

Agricultural Technical Cooperation Working Group
Strategic Plan 2020-2024
(Initial Draft)

ATCWG was established to serve as a forum for APEC member economies to enhance the capacity of agriculture and its related industries to contribute to economic growth, food security and social well-being in the region. Agriculture substantially contributes to the economy of most APEC member economies, and the issues of food security that includes food safety are of critical importance to the region. The ATCWG will implement its activities consistent with its mandate, the vision statement and action plans incorporated in the Osaka Action Agenda and relevant subsequent directions, including those identified by the Ministerial Meetings on Food Security (MMFS) held in Niigata, Japan in October 2010 up to the fifth held in Puerto Varas, Chile in August 2019 and APEC Food Security Roadmap towards 2020.

The ATCWG provides strong technical expertise that also supports other related APEC fora. ATCWG seeks to increase interactions with other APEC fora. It also provides direct advice and support to other APEC fora, Senior Officials Meetings (SOMs), Ministers and APEC bodies aimed at improving the food security and agricultural sustainability of the region. Other APEC fora include the APEC Food Safety Cooperation Forum (FSCF) and its Partnership Training Institute Network (PTIN), High Level Policy Dialogue on Agricultural Biotechnology (HLPDAB), Ocean and Fisheries Working Group (OFWG), the Policy Partnership on Food Security (PPFS) as well as Policy Partnership on Women and the Economy (PPWE).

1. Vision

APEC member economies have effectively addressed the issues of food security, sustainable development, climate change, and wealth creation in their food and agricultural sectors.

2. Mission

ATCWG's mission is to enhance agriculture's contribution to the region's food security, economic growth and social well-being by promoting technical cooperation

among APEC members. ATCWG will harness officials and experts from academia and private sectors who are available to work with member economy officials, agricultural experts, the business community and as part of a dynamic network to effectively address the issues of food security, circular agriculture, sustainable development, climate change, and wealth creation in the food and agricultural sectors through capacity building, studies, workshops, information sharing, promoting public and private partnership (PPP), and strengthening collaborations with other APEC working groups and other regional and international organizations.

3. Scope of Activity

- The ATCWG will concentrate in its future work on developing a dialogue and implementing agreed action programs on economic and technical cooperation along the chain of agriculture and food production, processing, marketing and distribution with special emphasis on opportunities for agricultural technical cooperation and trade and investment facilitation.
- Agricultural Technical Cooperation will focus on, but not be limited to, the following areas of activities:
 - Promoting activities and regional cooperation to strengthen food security in the APEC region, such as through the reduction of food losses and wastes.
 - Strengthening the cooperation among APEC members on conservation and utilization of animal and plant genetic resources by means of new technologies, such as next-generation sequencing technology, genetic mapping, connecting genotype to phenotype (G to P), etc.
 - Enhancing the R&D and extension of Smart Agriculture (Agriculture 4.0) to increase agricultural productivity, to resolve the problem of manpower shortage, and to cope with and adapt to the challenge of climate change.
 - Promoting the R&D and extension activities of post-harvest handling, processing, and cold-chain technologies to ensure product quality, safety, and shelf-life.
 - Building a resilient agricultural system to cope with the challenge of climate change through the cooperation on the following: (1) food security and agricultural risks, (2) production resilience and adversity adjustment, (3) production environment and knowledge platform, (4) value addition of weather information and disaster prevention, and (5) pests analysis and

adaptive management.

- Conducting agricultural resources recycling and reuse, including development of green energy; greenhouse gas reduction; environmental benefit assessment and economic value addition under the practices of circular agriculture.
- Building the value chain and marketing channels, and also providing agricultural finance through block-chain technology for small scale farmers to enhance their income and also increase their inclusiveness and global market connectivity.
- Strengthening cooperation on sanitary and phyto-sanitary (SPS) issues, integrated pest management (IPM) , biosecurity, biodiversity, and control of invasive alien species (AIS), particularly focusing on control and prevention of quarantine pests and diseases to facilitate agricultural trade.
- Other areas identified and adopted by APEC members.

4. Critical Thrusts/Areas to Achieve Success

- Facilitate dialogue and create opportunities to exchange views, share knowledge, information and experience among APEC member economies.
- Enhance capacity building in food security and sustainable agriculture through workshops and projects at individual level and institutional level in terms of knowledge, skills, attitudes, and uptake of innovation outputs.
- Improve linkages, networking capability, PPP and knowledge sharing among different groups of private and public stakeholders.
- Facilitate trade and investment in agriculture and promoting technology transfer to accelerate the development and prosperity of agriculture in the region.
- Adopt new tools of science to address agricultural production and distribution problems.
- Develop strong working relationships with other relevant APEC fora such as the PPFs, TPTWG, SMEWG, OFWG, EPWG, PPSTI, PPWE and HWG. Likewise promote collaboration with other regional and international organizations to jointly address issues on food security and sustainable agricultural development.
- Commitment to and participation in ATCWG activities and implementation of its recommendations.
- Provide adequate funding for ATCWG proposed activities.

