriculture Organization  
of the United Nations



## **Global Initiative on Food Loss and Waste Reduction - SAVE FOOD**



**Global Initiative  
on Food Loss and Waste Reduction**

# History of FLW action

**1950 – 1970.** Focus of agricultural development on primary production.

**1970 – 1990.** Development of ‘food technology’ as a science, implemented as ‘postharvest technology’. ‘Action Programme for the Prevention of Food Losses (PFL)’.

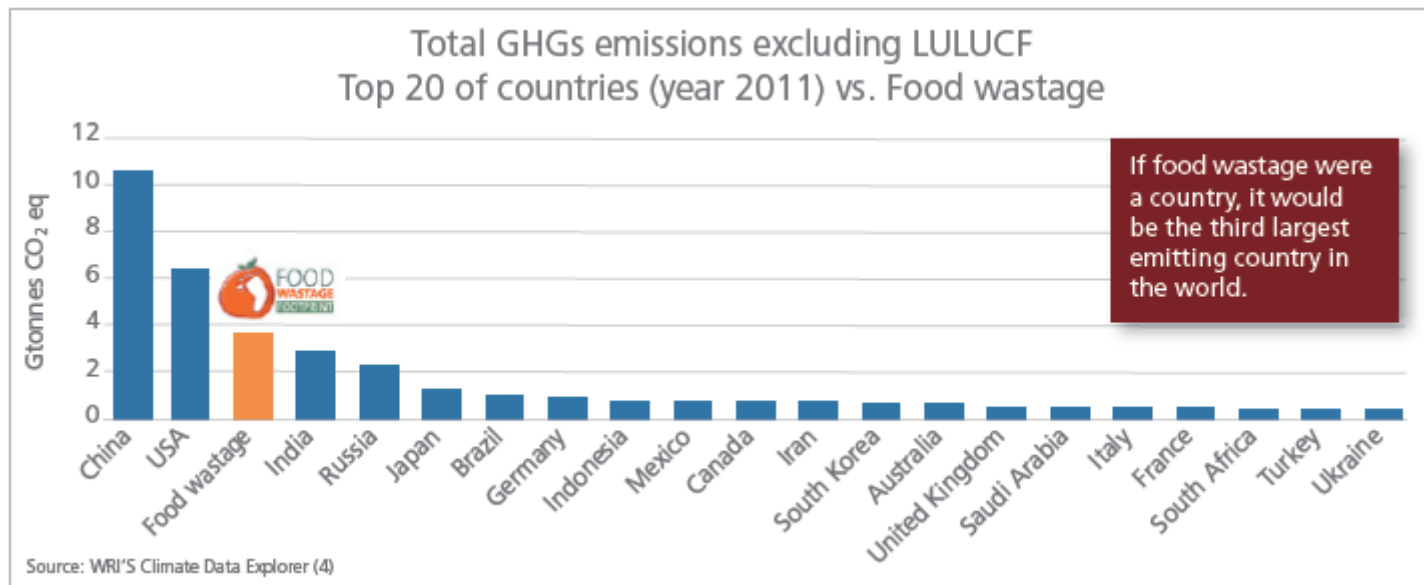
**1990 – 2010.** Accelerated development and introduction of the ‘Quality Management’ concept and ‘Logical Framework’. Application of the ‘Value Chain’ approach. ‘Special Programme on Food Security (SPFS)’.

**2010 – .** Climate change on top of the political agenda, relation with energy-/ natural resource efficiency and FLW is made. The 2011 study ‘Global Food Loss and Food Waste’ and the Düsseldorf Save Food Conference introduced Food Waste to FAO vice-versa.

