



**Asia-Pacific
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United Against Food Loss and Waste: How to Accelerate the APEC Movement

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Outline

- Background
- Target
- Measure
- Actions
- Suggestions



APEC economies face food security challenges arising from population growth, rapid urbanization, changes in diet, natural resource constraints, inequality in income and resource distribution, and climate change.

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- The UN estimated that the global population will rise to 9.7 billion people by 2050
 - To ensure food for people, we need to produce 70% more food for the additional people
 - FLW results in roughly \$940 billion in economic losses globally per year
 - The situation is worse with climate change

ALMOST A BILLION PEOPLE
are going hungry, while we waste
1/3 OF THE FOOD WE PRODUCE.



Source: FAO, 2013

Big Facts
ccaafs.cgiar.org/bigfacts



RESEARCH PROGRAM ON
Climate Change,
Agriculture and
Food Security



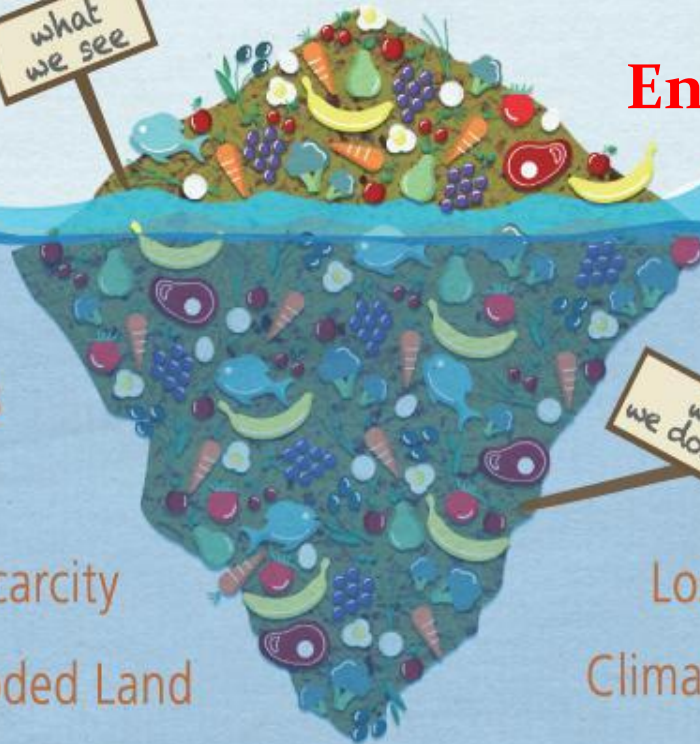
Food waste causes invisible cost for the environment

The Food Waste Iceberg

Bill at producer price:
\$750 000 000 000
Bill at retail price:
\$1000 000 000 000

Energy consumption?

