

Best Practices on food waste reduction at retail and hospitality services

Food Loss & Food Waste Reduction and Recovery Conference

27th, 28th February and 1st March 2018

Burrenchobay Lecture Theatre (RBLT), University of Mauritius

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"Mainstreaming food loss reduction initiatives for smallholders in food deficit areas"

Nutrition and Food Systems Division (ESN), FAO

Context

- ✓ **Estimated number of undernourished people**
 - 777 million in 2015 - 815 million in 2016 (FAO, IFAD, WFP and UNICEF, 2017)
- ✓ **Malnutrition** (under-nutrition, over-nutrition and micronutrient deficiency) and associated non-communicable diseases
- ✓ **Currently: enough food production for all**

Challenges...

- Physical/socio-economic access
- **Estimated 1/3 of food produced wasted or lost - COMPLEX ISSUES and CAUSES**
 - Economic, social, environmental impact

*...Opportunities! For actions to reduce FLW
for improving food security, resilience, revenues of smallholders
for business for Value Chain actors (private sector)*

-
- ✓ **Sustainable Development Goal SDG 12:** ensuring sustainable consumption and production patterns

SDG 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”

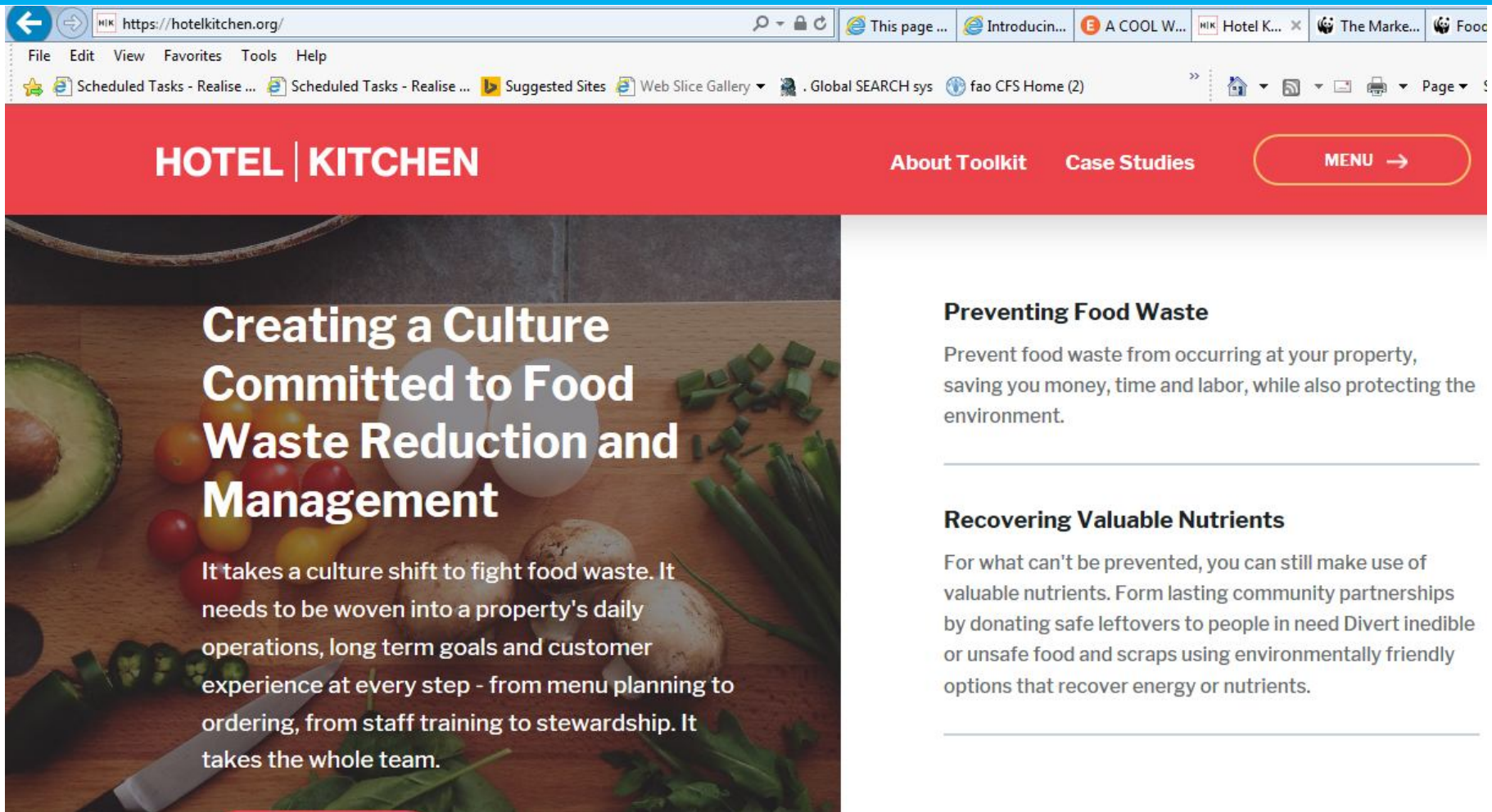
- **Measurement to assess levels waste, prioritize and design actions, track progress**

