Information to Make a Difference in Productivity

Singapore welcomes WSM delegates

he 56th Workshop Meeting of Heads of NPOs (WSM) convened in Singapore from 20 to 22 October. It was attended by 35 NPO and agriculture delegates and 19 advisers representing APO members at the meeting alongside observers from the Centre on Integrated Rural Development for Asia and the Pacific (CIRDAP), Pan African Productivity Association (PAPA), Singapore Productivity Association (SPA), Singapore Productivity Center (SPC), Singapore Innovation and Productivity Institute (SiPi), and the Solomon Islands. The main agenda items of the WSM included the adoption of the evaluation of 2014 projects, reconfirmation of the APO Program Plan for 2016, and discussion of the new APO Program Plan for the 2017–2018 Biennium.

Parliamentary Secretary for the Ministry of Trade and Industry and Ministry of Education Low Yen Ling delivered the inaugural address. She noted that, "Productivity growth is critical in sustaining a country's economic growth. It enables an economy to produce more value while using its resources more effectively, thus increasing its competitiveness." She praised the APO 2020 vision to transform into a leading international organization through enhancing productivity for being noble as it would help to create better jobs for the citizens of its member countries.

APO Director for Singapore Chew Mok Lee welcomed delegates, stating: "Collectively, the APO and fellow NPOs have a wealth of experience and knowledge in the areas of productivity, economic development, and policymaking." She added that, "We should draw on such



Parliamentary Secretary for the Ministry of Trade and Industry and Ministry of Education Low Yen Ling delivering the inaugural address.

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56 OF HEADS OF NPOS Singapore

WSM delegates, with the photo bordered by SPRING Singapore's iconic design.

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Summary of the Secretary-General's statement

fter greeting the guest of honor, Parliamentary Secretary for the Ministry of Trade and Industry and Ministry of Education and Mayor of the South West District Low Yen Ling, NPO and Agriculture delegates, advisers, and observers, Secretary-General Mari Amano thanked the Government of Singapore for "its warm hospitality and generosity in hosting this year's WSM." He also expressed appreciation to SPRING Singapore, led by APO Director for Singa-



Secretary-General Mari Amano. Photo courtesy of SPRING Singapore.

pore Chew Mok Lee, for "sparing no effort in organizing the WSM and making all the delegates feel at home."

Turning to current and new initiatives particularly important to the APO, Secretary-General Amano stated that, "The 2015 edition of the *APO Productivity Databook* released in September this year was based on the updated 2008 System of National Accounts (SNA) compared with the 1993 SNA used previously." Total factor productivity (TFP) had been newly computed for Cambodia, with TFP analysis expanded to cover 18 member economies. He was pleased that this edition presented energy productivity estimates to help improve energy efficiency for sustainable growth in the region and pledged that the *APO Productivity Databook* project would continue to improve as part of the policy advisory function of the APO.

Secretary-General Amano reported that Bangkok would host the next Eco-products International Fair (EPIF), to be organized by the FTPI and Federation of Thai Industries from 8 to 11 June 2016 with the theme "24-Hour Eco-Life." Various side events were planned, and an international conference was to be held concurrently from 8 to 10 June. He hoped that all member countries would participate in the EPIF to generate eco-business networks.

"I thank the Governments of the Republic of China, Japan, and the Republic of Korea for providing generous cash grants enabling the APO to implement new projects and assign experts to member countries," said the Secretary-General, pointing out that such grants were particularly important for the agriculture sector, which had benefited from the five-year Special Program for Capacity Building in the Food Industry in ASEAN Least Developed Countries starting last year. In addition to country-specific activities, it also financed the hosting of two multicountry projects in Japan annually. Japan had also provided a new three-year grant for the Special Program for Promoting Public-private Partnerships in Enhancing Food Value

Chains in Asian Countries starting in 2015, he explained. The APO had also received a special cash grant from the Government of Japan to build the capacity for energy conservation in Bangladesh, Mongolia, Nepal, Pakistan, and Sri Lanka, which was underway. To gain spillover effects from the program, the GBM had approved an increase in the number of slots for participants in multicountry projects under the program for other member countries, he reminded the delegates.

