



# ANNUAL REPORT 2016



**SUSTAINABLE PRODUCTIVITY**  
THE NEW FRONTIER FOR PRODUCTIVITY

First published in Japan  
by Asian Productivity Organization  
1-24-1 Hongo, Bunkyo-ku  
Tokyo 113-0033, Japan  
[www.apo-tokyo.org](http://www.apo-tokyo.org)

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The APO Secretariat thanks the NPOs for providing updates on their directory information and some of the project-related images used in this report.

ISBN: 978-92-833-2476-8

Designed by B&M Nxt.



**APO  
ANNUAL REPORT  
2016**





# CONTENTS

APO Directors, Alternate Directors, NPO Heads, and Liaison Officers	iv
APO Secretariat	vi
Foreword	vii
Organization	2
2016 GBM and WSM	8
Brief description of 2016 APO Projects	16
Strengthening of NPOs	18
Promoting the Development of SMEs and communities	34
Catalyzing Innovation-led Productivity Growth	42
Green Productivity	58
Individual-country Programs	67
Evaluation of APO Projects	70
Information Program	72
International Cooperation	81
APO 2016 Projects at a Glance	84
2016 APO Project Summary	86
Financial Report	128
The NPOs	148
Abbreviations and Acronyms Used	150

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**NPO Head**  
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**Liaison Officer**  
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Secretary-General



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**Yumiko Nishio**  
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**Md Zainuri Juri**  
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# FOREWORD

Focusing on Sustainable Productivity, the APO is better geared to serve the next-generation needs of member economies



Looking back, the fact that the APO has completed a journey spanning 56 meaningful years is rewarding. The recognition that it has lived up to the expectations of stakeholders in member countries is both humbling and gratifying. Yet we are conscious that in this new-age economy, driven by extremely fluid macro scenarios and hyperdisruptions, it is imperative to embrace change.

Asia is home to almost 60% of the world's population even though it occupies only about 30% of the global landmass. Productivity here therefore has a very different meaning than in less-populated, better-developed economies elsewhere.

The accelerated adoption of digital technologies holds immediate potential to raise productivity significantly by automating product development and business processes among industries. However, this may change the roles of human workers since the majority of repetitive tasks can be taken over by machines.

This in turn will have long-ranging socioeconomic impacts on governments, which may need to reconfigure educational systems to train manpower for higher-level work. Policy interventions and new long-term manpower management strategies may also be required.

A myopic view of productivity alone will therefore be counterproductive. The focus now must shift to Sustainable Productivity, the only way for economies and organizations to deal with uncertain global business environments and market disruptions being ushered in by fast-changing digital technologies and innovations. Developing and implementing cutting-edge, future-oriented initiatives to stay relevant to the next-generation needs of member economies are therefore a priority.

The Secretariat utilized the last two quarters of 2016 to review and revise programs to meet the new challenges as well as to create processes and reorganize internal work flows to shape the APO of the future. In a global economy that is now largely dependent on digital technologies to support and drive growth while expanding cooperation and collaboration, last year the Secretariat decided to move toward a digital office environment.

It was also decided to make a strategic shift toward online technologies and mobile platforms to connect, communicate, and disseminate information as well as to conduct projects. A sustained effort was made in 2016 to realign information programs and strategies. That effort helped the Secretariat launch two exciting new initiatives during the Governing Body Meeting in 2017: the eAPO, the APO's first mobile e-learning platform; and the Strategic Future Platform.

The new e-learning platform was developed to support the target of training 100,000 individuals as described in the APO Roadmap to Achieve Vision 2020. With the increasing penetration of mobile smart devices, I strongly believe that

# FOREWORD

APO courses should help create a level playing field and reach out to the citizens of all member countries.

Similarly, the web-based APO Strategic Future Platform will strengthen the organization's capability for strategic planning, including foresight and scenario planning, by integrating artificial intelligence and business analytics. The new platform will allow the APO to identify driving forces and enable the Secretariat to take informed decisions in view of long-term developments in the region.

On the program front, the APO continued to focus on building the capabilities of member countries using tried-and-tested productivity tools and know-how designed for current business models. Going ahead, we plan to offer professional certification programs that build the skills and capacities of practitioners, including courses on productivity management, strategic foresight, and advanced strategic planning. This new approach will ensure that APO programs are relevant to the needs and expectations of member countries and in sync with industry requirements.

To support the varied needs of stakeholders in member economies, and in line with initiatives to strengthen the evidence-based policy advisory role of the Secretariat, we continued to conduct research to measure productivity and generate socioeconomic and productivity data under the APO Productivity Databook project. The program will be revamped through new research to establish a Sustainable Productivity Index. This will measure economic productivity based on a new set of parameters which more effectively reflects the changing needs of automation-driven productivity.

To make research data more accessible, the Secretariat unveiled its online open-data initiative, the Asian Economy and Productivity Map (AEPM) that provides a graphic dashboard view of productivity and economic trends in 30 Asian countries and multiple benchmark economic groups. The upgraded AEPM database replaced the Asian Quarterly Growth Map.

The Secretariat recognizes that the active participation of NPOs enables co-creation of training contents customized to the needs of individual countries. Thanks to support from NPOs and member countries, the scale of APO activities has increased significantly. In the last three years, the number of projects increased from 170 in 2014 to over 200 in 2016, while the number of participants surged by 50%.

While volume growth is good, the strategy for transformation into a future-oriented digital organization will ensure that the APO provides better value to its members. We expect to evolve into a modern Secretariat, better equipped with advanced tools, techniques, and capabilities to execute inclusive, innovative, future-oriented smart initiatives aligned with the national development plans of member countries.

With your support, together we can shape the future of the APO.

**DR. SANTHI KANOKTANAPORN**

APO Secretary-General

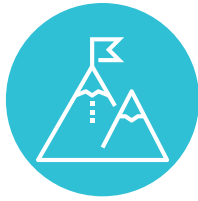
Tokyo, June 2017





# ORGANIZATION

The Asian Productivity Organization (APO) was established on 11 May 1961 as a regional intergovernmental organization. The APO is nonpolitical, nonprofit, and nondiscriminatory.



## MISSION

Contribute to the sustainable socioeconomic development of Asia and the Pacific through enhancing productivity



## VISION

To be the leading international organization on productivity enhancement, enabling APO economies to be more productive and competitive by 2020

## STRATEGIC DIRECTIONS



Strengthen NPOs and promote the development of SMEs and communities



Catalyze innovation-led productivity growth



Promote Green Productivity

From 1990 to 2010, APO programs and projects were based on the five thrust areas of knowledge management, Green Productivity, strengthening of SMEs, integrated community development, and development of NPOs. Three strategic directions replaced them for the 2011 to 2020 decade:

### 1 Strengthen NPOs and promote the development of SMEs and communities

NPOs need to be strengthened to lead national productivity initiatives, and SMEs play a crucial role in all economies. The APO aims to support NPOs to develop competency centers and improve the productivity of targeted segments of SMEs and communities.

### 2 Catalyze innovation-led productivity growth

Productivity improvement includes both increased efficiency and innovation-led gains that increase the quality of products and delivery of services. The APO aims to strengthen management skills through proven knowledge management tools, improve productivity in the service and public sectors, and promote business collaboration among member economies.

### 3 Promote Green Productivity

The APO will work with member countries to promote green technologies, create demand for green products and services, green manufacturing and service-sector supply chains, and promote sustainable practices in agriculture.

comprises Bangladesh, Cambodia, the Republic of China, Fiji, Hong Kong, India, Indonesia, the Islamic Republic of Iran, Japan, the Republic of Korea, Lao PDR, Malaysia, Mongolia, Nepal, Pakistan, the Philippines, Singapore, Sri Lanka, Thailand, and Vietnam. These countries pledge to assist each other in their productivity drives in a spirit of mutual cooperation by sharing knowledge, information, and experience.

## STRUCTURE

The APO structure comprises the Governing Body, NPOs, and the Secretariat headquartered in Tokyo.

### Governing Body

The Governing Body is the supreme organ of the APO. It comprises one government-appointed Director from each member. The Governing Body meets annually to receive the Secretary-General's annual report and the auditor's financial report; determine the APO budget, policies, strategies, directions, and membership; approve the two-year plan and annual programs; lay down guidelines for the ensuing fiscal year's program; and approve the budget and financial guidelines.

### NPOs and Workshop Meeting of Heads of NPOs

Each member government designates a national body to be its NPO. NPOs are usually entrusted with spearheading the productivity movement in each country. They also serve as the official liaison bodies with the Secretariat and coordinate APO projects hosted by their governments. Each year, the APO organizes a Workshop Meeting of Heads of NPOs (WSM) to evaluate the previous year's projects, undertake strategic planning, and formulate the two-year plan and detailed program for the next year. The WSM assumes the role of program

## MEMBERSHIP

APO membership is open to countries in Asia and the Pacific which are members of the United Nations Economic and Social Commission for Asia and the Pacific. Current membership

## SERVING MEMBER COUNTRIES



THINK TANK



CATALYST



REGIONAL ADVISER



INSTITUTION BUILDER



CLEARINGHOUSE FOR PRODUCTIVITY INFORMATION

planning for two years and presents the plans to the Governing Body Meeting (GBM) for the decision on budget size. It also deliberates on productivity issues, guidelines for future programs, and emerging needs of member countries.

### Secretariat

The Secretariat is the executive arm of the APO. Headed by the Secretary-General, four departments, comprised of Administration and Finance, Research and Planning, Industry, and Agriculture, work side by side in carrying out the decisions and policy directives of the Governing Body. In collaboration with NPOs and other partners, it plans the biennial program and implements projects. The Secretariat also undertakes joint

programs with other international organizations, governments, and private institutions for the benefit of its members.

### TYPES OF ACTIVITIES

The general feature of APO activities is to provide practical training through a combination of: 1) lectures by experts; 2) field visits to factories, farms, and facilities for observation of actual applications; and 3) country reports by participants for the sharing of experiences. APO projects are intended to be as immediately useful and applicable to participants as possible. The participants are expected to create multiplier effects by disseminating their newly acquired knowledge and understanding to others in their home countries.

## KEY ROLES

In serving its members, the APO performs five key roles: Think Tank, Catalyst, Regional Adviser, Institution Builder, and Clearinghouse for Productivity Information.

1

**As a think tank,** the APO conducts research on emerging needs of members for their follow-up and for determining appropriate assistance to them.

2

**As a catalyst,** the APO promotes bilateral and multilateral alliances among members and between them and others outside the APO region for collaboration in productivity-related activities for mutual benefit.

3

**As a regional adviser,** the APO surveys the economic and development policies and performance of each member country and assists in formulating strategies for achieving enhanced productivity and competitiveness.

4

**As an institution builder,** the APO strengthens the capability of the national productivity organizations (NPOs) and other institutions to provide productivity promotion, training, and consultancy services to the public and private sectors.

5

**As a clearinghouse for productivity information,** the APO facilitates the dissemination and exchange of information on productivity among its members.

## APO-CERTIFIED PRODUCTIVITY PRACTITIONERS SCHEME

The APO in cooperation with NPOs continues efforts to build up regionwide pools of productivity practitioners through multiple modalities. An APO certification scheme is in place to validate the abilities of project participants based on a three-stage process. The names with professional experience of the individuals certified as practitioners under the scheme are available on the APO website, allowing their services to be widely used by others seeking productivity consultancy throughout the region. Please contact the Secretariat or NPOs to take advantage of their expertise.

### BACKGROUND

The development of certified productivity practitioners is a high-priority need for NPOs. A pilot certification scheme consisting of the three stages illustrated helps to develop a pool of APO-certified basic and advanced productivity practitioners.

### OBJECTIVES

To develop a pool of APO-certified productivity practitioners with good knowledge of fundamental productivity concepts, principles, and tools.

To enable certified practitioners to identify, use, and explain basic productivity tools and other approaches to improve productivity.

To adopt an integrated productivity framework to diagnose productivity problems and develop and implement solutions.

To provide training, consultancy, and promotional services to NPO clients.

## PILOT CERTIFIED PRODUCTIVITY PRACTITIONERS SCHEME

### STAGE 1

- The APO issues a project notification for a self-learning course at least four months before the face-to-face course starts.
- Qualified participants are selected.
- Participants take the self-learning e-course and pass the final exam.

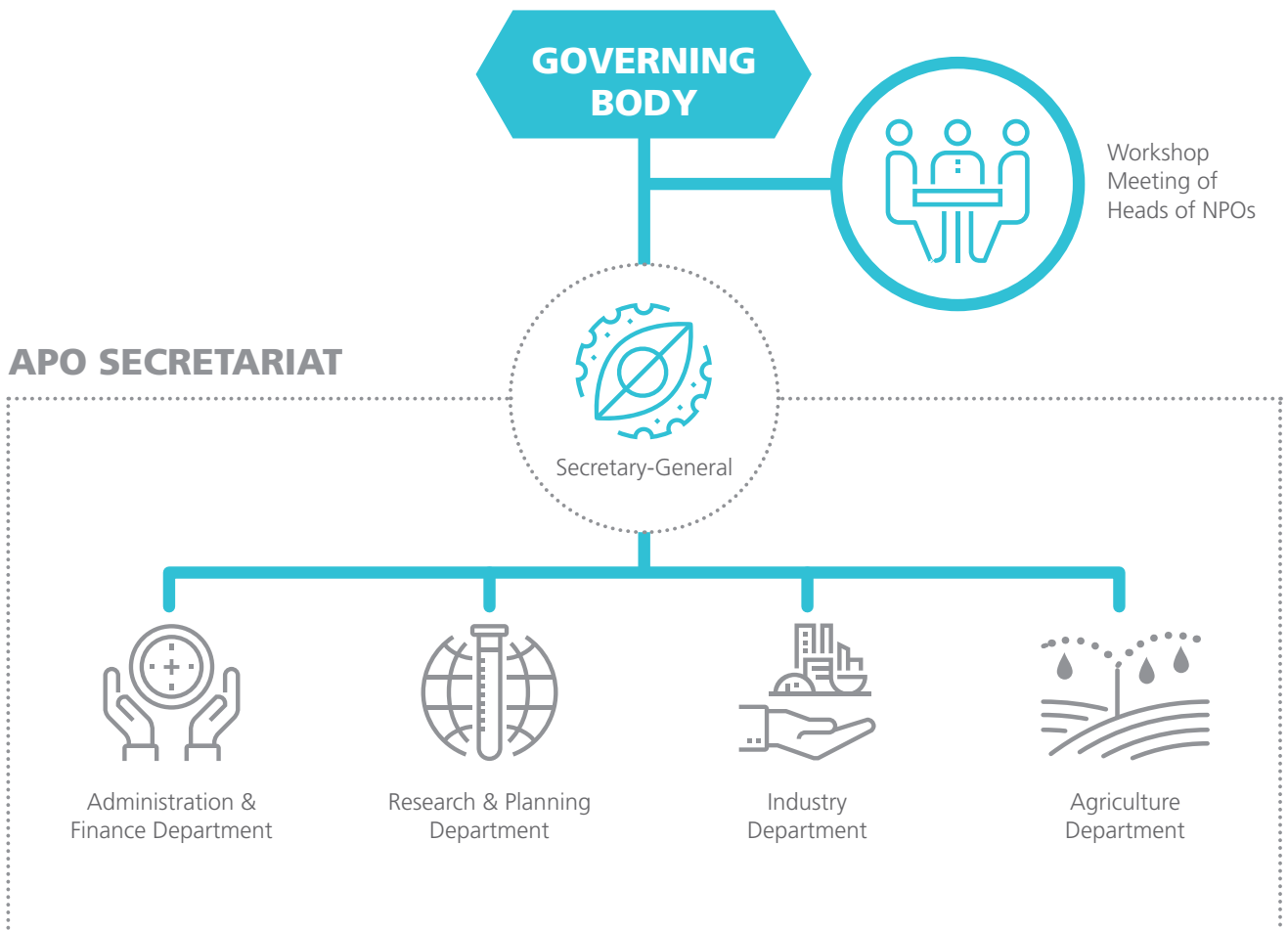
### STAGE 2

- The face-to-face course and exam are conducted.
- Specific project assignments are given to participants who pass the face-to-face course exam.

### STAGE 3

- Project reports are submitted by participants.
- The APO reviews the project reports and decides which candidates qualify for certification.
- The APO awards a registration-based certificate to successful candidates.





APO activities target a diverse group of productivity stakeholders. The various types of approach or methodology employed in organizing them are:

- **Training courses:** Impart information and practical skills based on an established body of knowledge following a structured curriculum to improve competency and performance.
- **Research:** In-depth study requiring the collection and analysis of data to address specific productivity-related issues.
- **Conferences:** Share or disseminate new knowledge, best practices, and research findings in a field, subject, or topic.
- **Forums:** Share views and knowledge on current and emerging productivity-related issues, their implications, and potential solutions.
- **Observational Study Missions:** Provide opportunities to learn based on direct observations of applications of best practices, innovations, and advanced technologies.
- **Workshops:** Discuss, share knowledge on, and explore emerging topics related to productivity tools, techniques, methodologies, and issues for making relevant recommendations and/or developing action plans to energize the productivity community.

- **Technical Expert Services:** Consultation services to member countries by assigning experts to cater to the specific needs of NPOs. Experts conduct training, consultancy, or national programs.

- **Development of Demonstration Companies/Organizations:** A program to establish model projects to improve productivity in factories, companies, and organizations and then disseminate best practices to others.

- **Bilateral Cooperation Between NPOs:** Provides opportunities for productivity professionals, high-level officials, or policymakers from NPOs or related organizations in one member country to visit one or more other NPOs, organizations, or enterprises for mutual learning and collaboration.

- **Institutional Strengthening of NPOs:** Consists of two mutually dependent components: DON Strategy to determine the needs of member countries; and DON Implementation to translate the results of DON Strategy into training programs that meet those specific needs.

- **e-Learning Programs:** Courses carried out using web-based or videoconferencing facilities.





# **2016 GBM AND WSM**





*Attendees at the 58th APO Governing Body Meeting.*

### 58TH SESSION OF THE APO GOVERNING BODY

The 58th GBM was held in Jakarta from 19 to 21 April, attended by 45 delegates consisting of APO Directors, Alternate Directors, and advisers from 19 member countries. Observers from six partner organizations also attended: the Center on Integrated Rural Development for Asia and the Pacific (CIRDAP); International Labour Organization (ILO); Organisation for Economic Cooperation and Development (OECD); Pan African Productivity Association (PAPA); Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA); and United Nations Industrial Development Organization (UNIDO).

APO Director for Indonesia Khairul Anwar delivered the welcome remarks, and APO Chair Shafqut-ur-Rehman Ranjha presented the opening address. Minister of Manpower Hanif Dhakiri of the Government of Indonesia presided over the Inaugural Session as the Guest of Honor. The heads of delegations to the meeting were introduced by APO Secretary-General Mari Amano.

The APO Chair is assigned on a rotational basis by member economy in alphabetical order as decided by the GBM in 2002 and practiced since 2003, beginning with Bangladesh. Thus, under this system, the 58th GBM elected APO Director for the Philippines Margarita R. Songco as APO Chair for 2016–2017, with APO Director for Singapore Chew Mok Lee and APO Director for Sri Lanka Jinasiri Dadallage assuming the position of First and Second Vice Chairs, respectively.

### Annual Report of the Secretary-General

Secretary-General Mari Amano welcomed APO Directors, advisers, and observers to the 58th Session of the APO Governing Body in Jakarta and extended gratitude to the Government of Indonesia for hosting it. He stated that this year marked 55 years since the APO had been founded in a very different world from today. He believed that the single greatest challenge still facing every member economy, regardless of its stage of economic development, was to raise the productivity of its workers and explained that long-term economic development could only be sustained through higher productivity, which remained fundamental to the prosperity of all member countries.

The Secretary-General said that individual member countries faced different productivity challenges and that the APO organized multicountry projects to address those. He pointed out that multicountry projects were a unique facet of APO programs and around 80 had been organized in the previous year. Those projects had not only allowed the sharing of knowledge but also created favorable publicity in the host countries. He cited the signing of a declaration by participants in the Workshop on Material Flow Cost Accounting (MFCA) held in Jakarta last August expressing their commitment to MFCA forums. The event had been witnessed by senior officials from the Indonesian government, UNIDO, and the Embassy of Japan. Another equally important stage was to ensure that the knowledge was disseminated effectively, and NPOs played

a critical role in multiplying APO efforts locally. He reported that bilateral networking and cooperation between NPOs had reached unprecedented levels, with 12 such in-country projects conducted in 2015.

The Secretary-General noted that NPOs had also tapped the Development of NPOs Program and Technical Expert Services Program, with 84 experts deployed to member countries. Three NPOs had been designated as centers of excellence (COE), and the Secretary-General suggested that it was time to review the COE Program and devise new strategies to maximize their potential. Another idea was to facilitate and equip existing COE to conduct regular APO-certified training courses to increase the pool of practice-oriented professionals in key productivity fields that would dramatically increase the number of training places for core productivity skills and serve as a future revenue stream for the COE as well as the APO.

Secretary-General Amano reported that the APO had been successful in offering videoconference (VC)-based e-learning and last year marked the first time that those courses had been conducted using the new in-house VC facilities. Five VC-based e-learning courses were offered in 2015, including an ongoing collaboration with the International Atomic Energy Agency's (IAEA's) joint FAO/IAEA Division.

The APO had also signed a three-year MOU with CIRDAP to support collaborative projects for 2016. The Secretary-General commented that global partnerships with major international organizations, research institutions, and universities created mutual benefits for the APO and its partners. He specifically cited the training and research partnership with Cornell University and with the Development Centre of the OECD to publish a productivity outlook report analyzing productivity growth trends in selected APO economies and relevant productivity enhancement policies. The collaboration with the OECD was the continuation of a pilot study on basic agricultural policies and productivity in selected member countries, he explained.

The Secretary-General stated that the APO had worked with the UN Department of Economic and Social Affairs in its productivity measurement work for the Bhutanese government. He also reported the APO's work on Green Productivity (GP), saying that Thailand had been selected to host the Eco-products International Fair (EPIF) in 2016, while Vietnam had been confirmed as the host for 2017.

Secretary-General Amano remarked that the convergence of technology, social media, and content would allow the APO to embark on the next phase of self-learning e-courses, which would introduce highly interactive contents on digital devices, with the aim of transforming the Digital Learning Program (DLP) into a world-class learning platform reaching a global audience. The DLP also intended to translate the courses into local languages as well as other global languages.

The Secretary-General thanked the Governments of the ROC, Japan, and the ROK for providing generous cash grants that had enabled additional projects involving both member and nonmember countries. He explained that cash grants from the Government of Japan (GOJ) had been utilized to organize projects on labor-management relations and SME innovation in Japan for member countries and Myanmar, respectively. The initial two-year Energy Efficiency Program, aimed at capacity development in energy efficiency and conservation in the five member countries Bangladesh, Mongolia, Nepal, Pakistan, and Sri Lanka, had successfully taken off last August. He reported that a new five-year Special Program for Capacity Building in the Food Industry in ASEAN Least Developed Countries (LDCs) had begun last year. The GOJ 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 from 2015. The APO continued to be active in Africa through the generosity of the GOJ, allowing 27 productivity professionals and government officials from eight African countries to attend the Training Course on Industrial Human Resources Development for Africa in South Africa in June 2015.



**1.** APO Director for Indonesia and Director General, Training and Productivity, Ministry of Manpower, Khairul Anwar welcomes delegates. **2.** Minister of Manpower Hanif Dhakiri of the Government of Indonesia inaugurates the meeting as the Guest of Honor. **3.** The APO Chair for 2015–2016, APO Alternate Director for Pakistan and Additional Secretary, Ministry of Industries and Production Shafqut-ur-Rehman Ranjha during his opening address.



*Former APO Secretary-General Mari Amano reporting to the Governing Body on APO activities.*

Secretary-General Amano added that the APO had signed an MOU with Colombia and had been discussing a broad range of cooperative activities, including developing customized productivity courses and participation in selected APO training courses. He said that such collaborations would allow the APO to expand its activities to nonmember countries.

The Annual Report contained the details of 2015 achievements, he continued, pointing out that the intensity of activities in the past two years had been comparable to the years before the drastic cost-reduction measures to cut staff expenses starting from 2010. Even though the measures had been partially lifted in 2014, staff expenses were still about 20% lower compared with pre-2010 levels, making the Secretariat much more productive and cost-effective. He stated that the organization was in a better position to attract and retain talented staff, which helped ensure its long-term sustainability.

The Secretary-General acknowledged that Secretariat staff had a major role to play in current and future success and that Program Officers must constantly innovate to find new methods of working with participants and experts. He told delegates that testing of the use of webinars to prepare participants before attending multicountry projects would be initiated. Secretariat staff also played an important role in promoting and sharing the APO's unique knowledge, experience, and expertise, especially their involvement in strategies for the sustainable development of LDCs at a United Nations Economic and Social Commission

for Asia and the Pacific (UNESCAP) meeting in Cambodia, innovation and productivity in the organic farming sector at a regional conference held in the ROK, and the annual UN Centre for Regional Development Forum on 3R Solutions held in the Maldives. Staff had also spoken on GP at both Yokohama National University and the International Forum for Sustainable Asia and the Pacific. Such initiatives by the Secretariat had helped to improve the visibility of the APO within the international community.