Global Food Loss Index Indicator 12.3.1 (GFLI) addressing food LOSS **and food WASTE**

Global Initiative on Food Loss and Waste Reduction

<http://www.fao.org/save-food/en/>

Learning from the sector champions and partners...



The screenshot shows a web browser displaying the Hotel Kitchen website. The browser's address bar shows the URL <https://hotelkitchen.org/>. The website has a red header with the logo "HOTEL | KITCHEN" on the left and navigation links "About Toolkit", "Case Studies", and a "MENU" button with a right-pointing arrow on the right. Below the header is a large image of fresh vegetables on a wooden cutting board. Overlaid on this image is the text: "Creating a Culture Committed to Food Waste Reduction and Management". Below this image, the text reads: "It takes a culture shift to fight food waste. It needs to be woven into a property's daily operations, long term goals and customer experience at every step - from menu planning to ordering, from staff training to stewardship. It takes the whole team." To the right of the image, there are two sections of text. The first is titled "Preventing Food Waste" and contains the text: "Prevent food waste from occurring at your property, saving you money, time and labor, while also protecting the environment." The second section is titled "Recovering Valuable Nutrients" and contains the text: "For what can't be prevented, you can still make use of valuable nutrients. Form lasting community partnerships by donating safe leftovers to people in need Divert inedible or unsafe food and scraps using environmentally friendly options that recover energy or nutrients."

HOTEL | KITCHEN

[About Toolkit](#) [Case Studies](#) [MENU →](#)

Creating a Culture Committed to Food Waste Reduction and Management

It takes a culture shift to fight food waste. It needs to be woven into a property's daily operations, long term goals and customer experience at every step - from menu planning to ordering, from staff training to stewardship. It takes the whole team.

Preventing Food Waste

Prevent food waste from occurring at your property, saving you money, time and labor, while also protecting the environment.

Recovering Valuable Nutrients

For what can't be prevented, you can still make use of valuable nutrients. Form lasting community partnerships by donating safe leftovers to people in need Divert inedible or unsafe food and scraps using environmentally friendly options that recover energy or nutrients.

Learning from the sector champions and partners... HOTEL KITCHEN TOOL KIT

What are the benefits?

- Feed more people
- Environment friendly
- Directly impact profits
- Engage staff (Requires trainings)
- Strengthen relationships customers

Developed by



In collaboration with



With generous support from



<https://hotelkitchen.org/about-toolkit/>

- **SAVE MONEY.** Demonstration projects saw at least **3% reduction in food costs.**
- **EMPOWER STAFF.** More than **90% of staff reported they wanted to take action**
- **MEET CUSTOMER DEMAND.** Individuals, meeting planners and corporate clients, especially large consulting firms, **expect their event venues to act sustainably**, including minimizing waste and working with community partners to donate remaining food.