The APO continued to be active in Africa through the generosity of the Japanese government, continued the Secretary-General, citing the training course on Industrial Human Resources Development held in South Africa in June. He confirmed that follow-up activities in Africa were planned. Noting that the APO had been accelerating global partnerships, he described a collaboration with the Development Centre of the OECD to publish a productivity outlook report in mid-2016. After assisting the UN Department of Economic and Social Affairs (UNDESA) in productivity measurement for the Bhutanese government, the APO and UNDESA were currently discussing a possible joint workshop on productivity data and their use for policy formulation, noted Secretary-General Amano. He acknowledged that Secretariat staff played important roles in international cooperation activities by sharing the APO's unique knowledge, experience, and expertise. "We are also committed to maintaining close relations with various agencies in Japan," he commented, listing an internship program on global leadership practices held by the JPC, a lecture on Green Productivity and green business at Yokohama National University, and the International Forum for Sustainable Asia and the Pacific.

Turning to e-learning efforts, the Secretary-General described "the convergence of technology, social media, and content" that had presented "the perfect opportunity to relaunch the APO's whole suite of e-learning courses." He called videoconference-based courses using the APO's new in-house facilities "a huge success." The highly regarded self-learning e-courses would also be revolutionized, he promised, by creating "high-impact, interactive self-learning e-courses that encourage learning anywhere, anytime, and with any digital device." He requested the support and advice of member countries "to help transform the Digital Learning Program into a world-class platform for e-learning on par with that offered by institutions of higher learning around the world." Colombian visitors to the Secretariat in August had specifically wanted to collaborate with the APO to translate its e-courses into Spanish, which the Secretary-General saw as a testament to the wide audience reached. He encouraged member countries to translate self-learning e-courses into local languages to increase the APO's reach.

"The APO has always strived to serve member countries by offering great programs funded from membership contributions and special cash grants, made even better through partnerships with other organizations working to advance the productivity mission," said Secretary-General Amano. "At this WSM, I look forward to lively discussions that will help improve our programs for member countries." Although acknowledging that much work must be accomplished, he hoped that delegates would be able to "soak up the amazing atmosphere of our host country, a modern metropolis set in a tropical garden, and sample the exceptional international cuisine infused with the flavors of the cultures of Singapore." The statement concluded with the announcement that the next WSM would be held in Malaysia. ②

First NFP project: National Conference on Enhancing the Role of Mass Media Practitioners in Knowledge Transfer to Improve Agricultural Productivity

he National Follow-up Program (NFP) was designed to provide opportunities for all APO management to have equal access and opportunities to benefit from APO projects dealing with subjects most relevant to their needs. NPOs raised concerns about the limited opportunities their countries had to participate in multicountry projects, especially those with huge populations. The NFP was designed in response. The first project under the NFP was a sequel to a 2014 multicountry observational study mission on Best Practices in Promoting Innovation and Productivity in Agriculture for Mass Media Practitioners in Japan. The National Productivity Organisation (NPO) of Bangladesh expressed great interest in this project and submitted a sound NFP proposal soliciting APO support.

The mass media are a potent force in disseminating knowledge and information and influencing opinions and decisions among policymakers and investors. They can play an important role in minimizing information gaps and helping farmers become aware of better methods to improve their production base. Access to information, new knowledge, and technologies are important to increase farm productivity and improve farmers' welfare. The media could be the missing link in efforts of governments to transfer knowledge and information more effectively to the multitude of small farmers scattered in rural areas.

The APO in partnership with the NPO, Ministry of Industries, Bangladesh, organized a National Conference on Enhancing the Role of Mass Media Practitioners in Knowledge Transfer to Improve Agricultural Productivity in Dhaka, 20–22 September. Fifty participants representing the media, public and private sectors, print and electronic media, relevant ministries and agricultural extension departments, and agricultural researchers attended.

NPO Director Dr. Md. Nazrul Islam inaugurated the program, and in videotaped remarks, APO Secretary-General Mari Amano noted, "Knowledge dissemination is important to increase productivity levels, and the mass media can play a major role in spreading information on new research findings among producers and consumers. The media are viewed



Dr. Kozai delivering a presentation on plant factory opportunities and challenges. Photo courtesy of NPO Bangladesh.

as important partners of the APO in publicizing information on best practices and transferring knowledge to small farmers and entrepreneurs."

