

**International Workshop on Food Loss and Waste Prevention
Targeting Southeast and East Asian Region, Oct 16-18, 2019,
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Facilitating Regional Cooperation on Reducing Food Losses and Waste in Asia

Dr. Ching-Cheng Chang

**Research Fellow, Institute of Economics, Academia Sinica, and
Professor, Dept. of Agricultural Economics, National Taiwan University**

OUTLINE

- I. APEC as a regional network on reducing FLW
- II. APEC multi-year project on reducing FLW
- III. Actions in E and SE Asia
- IV. Concluding Remarks

What Have Been Done at Regional Level?

- APEC is the **first region having an official agreement** on reducing FLW under food security umbrella, aiming to enhance the MDG–Hunger Goal
- **Reducing Food Losses** has been repeatedly underscored as one of the primary tasks to **safeguarding APEC Food security**



I. APEC as a regional network on reducing FLW

1. What is APEC
2. What does APEC do?
3. How does APEC work?
4. APEC Food Security Roadmap towards 2020

1.... What is APEC?

- APEC is “a multi-lateral economic forum established in 1989 to leverage the **growing interdependence** of the Asia-Pacific.”
- APEC's 21 members aim to create greater prosperity for the people of the region by
 - ✓ **promoting balanced, inclusive, sustainable, innovative and secure growth** and by
 - ✓ **accelerating regional economic integration.**

2..... What does APEC do?

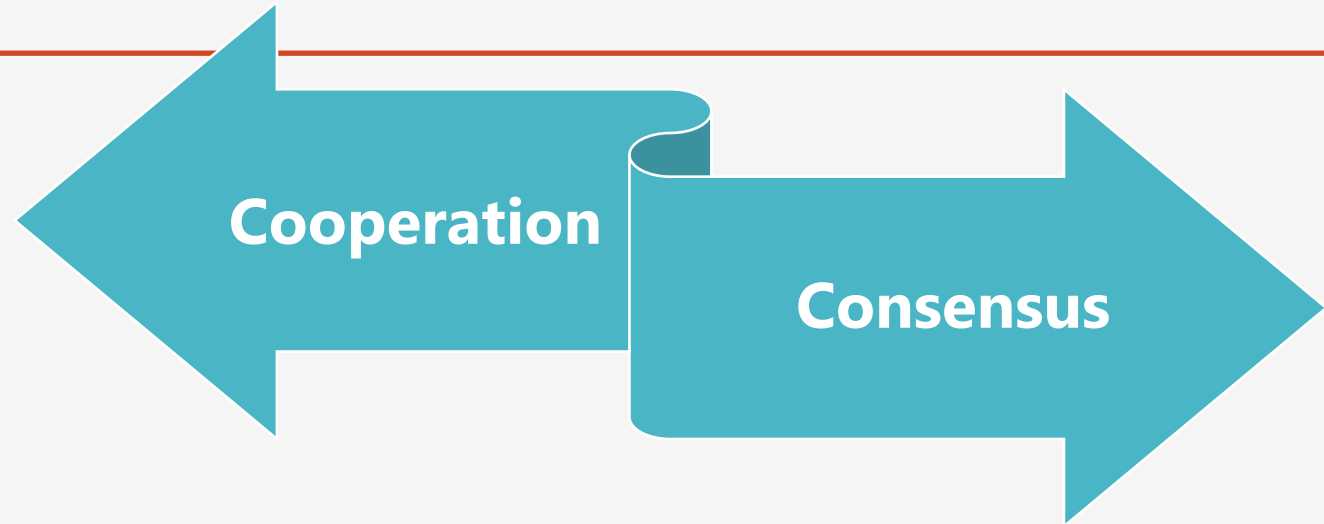
APEC's 3 Pillars



Source: APEC website at <https://www.apec.org/About-Us/About-APEC>

3..... How does APEC work?

APEC Process:



- Members participate **open dialogue** and respect for views of all participants.
- Decision making is reached by **consensus**.
- Commitments are undertaken on a **voluntary basis**
- **Capacity building** projects help members implement APEC initiatives.

