



UN Rome-Based Agencies' comprehensive approaches to effectively reduce post-harvest losses by ensuring sustainable upscaling of investments in post-harvest management solutions and strategies

Mireille Totobesola Project Manager, FAO

UN Rome-Based Agencies joint project "Mainstreaming Food Loss Reduction Initiatives for Smallholders in Food Deficit Areas"

AfDB-FAO

High level Ministerial Workshop to Support Post-Harvest Losses Reduction and Agro-Processing (PHAP): Flagship Launch
Abidjan, 21-22 November, 2017









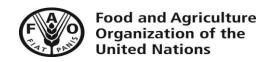
The business case

Estimations of Post-harvest losses (PHL) in Africa show high levels, above 30% for some categories of food products

Reducing PHL through effective post-harvest management (PHM) contribute to

- ✓ improve food security and nutrition,
- ✓ increase profits for food value chain actors (the private sector, including smallholder farmers),
- ✓ Contribute to food safety
- ✓ reduce unnecessary resource use, and increase adaptation to resilience to climate change.

- → AU Malabo Declaration: Heads of States commitment to half the levels of losses by 2025
- → PHL Reduction contributes SDGs: to SDG 1 on ending poverty, SDG 2 ending hunger and achieving food security, improved nutrition, and sustainable agriculture, and SDG 12 ensuring sustainable consumption and production pattern

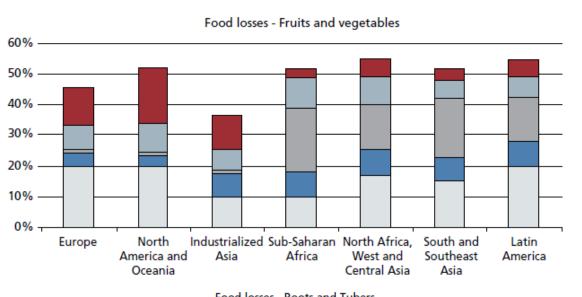


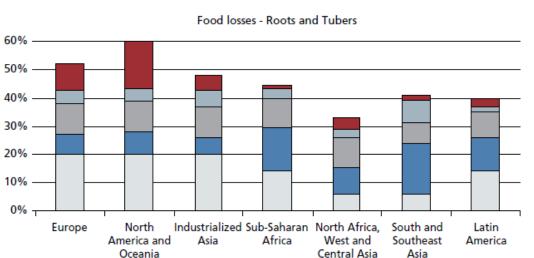






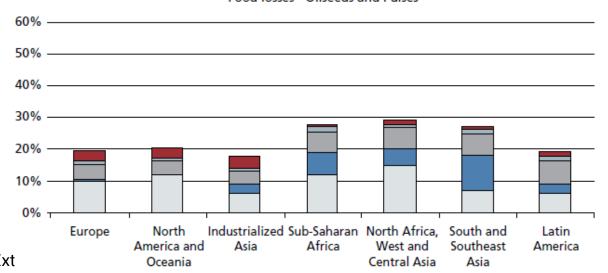
Some estimates of PHL of different categories of products



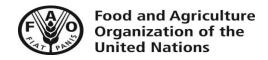


Food losses - Cereals 60% -30% ■ Consumption 20% Distribution 10% -■ Processing ■ Post-harvest ☐ Agriculture Industrialized Sub-Sahara Europe North North Africa, South and Latin America and Asia Africa West and Southeast America Oceania Central Asia Asia

