Asia-Pacific women in research and extension: Advancing gender equality in innovation

To celebrate the 2022 International Women's Day, the Asia-Pacific Association of Agricultural Research Institutions (APAARI), in collaboration with the Asia-Pacific Islands Rural Advisory Services Network (APIRAS), identified six outstanding women, who have made significant contributions through innovation towards improved agri-food development in Asia-Pacific. Their stories were shared in a webinar on 'Women in research and extension: Advancing gender equality in innovation' on 8 March 2022.

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Women's valuable role in agricultural innovation

Women are integral to advancing agricultural and social transformation in the Asia-Pacific region, whether working as agricultural researchers, scientists, rural advisors, research and project managers or leaders, as well as producers and agri-entrepreneurs. The use of innovative concepts, approaches and tools has been at the centre of their research and extension work, but also at the grassroots level rural women often use innovative thinking to come up with coping strategies to address many issues they are facing. Recently, women's roles in contributing towards food and nutritional security, especially in times of COVID-19 and in the face of the increasingly more evident impacts of climate change on the region's agriculture and rural development, have become even more important.

Nevertheless, women's significant contribution to the strengthening of agricultural innovation systems (AIS) has not always been fully recognized or valued. This is mainly due to the prevalent social norms in the mostly patriarchal and conservative socio-cultural environments in which they live and work. This has led to women within the AIS having limited capacities, insufficient access and confidence to enter management positions and influence innovation processes and inadequate mentoring and leadership support, along with many other challenges they face.

The Sustainable Development Agenda 2030 of the United Nations recognizes that no society can reach its full potential unless it empowers women and youth, and removes all obstacles to women's full participation in all areas of human endeavour. As women and men bring different perspectives to problems, an enabling environment considering equal contribution of both men and women needs to be built in and mainstreamed in institutional processes and development programmes as an enabler of innovation.

An overview of the contributions of women to innovation through their work in agricultural research and extension in the Asia-Pacific

Globally, rural women comprise 67 per cent of the total agricultural labour force, and are responsible for the production of more than 55 per cent of food grains and other food crops. [1] In Asia, women contribute about half of the region's food production. However, evidence shows that they receive only 5 per cent of all agricultural extension services, and are less recognized than men as farmers in their own right due to deeply established social norms and institutions. [2]

1. Srivastava and Srivastava 2017, Role of women in Indian agriculture - Issues and challenges. Journal of Agroecology and Natural Resource Management 4(1):37-43.)
2. Grow Asia 2012, https://www.growasia.org/post/mainstreaming-gender-in-agriculture-and-food-systems-in-southeast-asia; USAID,2012: https://pdf.usaid.gov/pdf_docs/pnaec808.pdf).

Rural women have different information needs and preferences but tend to be less literate than men, which means they often miss out on new information, technologies and practices. Furthermore, their responsibilities and decision-making power within the household is often ignored, which results in low adoption of technologies.

For decades, women scientists and rural advisors have made significant contributions in delivering innovative solutions through agricultural research and extension. This is particularly notable through their work in culturally sensitive areas that require gender-sensitive approaches to address common issues faced especially by women farmers, such as nutrition issues. In the context of the Asia-Pacific, where a majority of women are involved in farming and are still hindered in access to extension and technology due to prevailing social and cultural norms, it becomes all the more incumbent to have gender-sensitive approaches and involvement of women, both as advisors and researchers. Their conscious communication skills and unique perspectives support research and extension institutions in addressing the specific challenges faced by smallholder farmers.

However, the share of women agricultural researchers as compared to their male colleagues varies across the region. Figure 1 presents the distribution of women agricultural researchers per country in Asia-Pacific.