what we see



Bill from nature:
\$700 000 000 000

Cleared Forests

GHG Emissions

Increase in Food Prices

Increased Water Scarcity

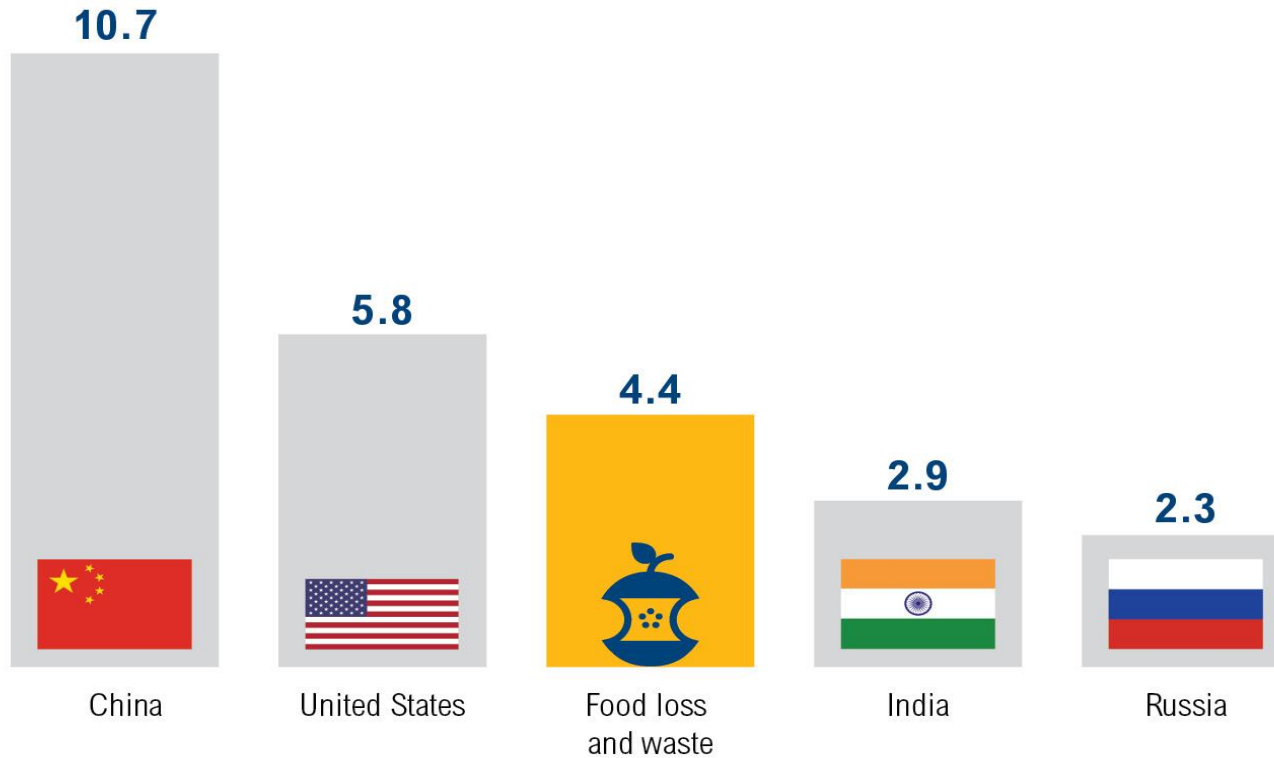
Eroded Land

Loss of Wetlands

Loss of Biodiversity

Climate Change Damages

If Food Loss and Waste Were its own Country, it Would Be the Third-Largest Greenhouse Gas Emitter



GT CO₂E (2011/12)*

* Figures reflect all six anthropogenic greenhouse gas emissions, including those from land use, land-use change, and forestry (LULUCF). Country data is for 2012 while the food loss and waste data is for 2011 (the most recent data available). To avoid double counting, the food loss and waste emissions figure should not be added to the country figures.

Source: CAIT. 2015; FAO. 2015. *Food wastage footprint & climate change*. Rome: FAO.



WORLD
RESOURCES
INSTITUTE





Reducing FLW is a “Triple Win”

1

- Save money for farmers, companies, and households

2

- Less food we waste, more people we can feed

3

- Alleviate pressure on water, land, and the climate



A “Target-Measure-Act” Approach

Governments and companies should pursue a simple but effective “Target-Measure-Act” approach to reducing food loss and waste.


- Set targets.
- Measure your food loss and waste.
- Take actions.



TARGET



Under the **APEC Food Security Roadmap Towards 2020**, approved in 2014, the long-term goal of the Policy Partnership on Food Security (PPFS) is the attainment by 2020 of **a sustainable food system** sufficient to provide lasting food security to APEC member economies.



APEC economies committed in the **APEC Food Security Roadmap Towards 2020** to “strive to reduce food loss and waste by **10%** compared with the 2011-2012 levels by 2020 in the Asia-Pacific region, [and to] aim to advance beyond the Millennium Development Goals (MDGs) 2015 hunger goals,” noting that the 10% specified in that goal is **an average level** for all economies, and noting further that **specific indicators** can be developed based on each economy’s respective situation.