Learning from the sector champions...

<https://www.worldwildlife.org/initiatives/food-waste>

<https://hotelkitchen.org/>

- Toolkit to **provide the industry with strategies, tips, and resources to prevent waste** from occurring, donate and divert what remains from landfills.
- **Convene key stakeholders across hospitality, retail, and food services sectors to understand how to accelerate the adoption of strategies to measure and reduce food waste**
- **Promote data transparency, which will allow companies to benchmark food waste prevention performance with their peers and across industries**

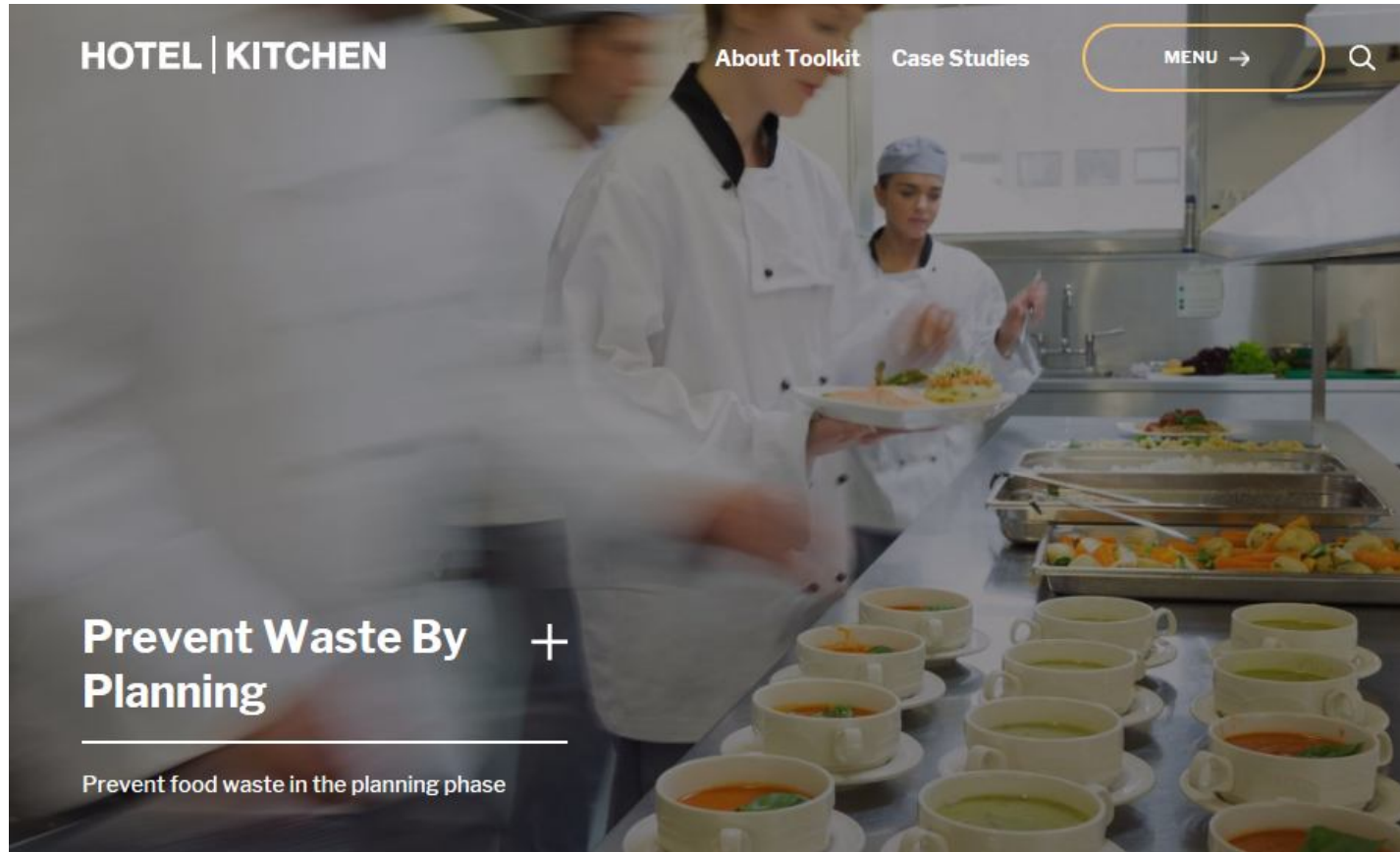
Learning from the sector champions...

