



2019 Workshop on APEC GIFTS ⁺

Women Sparkling in Smart Agriculture

2 October, 2019 | Incahuasi, Hotel Club La Serena





Contents

01	<i>APEC GIFTS A+: Promoting Gender Inclusion in Smart Agriculture</i>
03	<i>Agenda</i>
05	<i>Introduction</i>



2019 APEC GIFTS A⁺



2019 Workshop on APEC GIFTS A⁺: Women Sparkling in Smart Agriculture

Background

Women comprise around 49.5% of the agricultural labor force in Eastern and South Eastern Asia. Agriculture can be an important engine of growth. However, the sector is underperforming because of that hinders women economic participation. In respond to 2018 APEC Priority, "Harnessing Inclusive Opportunities, Embracing the Digital Future." and 2017 & 2016 APEC Leader's Declaration, Chinese Taipei launched the APEC funded project "APEC GIFTS A⁺ : Promoting Gender Inclusion in Smart Agriculture". The project's over-all goal is to promote use of gendered innovation approaches to boost innovation and development of agricultural science, technology, facilities and the environment as well as encourage women's participation in inclusive and innovative green economy. Furthermore, the project would be carried out to enhance physical, institutional and people-to-people connectivity through innovative technology, cross generations and cross fields examples.

This workshop will focus on the outcome of APEC project: APEC GIFTS A⁺: Promoting Gender Inclusion in Smart Agriculture. The policy toolkit and demonstration video will be displayed and further the discussion on women's participation in smart agriculture industry.

General Information

- Date: 2 October, 2019
- Host Economy: Chinese Taipei, Chile
- Co-Host Economy: The Philippines
- Organizer: Department of Gender Equality/ Chinese Taipei,
Ministry of Women and Gender Equality/ Chile
- Venue: Incahuasi, Hotel Club La Serena

Three Clusters

1. Enabling Environment

An **Enabling Environment** starts with a fundamental influence of culture, on which a legal, education system and community is built. Education carries the great responsibility of providing quality STEM and ICT education to all, including women and girls.

When adopting smart agriculture technologies, it is also necessary that governments and legal systems support women or women-entrepreneurs for their specific needs, and ensure the accessibility of all the resources and information.

The cluster therefore will focus on the transformation of (1) Culture, and women's opportunities of access to (2) Quality Education, (3) Government, Legal and Policy Support, and (4) Information and Resources that could ease the burden of women's participation in smart agriculture.

2. Inclusive and Sustainable Development

In recent years, climate change threatens our ability to ensure global food security, eradicate poverty and achieve sustainable development (UNDP, 2019). It has both direct and indirect effects on agricultural productivity including changing rainfall patterns, drought, flooding and the geographical redistribution of pests and diseases. As ICT has been making remarkable progress in agricultural industry, it is important that we adopt smart agriculture as an approach to reduce poverty and increase food and nutrition security.

Inclusive and sustainable development is an approach that benefit all stakeholders - including marginalized groups - in addressing social and economic development issues. It promotes transparency and accountability, and enhances development cooperation outcomes through collaboration between civil society, governments and private sectors. This cluster provides the guidance of (1) identifying different needs of women with intersectional identity and (2) integrating gender perspective into climate-smart agriculture.

3. Technology Innovation

To reduce costs and enhance the efficiency of agricultural labor; sensors, electronic measurement algorithms and drones are being used to collect data on targeted inputs such as soil moisture and crop health. The collected data is stored on a server or on the cloud and can be easily accessed by farmers via the internet with tablets and mobile phones to enable intelligent and remote wireless control over the agricultural production process (Lee, 2018).

However, women in South Asia are 26% less likely to own a mobile than men and 70% less likely to use internet due to accessibility and affordability problems (ITU, 2018). This impede women's ability to accrue the benefits of smart agriculture.

To achieve **technology innovation** that includes women, it is necessary to understand their different needs and barriers. Not only sex and gender should be prioritized before designing programs and/ or products, also gender analysis bring us innovation which benefits both women and men.

This cluster follows the concept of **gendered innovations** and will introduce several approaches that could engender the production chain of smart agriculture, which include equipment design, farming incubation, farming technology, e-commerce and digital security.