3. Agriculture Technology Cooperation Working Group (ATCWG)

Established in 2000

Objectives:

- To enhance contribution to economic growth and social well-being
- To improve the capacity of agri-food industries on trade
- To share information and experiences.

Core Activities

- Strengthen food safety standards
- Respond to food security challenges
- Promote next-generation sustainable biofuels
- Adjust and mitigate the impact of climate change
- Strengthen technological cooperation

In 2018, TOR of **ATCWG** Article 4: Scope of Activity

ATCWG will focus on... the following areas of activities:

- Promote **activities and regional cooperation** to strengthen food security in the APEC region, such as **through the reduction of food losses**.*
- Conservation and Utilization of Plant and Animal Genetic Resources.
- Research, Development and Extension of Agricultural Biotechnology.
- Production, Processing, Marketing, Distribution and Consumption of Agricultural Products.
- Sanitary and phyto-sanitary (SPS), Integrated pest management (IPM), Biosecurity, Biodiversity, and control of invasive alien species (AIS).
- Cooperative Development of Agricultural Finance System.
- **Sustainable Agriculture and Related Environmental Issues, including climate change adaptation and mitigation.**
- Agricultural investments and trade facilitation.

* News released by ATCWG on "**Public-private Sector Cooperation in APEC to Reduce Food Losses**" at https://www.apec.org/Press/News-Releases/2013/0813_food

APEC Policy Partnership on Food Security (PPFS)

Established in 2011

Objectives:

- To strengthen **public–private cooperation** to address **food security** issues in the region

Activities:

- **Sustainable food systems**
- Digital opportunities for food security
- Enhancing food trade in the region
- Rural development as a place for opportunities

4. APEC Food Security Roadmap Towards 2020

In Para. 7 of the Vision and Goal of the Roadmap:



*"APEC economies will strive to reduce food loss and waste by **10%*** compared with the **2011-2012** levels by **2020** in the Asia-Pacific economies*

** It is an average level for all economies. Specific indicator can be developed based on each economy's situation.*

Source: : APEC Food Security Roadmap Towards 2020, Third Senior Officials' Meeting, Beijing, China, 2014.
APEC website <https://www.apec.org/Groups/Other-Groups/Policy-Partnership-on-Food-Security>

APEC Fights Food Waste as Supply Pressures Mount

Quotes from APEC Food Security Ministerial Meeting in Piura Peru on Sept 26-27 2018: (https://www.apec.org/Press/News-Releases/2016/0921_food)

- ✓ "APEC research shows that about 40 per cent of food waste in member economies occurs at the hands of retailers and consumers," revealed **Peru's Vice Minister of Agriculture and Irrigation Juan Carlos Gonzales, who is Chair of the APEC PPFS**. "Within the region, the total amount of food wasted annually could sustain **800 million people** who still fall below the poverty line for **16 months**."
- ✓ "Food losses are piling up as incomes and consumption in the Asia-Pacific rise which presents a real challenge to food security," added **Dong-Chong Hsiou of Chinese Taipei's Council of Agriculture** which is an overseer of APEC's related project work. "We are building our industry collaboration to ensure there is adequate tracking data on food waste which can be elusive."
- ✓ "The collaborative actions being pursued in APEC to reduce food waste could go a long way to ensuring food security in the world's most populous region," noted **Tony Nowell, Vice Chair of the APEC Policy Partnership on Food Security and APEC Business Advisory Council representative from New Zealand**. "The economic and social incentives for supporting more efficient industry supply chains and consumer habits are considerable."

II. APEC Multiyear Project on Reducing FLW

- Become a **driving force** for innovations, toolkits, and policy development;
- Provide **capacity building** and **information platform (APEC-FLOWS)** to bridge the gaps:
 - ✓ between public and private sectors,
 - ✓ among different stakeholders,
 - ✓ from upstream to downstream,
 - ✓ from local to regional/global.