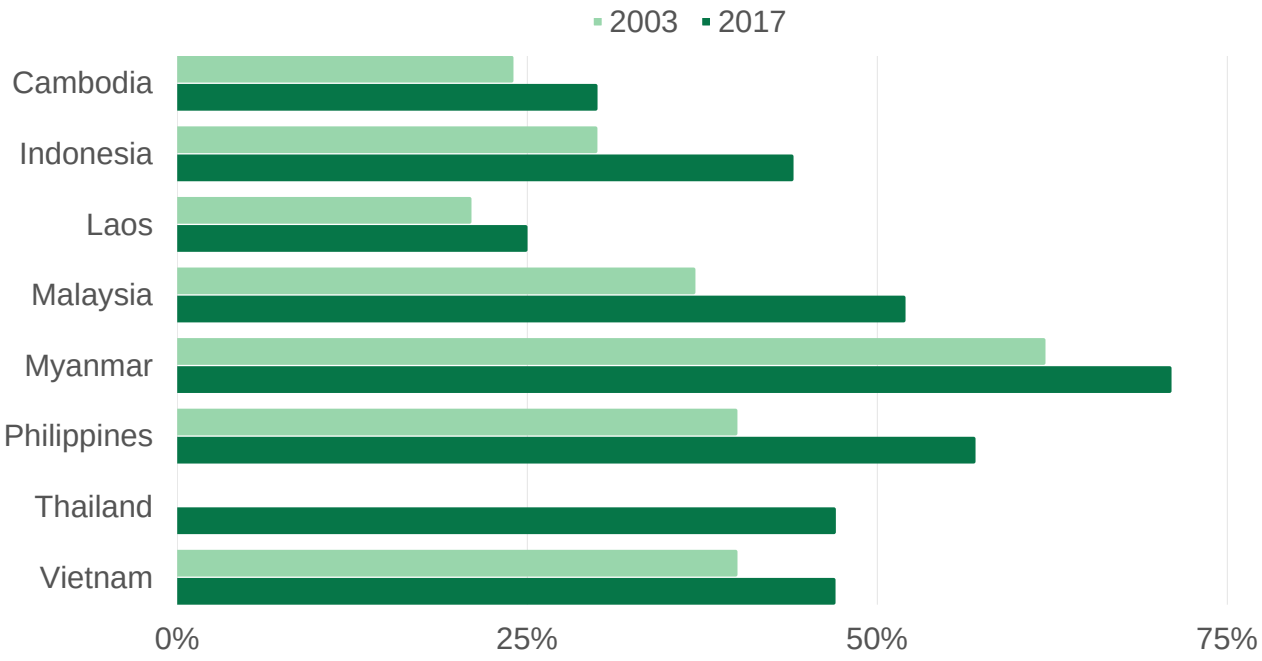

Figure 1: Share of female agricultural researchers by country, 2003 and 2017

Source: Constructed by authors of ASTI (various years)
Note: Data includes researchers employed at government and higher education agencies with BSc, MSc and PhD degrees; data for Malaysia and the Philippines is for 2022; NA= data not available.

3. Stads, G., Nin Pratt, A., Omot, N., Thi Pham, N. (2020) Agricultural Research in Southeast Asia: A Cross-Country Analysis of Resource Allocation, Performance, and Impact on Productivity. p.16 https://www.apaari.org/web/download/36021/

In recent years, the share of female agricultural researchers has grown considerably in Southeast Asia (49 per cent in 2017) and is higher than in other developing regions around the world, such as Sub-Saharan Africa (24 per cent in 2014), South Asia (20 per cent in 2016/17), West Asia and North Africa (34 per cent in 2012), and Latin America and the Caribbean (36 percent in 2013). In South and Southeast Asia, this share is the lowest in Nepal and Pakistan, where just 11 and 19 per cent of agricultural researchers respectively were women (2012 and 2016). In contrast, Malaysia, Myanmar, Philippines and Sri Lanka actually employed higher numbers of female researchers than male researchers. In fact, nowhere in the world is the share of female agricultural researchers higher than in Myanmar (71 percent in 2017). Although this appears positive, the underlying reason is that salaries of civil servants in Myanmar are so low that they are insufficient to support a family. Hence, the low salary is a disincentive to the research employment of men, who are predominantly household heads. Consequently, research positions mainly attract female applicants.[4]

In recent years, a growing number of women across Southeast Asia have made advances in agricultural research. At many agricultural universities across the region, female students outnumber male students, resulting in a steady influx of young female researchers into research and development (R&D) agencies. Nevertheless, women are less likely to hold management positions, which means they have less influence on priority setting and policy making. In some countries, women also remain less likely to hold PhD degrees. In Cambodia, only 8 per cent of agricultural researchers with PhD degrees were female (2017), while in Nepal (2016) and Pakistan (2012) it was only 10 per cent of researchers. In Vietnam, only one in four PhD-qualified researchers were female (2017), which is remarkable given that nearly 50 per cent of the country's researchers—that is, the combined total of those with BSc, MSc, and PhD degrees—were female.[5] Figure 2 demonstrates the distribution of PhD-qualified agricultural researchers by gender.