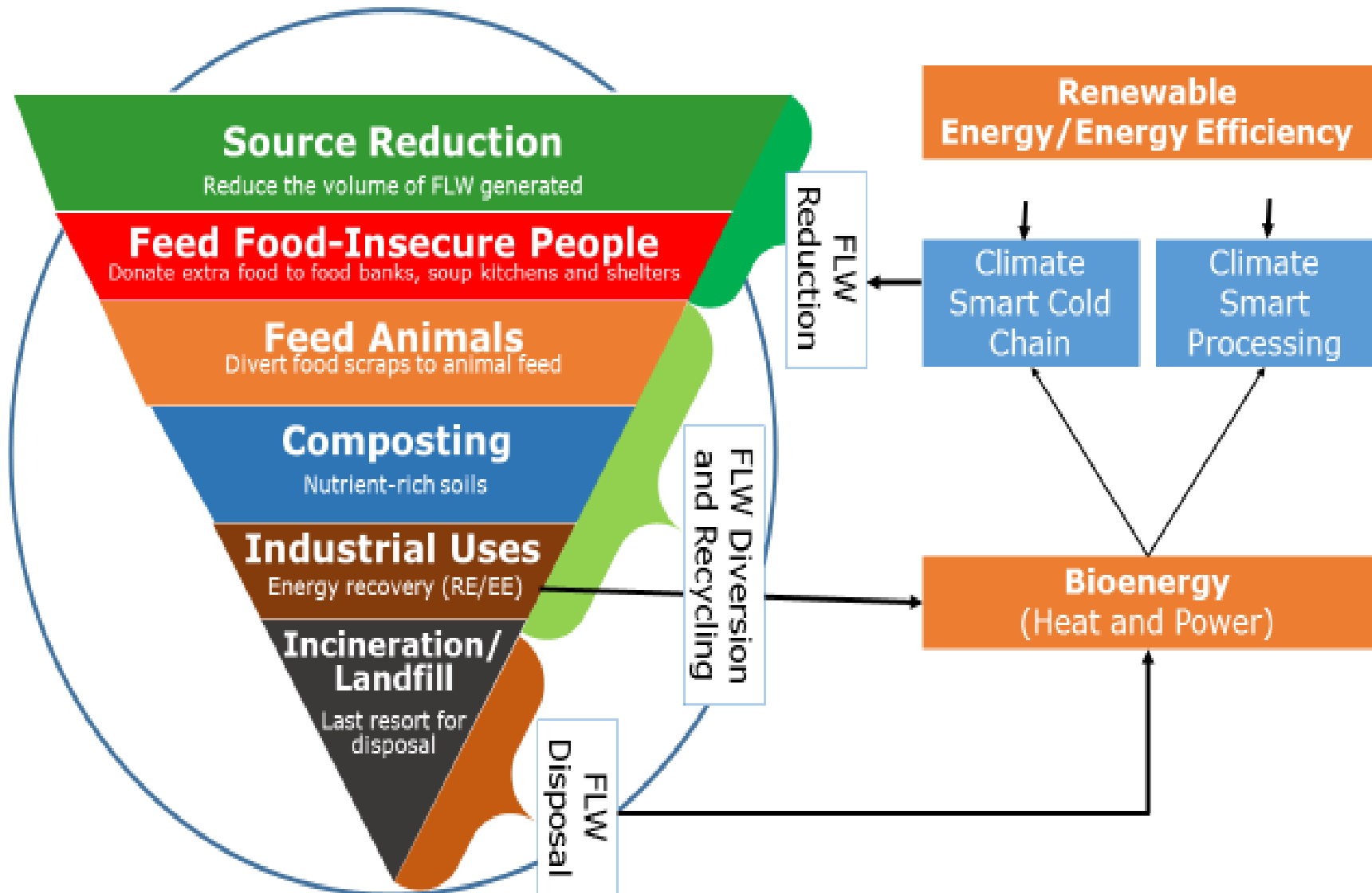


# Why is FLW important?

1. FLW is a major contributor to climate change
2. Accounts for around 8 % of total global GHG emissions
3. GHG emissions arising from the land, livestock and energy inputs needed in food systems as well as from waste disposal



# FLW hierarchy



# Why is FLW important?

## Food Security Impact of FLW

Who are affected?

- Poor smallholder food producer – especially women, direct food access
- Poor food insecure consumer – higher prices
  - ✓ Increased supply and cost reductions of production be translated into price reductions

## Impact on nutrition, food quality and safety

- Qualitative food losses - reduced nutritional value
- Unsafe products

## Economic impact and income-distribution in the value chain

- Market circumstances
- Where in the supply chain are losses reduced
- Improvement in the efficiency of supply chains benefits both producers and consumers



# Why is FLW important?

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**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.