Summary Report of Activities, Findings and Recommendations from the APEC HLPD 2018

- Hold **regional seminars and workshops**, liaise with other relevant APEC sub-fora and international organizations;
- Systematically **measure FLW** in their food systems, while also recognizing the importance of initiating active efforts to reduce FLW even without final estimates;
- Collaborate with the **private sector and civil society** to investigate improvements, including low-cost steps that can be implemented quickly;
- Collaborate with the private sector and civil society to **implement feasible solutions** to reduce FLW;
- Policy supporting **donation activities** (e.g. liability protection, tax incentives) is a low-cost solution which should be considered to implement quickly.

Other Related APEC Projects on Reducing FLW

Since 2013, there have been several projects aiming at reducing FLW

The projects and capacity building focus on:

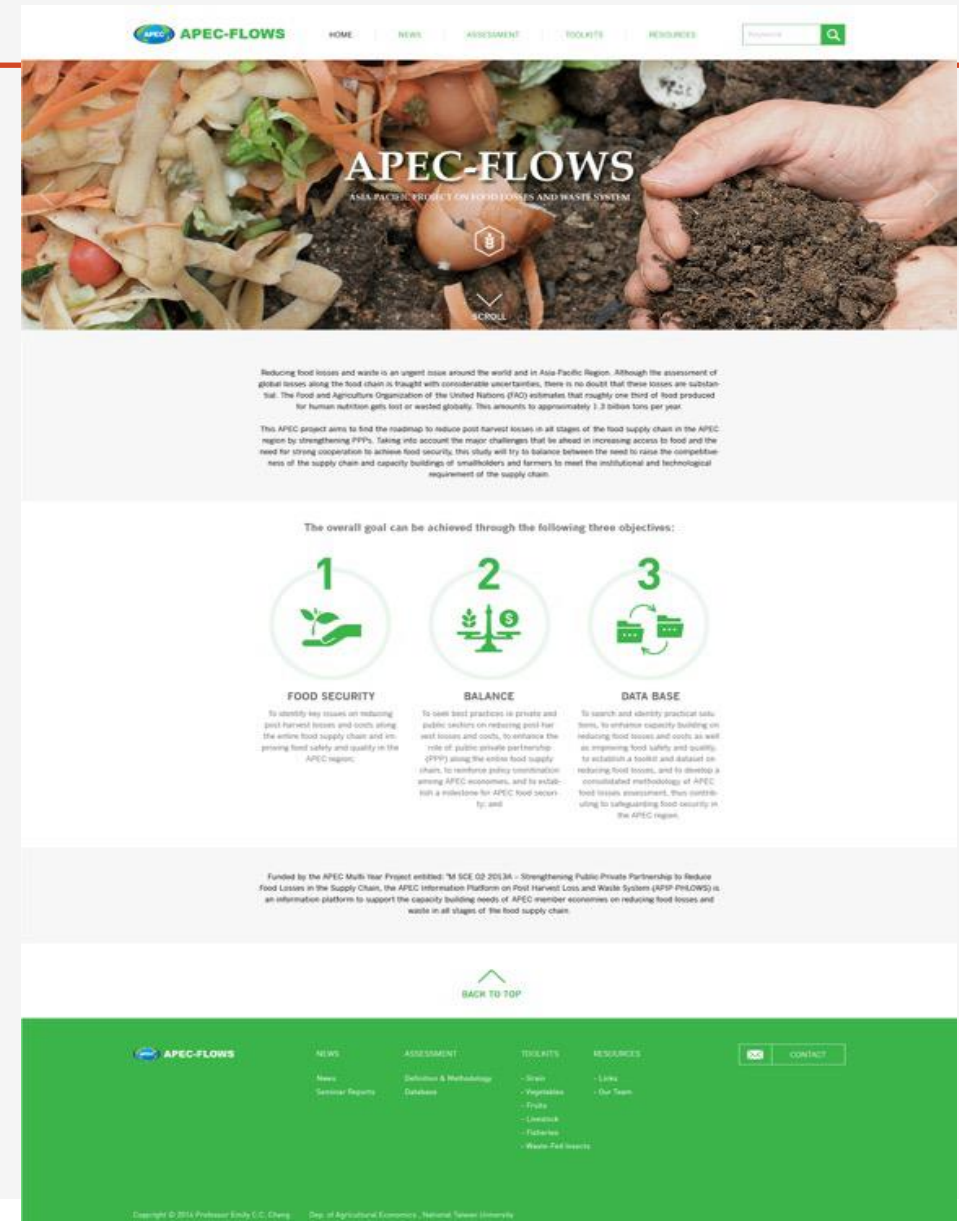
- 1) Improve the efficiency of the food supply chain including **enhance agricultural productivity** and **improve logistics** such as cold chain.
- 2) Food security – food safety (e.g. Reduce Mycotoxin in grain by China)
- 3) A **complete study on FLW issues** in several food categories, retail and consumer levels. E.g. *Strengthening Public – Private Partnership to Reduce FLW along the supply chain.* (Chinese Taipei)
- 4) **Food security and climate change nexus** is the new topic in 2017, e.g. Strengthening APEC Cooperation on Food Security and Climate Change by the U.S.
- 5) Reducing Food Waste by Using Information and Communications Technology (ICT) and Innovative Technologies (2019, Japan)