4. Stads, G., Nin Pratt, A., Omot, N., Thi Pham, N. (2020) Agricultural Research in Southeast Asia: A Cross-Country Analysis of Resource Allocation, Performance, and Impact on Productivity. p.13 https://www.apaari.org/web/download/36021/
5. Stads, G., Nin Pratt, A., Omot, N., Thi Pham, N. (2020) Agricultural Research in Southeast Asia: A Cross-Country Analysis of Resource Allocation, Performance, and Impact on Productivity. p.11 https://www.apaari.org/web/download/36021/

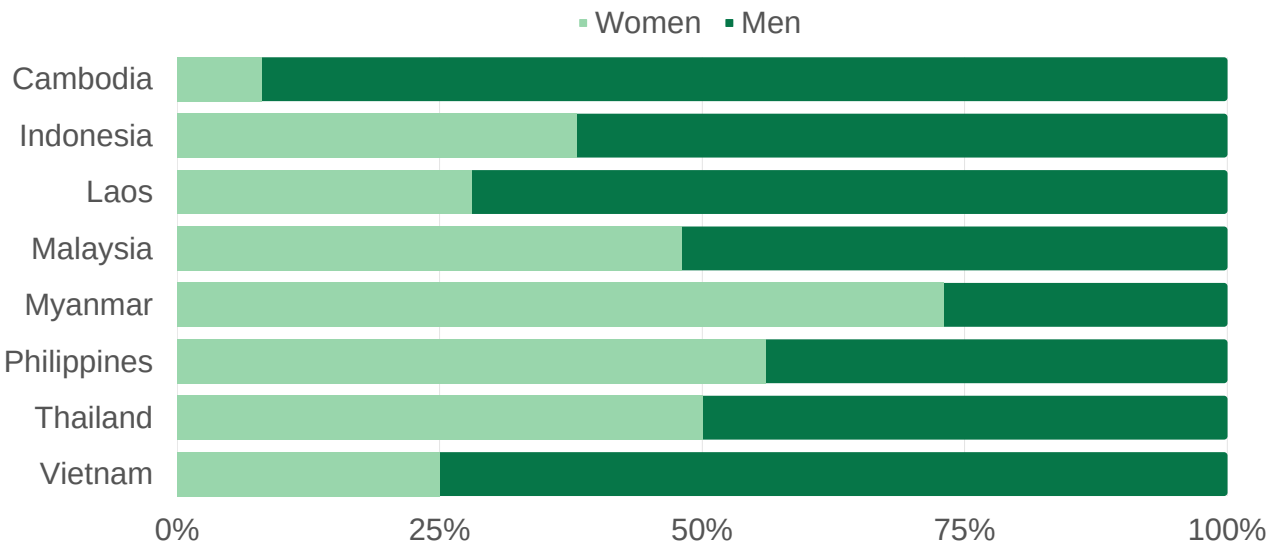

Figure 2: Distribution of PhD-qualified agricultural researchers by gender, 2017

Source: Constructed by authors of ASTI (various years)

The public sector employs the highest number of women researchers. But in India and the Philippines, it was found that 64 and 60 per cent of female researchers respectively were employed in the higher education sector. In terms of research topics, in 2016 and 2017, more than 40 per cent of women researchers focused on crop research, 14 per cent on livestock and 9 per cent on forestry. Comparatively less women focused on research in fisheries, natural resources and socio-economics. In crop research, around 36 per cent of women engaged in cereal research, especially rice in countries like Cambodia and Laos with rice centric research agendas. Only 22 per cent of women focused on horticulture, and 13 per cent on oil crops.

In agricultural extension women advisors also face a number of challenges. Firstly, only 15 per cent of the world's agricultural extension agents are women,[6] and women receive only 5 per cent of all agricultural extension services. Women in extension also have to deal with gender biases while delivering services to farmers, and often, the knowledge they share may not be accepted by male farmers. However, experience shows that women extension agents provide high quality advisory services that are relevant to farmers' needs, when they are appropriately trained on technical matters. Moreover, they provide better services to women farmers in more conservative areas than their male colleagues. To achieve successful outcomes in agricultural extension, women are extremely creative in finding and developing innovative approaches and ways of communicating and working with rural communities.

6. Sweeney, E. (2020) Mainstreaming Gender in Agriculture and Food Systems in Southeast Asia https://www.growasia.org/post/mainstreaming-gender-in-agriculture-and-food-systems-in-southeast-asia; and USAID (2012) GENDER MAINSTREAMING IN ICT FOR AGRICULTURE, Briefing Paper. https://pdf.usaid.gov/pdf_docs/pnaec808.pdf).

In South-East Asia, women play major roles in sowing, transplanting, harvesting and processing staple crops, such as rice. Complementary gender roles are also found in most areas – as in Nepal and India – where women exclusively gather fodder for buffaloes, cattle and other livestock. Almost all women in rural India can be termed as farmers, in some sense, working as agricultural labour, unpaid workers in families and farm enterprises or a combination of the two.[7]

Though women play a major role in farming, they receive very limited support and funding for extension and advisory services. Women and men often have different information needs and preferences. Most women engaged in agricultural operations are less literate than men. The social norms and institutions, which often do not recognise women as farmers in their own right, make them invisible in the agricultural sector. As a result, information, technologies and practices, and their dissemination are usually tailored to men.