APO-assigned expert Dr. Toyoki Kozai, Japan Plant Factory Association and Professor Emeritus of Chiba University, gave two presentations: Towards Technological Innovations in Agriculture; and Plant Factories with Artificial Lighting. Knowledge transfer, agritourism, agribusiness models, value chains, organic agriculture, food retail business, etc. were eagerly discussed, with special interest expressed in entrepreneurship development in greenhouse horticulture, agritourism, and organic agriculture in Bangladesh.

Six groups formed to discuss the strengths, weaknesses, and opportunities of different media categories, including social media, and how they could be used more efficiently for the agriculture sector. Recommendations covered active networks involving media, private-sector financial institutions, policymakers, knowledge agencies, extension services, and researchers.

Dr. Kozai lauded the NFP-sponsored conference as a great success and stated, "The APO, NPO, and the participants were aware of the important roles of mass media and should continue more programs with the media from the agricultural innovation and technology dissemination point of view."

Agricultural productivity measurement

he APO in partnership with the National Iranian Productivity Organization (NIPO) organized a workshop on Agricultural Productivity Measurement in Tehran, IR Iran, 22–26 August. APO Director for Iran and NIPO Head Dr. Roya Tabatabaei Yazdi delivered inaugural remarks. Secretary-General Mari Amano gave welcome remarks via a video link. Twenty-four participants from 12 member economies, six local observers, and four resource persons attended. The workshop consisted of presentations by resource persons on agricultural productivity (AP) measurement and monitoring, sharing of country experiences, hands-on exercises on measuring and interpreting AP, and visits to two model farms engaged in the commercial production of pistachios and ornamental plants.

The widespread view among the experts and participants was that increased AP was crucial in achieving national food security and economic growth, and that building national capacities for productivity measurement and monitoring was essential to strengthen national policies, planning, and programs on AP improvement in the region. Additionally, the experts believed that estimation of a set of output-input combinations that are technically feasible at different times in various production environments, as well as for specific



The owner of Bharam Jafari Greenhouse in Tehran explaining the best practices of commercial floriculture.

periods and environments, was needed to understand the economic drivers of AP change in Asia.

Participants reached a consensus on recommendations that would advance AP measurement and analysis in the APO membership (www.apo-tokyo.org/publications/outcome_documents/) and pledged to utilize and disseminate the knowledge, skills, and lessons learned. ②

Strengthening consulting capacities of NPOs

n APO workshop on Developing and Strengthening Consulting Capacities of NPOs was hosted by the China Productivity Center (CPC), 11–14 August. Twenty participants from 16 member economies examined the consultancy services of NPOs and described their experience in developing and extending them.

Resource person Dr. Paul N. Friga, author of *The Mc-Kinsey Engagement: A Powerful Toolkit for More Efficient and Effective Team Problem Solving*, shared his personal knowledge of problem solving and consulting, focusing on theories, tips, and tools for immediate application. Eddy Edwards, the other resource person, described the role of NPO consultants and effective consulting process, while APO Director and Liaison Officer for the ROC Dr. Eugene Lin explained the consulting business of the CPC and its contributions to business growth in an economy where competition has become "much tougher than before."

The participants visited two CPC client companies. The Super Qin Group is an automated poultry-processing plant that supplies McDonald's, Mos Burger, China Pacific Catering Service, local supermarket chains, and National Taiwan

University. Shin Puu Technology Co., Ltd. produces printed circuit boards (PCBs) and undertakes PCB assembly. In 2014, it received the Taiwan National Quality Award. During that visit, participants had the opportunity to question the management on how the CPC was able to help them via consultancy services. A summary of learning and action plan formulation wrapped up the workshop. ②



Interactive session between Dr. Friga and participants.