# Save Food: vision and strategy

**FLW reduction** not a goal in itself:

Essential part of the creation of *efficient value chains*, which are the core of *sustainable food systems* which provide *food and nutrition security*, *economic growth* and *climate change mitigation*.

**Integrated multi-disciplinary programme –**

technology, economics, sociology, ecology, nutrition.

**FLW problem extremely complicated –** Research must be thorough, practical and innovative.



# Save Food: vision and strategy

**FLW problem extremely vast** – Implementation world-wide by partners.

Only the Private Sector can reduce food losses at a significant scale.

The Public Sector does research and provides guidance. It creates the enabling environment for the Private Sector to **invest** and act.

Promote and support the actors and stakeholders in the FSCs to take action in their own area, **collaborating with each other.**





# Save Food: vision and strategy

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FAO to take a realistic, non-dominant, non-imposing position.

Competition between organizations in FLW reduction is not in anybody's interest.



# Save Food: vision and strategy

## Communication Strategy:

- Supportive and advocating the principles above.
- Extremely open, sharing with every partner.
- Consistent and stable messages.
- Responsiveness in a helpful and meaningful way has the highest priority.
- Not pretending to know everything but seeking the right information from other experts.

In this way the Programme creates **connections, credibility and trust/ confidence.**





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The UN Secretary-General encourages all partners to scale up their efforts and turn the vision of an end to hunger into a reality.

The infographic features a central yellow banner with a dark red border. On the left, a dark red square contains a white spoon icon and the text 'ZERO HUNGER CHALLENGE'. To the right, five circular icons represent targets: 1. A person with a bar chart (ZERO stunted children less than 2 years). 2. A bowl of food (100% access to adequate food all year round). 3. A plant with water droplets (ALL food systems are sustainable). 4. A shovel digging (100% increase in smallholder productivity and income). 5. A person with a trash can (ZERO loss or waste of food). At the bottom, the text 'HUNGER CAN BE ELIMINATED IN OUR LIFETIMES' is displayed.

**ZERO HUNGER CHALLENGE**

- ZERO** stunted children less than 2 years
- 100%** access to adequate food all year round
- ALL** food systems are sustainable
- 100%** increase in smallholder productivity and income
- ZERO** loss or waste of food

**HUNGER CAN BE ELIMINATED IN OUR LIFETIMES**



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**12.3**

**“By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses”**



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# Four components of Save Food

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- 1 **Awareness raising** on the impact of, and solutions for food loss and waste.
- 2 **Collaboration** and coordination of world-wide initiatives on food loss and waste reduction.
- 3 **Research to** policy, strategy and programme development for food loss and waste reduction.
- 4 Support to **investment programmes and projects**, implemented by private and public sectors.



# DEFINITIONAL FRAMEWORK OF FLW

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*Quantitative FLW can also be referred to as physical FLW. It is food which is not eaten by people.*