Gender bias exists in both the content and delivery of extension and rural advisory services. Little attention is given to the responsibilities, activities, assets and power of women within the household. As a result, new technologies are often not adapted and demonstrated to women, who are often the ones who actually use and make decisions about them. As a result, most technologies are not adopted. In cases where technologies are designed for women, men, who may not understand the importance or see the benefit of these technologies, do not provide support to the women in their households when it comes to adopting these technologies.[8]

To address these issues, attention needs to be paid to responding to the dissimilar needs of men and women, as well as ensuring that the gender gap does not increase further.[9] Rural advisory services should therefore play a role in capacity development that includes training, strengthening the innovation processes, brokering linkages and facilitating partnerships, to support the bargaining position of men and women farmers.[10] This requires a significant shift from the way extension and rural advisory services are structured at present, and relevant programmes are designed and delivered.

7. Srivastava and Srivastava (2017) Role of women in Indian agriculture - Issues and challenges. Journal of Agroecology and Natural Resource Management 4(1):37-43.)
8. GFRAS (2016) Module 12: Gender in Extension and Advisory Services. This module was developed as a part of the New Extensionist Learning Kit. http://www.g-fras.org/fr/652-the-new-extensionistcore-competencies-for-individuals.html.
9. Jafrey, T. and Sulaiman, R. (2013). Gender-sensitive approaches to extension programme design. The Journal of Agricultural Education and Extension 19(5):469-485).
10. Sulaiman, V. R. and Hall, A.J. (2004). Towards extension plus: Opportunities and challenges for reform. NCAP Policy Brief No. 17. New Delhi: National Centre for Agricultural Economics and Policy Research. Pp. 4).

The following stories of six outstanding women from the Asia-Pacific region provide examples of their significant contributions to agricultural innovation that have not just led to advancing their own careers, but have improved the situation for many disadvantaged women and men in the countries where they work. These women share their success, challenges, and the ways they addressed these challenges, as well as their advice to fellow women professionals.

The secret of successful adoption of new rice varieties in Iran is to partner with farmers

More than 400,000 hectares of agricultural land in Northern Iran is devoted to production of rice. When Maryam Hosseini Chaleshtor moved to this area, she had no experience with farmers. At that time – 23 years ago – the number of women in Iran with graduate degrees in agriculture was low.

"In my Masters studies in Plant Breeding and Genetics focused on rice, I faced many challenges as a woman, but I kept moving forward and worked hard to pursue my goals. I learned that in the field of agricultural R&D, if women are given equal opportunity and are supported to innovate, with related training they can really be empowered."

Dr. Maryam Hosseini Chaleshtor

The first challenge Maryam faced was effective communication with farmers, especially smallholders, if she wanted to identify the most important problems they were facing. After some initial research Maryam found that solutions to challenges lie in involving farmers in her research.

"Accepting myself as a young female researcher in the agricultural R&D community was my biggest challenge at the beginning of my research. Since my job was promoting scientific findings, I first decided to study the rural communities involved in paddy cultivation."

During her research, Maryam spent time in the field, working with farmers, including women, where she initially faced rejection and resistance. However, she was gradually accepted as a member of their own community, which made her really understand their problems. To release new cultivars, Maryam conducted participatory breeding with cooperation of men and women farmers. As a result of this collaboration, new cultivars were introduced that were welcome by farmers. Consequently, similar work in the field of certified seeds was also very successful.

Dr. Maryam Hosseini Chaleshtor, Head of Rice Research Institute (RRI) of Iran, Agricultural Research, Education and Extension (AREEO), Iran. Devoting her career to agricultural research and innovation, Maryam joined RRI as a researcher, developing her career to later become Head of Plant Breeding Department, Deputy of Finance, and now the Head of RRI. Her current research looks at the common local Iranian rice cultivars' purification, high potential rice yield varieties, and participatory breeding programmes. She recently started leading Iran's large project on 'Improvement of quality, quantity, and efficiency of rice production' implemented by AREEO. Maryam has published ten books and many articles in peer-reviewed journals, and mentored over thirty university students.

When Indian women own land, a range of developments follow

Forests are home to many Indian tribes, with about 200 million traditional forest dwellers living in and around the periphery of 86 million acres of forest land in India. With the of Sailabala Panda, the Professional Assistance for Development Action (PRADAN) – an Indian non-governmental organization – is bringing innovation in the way it is feminizing its activity implementation. For example, how the village council can identify vulnerable women in the community, how these vulnerable women can be supported to claim their rights, and how they can get the land title in their own or community name. Most importantly, PRADAN addresses how women can play a greater role in village governance and forest conservation to enhance their livelihoods, ensure food and nutrition security at the household level, and make their villages better places to live in.