Public-private partnerships (PPP) play an important role in achieving food security and are a key part of any APEC Policy Partnership on Food Security (PPFS) activity, as emphasized in the APEC Food Security Roadmap Towards 2020.



The world has a consensus on reducing FLW

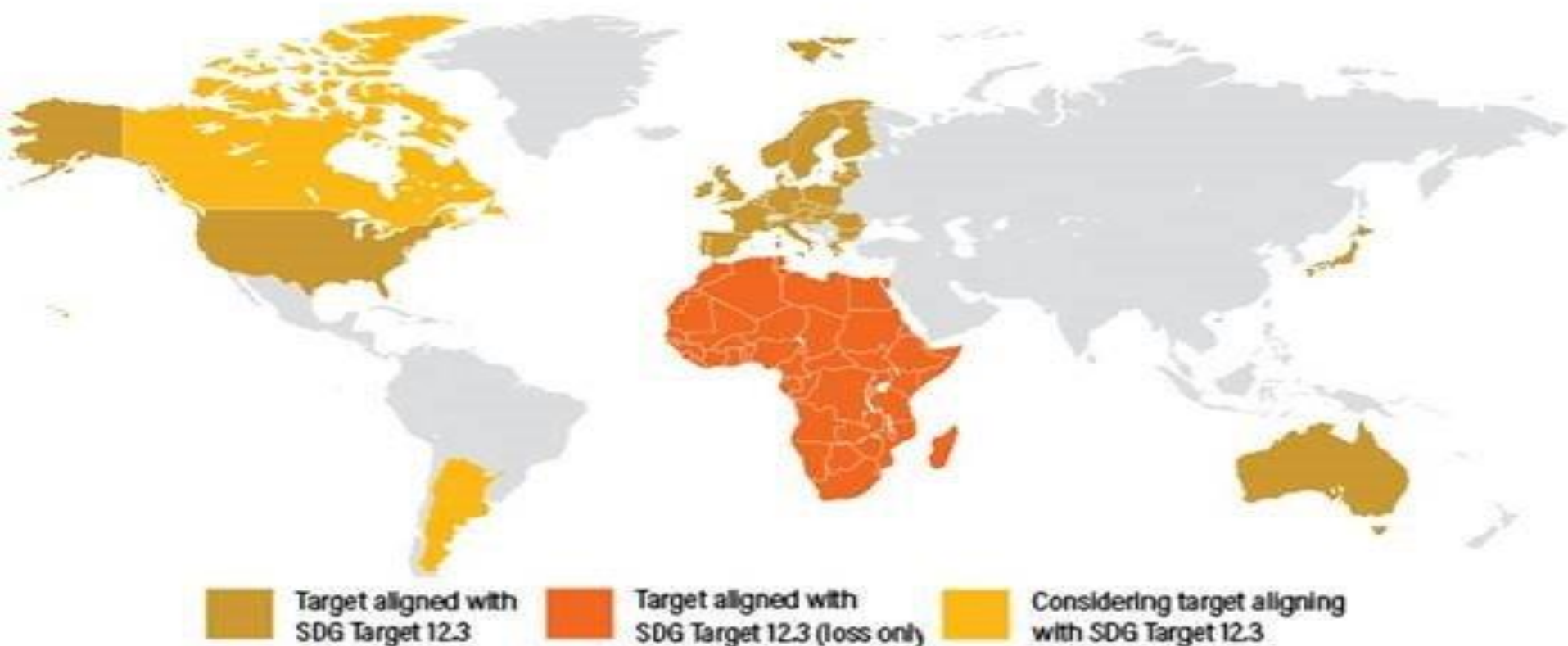


Target 12.3: *By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses*



How are we doing on **SDG Target 12.3**?