AGENDA

2 October, 2019

Workshop | Incahuasi, Hotel Club La Serena

TIME	TOPIC
13:50~14:00	Registration
14:00~14:15	Opening and Welcome Remarks <ul style="list-style-type: none"> • Mr. Ping-Cheng Lo, Minister without Portfolio, Chinese Taipei • Ms. Maria Carolina Cuevas Merino, PPWE Chair, Chile • Dr. Rhodora Masilang-Bucoy, Chairperson of Philippine Commission on Women (PCW), The Philippines
14:15~14:20	Group Photo
14:20~14:35	Video Display "Women Sparkling in Smart Agriculture – Gendered Innovations Trigger Ambition"
14:35~15:10	Keynote Speech: Introduction & Guide of the Policy Toolkit <p><i>Together with Chile and the Philippines, Chinese Taipei developed the "Policy Toolkit on Promoting Gender Inclusion in Smart Agriculture", which aims to provide guidance and practical experiences to address gender concerns in smart agriculture. In this session, Dr. Chang will introduce the context of the toolkit and open the floor to more discussion on application and its impact.</i></p> <ul style="list-style-type: none"> • Speaker from Chinese Taipei : Dr. Ching-Cheng Chang, Research Fellow, Inst of Econ, Academia Sinica
15:10~16:40	Panel Discussion : Promoting Gender Inclusion in Smart Agriculture <p><i>Researchers, experts and government officials are invited to have dialogues sharing the experiences and insights on integrating gender perspective into smart agriculture projects and policies, under the three main clusters of the policy toolkit, Enabling Environment, Sustainable and Inclusive Development and Technology Innovation.</i></p> <ul style="list-style-type: none"> • Moderator from Chinese Taipei : Dr. Unga Kalay Joy Lin, Executive Director, YWCA at Pingtung • Panelist from Chinese Taipei : Ms. Jia-Cih Yang, CEO of Telome Seedlings CO., LTD. • Panelist from Chile : Ms. Javiera ARTEAGA, Management and Technical Support of Food and Agriculture Organization(FAO)at the United Nations in Chile • Panelist from The Philippines : Ms. Remelyn Recoter, Director IV/Regional Executive Director, Regional Field Office Western Visayas of Department of Agriculture • Panelist from New Zealand : Ms. Renee Graham, Chief Executive of Ministry for Women • Panelist from Chinese Taipei : Ms. Mei-Chun Lu, Researcher of Council of Agriculture

INTRODUCTION



Keynote Speech Introduction & Guide of the Policy Toolkit



Dr. Ching-Cheng Chang
Research Fellow
The Institute of Economics
Academia Sinica

Education Background

- Ph.D. Agricultural Economics, Pennsylvania State University, December 1987.
- M.S. Agricultural Economics, National Taiwan University, June 1982.
- B.S. Agricultural Economics, National Taiwan University, June 1979

Research Fields

- Agricultural and Environmental Economics - Agricultural Production
- Agricultural and Environmental Economics - Agricultural Policy
- Agricultural and Environmental Economics - Agricultural Trade
- Microeconomics and Mathematical Economics - Quantitative Methods

Research Specialty

- Assessing the economic impact of public policies (commodity programs, environmental regulations, public research, and international trade policies) on natural resource usage and production decisions involved in agricultural sector.
- Methodological issues involved with micro-level and macro-level decision making, efficiency measurement, productivity growth, dynamic optimization, risk/uncertainty, and cost-benefit analysis in public project appraisal.
- Research on global climate change impact and related risk-reduction policies.
- Research on trade policies and market structure of international commodity market.

Experience

- 2011~ Director, Socio-Econ Dept, APEC Research Center for Typhoon and Society
- 2000~ Research Fellow, Inst of Econ, Academia Sinica and Professor, Dept of Ag Econ, National Taiwan University.
- 1993~2000 Associate Research Fellow, Inst of Econ, Academia Sinica and Associate Professor, Dept of Ag Econ, National Taiwan University.
- 1992-93 Visiting Associate Professor. Dept of Ag Econ, Texas A&M University.
- 1988-92 Visiting Assistant Professor. Dept of Ag Econ, Texas A&M University.
- 1987-88 Post-doctoral Research Associate. Dept of Ag Econ, Texas A&M University.
- 1983-87 Research Assistant. Dept of Ag Econ and Rur So, Penn State University.
- 1982-83 Research Fellow. Bureau of Statistics, DGBAS, Executive Yuan.