Secretary-General Amano announced that with the usual strong cooperation of member countries, APO activities had been covered by the media about 500 times last year. The *APO News*, both print and e-mail versions, was regularly distributed to more than 8,000 recipients around the world. The APO Facebook page acted as an important tool not just to disseminate information about activities but also to interact directly with individual users. The number of Facebook likes increased by almost 50% in 2015. He said that, as reported at last year's GBM, success stories to illustrate the real-life experiences of beneficiaries of APO programs were available on the APO website. He hoped that these success stories and testimonials from participants would continue to inspire and encourage more individuals and enterprises to work with the APO and NPOs on productivity initiatives.

The Secretary-General stated that in efforts to expand the APO membership, discussions with the governments of

Myanmar, the Solomon Islands, and Turkey had been held. The Secretariat had been advising Turkey in particular on APO accession procedures. With the encouragement of APO Directors, he planned to build stronger relations with Central Asian countries.

The proposed budget for the 2017–2018 biennium had been submitted for the GBM's approval, continued the Secretary-General. The prioritization of projects had been guided by a set of criteria which included directives from previous GBMs, member country surveys, and outputs of APO workshops and research. He said that all projects had been systematically designed to achieve the goals using the new program approach. One new program was providing policy analysis and advice to member countries in the area of productivity enhancement.

Secretary-General Amano again thanked the Government of Indonesia for the wonderful hospitality and the Government of IR Iran for confirming the hosting of the next GBM in 2017. He recalled that predecessors had often described the productivity movement as "a marathon without a finish line." He said that productivity must be pursued relentlessly, regardless of economic conditions or turmoil in financial markets. This sense of continual commitment to excellence and focused effort would foster a strong productivity culture and ensure that economic growth remained sustainable in the longer term. He concluded that it had been an eventful two-and-a-half years serving member countries as Secretary-General and thanked all for continuing support for the APO and its activities.

The Chair thanked the Secretary-General for his report and opened the floor for discussion, clarification, or comments on the report.

APO Alternate Director for India G.R. Raghavender congratulated the Chair from the Philippines and the two Vice Chairs from Singapore and Sri Lanka on their election. He thanked the Secretary-General for the detailed presentation on the overall work of the APO. He also expressed his appreciation for the achievements of the APO and its efforts to spread the productivity movement beyond the region, especially in collaborating with the UN and other international organizations. Alternate Director Raghavender found it very interesting to learn that the APO was supporting the African region by creating tailor-made projects on productivity. India wanted to see increased visibility of APO activities, not just in the African region but including Central and South America and within member countries. He stated that given the average 80 projects executed well by the APO, the same quality and standards should be achieved in all projects. The results and performance must be disseminated to other member countries, especially for replicating the best practices of each project. He added that some special projects had to be customized for large economies since their developmental activities would enhance economic and productivity growth.

APO Alternate Director for Indonesia Kunjung Masehat asked for clarification on the 22 projects still in progress for 2015 as reported.

Secretary-General Amano explained that some projects such as research projects took more than one year to complete and were reported as "in progress." He added that some completed projects had budget remaining, which was used to publish reports and papers on the projects. He said that such activities lasted for a few months, with some extending to the following year.

APO Director for the Philippines Margarita R. Songco inquired whether food security and famine avoidance in developing member economies could be attributed directly to APO projects. If so, there should be evidence. She also welcomed the suggestion on reviewing the COE Program. She asked when it was to be done as she looked forward to a more effective, efficient organization and it would be useful to learn from the results and experiences of this program. She also asked if there were success indicators for the EPIF other than the number of visitors and exhibitors, as reported. She wondered if there was a program for phasing the fair out and leaving it to the private sector, a matter that had been raised a number of times in previous GBMs. She also looked forward to the activities that the APO was embarking on to provide policy analysis and advice to member countries in the area of productivity enhancement.

On the question of the COE, Secretary-General Amano replied that the intention of the report was to suggest a new way or approach that member countries could consider in the future. He said that it was difficult to evaluate the EPIF's success by simply counting the number of visitors since some activities also focused on business-to-business exchanges or involved the general public such as students. He noted that another indicator of the success of the EPIF was the number of exhibitors. He added that it was not simple to measure success by just measuring quantity in terms of exhibiting companies and the number of visitors. The success of the previous EPIF in the ROC was shown by the amount of business created which brought tangible results in terms of business matchmaking. He concluded that there were several ways to identify success including those indicators.

The Secretariat clarified that food security and famine avoidance were not purely attributed to specific APO projects in member countries. The Secretariat added that progress achieved was also attributed to national initiatives to improve agricultural productivity. The Secretariat mentioned that projects were being planned for measuring agricultural productivity in the region. The Secretariat also suggested that more projects were needed in the future to address agricultural productivity in developing member countries.

Chair Songco asked if there were more comments on the report. She requested the Secretary-General to consider all the points mentioned, including more focused projects, outcomes of projects, use of success stories, and collaboration among member countries. The Chair ended by declaring the adoption of the Annual Report of the Secretary-General to the GBM for 2015.



57th WSM delegates.

### 57th WSM

The 57th WSM was held in Malaysia, 19–21 October. It was attended by 33 NPO and agriculture delegates and 15 advisers representing APO members alongside observers from the African-Asian Rural Development Association, CIRDAP, OECD, PAPA, and UNESCAP. Second Minister for International Trade and Industry YB Dato' Seri Ong Ka Chuan delivered the inaugural address. APO Director for Malaysia Azman Hashim presented the welcome remarks, while the vote of thanks was led by KPC Vice Chairman Wooyoung Chun.

#### Statement by the APO Secretary-General

Dr. Santhi Kanoktanaporn stated that it was a great honor for him to attend this distinguished gathering of Heads of NPOs and Agriculture delegates for the first time as the Secretary-General of the APO.

The Secretary-General expressed his appreciation to the Government of Malaysia for hosting this WSM. He also thanked the Guest of Honor, Second Minister of International Trade and Industry Dato' Seri Ong Ka Chuan for delivering the inaugural address. Secretary-General Santhi expressed his deepest appreciation to the host and longest-serving APO Director, Tan Sri Azman Hashim, Chairman of the MPC, and Dato' Razali Hussain, Director General of the MPC, for the warm hospitality extended to the delegates.

Dr. Santhi stated that he had already been deeply involved in APO activities before being appointed to the post of Secretary-General at the GBM in Jakarta in April this year. He added that his immediate priority was to ensure that the Secretariat followed through to achieve the goals of the APO Roadmap to Achieve Vision 2020. In addition, with the GBM's endorsement, he would like to steer the APO to develop and implement cutting-edge, future-oriented initiatives to stay relevant to the next-generation needs of member economies.

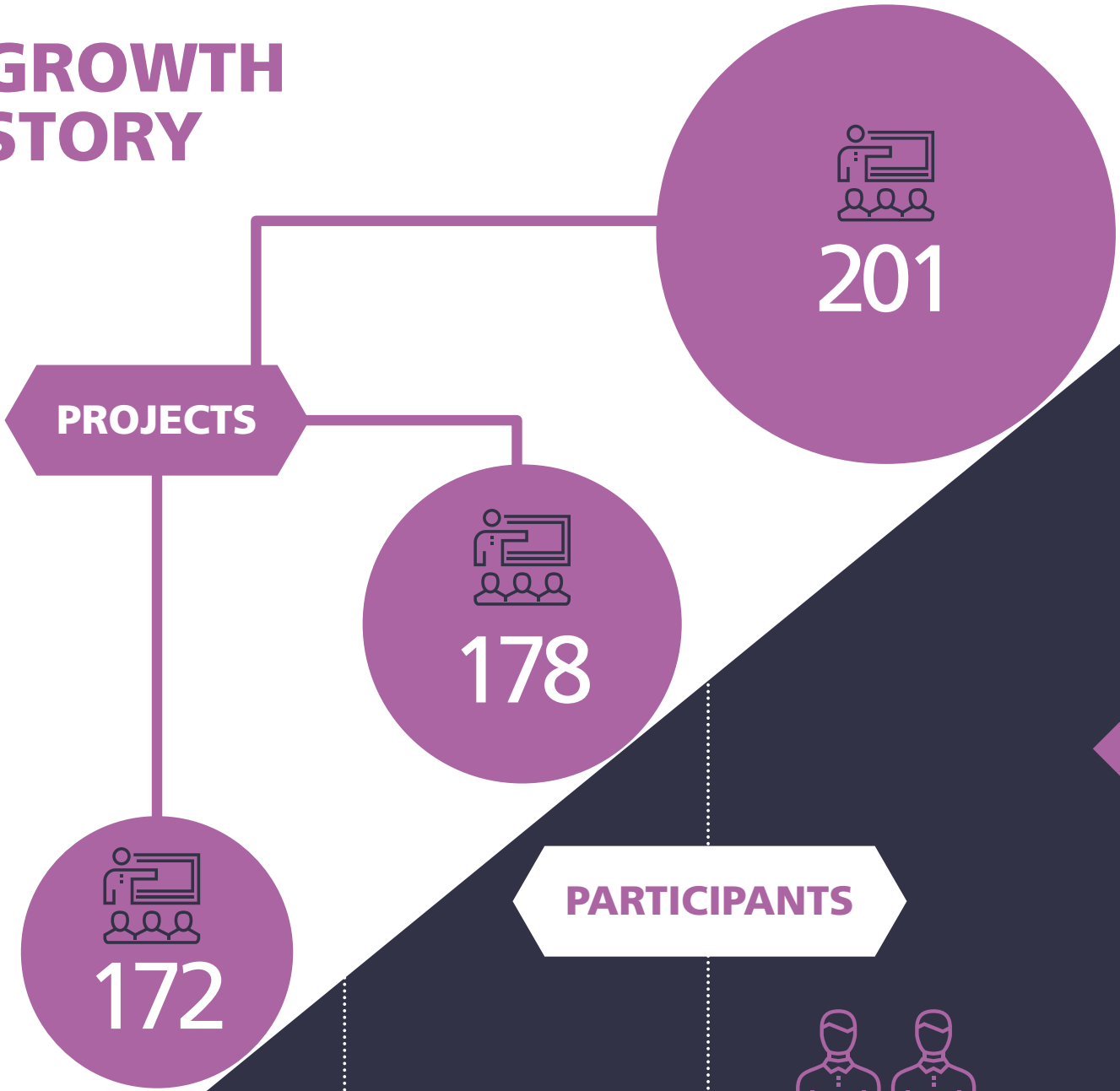
The Secretary-General mentioned that for this WSM, one of the main objectives was to discuss and endorse the 2017–2018 Program Plans, for which the GBM had already approved the preliminary budget. He explained that the 2017–2018 biennium had first been discussed at the WSM held in Singapore last year, which had also endorsed the program approach that clustered projects with common goals of enhancing productivity. He added that the Secretariat had revised the 2017–2018 Program Plans taking into account the recent US dollar-to-yen exchange rates to obtain the best lineup of projects within the budget available. He noted that the lineup for 2017 featured 72 multicountry projects on the priority list and another 16 on the out-of-ranking list, while the lineup for 2018 featured 70 multicountry projects on the priority list and 22 on the out-of-ranking list. He informed the delegates that they would be reconfirming the 2017–2018 project lineups during the planning sessions the next day.



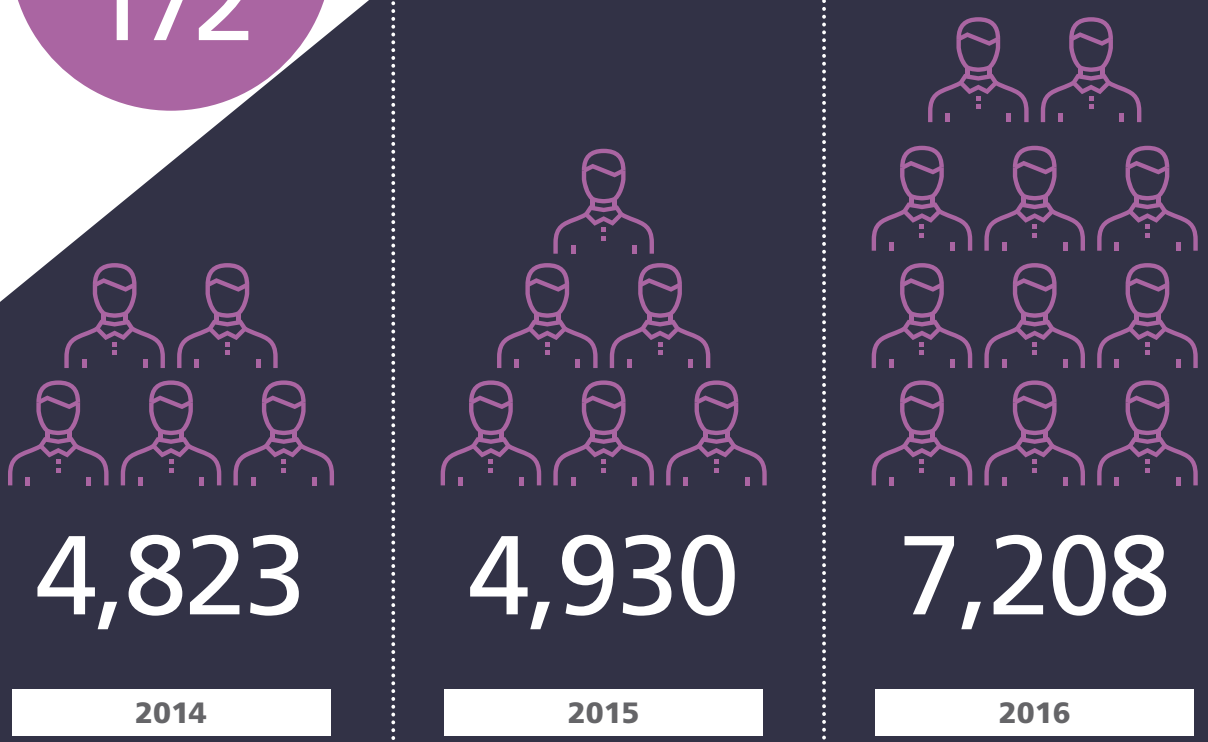
(L-R) Malaysia Productivity Corporation (MPC) Director General Dato' Mohd. Razali Hussain; APO Director for Malaysia Tan Sri Azman Hashim; Malaysia's Second Minister of International Trade and Industry Dato' Seri Ong Ka Chuan; and APO Secretary-General Santhi Kanoktanaporn at the opening session of the APO WSM 2016 in Putrajaya, 19 October 2016.



# GROWTH STORY



## PARTICIPANTS



2016 GBM AND WSM





**BRIEF  
DESCRIPTION  
OF 2016  
APO PROJECTS**

# STRENGTHENING OF NPOS

## Research on Need Assessment of Member Countries

Having knowledge of the current and future development needs of stakeholders in member countries is crucial for the APO Secretariat to conduct strategic project planning and implementation. To enhance the relevance and effectiveness of APO support to member countries, it is important that its projects be aligned with the needs and priorities of each. Research is implemented by the APO Secretariat to develop impactful programs and projects. This exercise is also crucial for the APO in terms of allocating resources and developing a medium-term roadmap.

Research on Need Assessment of Member Countries was carried out by the APO Secretariat from August 2013 to assess the current productivity-related needs of member countries. Eighteen member countries participated, and the final assessment report was submitted by the chief expert, which served as one reference during the development of the draft APO Roadmap to Achieve Vision 2020.

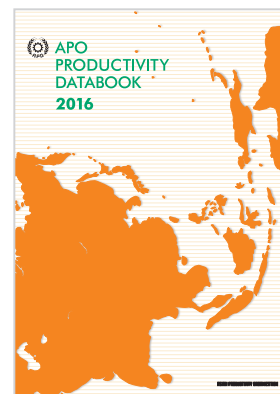
Program coverage: National development policy priorities; National productivity strategy; Identification of mid-term national productivity targets; NPOs' strategies and priorities; and Assessment of project needs for productivity improvement.

## Research on the APO Productivity Databook and Database (2016 edition)

Policymakers, business planners, and economic analysts rely on economic statistics including productivity data to analyze socioeconomic growth and set policies and goals for the future. To support the needs of such stakeholders in member economies, as well as in preparation for one of the APO Roadmap to Achieve Vision 2020 initiatives to strengthen the evidence-based policy advisory role of the Secretariat, the Productivity Databook project continues to conduct research to measure productivity and generate a set of socioeconomic and productivity data under an internationally harmonized measurement framework.

The project is conducted under a research partnership between the APO and Keio University in Tokyo, while national experts collect basic primary data following the internationally harmonized methodology as guided by the chief expert. The project not

only monitors productivity trends but also provides analysis of the most up-to-date socioeconomic performance indicators for assessing potential economic growth. The project published the *APO Productivity Databook 2016* as well as the APO Productivity Database on the APO website. A new, upgraded database, the Asian Economy and Productivity Map (AEPM), was also developed this year to replace the Asian Quarterly Growth Map.



Program coverage: Comparative analyses of labor productivity and sources of economic growth; Total factor productivity analysis; Energy productivity and sustainable development; Analytical reports for publication in the *APO Productivity Databook 2016*; APO Productivity Database; and New AEPM database.

## Research on the APO Productivity Databook and Database (2017 edition)

To continue supporting the needs of policymakers, planners, and economic analysts in member economies, in line with the Roadmap to Achieve the APO Vision 2020 initiatives to strengthen the evidence-based policy advisory role of the Secretariat, expanded research is being conducted to

measure productivity and generate a set of socioeconomic and productivity data under an internationally harmonized measurement framework.

The research is conducted in a partnership between the APO and Keio University in Tokyo, together with national experts who collect basic primary data following the internationally harmonized methodology. In 2016–2017, the project not only monitored productivity trends but also expanded its research coverage to the productivity of cities, which will examine the impacts of smart cities as well as energy productivity. The project will publish the *APO Productivity Databook 2017* as well as the APO Productivity Database on the APO website. Another database output, the AEPM, will also be fine-tuned for user-friendliness with updated data releases.

Program coverage: Comparative analyses of labor productivity and sources of economic growth; Total factor productivity analysis; Energy productivity, city productivity, and sustainable development; Analytical reports for publication in the *APO Productivity Databook 2017*; APO Productivity Database; and AEPM database.

### Self-learning e-Course on Waste Management in Agribusiness

Waste management is one of the key issues being discussed at the global level in both the agriculture and industry sectors. Global warming, climate change, environmental degradation, and health hazards are just some of the consequences of improper waste management.

Agriculture generates huge amounts of organic and inorganic waste during food production, handling, processing, packaging, storage, transportation, and marketing. It is estimated that 15% of total waste consists of agriwaste, equivalent to 998 million tons per year. Waste management can not only reduce waste generation but also promote its reuse and recycling. In general, agribusiness enterprises are concerned about waste management. However, micro, small, and medium enterprises (MSMEs) are constrained in the adoption of proper waste management strategies due to a lack of knowledge and other factors. The appropriate management of waste in any agribusiness can help to maintain a healthy environment for the business and community, yielding overall economic benefits.

To train more stakeholders, in particular MSME managers and entrepreneurs, professionals, consultants, and academics involved in agricultural waste management, the APO offered a self-learning e-course on Waste Management in Agribusiness, 14 December 2015–13 May 2016. A total of 664 participants from 27 countries, including 14 from the 10 nonmembers Australia, Kenya, Netherlands, Nigeria, Oman, Saudi Arabia, Turkey, Uganda, United Arab Emirates, and USA, enrolled in the course to gain basic knowledge of and skills in agri waste management. A total of 153 passed the course.

Program coverage: Introduction to waste management in agribusiness; Agricultural waste generation and characterization; Waste management strategies; Resource recovery from waste; Life cycle assessment and financing; Legal and institutional arrangements; and Sample real-life stories.

The same course was developed in interactive mode as a pilot course and launched in November 2016.

### Self-learning e-Course on Organic Agriculture and Organic Agribusiness

Driven by growing consumer concerns about food safety and the need for healthier lifestyles, the global market for organic products is expanding fast, resulting in greater opportunities for Asian producers. Organic agricultural and food products, however, remain niche products, although they command premium prices. Marketability at a premium depends on consumer confidence in the authenticity of organic products. Therefore, producers need a way of assuring consumers that a product has been grown using organic methods. This requires a credible system of organic standards, certification, and traceability in place.

To provide basic knowledge, skills, tools, and techniques for the production, processing, certification, labeling, and marketing of organic agricultural and food products, the APO offered a self-learning e-course on Organic Agriculture and Organic Agribusiness, 1 February 2016–30 June 2016. A total of 420 participants enrolled, of whom 414 were from member countries while six came from PR China, Egypt, Kenya, Saudi Arabia, United Arab Emirates, and USA. Eighty-four completed the course successfully.

Program coverage: Definition, scope, benefits, principles, and status of organic agriculture in Asian countries in the global context and current trends; Introduction to organic agriculture in Asian countries in the global context and trends; Soil fertility management; Insect pest, disease, and weed management; Organic waste management and natural resource management; Organic plant, animal, and aquaculture production; Organic food processing; Organic standards and regulations; Organic guarantee systems; and Organic marketing and trade.

### Self-learning e-Course on Productivity Tools and Techniques (Basic)

SMEs generally suffer from the lack of knowledge of basic productivity tools, weak technical capabilities, and limited access to external assistance. Needing to improve product or service quality, most SMEs are applying various improvement tools and techniques to achieve growth as well as greater profit. The development of productivity practitioners is a high-priority need of SMEs. Based on that need, the APO designed the face-to-face training course on the Development of Productivity Practitioners

(DPP: Basic Course) in 1994 aiming to develop future experts and specialists in productivity improvement and provide momentum for the development paths of productivity practitioners. In 2015, the APO launched the self-learning e-course on Productivity Tools and Techniques (Basic) for participants who were selected for the face-to-face course as a prerequisite under the APO Certified Productivity Practitioners' scheme. The objective was to equip participants with knowledge of fundamental productivity concepts, principles, and tools.

In 2016, the self-learning e-course on Productivity Tools and Techniques (Basic) opened on 1 May and was completed on 30 September. A total of 1,265 participants enrolled, of whom 1,245 were from member countries while 20 were from the nonmember countries Argentina, Australia, Botswana, PR China, Colombia, Egypt, Nigeria, Poland, Qatar, Tunisia, Turkey, United Arab Emirates, and Venezuela. A total of 361 completed the course and passed the examination.

Program coverage: Introduction to productivity, quality, and competitiveness; Background of the Asian productivity movement; The profile of a productivity practitioner; Basics of productivity measurement; Basic productivity and quality tools and techniques; Introduction to total quality management; and Final exam.

### Self-learning e-Course on Productivity Tools and Techniques (Advanced)

The development of capable productivity practitioners is a high priority for APO member countries to assist the development of SMEs. In general, SMEs lack knowledge of advanced productivity tools, need to upgrade their technical capabilities, and have only limited access to external assistance. These result in low productivity and the inability to sustain their businesses over the long term. As the backbone of every economy, it is crucial for SMEs to be guided in utilizing the latest technology and techniques to improve their overall performance. Against this background, the APO designed the face-to-face training course on DPP: Advanced, which has been conducted since 2001. Similar to DPP: Basic, the APO launched the self-learning e-course on Productivity Tools and Techniques (Advanced) for participants who were selected for the face-to-face course as a prerequisite under the APO Certified Productivity Practitioners' scheme in 2015.

Realizing the effectiveness of using its e-learning platform to attract more participants, the APO continued the e-course in 2016. The self-learning e-course on Productivity Tools and Techniques (Advanced) opened on 1 May and was completed on 30 September. The main objective was to enable participants to understand advanced productivity tools and techniques to improve the productivity and competitiveness of organizations. A total of 734 participants enrolled, of whom 721 were from member countries and 13 from the nonmember countries Australia, Botswana, Brazil, Egypt,

Iraq, Nigeria, Poland, Qatar, South Africa, and United Arab Emirates. A total of 237 completed all modules and passed the examination.

Program coverage: Productivity measurement; Business excellence; Lean techniques; Basic statistical data analysis; Value stream mapping; Material flow cost accounting (MFCA); and Final exam.

### Self-learning e-Course on Material Flow Cost Accounting (ISO 14051)

MFCA is a management tool that promotes the efficient use of materials, contributing to reductions in waste, emissions, and nonproducts. MFCA increases the transparency of material flow, which is a key to successful problem solving and improvement. It is one of the major tools of environmental management accounting (EMA). EMA is a set of procedures used within organizations for linking environmental considerations with economic objectives. Today, organizations cannot ignore the environmental aspects of their activities and consequently seek management tools to link concern for the environment with economic considerations. In 2011, the International Organization for Standardization (ISO) published the MFCA implementation standard, ISO 14051, which includes life cycle assessment and performance evaluation of this management system.

To enable participants to learn the basic concept and principles of MFCA and enhance their understanding of ISO 14051, the APO offered a self-e-learning course, 1 June–31 October 2016. A total of 466 participants enrolled, of whom 457 were from member countries while nine were from nonmembers Egypt, Jamaica, Myanmar, Nigeria, Palau, Poland, Saudi Arabia, and United Arab Emirates. A total of 113 completed the course and passed the exam.

Program coverage: General concept of MFCA; Background to the MFCA standard ISO 14051; Standardization history and dissemination of MFCA; Scope, terms, objectives, principles, and implementation steps; and Final exam.

### Self-learning e-Course on Climate Change Impacts and Adaptation: Basic Course

Climate change is already affecting the physical surface of the earth, the environment that supports our lives, supplies our food, and makes our economies and societies possible. Changes in climate will only accelerate over the next few decades. Multidisciplinary perspectives on climate change are necessary to comprehend how it affects people as individuals, members of local communities, citizens of countries, and part of the global community. This means that an understanding of the science of climate change, its impacts, current methodology to alleviate those impacts, and future measures to adapt to climate change is required.