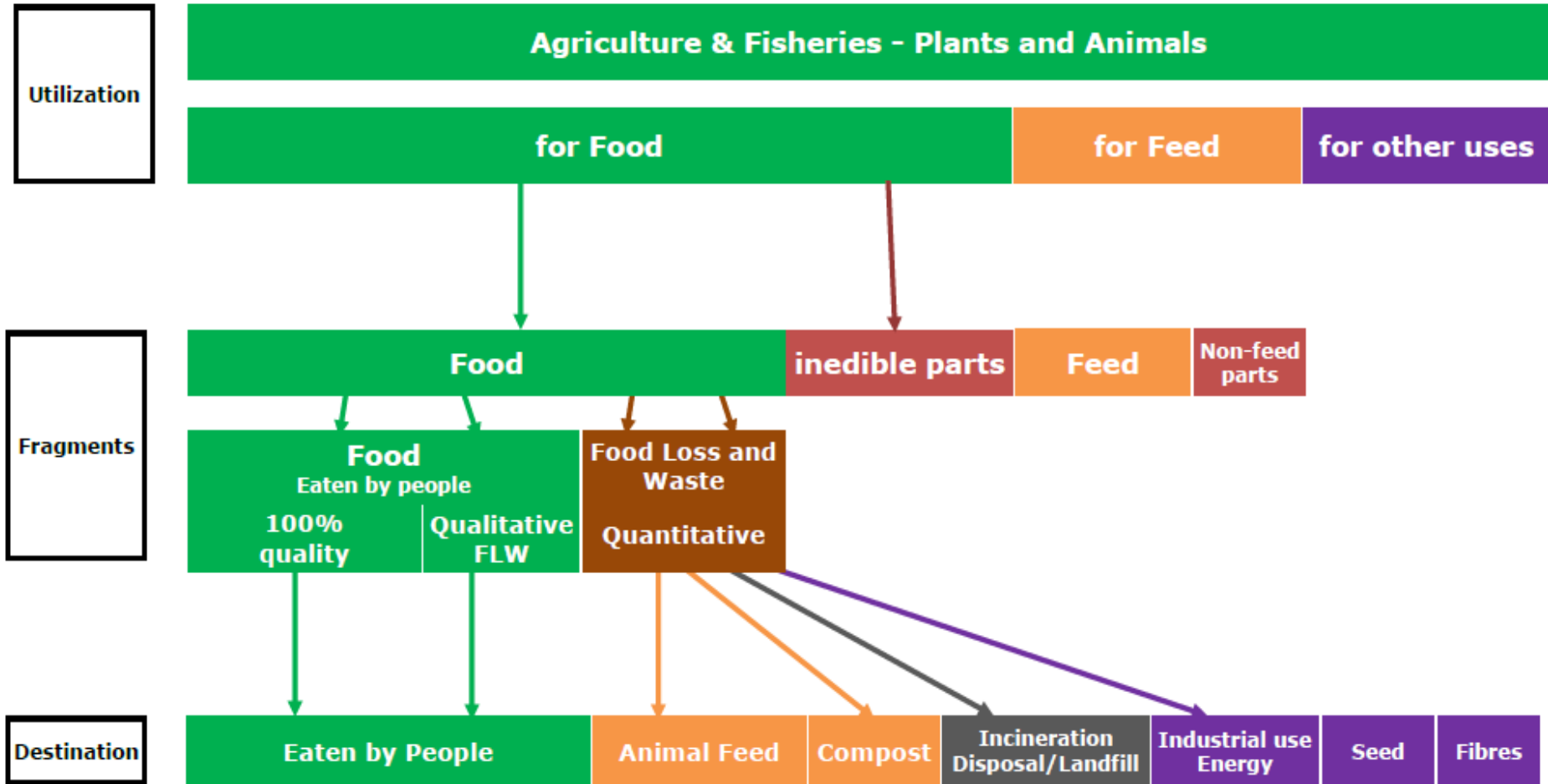
*Qualitative FLW: All the produce is eaten by people, but has incurred reduction of nutritional value, economic value, and/or food safety.*

*Food loss is mainly caused by the malfunctioning of the food production and supply system or its institutional and legal framework..*

*Food waste is the removal from the FSC of food which is fit for human consumption, by choice, or which has spoiled or expired, mainly caused by economic or social behaviour, poor stock management or neglect.*



# DEFINITIONAL FRAMEWORK OF FLW





Currently **800** registered **partners** - and growing - world-wide, public and private