Food losses - Oilseeds and Pulses



FAO, 2011. Global Food Losses and Food Waste: Ext





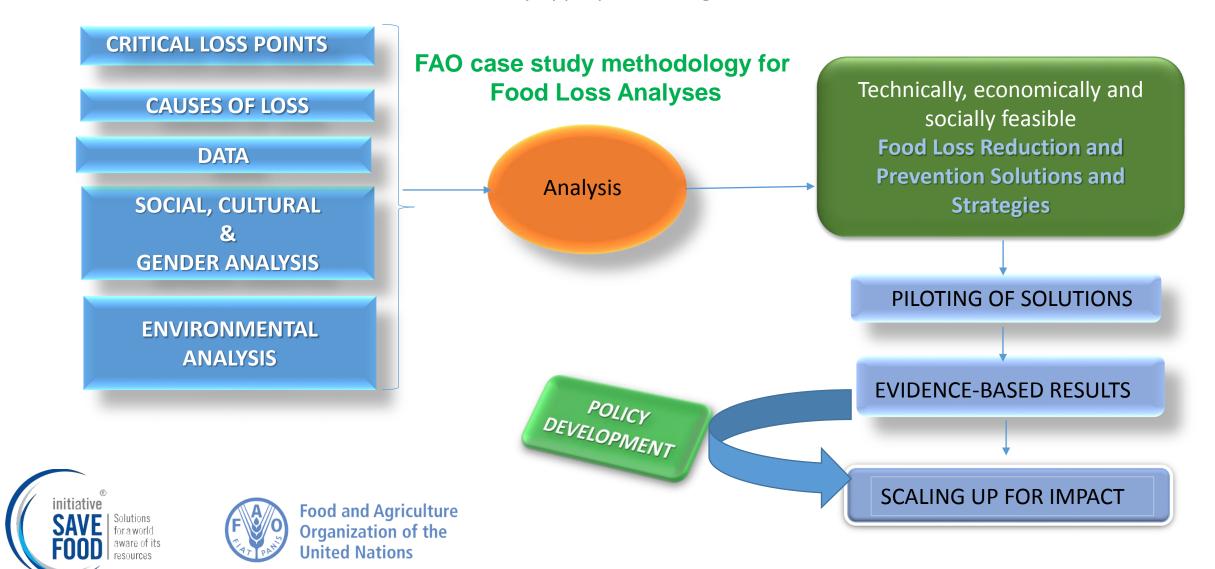


<u>UN RBAs joint project</u> Mainstreaming food loss reduction initiatives for smallholders in food deficit areas to *improve food security and income generation oppor*tunities through reduction of food losses in supported value chains

 Building on their comparative advantages and complementarity, the UN RBAs provide expertise and technical assistance to member countries and regional institutions

 The UN RBA promote comprehensive approaches to effectively reduce post-harvest losses (PHL) by ensuring sustainable upscaling of investments in post-harvest management solutions and strategies **Investment in developing a baseline** – i.e. conducting fundamental research toward identifying critical loss points in priority crop supply chains and the underlying causes of these losses

Developing strategies to tackle the reduction of losses through the identification of solutions that are technically economically and socially appropriate in a given context.











Identified Critical Loss Points (CLP) and major causes of losses along selected grains supply chains in <u>Burkina Faso</u>, the <u>Democratic Republic of Congo</u> and <u>Uganda</u>

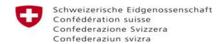
Critical Loss Points (CLP)	Indicative levels of losses observed	Major causes and symptoms of losses observed	
Harvest	Up to 14%	Poor harvesting practices (untimely harvest, insects attack, bird, other animals, rain), lack of labor	
Transport to homestead	Up to 13%	Rough handling, lack of or inadequate transport means, packaging	
Drying	Up to 3%	Spillage, animals, not covered against wind or rain, insufficient drying	
On-farm storage, Storage at warehouses	Up to 35%	Inadequate storage practices and infrastructures causing damages by insects, rodents, moisture, molding; insufficient storage management skill	
Threshing/shelling / hulling / milling	Up to 80%	Inappropriate practices (e.g. beating, tractors), spillage, breakage due to poorly adjusted equipment / machinery (e.g. Rice huller)	

Cross-cutting: gender related issues causing losses









Investment in action research to build an evidence base to support the uptake of technologies —

Piloting of the technologies with stakeholders, and providing them with the data and information required to facilitate the uptake of improved practices that result in loss reduction.

Examples of technologies piloted in Burkina Faso, DRC and Uganda during the 1st phase of the in the UN RBA joint project



Hermetic bags

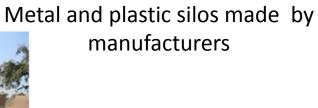


Metal and plastic silos made by artisans



Mechanized sheller







Manual sheller









Comprehensive approaches for sustainable and effective upscaling of PHL reduction include:	Governments' role	UN RBAs' role (a)	Value chain actors' role (b)
1. Investment in developing a baseline through research (food loss analyses and assessments) to identify critical loss points and major causes for different FSC of different categories of products in different contexts	XXX	TA	XX
2. Developing strategies to tackle the reduction of losses	XXX	TA	XX
3. Investment in action research to build an evidence base to support the uptake of technologies, through hands-on training and piloting, and providing information facilitating uptake to actors	XXX	TA	XX
4. Investment in policy development designed to promote the uptake of technologies and practice	XXX	TA	XX
5. Investment in an infrastructural support base for improved post-harvest practices		IFAD loans	Х
6. Creation of an enabling environment to support the scale up of PHM Incl. training at all levels of the supply chain, support for research and academia and job creation , enabling environment for the private sector to support both PHM supply and demand sides , and improved access to finance	XXX	TA	XX
7. Investment in technology development, maintenance services and technical support	XXX	TA	XXX
8. Investments design to facilitate scale up of successes to the national level	XXX	TA	XX
9. Investment in knowledge sharing, exchange and linkages amongst stakeholders through dynamic platforms such as the <u>Community of Practice (CoP) on food loss reduction</u>		xxx TA	XX