"I only planned to stay in PRADAN for fifteen days. But I was exposed to discrimination, poverty and hunger, and I felt very disturbed, so I decided to make my life more meaningful and make a difference in the lives of these poor communities."

Ms. Sailabala Panda

Sailabala started her career by mobilizing women to share their perspectives based on their roles as farmers, organizing women into women farmer/producer groups, developing their capabilities and shaping their mind sets, and empowering them as critical actors in the value chains.

“But after some time I’ve realized the root cause of these women’s disadvantage – the lack of land ownership that is making them more vulnerable. When there is the ownership of the land, all the other things fall into place. Women then have access to agricultural inputs, credit and market. More expenditure goes into family wellbeing as they have more control over the money.”

Women at the grassroots’ level struggle a lot. When a woman decides to work in agricultural extension, she faces several types of customary, cultural and social barriers when trying to push the gender equality agenda. In addition to her professional efforts to deliver extension services, she has to deal with conservative mindsets at individual and community levels. India has many progressive policies in place, but there is still a lack of intent to implement them, which creates a gap between policy and field-level implementation.

“While a lot of efforts are going into improving agricultural extension, the extension model is insufficiently localized. Rural communities lack ownership of activities, with much dependence being on the promoters. In the long run, such approaches are not sustainable. Understanding the root of the problem, and how women can collectively lead these activities, and contribute to multi-dimensional change, is a basis for creating a support system embedded in the community itself.”

Technical capacities in agricultural extension are required but insufficient. When social transformation is considered, soft skills are required to facilitate a long-term engagement. Communities are capable of driving social change, when supported by development professionals as catalyst to stimulate and facilitate these processes.

“So much technical knowledge is transferred to women, but there is a need to build the extension spirit and community feeling – the soft part. For example, in the case of forest fires, it is not the technology that solves the problem, it is the village governance. My advice to women is that at challenging times when we feel like giving up, never ever give up because our perspective is bigger than our challenges!”

Ms. Sailabala Panda, Project Lead, FRA and Forest-Based Livelihoods, PRADAN, India. Working in PRADAN for 18 years, Sailabala has extensive experience in working with vulnerable rural women to increase their access, control, ownership, and management of land resources. Sailabala has designed various grassroots engagement approaches to change the mindsets of rural communities towards enhancement of women’s position and their acceptance as landowners, farmers, and entrepreneurs. She has demonstrated a model of agriculture production cluster wherein women are playing key roles in each node of the value chain. Currently, Sailabala is working on ensuring ownership of rural women over forest land and empowering them to increase their stake in sustainable forest resource management, forest protection, and conservation and forest-based livelihoods.

Supporting farmers' adoption of new technologies in Bhutan brings positive impact on farming

Bhutan is a small landlocked country on the southern slopes of the Eastern Himalayas. Sixty per cent of its territory is covered by forests. Bhutan is famous for its unique philosophy of Gross National Happiness (GNH) index, which helps balance its development aspirations with the preservation of its cultural traditions and beautiful natural environment.

The Bhutanese agricultural sector has the national mandate to increase food production to ensure household food and nutrition security, alleviate poverty, substitute or reduce imports through increased domestic production, generate marketable surplus, enhance household income; and generate employment opportunities. In this context, agricultural innovation is considered a new idea or technology that increases effectiveness, competitiveness and resilience with the goal of addressing field problems.

Agricultural research centres in Bhutan are mandated to develop demand-driven innovations and agricultural technologies to support the country's population, 90 per cent of which lives in rural areas. Tanka Maya Pulami works in agricultural research communication providing technical backstopping to extension workers and farmers, building their capacities that lead to new technology adoption.

"To me, innovation is a new idea or technology coming from organizations and individuals to better support farmer programmes, improve agricultural production and its quality. My role is to transfer these innovations and technologies to farmers, and encourage their adoption. Many such efforts have already shown positive impacts on farmers and farming processes."

Ms. Tanka Maya Pulami

The country's agri-food system faces many challenges, including inadequate technologies and innovation particularly for value addition, e.g. processing, marketing and packaging, as well as transformation, integration of value for marketing, and geography due to the country's mountainous terrain. To address these challenges, Bhutan is linking farmers to institutions e.g. schools, capacity building through farmer training, packaging, product diversification. Human-wild life conflict is also a major challenge in farming, but women and men both play a role in keeping wildlife away from damaging the crops. Subsistence farming has been slowly shifting to the commercial scale, which requires new technologies, which are also climate smart, since climate change is a big challenge causing draught, water shortages, and seasonal rain in the country.

It is difficult to motivate farmers to use new technologies, so a lot of training has been used as a motivation. There are opportunities to use agricultural machinery, e.g. power tiller and developing and using renewable materials to prevent deforestation. However, the ongoing rural-urban migration of men leads to the feminization of farming, which means that user-friendly machinery and agricultural practices are being promoted for the use of women."