Organic sack gardening for increased agricultural productivity and household incomes

egetables are rich in vitamins, minerals, and fiber essential for human health. Some, like spinach and other leafy vegetables, can help prevent cancer. The minimum daily recommended vegetable allowance for adults is 220–275 g. In many countries, however, vegetable consumption is very low; for example, in Bangladesh it is about 45–70 g daily. Malnutrition is a serious problem in the majority of developing countries, with adverse effects on children even before they are born. To reduce malnutrition, dietary diversity is important. Households that grow their own vegetables can easily eat a rich, varied diet, although many lack sufficient land. To resolve this, growing vegetables in bags or sacks is an effective alternative.

Sack gardening technology

Sack gardening is a simple, low-cost, technology for those who have very limited or no space for vegetable production. It allows the disadvantaged and people living in unfavorable ecosystems (such as char or basin areas) to grow vegetables, providing greater diversity and nutrition to their diets. It also improves food security and can increase household incomes. The sack gardening method was successfully adopted by Solidarités International, a France-based NGO, in urban slum areas in Kenya. It was introduced in Bangladesh in 2010, where it attracted widespread media attention and has been accepted by farmers and city dwellers.

Sack gardening does not require much land. A square meter is sufficient, depending on household requirements and preferences. If enough nutritious vegetables are grown, the needs of a family can be met, while saving hard-earned cash and shopping time. The sacks can also be relocated, allowing families with no permanent residence to cultivate vegetables.

Preparing a sack garden

It only takes a few hours of labor and minimum expenditure to set up a sack garden. Durable used bags, like grain sacks or livestock feed bags, should be selected so that they do not easily rot. A biodegradable synthetic one is ideal, since each sack should last for at least two growing seasons. A 50-kg sack requires the following inputs: 20 kg of soil; 20 kg of dry animal dung or compost; 5 kg of stones (20–40 mm in diameter); 3 kg of dry leaves or straw; and 2 kg of ash. Different sizes of sacks can be used, as long as the proportions of inputs remain the same

As shown in Figure 1, first, place a hollow PVC pipe approximately 15 cm in diameter and long enough to reach nearly to the top into the center of the sack. Drop the stones in the pipe, which will allow irrigation water to spread throughout later. Put the dry leaves/straw in the bottom of the sack to maintain the moisture balance. Mix the ash, compost, and soil and add the mixture to the sack. Then remove the pipe, leaving the stones in place. Place different vegetable seeds or shoots in the soil on top of the bag and along the sides. Leafy vegetables, gourds and squash, okra, herbs, peppers, onions, tomatoes, and many others can be grown in sacks.

Benefits

General: The benefits of sack gardening are numerous. Monocropping or mixed vegetables can be produced. Depending on the climate and crop, each sack can produce continuously for 7–9 months. The grower's initiative is the main capital, and this is a simple, low-cost method that is easily mastered. Sack gardening does not require chemical fertilizers or pesticides. Organic urban waste can be converted into compost for sack gardening, while gray water from washing can be used for irrigation. The technique has a positive impact on food security, nutrition,



Figure 1. Steps in setting up a sack garden.

climate change, women's participation in feeding families, and sustainable development. It can improve community food production systems by creating year-round gardens. Vegetables from the sacks ensure the availability of vitamins and minerals essential for proper immune system function and full physical, intellectual, and cognitive development.

Helping the planet: Recycling urban organic trash and water comprises a form of permaculture that reduces waste and resource use within cities. Utilizing space and recycling resources in cities result in less pressure on dwindling farmlands. Since sack gardening does not use fertilizers or pesticides, it causes less water and land pollution.



Sack gardening technology visited by Bangladesh State Minister of Finance M.A. Mannan (4th R), and Dr. Shahidullah Talukder (far R), former Vice Chancellor, Sylhet Agricultural University.

Helping people: Households benefit from better nutrition and potential supplementary income when surplus produce is sold or bartered. Women in particular are empowered, as they generally organize and tend urban gardens. Sack gardening encourages new urban farmers to cooperate, share knowledge and experience, and discuss issues of interest such as nutrition, health, and marketing of products. It can help communities adapt to changes resulting from increasing populations and climate change. Since the sacks can be transferred from one location to another, this is convenient for areas with increasing numbers of climate refugees.