To develop an effective program and change *the way food is planned, handled, and served at your property*, there is a need for a **Food Waste Task Force** that includes [key leaders and staff across the organization](#).

The goals for this team include:

- **Understand a baseline** of how much food waste is generated at the property
- **Set goals** to reduce food waste generation
- **Implement tactics** in [planning, handling and service phases](#)
- [Establish a food donation program](#) with community partners
- [Divert from landfills](#) remaining food material with more environmentally-friendly options

Learning from the sector champions...



Learning from the sector champions...

American Hotel & Lodging Association partners with WWF to tackle food waste

November 17, 2017 | Filed under: Industry News,Waste | Posted by: Siobhan O'Neill



AHLA toolkit to tackle food waste

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Polls

Which organisations make the best partners for hotels to achieve greater impact in sustainability?

- Non-profit partners - they understand the issues we're tackling
- Private companies - they offer solutions that work
- Certifications entities - they help us improve performance
- Governments / legislators - they can incentivise sustainable activity & level the playing field

Vote

GREEN HOTELIER

<http://www.greenhotelier.org/our-themes/waste/american-hotel-lodging-association-partners-with-wwf-to-tackle-food-waste/>

Recovery and Redistribution (R&R)

FAO is developing **GUIDING PRINCIPLES FOR R&R OF SAFE AND NUTRITIOUS FOOD FOR DIRECT HUMAN CONSUMPTION** addressing...

- **Why should R&R be promoted?** What **enabling conditions?** What **main barriers for R&R?**
- **Legislation / Regulatory framework**
- **Operational / Organizational framework for R&R**
 - What can / cannot be recovered and redistributed?
 - Actors involved in R&R operations / Food redistribution organizations
 - R&R operational models
- **Food safety rules in R&R operations**
 - Food safety risk analysis for R&R
 - Risk assessment / Risk management / Risk communication
- **Nutrition considerations as applicable to R&R**
- **Social considerations as applicable to R&R**

Recovery and Redistribution (R&R)

Food safety - Risks - Hazards

Biological hazards	Chemical hazards	Physical hazards
<p>Infectious bacteria</p> <ul style="list-style-type: none"> • Salmonella • Escherichia coli • Listeria • Vibrio <p>Toxin-producing organisms</p> <ul style="list-style-type: none"> • Clostridium botulinum • Staphylococcus aureus • Bacillus Cereus <p>Molds</p> <p>Parasites</p> <p>Viruses</p>	<ul style="list-style-type: none"> • Naturally occurring toxins (e.g. cyanides in raw cassava and almonds) • Food additives • Pesticide residues • Veterinary drug residues • Toxins of microbial origin (e.g. aflatoxin) • Allergens • Chemical contaminants from packaging • Environmental contaminants 	<ul style="list-style-type: none"> • Glass • Plastic • Metal, machine fillings • Wood • Stones • Bone chips • Personal articles such as jewelry , ear plugs, etc.

Activities to Address Food Waste

Resource Mobilization

With banks / financial institutions, private sector, donors , foundations (incl. for Recovery and redistribution operations, equipment, infrastructure, etc.)