The APO offered a self-learning e-course on Climate Change Impacts and Adaptation: Basic Course, 1 June–31 October 2016, to enable participants to understand the science, impacts, mitigation measures, and policy frameworks at individual, community, national, and global levels to reduce the effects of climate change. A total of 551 individuals enrolled, of whom 541 were from member countries while 10 were from the nonmember countries Egypt, Ethiopia, Iraq, Myanmar, Nigeria, Poland, Qatar, United Arab Emirates, UK, and Zimbabwe. A total of 132 completed all course modules.

Program coverage: Science and impacts of climate change; Energy usage; Environmental economics; Mitigation measures; Climate change adaptation; and Future focus and trends.

### Self-learning e-Course on Green Productivity and the Environmental Management System (ISO 14001)

The Environmental Management System (EMS) is part of the overall management system that addresses the impact of an organization's activities, products, and services on the environment. An EMS allows an organization to identify and take control of the environmental impacts that it generates and is a tool to improve the efficiency of activities, products, and services so that they will benefit the entire society. Improved relationships with suppliers and customers can result from the consistent management and reduced environmental impacts of organizations. The APO has organized a number of projects related to the EMS and ISO 14001 due to the relevance of the topics to its member countries.

To enable participants to learn more about ISO 14001: EMS and understand how an EMS should be implemented in an organization utilizing the Green Productivity (GP) approach, a self-learning e-course was offered 1 June–31 October 2016. A total of 730 participants enrolled, of whom 714 were from member countries while 16 were from nonmembers Australia, Colombia, Egypt, Iraq, Kenya, Nigeria, Palau, Peru, Poland, Saudi Arabia, United Arab Emirates, and Zimbabwe. A total of 234 completed all the modules.

### National Workshop on Agritourism Development

The tourism sector is one of the most important driving forces of Cambodia's economic growth because of its contributions to job creation, income generation, improvement of people's livelihoods, and poverty reduction. The government is attempting to diversify tourism products and services in response to the growing demand for green tourism. Considering that 80% of the total population in Cambodia is in agriculture with low incomes, developing agriculture for tourism is viewed as an important step to increase farm incomes and ensure inclusive development.

To promote agritourism, homestays, and farmstays as new tourism products and explore ways of enhancing cooperation

among tourism- and agriculture-related government agencies, the private sector, farmers, and other stakeholders to expand tourism activities to rural areas and encourage investment in SMEs in agritourism and related enterprises, the Ministry of Tourism of Cambodia in Association with the NPCC and with APO support organized a national workshop on Agritourism Development in Phnom Penh, 11–13 January, with 124 attending.

Program coverage: Tourism development in Cambodia: Trends, opportunities, and challenges; Concept, trends, and opportunities for agritourism; Agritourism models in selected Asian countries; Stakeholders' participation and benefit sharing in agritourism; Holistic approach to sustainable agritourism; Agritourism in Cambodia; Marketing, promotion, and pricing of agritourism products; Homestays and farmstays: Concept and features of selected models in Asia; Homestays in Cambodia; and Role of government and other stakeholders in the promotion of agritourism and homestays/farmstays. Participants visited Kampong Loungs village and Shre Por village to observe agritourism activities and enterprises.

### Practice-oriented Workshop on Energy Efficiency in India

Energy efficiency plays a critical role in enhancing an organization's productivity and lessening its impact on the environment. It helps to reduce energy costs and environmental footprints, therefore contributing to cost-effective, environment-friendly, sustainable development and benefiting more than simply the organization itself.

As a follow-up to the 2015 multicountry observational study mission on Energy Efficiency conducted in Tokyo, the APO in partnership with the NPC organized a practice-oriented workshop on Energy Efficiency in Chennai, India, 18–22 January, attended by 28 energy professionals. Speakers from the NPC and industries provided an overview of the concept of energy efficiency and auditing, familiarized participants with the implications of various mechanical systems, and led practical exercises in laboratories.

Program coverage: Industrial plant electrical systems and electric motors; Energy efficiency in compressed air systems; Electric motor lab practice; Compressor lab practice and data analysis; Energy efficiency in pumps and pumping systems; Pump lab practice and data analysis; Energy efficiency in fans and blowers; Fan lab practice and data analysis; Case studies on pumps, fans, and compressors; Energy efficiency in industrial thermal systems (boilers and steam traps, furnaces, and waste heat recovery); Boiler and steam trap lab practice; Refrigeration and air-conditioning systems; Energy efficiency in lighting systems; Lighting system lab practice; Overview of renewable energy systems; and Case studies on energy management and audits. A site visit was hosted by Danfoss India, which offered the participants hands-on exercises involving power

electronics, motors, harmonics analysis and control, refrigeration, compressors, and variable-frequency drives.

### National Workshop on Measurement of Productivity in the Public Sector

Under the Eleventh Malaysia Plan, 2016–2020, the Malaysian government will become more citizen-centric and focus on enhancing the efficiency and productivity of public service. Among the focus areas is rationalizing public-sector institutions for greater productivity and better performance by integrating productivity improvements into public service. One of the initiatives is to undertake productivity measurement in public service. It is necessary for all stakeholders involved to understand the concepts of and approaches to measuring public-service productivity immediately before implementation.

As a national follow-up project to a similar workshop implemented by the APO in November 2015 and hosted by the DAP in Manila, a workshop on Measurement of Productivity in the Public Sector was organized and hosted by the MPC, 19–21 January in Kuala Lumpur. It introduced basic principles of and different methods to measure public-sector productivity to various government agencies of Malaysia. Sixty-one participants from 16 government agencies and local administration units joined the workshop.

Program coverage: Why measure public-sector productivity?; APO public-sector productivity milestones and the Center of Excellence on Public-sector Productivity; Defining key performance indicators in measuring public-sector productivity; Productivity measurement approaches for the public sector; Measuring public-sector productivity; Lessons from international experience and selected APO member countries; and Challenges in measuring public-sector productivity. Selected participants from government agencies made presentations on their individual research on measuring productivity in delivering specific public services.

### National Workshop on Strengthening Food Quality Control Systems in Cambodia

Effective national food quality control systems (FQCS) are essential to protect the health and safety of domestic consumers. They are also critical in enabling countries to ensure the safety and quality of food entering international trade and that imported foods conform to national requirements. There is room for improvement in the food control and inspection systems in many developing countries like Cambodia, however. The main impediments to improving FQCS are a lack of awareness of the latest developments, insufficient and fragmented legislation, multiple jurisdictions and lack of coordination among different organizations, poor infrastructure, and inadequate financial resources.

The NPCC in cooperation with the APO organized a national workshop on Strengthening Food Quality Control Systems



*National Workshop on Strengthening Food Quality Control Systems in Cambodia.*

in Phnom Penh, 16–19 May. The objectives were to acquaint participants with the latest emerging trends in the food industry, especially modern FQCS; enhance their understanding of modern FQCS and equip them with inspection skills; and produce more trainers in FQCS and inspectors of food quality in Cambodia. Fifty-two participants attended.

Program coverage: Findings from the study mission to Germany on modern quality control and inspection systems for food products; Experience gained and activities carried out by Cambodian participants after returning from Germany; FQCS; Food legislation/legal framework; Risk management and traceability; and Food inspection and certification. Participants visited the Cambodia Import Export Inspection and Fraud Repression Directorate General.

### National Follow-up Program to the Workshop on Developing and Strengthening Consulting Capacities of NPOs

The DAP, as the NPO of the Philippines, plays a crucial role in the promotion and enhancement of national productivity. In line with its mandate of “helping its development partners excel in serving others better by enabling the institutionalization of cutting-edge capacity building and development solutions,” the DAP undertakes training, education, consultancy services/technical assistance, and policy- and action-oriented research and publications. As an NPO that provides consultancy services, the DAP constantly seeks new methodologies, knowledge, and approaches for improving consultancy services and enhancing consultants’ competencies.

A workshop on Developing and Strengthening Consulting Capacities of NPOs was hosted by the CPC, 11–14 August 2015.



Following that workshop, the DAP conducted a follow-up project to intensify the sharing of knowledge of and best practices in consulting services, especially in critical areas that can make any consulting endeavor successful, 16–20 May 2016. A total of 40 participants attended.

Program coverage: The consulting industry evolution; TEAM FOCUS—a framework for more efficient and effective team problem solving; Role of NPO consultants and effective consulting process; and The consultant’s toolkit. Participants visited public offices that were clients of the DAP in its consultancy business.

### **National Training Course on Value Addition to Agrifood Products in Cambodia**

Value addition to agrifood products has enormous potential for increasing productivity, incomes, and off-farm employment opportunities in Cambodia. There is a need to build nationwide agrifood value chains to enhance agricultural productivity, reduce postharvest losses, and increase the profitability of small- and medium-sized farms and agrifood enterprises.

The APO in partnership with the NPCC, Ministry of Industry and Handicraft, and Ministry of Agriculture, Forestry and Fisheries of Cambodia organized a national training course on Value Addition to Agrifood Products in Phnom Penh, 17–20 August. The course was a follow-up to the APO multicountry training course on Value Addition to Agricultural Products for Increasing Productivity, 7–13 September 2015, held in Colombo, Sri Lanka. The objective was to acquaint participants with recent developments and new tools and techniques in value addition to agricultural and food products for increasing the productivity and profitability of Cambodian agribusiness SMEs. Fifty participants representing SMEs in agribusiness and food manufacturing industries, SME associations, the NPCC, government agencies, and NGOs attended. One resource person from Pakistan assisted by one local resource person conducted the course.

Program coverage: Basic concept and principles of value addition; Product development, innovation, and value addition; Adding value through processing, packaging, and marketing; Utilization of by-products and farm waste to create new value-added food and nonfood products; Emerging global trends in new and value-added products with success stories; and Value addition through quality and safety assurance certification systems.

### **National Workshop on Nonchemical Pest Management in Agriculture for Enhancing Green Productivity**

Cambodia’s economy continues to be dominated by agriculture. It was found, however, that pests destroy up to 40% of all potential food production each year. The use of chemical pesticides is the most common pest control method. Chemical pesticides are fast acting but can be harmful to people, animals,

and the environment. In addition, some pests can develop resistance to those chemicals. The risks associated with the use of chemical pesticides are even higher among small farmers. To address such externalities associated with farming, there have been attempts to replace the use of synthetic chemical pesticides with nonchemical pest management (NCPM).

To provide a platform for the training and development of NPCC staff and individuals from other relevant stakeholder organizations in Cambodia by enhancing their capacity to provide training and consultancy in NCPM in agriculture and contribute to the development of national policy on promoting GP in the country, especially environment-friendly pest management in agriculture, the NPCC in cooperation with the APO organized a national workshop on Nonchemical Pest Management in Agriculture for Enhancing Green Productivity, 20–23 September in Phnom Penh. Fifty-one participants attended.

Program coverage: Key concepts and recent developments in NCPM; Nonchemical methods of pest control; Applications of nuclear technology in insect pest control; Regulatory framework for biological pesticides; Institutional settings to promote the adoption of NCPM by farmers; and Policy incentives to promote the adoption of sustainable food production systems by farmers. Participants received hands-on training on the Ros Mao farm and Ngem Sovannary rice farm in Takeo province.

### **National Follow-up Program to the National Workshop on Best Practices of Knowledge Management Implementation in NPOs and the Public Sector**

Knowledge Management (KM) is an effective management tool that can contribute significantly to productivity and quality improvement in various sectors. It could offer opportunities for the NPCC and other public-sector organizations in Cambodia in two ways: applying KM internally; and building the capacity to provide KM training and consultancy to public- and private-sector organizations.

To enhance understanding of the KM concept and principles to increase public-sector productivity and support the NPCC in strengthening its capacity to provide consultancy and KM services to the public and private sectors for productivity enhancement, a national workshop on Best Practices of Knowledge Management Implementation in NPOs and the Public Sector was organized, 26–28 September, in Phnom Penh. Ninety-one participants from the government and NGOs, private sector, and academia attended.

Program coverage: Concept of KM and its importance to improving the productivity of organizations; Importance of KM to productivity and quality improvement initiatives; KM applications in public-sector organizations; The APO KM Framework and its applications in the public sector; KM tools and techniques; KM implementation approach; KM best practices in public-sector organizations; and KM opportunities in the public sector.

### 1st National Workshop-cum-Conference on Organic Certification in Mongolia

The market for certified organic food products is expanding fast, driven by increased consumer demand for product authenticity and concerns about the negative effects of input-intensive agriculture on natural resources and the environment. The demand for organic food products is expected to continue growing robustly in domestic and international markets.

The APO in partnership with the MPO and Ministry of Food and Agriculture organized the 1st National Workshop-cum-Conference on Organic Certification in Mongolia in Ulaanbaatar, 10–12 October. The objective was to enhance participants' knowledge of and skills in organic certification for the development of the organic market in Mongolia, create awareness of organic agriculture and organic agribusiness and their roles, and establish a national network of key stakeholders in the Mongolian organic industry with the aim of promoting organic agriculture in the country. The 150 participants represented farmers and food-processing companies, local government organizations, the National Agency for Standardization, Meteorology Agency, cooperatives and private companies, international organizations, research institutes, and NGOs engaged in promoting the organic movement. Resource persons from Germany, Mongolian Ministry of Food and Agriculture, and UN Food and Agriculture Organization-Mongolia made presentations. The project was a follow-up to the APO multicountry Organic Agroindustry Development Leadership Course in Asia, 28 May–3 June 2016, in Bogra, Bangladesh.

Program coverage: Overview of the organic industry; International trends and challenges; Organic standards and regulation; Organic guarantee system; Organic marketing and trade; Participatory guarantee system; Organic farming innovation and organic agriculture development in Asia; and Challenges and possibilities of organic agriculture development in Mongolia.

### National Training Course on Lean Manufacturing Systems

The objective of adopting lean systems is to get the needed items to the right place at the right time in the right quantity and quality. The process requires identifying and eliminating activities that do not add value to the process of design, production, logistics, and customer relations. Lean systems have been widely adopted by industries and other sectors in many countries. To disseminate knowledge on those systems to all member countries, the APO has conducted various lean-related projects including digital learning and face-to-face courses over the past decade. In most of those projects, participants were exposed to comprehensive information and actual implementation in companies applying lean principles.

Among NPOs in member countries, the NPS of Sri Lanka is actively developing its capacity to meet the demands of

its various stakeholders. Realizing the effectiveness of lean applications, a national program on Lean Manufacturing Systems was held 14–18 November in Colombo. Replicated from the APO multicountry program on a similar topic held in February in Malaysia, about 50 participants from different types of organizations attended the program conducted by a resource person from Singapore.

Program coverage: Principles of lean manufacturing systems/value addition, waste elimination/kaizen, and the plan-do-check-act cycle; Lean tools/pull system/one-piece flow/takt time/leveled production/group work; Value stream mapping/group work; and Jidoka/lean culture and group presentations. Participants visited apparel manufacturer Mihila to observe lean management practices in action.

### National Workshop on Development and Promotion of Ecotourism Homestays in Luangprabang

Homestay ecotourism has become very popular for both domestic and foreign travelers in many countries in Asia and the Pacific. Homestays are a form of tourism allowing visitors to rent accommodations from a local family, become familiar with the local lifestyle, and share the family's culture. In recent years, Lao PDR has become an increasingly popular tourist destination since it opened its doors to international visitors in 1990 due to its rich, unique natural resources and cultural heritage. The country was selected as the world's best tourist destination for 2013 by the European Council on Tourism and Trade. In this context, a national workshop was arranged by the LNPO and DOSMEP, in cooperation with the Tourism Development Department, Ministry of Information, Culture and Tourism; and Department of Industry and Commerce of Luangprabang province as a timely response to ensure the sustainable management of the ecotourism industry being developed.

Fifty participants gathered in Luangprabang to attend the three-day workshop, 9–11 November. Policymakers, economic planners, and other key stakeholders were involved to raise awareness of the importance and potential of ecotourism homestays and examine how they could serve as a tool for increasing productivity, creating alternative incomes, and diversifying the rural economy, as well as chalking out a development strategy to promote inclusive growth. One resource person from Thailand conducted the workshop.

Program coverage: Introduction to ecotourism homestays: Concept, principles, and categories of ecotourism homestays; Status of ecotourism development in Lao PDR, Asia, and the Pacific; and Selected tools and techniques for effective planning and development of ecotourism homestays as a rural business. Two villages in Luangprabang, Phanom and Xangkhong, hosted site visits to demonstrate the operations and outputs of a weaving cluster, a mulberry paper product cluster, and a handicraft production center specializing in silver and gold items, all set up and run by rural community women.

## National Conference on Rural Tourism: Homestays

Rural tourism and homestay development offers tremendous opportunities to create viable SMEs to generate income and employment for rural communities in Nepal. It could optimize the use of natural resource endowments of rural communities, local culture, and indigenous industry to serve as the integral elements of a tourism product or package.

To provide participants a platform for assessing the current status, reviewing issues and challenges, and presenting and discussing best practices and successful models of homestays and farmstays, as well as establish a national network and develop a framework for cooperation among key stakeholders for promoting the development of the agritourism and homestay sector in Nepal, the APO in partnership with the NPEDC and Lalitpur Chamber of Commerce and Industry organized a national conference on Rural Tourism: Homestays in Kathmandu, 20–22 December. The conference was a follow-up to the APO multicountry training course on Development of Homestay and Agritourism Programs, 21–27 September 2014 in Kedah, Malaysia. Seventy-five participants representing national and local government organizations, academia, and NGOs, including community homestay leaders, members of homestay/agritourism associations, and homestay operators, attended. One resource person from Sri Lanka assisted by local resource persons spoke at the conference.

Program coverage: Current status of rural tourism in Nepal; Trends and future prospects of ecotourism in Nepal; Agritourism in Nepal: Opportunities and challenges; Homestays in Nepal: Issues, challenges, and prospects; Examples of successful models of homestays and farmstays in Nepal and elsewhere; and Successful models of agritourism and homestays from other countries.

## Special Program for Capacity Building in the Food Industry in ASEAN Least Developed Countries

The APO Special Program for Capacity Building in the Food Industry in ASEAN Least Developed Countries (ASEAN-LDCs) from 2015 to 2019 consists of national capacity-building projects on productivity enhancement in agriculture and the food industry for ASEAN LDCs, in particular Cambodia, Lao PDR, and Myanmar, under a special grant from the Government of Japan. In 2016, the following projects were undertaken under the program.

### 1 Coordination Meeting on National Project Plans under the Special Program for Capacity Building in the Food Industry in ASEAN Least Developed Countries (ASEAN-LDCs)

In the beginning of the program, an initial coordination meeting was held in Tokyo, 2–4 March, to examine the challenges and opportunities in capacity building on productivity enhancement in

agriculture and the food industry and to discuss national project plans in consultation with the participating countries. Trends in agriculture and the food industry in Cambodia, Lao PDR, and Myanmar and achievements of the previous special program were also presented at the meeting. Nine participants comprising NPO staff and government officers from the three countries, along with two resource persons, attended. They also made site visits to the National Agriculture and Food Research Organization, a dairy product factory, and soy sauce manufacturer.

### 2 Demonstration Company Project on Advanced Food Safety Management Systems for SMEs

A demonstration company project in Cambodia was initiated on advanced food safety management systems (FSMS) for SMEs to be implemented from October 2016 to May 2017 to establish effective, advanced FSMS in three food-processing demonstration companies with the ultimate aim of obtaining advanced FSMS ISO 22000:2005 certification. The project aims to provide practical examples of advanced FSMS in Cambodia for other food-processing companies to emulate the practices and to establish a pool of practitioners and experts on advanced FSMS for the Cambodian food industry. An APO food safety expert visited Cambodia in October 2016 and two more visits were scheduled for 2017.

### Workshop on Strengthening Institutions Offering Productivity Courses

Rapid changes in society have led to the development of more varied methods of acquiring knowledge and skills in the educational setting, which include short- or long-term courses, vocational or baccalaureate degrees, formal or informal approaches, etc. The same trend also applies to productivity courses offered by educational institutions in efforts to provide more learning opportunities to society at large.

In line with APO efforts to strengthen the productivity movement in the region and involve more stakeholders, a workshop on Strengthening Institutions Offering Productivity Courses was organized and hosted by the Directorate of Productivity, Directorate General of Training and Productivity, Ministry of Manpower, Indonesia, 16–19 May in Jakarta. Eighteen international participants from 16 member countries and three local ones discussed ways to strengthen institutional operations and broaden their curricula and training courses on productivity initiatives as well as explored possible collaborations with NPOs to expand the pool of productivity practitioners in the region.

Program coverage: Role of institutions in human capital development and enhancing national productivity; Evaluating and improving a productivity education and training course/program; Reviewing and strengthening curriculum development of productivity education and training courses; Outreach strategy for industry in productivity education and training programs; and Ensuring quality in productivity education and training programs.



*Training course on Development of Productivity Practitioners: Basic Program.*

The participants visited the Jakarta campuses of Trilogi University and Binus University to learn about their best practices in existing courses/programs related to productivity education.

### **Training Course on Development of Productivity Practitioners: Basic Program (DPP: Basic)**

The development of certified productivity practitioners is a high-priority need of NPOs. Based on that need, the APO designed the training courses on DPP: Basic and Advanced in 1994 and 2001, respectively, aiming to develop future experts and specialists in productivity improvement and provide momentum for their development paths. DPP: Basic aims to equip participants with fundamental knowledge on productivity, which enables them to diagnose the current productivity performance of any organization and then adopt and implement appropriate solutions for improvement.

The 21st DPP: Basic course was held in Manila and Tagaytay City from 6 June to 1 July. A total of 22 participants attended, 18 from NPOs and the remainder from NPO-affiliated organizations such as SME development agencies and ministries of industry. It was organized in collaboration with the DAP, and participants stayed in Manila and at the DAP Conference Center in Tagaytay City during the course. Participants were given six months after project completion to submit reports on how they carried out their action plans in order to qualify as APO-certified productivity practitioners.

Program coverage: Module I—Productivity concepts and implementation strategies; Module II—Productivity tools and techniques; Module III—Competencies as a productivity practitioner; and Module IV—Individual productivity and quality

action plans. Four organizations served as venues for practical study: Tagaytay Cooperative Center; Tagaytay Medical Center; 1 Tagaytay Hotel; and Municipal Council of Tasilay.

### **Training Course on Development of Productivity Practitioners: Advanced Program (DPP: Advanced)**

The DPP: Basic and Advanced training courses have been conducted annually since 1994 and 2001, respectively, to equip productivity professionals from NPOs and associated agencies with the productivity and quality tools needed to strengthen the capacity of NPOs. DPP: Advanced provides state-of-the-art knowledge on productivity to enable participants to diagnose the current productivity performance of an organization, adopt appropriate tools and techniques, and implement applicable solutions for

improvement. At the same time, they are expected to guide beginning practitioners in offering professional consultancy services to organizations and industries.

In 2016, a total of 21 participants attended the DPP: Advanced course, 8–26 August. Nineteen were from NPOs, while one each from Mongolia and Nepal represented clients of NPOs. In collaboration with the MPC, the course was held in Johor Baharu for the first two weeks and then moved to Petaling Jaya for the final week. Participants were given six months after project completion to submit reports on how their action plans were implemented in order to qualify them as APO-certified productivity practitioners.

Program coverage: Module I—Productivity and business competitiveness; Module II—Corporate strategies and implementation; Module III—Process management; and Module IV—Productivity tools and techniques. Participants visited the MPC Southern Region Office, KPJ Specialist Hospital, and Benithem in Johor and Recomtec in Selangor.

### **Workshop on Best Practices of Knowledge Management Implementation in NPOs**

NPOs in APO member countries are the key drivers of national productivity movements. They have been involved in coordinating and implementing various APO-sponsored activities including training, workshops, conferences, e-learning courses, observational study missions, and research. This wide range of activities creates huge amounts of information, data, knowledge, and expertise that continue to mount over time. To benefit from all these in the best possible way, each NPO needs a system that can collect data, store it, share it, and manage it effectively. In essence, each NPO should have a KM system designed to create new expertise and

utilize it throughout the organization to enhance efficiency and productivity in the delivery of services to its clientele.

To share NPO experiences and best practices of KM implementation in line with their national productivity movement activities, assess the KM systems of NPOs and their consistency with the APO KM Framework, and identify strategies for intensifying the applications of KM in NPOs, an APO workshop on Best Practices of Knowledge Management Implementation in NPOs was held 14–17 June in Ulaanbaatar, Mongolia. Twenty-five participants from 13 members and three international experts attended.

Program coverage: Importance of KM to productivity and quality improvement initiatives; KM applications in international development organizations; KM applications in private business organizations; KM applications in public organizations; Selected models and best practices of KM in NPOs; and Strategies to intensify KM applications and adoption in NPOs.

### Workshop on Social Marketing and Networking for NPOs and Public-sector Organizations

Social marketing is the systematic application of marketing techniques, along with other concepts and tools, to influence a target audience's behavior to achieve specific goals for a social good. It represents an approach to planned social change such as promoting environmentally protective behaviors and facilitating the formulation and adoption of new policies. Social marketing targets the behavioral change not only of individual citizens but also of organizations.

Through motivating and enabling stakeholders to move toward beneficial behavioral changes, social marketing helps NPOs and public-sector organizations to enhance their organizational visibility and gain support for productivity enhancement initiatives.