Information Platform: APEC-FLOWS

<http://apec-flows.ntu.edu.tw/>

Purpose

- Serve as a repository of information on APEC strategic plans on FLW reduction
- Connect stakeholders to share information and best practices and build business connection
- Capacity building information platform
- Dissemination and on-line education



III. Some Examples from E & SE Asia

1. Malaysia: Economy Report in 2019
2. Vietnam: Economy Report in 2019
3. Chinese Taipei: 2019 APEC Expert Consultation on “Reducing FLW for Addressing Interlinked Challenges of Food Security and Climate Change

Actions to Reduce FLW in Malaysia- Consumer Campaign, Food Donation Support



FOOD BANK MALAYSIA PROGRAMME



Benefited 45,850 households as of February 2019

Saved 1,055 tonnes of food

Launched in Penang on Dec 22, 2018

TARGET :



Households from the B40 group, including students of public universities

METHOD :



Gathering surplus food such as bread, vegetables & fruits from hypermarkets, and distributing these to the needy

Feb 19, 2019

The government decided to extend the Food Bank Malaysia programme to all universities to help address the rising cost of living faced by students.

Source : Deputy Prime Minister, Datuk Seri Dr Wan Azizah Wan Ismail

Bernama Infographics

Source: Dr. MASNIZA SAIRI (MARDI), *Member Economies' Report from Malaysia*, PPT presented at the "APEC 2019 Expert Consultation on Reducing Food Loss & Waste (FLW) for Addressing Interlinked Challenges of Food Security and Climate Change in APEC Member Economies", July 25-26, Taipei, 2019.

Actions to Assess the Relationship between FLW and Climate Change in Malaysia

Targeted self-sufficiency level of rice (100 %), fruits (106.5%) and vegetables (95.1%) by 2020