Stereotypical gender roles are still practiced in Bhutanese communities, whereby household responsibilities are mainly shouldered by women. As a result of the heavy workload within their domestic roles, low literacy rates of rural women is one of the key challenges for adopting technologies, and acquiring new information as compared to men. Since government agricultural development projects demand at least 30 per cent of women participation, videos need to be produced to facilitate women's capacity development.

"At the institutional level, we really need to practice gender mainstreaming in agricultural innovation."

Ms. Tanka Maya Pulami, Deputy Chief Agriculture Officer, Agriculture Research and Development Centre, Department of Agriculture, Ministry of Agriculture and Forests, Bhutan. In her role, she is contributing to the knowledge transfer of agricultural innovation to farmers, conducting impact assessment of adopted technologies, and collecting field-level data for socio-economic analysis and documentation. Providing technical support and capacity development to farmers, she is dedicated to bringing about positive changes to farmers' livelihood through promoting participatory processes in innovation.

Innovation in Arabica coffee led to rust-resistant varieties and opportunities for disadvantaged communities in Thailand

Arabica coffee has been an important product of Thailand since 1849. During her twelve-year role as a leader of the Arabica Coffee Project in Thailand, Ms. Chatnapa Khomarwut contributed to the release of two new coffee varieties. Chiang Rai 1 and Chiang Rai 2 are rust-resistant varieties that were the outcome of a long-term 46-year breeding programme of the Department of Agriculture (DOA), Thailand, to combat rust and anthracnose – the most serious disease of Arabica coffee in the world. But the pathways towards this success were not always easy for Chatnapa. As the project leader, she faced struggles with policy and budget.

"I learned that a shortcut to decreasing the time of a breeding programme lies in the development of knowledge and creation of a biotechnology team."

Ms. Chatnapa Khomarwut

In 2007, Chatnapa contributed to the release of Chiang Mai 80 Arabica coffee, which the DOA released particularly to provide an opportunity for tribal people living in the hills to grow coffee instead of opium. This implied following the policy of the King Rama the ninth, and teaching Good Agricultural Practices (GAP) on Arabica coffee to these disadvantaged communities.

"One of my challenging opportunities was when I worked in a team of a few women to transfer technology and GAP on Arabica coffee to tribal villages in the hills. This implied a lot of learning and building understanding of the tribal people around the new alternative according to the royal initiative. For example, we were teaching them how to plant coffee crops, when to apply the fertilizer, how to manage pests, how to prune and harvest, to ensure productivity and high quality produce. It was not easy, particularly as we worked at an altitude of 700-1,300 meters above sea level, which was physically and logistically inconvenient."

One of her prides is Chatnapa's contribution to ensuring access of these tribal people to coffee production technology. Firstly, the outcome was "Lazy Man Coffee" – a brand around which her team developed farm practices to help solve problems in productivity, infestation of diseases and insects, and processing methods. As a result, the farmers became specialty coffee producers, which facilitated their coffee exports to Japan and Korea. The second outcome was "Brand Zhan Coffee" – an initiative of a young farmer, who strived to develop and improve himself as a coffee producer. He started to learn about roasting coffee by driving his motorcycle from Ban PA Miaeng, Lampang Province, to Chatnapa's office in Chiang Mai. By now, he has been so successful that he owns a car and roastery, providing leadership in coffee production to his community.

"If there is a continuous drive for breeding development, farmers will be able to use new varieties with more productivity. Since coffee can be grown in forest conditions, it is also one of the mechanisms to conserve the environment, helping to slow down the effects of climate change in the region."

As advice to other women, Chatnapa points out that "We should have confidence in ourselves and be committed to our work, as we can always link problems with solutions. Femininity, confidence and self-leadership are strong points of persuasion in team management, helping to achieve common goals faster."

Ms. Chatnapa Khomarwut, Director, Phrae Agricultural Research and Development Research Center, Office of Agricultural Research and Development Region I, Department of Agriculture, Ministry of Agriculture and Cooperatives, Thailand. She contributed to the breeding programme of Arabica coffee - Chiang Mai80, which is a rust resistant and high yield variety released by DOA, as well as its adoption among tribal people in Thailand. Furthermore, Chatnapa has promoted systematic job creation for farmers, processors and other market actors, to reduce coffee imports to Thailand from abroad. Chatnapa is proud of these achievements as Arabica coffee contributes to the conservation of soil and water in the Thai environment. Currently, the farmers, who have been trained in producing this coffee variety, have been upgrading their production to premium coffee.