Spillover effect: Sack gardening has been successful in Bangladesh, Uganda, and Kenya. The technique was disseminated via producer-to-producer visits, publicity materials, and mass media. The practice also spread spontaneously among neighbors as they saw the many rewards.

Economic benefits: On average, in Bangladesh each household could increase its weekly income by US\$5.00 by selling surplus vegetables and reducing the amount spent to purchase them from the market.

Applicable around the world: Urban agriculture has great potential. If managed correctly, sack gardens can provide food for families throughout the year. Shared or communal gardens could be established on high-rise apartment building rooftops. Properly designed sack gardens can be entirely self-sufficient by harvesting rainwater, using solar power, and applying manure or kitchen waste as organic fertilizer. Once set up, sack gardens require minimal effort to maintain. They are also a great way to teach children about the environment and ethical farming.

Several case studies that show the success of organic sack gardening are available at http://www.new-ag.info/en/research/innovationItem.php?a=2982.

Some of the contents of this article appeared in slightly different form in Hossain, S.T., Akter S. Organic sack garden ensuring nutrition and improve the food security on small scale households. Proceedings of the 17th IFOAM Organic World Congress (CD version), Gyeonggi province, ROK, 26 September–5 October 2011; and on the following web pages contributed to by Dr. Tanveer: https://unfccc.int/secretariat/momentum_for_change/items/8339txt.php and http://www.new-ag.info/en/research/innovationItem.php?a=2982.

Photos courtesy of Friends In Village Development Bangladesh, Bangladesh.



Dr. Shaikh Tanveer Hossain is a Program Officer in the APO Secretariat Agriculture Department. Formerly, he was a Sustainable Agriculture Advisor of Friends In Village Development Bangladesh and scientist at the Bangladesh Rice Research Institute.

He pioneered integrated rice-duck farming and organic vegetable sack production in Bangladesh. Dr. Tanveer was awarded the grand prize of the Organic Farming Innovation Award by the International Federation of Organic Agriculture Movements (IFOAM) in the ROK in 2011. He is Vice-President of IFOAM Organics Asia (2015–2017). Dr. Tanveer holds a PhD in Agriculture from Ehime University, Japan. He can be reached at stanveer@apo-tokyo.org.

Photo news



Thirty-five Myanmarese government officials, SME owners/top managers, and academics learning about the SME best practices of L.P.S. Works Co., Ltd. in Tokyo on 8 September during the Workshop on SME Innovation and Quality Management for Myanmar to Increase Productivity organized by the APO and supported by the Ministry of Foreign Affairs, Japan.



Delegates engaged in group assignments during the APO Workshop on Labor-Management Relations funded by the Government of Japan. Twenty-one high-ranking officials from 17 Asia-Pacific governments who oversee labor-management issues or monitor the relationship between economic growth and labor issues, investment, promotion, and economic and industrial policy convened in Tokyo, 28 September–2 October.

institutional knowledge to support each other in our roles as NPOs to meet the needs of our countries and the overall socioeconomic development of the Asia-Pacific. Ultimately, we hope to bring the ideas generated during these three days to fruition."

During the WSM, NPO Delegate from Singapore Chew Mok Lee was elected Chair and NPO Delegate from Malaysia Kamaruddin Mohamad as Vice Chair. APO Secretary-General Mari Amano reported on some of the initiatives that could be anticipated by APO members (see p. 2): "Public-sector productivity is set to take center stage with the approval of the Governing Body to designate the Development Academy of the Philippines as the Center of Excellence (COE) on Public-sector Productivity. The new COE will develop a master plan and implement activities to facilitate learning, innovation, and sharing of knowledge and best practices from the public sector on topics important to member countries." On the international front, the Secretary-General added that, "We will be collaborating with the Development Centre of the OECD on the publication of a productivity outlook report, which will analyze productivity growth trends in APO economies and related policies. Publication is planned for mid-2016."

During Plenary Session 1, the APO Secretariat reported on the Strategic Planning Workshop for APO Liaison Officers and Roadmap to Achieve the APO Vision 2020. That was followed by presentations on the criteria for and prioritization of 2017–2018 project lineups and proposed expansion of the APO Digital Learning Program.