- Provide special focus on the agriculture of the poor to address food security and rural poverty problems.
- Give urgent attention to the agriculture in fragile environments to mitigate the effect of climate change, reduce the chemical fertilizer dependency and the use of chemical pesticides, and increase the resilience to natural disaster in accordance with United Nations Framework Convention on Climate Change (UNFCCC).

5. Objectives and Key Performance Indicators (KPIs)

In light of its overarching working mechanism of promoting agricultural technical cooperation among APEC member economies, the ATCWG seeks to improve the capacity of member economies in agriculture and its related industries. Equally important, it seeks to share information and experiences in the areas of agriculture, biotechnology, natural resource management, and climate change adaptation and mitigation ultimately to contribute to the region's food security, economic growth and social wellbeing.

The collective objectives of ATCWG and Key Performance Indicators (KPIs) are enumerated below:

- **Objective 1:** To promote collaborative activities and regional cooperation among the APEC members.
 - **KPI**
Directives carried out through projects implemented by ATCWG, and number of economies participating.
- **Objective 2:** To improve agricultural production and distribution through increased use of the new tools of science accompanied by institutional innovations.
 - **KPIs**
 - i. New tools of science and institutional innovations introduced by 2020;
 - ii. Average agricultural production increases from 2020 to 2024 and agricultural trade flows also increases over the same time period among APEC economies.
- **Objective 3:** To strengthen human and institutional resource capacities in agriculture through education and training.

➤ **KPIs**

- i. 10 workshops with at least 500 participants by 2024; a follow up survey shows that 90% of the participants in the workshop use the knowledge gained in their jobs;
- ii. 5 major conferences that generate proceedings by hosting member economies.
- iii. 10 successful stories shared among member economies on building the value-chain and marketing channels for small scale farmers to enhance their income and also increase their inclusiveness and global market connectivity

- **Objective 4:** To improve environmental and natural resource management, infrastructure development aimed at addressing food security and safety.

➤ **KPIs**

- i. Compendium of best practices on environmental and natural resource management by end 2024 increase in member economies investment on food security infrastructure aimed at addressing efficiency.
- ii. 10 new technologies and best practices on circular agriculture have been adopted and commercialized by private sector.

- **Objective 5:** To strengthen agricultural information systems including their analysis and utilization.

➤ **KPI**

Developed further the APIP initiated by Japan by 2015.

- **Objective 6:** To improve the capacity of member economies on preparedness for natural disasters including cross border pests and diseases.

➤ **KPI**

Together with other APEC fora and appropriate international organizations train 50 experts on the use of GIS, ICT technologies and best practices in establishing the early warning system aimed at tracking and mitigating the effects of natural disasters and cross border disease problems.

- **Objective 7.** To strengthen capacity of member economies in reducing damage and loss in agriculture and fisheries from extreme events.

➤ **KPI**

Reduction of 10% damage and loss to agriculture and fishery and strengthening capability of these sectorsⁱ

Reduction of 10% as a KPI is achievable if there is political will. Many of the damage reduction measures are already tested either in small areas or large elsewhere. What is needed is the political will or incentives for farmers and fisher folks to implement the major measures in an extensive way.

Activities:

- ✧ Capacity building activities such as seminars, workshops and training courses on climate and disaster risk assessment, vulnerability assessment, risk mapping, climate change adaptation and disaster risk reduction strategies and related topics embodied in a multi-year project covering 2016-2020.
- ✧ Collaboration on common RDE priorities identified during the APEC Symposium on Planning a Collaborative RDE Program on Climate Change among APEC Economies held in September 2015:
 - (1) Improvement of seasonal climate forecasts
 - (2) Climate-Smart Agriculture Knowledge Sharing
 - (3) Mainstreaming Climate Change Adaptation and Mitigation
 - (4) Inventory of relevant research programs
- ✧ Peer-to-peer learning
 - (1) Trainings
 - (2) Information and experience sharing
 - (3) Research, comparative analysis
 - (4) Multi-hub learning alliance
 - (5) Pilot Models
 - (6) Quantifying economic losses

ⁱ Member economies periodically suffer from extreme events. The damage and loss to agriculture and fishery comprise an average of 22% of the total economic losses from these periodic natural hazards mainly extreme weather events such as storms, hurricanes, typhoons/ floods and drought (FAO, 2015). Such damage and loss significantly decrease food production thereby threatening food security and maintaining the cycle of poverty in rural areas. Various instruments and strategies have been adopted, being tested and proposed to reduce such damage and loss. Hence, to help achieve

food security and promote inclusive growth, member economies must address the reduction of damage and loss to agriculture and fishery due to extreme events.