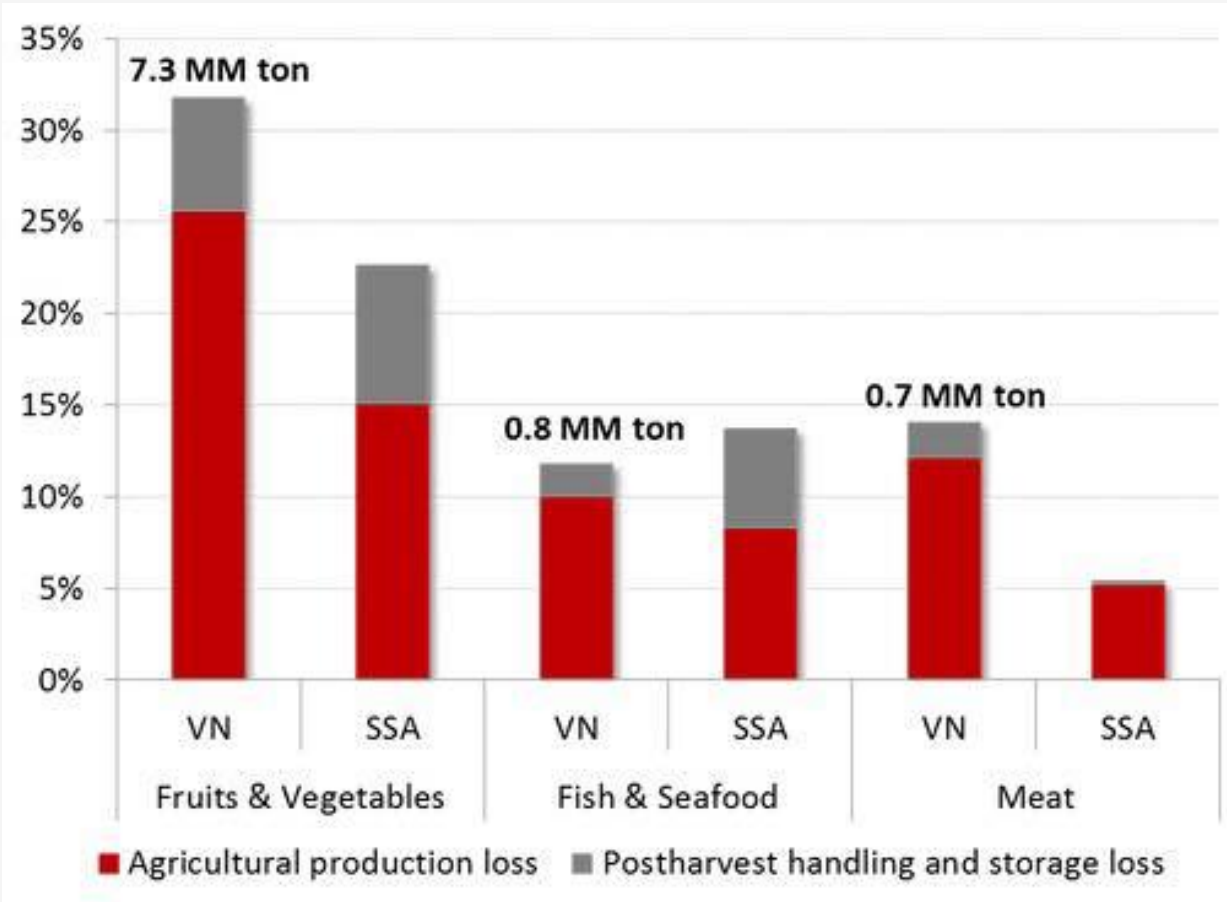
- Implementation strategies guided by National Agrofood Policy (NAP) (2011-2020)
- Strong correlation between the targeted SSL of food commodities and FLW
- Study on postharvest losses of paddy (MARDI)
- SOP for reducing paddy postharvest losses (MARDI, 2017)

Support Needed

- ✓ **Capacity building** to institutional to enhance national technical capacities to address FLW and accelerate climate action/enhance climate resilience
- ✓ **Financial requirement** for capacity building

Source: Dr. MASNIZA SAIRI (MARDI), *Member Economies' Report from Malaysia*, PPT presented at the "APEC 2019 Expert Consultation on Reducing Food Loss & Waste (FLW) for Addressing Interlinked Challenges of Food Security and Climate Change in APEC Member Economies", July 25-26, Taipei, 2019.

Food loss: Vietnam vs. South Southeast Asian (SSA) economies



SSA:

Meat 5,3%

Fish and seafood: 14%
(pack, handle, transport
loss is higher (6% vs 2%))

FV: 23%

Source: CEL Consulting, 2018

Source: Tran Cong Thang, *"Food Loss and Initiatives to Mitigate the Food Loss in Vietnam"*, Institute of Policy and Strategy for Agriculture and Rural Development (IPSARD), PPT presented at the "APEC 2019 Expert Consultation on Reducing Food Loss & Waste (FLW) for Addressing Interlinked Challenges of Food Security and Climate Change in APEC Member Economies", July 25-26, Taipei, 2019.

