Recommendations of Food Loss & Waste Reduction to APEC Food Security Roadmap Beyond 2020 (Roadmap 2030)

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Workshop on Reducing Food Loss and Waste along the Food Value Chain in APEC during and post COVID-19 Pandemic Jan

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Checklist to Achieve SMART Goals

Specific □ What needs to be done? ☐ What will be the outcome or result? & Why is this important? ☐ Who is responsible? Who else needs to be involved? ☐ What requirements/constraints are involved? Measurable ☐ Can indicators be quantified and measurable? (at least suggest an indicator of progress) **Achievable** ☐ Can we get it done in the proposed time frame? Is this possible and practical? Relevant ☐ Individuals and the team need to see how objectives is relevant to their role and the overall direction of the team Time based ☐ When will this objective be completed?



Specific

What needs to be done?

- > According to the draft Roadmap 2030, we should
 - o draft the implementation plan in 2021
 - o identify specific voluntary actions or initiatives in 2022
 - o interim reviews of the implementation plan in 2025 & 2028 with a final review of the Roadmap in 2030
 - o strengthen statistical capacity to collect data for dissemination and publication

What will be the outcome or result? & Why is this important?

- > Theoretically, we know the benefits of reducing FLW such as
 - o reduce GHG emissions and other environmental problems,
 - save natural resources,
 - feed more hungry people,
 - o save money for actors across food supply chain
- > But individuals, society & policymakers may want to know the value of net benefits for their decision making
- > Need to implement program evaluation to value the net private & social benefits
 - o Capacity building may be needed especially the non-market valuation

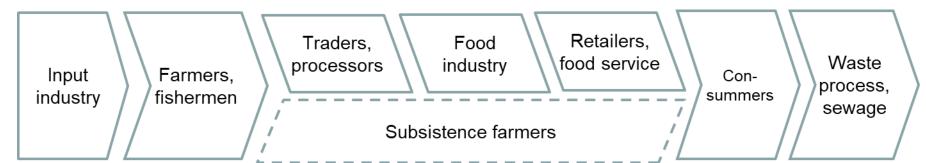




Specific

Who is responsible? Who else needs to be involved?

- > Central & local government, Community, Academics/researchers,
- > NGO, Non-profit organizations (e.g., food charities)
- > Individual consumer/household
- > Emphasize the role of public private partnership
 - Startup, technology & digital developers
 - Farmers
 - o Food trading business (supermarket, local market, grocery store, etc.),
 - o Food cooking business (restaurant, hotel, etc.)
 - o etc.
- ➤ How can we link all parties to work together? Incentive design may be needed!
 - Capacity building may be needed





Specific

What requirements/constraints are involved?

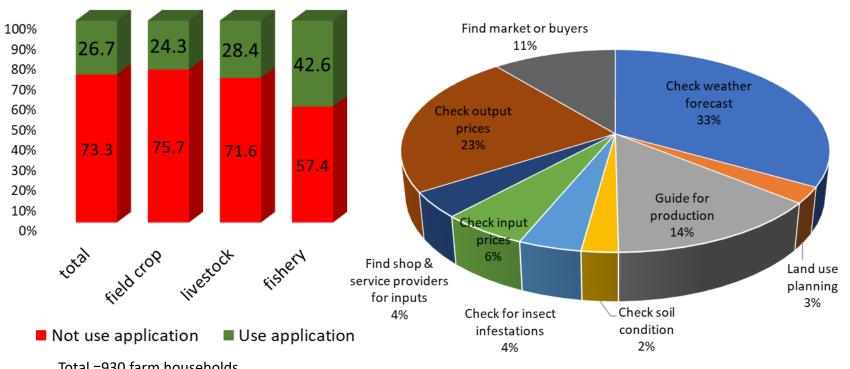
- > Public awareness & knowledge, useful information, human resources, budget, infrastructure (e.g., packing house, cold chain system, waste management system, digital application), etc.
 - o Increase consumer awareness is very important to reduce FLW such as
 - educate consumers on reducing FLW by buying less "attractive" produce
 - · environmental impacts from FLW
 - etc.
 - o Facilitate information sharing and utilize best practices from elsewhere in the world to reduce FLW
 - Make sure that the academic (difficult) information is easy to understand for local people with different ages and education level
 - Capacity building for FLW personnel
 - o Initial evidence in Thailand (PCD & GIZ, 2021):
 - 72.1% of households were still misunderstanding about "best before" labeling
 - 28.0% do not know where to bring food to share or donate
 - Only 20.1% of households utilizes all of their food waste
 - 26.7% of smallholders use digital application (Attavanich, 2020)