Innovating Indonesia's rural advisory through digitalization improves communication between extension and ministries

In Indonesia, it is not easy to provide extension services to its 33.4 million farmers, given that it is a big country with 13,000 islands, 35 provinces, and over 70,000 extension workers (one for each sub-district). As such, when COVID-19 started, it complicated the already complex situation in farmer extension, but also provided a valuable opportunity for the development of digitalization. During the pandemic outbreak, the extension workers were unable to advise or train farmers directly. New ideas had to be generated to ensure continuation of these services even during COVID. Under the leadership of Leli Nuryati, the Indonesian Centre for Agricultural Training at the Indonesian Agency for Agricultural Extension and Human Resource Development (IAAEHRD) developed a new extension methodology using digitalization to disseminate technology and knowledge by creating a system komando strategic pertanian. The system enables connection of the centre of the Ministry of Agriculture (MoA) with the centre of extension (kostratani/BPP) at the sub-district level through knowledge-sharing events and virtual training programmes. It is very effective and inexpensive.

Dr. Leli Nuryati

"More than 6,000 BPPs are now connected and can discuss issues and solutions with the Ministry and farmers. Every month, 1 million farmers and extension workers are trained through the platform. This is a major process innovation that enables technical innovation. There are currently five virtual activities through this platform – one of them is a meeting with the Minister talking to extension scheduled for every Friday. All extension workers from the entire country can now talk to the Minister."

However, this positive development did not come without challenges. At the beginning of the online system establishment, Leli learned that out of the 30 million farmers in Indonesia, only 25 per cent are young farmers. This implies a gap in understanding information and communication technologies (ICT), particularly the proposed digitalization in agricultural extension, by the aging farmers. The system therefore had to be user friendly to allow interactive online extension training to happen.

Moreover, limited access to internet and appropriate facilities, e.g. computers and other equiptment needed to connect villages to sub-districts, was a limitation to an effective facilitation of the platform. For example, some parts of eastern Indonesia like Maluku and Papua still face insufficient internet access to facilitate online extension.

Budget limitation was also a challenge for the government support to extension workers to implement farmer field schools (FFS) at the sub-district and district level, as well as coordination between research centres, islands and districts. The online system therefore provided an opportunity for online coordination through discussions without significant budget implications, which convinced the stakeholders that the system is beneficial in facilitating communication between research centres and extension.

“Indonesian women are involved in many research and extension activities. But only 20,000 out of 70,000 extension workers are women. We need to accelerate processes that can build their knowledge and enable them to transfer research knowledge to enhance agricultural productivity and production.”

To support the digitalization of agricultural extension in the face of COVID-19, from 2020 the Government of Indonesia has facilitated technical and communication infrastructure for all BPP in sub-districts. The system has now been implemented and is being used for and by farmers and extension workers, especially for communication and coordination. IAAEHRD is now establishing an app for data reporting to enable planning, evaluation and implementation directly from sub-district extension.

“We women can do what men can do. So if women want to be innovators, they need to be more confident, and they can change the world.”

Dr. Leli Nuryati, Director, Indonesian Centre for Agricultural Training, Indonesian Agency for Agricultural Extension and Human Resource Development (IAAEHRD), Ministry of Agriculture, Indonesia. Passionate about data, Leli believes it is crucial to enable more precise government direction and policy. In her current role, she supervises agricultural training across Indonesia and leads ten technical units responsible for training implementation. Before joining IAAEHRD, Leli worked as Director of Indonesia Center for Agricultural Extension, where she devoted a lot of effort to empowering women in extension to better reach farmer families. She strongly advocates that women have been proven to work in smart and diligent ways.

Two-way communication builds trust and ownership to embrace gender-transformative innovation in the Pacific

When Flavia Ciribello, moved to the Pacific from Cambodia, she observed that while her colleagues excelled in technical fields, their skills were less strong on social issues. Her key challenge as a gender specialist has been in building credibility around her skills, capacity and role in mainstreaming gender in existing technical operations and institutional processes. As a young woman professional from Italy, it was not always easy to assert herself and break the prevailing gender stereotypes in a new cultural environment.

Ms. Flavia Ciribello

“When I think of innovation, I think of a process that brings different perspectives – including social – in agriculture. But often, I found myself being the only one working to promote gender equality and social inclusion agenda. What needs to be understood is that when we talk about gender and agriculture, we are not adding anything new in the existing reality, we are only looking at the reality from a different perspective. So the process of developing this new perspective implies creation of new opportunities for reflection, integration of different voices and opinions, as well as valuing different experience and expertise.”

To overcome these challenges, Flavia had to build her credibility and trust with her colleagues, though a mutual learning experience that relied on two-way communication. She encouraged them to bring out their perspectives and build their ownership to embrace innovation, particularly through mentorship.