Capacity Development

Methodologies and Tools

- Food Loss Analysis (FLA) methodology
- Measurement and Statistics
- Training resources

Knowledge sharing

- Relevant platforms on Food Waste reduction convening stakeholders
- G20 Technical Platform on Food Loss and Waste
- **Save Food Network/ Website / e-Newsletter**

Partnerships and Collaboration

More than 900 SAVE FOOD PARTNERS

- Public & Private sector
- Academia & Research Institutions
- Civil society
- Development agencies

Awareness Raising and Advocacy

- Save Food Congresses, Exposyums, Exhibits
- National and regional level awareness-raising campaigns
- Social media campaigns
- National Save Food Networks

Education

Educational material targeted to students of different ages

Research for policy development

DO GOOD nine easy tips to reduce food waste. SAVE FOOD!



1 ASK FOR SMALLER PORTIONS

Make sure you start your meals with a small portion on your plate. You can always go back for more if you're still hungry.

2 LOVE YOUR LEFTOVERS

Instead of scraping leftovers into the bin, use them as ingredients for tomorrow's meal, or simply reheat them as the same meal again. Remember, if you want to use leftovers, it's very important to store them in the fridge or freezer within two hours of preparing your meal.



3 SHOP SMART

We often buy more food than we can eat before it goes off. To avoid over-shopping, try to plan ahead, make a shopping list and don't go shopping on an empty stomach!

4 BUY "UGLY" FRUITS AND VEGETABLES

Many shops and farmers' markets offer irregularly shaped fruit and vegetable, which are just as good to eat as regularly shaped and coloured ones. Buy "ugly" fruits and vegetables to show that you do not want any food wasted!



5 CHECK YOUR FRIDGE

To make sure that food is properly stored and kept fresher for longer in your fridge, set it to the right temperature (between 1 and 5 °C), store products in the right places in the fridge and follow the instructions on the packaging or the fridge manual. Don't pack the fridge too full: you will use less energy and you'll be less likely to forget to use the food you bought.

6 PRACTICE FIFO: FIRST IN, FIRST OUT!

When you put your shopping away, rotate the food in your fridge and cupboard so that the older food comes forward and the most recent shopping – which will keep the longest – goes to the back. But keep an eye on the use-by and best-before dates – some new food may need to be eaten quickly.



7 UNDERSTAND DATES ON YOUR FOOD

After the "use-by" date has passed, food is not safe to eat anymore. "Best-before" dates, on the other hand, only show when the food is at its best quality in terms of smell, texture, and taste. If well stored, most of non-perishable food is still edible after the "best before" date!

8 TURN WASTE INTO COMPOST

If you do end up wasting some of your food, recover it by turning it into garden food: instead of throwing it in your regular bin and contributing to the greenhouse gas emissions connected to the transport and disposal of waste, why not set up a compost bin for food waste and fruit and vegetable peelings?



9 SHARING IS CARING: GIVE TO HELP

Give your surplus to help those who need it. When hygiene and sanitary conditions and traceability requirements are ensured, it's easy to give your surplus food to those in need. Learn about existing initiatives in your cafeterias, your stores, your city... to give a boost to food aid associations and reduce waste.

Together, we can fight food waste. So, Do Good – Save Food!

DO GOOD
SAVE FOOD!

Climate technologies / solutions that could support FLW prevention - examples



Planning: crops, harvest, markets	Hermetic bags	Solar driers	Evaporative coolers	Improved public infrastructure	Facilities	Food literacy life-long learning
Pests and disease management	Metal silos	Solar threshers	Solar powered cooling	Adequate distance from production – processing – markets – households	Marketing models	Awareness messaging
Early warning systems	Humidity and moisture control	Sustainable bio-sourced packaging materials	Natural refrigerants	Robust crates and business solutions for the utilization and transport (full and empty)	Accessible and fair certification schemes	Recovery and redistribution of safe and nutritious food for human consumption
Good handling practices	Warehouse receipt systems	Sustainable agro-residues fuel	Adequate access to household refrigerators	Adequate and maintained vehicles	Labelling	Waste and loss management: nutrient recovery
Adequate inputs	Pest and rodent management	Adequate packaging machinery	Cooling and refrigeration literacy for all, including consumers		Product and service diversification	