Panel Discussion Promoting Gender Inclusion in Smart Agriculture



Moderator:

Dr. Unga Kalay Joy Lin
Executive director
YWCA at Pingtung

After retiring from my career as a professor at National Pingtung University in 2016, I am now a full-time farmer. My background is in therapeutic recreation and education; I also have a strong passion for the rights of Indigenous peoples and women. I have been an active member of many NGOs including YWCA. As an Indigenous woman from the Amis tribe, I always want to back to nature to practice traditional living where I can connect with land and spirit. I practice traditional and organic agriculture, which allows land to flourish naturally. Achieving happiness and living in the present are the guiding principle of my life. I do that by staying connected with friends and family and treasuring every opportunity I am given in life. This is how I made my dream realized. My current goal is to create a friendly environment for people to work and play.



Panelist:

Ms. Jia-Cih Yang
CEO
Telome Seedlings CO., LTD

Jia-Cih Yang current position is CEO of Telome seedlings, a startup seedling company development of banana, strawberry, papaya and passion fruit's plant tissue culture technology. Select disease resistant variety and provide virus-free healthy seedlings to farmers to solve plant disease. In two years, Telome has sold over 70 thousand seedlings and planning build a factory in Zungpu Township Chiayi County in 2019. She had a master degree in Life Science and a PhD study at school in plant pathology from National Chung Hsing University, and also a young agriculture ambassador and top's 100 outstanding young farmers.

Panel Discussion Promoting Gender Inclusion in Smart Agriculture



Panelist:

Ms. Renee Graham
Chief Executive
Ministry of Women
New Zealand

Renee has been Chief Executive of the Ministry for Women since June 2017. The Ministry for Women works to improve outcomes for New Zealand women and girls and strongly promotes diversity and inclusion. Key priority areas include closing the gender pay gap, ensuring all women and girls are free from violence, and improving outcomes for Māori women.

Prior to this appointment, Renee was a Policy Director at the Ministry of Education. Renee has a strong background in leading complex strategic policy development in both the Ministry of Education and Ministry of Social Development.

Renee is of Ngāti Toa and Ngāti Raukawa descent.



Panelist:

Ms. Javiera Arteaga
Management and Technical Support
Food and Agriculture Organization of the United Nations in Chile
Chile

Degree in Economics and Business, Master in Economics in Natural Resources and Environment with experience in the management of projects and initiatives in the areas of environment, energy, transport, trade and international negotiations in the State of Chile and FAO.



Panel Discussion Promoting Gender Inclusion in Smart Agriculture



Panelist:

Ms. Remelyn Recoter

Director IV/Regional Executive Director
Regional Field Office Western Visayas, Department of Agriculture
The Philippines

Our speaker/panelist is a true blooded Filipina. An Alumna of Central Philippine University in Jaro, Iloilo City, Philippines, earning her bachelor's degree in Chemical Engineering. A President Marcos COCOFED Scholar. She has a degree in Master in National Security Administration Regular Class 33 from the National Defense College of the Philippines and Command and General Staff Course Class 49 from the AFP's Command and General Staff College. An Army Reserve Officer with a rank of Lieutenant Colonel and was awarded as an Outstanding Armed Forces of the Philippines Reserve Officer in 2006.

Before she served the Government, she worked as laboratory technician at a sugar central and prawn hatchery. In the government, she rose from the ranks as civil servant, starting as an Agricultural Extension Specialist I, at the Department of Agriculture-Agricultural Training Institute (ATI). She has served ATI for 18 long years and was already contented being home based and expecting to retire as Center Director. But, a twist in her Career brought her to the regional office of the Department of Agriculture in Western Visayas. She was appointed as Director III and designated as Assistant Regional Director for Operations

Typhoon Pablo (Typhoon Bopha) which heavily damaged Davao Region in Mindanao was another event that gave another twist in her career. She was pulled out from Iloilo City and designated as the OIC Regional Executive Director (RED) of DA-Davao Region in Mindanao primarily for the rehabilitation of damaged areas and assist the affected farmers. It was during her stint in Davao that President Benigno Aquino III appointed her as a full pledged RED. Served Davao Region for three and a half years and was transferred back to her mother region when the Duterte Administration assumed office last July 2016.

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Memo

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