A four-day workshop on Social Marketing and Networking for NPOs and Public-sector Organizations was organized by the APO in partnership with the NPS, 21–24 June in Colombo. Twenty-nine participants from 16 member countries attended the workshop. NPS Director and APO Liaison Officer for Sri Lanka Suranga Gunarathne delivered welcome remarks to all participants. Secretary Jinasiri Dadallage, Ministry of Public Administration and Management, and APO Director for Sri Lanka gave the keynote speech. The workshop was a platform to enhance participants' knowledge and share good practices of social marketing for advocacy campaigns and the promotion of productivity programs. This 2016 workshop was organized to follow up on social marketing initiatives implemented in member countries for productivity enhancement. At the end of the workshop, participants divided into five groups to discuss their ideas to apply social marketing to their organizations' activities.

Program coverage: Social marketing; Networking; Visibility; Social media marketing for sustainable behavior; and

Community-based social marketing. A site visit was made to the Department of Pensions of Sri Lanka, where the practices of social marketing and the use of social networking in the public sector are deployed.

### Strategic Planning Workshop for APO Liaison Officers

Liaison Officers (LOs) are the focal points for communication between NPOs and the APO Secretariat. They facilitate the nominations of national candidates for APO projects and liaise with the Secretariat and implementing organizations



Strategic Planning Workshop for APO Liaison Officers.

for project hosting. They also provide backup to their NPO Heads and APO Directors. Therefore LOs play a crucial role in the communication flow between the APO Secretariat, NPOs, and APO Directors. The Strategic Planning Workshop for APO LOs is held each year to foster good working relationships and partnerships between NPOs and the APO Secretariat. The workshop also provides a forum for developing ideas to improve APO and NPO operations and sharing productivity promotion initiatives among member countries.

The objectives of the 2016 workshop were to: share recent developments and initiatives of NPOs and the APO Secretariat in line with productivity programs; discuss strategic and operational issues among LOs and the Secretariat; and identify appropriate methodologies and indicator systems for monitoring and evaluating APO programs and projects. The workshop was held 19–21 July at the Secretariat in Tokyo and attended by 211 participants from 18 member countries.

Program coverage: Recent developments and initiatives of NPOs; Updates on recent initiatives of the APO Secretariat; Project implementation issues in 2015–2016; Results-based performance management systems; and Performance indicators for monitoring and evaluating APO programs and projects.

### **Development of Centers of Excellence: Expert Meeting for Development of a Course Manual on Developing Productivity Specialists in Public-sector Productivity**

Productivity issues in the public sector have been identified as one of the top priorities by many APO member economies in recent years. In most countries, the public sector is the largest employer from the national down to the local unit level. The APO believes that improvements in productivity in the sector can have significant economic implications at the national level. Recognizing the importance of public-sector productivity (PSP), the 57th Session of the Governing Body in Bangkok, Thailand, in April 2015 approved the establishment of the APO Center of Excellence (COE) on PSP to take the lead in enhancing the productivity performance of the public sector in the region.

An APO expert meeting on the Development of a Course Manual on Developing Productivity Specialists in Public-sector Productivity was organized 2–4 August in Manila, hosted by the DAP. Five national experts from Indonesia, the ROK, Malaysia, the Philippines, and Thailand were selected to attend the meeting to review the key competencies of productivity practitioners for the public sector, develop a course syllabus, identify required topics for a training program to develop productivity specialists for public-sector organizations, and develop a course manual and learning materials required for the implementation of the course.

Program coverage: Global trends in the public sector; Contextualizing the APO PSP and quality training manual within the APO PSP Framework; APO PSP milestones and the COE on PSP; and Course manual outline, contents, and format. The national experts made presentations on their preassignments following the guidelines given in advance.

### **Workshop on Management of Consultancy Activities of NPOs**

NPOs play a crucial role in the promotion of productivity in APO member countries. They are designated by their governments to spearhead the productivity movement and to provide consultancy services to various organizations to improve their productivity. As consultancy agencies, therefore, their core competence is a key area for client access, especially in knowledge-based sectors. However, in recent years, NPOs have been facing complex issues shaping development consultancy services. Therefore continued development of NPOs' consulting capabilities will create positive effects on overall national development.

A workshop on Management of Consultancy Activities of NPOs was organized and hosted by the NTPC, Fiji National University, 15–19 August in Nadi. Seventeen international and six local participants, along with three observers, attended. The workshop examined the consultancy services of NPOs including their management, facilitated the exchange of experiences between those advanced and less advanced in the area of consultancy services, and formulated an agenda to enhance the consultancy services and competencies of NPOs.

Program coverage: The “design thinking (DT)” approach; Consultancy innovation through the DT approach; DT in action; Reexamining and strengthening the consultancy services of NPOs; Reexamining and enhancing the competencies of NPO consultants; Advancing NPOs' consultancy services toward excellence; and Capitalizing on risks and opportunities faced by NPOs and consultants in providing consultancy services. The participants visited Manubhai Industries Ltd., a producer of polyurethane foam mattresses and related products for both domestic and export markets and a successful example of consultancy offered by the NTPC.

### **Training Course on Strengthening National Productivity Organizations for Productivity Promotion Practices and Strategies**

One of the recognized roles of the APO is institution builder. This role entails initiatives and actions to enhance the capacity of NPOs and other related institutions. These efforts must include elements of continuity and long-term dimensions to ensure that productivity enhancement is sustainable. The goal is to strengthen NPOs so they can provide high-quality productivity-related services to their stakeholders.

As part of the APO's continuing support for building the capacities of NPOs to enhance their productivity initiatives and ensure stakeholder satisfaction, a training course on Strengthening National Productivity Organizations for Productivity Promotion Practices and Strategies was collaboratively implemented with the KPC in Seoul, 6–9 September. It was attended by 18 international participants and guided by three resource persons. There were three main focuses: institutional analysis of national productivity movements including comparisons among countries over the long term; productivity promotion tools; and productivity formulation strategy. Productivity consultation techniques were also integrated into the course content.

Program coverage: Diverse models and approaches of the national movement for productivity improvement; Emerging productivity promotion strategies including tools, practices, and communication/networking techniques; Productivity movement promotion and strategies from the Japanese perspective and practices; Productivity consultation tools for NPOs; Institutional challenges and requirements for a successful national productivity movement; Policy design and regulation management to promote productivity for SMEs; The productivity management system and National Productivity Award in the ROK; the Korea Production System, Industry Innovation 3.0, and smart factories; and Assessment of national productivity movements.

### **Institutional Strengthening of National Productivity Organizations by Development of Productivity Practitioners**

This program, also known as the Development of NPOs (DON) in-country projects, is designed to fulfill the ongoing need for the

capacity building of NPOs. It aims to strengthen the institutional capacity of NPOs in enhancing productivity in each member economy through maintaining the availability, quantity, and quality of productivity practitioners. These productivity facilitators and practitioners are then expected to apply their acquired skills and knowledge in advisory and training services for multiplier effects. The focus of this program is on both NPOs and SMEs in line with the APO strategic direction of strengthening NPOs and promoting the development of SMEs and communities.

Three DON in-country projects were implemented in 2016 as of December, while one project was postponed until 2017. Sri Lanka hosted a 12-day DON project in Colombo, focusing on advanced productivity tools and techniques, attended by 50 productivity practitioners. The MPO held a project under the DON Program on the topics of Six Sigma and performance management, areas aligned with Mongolia’s needs. Nineteen participants from various professional backgrounds and institutions interested in those topics attended the 10-day project in Ulaanbaatar. The third DON project of the year was organized in Phnom Penh. It was a 10-day project taking lean manufacturing systems as a central theme and attended by 27 individuals from the NPCC and SMEs. Another project under DON will tentatively be implemented in March 2017 in Islamabad, Pakistan, using the 2016 budget allocation after a postponement requested by the NPO.

**Special Program for Strengthening the Capacity of Food Supply Chain Management in Asian Least Developed Countries**

The APO has carried out the Special Program for Strengthening the Capacity of Food Supply Chain Management in Asian Least Developed Countries (FSCM-LDCs) since 2009 under a special grant from the Government of Japan, in which national projects including seminars, training courses, demonstration companies,

and manual development were organized in Cambodia and Lao PDR. The following projects were organized in 2016 with the completion of the special program.

**1 Training Course on Food Engineering**

In cooperation with the NPCC, a national training course on food engineering was organized in Phnom Penh, 31 May–3 June, to enhance the knowledge of NPCC consultants and food company managers of the concept, principles, tools, and techniques of food engineering including dehydration, thermal and nonthermal processing, microwave heating, and high-pressure processing. Twenty-eight Cambodian participants attended the training course with one international resource person. A factory processing dried mangos and pineapples hosted a site visit.

**2 Individual-country Observational Study Mission on Food Safety Management Systems to Thailand from Lao PDR**

To strengthen FSMS in Lao PDR through enhancing the understanding of the key stakeholders in the food industry of food safety and quality management skills, tools, techniques, technologies, and systems, an individual-country observational study mission was organized, 18–20 October, in collaboration with DOSMEP. The mission covered modern FSMS and recent developments, regulatory and institutional settings for strengthening FSMS, and challenges and opportunities for private-sector SMEs in implementing the requirements of modern FSMS. Eighteen Lao participants made site visits to a meat-processing factory, bakery plant, milk processor, and sugar factory in Thailand.

**Special Program for Promoting Public-private-sector Partnerships in Enhancing Food Value Chains in Asian Countries**

The Special Program for Promoting Public-private-sector

STRENGTHENING OF NPOS



National conference on Promoting Public-private-sector Partnerships in Enhancing Food Value Chains in India.

Partnerships in Enhancing Food Value Chains in Asian Countries is made possible through a cash grant from the Government of Japan. This three-year program started in February 2016 to strengthen capacity building to promote public-private-sector partnerships (PPPs) in enhancing food value chains (FVCs) with the aim of ensuring food safety and quality and encouraging economic development in selected Asian countries. Under this program, the following projects were carried out for India and Vietnam in 2016.

### ❶ National Conference on Promoting Public-private-sector Partnerships in Enhancing Food Value Chains in India

With the cooperation of the NPC and Ministry of Food Processing Industries, a national conference in India was organized on Promoting PPPs in Enhancing FVCs in New Delhi, 3–4 November, to assess the present status of FVCs in India, share knowledge on the latest technologies and best practices in FVC management, review the challenges and opportunities in enhancing FVC management, and deliberate on ways and strategies to promote PPPs for improving FVC management. More than 100 participants attended the national conference

### ❷ National Conference and Workshop on Promoting Public-private-sector Partnerships in Enhancing Food Value Chains in Vietnam

In collaboration with the VNPI and Vietnam Chamber of Commerce and Industry, a national conference and a national workshop were held in Ho Chi Minh City, 12–15 December, to provide a platform to discuss how to promote PPPs for enhancing FVCs and share successful models of PPPs with the aim of promoting food safety and quality and enhancing the competitiveness of food industry SMEs in Vietnam.

The project was carried out in two sessions: 1) National Conference on Promoting PPPs in Enhancing Food Value Chains, 12 December; and 2) National Workshop on Enhancing the Capability of Food Supply Chains through Applying Management and Technology Innovations, 13–15 December. More than 100 participants attended the conference with five resource persons, while nearly 60 along with six resource persons attended the workshop and visited HCMC Hi-tech Agricultural Park.

### Workshop on Policies Impacting National Productivity Growth

Government policies play critical roles in driving national productivity growth. Among the broad spectrum of policies interdependently affecting national productivity performance, innovation policies for productivity growth are receiving a surge of interest from many governments. Innovation nowadays is a central theme of many countries' growth strategies to achieve higher productivity performance regardless of development status. Many APO member economies and NPOs are involved in ensuring that innovation ultimately contributes to productivity increases and functions as a long-term lever for national economic growth and competitiveness.

A workshop organized by the APO provided a platform for representatives from member countries to review their own innovation policies for national productivity performance and to share good practices in formulating and implementing those policies. The workshop was hosted by the NTPC, 16–18 November in Nadi, Fiji. NTPC Acting Director Penitiko Tao delivered welcome remarks. Twenty participants from 11 member countries attending the workshop had a chance to learn the best practices in innovation policy formulation and implementation from Australian, Japanese, and Korean resource persons. They took home ideas learned from resource persons and shared by fellow participants to review their innovation policies. It was expected that those ideas would contribute to scaling up innovation and competitiveness to foster productivity growth in APO member countries.

Program coverage: Innovation policy; Framework conditions for innovation; Innovative capacities; Financing innovation; Innovation ecosystems; R&D indicators; and Evidence-based innovation policy review. A site visit was made to the Fiji National University (FNU) Nadi campus to allow participants to learn about the Fiji Business Excellence Award sponsored by the FNU and interact with a representative from Vodafone Fiji, the most innovative Fijian company and recipient of the award.

### Research on Productivity Analysis for NPOs

With the increasing recognition that productivity growth is one of the keys to sustained economic expansion, measuring and analyzing productivity are becoming more important for member economies and NPOs to provide better recommendations to policymakers on setting appropriate priorities for their economic growth. As a part of capacity-building efforts, it is necessary to strengthen the ability of NPOs to collect and utilize those data in their own national productivity analyses and provide evidence-based policy advice and guidance to policymakers. While recognizing that it is daunting to discuss different issues of productivity measurement in each participating member, this project is the initial feasibility study on the capacity building of NPOs in productivity measurement and producing national productivity reports.

This research was initiated by a coordination meeting of national experts in December 2014 in Vietnam, where they agreed to undertake a study analyzing national productivity and economic growth trends and attempt to produce national productivity analysis reports, while establishing collaborative channels between NPOs and national statistics offices. Participating countries have so far submitted partial drafts of national productivity reports based on their research, and the Secretariat has provided feedback and advice to some experts. Based on the findings from the initial research, the next phase is being planned.

Program coverage: Productivity concepts and different productivity measures; National data collection and productivity analyses at national level; Labor productivity and sources of



growth; and National development plans and evidence-based policy analyses.

### Research on Institutions Offering Productivity Courses

A research project on Institutions Offering Productivity Courses was carried out in 2015 with six national experts from Bangladesh, Pakistan, the Philippines, Sri Lanka, Thailand, and Vietnam, and one chief expert from India. The objective was to agree on the research design and methodology to examine the curricula and training programs of institutions that offer such courses with the aim of expanding them to increase the number of productivity specialists in the region. The coordination meeting was held 6–8 October, hosted by the VNPI in Hanoi, Vietnam. At the time of writing, the report was being finalized by the experts involved.

### Research on Green Productivity for the Base of the Pyramid for Sustainable Development in APO Member Countries

Recent studies have indicated that base-of-the-pyramid (BoP) business activities by multinational and local companies could contribute to poverty reduction and sustainable development while generating profits in the long run. The other contention of this model is that low prices and easy access to products and services will help the poor increase both their productivity and purchasing power. To heighten awareness among organizations, companies, and individuals of the need for continuous improvement and innovative approaches, the COE on GP is undertaking this research to examine possible contributions and opportunities for BoP-targeted GP activities to improve the quality of life of the people at the BoP while underpinning sustainable development.

An APO coordination meeting for the Research on Green Productivity for the Base of the Pyramid for Sustainable Development in APO Member Countries was held 3–5 May in Taipei, hosted by the CPC. Six national experts from India, Indonesia, Malaysia, the Philippines, Thailand, and Vietnam were selected to undertake the research. The objective was to explore how the BoP approach interacts with issues such as eco-business, renewable energy, recycling industries, eco-agriculture, etc. while serving the interests of the poor. It is envisioned that the output of this research will support overall GP approaches of the APO in spreading environmentally sustainable solutions and development in the region.

Program coverage: Defining the BoP as a business strategy within the framework of sustainable development; The BoP promise: Building businesses with impact and scale and its implications for sustainable development; Example of business strategies under the BoP model; and Research framework and methodology. The national experts also made presentations on their preassignments following the guidelines given in advance.

### Development of the APO Certification System

In 2013, the APO Secretariat held an expert meeting to study the feasibility of and identify opportunities for developing an APO certification system. Based on the discussion and subsequent review of projects, two courses were identified in 2014 for the development of APO-certified productivity practitioners as a pilot project. The two courses were the DPP: Basic and Advanced implemented in the Philippines and Malaysia, respectively. In 2015, the pilot APO certification program was launched. Each qualified participant was given six months to undertake and submit a report to the Secretariat on a follow-up project in his or her own work environment. The scheme aims to develop a pool of APO-certified basic and advanced productivity practitioners in member countries.

An evaluation committee consisting of representatives of the Secretariat, NPOs, and external experts was established to assess the reports by participants. Evaluations determine whether participants showed a clear understanding of productivity tools and techniques; had an overall understanding of productivity; were able to analyze issues and then utilize appropriate approaches and methodology to resolve them; described the detailed process followed in the project; and presented the relevant facts and figures, along with the overall results or intended results/outcomes.

A total of 10 project reports were submitted by individuals attending the two courses implemented in 2015. Based on the assessment and evaluation, in 2016 five participants from Bangladesh, Fiji, India, and Mongolia became APO Certified Productivity Practitioners (Basic), while two from Sri Lanka became APO Certified Productivity Practitioners (Advanced) for a period of three years.

### Expert Meeting on Asian Productivity Outlook and Policy

One of the goals set in the APO Roadmap to Achieve Vision 2020 is to establish the APO as a leading international organization on productivity. To achieve this, two key strategies were adopted to increase the visibility of the APO through its publications and organizing high-profile international events in partnership with other international organizations. To support those strategies, the APO in cooperation with the OECD Development Centre will publish the Asian Productivity Outlook and Policy (APOP) annually to be launched in 2017 with the cooperation and support of the UN Economic and Social Commission for Asia and the Pacific (ESCAP) and Economic Research Institute for ASEAN and East Asia (ERIA).

An expert meeting was organized by the APO with the cooperation of the VNPI on 12 September in Hanoi to discuss the overall plan of the APO and OECD for the annual APOP, discuss the findings of the research to be featured in the APOP 2016, gather comments/feedback from productivity stakeholders and experts from the three countries covered, and share the future research areas and thrust of the APO, OECD,

ESCAP, and ERIA related to productivity and identify possible areas for cooperation among them and with relevant national organizations. Ten international and national experts and 10 local observers attended.

Program coverage: Productivity policy challenges in Asia and selected countries; and Micro-level case studies promoting productivity in selected ASEAN members (Indonesia, the Philippines, and Vietnam).

### Self-learning e-Course on Agribusiness Management (Basic)

Agribusinesses include farms and off-farm enterprises that produce and distribute farm inputs and those that assemble, store, process, and distribute fresh and processed farm commodities and products. The performance of the majority of agribusiness SMEs in Asia is not up to the mark, however. The main constraints include a lack of entrepreneurial knowledge and skills, poor marketing strategies, inefficient operations, lack of financial resources and their poor management, and poor product quality and safety. Individuals are thus increasingly needed to manage agribusinesses competently and sustainably in food and nonfood value chains serving both domestic and global markets.

To train more stakeholders, in particular CEOs, managers, and officers of agribusiness companies including SMEs; officers of government and NGOs; and academics, extension officers, consultants, and other technical personnel engaged in planning and managing agribusiness SMEs, providing training and consultancy, and/or promoting agribusiness SMEs, the APO offered a self-learning e-course on Agribusiness Management (Basic), 15 September 2016–14 February 2017. At the time of report preparation, a total of 440 participants from 17 countries, including eight from nonmembers, had enrolled in the course, including 79 who had already completed it.

Program coverage: Overview of agribusiness management; The agribusiness manager; Agribusiness marketing; Operations management and quality; Human resources management; Financial management; Information management; and Ethics, social responsibility, and corporate governance of agribusinesses.

### Self-learning e-Course on Controlled-environment Agriculture

The challenges of limited land available for food production, growing scarcity of irrigation water supply, changing climatic patterns, and a need to restrict chemical use are paving the way for more controlled-environment agriculture (CEA) production systems to ensure a safe, abundant food supply in an efficient, sustainable manner. With such systems, producers are able to manipulate the crop environment to the desired conditions using precise technologies and equipment to improve the efficiency of operations as well as the consistency of products. There are

two types of CEA systems, traditional and advanced. The most advanced CEA systems have the advantage of high levels of certainty in meeting contractual commitments for the delivery of produce because cropping intensity and production cycles are programmed to meet market requirements in terms of volume, timeliness, and quality.

To provide basic knowledge of the concepts and principles of CEA, and the basic skills, tools, techniques, and technologies of CEA production systems, the APO plans to offer a self-learning e-course on the topic. The original project timing was 1 December 2016–30 April 2017. However, that was postponed, and as of the time of writing the course modules were being prepared.

Program coverage: Introduction to CEA; Growing systems and the crops they support; Crop maintenance; Irrigation systems; Plant nutrition; Insect pest and disease management; Greenhouse structure and design; Environmental control and energy conservation; Food quality and safety; and Marketing of CEA produce.

### Research on Youth Employment Issues and Human Capital Development for APO Economies

In all APO member countries, the youth face more than two-fold higher unemployment rates than adults. Many APO member countries are experiencing a “youth bulge,” a period in which young people are far more numerous than all other age-groups combined. Measures to ensure that the youth bulge will turn into a demographic dividend or to maximize the human capital potential and minimize the negative impact of youth employment issues are essential. Encouraging youth entrepreneurship is one approach to solve the issues of youth unemployment and underemployment. Youth entrepreneurship is not a panacea to deal with employment challenges, but it could contribute to job creation and boost the economy by fostering new, innovative models.

To help member countries deal with the challenges posed by youth employment issues, the APO is conducting a one-year research project to study the policies and programs initiated by governments, the private sector, and PPPs focusing on youth entrepreneurship promotion. Best practices, failures, and constraints of the programs and policies implemented within the past five years will be analyzed. Evidence-based policy implications to help entrepreneurship contribute to solving the issue of youth employment, thus enhancing labor productivity and the quality of human capital, are the expected outputs of the research. The coordination meeting of experts was held 30 November–2 December in Kuala Lumpur, attended by one chief expert and seven national experts from India, Indonesia, Malaysia, Nepal, Pakistan, Thailand, and Vietnam. The meeting discussed the framework, scope, methodology, and timeline to conduct the research.

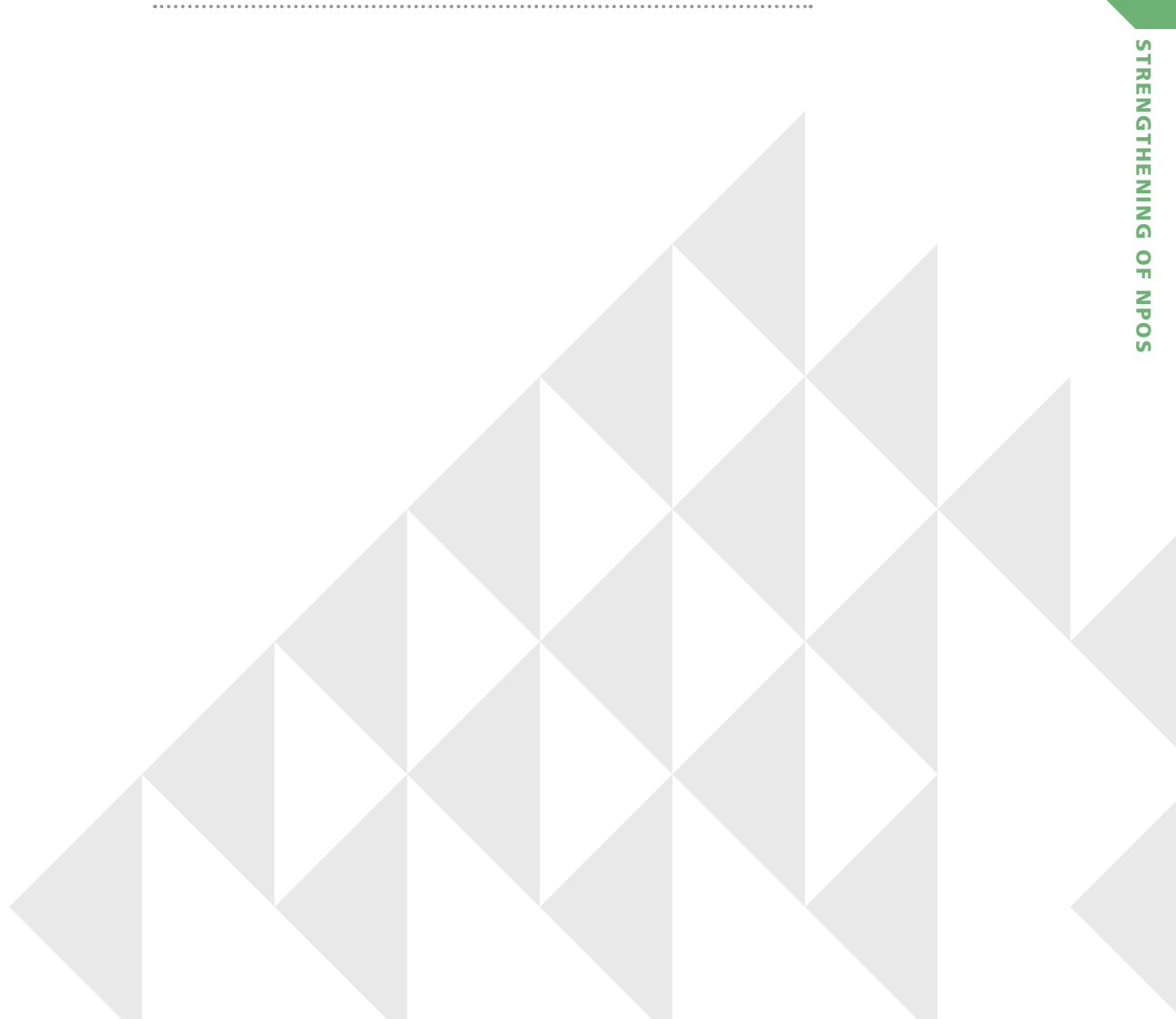
Program coverage: Youth employment; Youth unemployment and underemployment; Youth entrepreneurship; Youth not in employment, education, or training (NEET); Start-up supporting policies; Innovative self-employment programs; and Skill development programs.