Scale-up on access to (renewable) energy and technologies and improve access to Information and Communication Technologies (ICTs)

Supply side measures



Demand side measures

Adapted from: FAO. 2017. *Save Food for a Better Climate - Converting the food loss and waste challenge into climate action*



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

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


- **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 initiative including private sector**
- **Moderated Online forum discussions** - News, Events and Opportunities (including on trainings, etc.;
- Special sections

SAVE FOOD: Global Initiative on Food Loss and Waste Reduction

Community of Practice on Food Loss Reduction

Home Forum News Events and Opportunities Resources About the CoP Background View partners View my details Edit my details

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1st All Africa Postharvest Congress & Exhibition and All Africa Postharvest Technologies and Innovations Challenge


Last 17th January, the 1st all Africa Post-harvest congress was officially launched in Nairobi, Kenya. Jane...

GET INVOLVED!

In being a member of the **Community of Practice** you will access the Forum, and participate in on-line discussions, get in touch with other practitioners, share and request relevant and updated information, contribute in building up a worldwide community aimed at reducing food losses and achieving food security.

This **Community of Practice on food loss reduction** has been launched in the framework of an UN Food and Agriculture Organization (FAO), the International Fund for Agricultural Development (IFAD) and World Food Programme (WFP) joint project "Mainstreaming food loss reduction initiatives for smallholders in food deficit areas" funded by the Swiss Government ([more](#)).

CoP members' projects



Help us to complete this map!

A global Community of Practice on food WASTE is under development

<https://www.eventbrite.co.uk/e/a-cool-world-international-clean-cooling-congress-tickets-43164453041?aff=es2>

The screenshot shows a web browser window displaying an Eventbrite event page. The browser's address bar shows the URL: <https://www.eventbrite.co.uk/e/a-cool-world-international-clean-cooling-congress-tickets-43164453041?aff=es2>. The Eventbrite logo is in the top left, and navigation links for 'BROWSE EVENTS', 'HELP', 'SIGN IN', and 'CREATE EVENT' are in the top right. The main event banner features the title 'A Cool World' in large teal letters, followed by '1st International Congress on Clean Cooling' and the dates '18th - 19th April, University of Birmingham'. Logos for the University of Birmingham and Birmingham Energy Institute are shown. The event is scheduled for 'APR 18' and is 'Free'. A green 'REGISTER' button is prominently displayed. The browser's taskbar at the bottom shows various application icons and the system clock indicating 03:50 on 28/02/2018.

Eventbrite Search for events BROWSE EVENTS HELP SIGN IN CREATE EVENT

A Cool World

1st International Congress on Clean Cooling
18th - 19th April, University of Birmingham

UNIVERSITY OF BIRMINGHAM | BIRMINGHAM ENERGY INSTITUTE

APR 18

A COOL WORLD – INTERNATIONAL CLEAN COOLING CONGRESS

by Birmingham Energy Institute

Free

REGISTER

<https://www.eventbrite.co.uk/e/a-cool-world-international-clean-cooling-congress-tickets-43164453041?aff=es2#listing-organizer> 105%

03:50
28/02/2018

Conclusions

- **Need for education/awareness raising of actors (Management and staff) on practices that cause losses and root causes of waste at retail and hotel levels**
Poor planning, packaging (Pro and Cons of big vs. small) and labelling issues, food safety and quality issues
- **Identification and adoption of feasible / innovative solutions and strategies**
- **Collaboration/partnerships between suppliers and hotels and with consumers associations are important :**
“Value chains” Win – Win situation for actors involved, good image, ethics, social enterprises while contributing to reducing waste by prioritizing human consumption, not non-food uses and landfill.

Thank you!

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