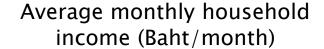


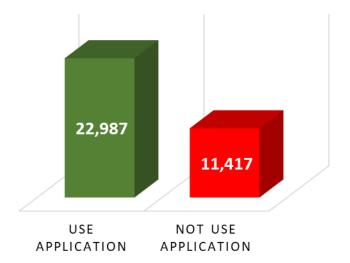


Promoting the use and access of digital technology to smallholders can not only reduce food loss, but reduce the poverty of smallholders

Share of smallholder's application use (%)







Total =930 farm households

Field crop = 795 farm households

Livestock = 268 farm households

Fishery = 155 farm households

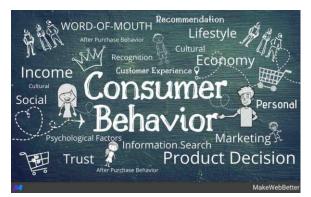
Conducted during June 2020



Specific

What requirements/constraints are involved?

- > Do we have technology (e.g., digital applications linking buyers & shops) to help FLW management?
- > Do we have enough knowledge from research to...
 - o provide practical options to increase the value added of FLW utilization?
 - FLW for insects,
 - · Standardized compost for farming,
 - Biodiesel
 - Make sure that they can sell their products in the market!
 - o understand the behavioral interaction of actors across the food supply chain?
 - Do food waste interventions in workplaces influence food waste and behaviors in households?
 - How do different household types (e.g. young families, empty nesters etc.) respond to food
 - waste interventions?
 - etc.







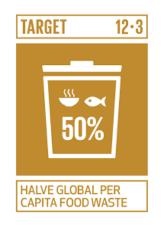
How well we understand factors that determine the behavior of consumers Physical nature and materiality of food and interaction among them? products Demographics*** Needs and tastes of others** Retail** Demographics** Demographics*** Equipment and infrastructure* Physical Attitudes*** Culture/ Skills and knowledge*** Norms* settings place* Time constraints** (other than Values and self-identity** Dynamics between retail) * householders* Awareness** Legal and Food provisioning Intentions* regulatory Household Social* practices and frameworks* Perceived control* Combined time food waste associated constraints* behaviours Perceived norms* Habits and emotions* Proximal Roles in household* Distal levels levels INDIVIDUAL LEVEL LEVELS EXTERNAL TO HOUSEHOLD HOUSEHOLD LEVEL



Measurable

Can indicators be quantified and measurable? (at least suggest an indicator of progress)

- o Yes, a main indicator can be quantified and measurable.
 - 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
 - Other indicators may be developed to measure (e.g., percent of utilization of FLW, level of public awareness)
- But the database is the key and costly to collect especially for the developing economies!
 - How can APEC economies have the common database for FLW? When?







Achievable

Can we get it done in the proposed time frame?

- ➤ The Roadmap 2030 clearly emphasize that "actively support member economies' individual and collective efforts to adopt the UN SDG 12.3 by 2030"
- ➤ APEC Food Security Roadmap Towards 2020 (Version 2014)
 - APEC economies aimed to reduce FLW by 10% compared with the 2011–2012 levels by 2020
 - More effort may be needed to reach 50% of UN SDG Goal 12.3 in 2030!
 - What is the baseline year/period for APEC economies to measure the progress & achievement?
 - Several countries use year 2015, 2016 or 2017
 - O How can we distribute the overall goal (50% reduction) to member economies with different levels of economic development?
 - o How can we distribute the overall goal (50% reduction) for each economy to different size of firms?
- > The Roadmap 2030 identify actions that can directly & indirectly ensure the achievement of FLW goal
 - Let's make sure that they will be succeeded
 - Implement the six-hour perishable product border clearance initiative
 - Enhance cross-border cooperation through electronic certification processes
 - Transportation problem faced during the 1st wave of COVID-19 has clearly demonstrated the benefits of these measures



Relevant

Individuals and the team need to see how the objectives is relevant to their role and the overall direction of the team

> Ensure that different objectives are supporting each other and not creating any conflict or tensions

Time Based

When will this objective be completed?

- Clearly in 2030
- > But before 2030, we need to set the time frame for actions and measure the progress continuously



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