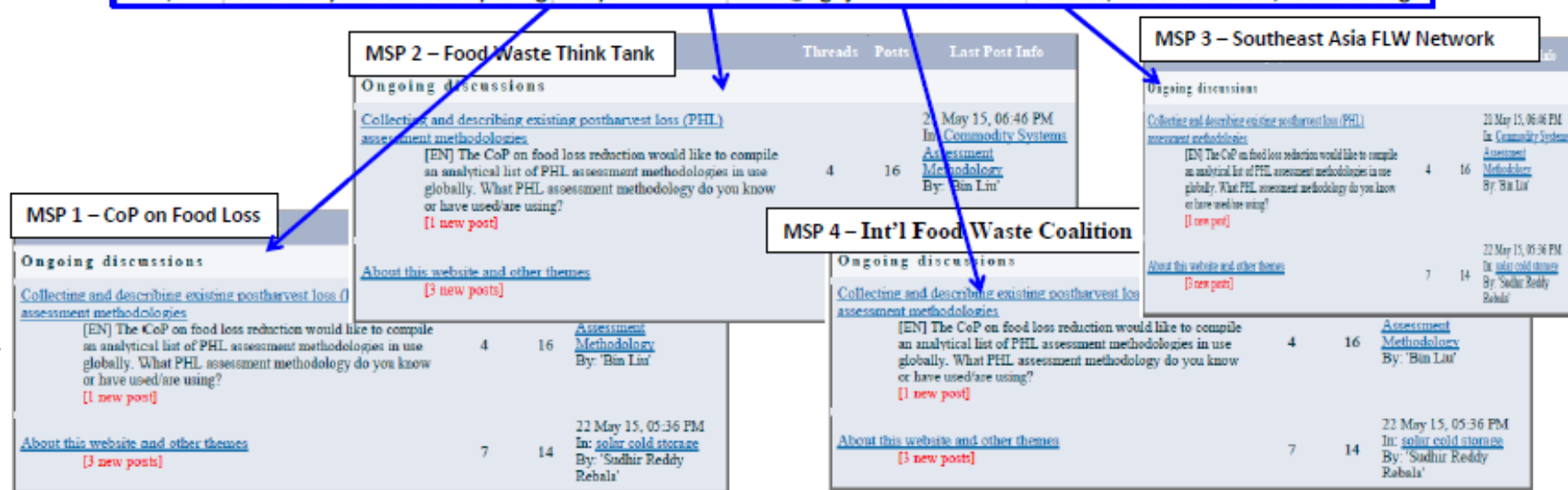


# Save Food: vision and strategy

## SAVE FOOD NETWORK DATABASE

ANNEX 2

MSP	Organization / Company name	Country	E-mail address 1	Food product group(s)
2	Slow Food Dubai Convivium	Oman, Saudi Ara	leader@slowfooddubai.org	Fruits & Vegetables
1,2	Panjin Administration of Grain	China	892777565@qq.com	Dairy
4	Ateliers Busch S.A.	Afghanistan, Alg	christian.picard@busch.ch	Cereals, Roots & Tubers, Fruits & Vegetables
2	GUNA	India	guna.connect@gmail.com	Oilseeds & Pulses
1	Massachusetts Institute of Tech	Uganda	egooding@mit.edu	Cereals, Oilseeds & Pulses
1	Club Serres for UNESCO	Vatican City	serres.for.unesco@gmail.com	Fruits & Vegetables
3,4	Em	Brazil	anny@daad-alumni.de	Other (including non-food agricultural products)
1,4	University of Parma	Italy	cristina.mora@unipr.it	Cereals, Roots & Tubers, Fruits & Vegetables
2,3	Foodcloud	United Kingdom	sinead@foodcloud.ie	Other (including non-food agricultural products)
1,2,4	pucp	Peru	ybecerraa@pucp.pe	Fruits & Vegetables
2	Welthungerhilfe / German Agro	South Sudan	matthias.amling@welthungerhilfe.de	Fruits & Vegetables
1,2	RAMPARVA SAMAJIK SHAIKSHA	India	ramparva@gmail.com	Fruits & Vegetables, Oilseeds & Pulses
4	AGRO-CONSULTANTS LTD	Uganda	makuneaggrey@gmail.com	Cereals, Roots & Tubers, Fruits & Vegetables
3	NGO "Plantons Utile"	Guinea-Bissau	eric.lehavre@wanadoo.fr	Fruits & Vegetables
1	Yes FOOD Can	France	florian.hugfouche@gmail.com	Fruits & Vegetables
1	Plan Zheroes - the Zero Food W	United Kingdom	maria.ana@planzheroes.org	Cereals, Roots & Tubers, Fruits & Vegetables
3,4	Jomo Kenyatta University of Agi	Kenya	willis@agr.jkuat.ac.ke	Cereals, Roots & Tubers, Fruits & Vegetables



# Specific Activities

## FLW Measurements

WRI Protocol – Standards for FLW Measurement,  
Accounting and Reporting

### **Tools:**

- ESN - Field case studies for FL analysis.
- ESS - Global Food Loss Index.
- NRI - Calculator model with predictive FL indicators.
- UNEP/WRAP - Guidance for FW Assessment
- GIZ – Rapid Loss Appraisal Tool