National and Regional Governments with Food Loss and/or Waste Reduction Targets Aligned with SDG Target 12.3 (as of Sept 2018)




MEASURE






APEC Multi-Year Project “**Strengthening Public-Private Partnership to Reduce Food Losses in the Supply Chain**” (APEC MYP SCE 02 2013A, hereafter “APEC MYP FLW”) by Chinese Taipei.




“A Food Loss and Waste Quantification Handbook for APEC Economies” (“**APEC FLW Handbook**”) was produced under APEC MYP FLW and provides a review of food loss and waste definitions, measurement approaches and APEC case studies to support APEC member economies in developing their own systematic quantification methods to estimate FLW, while drawing on the Mass Flow Model and 2011 Food Balance Sheet of the United Nations FAO to provide baseline FLW quantity data for 19 APEC member economies.



The “APEC Project on Food Loss and Waste System” (“**APEC-FLOWS**”) was established as a public platform to share FLW quantification methods, to disseminate best practices and policies for reducing FLW, and to publicize the results of expert consultations and other capacity-building activities attended by APEC member economy representatives for reducing losses and waste of grain, vegetables, fruits, fishery and livestock products at each stage of the supply chain.


ACTIONS





Collaborate with the private sector and civil society to investigate improvements, including low-cost steps that can be implemented quickly, to their cold chains, dry chains, and other supply networks in order to strengthen global value chains for foods and agricultural products.






Collaborate with the private sector and civil society to implement feasible solutions to reduce FLW, recognizing that engaging the private sector and civil society in a meaningful way can help develop business strategies around FLW reduction and meet regional food security challenges.





Adopt voluntary agreements among government, industry, researchers, academics, and food suppliers and distributors to promote policies and funding initiatives for reducing FLW.






Recognize that the promotion of food donation through tax incentives and the expansion of consumer education programs, such as public information about date labeling systems and proper storage for fruits and vegetables, are important parts of reducing food waste at the retail and consumer levels.



財團 中華民國消費者文教基金會
法人 CONSUMERS' FOUNDATION, CHINESE TAIPEI




Support the APEC Services Competitiveness Roadmap (2016-2025), which encourages the development of services-related statistics to measure the services regulatory environment in APEC economies for innovative APEC-wide and individual economy solutions in finance, logistics, telecommunications and other service industry sectors that can be effective in reducing FLW across the supply chain.



Systematically measure FLW in their food systems, while also recognizing the importance of initiating active efforts to reduce FLW even without final estimates.



Hold regional seminars and workshops, liaise with other relevant APEC sub-fora and international organizations, carry out other activities to share their best practices on FLW reduction, and publish these best practices on the APEC-FLOWS platform;



Consult the resources produced under APEC MYP FLW and to refer to relevant information and activities from the United Nations Food and Agriculture Organization (FAO), the United Nations Environment Programme (UNEP), the World Resources Institute (WRI), the Waste and Resources Action Programme (WRAP), the Rethink Food Waste through Economics and Data (ReFED) program, the World Food Program (WFP), the Organization for Economic Cooperation and Development (OECD) and Champions 12.3;

SUGGESTIONS





Suggestions-1

Encourage APEC members to work together to advance beyond the Millennium Development Goals (MDGs) 2015 hunger goals and further prepare a new APEC Food Security Roadmap Towards 2030 and adopt a new FLW reduction TARGET consistent with Sustainable Development Goal (SDG)

12.3



Suggestions-2

To ensure continuously support research and innovations in improvement of assessment methodology, data collection, FLW quantification, indicator construction as suggested in the APEC FLW Handbook, as well as APEC-FLOWS website, capacity-building and networking with other relevant APEC sub-fora and international organizations, we (NTU) are happy to support establishment of the **APEC Food Loss and Waste (FLW) Center**.



Suggestions-3

Encourage more research and PPP actions on the new frontier that reducing food loss and waste (FLW) can be seen as an “adaptation” option for reducing food security risks from climate change, as well as a “mitigation” option by reducing greenhouse gases (GHG) emissions.



Thank You!