**National Training Course on Lean Production Systems in Agribusiness to Improve the Productivity and Sustainability of SME Agribusinesses**

Lean production systems (LPS) are derived from the mass production system of Toyota called the Toyota Production System (TPS) that eliminates actions that do not create value. LPS tools evolved from the TPS remove unnecessary inventories of raw materials and finished products in supply chains to maximize the use of resources. LPS can be potentially applied to every step of value chains in agriculture and the food industry. As its products are perishable, it is important to maintain freshness to increase commercial value, which requires the highest level of just-in-time production. LPS not only provide technical solutions but it also benefit the organizational culture and leadership to make people active members of the production system.

A training course was designed to study the concepts of LPS and their applications for enhancing labor productivity and to inspire and share ideas for LPS applications in agriculture and food manufacturing to cope with challenges in that specialized environment. The course was held in Tehran, IR Iran, implemented by NIPO and the Institute of Technical & Vocational Higher Education of the Ministry of Agriculture Jihad, 31 December 2016–4 January 2017. Fifty participants from universities, training centers, and the agrifood industry attended. One APO resource person from Singapore and one local resource person conducted the training.

Program coverage: Concepts and principles of lean and the TPS; Lean thinking and lean culture; and Lean techniques and tools and their applications in the agribusiness environment such as the seven tools of quality, lean Six Sigma, and kaizen and waste elimination. For field observations of LPS in action, the participants visited two factories, Zar Macaron and Zar Fructose, which are both highly automated. They engaged in discussions with management about the impact of job creation in the manufacturing sector and the contrasting effects derived from high-level automation.





# PROMOTING THE DEVELOPMENT OF SMES AND COMMUNITIES

## Research on Entrepreneurship Initiatives in APO Economies

Entrepreneurs stimulate and revitalize national economies by marshaling resources and leveraging innovation, technology, and creativity to create new business ventures. By serving as a conduit for knowledge spillovers, entrepreneurship is an important mechanism that connects the missing link between investments in new knowledge and economic growth. It is thus vital for the APO to understand how entrepreneurship can be effectively promoted for stimulating economic growth. A research project was designed to look into which initiatives, policies, and frameworks could be conducive to productive entrepreneurship in the target countries under study.

A research coordination meeting was held 21–23 August 2013 in Phnom Penh, bringing together eight national experts from Cambodia, the ROC, India, Indonesia, Japan, Pakistan, the Philippines, and Thailand. The meeting was organized jointly with the Cambodia-Japan Cooperation Center and the NPCC. The national experts discussed the framework of the final research report and brainstormed on different aspects of entrepreneurship initiatives, such as the regulatory environment for start-ups, entrepreneurship education and skill development, schemes for facilitation of technology exchange and innovation, access to financing, entrepreneurship awareness, etc. The research report as the final output was published as an online e-report in August 2016.

Program coverage: Analysis of perceptions of entrepreneurship; Global entrepreneurship monitoring; National policies on entrepreneurship promotion; and Entrepreneurship and economic and productivity growth.

## Research on Benchmarking Indexes for SMEs (Food-manufacturing Sector)

Benchmarking is a continuous process of self-assessment and initiating actions to close gaps, surpass the best performers, and

retain a competitive edge. To pursue continuous improvement, it is essential that SMEs not only have a relevant basis for comparison but also learn from the achievements and results obtained from benchmarking exercises. The APO conducted benchmarking research on SMEs in the Retail and Food Service Subsectors in 2012. As a continuing effort and due to the fact that the food business is a growing sector in Asia, a study on benchmarking of food-manufacturing businesses among advanced member economies was felt necessary.

A coordination meeting was organized in June 2013 with six national experts from the ROC, Japan, ROK, Malaysia, Singapore, and Thailand. The objectives of this research are to develop a database on the productivity performance and best practices of SMEs in the food-manufacturing sector in selected APO member economies and publish a report containing cross-country analyses. The research activities of all experts continued, and the final report was published in 2016.

Program coverage: To decide why to undertake benchmarking, its purpose, types, models, framework, action phase, data collection method, types of questions, and methods of research; Key learning points from the 2012 benchmarking research; 2013 APO benchmarking research plan, framework, and methodology; Preliminary research findings in terms of benchmarking frameworks, challenges, and issues; Success stories of benchmarking companies; Best practices of SMEs in the food-manufacturing sector; Critical success factors; and Classification of types of food manufacturing in each participating country.

## Research on Benchmarking Indexes for SMEs (Logistics Sector—Warehousing Subsector)

In APO member economies, SMEs are important as they are growth engines and stimulators of productivity enhancement. However, SMEs lack the knowledge to implement productivity initiatives to improve their performance. To help SMEs in member countries overcome this challenge and improve their productivity,

it is necessary to provide them with benchmarking indicators against which they can compare their performance.

In 2014, the APO initiated the Research on Benchmarking Indexes for SMEs to provide insights into how companies in the warehousing subsector operate and support the agricultural, manufacturing, and service sectors in five Asian countries. National experts from India, the ROK, Singapore, Thailand, and Vietnam together with the chief expert undertook this research project following a seven-step benchmarking framework. A set of performance metrics from the four perspectives of financial, customer, operational, and human resources was formulated together with survey questionnaires. The publication came out in 2016, introducing the benchmarking process as one strategic tool to be embraced by SMEs to innovate. Key takeaways from this benchmarking project were the research findings and recommendations, which SMEs in the warehousing subsector can adopt to transform their businesses. Best-in-class performance identified could be used as a reference for SMEs to formulate their own improvement roadmaps for business and operational growth.

Program coverage: Benchmarking process; Seven-step benchmarking framework; Performance metrics; and Best-in-class performance.

### **Research on Successful Agribusiness Models: Case Studies of Value Chain Analysis for Agroprocessing Enterprises (2015)**

Agribusiness is increasingly becoming a dynamic sector susceptible to the vagaries of nature and markets. Thus, today's agribusiness executives and managers operate in a rapidly changing, volatile, technology-driven, consumer-focused environment. To stay competitive, agribusinesses must explore new business models and organizational structures that could increase their efficiency and overall productivity to strengthen their market positions. Executives and managers of agribusinesses should also have an international perspective and good familiarity with how other businesses are coping with issues and challenges.

The APO implemented the second batch of studies as part of the three-year series of research on Successful Agribusiness Models from May to December 2015 to study SMEs in agribusiness, identify operational and management issues and appropriate actions to address them, and develop the research results into case studies to be used in APO and partner institution training courses on agribusiness management and related courses for CEOs and managers of agribusiness SMEs. This research project was undertaken with the cooperation of the Cornell International Institute for Food, Agriculture and Development (CIIFAD) under its Student Multidisciplinary Applied Research Team (SMART) Program. The case studies will also form part of the compendium of agribusiness case studies to be published in 2017.

Research coverage: Royal Umbrella, Thailand's best jasmine rice to capture the United States market; Growing through sustainability: The case of River PRO's environmentally friendly paper; Zenxin: An inside look at organic agriculture in Malaysia; and Jabon Kendal: Social microenterprise growth in central Java, Indonesia.

### **Research on Successful Agribusiness Models: Case Studies of Value Chain Analysis for Agroprocessing Enterprises (2016)**

Agribusiness executives and managers operate in a rapidly changing environment due to globalization, climate change, advances in technology, and trends in consumer preferences. To stay competitive, executives and managers need to be equipped with the knowledge and skills to respond to actual issues arising from the rapid changes in the business environment. They should also learn from the experiences of other companies.

The APO implemented the third batch of studies as part of the series of research on Successful Agribusiness Models from May to December 2016 with the cooperation of CIIFAD to study selected SMEs in agribusiness by identifying operational and management issues and appropriate actions to address them and develop the research results into case studies to be used in APO and partner institution training courses on SME agribusiness management and other topics for CEOs and managers. The research was undertaken along with CIIFAD studies in its SMART Program. Under this program, multidisciplinary teams of students and faculty from diverse disciplines undertake studies of firms or community groups located in developing countries. The case studies will also form part of the compendium of agribusiness case studies to be published in 2017.

Program coverage: Conceptual development of intellectual property: Case study on crocodile oil (Thailand); Kirirom Fopod production: Case study on Cambodia's flagship dried fruit company (Cambodia); Lingzhi Mushroom Company case study (Vietnam); Maharashtra Hybrid Seeds Company case study (India); and Metro Kang Jian Health Supplement case study (ROC).

### **Multicountry Observational Study Mission on Food Safety Management Systems along Food Value Chains**

A number of food safety crises occurring worldwide in recent years has heightened consumers' food safety awareness and caused public distrust of increasingly complex global food value chains. Against this background, the food-processing industry has been developing diverse management systems to control food safety and quality along value chains. However, due to a lack of a clear understanding of these systems and limited financial and human resources, food-processing SMEs have difficulties in establishing and operating them.

To enhance participants' understanding of modern food production process management systems inclusive of HACCP, ISO



Multicountry observational study mission on Food Safety Management Systems along Food Value Chains.

22000, and food traceability systems; examine the challenges and opportunities in enhancing such systems; and formulate strategies for adopting the lessons learned from the experience of Japan by other participating countries, the APO organized a multicountry observational study mission on Food Safety management Systems (FSMS) along Food Value Chains in Japan, 23–28 May, under a special grant from the Government of Japan. Eighteen participants representing relevant government agencies, the food-processing industry, NPO consultants, and academic institutions of 14 member countries, along with five resource persons, attended.

Program coverage: Modern FSMS; Food traceability systems; and Challenges and options for the private sector in implementing FSMS and traceability systems, especially for SMEs. The study mission included visits to a variety of research institutes under the National Agriculture and Food Research Organization, Food and Agricultural Materials Inspection Center, a confectionery factory, dairy products factory, rice seasoning factory, fish paste factory, and AEON farm.

### Training Course on Total Quality Management for SMEs in the Service Sector

To improve product or service quality, most organizations are applying various methods including total quality management (TQM) to achieve growth as well as sustain profitability. TQM is viewed as a comprehensive, structured approach to organizational management which helps to improve the quality of products and services through ongoing refinements in response to continuous feedback. With the aim of radically transforming enterprises through progressive changes in attitudes, practices, structures, and systems, TQM encompasses

many aspects of operations beginning at the lowest levels focusing on customer requirements, delivering products and services satisfactorily to production systems, and ensuring quality in all steps in the process.

The APO organized a training course on Total Quality Management for SMEs in the Service Sector, 30 May–3 June, hosted by the CPC in Taipei, with 22 participants from 13 member economies. Three international resource speakers and one local expert gave presentations reviewing TQM concepts, benefits, and methodology and facilitated discussions on the necessity for quality management in the service sector, useful tools and techniques for TQM implementation in the sector, and best practices of TQM.

Program coverage: Overview of TQM; Change management strategy in the process of TQM; Characteristics of the service sector and the need for TQM; Modern approaches to quality excellence for the service sector; TQM implementation in the service sector; and Best practices of TQM in the service sector. Ko Da Pharmaceutical Co., Ltd. and Yi-Ren Garden Food & Beverage Corp. hosted site visits to demonstrate their TQM applications to enhance product and service quality.

### Study Mission to a Nonmember Country on Planning and Management of Rural Tourism

Rural tourism is increasingly gaining importance as a viable activity in the socioeconomic development process of many countries. It has great potential for enhancing business opportunities in rural areas for local communities. The Asia-Pacific region, with its rich biodiversity and scenic landscapes,

can develop rural tourism as a strategic economic activity in the countryside. However, there is evidence from many countries that unplanned or poorly managed tourism development can seriously harm the environment, wildlife, and biodiversity.

The APO organized a study mission to the USA on Planning and Management of Rural Tourism in Hawaii, 13–18 June. The implementing organization was the Pacific Training Institute. The objective was to expose participants to Hawaii's pristine environment and abundant natural resources and illustrate how they are maintained; different approaches and principles in the planning, development, and management of rural tourism; and best practices of rural tourism development, management, and promotion. Seventeen participants from nine APO member countries attended. The House of Representatives, State of Hawaii, awarded a certificate of appreciation to the APO and the implementing organization.

Program coverage: Rural tourism: Key concepts, principles, challenges, and opportunities; Rural tourism as a strategic economic activity for local/rural community development; Planning, development, and management of ecotourism; Sustainable agritourism models; Promotion and marketing of tourism products; and Policy and institutional arrangements for promoting rural tourism. Participants visited a wide variety of rural tourism sites and attractions including a family taro farm, Waiahole poi factory, Dole Company farm, Kualoa ranch, a shorebird sanctuary, and rural retail cluster Kaya's Store.

### **Multicountry Observational Study Mission on SME Development**

SMEs play an important role in the economies of most countries in the Asia-Pacific region, not only because of their sheer numbers but also the variety of their activities. SMEs have been forced to move beyond the philosophy of continuous improvement and adopt more radical, innovative ideas to upgrade and transform due to severe competition in the global business environment and increasing technological complexity. The lack of knowledge of advanced management practices, weak technical capabilities, and limited access to external assistance are their critical common factors and should be closely examined for future development.

The APO organized a multicountry observational study mission on SME Development, 15–19 August in Taipei, hosted by the CPC. Nineteen participants from 13 member economies attended. Three international resource speakers and one local expert led the mission, gave presentations, and shared their ideas during discussions of SME development measures, management philosophy and strategies of top SME managers seeking to increase productivity and competitiveness, and practical productivity improvement tools and techniques for SMEs.

Program coverage: The meaning of productivity for SMEs; Key attributes and practices of innovative and competitive SMEs;

SME journey toward operational excellence; Practical productivity and quality tools for SMEs; Achieving business excellence and becoming competitive; Success stories of innovation and competitiveness of SMEs; and Innovation and quality teams for achieving and sustaining SME business performance and competitiveness. The participants also visited Sha Yang Ye Industrial Co., Ltd. and Advanced Taiwanese Machinery Automation to observe how those SMEs undertook initiatives to enhance productivity.

### **Workshop on Customer Relationship Management for SMEs**

To create and maintain customer loyalty, many companies are attempting to reorganize their business processes around customers. Customer relationship management (CRM) is the practice of integrating all aspects of business functions for dealing with customers with the assistance of technology and with the intention of boosting company profitability. CRM has been widely promoted as a critical contributor to business survival. CRM, however, is not simply a tool but rather a comprehensive, customer-focused approach to an organization's philosophy on dealing with its customers. This includes policies and processes, customer service, employee training, marketing, and information management systems. Hence, it is important for CRM to address broader organizational requirements.

The APO in cooperation with the CPC organized a workshop on Customer Relationship Management for SMEs, 5–9 September in Taipei. Twenty-one participants from 15 member economies attended. Three APO resource speakers and two local experts made presentations describing the concept of CRM, CRM technology and solutions, customer data analysis for CRM, and best practices of CRM.

Program coverage: Overview of CRM; CRM trends and development; Business innovation; New product/service development based on CRM; Understanding customer requirements; Ways to enhance service productivity through CRM; Successful CRM implementation in the service and manufacturing sectors in the ROC; CRM best practices; and How to implement and sustain CRM in organizations. Fullon Tamsui Fishermen's Wharf and Chunghwa Telecom hosted site visits to share how they undertook CRM initiatives to enhance customer satisfaction.

### **Training Course on Food Safety Management Systems: Advanced Course for SMEs in the Agrifood Industry**

Food safety is a global issue as contaminated food causes widespread health problems with serious implications for families as well as public healthcare systems. It also causes reduced workforce productivity. Both developed and developing countries share concerns over food safety as international food trade and cross-border movements of people increase. The APO has trained



*Training course on Food Safety Management Systems: Advanced Course for SMEs in the Agrifood Industry.*

thousands in basic food safety management and is turning the focus to advanced FSMS and regulations, which are often considered an essential step in developing the agriculture and food sectors for successful trade in agrifood products.

To provide participants with an in-depth understanding of managing modern FSMS and food safety regulations, the APO, in collaboration with the CPC, organized an advanced training course on Food Safety Management Systems for SMEs in the Agrifood Industry, 3–7 October, in Taipei. Twenty-four participants from 15 APO member countries and four resource persons from the ROC, India, and Malaysia attended the course.

Program coverage: Overview of modern FSMS (HACCP); Food safety regulations; Standards relating to food safety and FSMS; Prerequisite programs; Implementation of FSMS; and Overcoming difficulties in implementing FSMS in SMEs. Participants visited the ISO 22000- and HACCP-certified vegetable-processing factory of Chinafoods Industrial and Development Co., Ltd.

### **e-Learning Course on Total Productive Maintenance Applications in SMEs**

Total productive maintenance (TPM) is an approach to equipment improvement used to reduce costs and improve quality and delivery reliability. TPM is an evolution of 5S, particularly the *seiso* (keeping machines and work areas clean) element. TPM was originally developed among Toyota's supplier base and has become an essential part of world-class manufacturing,

focusing on improvement activities, production equipment, and the integration of maintenance with production. The goals of TPM are zero breakdowns, zero accidents, and zero defects with excellent performance, safety, and quality. The starting point of TPM is to measure overall equipment effectiveness and perform loss analysis to give a baseline for continuous improvement and identify improvement priorities.

To understand the overall concept of TPM and to provide participants with practical approaches, tools, and steps to adopt it in SMEs through videoconferencing, the APO organized an e-learning course on Total Productive Maintenance Applications in SMEs. It was held in two sessions: 7–10 November for Cambodia, Fiji, Mongolia, the Philippines, and Vietnam; and 21–24 November for Bangladesh, India, IR Iran, Nepal, Pakistan, and Sri Lanka. One hundred and eighty-eight participants took the course. One resource speaker from Japan conducted both sessions. Member countries also shared their best practices in TPM for SMEs through country presentations after site visits.

Program coverage: The course covered a variety of TPM topics in six modules: Module 1, Introduction to overall TPM; Module 2, Overall equipment effectiveness; Module 3, How to implement kaizen (productivity/cost improvement); Module 4, How to improve the reliability of machines/equipment; Module 5, How to install autonomous maintenance systems by workers; and Module 6, How to implement skill upgrading of workers/employees. A written examination was given on the final day to evaluate learning from the course.



**Multicountry Observational Study Mission on Industrial Engineering Techniques for Productivity Improvement in SMEs**

In general, industrial engineering (IE) is primarily focused on the design, improvement, and installation of integrated systems of men, methods, materials, and machines for a better quality of life. The integrated components are analyzed and specified by engineers to create efficient, effective systems that produce high-quality goods and services for end users. At the company level, IE helps businesses to remain competitive by continuously improving all areas, including lowering production costs, increasing the quality of products and services, providing conducive working environments for employees, protecting the environment, and complying with both local and international regulations. It provides ways for companies to optimize the available resources, maximize profits, and eliminate redundancies or waste wherever possible. The most important point is that IE works in any type of industry, regardless of the size of the company, including SMEs.

Recognizing the importance of IE in enhancing productivity in SMEs, the APO organized a multicountry observational study mission on Industrial Engineering Techniques for Productivity Improvement in SMEs in Singapore, 7–10 November. The main objective was to observe and learn from the best practices of IE implemented in SMEs in Singapore. A total of 18 participants from 16 member countries and three international resource persons from the ROC, Singapore, and Thailand attended the mission based in Village Hotel Albert Court.

Program coverage: Overview of IE techniques and their impact on SME development and competitiveness; Policies and schemes to provide technical assistance to SMEs; Implementation of IE in SMEs; and Discussion and development of action plans by each participant. Participants visited Toolbox, Straits Construction Group Pte Ltd, food and beverage company Hans F&B Pte Ltd, and power transmission equipment manufacturer TransZplus Engineering Pte Ltd to observe their recent IE initiatives.

**Training Course for Women on Productivity Tools and Techniques for Improving the Productivity of Micro and Small Agrofood-processing Businesses**

Women are emerging as key players in the development of micro and small enterprises in rural areas. They engage in various income-generating activities to augment family incomes. Often, women do not have formal training in enterprise development or business management. Thus, in many cases, their enterprises are not sustained or unable to expand. It is important to support women in rural areas, especially those operating micro and small agrofood-processing enterprises, through the provision of training to enhance their knowledge of and skills in business management.

To enhance the capacity and competency of those involved in supporting women in rural areas, a training course on Productivity Tools and Techniques for Improving the Productivity of Micro and Small Agrofood-processing Businesses was organized by the APO in collaboration with the NPC and National Institute of Rural Development and Panchayati Raj, and co-sponsored by the Centre on Integrated Rural Development for Asia and the Pacific (CIRDAP), 7–11 November, in Hyderabad, India. Twenty-two participants from 13 APO member countries and four resource persons from India, the Philippines, and Thailand attended.

Program coverage: Enterprise development planning; Process and modes of strategy formulation; Product development process; Product life cycles; Marketing strategies; and 5S and kaizen. Participants made site visits to the Association of Lady Entrepreneurs of India in Hyderabad.

**Workshop on Microenterprise and SME Development Policies**

Microenterprises and SMEs (MSMEs) feature prominently in APO member countries. Many rely on this sector to assist in achieving the overall national development and competitiveness agenda since they can be engines of economic growth, cornerstones for creativity and innovation, and seedbeds of entrepreneurship. MSMEs provide depth to the industrial economy base, utilize local resources, and engage in value chains. They are also major components in job creation and, in recent years, in poverty reduction and the promotion of inclusive growth for developing economy members. Policy and government interventions to support MSME development are available in each APO member economy, including subsidized forms of credit, human resources development training, technical assistance, advisory and extension services, and marketing and promotion facilitation.

A workshop on Microenterprise and SME Development Policies was organized and hosted by NIPO, 12–15 November in Tehran. The workshop served as a platform to review and assess the effectiveness of current policies so that recommendations could be made to improve them. Fifteen international participants



Multicountry observational study mission on Industrial Engineering Techniques for Productivity Improvement in SMEs.

from 11 member countries and six local participants, along with eight observers, attended. The workshop examined the existing public policies and interventions that promote MSME development, reviewed the current situation of MSMEs and their contributions, and shared best policies and programs among participating member countries.

Program coverage: Setting the policy framework context for SME development in the Asia-Pacific region; Understanding the contributions, challenges, and prospects of MSMEs; Entrepreneurship development and sustaining an enterprise; The business-enabling environment for MSME growth; What makes financial assistance to small businesses successful?; Market access and integrating global value chains; Innovation and technology for MSME development; and Cluster development for the MSME sector. The participants visited the Iran Small Industries and Industrial Parks Organization where many MSMEs are located as an example of best practices examined during the workshop.

### Workshop on Development of Rural Tourism Networks and Clusters for Enhancing the Competitiveness of Small Enterprises

Rural tourism development offers tremendous opportunities to create viable SMEs to generate income and employment for rural communities. It can optimize the use of natural resource endowments, local culture, and indigenous industry to serve as the integral elements of a tourism product or package. Among the strategies for tourism development, establishing and extending networks and clusters in rural areas have played important roles in connective, inclusive community development. It is known that a well-planned network of tourism enterprises ensures their complementarity and boosts their competitiveness.

Nineteen international participants from 12 APO member countries attended a workshop on Development of Rural Tourism Networks and Clusters for Enhancing the Competitiveness of Small Enterprises in Vientiane, 21–25 November, organized in cooperation with the LNPO. Presentations by experts and country papers described different approaches to and models for the development of rural areas. At the end of the workshop, participants formulated action plans for the development of sustainable tourism networks and clusters in their countries.

Program coverage: Trends in tourism development; Impacts of tourism development on rural communities; Development and promotion of rural tourism products, clusters, and networks;



*Workshop on Sustainability Assessment of Agribusiness Enterprises.*

Tools and techniques in planning rural tourism projects; and Roles of different stakeholders in rural tourism development. A site visit was hosted by Houey Hong Vocational Training Center for Women, an NGO that provides education at various skill levels in weaving, dyeing, and tailoring for women from rural areas. Participants also visited the Lao Derm Som Nguem Tourist Spot, a riverside destination where they observed how the resort tourism business is developing in Lao PDR.

### Workshop on Sustainability Assessment of Agribusiness Enterprises

The need for sustainable development received almost worldwide endorsement at the 1992 Earth Summit. Agriculture and food-sector stakeholders have been playing a leading role in sustainable development through improving agricultural productivity, protecting natural resources, taking care of human resources, and minimizing the environmental impacts of farming and agribusiness operations. For full recognition of such sustainable development, sustainability assessment has emerged as an important policy tool in both government and private agribusiness enterprises to determine the level of sustainability performance.

To review different models, standards, and approaches for assessing the sustainability of agribusiness enterprises and to promote the adoption of principles of sustainable development by farms and agribusiness enterprises, in particular SMEs in Asian countries, the APO organized a workshop on Sustainability Assessment of Agribusiness Enterprises in collaboration with the Ministry of Agriculture, in Bogor, Indonesia, 28 November–2

December. Twenty-four participants from 15 APO member countries and five resource persons from Australia, Germany, Indonesia, and New Zealand attended the workshop.

Program coverage: Key concepts and principles of sustainability assessment; the UN Food and Agriculture Organization’s Sustainability Assessment in Food and Agriculture Systems Guidelines; Issues and opportunities in sustainability assessment; Models, standards, and approaches for sustainability assessment; Procedures and requirements for conducting sustainability assessment; and Case studies on assessment of sustainability performance of agribusiness enterprises with the emphasis on SMEs.