# 2015 SERIES OF INTERNATIONAL CONFERENCES ON FOOD LOSS AND WASTE REDUCTION

## Food Losses and Waste Initiative

Global Forum for Innovations in Agriculture - GFIA

**9 - 11 March**

*Abu Dhabi, United Arab Emirates*

**Theme:** From Prevention to Valorisation

## Global Change, SDGs and the Nexus Approach

Dresden Nexus Conference - DNC

**27 March**

*Dresden, Germany*

**Theme:** Food Losses and Environmental Resources

## Facing challenges in post-harvest food losses

Agritech Israel 2015

**28 - 30 April**

*Tel Aviv, Israel*

**Theme:** Facing challenges in post-harvest food losses.

## SAVE FOOD Annual General meeting

Messe Düsseldorf

**12 May**

*Vevey, Switzerland*

**Theme:** Private Sector support for food loss and waste reduction projects.

## No more Food to Waste

Ministry of Economic Affairs

**16 - 19 June**

*The Hague, The Netherlands*

**Theme:** Global action to stop food waste and food losses

## The First International Congress on Post-harvest Loss Prevention

ADM Institute for the Prevention of Post-harvest Loss

**4 - 7 October**

*Rome, Italy*

**Theme:** Solutions for post-harvest losses - technologies, policies and resources

## Conference on Food Waste and Food Losses

European Commission - DG for Health and Food Safety

**World Food Day - October**

*Milan, Italy (MilanExpo)*



# FAO'S AFRICA – FOCUSED PROGRAMME ON FOOD LOSS REDUCTION

African Development Bank:  
“Post-Harvest Losses Program”  
5-years, US\$1.7 billion

African Union  
“Support to regional capacity  
building to reduce postharvest loss”



“African Agribusiness and Agro-industries Development  
Initiative” with AUC, FAO, UNIDO, IFAD, AfDB, UNECA

National programmes and projects



# FAO'S AFRICA – FOCUSED PROGRAMME ON FOOD LOSS REDUCTION - PROJECTS

Food loss reduction strategy development in favour of smallholder producers in Africa (10 countries)



**Mainstreaming Food Loss Reduction  
Initiatives for smallholders in Food Deficit  
Areas (Uganda, Congo DR, Burkina Faso)**



Food loss reduction through partnerships and evidence based interventions (Malawi, Rwanda, East Timor)



**Improving food packaging for SMAEs in Sub-Saharan Africa**

*FAO's Regional project with*  *International Trade Centre* *funded by*  





# FAO Regional Office for Asia and the Pacific

[www.savefood.net](http://www.savefood.net)



**SAVE FOOD ASIA-PACIFIC**  
Reduce food loss and waste



Search...

HOME PUBLICATIONS ABOUT FOOD LOSS AND FOOD WASTE HOW TO SAVE FOOD? COUNTRY ACTIVITIES

SAVE FOOD ASIA-PACIFIC JOINT COMMUNIQUÉ

**LOVE TO RUN ?  
RUN FOR SAVE FOOD !**

As a runner, you can appreciate your body's need for food

**But did you know ?**

A large quantity of food produced and/or imported into Thailand never makes it to the mouth of consumers, owing to food waste

Food is an important part of Thai culture and heritage. Let us do all our part to reduce food waste in Thailand.

**SO " RUN FOR SAVE FOOD! "**

**SUNDAY, 10 MAY 2015**

**04:00 – 08:00 AM**

IN FRONT OF MINISTRY OF AGRICULTURE AND COOPERATIVES  
RATCHADAMNOEN NOK AVE., BANGKOK

**JOIN THE SAVE FOOD CAMPAIGN IN THAILAND TO REDUCE FOOD WASTE !**

**PRE - REGISTER NOW ! (see reverse)**



Food and Agriculture  
Organization of the  
United Nations

**Bangkok, Thailand, 29 Aug 2013**

Network aims to reduce **post-harvest food losses and market-to-consumer food waste.**



# GLOBAL INITIATIVE ON FOOD LOSSES AND WASTE REDUCTION – SAVE FOOD

## Regional Alliance for Food Losses and Waste Reduction in Latin America and the Caribbean





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# REGIONAL FRAMEWORK FOR FOOD LOSSES AND WASTE REDUCTION IN THE **NEAR EAST AND NORTH AFRICA**

## 32nd FAO Regional Conference for the Near East (February 2014):

Strategy presented and **endorsed** by FAO member countries, called upon to,

- Collaborate with FAO and partners to develop **evidence-based national action plans** for food losses and waste, with clear objectives, indicators and targets
- **Give high priority to investments** for improving food chain efficiency and other actions crucial to reduce FLW (Governments, funding institutions, private sector).