“I took a step back to observe, listen and learn from the context and people I’m working with. I also created my own network of local experts working in the same field. Step-by-step, this enabled me to start integrating gender in the technical domains, institutional structures, and people’s skills, building on the foundation that was already there.”

According to Flavia, ‘no one solution fits all’ and multiple actions by multiple actors at different levels are required to create a conducive environment for women to thrive. A comprehensive and holistic approach is required, which can be implemented through strategic partnerships and knowledge sharing. Increased technical capacity might not automatically result in women’s empowerment, hence, there is a need to reshape power dynamics in informal and formal settings, starting from homes and communities. Functional capacities or soft skills need to be developed to enable development practitioners to better engage with these communities and build their confidence. Gender bias still prevents women from moving forward in their careers; this problem needs to be systemically addressed, for example, through the creation of opportunities for reflection to enable both women and men to unlearn internalized gender stereotypes and to build a new narrative.

“My advice to other women is that when there is resistance or backlash, do not give up and follow your passion, and be with women and men who are supporting you and your agenda.”

Flavia Ciribello is Gender and Value Chain Advisor, SPC Land Resources Division (LRD), Pacific Organic and Ethical Trade Community (POETCom), Fiji. With prior experience in Cambodia and Kenya, she actively promotes transformative institutional change by systematic integration of gender considerations in the programme’s strategy, processes and tools. As such, she is influencing methodological and research approaches on incorporating gender, which is contributing to the creation of a conducive environment to empower women and other disadvantaged stakeholders in governance, projects and policies. Recently, Flavia has contributed to the establishment of a Women’s Chapter within POETCom, and gender mainstreaming in organic policies and practices at national and international levels. Furthermore, she provides mentorship, technical advice and coordination assistance on the institutional integration of gender issues at different levels, contributing to a shift of mindset towards gender equality outcomes.

Conclusion

The stories of the six women remind us how much agricultural research and extension are needed to facilitate innovation. But at the same time, it is important that research and extension work more closely, more efficiently and more effectively to pave innovation pathways that meet the needs of rural communities – both men and women.

Women make decisions that impact our agri-food systems every day. They are agricultural researchers, rural advisors, farmers, agri-business or project managers, teachers, and consumers. Furthermore, they are mothers whose daily decisions affect the health, nutrition and education of their children, and the overall wellbeing of their families.

“There is a saying that behind every successful man is a strong woman. But, we should not stay behind, we need to come forward…”, Dr. Delgermaa Chuluunbaatar, Agricultural Research Officer, FAO.

The gender-transformative approach that challenges the underlying harmful gender norms that keep women and men in the cycle of poverty needs to be integrated in agricultural research and extension programmes. This is to bring women and men together to challenge their traditional norms, the understanding of gender roles, and the way the gender gap affects their daily lives.

Agricultural research and extension institutions need to support these processes. To enable such transformation, they need to ensure gender balance in employment and leadership of women and men. They need to capitalize on women’s creativity and leadership to push the boundaries of scientific knowledge and find innovative and inclusive ways to solve the region’s complex development challenges.

Men are an important part of the innovation process and need to be sensitized on the importance of women’s empowerment. Therefore, it is fundamental that both men and women researchers and rural advisors are empowered through development of their functional capacities for innovation, which includes soft skills, behaviour and attitudes to drive gender-transformative innovation at scale. They need knowledge and tools to consciously design, facilitate and implement projects that have impact on the lives of both women and men in their countries – particularly the poorest segments of the population.

“Women are born to excel but they have barriers that stop them. Yet, they have the patience and commitment needed for research; and good communication and networking skills needed for extension,” Dr. Ravi Khetarpal, Executive Secretary, APAARI.

Along with supporting policies, research and extension institutions also need to involve multiple actors in knowledge co-creation and encourage more women to apply for higher management positions. This is to better address the specific problems that poor women farmers and small rural entrepreneurs face, and create opportunities to discuss their needs, ideas and concerns with scientists and policy makers. Women researchers and rural advisors have proven themselves to be a channel to facilitate such discussions, and a key factor in finding appropriate solutions. As the stories pointed out, women farmers tend to follow the advice of other women – it is a fact that needs to be capitalized on if gender equality is to be promoted for the benefit of the region.

The TAP-AIS project

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For more information see:
www.fao.org/in-action/tap-ais
www.twitter.com/TAP_G20

The Asia-Pacific Association of Agricultural Research Institutions (APAARI) is an innovation platform that plays an important role in strengthening innovation in agriculture and related processes to improve food security, nutrition and sustainable development in the region.
https://www.apaari.org

The Asia-Pacific Islands Rural Advisory Services Network (APIRAS) is a platform for networking, advocacy, and capacity building for agricultural extension and rural advisory services (RAS) professionals and institutions in the Asia-Pacific Islands Region.
https://apiras.net