Comparison post-harvest loss in rice between Vietnam and other economies

Stage	Vietnam (MRD)	Thailand	India	Myanmar	Cambodia	Asean countries
Harvesting	3	1 - 3	-	1,2 – 2	-	1-3
Transportation	0,9	0,4	-	2,2 – 2,8	-	1-7
Cleaning	-	-	-	1,2 - 2	-	2-6
Drying	4,2	1,2 – 2,2	-	2,5 - 4	-	2-5
Storage	2,6	1,2	-	1,8 – 3,3	-	2-6
Millings	3	2,3	-	2 - 4	-	2-10
Total	13,7	6,1 – 9,1	6	10 – 18,1	13	10-37

Annual post-harvest loss of rice in MRD: ~ USD 150 - 300 million

Source: Tran Cong Thang, *"Food Loss and Initiatives to Mitigate the Food Loss in Vietnam"*, Institute of Policy and Strategy for Agriculture and Rural Development (IPSARD), PPT presented at the "APEC 2019 Expert Consultation on Reducing Food Loss & Waste (FLW) for Addressing Interlinked Challenges of Food Security and Climate Change in APEC Member Economies", July 25-26, Taipei, 2019.

Challenges and policies for promoting post-harvest and cold chain in Vietnam

Challenges:

- ✓ **Small farm** without support by cooperatives,
- ✓ Value chain **management capacity** still weak,
- ✓ Sustainable food system in new conception,
- ✓ Lacking of research on appropriated and **low cost** post-harvest technology, cold chain management in Vietnam,
- ✓ Consumer behavior on safe food changing slowly
- ✓ PPP constraint is public credit process

Policies:

- The **Government Decision 68/2013 on reducing post-harvest**
- The **MARD Decision 1003/2014** on increasing value in processing industry and reducing food losses
- Reducing **land use tax** for investment in cold storage
- **PPP** in post-harvest processing to reduce food loss
- Post harvest techniques **training** to farmers through agricultural extension network.
- New business cooperative model to link farmers, cooperatives, company.

Source: Vu Hong Anh, "Food loss and waste in Vietnam and challenges of food security and climate change", ICD - MARD, Vietnam, PPT presented at the "APEC 2019 Expert Consultation on Reducing Food Loss & Waste (FLW) for Addressing Interlinked Challenges of Food Security and Climate Change in APEC Member Economies", July 25-26, Taipei, 2019.

2019 APEC Expert Consultation on “Reducing FLW for Addressing Interlinked Challenges of Food Security and Climate Change”

- Held on July 25-26, 2019 in Taipei
- 74 participants from **14 APEC** economies
- 36 speakers, including Clementine O'Connor, (UNEP); Chris Cochran (ReFED); Brian Lipinski, (WRI)
- APEC member economy's FLW progress reports.

Fifth APEC Ministerial Meeting on Food Security

Puerto Varas, Chile, 23 August 2019

Puerto Varas Declaration on Food Security

“6. For food systems to effectively adapt to global changes while securing long-term food security, we encourage the development and implementation of integrated policies for agriculture, aquaculture and fisheries in line with the spirit of the **APEC Food Security Roadmap Towards 2020** and **the UN 2030 Agenda for Sustainable Development**. This will contribute to improving productivity, reducing food loss and waste, ensuring the conservation, protection and sustainable use of water, land and marine ecosystems, biodiversity and natural resources, as well as enhancing society’s wellbeing.”

Fifth APEC Ministerial Meeting on Food Security

Puerto Varas, Chile, 23 August 2019

Puerto Varas Declaration on Food Security

“7. The resilience of our food systems to climate variability is a priority for our economies because agricultural production is closely linked to weather conditions. We recognize the positive role that agriculture can play in providing solutions to global challenges. **Reducing food loss and waste can also be an adaptive and mitigation option to reduce the food security risks of new climate scenarios.** We support strengthening regional cooperation with an aim to creating enabling conditions to face the challenges and leverage the opportunities brought by globally changing climatic conditions.”