## REGIONAL STRATEGIC FRAMEWORK FOR FOOD LOSS AND WASTE REDUCTION



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## REGIONAL OFFICES

Subsaharan Africa

North Africa & The Near East

Eastern Europe & Central Asia

Asia & The Pacific

Latin America & The Caribbean

## LIAISON OFFICES

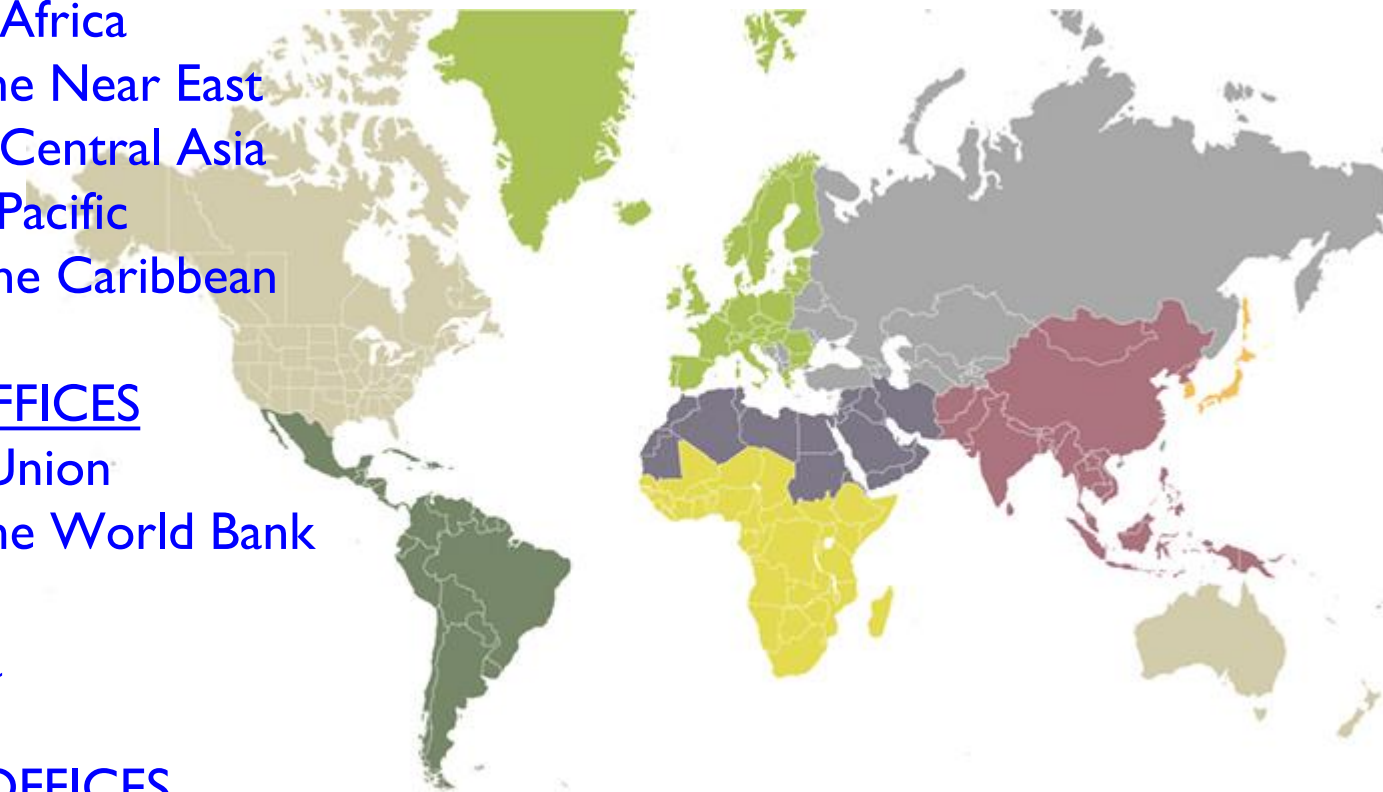
European Union

North America & The World Bank

Japan

Russia

## COUNTRY OFFICES



Global Initiative  
on Food Loss and Waste Reduction

Geographical coverage: Global

# Umbrella Programme

Global Initiative on Food Loss and Waste Reduction  
(5 yr – \$ 100 million)