⁽a) TA based on the UN RBA's respective expertise and mandate or joint efforts

⁽b) Participatory and inclusive approaches







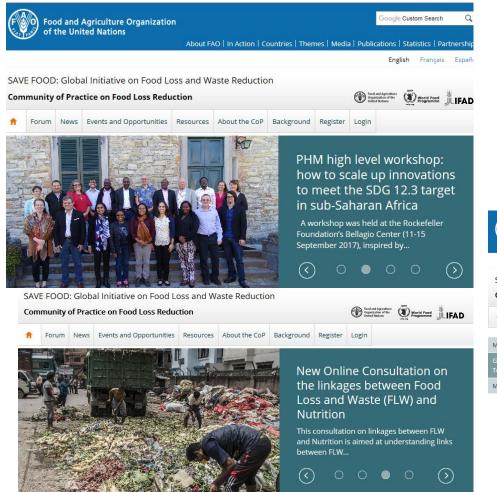


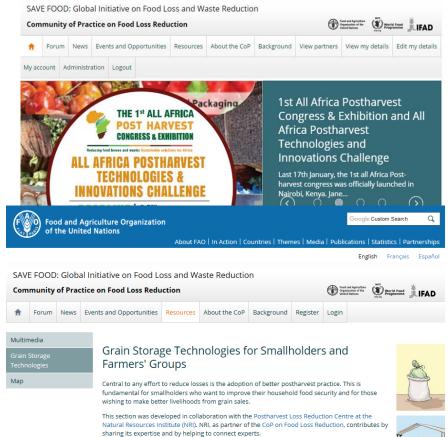


- Resources from world-wide actors, links (publications, reports, video, radio, mapping of PHM and FLR initiatives, etc.)
- A network: database of registered members with Save Food global. Near 1000 registered members in 2017
- Online forum discussions moderated
- News, Events and Opportunities (including on trainings, etc.)
- Special sections

The Global Community of Practice on food loss reduction (CoP)

A dynamic web-based global convener integrator of knowledge which facilitates linkages and information sharing





was supported by the Swiss Agency for Development and Co-operation (SDC). Based on a survey of over 30 postharvest technologists, the NRI team developed an interactive catalogue of storage technologies for easy consultation. In addition, they have provided a simple 'app' to help users

appreciate the main factors influencing smallholders' choice of a grain store.







Selected references

Food and Agriculture Organization, 2017. Save Food for a Better Climate - *Converting the food loss and waste challenge into climate action*. http://www.fao.org/3/a-i8000e.pdf

Food and Agriculture Organization, 2016. FAO Methodology – Food Loss Analysis – Causes and Solutions (May 2016) http://www.fao.org/3/a-az568e.pdf

Food and Agriculture Organization, 2011. Global Food Losses and Food Waste: Extent, Causes, and Prevention. Rome, Italy http://www.fao.org/docrep/014/mb060e/mb060e00.pdf

Food and Agriculture Organization, 2008. An Introduction to the Basic Concepts of Food Security. Rome, Italy

HLPE, 2014. Food losses and waste in the context of sustainable food systems. A report by the High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security, Rome 2014 http://www.fao.org/3/a-i3901e.pdf

Megan Sheahan, Christopher B. Barrett, 2017. Review: Food loss and waste in Sub-Saharan Africa, Food Policy, Volume 70, July 2017, Pages 1-12, ISSN 0306-9192, https://doi.org/10.1016/j.foodpol.2017.03.012

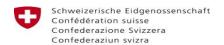
World Bank, Natural Resources Institute, & Food and Agriculture Organization, 2011. Missing Food: The Case of Postharvest Grain Losses in Sub-Saharan Africa. Report No. 60371-AFR, Washington, DC.

http://www.fao.org/3/a-i7614e.pdf http://www.fao.org/food-loss-reduction/news/detail/en/c/1043703/









Thank you!

Mireille Totobesola ESN Division FAO, Rome mireille.totobesola@fao.org

Register and contribute to the Community of Practice on Food Loss Reduction platform (CoP):

www.fao.org/food-loss-reduction