During Plenary Session 2, each NPO presented its country's innovation strategy and framework with some examples and gave suggestions on priority innovation areas or capabilities for future APO programs.

Strategic Planning Session 1 took place with delegates breaking into different groups to discuss the priority productivity training topics for self-learning courses. The groups explained the various insights, suggestions, and recommendations of the breakout sessions to delegates the next day.

On day two, delegates were involved in Strategic Planning Session 2 to reconfirm the APO Program Plan for 2016 and review the APO Program Plan for the 2017-2018 Biennium.

On the last day, delegates attended a master class and networking session with the American Productivity and Quality Center. (0)

Photos courtesy of SPRING Singapore.

Spreading the MFCA word

he APO, in collaboration with the NPO of Indonesia, organized a workshop on Material Flow Cost Accounting (MFCA), 24–28 August. Twenty-three participants from 13 countries gathered in Jakarta, with three resource speakers from Germany and Japan, to formulate strategies to disseminate the MFCA concept and practices. MFCA was originally an environmental management tool developed in Germany. With years of practice and refinement, it has become a unique management technique that contributes to cost reductions, quality improvement, and greater efficiency. The APO has been implementing MFCA projects since 2010, and this workshop was designed to deepen MFCA practices in member countries. A feature of the workshop especially appreciated by many participants, including Japan K. Trivedi of India, Thongphet Phonsavath of Lao PDR, and Aftab Khan Masood of Pakistan, was an introduction to and handson training in the use of recent technical MFCA software.

The participants drafted and signed a declaration expressing their commitment to establishing national MFCA forums in their home countries. On the final day of the workshop, a ceremony was held to launch the Indonesian MFCA Forum, and Minister of Manpower Muhammad Hanif Dhakiri signed the declaration as a witness. Minister Hanif hoped that the forum would "institutionalize efforts in this area and encourage widespread utilization of this technique... to improve overall productivity." The workshop and launch ceremony received significant support from the United Nations Industrial Development Organization, Indonesian Ministry of Manpower, and Embassy of Japan in Indonesia. Participants planned to use the strategies taught in the workshop and attempt to form national MFCA forums for the widest possible benefit. (2)



National Productivity and Quality Excellence Award 2013 in Bangladesh

On August 9, the National Productivity Organisation (NPO), Ministry of Industries of Bangladesh awarded 17 organizations for their significant contributions to the industrial sector through maintaining productivity and the quality of products. The National Productivity and Quality Excellence Award 2013 was given in six categories: large industry; medium industry; small industry; microindustry; cottage industry; and state-owned enterprises. Minister of Industry Amir Hossain Amu gave the awards to representatives of the recipients at a function jointly arranged at a Dhaka hotel with the NPO. Secretary of the Ministry of Industry M. Mosharraf Hossain Bhuiyan served as the



Industries Minister Amu conferring the National Productivity and Quality Excellence Award 2013 on a winner.

chair of the event. NPO Director Dr. M. Nazrul Islam Khan, Joint Director Abdul Baqui Chowdhury, Khulna Shipyard Limited Managing Director Commodore Syed Irshad Ahmed, British American Tobacco Bangladesh Limited Chairman Golam Mainuddin, and Massers Rony Engineering Managing Director G.M. Nurul Islam also spoke at the occasion.

The awardees included British American Tobacco Bangladesh Company Limited, Khulna Shipyard Limited, Resimax Industries Ltd., BRB Cables Industries Ltd., Energypack Electronics Ltd., Tamai Knit Fashion Ltd., CIBL Technology Consultant Ltd., M/S Rony Agro Engineering, Prince Chemical Company Ltd., National Tubes Ltd., and Jamuna Fertilizers Company Ltd. In congratulating the award winners, Minister of Industry Amu stated that any nation could achieve the desired growth through appropriate industrialization, pointing out that, "Our government is an industry-friendly one." He referred to industrialists as "the architects of building an industryand knowledge-based enriched economy" and urged the audience, "Let's work together in a coordinated manner to boost productivity in industrial units," adding that all needed to join this journey.

Contributed by United News Bangladesh (for more coverage, see http://unb.com.bd/award-productivity#sthash.grbatJLr.dpuf).