## Cross-cutting Components

Awareness raising

Collaboration and partnerships

Research for policy development

Support to pilot projects and investment programmes

## Project funding



## Programme support



## Stakeholders

Private Sector

Civil Society

Research and Educational Institutions

Governments

Beneficiaries: the food supply chain actors

# FOOD LOSS & WASTE AND CLIMATE CHANGE





# FLW AND THE CONNECTION WITH CLIMATE CHANGE

1. Climate change is also aggravating food losses to the most vulnerable → increasing food insecurity
2. Losses due to climatic variability is likely to affect the first stages of the FSC incl at pre-harvest level
3. Global food production will decrease over time because of cc, land degradation and new pests and diseases

*Food loss is undermining human and ecological resilience to climate change and increasing vulnerability and food insecurity*



# FLW REDUCTION: A WIN-WIN-WIN SOLUTION FOR THE CLIMATE

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1. FLW reduction can enhance climate action:
2. Food loss reduction can strengthen resilience to the impacts of climate change by increasing food availability: simple cost-effective measures can contribute to climate resilience in food insecure food supply chain actors
3. Food loss reduction interventions will also help mitigate cc by avoiding GHG emissions associated with FL
4. Facilitate the transfer and uptake of climate technologies\*



# FOOD LOSS REDUCTION FOR RESILIENCE

1. Need for a holistic and integrated approach to climate-proof food systems
2. Food losses increase vulnerability to climate-related shocks in food insecure regions
3. We need to understand how to ensure food and nutrition security under a changing climate



# UNDERSTANDING THE CAUSES & SOLUTIONS

1. FAO works with small-scale farmers to assess causes and solutions to FL
2. Findings from LDCs: Critical loss point at harvest level due to climate variability
3. FLW Reduction policies must be considered and integrated in National Adaptation Plans and strategies that target food systems and food security.





# CLIMATE TECHNOLOGIES FOR FL REDUCTION

1. Simple cost-effective measures can reduce FL and improve food security.
2. Prevent crops from open-air spoilage in the field/at harvest
3. Target storage facilities
4. Improve connection to markets





# TECHNOLOGIES FOR FL REDUCTION: ENHANCING THE MITIGATION POTENTIAL

1. Connection between FL & lack of access to energy
2. Reducing losses could increase dependence on fossil fuels in food systems
3. Addressing losses → opportunity to scale up transfer and deployment of clean technologies
4. Improve Renewable Energy/ Energy Efficiency in FSC
5. Processing and cold storage
6. → double the emission reduction potential by promoting climate-friendly technologies to avoid losses



# OVERCOMING BARRIERS

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1. There is a need to increase awareness on FLW in the context of climate change
  2. Strengthen institutional and technical capacity to integrate FLW reduction into national climate change action plans and strategies
  3. Identify opportunities to tap into climate finance
    - ❖ Increase investment for FL reduction measures as part of climate resilience
    - ❖ Improve investments into low-emission technologies that can reduce FL, while simultaneously reduce the emissions in food systems
- Altogether contribute to making food systems more productive



# ENHANCING COOPERATIVE CLIMATE ACTION THROUGH FLW REDUCTION



FAO is raising awareness on the issue:

1. Conferences (3GF, UNFCCC COP, etc)
2. Analytical material, publications, research findings
3. World Food Day 2016 (topic is on cc)

Provides assessments on the technology options that reduce FLW and contribute to resilient low-emission food systems

Will assist countries on aspects that relate to FLW reduction technology needs in the context of achieving national mitigation and adaptation priorities and objectives and the SDGs

Works with actors in the SAVE FOOD network to promote and accelerate cooperative climate action in both state and non-state actors





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[www.fao.org/save-food](http://www.fao.org/save-food)



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