**Workshop on Agricultural Insurance Systems**

Natural calamities and subsequent havoc wreaked on agricultural production cause immense losses to farmers in many countries in the region. Agricultural insurance (AI) has been proven to be an effective mechanism to minimize the impact of such losses, help farmers smooth their income flows, and provide a financial buffer to rehabilitate damaged enterprises. In addition, AI also brings collateral benefits such as enhancing farmers’ access to

loan facilities. Financial institutions are more inclined to lend to farmers who have insurance premiums.

To help member countries formulate better strategic action plans for scaling up the best practices in AI, the APO in partnership with the Department of Agrarian Reform and CIRDAP organized a workshop on Agricultural Insurance Systems in Manila, 28 November–2 December. Twenty-four participants from 15 countries and three resource persons from India, Singapore, and Switzerland attended.

Program coverage: Role of AI in managing risks and improving productivity on small farms; Challenges and strategies in extending AI to small and marginal farmers; Principles and practices of selected AI models; Comparative analysis of government-sponsored and private-sector AI schemes; Recent approaches and techniques in estimating and compensating farm losses for insurance coverage; Capacity development needs of AI companies in member countries; and Successful models and schemes and best practices in the management of AI programs. Participants visited the Philippine Crop Insurance Corporation, Region III Office, and Cruzian Multipurpose Cooperative and its crop insurance programs located in Pampanga.



# CATALYZING INNOVATION-LED PRODUCTIVITY GROWTH

## Research on Performance Management for Public-sector Organizations

Public-sector organizations face unprecedented pressure to improve service quality while adhering to the rules for accountability, transparency, and higher productivity. This is why the era of good governance and new public management triggered institutional and policy changes that resulted in the transformation of many governments to meet a more demanding public and make wiser use of limited resources. The idea of performance management for the public sector is an emerging issue but has been reflected in various APO projects in its effort to address the much broader issue of public-sector productivity in member countries in the past several years.

As a follow-up to its previous public sector-related efforts, the APO decided to undertake research on Performance Management for Public-sector Organizations covering selected member countries that had undertaken successful management initiatives in their public sectors. A three-day coordination meeting was conducted 3–5 September 2013 in Manila, with the DAP as the local implementing organization. The eight experts (one chief expert and seven national ones) attending reviewed the different models of performance management systems in public-sector organizations, studied existing performance management systems in public-sector organizations in selected countries, identified the critical elements in performance management systems, and recommended ways of improving current ones. The report was completed and published in 2016.

Program coverage: Productivity concepts in the context of the public sector; Review of the Atkinson Study on Public-sector Productivity; Measuring public-sector organizations' performance; Issues and solutions in determining public-sector productivity; and Suitable output measures for public services.

## Training Course on Lean Manufacturing Systems

The lean system was originally developed by Toyota Motor due to its complicated operations. It became widespread with the business success of Toyota, and the “Toyota way” is a topic studied in business schools worldwide. “Lean” is used by many consulting firms and in academia as a synonym for the Toyota Production System. To achieve the objectives of lean systems, several techniques and concepts are indispensable, including just-in-time inventory, the pull concept, small-lot production, total quality management, supply chain management, and value stream mapping.

In order to develop the capability of trainers/consultants, engineers, and production managers in lean management, the APO organized a two-week training course focusing on Lean Manufacturing Systems. A total of 21 participants from 16 member countries attended the course held 15–26 February



*Training course on Lean Manufacturing Systems.*

in Kuala Lumpur and Kuantan, Malaysia. In cooperation with the MPC, participants were taught comprehensive information on lean manufacturing systems and lean applications in organizations by international and local experts.

Program coverage: Concepts of and strategic planning for lean manufacturing systems; Methodologies for and approaches to lean applications; Practical techniques in the management of manufacturing systems; and Practicing improvement in a production process. During site visits combining hands-on practice, participants were hosted by BUJ Technology Enterprise Sdn. Bhd. in Pahang, Indkom Engineering Sdn. Bhd. and KLPI Resources Sdn. Bhd. in Selangor, and the Selangor Human Development Centre.

### National Workshops on Productivity Enhancement through Innovative Postharvest Management Tools and Technologies for Food, Fruit, and Vegetable Products

Asian producers have been losing up to 40% of the value of their fresh fruit and vegetables (FFVs) due to inadequate postharvest handling. Postharvest management (PHM) not only reduces postharvest losses but also determines food quality and safety, competitiveness in the market, and the profits earned by producers. PHM in most developing Asian countries like Vietnam, however, should be improved. The major constraints include inappropriate harvesting techniques, inefficient postharvest handling and transportation, inappropriate technologies for storage and packaging, inadequate processing and preservation, inefficient logistics, poor infrastructure, and overall poor linkages among the key actors in FFV supply chains.

To enhance participants' understanding of how to apply innovative PHM tools and technologies to reduce postharvest losses of Vietnam's main agricultural products, especially FFV products, and promote their use to diversify value-added, high-quality products for domestic consumption and export, the VNPI in cooperation with the APO organized two national workshops in Hanoi and Ho Chi Minh City, 29 February–4 March 2016. A total of 149 participants (89 in Hanoi and 60 in Ho Chi Minh City) attended.

Program coverage: FFV supply chains and productivity enhancement in agriculture; Innovative technologies and approaches that could reduce postharvest losses of FFVs; Innovative marketing of FFVs for greater competitiveness; and Key success factors in the efficient, effective PHM of perishables.

### Asian Food and Agribusiness Conference: Strengthening Public-private-sector Partnerships for Sustainable, Competitive Agribusinesses

The Asian Food and Agribusiness Conference provides a unique forum for policymakers, industry leaders, CEOs from the private



*Asian Food and Agribusiness Conference.*

sector, NGOs, scientists, and consultants to discuss current and emerging topics important for advances in agriculture, agribusiness, and food industries in Asia. The second conference in the series focused on the theme Strengthening Public-private-Sector Partnerships (PPPs) in Developing Sustainable, Competitive Agribusinesses. The conference emphasized the need for the public and private sectors to cooperate for greater synergy and leverage their limited resources for successful agribusiness. PPP models for agriculture-sector and agribusiness development have been established, although information on them is not adequately documented and disseminated.

To provide a platform for presenting and discussing innovative models of PPPs for sustainable, competitive agribusiness and draw lessons that can be used by member countries to achieve sustainable, mutually beneficial long-term partnerships between the public and private sectors, the APO, with the cooperation of the Ministry of Agriculture and Ministry of Manpower, organized the Asian Food and Agribusiness Conference, 28–30 March in Bandung, Indonesia. Thirty-eight participants from 16 member countries and nine experts attended.

Program coverage: Engaging the private sector in inclusive, sustainable agribusiness; Enabling environment for PPPs to achieve sustainable, competitive agribusiness; PPP models in agribusiness value chains; PPP models in innovation, technology, and business incubation; and PPP models in logistics, postharvest handling, and cold chains. The Cilembu Sweet Potato Agribusiness Center in the Sumadong region hosted a site visit.

### Observational Study Mission on Innovation and Competitiveness in SMEs

The increasing technological complexity required for making new products, shorter product life cycles, and unceasing competition have forced SMEs to move beyond the philosophy of continuous improvement to more innovative, radical ideas that will enhance

their competitiveness. In addition, more demanding customers and increasing pressure in markets are the main reasons why innovative power is becoming one of the strongest deciding factors in the commercial success or failure of any business.

The APO organized an observational study mission on Innovation and Competitiveness in SMEs, 29 March–1 April in Seoul in cooperation with the KPC. Seventeen participants from 14 member economies were in attendance. Three international resource speakers and two local experts gave presentations and led discussions. The mission provided a platform for understanding innovative strategies for improving productivity in SMEs, sharing best practices and initiatives by successful SMEs to promote innovation, and learning how to develop an innovative, creative culture in SMEs for sustaining business performance and competitiveness in the global market.

Program coverage: Key attributes and practices of innovation and competitiveness; Enhancing competitiveness through innovation; Becoming innovative and competitive SMEs; Enterprise architecture-based innovation; Risk management framework and practices for sustainable SMEs; and Best practices of innovation and competitiveness in SMEs. The participants visited Nonghyup Hanaro Mart, Samsung Innovation Center, and Gyeong-gi Center for Creative Economy and Innovation to observe their best practices in innovation.

### Conference on Female Workforce Participation and Productivity Enhancement

The participation of women in the labor force has been a major focus of many countries as it provides a means to pursue greater equality as well as productivity. By tapping the capacity

and potential of women, employment, entrepreneurship, and competitiveness can be improved, thus contributing to overall socioeconomic development. The female labor force participation rate in the Asia-Pacific region is still lower than the world average, which means that more improvement can be made. A conference on Female Workforce Participation and Productivity Enhancement was organized at the APO Secretariat, 5–7 April, with support from the Government of Japan. Twenty-five participants from 17 member countries and three observers from the International Labour Organization and Embassy of Bangladesh in Japan attended the conference, where they shared practices and experiences from their countries, benchmarked the effectiveness of their policies, and discussed possible future actions to encourage female workforce participation. Six speakers from India, Japan, Malaysia, Sri Lanka, and the USA shared trends in women's workforce opportunities in their countries.

Program coverage: Status and trends of female participation in the Asia-Pacific region; Relationship between productivity and female labor force participation; The role of policies and their effectiveness in increasing female labor force participation; and Current status of women's participation in the workforce in APO member countries.

### Multicountry Study Mission on Local Government Service Delivery and Productivity

One requirement for enhancing productivity in the public sector is to ensure that efforts at national and local levels are aligned. Local governments are critical in all productivity initiatives because they are on the front line in delivering public services to citizens.



Conference on Female Workforce Participation and Productivity Enhancement.

That was the main reason why the APO, in collaboration with the NPS, organized a multicountry study mission on Local Government Service Delivery and Productivity in Colombo, 9–13 May. It was attended by 25 participants from 14 member economies and guided by three resource persons from Canada, Indonesia, and the ROK. The participants mainly represented local governments, ministry policymakers, and public service providers and discussed approaches and methodologies to meet local citizens' needs.

Program coverage: Relationship between productivity enhancement at national and local levels; Reasons to improve service delivery by local governments; Common barriers to and challenges in reform of local public services; The need for a more people-centered approach; Policy innovations required in a changing environment to allow local authorities to serve citizens better; and Measuring citizen satisfaction and benchmarking services and productivity. Observational visits were hosted by the Mount Lavinia Municipal Council, located in Dehiwala, and Department of Local Government, in the Western province. Presentations were given by a local government practitioner and deputy mayor of Mount Lavinia. A Mount Lavinia council member spoke on the development of a citizen-centered local government and how local public services can be improved even with resource constraints. Discussions on the effectiveness of PPPs in managing local waste were a highlight of the visit to the Department of Local Government in the Western province.

### Forum on Labor-Management Relations for Policymakers, Labor Unions, and Top Management

The term "labor-management relations" refers to the system in which employers, workers, and their representatives, and, directly or indirectly, the government interact to set the ground rules for the governance of work relationships. How companies develop and maintain an amicable relationship between labor and management is an important process that they see as mutually beneficial. As companies grow overseas, it is necessary to take a global approach to labor-management relations. There are labor and legal risks specific to each country in which companies operate, and it is important that they proactively identify and manage those risks.

The APO organized a forum on Labor-Management Relations for Policymakers, Labor Unions, and Top Management, 17–19 May at the Secretariat in Tokyo. There were 32 participants from 16 APO member economies from government, public organizations, national labor unions, NPOs, and the private sector in charge of labor-management issues, policy, and monitoring the relationship between economic growth and labor issues. Five resource speakers from Japan introduced current issues, challenges, and past experience in labor-management relations in the country.

Program coverage: The productivity movement and labor-management relations in Japan; Current issues in industrial relations in Japan and Asian countries; and Management

viewpoint and tasks for constructive Japanese labor-management relations. The participants also visited Suntory Holdings Limited and the Japanese Trade Union Confederation to learn about how amicable relationships were developed between management and labor to improve productivity.

### Training Course on Business Excellence for the Public Sector

Business excellence (BE) is a dynamic tool enabling continuous improvement of performance and productivity. It provides a holistic perspective for management and aligns all the resources and personnel with organizational strategies, targets, and goals, which is especially beneficial for public-sector organizations pursuing improved service productivity. The APO has long promoted BE awareness and public-sector productivity through various activities, especially its Center of Excellence (COE) on BE in Singapore and COE on Public-Sector Productivity in the Philippines.



Training course on Business Excellence for the Public Sector.

A training course on Business Excellence for the Public Sector was held in cooperation with the NTPC, Fiji National University, 23–27 May in Nadi, with 21 participants from 15 member countries in attendance. It aimed at raising the awareness of BE benefits among public-sector organizations, identifying strategies for BE implementation, and benchmarking of BE practices in APO member countries against initiatives from other international organizations.

Program coverage: Introduction to BE and its linkages to public-sector productivity; BE framework and assessment; The role of innovation in the public sector; Case studies from selected member and nonmember countries; and The sustainability of BE for organizations. The APO Secretariat also collaborated with the UN Development Programme's Global Centre for Public Service Excellence to showcase initiatives from the global community in promoting public-sector productivity. A site visit was hosted by Fiji Meteorological Services, a Fiji Business Excellence Award winner,

to learn from its experience in pursuing continuous improvement and service excellence.

### Multicountry Observational Study Mission on Agricultural Innovations in Japan to Increase Productivity

Improving agricultural productivity and value addition are critical to reducing poverty and raising the competitiveness of a country's agricultural and food exports. Innovations in food production systems and postharvest operations are required to increase productivity and offer high-quality agricultural products. However, many developing countries face difficulties in improving agricultural productivity and product quality due to a lack of access to knowledge on modern production technologies and inadequate infrastructure support.



*Multicountry observational study mission on Agricultural Innovations in Japan to Increase Productivity.*

To study current Japanese agricultural production practices and innovative technologies to increase productivity and best management practices in postharvest operations and value addition which reduce losses and improve the quality of agricultural produce, the APO organized a multicountry observational study mission on Agricultural Innovations to Increase Productivity in Japan, 6–10 June, under a special cash grant from the Government of Japan. Eighteen participants from relevant government agencies, agribusinesses, and academic institutions of 15 member countries, along with eight resource persons, attended.

Program coverage: Agricultural production technology and practices; Infrastructure and facilities supporting agricultural production; and Postharvest handling and marketing practices. The study mission included visits to Tsukuba Agricultural Research Hall, National Institute for Rural Engineering, Kyoto University, the Plant Factory of Chiba University, JA Oumi (Japan Agricultural

Cooperatives) and direct-sales shop, and Yanmar Museum (agricultural machinery exhibition hall).

### Workshop on Knowledge Management for SME Top Management

Knowledge or know-how is an intangible resource that provides a competitive advantage and a consistent way of managing it. Knowledge is rapidly becoming the most important asset of virtually all organizations, and SMEs are no exception. SME leaders need to manage knowledge for the same reasons as larger organizations. SMEs will be able to gain a competitive advantage through their ability to manage and exploit knowledge. Knowledge management (KM) is a discipline that enables individuals, teams, organizations, and communities to capture, store, share, and apply their knowledge collectively and systematically to achieve specific objectives.

The APO organized a workshop on Knowledge Management for SME Top Management, 6–10 June, hosted by the NPCC in Phnom Penh. It was attended by 23 participants from government, public organizations, NPOs, and SMEs from 12 member economies, along with three international resource speakers. The workshop introduced the basic concepts and benefits of KM implementation for SMEs, the APO KM Framework and implementation approach, importance of IT for KM, case studies on best practices of KM in SMEs, and KM challenges for SMEs.

Program coverage: Why KM and innovation are important for SMEs; Basic concept of KM; APO KM Framework and implementation approach for SMEs; Case study on SME KM in the manufacturing and service sectors; KM tools and techniques for SMEs; Key success factors of KM implementation in SMEs; SME benchmarking on KM; KM challenges for SMEs; and Establishing an organizational culture to sustain KM initiatives. The participants also visited the Cambodia Investor Club (CIC) to learn about how KM can be applied in an SME.

### Workshop on Sustainable Community Development and the Saemaul Undong

The Saemaul Undong achieved astonishing economic growth through community and rural development during the 1960s and 1970s in the ROK. The movement also improved both individual and community well-being through: poverty reduction due to its impacts on increasing household incomes; access to modern infrastructure and services with the introduction of mechanized farming, electrification, and improvement in the quality of housing and health services; empowerment of local communities and amassing of social capital; revitalization of community leadership; and acceptance of modern roles for women in terms of overall social participation.

In collaboration with the KPC, the APO organized a workshop on Sustainable Community Development and the Saemaul Undong, 27 June–3 July in Seoul. Participants from 15 member



economies and one nonmember country (Myanmar), along with 18 local ones, attended. They represented government agencies, public institutes, NPOs, and private companies. Six local experts from the ROK made presentations on sustainable community development and the Saemaul Undong. The workshop provided a platform to share the concepts and implementation of the Saemaul Undong and economic development in the ROK.

Program coverage: Korea’s economic development policy: Experience and implications for emerging economies; Korean experience of the Saemaul Undong: Background, theoretical frame, and lessons; Korea’s rural development; and Participatory approach to the Saemaul Undong and rural development. The Saemaul Undong Museum, Saemaul village, and Agriculture Technology Center hosted site visits to allow participants to observe and learn firsthand from the community development experience of the ROK.

**Conference on State-of-the-art Technologies to Drive Agricultural Productivity in the Next Quarter of the Century**

Agriculture must produce more food to feed the projected 33% increase in the world population by 2050 from limited land and water resources. Technological change will remain the major driver of increasing agricultural productivity and promoting agricultural development. However, certain modern technologies in agriculture are resisted, especially by small farmers, due to a lack of understanding of their benefits and safety issues. It is important to disseminate accurate information and demonstrate the advantages of modern technologies in the

context of persistent widespread food insecurity, environmental degradation, and climate change.

To provide a platform for presenting and discussing the latest scientific advances and future directions of applications of modern technologies in agriculture, which should be promoted to increase the productivity, sustainability, and competitiveness of small- and medium-sized farms, the APO organized a conference on State-of-the-art Technologies to Drive Agricultural Productivity in the Next Quarter of the Century in Tokyo, 28–30 June. Thirty-two participants from 16 member countries and 13 resource persons attended.

Program coverage: Mega trends in the agrifood industry; Precision agriculture technologies; Agricultural mechanization and field robots; Emerging technologies for safe, productive farming in fragile environments; Food traceability and marketing; and Applications of cutting-edge agricultural technologies on the ground, their role in meeting challenges to agriculture in the next quarter-century, and their scaling up. To observe state-of-the-art technologies in operation, participants visited the Plant Factory at the Kashiwa-no-ha Smart City, Chiba prefecture.

**Multicountry Observational Study Mission on Cold Chain Systems for Perishable Food**

Food loss and waste are global concerns due to their socioeconomic and environmental implications. The lack of good harvest- and postharvest-handling practices and of good infrastructure for transportation, storage, cooling, processing,



Multicountry observational study mission on Cold Chain Systems for Perishable Food.

and marketing are among the major causes of food loss in developing countries. A well-designed cold chain system can reduce such losses and maintain the safety and quality of produce at the desired level to increase the productivity and income of farmers, add value, and support the development of a diversified food industry.

To study the current status of cold chain systems for perishable food in member countries and share knowledge on new technologies and best practices in cold chain management systems for perishable food, the APO organized a multicountry observational study mission on Cold Chain Systems for Perishable Food in Japan, 4–8 July, under a special cash grant from the Government of Japan. Eighteen participants from 11 member countries representing relevant government agencies, agribusinesses, and academic institutions who were engaged in managing and promoting the development of cold chains and value chains in agribusiness, and five resource persons, attended.

Program coverage: Cold chains and logistics for perishable food; Cold chain development and its impact on agriculture and the food industry; and Capacity development needs for cold chain and logistics management for perishable food products. The study mission included visits to Tsukuba Agricultural Research Hall and Food Research Institute of the National Agriculture and Food Research Organization, University of Marketing and Distribution Sciences, Distribution Resource Center (distribution museum), central distribution center and meat packing center of a supermarket chain, distribution center of a logistics company, dairy products factory, and International Distribution Center at the Port of Kobe.

### **Top Management Forum with Focus on Business Excellence for the Service Industry**

BE is about developing and strengthening the management systems and processes of an organization to improve performance and create value for stakeholders. BE is much more than putting a quality system in place. It is about achieving excellence in everything that an organization does, including leadership, strategy, customer focus, information management, people, and processes, and, most importantly, achieving superior business results.

To expand awareness of BE, promote the adoption of the BE framework and standards in the service industry, and share and exchange information on and experience in best practices of BE adoption in the service sector, the APO organized the Top Management Forum on Business Excellence for the Service Industry, 12–14 July, hosted by the KPC in Seoul. International participants from 15 member countries and 17 local ones involved in BE initiatives attended. Three overseas and one local resource persons gave presentations and facilitated discussions. The Top Management Forum introduced the overall BE framework (concepts, tools, and methodologies), best examples of key BE applications, case

studies of leading BE organizations, and strategies for BE adoption in service industry.

Program coverage: The importance of BE and current status of BE—challenges and opportunities; BE explained: Core concepts, categories, scoring, and assessment methods; BE tools; BE, self-assessments, and service excellence; BE criteria requirements; Building and sustaining BE for the service sector; and How to implement BE in the service sector. The participants visited the Samsung Innovation Center to observe successful strategies of BE adopted to enhance productivity and quality performance.

### **Training Course on Innovative Agriculture Extension Systems to Improve Farm Productivity and Income**

Globalization, changing structure of rural economies, and emerging issues such as sustainability, environmental degradation, climate change, and aging farmers require agriculture extension services (AES) to play an expanded role. This includes linking farmers more effectively to the market, coupling technology transfer with other services relating to input and output markets, environmental conservation, promoting rural entrepreneurship, building the capacity to strengthen innovation processes, and institutional development to support the bargaining position of farmers.

To enhance the knowledge and skills of trainers and extension officials on the latest approaches, tools, techniques, and skills of providing AES and share innovative AES models, the APO in collaboration with the DAP organized a training course on Innovative Agriculture Extension Systems to Improve Farm Productivity and Income in Manila, 25–29 July. Twenty-six participants from 14 member countries and five resource persons attended.

Program coverage: Global trends and innovative schemes in agriculture extension; Cyber extension and ICT applications for efficient AES in Asian countries; Cases of PPPs in AES; Current policies and projects being actively implemented in member economies; and Retooling and capacity development needs of agricultural extension mechanisms. To learn about agricultural activities in the host country, participants visited the International Rice Research Institute; Philippine Carabao Center; an agricultural promotion fair organized by the Philippine Council for Agriculture, Aquatic, and Natural Resources Research and Development; University of the Philippines Los Baños; and MASIPAG, a network of farmers' organizations and local communities.

### **Advanced Agribusiness Management Course for Executives and Managers**

Opportunities in agribusiness have expanded substantially due to the globalization of trade, rising incomes in the region, and increasing population. Efforts to expand agribusiness operations

must deal with emerging challenges such as climate change, progressive decimation of agricultural lands, aging of farmers, and the migration of the young labor force to urban areas. The future of agribusiness in the region will be shaped by these trends, but a looming question is how agriculture can meet the food requirements of the future.

To enhance participants' knowledge of recent and emerging developments in global and regional agribusiness and best practices in dealing with associated issues, the APO in collaboration with the FTPI and Cornell International Institute for Food, Agriculture and Development (CIIFAD) of Cornell University organized the Advanced Agribusiness Management Course for Executives and Managers, 25–29 July, in Bangkok. Eighteen participants from 12 members attended, along with resource speakers from Cambodia, Germany, Malaysia, South Africa, Thailand, and the USA.

Program coverage: Facing the challenges of sustainable food systems: Feeding 9 billion people; Food security in the future: What will it take to make Asia food secure?; Land as an essential resource in food security: Perspectives from Asia; Landless farming: The plant factory model; The future of food: Addressing safety challenges; The future of south–south opportunities in food trade; Food value chains in the future; Upgrading of micro and small enterprises; The future of rice trade; Analyzing case studies; and Case study of the Kirirom Company of Cambodia. Participants visited the Thai International Food Catering Service and National Center for Genetic Engineering and Biotechnology.

### **Asian Food and Agribusiness Conference: Innovations for Enhancing the Productivity and Sustainability of Enterprises in Agribusiness and the Food Industry**

Agribusiness in the Asian region is increasingly becoming a more dynamic, complex, highly competitive industry. Considering the various factors that could influence the achievement of these goals and the resources required to address them, it is necessary to bring together key stakeholders in the agribusiness and food industry to deliberate on issues and challenges and determine a common agenda for adopting innovations to enhance the productivity and sustainability of Asian agrifood SMEs.

To provide a platform for presenting and discussing successful models of innovation to enhance the productivity and sustainability of entrepreneurial efforts, particularly of agrifood SMEs, the APO in partnership with the Ministry of Agriculture of Sri Lanka and NPS organized a conference in Colombo, 2–5 August. Twenty-eight participants from 12 member countries attended, with eight resource persons from Bangladesh, Hong Kong, India, Malaysia, Pakistan, the Philippines, Singapore, and Switzerland and two local speakers.