Reference: [Puerto Varas Declaration on Food Security](#), APEC website at:
http://mddb.apec.org/Documents/2019/MM/FSMM/19_fsmm_jms.pdf

Fifth APEC Ministerial Meeting on Food Security

Puerto Varas, Chile, 23 August 2019

Puerto Varas Declaration on Food Security

“9. We acknowledge that **the prevention and reduction of food loss and waste is a multidimensional challenge that continues to affect food security and environmental sustainability in the APEC region.** We highlight the importance of strengthening policies along the entire food chain with the contribution of all relevant stakeholders. We support further APEC cooperation in generating information and improving measurements; strengthening partnerships with all stakeholders; encouraging research, development and innovation, including information and communications technology (ICT); raising awareness and building capacity; and **developing robust policies to prevent and reduce food loss and waste.”**

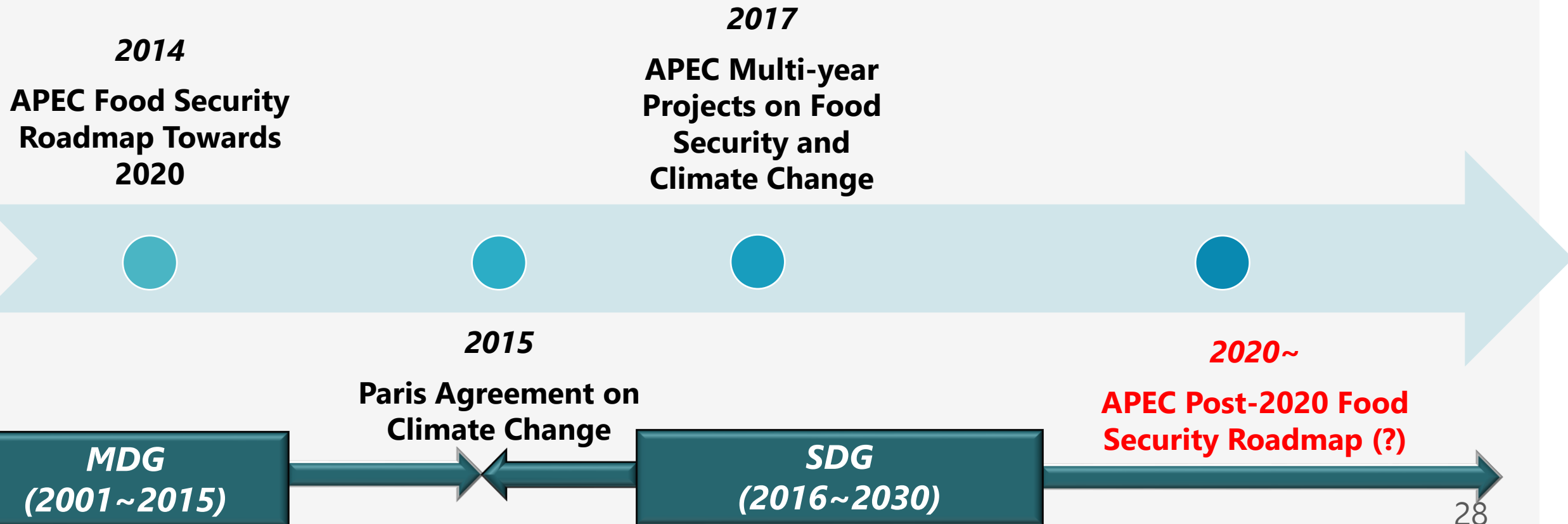
Reference: [Puerto Varas Declaration on Food Security](#), APEC website at:
http://mddb.apec.org/Documents/2019/MM/FSMM/19_fsmm_jms.pdf

Concluding Remarks

1. An APEC Post-2020 Food Security Roadmap
2. Initiative on “APEC FLW Reduction Outlook Forum”

Safeguarding APEC Food Security

Reducing FLW has been repeatedly underscored as one of the primary tasks to safeguarding APEC Food security in relevant APEC fora and Leader's meetings.



Initiative on “APEC Food Loss and Waste Reduction Outlook Forum”

I. Purposes:

- **Prepare APEC FLW Reduction Target and Framework** for the Post-2020 Food Security Roadmap;
- **Exchange info.** on measurement, innovative technologies, policies, actions and best practices;

II. Method:

1. Host annual **workshop** by interested economy
 - Discuss global outlook and regional trend;
 - Provide updated measurement and data;
 - Present local actions and policy responses;
 - Highlight challenges and opportunities.
2. Publish annual APEC FLW reduction **outlook report**.
3. Prepare a Summary Outlook Report to the **Ministerial Meeting**.

Thank you for your attention!