Program coverage: Global and regional trends and innovations in agribusiness and the food industry; Successful models of

innovation in agrifood SMEs in Asia; e-Business and online marketing in the agrifood industry; Emerging markets for innovative Asian agricultural and food products and services and strategies for enhancing access of SMEs; Integrating Asian agrifood SMEs into global value chains through innovation and internationalization; Modern technologies and innovative ways to improve the environmental performance of agrifood products; and Creating an enabling environment for innovation by SMEs in agribusiness and the food industry. The participants visited the agro-processing company Country Style Food Pvt. Ltd. in Kadawatha.

### **International Conference on Public-sector Productivity**

The public sector is the largest employer in both developed and developing countries. Citizens rely on this sector for public goods and services that cannot be provided by the private sector. Tax revenues, as one of the significant financial resources used by economies for investment in growth and development, are mostly if not entirely consumed by this sector. Promoting productivity in this significant sector among APO member countries will therefore deliver the much-needed results of higher economic growth, the achievement of social goals, and greater citizen satisfaction.

An international conference on Public-sector Productivity was organized in collaboration with the MPC in Kuala Lumpur, 9–11 August, as another APO effort to raise awareness of the importance of enhancing productivity within the sector. It was attended by 36 overseas participants from 14 member economies and more than 350 local ones. Eight international and four local resource persons delivered presentations. The conference attracted widespread media attention as a platform to discuss the importance of and trends in productivity in the public sector and give updates on recent initiatives and policy innovations in APO member economies and elsewhere.

Program coverage: Policy design, regulation, and innovation for productivity enhancement in the public sector; Measurement of productivity and performance in the public sector; Initiatives in transforming public-sector productivity; Modernizing public services; The future of governing productivity in the public sector; and Routes to improved productivity in the public sector.

### **e-Learning Course on Value Addition to Agrifood Products**

Value addition to agricultural products has enormous potential for increasing productivity, incomes, and off-farm employment opportunities in developing countries. In many instances, agricultural products are sold in their basic raw form in local as well as upstream markets. With proper adoption, value addition can encourage intensive, diversified use of local agricultural raw materials, development of collateral and/or complementary enterprises, and thus job creation. It is important for producers

and related agribusiness players and food-industry SME entrepreneurs to have the skills and know-how to add value to agricultural and food products and increase their profitability.

To train greater numbers of key stakeholders in value-addition skills, management tools, techniques, and technologies, the APO held a videoconferencing-based distance-learning course on Value Addition to Agrifood Products in two sessions: 29 August–1 September (Bangladesh, India, IR Iran, and Nepal); and 20–23 September (Cambodia, Mongolia, Pakistan, Thailand, and Vietnam). NPOs implemented the course in the nine countries for 183 participants.

Program coverage: Basic concepts and principles of value addition; Product development, innovation, and value addition; Adding value through processing, packaging, and marketing; Utilization of by-products and farm waste to create new value-added food and nonfood products; Emerging global trends in new and value-added products with success stories; and Value addition through quality and safety assurance certification systems.

### Conference on Raising Productivity in Higher Education

Higher educational institutions have recently been devoting considerable resources to understanding factors that impact their overall success. Productivity is one important area being looked into because of its potential benefits not only to institutions but also to the economy as a whole. Concepts such as productivity, efficiency, and accountability are central to discussions on the sustainability, cost, and quality of higher education. To assist

higher educational institutions in understanding their own productivity levels, it is necessary to identify issues that hinder their competitiveness and requirements for improving their efficiency and effectiveness in the long term, especially in Asia where there are serious concerns about the quality of higher education.

The APO organized a conference on Raising Productivity in Higher Education, 29 August–1 September in Jakarta, hosted by the Ministry of Manpower, Indonesia. Ninety participants, including 49 from 16 APO member countries, attended. Five international and two local speakers made presentations. The conference provided a platform to discuss the importance of and trends in productivity in higher education and review policies contributing to better productivity and performance in the sector.

Program coverage: Understanding the concepts of and approaches to measuring productivity in higher education; The reengineering challenge to promoting innovation in higher education; Productivity indicators in higher education: What do they mean?; Innovations for productivity improvement in higher education; Measuring productivity in higher education in selected APO member countries; Quality indicators in higher education: How reliable are they?; Productivity, quality, and performance excellence in higher education; and Higher education reform in the digital age for productivity consciousness. The participants visited the University of Indonesia to learn about its ongoing strategies to enhance productivity and quality performance.

### Training Course on Lean Applications Focusing on the Service Industry

Lean manufacturing systems involve the systematic elimination of all types of waste in production and related processes. “Lean” is a set of principles which accelerates the speed of all processes across the enterprise. Adopting lean processes requires identifying and eliminating activities that do not add value to design, production, logistics, and customer relations. Although lean systems were first adopted in manufacturing, they have been widely applied in the service sector in many countries.

The APO in collaboration with the VNPI organized a training course on Lean Applications Focusing on the Service Industry, 19–23 September in Ho Chi Minh City. The course was attended by 23 participants from 13 APO member economies, along with three resource speakers. They discussed the philosophy and concepts of lean systems, methodologies for lean applications in the service industry, and best practices.

Program coverage: Lean principles and value added—core concepts of lean thinking; How to apply lean thinking for the service industry; Implementation process of lean service operations; Lean techniques and tools; Organizing and leading lean kaizen projects; and Lean techniques for the service industry and office improvement. Participants visited the Thu Duc District Hospital to understand how it practices lean applications in the service sector.



Conference on Raising Productivity in Higher Education.



*Workshop on Performance Management for the Public Sector.*

### Workshop on Performance Management for the Public Sector

The linkage between government operations and increased productivity within the public-sector domain can be strengthened using various tools and techniques from the private sector, such as performance management. This is a tool to manage mandates imposed by the public and politicians while responding to demands for transparency and accountability.

The APO organized a workshop on Performance Management for the Public Sector in collaboration with the DAP in Manila, 26–30 September, to illustrate that link. Seventeen overseas and six local participants attended the workshop, which was facilitated by three resource persons from Canada, India, and Thailand. The sessions introduced the basic concept of performance management systems and how to prepare for and implement them. The participants were exposed to exercises based on a real-world example using an online toolkit. Recent developments in performance management in the public sector in advanced countries were also discussed.

Program coverage: Performance management as a tool to enhance productivity for public-sector organizations; Result framework document as an instrument for improving the performance of government; Important elements of performance management in public-sector organizations; Preparing and agreeing on performance management systems; Performance assessment and the use of performance indicators; Performance management and measurement in public-sector organizations; The way forward for implementing performance management; Performance reporting: Framing and conveying the performance story; and Case studies on performance management. The workshop was also enriched by a visit to the Department of Environment and Natural Resources of the Philippines, where policy initiatives and best practices were shared, including a demonstration of the use of technology to boost performance.

### Conference on Customer Satisfaction (CS) Measurement and CS Index Development for the Service Industry

The service industry plays a vital role in a country's economy. Thus, the promotion of productivity in the service industry is crucial to sustain growth. Customer satisfaction (CS) measurement is critical for the long-term competitiveness and profitability of organizations at the firm and macro levels. Some member economies have already initiated and promoted national CS measures and CS indexes for the service industry. There has been increasing demand from participants and NPOs for methods to measure CS levels in the service sector.

The APO organized a Conference on Customer Satisfaction (CS) Measurement and CS Index Development for the Service Industry, 4–6 October, hosted by the CPC in Taipei, with 33 participants from 16 member economies. Three international resource speakers and one local expert gave presentations

reviewing CS measurement principles, methods, and models; best practices of CS measurement; and CS index development and opportunities for application in the service industry.

Program coverage: International overview of CS measurement systems, CS indexes, and CS benchmarking; Making CS relevant in the service sector; Benchmarking and integrating CS indexes for productivity improvement; and Best practices of CS measurement for the service industry in the ROC, Singapore, and Japan. Taiwan Taxi Company hosted a site visit to demonstrate its CS measurement system to improve services to customers and meet new demands.

### Training of Trainers on Business Excellence for SMEs

A powerful tool for managing organizations to improve productivity which can be utilized by enterprises of all sizes, most importantly SMEs, is the BE framework. It can help identify



*Training of trainers on Business Excellence for SMEs.*

strengths and opportunities and then align management systems with processes to create an environment for sustainable improvement. The APO has taken many initiatives to improve the competitiveness of SMEs, ranging from research to training projects related to BE.

A training-of-trainers course on Business Excellence for SMEs was also organized in 2016 in collaboration with SPRING Singapore, 24–27 October, as a continuation of those initiatives. Twenty participants from 14 APO member economies attended. The training was facilitated by two resource persons from Malaysia and New Zealand. The sessions covered the basic concept of BE and its application to SMEs, including consultancy skills and techniques. The participants were also introduced to innovative methods for diagnosing SMEs' organizational performance, business operations, etc. In addition, a practical session was conducted by local resource persons. The course concluded with attendance at the Business Excellence Awards Dinner organized by SPRING Singapore.

Program coverage: BE for productivity and overview; BE for SMEs: Benefits and challenges; Role of BE practitioners, consultants, trainers, assessors, and NPOs in BE capacity building; BE consulting methodology for SMEs; BE assessment for SMEs; Assessing SME performance; Improving SME performance using the BE framework; and Proposing action plans: Building BE capability for SMEs and building BE capability through training programs for SMEs. The course featured a site visit to a local company, Goodrich Global, to learn the history of its BE journey.

### **e-Learning Course on Innovative Approaches in Marketing of Agrifood Products**

The marketing of agrifood products involves numerous interconnected activities such as planning production, growing, harvesting, grading, packing, transport, storage, processing, distribution, advertising, and sales. To ensure that reasonable prices for agricultural produce are received by farmers and agribusinesses, there is a need to promote marketing models including direct marketing, e-marketing or online marketing, and through agricultural cooperatives. Farmers and agribusinesses must understand the basics of developing marketing strategies for their products and buyer requirements, both in terms of product and business conditions.

To enhance participants' understanding of the issues and constraints faced by farmers and agribusinesses in marketing their products in a globalized environment and to acquaint them with the emerging marketing models for agrifood products, the APO held a videoconferencing (VC)-based e-learning course on Innovative Approaches in Marketing of Agrifood Products in two sessions: 25–28 October (Cambodia, Mongolia, Philippines, Thailand, Vietnam); and 5–8 December (Bangladesh, India, IR Iran, Nepal, Pakistan). NPOs implemented the course in the 10 countries for 184 participants who completed it.

Program coverage: Key concepts in the marketing of agricultural and food products; Challenges and opportunities for Asian farmers in marketing agricultural and food products; Marketing and pricing strategies; Strategies to enhance market access of agrifood products; Emerging models of marketing of agrifood products (direct marketing, e-marketing, agricultural cooperatives, etc.); Integrating small farmers into agrifood supply chains; and Collaboration among the stakeholders along food supply chains.

### **Study Mission to a Nonmember Country on Regional Innovation Strategies and Knowledge Productivity**

Innovation holds the key to boosting productivity and serves as a major source of economic growth. Fostering innovation and creating a conducive environment for it are concerns of many governments. Switzerland, a pioneer in innovation, was chosen as the destination of this study mission for participants to learn about innovation strategies. For the last seven years, Switzerland has maintained its first-place ranking in the Global Competitiveness Index and Global Innovation Index, which annually assess the factors driving productivity and prosperity. Switzerland is also notable for excellent public–private collaboration in efficient regional innovation strategies.

The five-day study mission to Switzerland on Regional Innovation Strategies and Knowledge Productivity was organized from 31 October–4 November for 13 participants from 11 countries representing government, industry, and academia. The key words of “industry-driven, bottom-up approach, business environment focus, hands-on business coaching and incubation, dual-track and permeable education systems” were repeatedly mentioned by different speakers in the organizations visited. Participants had the chance to interact with numerous representatives of successful Swiss innovation ecosystems, i.e., federal departments and local cantons representing the government, incubators and start-ups representing the private sector, and an independent think tank and research and training institutions. Different perspectives were presented to enhance participants' understanding of successful innovation processes, the framework conditions, and factors allowing Switzerland to maintain its high innovation ranking.

Program coverage: Innovation policies; Innovation ecosystem; Public–private–academia partnerships; and R&D indicators. Visits were made to: Avenir Suisse (an independent economic and social issue think tank); Swiss Federal Laboratories for Materials Science and Technology; Optotune (a successful start-up); Swiss Federal Institute of Technology Zürich; State Secretariat for Education, Research and Innovation; Commission for Technology and Innovation; Swiss Federal Institute for Vocational Education and Training; Bern Economic Development Agency; World Intellectual Property Organization; and Campus Biotech (a world-leading center for biotechnology and life sciences).



Study mission to a nonmember country on Innovations in Agriculture to Increase Productivity and Profitability.

### Study Mission to a Nonmember Country on Innovations in Agriculture to Increase Productivity and Profitability

Agriculture will face enormous challenges in feeding about 10 billion people by 2050. Food production must increase by 70% by 2050 despite the limited availability of arable land and fresh water and other less predictable factors, such as the impact of climate change. Innovation-led, productivity-driven agricultural growth is crucial for developing member countries to enhance national and regional food security. In most developing countries, however, agricultural productivity and profitability remain low and degradation of natural resources is widespread.

Asian countries can learn a lot from Australia, whose fresh produce and food products have received top global quality ratings for decades. A core theme in Australian agriculture is producing high yields from small areas using limited resources and energy. To expose participants to the latest innovative methods, technologies, and best practices of smart agriculture in Australia and provide opportunities for networking, the APO in collaboration with Primary Industries and Regions South Australia and the Asian Cold Chain Centre organized a study mission on Innovations in Agriculture to Increase Productivity and Profitability, in Adelaide, South Australia, 7–12 November. Twenty-two participants from 12 member countries attended this first APO study mission to Australia.

Program coverage: How South Australian agribusinesses are sustainable and keep their produce fresh throughout the whole supply chain, from production and processing, to packaging and distribution. The program included visits to numerous farms, wineries, food distribution centers, processors, wholesalers, and research centers, spanning the Adelaide metropolitan area,

Adelaide Hills, Virginia, Northern Adelaide Plains, and McLaren Vale areas.

### Workshop on Developing the APO Public-sector Leadership Framework

Well-functioning leadership affects an organization’s ability to deliver responsive, innovative, efficient services to its stakeholders. Leadership values must be preserved within the organizational structure. A leadership framework is needed in targeting higher productivity for the public sector to move its various organizational elements in the desired direction.

As part of initiatives to develop such a framework based on the challenges faced by APO member economies and to boost the productivity of the sector, a workshop on Developing the APO Public-sector Leadership Framework was held in collaboration with the DAP in Manila, 14–18 November. There were 16 overseas and eight local participants in attendance, along with three resource persons from Australia, Canada, and Singapore in addition to one from the DAP who facilitated the workshop. A guest lecture was given by the former Secretary of the Department of Education of the Philippines on leadership initiatives amid unprecedented circumstances. The workshop will be followed up by the drafting of the APO Public-sector Leadership Framework.

Program coverage: The APO Public-sector Productivity Program and the DAP’s public-sector productivity initiatives; Linking effective leadership to productivity within the public-sector realm; Leadership and performance management systems in public-sector organizations; Leading with vision; The ethics of public leaders; Understanding public organizations and public employees; Communicating with influence; Driving changes in

the public sector; Establishing a culture that supports innovation and idea generation; Managing human resources for results; and Strategic thinking in leading public-sector organizations. A site visit to observe the implementation of leadership in practice and examples of effective leadership was hosted by Muntinlupa municipal offices.

### Workshop on Information Security Management Based on ISO 27000

The latest technology for information sharing such as cloud systems provides excellent solutions for organizations seeking to reduce administrative costs and speed up delivery systems. However, all information held and processed is subject to the risk of errors, hacking attacks, sabotage, natural disasters, and many other threats. The loss of available information severely impacts organizations. Therefore it is vital that they install appropriate protection systems to maintain the availability, confidentiality, and integrity of their information, and they are increasingly aware of the importance of protecting this valuable asset and the consequences that could occur if it is leaked. Aware of the importance of information security in enhancing productivity and efficiency, the APO has organized a series of projects on information security management systems (ISMS) based on the ISO 27000 standard since 2010. Most focused on providing comprehensive learning opportunities on ways to implement management systems based on the guidelines and requirements of ISO 27000.

To enhance the understanding of the requirements of ISMS and discuss issues and challenges in implementing them,

the APO in cooperation with the NPO of Pakistan organized a workshop on Information Security Management Based on ISO 27000, 21–25 November in Islamabad. A total of 23 participants from 12 countries and three international resource persons attended.

Program coverage: Overview of ISMS standards, guidelines, certification process, and associated benefits; Impact of ISMS on productivity; Issues and challenges in implementing ISMS; Best practices in implementing an effective ISMS; Integrating ISMS with other ISO standards; and Case studies of successful examples of ISMS. Participants visited Medical Transcription Billing Corporation, a healthcare IT service provider, and TEO, a software development company, both located in Islamabad.

### Study Mission to a Nonmember Country on Cloud Computing Technology

Cloud computing is the practice of using a shared pool of computing resources hosted on the Internet. With ubiquitous, on-demand access to online resources and data, end users have easier access to a greater scope of services and information, and economies of scale can be achieved at lower cost. With the prevalence of cloud computing, SMEs can harness the power of the Internet, advanced servers, and applications that improve their operational efficiency, services, and market research capacity and thus increase their overall productivity.

An APO study mission on Cloud Computing Technology was organized in San Francisco, California, USA, 28 November–2 December, attended by 18 participants from 11 member



Study mission to a nonmember country on Cloud Computing Technology.



countries. Speakers from Silicon Valley provided an overview of the concept of cloud computing, including its history, trends, technologies, and business models, and presented its extensive applications, such as those in the industrial Internet of Things (IoT), consumer products, services (finance, health, and entertainment), and individual project and corporate management. The participants visited major cloud service providers to learn about future trends in the cloud revolution and were also briefed on the development of cloud technology in Asia by the Asia Cloud Computing Association.

Program coverage: Silicon Valley and its innovation history; Cloud computing trends; Case studies from SMEs; The industrial IoT and the cloud; IoT cloud for commercial use; and Fintech and the cloud. Site visits were hosted by Intel, Wrike, Microsoft, GridMarkets, and Amazon Web Services, where the participants were familiarized with the individual strengths and strategies of those companies.

### **Multicountry Observational Study Mission on Strengthening Public-private-sector Partnerships in Developing Competitive Agribusiness**

PPPs have emerged as key mechanisms for development, particularly in infrastructure, communication, and transportation projects. PPPs also play an important role in the delivery of health services and advances in technology, in both highly developed and developing countries. However, their applicability in agriculture needs careful analysis. While a few countries have adopted the concept for setting up postharvest, cold storage, and irrigation facilities, not all PPPs in the agriculture sector have been successful. The reasons include unclear government policies, noncompliance with the conditions of the partnership by one or both parties, persistent negative perceptions, and complexity of the division of tasks and profit sharing.

It is important to note that PPPs are being promoted in Malaysia as an important institutional mechanism for gaining access to additional financial resources, sharing risks, and addressing other constraints in the pursuit of sustainable, inclusive agricultural development. Therefore the APO in collaboration with the Ministry of Agriculture & Agro-based Industry and MPC organized a multicountry observational study mission on Strengthening PPPs in Developing Competitive Agribusiness, 5–9 December, in Kuala Lumpur. Twenty overseas participants from 15 member countries and one resource person from India attended.

Program coverage: Trends and key issues and challenges in developing and sustaining PPPs; Enabling environment for PPPs to create sustainable, competitive agribusinesses; PPP models in agribusiness value chains; PPP models in innovation, technology development, and agribusiness incubation; and PPP models in logistics, postharvest handling, and cold chains. To observe

successful PPP initiatives in agribusiness, the participants visited seven diverse agroenterprises and farms.

### **Workshop on Developing the APO Toolkit for Designing and Implementing Performance Management Systems in the Public Sector**

Initiatives to improve public service delivery often fail to achieve the desired outcomes due to the absence of reliable measurement concepts. Performance management systems (PMS) should maintain a balance between priorities and drivers. This is crucial so that performance measurements can monitor the implementation of strategy and feed back into strategy formulation.

A workshop on Developing the APO Toolkit for Designing and Implementing Performance Management Systems in the Public Sector was held in Tokyo, 5–9 December, as a follow-up to a similar project in Manila in November. The toolkit is meant to provide practical guidelines for designing and implementing PMS to enhance public-sector productivity in member countries. The December workshop was led by three resource persons from Australia, Hong Kong, and India and attended by 18 participants from 14 member countries. They discussed recent developments in performance management in advanced countries in addition to the specific needs of their public sectors. The workshop will be followed up by the development of the APO toolkit.

Program coverage: Performance management and productivity for the public sector; Result instruments for improving the performance of government; Important elements of performance management in the public sector; Preparing and agreeing on performance management; Performance assessment and performance indicators; Performance management and measurement; The way forward for implementing performance management; Performance reporting; Framing and conveying the performance story; and Case studies on performance management. The participants were able to examine how a PMS is being applied in Komoro City Office.

### **Research on Agricultural Policies in Asia**

Agricultural policies and measures have a significant impact on the long-term performance and productivity of the agriculture sector. However, many Asian countries have limited experience in policy analysis and poor monitoring systems to support farmers in the context of globalization and sustainable development. Policymakers must be adequately supported by reliable information, databases, and analytical tools. In this context, the APO conducted a pilot study on basic agriculture policies and agricultural productivity in selected member countries utilizing the producer support estimates (PSEs) developed by the Organisation for Economic Co-operation and Development (OECD) and published a synthesis of the pilot study in 2013.

As a follow-up to that study, the APO initiated research on agricultural policies in Asia. The coordination meetings were

held in Tokyo in July and October 2015 to agree on common analytical tools, databases, and manuals to be used for PSE computations for the research. According to the guidelines, the national experts from eight selected countries (Bangladesh, ROC, India, Indonesia, Malaysia, Pakistan, Sri Lanka, and Thailand) prepared documents to submit, including PSE tables and country reports, in 2016. The chief and international experts will subsequently compile draft reports based on the submitted documents for final publication.

Program coverage: OECD experience in the use of PSEs for policy analysis and monitoring; Major findings of the APO research on agricultural policies; Recent changes in agricultural policies in ASEAN; Structure and analytical framework of the new research on agricultural policies; Revised guidelines and new APO template; and Data availability and possible difficulties in measurement. The experts were involved in extensive discussions to establish a common methodological framework.

### Research on Measuring Productivity in Higher Education

Research on Measuring Productivity in Higher Education was carried out in 2015 with eight national experts from Cambodia, Fiji, India, Indonesia, Malaysia, the Philippines, Sri Lanka, and Thailand and one chief expert from Australia participating. The objectives were to examine the concepts of productivity and its application to higher education, agree on the key performance indicators (KPIs) in assessing the productivity level of academic institutions, and recommend proposals that would enhance the productivity outcome of the higher education sector in general. The coordination meeting was held 24–26 November, hosted by the FTPI in Bangkok.

### Research on Aging Societies and Gender Mainstreaming in Human Capital Development

Currently, APO member countries face the prospect of shrinking labor forces and thus labor shortages in coming years with rapidly aging populations. Better utilization of the untapped or underutilized pool of female labor is crucial to stimulate productivity growth and cope with the challenges facing aging societies. Initiated at the end of 2015, the Research on Aging Societies and Gender Mainstreaming in Human Capital Development aims to examine the trends, patterns, and determinants of the female labor force participation (FLFP) rate in participating countries and their impact on labor productivity. Six experts from the ROC, India, Indonesia, Malaysia, the Philippines, and Thailand were assigned to conduct the research. After one year spent collecting data, the research team consolidated a report containing an analysis of policies to boost the participation of women in the labor force. Good practices and lessons learned from advanced countries with experience in driving FLFP will be documented and serve as the basis for recommendations for the more active participation of women in the labor force in

participating member countries. The final research report will be published in 2017.

Program coverage: Aging societies; Gender mainstreaming; Human capital development; FLFP; Quality employment for female labor; Labor market participation framework; and Labor productivity.

### Research on Knowledge Management Models in the Public Sector

Research on Knowledge Management Models in the Public Sector commenced in 2015 with five national experts from Indonesia, Malaysia, the Philippines, Singapore, and Vietnam, one chief expert from the UK, and one coordinating expert from Hong Kong. The first coordination meeting was held 21–23 September 2015 in Kuala Lumpur, hosted by the MPC, and the second was held 11–12 May 2016 in Hanoi, hosted by the VNPI. The objective is to produce KM models in the public sector to serve as practical guides to improving its performance, with the emphasis on knowledge productivity enhancement. The report was being reviewed and finalized at the time of writing.

### Research on Agricultural Productivity Measurement and Monitoring

Increased agricultural productivity is crucial in achieving the objectives of many countries of rural poverty reduction, food security, and inclusive economic growth. In most developing and less developed countries, agriculture contributes substantially to rural livelihoods, trade revenues, and national food security, while providing raw materials for the industry sector. But for most of those countries, the systems for monitoring agricultural productivity trends are weak. This usually translates into weak planning and programming systems, which often lead to improper allocation of scarce resources among sectors and even within the agriculture sector. With globalization and increasing liberalization in the trade of agricultural and food products, countries in the region need reliable databases on their agricultural resources and their productivity so that governments can plan and pursue the appropriate policy mix and program support. This is essential for enhancing the competitiveness of agribased enterprises and at the same time will help the private sector identify potential areas for investment in the sector.

In 2016, the Research on Agricultural Productivity Measurement and Monitoring was undertaken to monitor, report on, and provide analysis of the most up-to-date agricultural performance and productivity trends. It is expected that this research will pave the way for the establishment of a harmonized regional database on agricultural productivity at the APO Secretariat for benchmarking and monitoring trends. This research was expected to be completed in May 2017. A tangible output of this project will be a research report on trends in agricultural productivity in selected APO member countries.

### Research on Case Studies of Diversity Management and Human Capital Strategy

Employing a diversified workforce is not only an advantage but also a challenge for management. Diversity could have both positive and negative effects on firm productivity. A strategy to manage diversity successfully is one that creates a work environment where similarities and differences in the workforce are included and valued. Such a strategy turns a diverse workforce into an inclusive workforce. The more diverse and inclusive the workforce, the greater the team collaboration and commitment to organizational performance and productivity enhancement. The organization's ultimate goal of improving efficiency and effectiveness while achieving better productivity performance can be achieved by well-satisfied, better-performing, more committed employees.

The APO is conducting this research to assess the impact of a diverse, inclusive workforce on organizational productivity gains and competitiveness. Best practices in strategies for diversity management and inclusiveness in organizations in both the public and private sectors will be compiled. A general framework on how to promote diversity, eliminate bias and discrimination in the workplace, and include all differences for organizational productivity enhancement in the Asia-Pacific context will be developed. The coordination meeting of experts was held 28–30 September in Seoul with the attendance of one chief expert and six national experts from the ROC, India, IR Iran, Malaysia, the Philippines, and Thailand. The purpose of the meeting was to discuss the research framework, scope, methodology, and the timeline to conduct the research.

Program coverage: Diversity and inclusion strategy; Human capital development; Unconscious bias; Organizational performance; and Firm productivity.

### Research on Measurement of Productivity in the Public Sector

The APO has focused on public-sector productivity growth and its measurement in recent years. Various initiatives have been undertaken to help improve the motivation and skill level of public officials, strengthen management systems, and enhance performance given the changing environment and current commitment to public-service renewal in many countries. In 2015, the APO published its first research on Measuring Public-sector Productivity in Selected Asian Countries. That initial volume examined the efforts to enhance the productivity of governments of selected APO member economies. This research therefore was another attempt to identify and measure the productivity of specific public services in assessing the overall performance of the public sector so that appropriate recommendations could be made, especially for the health and education sectors, among participating member countries.

The coordination meeting for the Research on Measurement of Productivity in the Public Sector, hosted by the MPC, was held

23–25 November in Kuala Lumpur. Eight national experts from India, Indonesia, IR Iran, Malaysia, Pakistan, the Philippines, Sri Lanka, and Thailand participated. The objective of the coordination meeting was to agree on the research design and methodology including identification of the key indicators in measuring public-sector productivity so that the appropriate recommendations to enhance the overall productivity performance of the sector could be made after the completion of the research project.

Program coverage: Why measure public-sector productivity?; The public-sector measurement framework; and Key elements of the measurement strategy for the project. The national experts also made presentations on their preassignments following the guidelines given in advance.

### Research on Change Management in the Public Sector

While the APO has been implementing capacity-building programs for the public sector to improve overall performance and productivity, the introduction of change management has not yet become widespread to support ongoing institutional reforms by many member country governments. In 2015, the APO conducted a workshop on Change Management in the Public Sector, and one of the recommendations by participants and experts was for the APO to collect and publish case studies since there were few publications on the subject, especially in the Asia-Pacific region. This research therefore was an attempt to investigate what has been done so far to introduce and manage change in the public sector and look into its complexities so that appropriate interventions could be made in formulating projects and programs in the future. The results of this study will also provide insights into how change has been introduced and managed given the complexity of the public sector.

The coordination meeting for the Research on Change Management in the Public Sector, hosted by the FTPI, was conducted 7–9 December in Bangkok. Ten national experts from Bangladesh, Cambodia, India, Indonesia, IR Iran, Malaysia, Pakistan, the Philippines, Sri Lanka, and Thailand participated. The objective of the meeting was to agree on the research design and methodology, including the parameters of change concept applications in the public sector, by examining examples in terms of administrative reform and performance-based change, economic development, competitiveness and market-based change, community development, and bottom-up and community-based change, among other public sector-related issues.

Program coverage: What is change management in the public sector?; Change management best practices: Cases of public-sector organizations; Elements/criteria in analyzing change management in the public sector; and Overall research design including methodology and timeline of activities. The national experts made presentations on their preassignments following the guidelines provided in advance.



# GREEN PRODUCTIVITY

## Research on Green Productivity and Productivity Measurement Program for Myanmar

Measuring the productivity performance of a nation is essential to evaluate its efficiency in resource use and assess areas for potential economic growth, which is pivotal for evaluating national productivity improvement. This project is attempting to assess labor, capital, and energy productivity while examining the potential for improving energy productivity (or energy efficiency) with lower carbon emissions in Myanmar.

This pilot project is implemented under a cash grant from the Japanese Ministry of Foreign Affairs (MOFA). The research is a collaboration between the APO and Keio University. The project will initially examine energy productivity issues along with an attempt to compute single- and multifactor productivity for Myanmar. It is envisioned that the research activities in turn will contribute to building the capacity of stakeholders in Myanmar to understand productivity measurement and evidence-based productivity analysis, as well as energy productivity for promoting Green Productivity (GP). To date, statistical research has been done to collect national data to compute productivity, while looking into energy issues in the country. A workshop is planned in early 2017 in Myanmar to share the preliminary results with stakeholders and it will be combined with a research mission to examine some statistical issues.

Program coverage: Assessment of national account data; Establishment of preliminary methodology to construct a growth accounting framework; Measurement of labor productivity, total factor productivity, and energy productivity; and Assessment of energy efficiency.

## Expansion of the Network of International Green Advisory Committees and the Green Productivity Advisory Committee

Since the establishment of the GP Program in 2003, the APO has been expanding Green Productivity Advisory Committee (GPAC) activities internationally. The main objective of the GPAC is to promote state-of-the-art eco-technology and innovations that contribute to GP practices among member economies. In recent years, GPAC activities have been expanded by International

GPACs (I-GPACs). The first I-GPAC was established in the ROC after the 9th Eco-products International Fair (EPIF) in 2014, which was followed by the establishment of another I-GPAC in Sri Lanka, called the Green Productivity Enhancement Committee. These I-GPACs have unique attributes where leaders from industry and academia as well as government agencies jointly collaborate to act as enablers and advisers in fostering green industries and green growth in the country.

On 3 February, the 14th annual meeting of the GPAC was held in Tokyo to report on the final preparations for the EPIF 2016. Details on the main program and side events were explained by the Thai host organization, the Federation of Thai Industries. Other main activities of the GPAC this year included encouraging Japanese exhibitors at the EPIF 2016 to showcase their eco-technology and innovations to visitors from the host country and beyond the APO membership. As a result, 32 Japanese companies exhibited at the EPIF 2016 in Thailand. The promotional activities also included establishing relations with Japanese mass media, which covered the EPIF in newspapers and web-based media.

## Workshop on the Development of the International Green Productivity Advisory Committee

A main objective of the GP Program is to promote the establishment of I-GPACs in other member countries and to facilitate their interactions to learn from each other and create synergistic effects of GP movements. Coinciding with the 9th EPIF held in Taipei, the GPAC in the ROC was established in 2013 as the first one outside Japan. After the meeting on Development of a Network of GPACs held in December 2014 in Tokyo, the GP Enhancement Committee was established in Sri Lanka, led by the NPS in collaboration with consultants and private partners.

To exchange information and updates on new activities and initiatives among member countries with established GPACs as a model for other member countries and to enhance knowledge and understanding of recent green technology trends in the region in the context of evolving international discussions and initiatives for promoting sustainable development, the APO organized a workshop on the Development of the I-GPAC, 28–

30 November, at the Secretariat. Thirteen participants from 11 APO member countries attended. The project also provided an opportunity to observe the latest environment-friendly products, technologies, services, and innovations in green businesses.

Program coverage: GP; Environmentally friendly eco-technologies, eco-products, and eco-services; Green growth; Eco-innovation; and Energy efficiency. Site visits were hosted by Re-Tem Corporation, which specializes in the recycling and reuse of resources, and Toshiba Science Museum.

### Training Course on Energy Conservation

Without sufficient energy supplies, society cannot function and economic growth in the region cannot be achieved. To maintain high, sustainable growth, APO member countries must manage energy security and promote energy conservation through smarter, more efficient use of energy. The promotion of energy conservation will also help in the transition from carbon-intensive to environment-friendly, sustainable economic patterns.

To address the issues of energy conservation in the industry and service sectors, the capacity building of human resources who can lead energy conservation initiatives in member countries is necessary. Since Japan has substantial experience in and technologies useful for energy conservation, the Ministry of Economy, Trade and Industry of Japan decided to contribute to that capacity building in the targeted APO member countries of Bangladesh, Mongolia, Nepal, Pakistan, and Sri Lanka by transferring its advanced knowledge. Under this project, a two-week training course on Energy Conservation was organized by the APO, 15–26 February in Tokyo and Nagoya. Thirty-eight participants from 15 member countries attended the course.

Program coverage: General concepts and overview of energy efficiency and conservation and energy management systems; Establishment of total energy management systems; Latest technologies for and knowledge of energy management; and Measures and viewpoints to improve energy efficiency and conservation. Participants made site visits to TLV Co., Ltd. and Hitachi Industrial Equipment Systems Co., Ltd. in Chiba. In Nagoya, Denso and the Sharp Kameyama factory hosted visits to demonstrate cutting-edge energy conservation technology used in Japanese industries.

### Training Course on Green Productivity

GP represents a strategy that simultaneously strengthens productivity and addresses environmental protection issues. It provides a holistic perspective on managing an organization's activities with detailed consideration of possible environmental impacts and thus contributes to increased productivity and sustainable development. Since 1994, the APO has been in the forefront in promoting this strategy in member countries to raise awareness, share know-how, and exchange experiences.

A training course on Green Productivity was organized and hosted by the NTPC, Fiji National University, 21–25 March in Nadi, with 22 participants from 17 member countries and three observers from Colombia. The training course aimed at raising awareness of GP; equipping the participants with basic GP concepts, methodologies, and tools; and providing them a platform to exchange practices and experiences.

Program coverage: GP concepts, material flow cost accounting (MFCA), and energy efficiency; GP methodologies; GP tools for analyses and techniques for solutions; Introduction to and case studies of MFCA; Hands-on practice of MFCA analysis; Basic concepts in energy management and energy audit; and Energy efficiency in thermal systems and electrical systems. The participants and observers also benchmarked against each other by sharing country papers. A visit to Radisson Blu Resort Fiji was arranged to showcase applications of waste management, solar panels, and green initiatives in the hospitality industry, including the largest roof-mounted resort solar power system in the southern hemisphere, and learn how they contribute to business operations.

### Workshop on Mainstreaming Climate Change Adaptation in Agriculture

Agriculture faces the challenge of producing more food to feed around 10 billion people worldwide by 2050 and, more specifically, to contribute to self-sufficiency in food and poverty alleviation in developing countries. Additional food production must come through increasing productivity, enhancing climate change resilience, and contributing to climate change mitigation. Agriculture is, however, extremely vulnerable to climate change. As climate change brings greater uncertainties, adds new risks, and changes existing risks, many countries have undertaken initiatives to mainstream climate change adaptation into policy, development planning, and program formulation. Such initiatives are expected to prevent policy conflicts and result in greater efficiency in the use of financial resources compared with managing adaptation separately.

To review strategies and approaches to mainstream climate change adaptation measures, techniques, and activities into national agricultural development programs and to formulate strategic action plans to promote its mainstreaming in agriculture, the APO in partnership with the NPO of Bangladesh organized a workshop on Mainstreaming Climate Change Adaptation in Agriculture in Dhaka, 25–28 April. It was attended by 24 participants from 14 member countries along with five resource persons.

Program coverage: Climate change risks, challenges, and mainstreaming opportunities; Framework conditions for mainstreaming climate change considerations into agricultural development planning; Strategic assessment of value chains and changing the conditions for mainstreaming climate change adaptation; Challenges and successful experiences

in mainstreaming adaptation and resilience into agricultural development planning; Successful cases of mainstreaming climate change adaptation in agriculture; and Accelerated actions to mainstream climate change adaptation.

### Training Course for Energy Management System Auditors: ISO 50001

Organizations that waste energy through lax processes and insufficient management are not only losing money but are also causing avoidable pollution through increased carbon emissions.



Training course for Energy Management System Auditors: ISO 50001.

In addition, energy security and fossil fuel depletion have become global concerns. Proper energy management through promoting energy efficiency and conservation measures is therefore of paramount importance. The interest in such measures is not new among organizations and companies in all sectors as well as consumer groups worldwide. There have been some clear successes in many parts of the world, such as the growing adoption of energy-saving appliances and utilization of energy-efficient techniques and technologies. Yet more needs to be done in both the private and public sectors to facilitate energy-efficient practices and procedures in the Asia-Pacific region.

To assist top managers in establishing, implementing, maintaining, and improving energy management systems to achieve continual improvement of energy performance based on the ISO 50001 standard, the APO in partnership with the NPO of Bangladesh organized a training course for Energy Management System Auditors: ISO 50001, 8–11 May, in Dhaka. Twenty-four participants from 13 member countries attended, mainly directors, managers, engineers, and consultants of public and private enterprises.

Program coverage: Modern energy management systems; Essential features of ISO 50001; ISO 50001 energy

management scope; Management responsibility and policy; ISO 50001 energy planning; ISO 50001 implementation and operation; Checking; Management review—inputs and outputs; Plan of implementation of ISO 50001; and Certification for ISO 50001. Participants visited Energypac Electronics Ltd., one of the leading companies producing energy-efficient items in Bangladesh.

### Workshop on Advanced Renewable Energy Technologies and Assessing Their Adoption and Application

Without adequate energy supplies, society cannot function and economic growth in the region cannot be achieved. Due to rapid economic growth that causes dramatic increases in energy consumption in Asia, it is becoming a critical issue to ensure energy security. Energy security can only be achieved by utilizing technologies that maximize the efficiency of fuel of all types. In addition, given the public health and environmental impacts of fossil fuel use and fast-growing energy demand, renewable energy will play a crucial role in the global energy mix.

To observe and learn from the latest advanced renewable energy technologies contributing to the replacement of fossil fuels in the region, the APO in association with NIPO organized a workshop on Advanced Renewable Energy Technologies and Assessing Their Adoption and Application, 14–18 May, in Tehran. Twenty-three participants from 14 APO member countries and 19 local observers attended. The workshop also provided an opportunity to assess the practical adaptation and application of renewable forms of energy in the participating countries.

Program coverage: Introduction to advanced renewable energy technologies; Application of advanced renewable energy technologies; and Applicability of advanced renewable energy technologies. Participants visited MAPNA Generator Engineering & Manufacturing Company, which was a pioneer in wind energy utilization in IR Iran and manufacturer of a megawatt range of wind turbines.

### Development of Demonstration Companies on Energy Conservation

Rapid industrialization in Asian economies has been a strong driving force in raising productivity in the region. On the other hand, however, it has shown negative effects on the environment such as global warming, climate change, energy price fluctuations, etc. It is crucial to promote energy conservation in the region to enable smarter, more efficient use of energy in all sectors. The promotion of energy conservation will also help in the transition from carbon-intensive to more environment-friendly, sustainable economic patterns.

APO demonstration projects on energy conservation are meant to illustrate practical applications of the necessary tools and techniques. Demonstration companies disseminate success

stories on the development and implementation of energy conservation initiatives undertaken by all stakeholders. By establishing demonstration/model organizations, companies, and communities to showcase the tangible results of energy conservation improvement programs, others are encouraged to undertake similar efforts. Such projects involve a tripartite arrangement among a demonstration company or group of demonstration companies, the NPO involved, and APO. The APO assigns technical experts to assist demonstration companies in the implementation of the projects.

In 2016, two demonstration projects on energy conservation were implemented, one in Mongolia and the other in Sri Lanka in collaboration with the MPO at APU Company, TESO LLC, and UBEDN SOJS Company in Mongolia and in Wijeya Newspapers in Sri Lanka. Both projects were scheduled to be completed in early 2017.

**Organic Agroindustry Development Leadership Course in Asia**

Leadership and institution building are the key factors for greater sustainability in agriculture and the development of the organic sector. Organic agriculture combines tradition, innovation, and science to benefit the shared environment and promote fair relationships and a good quality of life for all involved. Also, high-quality foods can gain access to high-end national and international markets and therefore play a crucial role in wider poverty reduction. However, the full potential benefits of organic agriculture have not been achieved. One of the main reasons is that the capacities of leaders in the organic sector, which includes NGOs, research and certification bodies, and public organizational units, are not yet fully developed.

To broaden participants’ knowledge and skills in promoting and leading the organic industry, enhance their familiarity with recent and emerging developments in global organic agribusinesses, and provide opportunities for networking and sharing of best practices in the management of agribusiness issues, the APO in partnership with the NPO of Bangladesh, Centre on Integrated Rural Development for Asia and the Pacific (CIRDAP), and International Federation of Organic Agricultural Movements (IFOAM)-Organics International organized an Agroindustry Development Leadership Course in Bogra, 28 May–3 June. Twenty-four participants from 14 countries attended, with two resource persons from Germany and India. The training course consisted of two online learning sessions (webinar sessions) before the face-to-face course in Bogra. This was the first APO project in which webinar sessions were conducted to enhance participants’ awareness of the subject before attending the face-to-face course.

Program coverage: Organic agriculture principles; Organic advocacy; Sustainable organic value chains; Organic guarantee systems; and Research, advocacy, and training needs. Participants observed green agricultural field activities and the agroprocessing center of the Rural Development Academy and a community biogas project in Bamunia village.

**Eco-products International Fair 2016**

The APO has engaged in various activities designed to improve productivity and increase awareness of environmental problems in its member countries and launched its GP projects in 1994 to pursue the concurrent improvement of productivity and conservation of the environment. The APO has implemented 10 EPIFs to date, including the EPIF 2016, to encourage environmental advocacy among general consumers and promote eco-technologies, eco-products, and eco-services in Asian countries including Japan. During the period from the first to the 10th fair, we have witnessed serious acceleration of climate change and other forms of global environmental degradation. In this situation, holding the EPIFs in the Asia-Pacific region has become even more meaningful.

To provide a platform to showcase the latest eco-technologies and eco-products to governments, industries, and the general public, as well as to expand green markets for the creation of a sustainable society, the APO organized the 10th EPIF, 8–11 June at the Bangkok International Trade & Exhibition Center, in collaboration with the Federation of Thai Industries (FTI) and FTPI. The EPIF 2016 was themed “24-Hour Eco-Life” and focused on the B2B (business-to-business), B2C (business-to-consumer), and B2G (business-to-government) models. This was the second EPIF to be held in Bangkok. VIPs from industry and the government, including Deputy Prime Minister Air Chief Marshal Prajin Juntong, attended the Opening Ceremony and visited the fair. There were 129 exhibitors, and the fair attracted approximately 44,000 visitors over four days.



Organic Agroindustry Development Leadership Course in Asia.



Thailand Deputy Prime Minister Air Chief Marshal Prajin Juntong (center) touring the EPIF 2016 exhibitors' booths.

Program coverage: GP; Environmentally friendly eco-technologies, eco-products, and eco-services; Green growth; and Eco-innovation and energy efficiency.

### Asia EnviroEconomics Conference: Concerted Efforts for a Sustainable Future through 24-Hour Eco-Life

Following the outcomes of the Rio+20 conference in June 2012 which identified areas for further work to move toward

sustainable development and a greener economy, the Post-2015 Development Agenda was formulated, in which tackling environmental challenges remained one of the top priorities. In addition, the importance of public-private partnerships to achieve inclusive green growth continues to be an important strategy for the international community to work together for sustainable development.

The APO organized the Asia EnviroEconomics Conference: Concerted Efforts for a Sustainable Future through 24-Hour Eco-Life, 8–10 June, hosted by the FTPI. The conference was held in parallel with the 10th EPIF in Bangkok. A total of 193 participants, including 36 from 16 APO member countries and three observers from Colombia, attended. Eighteen international and local speakers made presentations on various GP-related topics in line with the conference theme. The main objectives of the conference were to share knowledge of the roles and advanced practices of GP in achieving sustainable development; stimulate discussions on challenges and potential solutions for global sustainable development issues, including sustainable industrialization, sustainable consumption and production patterns, and climate change and its impact on economies; and promote partnerships among diverse players in GP including private firms, governments, and NGOs.



Asia EnviroEconomics Conference.



Program coverage: Energy innovation and new lifestyles; Toward zero emission life—ZERI's cases and suggestions for the future; Beyond sustainable palm oil: Proposal for the maximum use of biomass; Ethical consumption; Redefining anthropocene: Toward a planetary civilization; Japanese cooperation for developing Thai eco-towns; The power of ICT for a green future; and Global environmental cooperation for eco-lifestyles post-2015.

### Training of Trainers and Consultants in Green Productivity

GP techniques specifically evaluate potential environmental impacts of organizational activities and show how overall management of resources, operations, and energy use could be improved to maximize productivity while minimizing harm to the environment, contributing to more sustainable development of organizations, societies, and nations. Since 2001, the APO has been organizing the annual Training of Trainers and Consultants in Green Productivity course, emphasizing practicality and in-depth knowledge that enable participants to conduct concrete GP diagnoses.

The 2016 Training of Trainers and Consultants in Green Productivity was organized in collaboration with the CPC, 4–22 July in Taipei. It was attended by 22 participants and two observers from 15 APO members. The course involved presentations followed by hands-on practice to equip participants with analytical capacity and consultancy skills, enabling them to disseminate GP concepts, methodologies, tools, and techniques in their countries.

Program coverage: GP concepts and consultancy skills; MFCA; and Green supply chains and procurement. It also took advantage of the capacity of the APO Center of Excellence (COE) on GP in the ROC to share good practices in waste recycling, green factories, and applications of renewable energy. The participants visited Cashido Corporation, an APO demonstration company practicing GP strategies in manufacturing its ozone sanitation devices, to observe the results achieved and their effects on business operations. Participants were then assigned to the following companies to practice in-plant analyses and consultancy: AU Optronics, a specialist in solar, integrated-touch, and visual solutions; Chung Tai Resource Technology Corp., a waste lighting recycling business; and Rhymebus Components, a maker of frequency inverters, motor controllers, and variable-speed drives.

### Advanced Training Course on Certification of Organic Products

Driven by increased consumer demand for product authenticity and concerns about the negative effects of input-intensive agriculture on natural resources and the environment, the global market for certified organic food products is expanding rapidly. To take advantage of this growing export market, there is a need to establish credible systems of organic standards and strengthen organic certification systems. Currently, third-party

certification is a prerequisite to successful sales transactions, and an “organic” claim on a product label requires such certification under the regulations of many governments. There is a need to develop qualified trainers and inspectors for organic products to facilitate the credible certification of growers, postharvest handlers, and processors.

To provide advanced training to trainers on and practitioners of organic certification and inspection, the APO in partnership with NIPO, the Ministry of Jihad-e-Agriculture Agricultural Research and Education Organization (AREO), and Institute of Technical and Vocational Higher Education of IR Iran organized an advanced training course on Certification of Organic Products in Tehran, 20–24 August. Twenty-four participants from 15 countries attended, with three resource persons from PR China, IR Iran, and Italy.

Program coverage: Organic standards and regulations; Requirements of regional and international organic standards; Organic guarantee systems; Third-party organic certification: Key concepts and considerations; Organic certification processes; Organic inspection; and Organic marketing and trade. For hands-on training, participants visited an organic-certified pomegranate orchard in the city of Saveh, Markazi province; the Iranian Research Institute of Plant Protection; and an organic store on the AREO campus in Tehran.

### 1st International Conference on Biofertilizers and Biopesticides

Inappropriate use of chemical fertilizers and pesticides can cause irreparable damage to ecosystems and food production systems. Consumers and customers are increasingly concerned about the safety of the food they buy, way the food is produced, environmental impact of agricultural practices, and sustainability of agrifood production systems. Consumption of natural and organic products is on rise. The use of biofertilizers and biopesticides (BB) can play an important role in promoting GP and sustainability in agriculture by mitigating negative impacts associated with chemical fertilizers and pesticides.

The APO in collaboration with the Council of Agriculture, Executive Yuan; CPC; and Agricultural Technology Research Institute organized the 1st International Conference on Biofertilizers and Biopesticides in Taichung, 23–26 August. The objective was to provide a unique platform for representatives from the public and private sectors and NGOs as well as researchers, entrepreneurs, and consultants to present and discuss the latest scientific advances in the field and future prospects for BB in agriculture and to network among themselves and with stakeholders in the BB industry in the host country. Forty-six participants from 13 APO member countries and 64 local observers attended with 10 resource persons from the ROC, India, Japan, the ROK, and the USA.

Program coverage: Global trends in the development and use of BB; Regional development; Risk management; Successful

examples of commercialization; and The way forward to the future of BB. To observe activities relating to BB development and use in the host country, participants visited the Sweet Pepper Producers' Cooperative in Puli, Nantou county, and AVRDC-The World Vegetable Center located in Shanhua, Tainan.

### **Multicountry Observational Study Mission: Promoting GP with Focus on Smart Grids and Green Energy**

A smart grid is an electricity network that integrates a variety of operational and energy measures. It coordinates the actions of power generators and users, optimizes the production and distribution of electricity, and thus helps to improve the efficiency of electricity generation and consumption and deliver economical, stable power supplies. Applying smart grids and adopting renewable energy are future trends and solutions for sustainable power generation, secure power supplies, and efficient electricity consumption.

An APO observational study mission on Promoting Green Productivity with Focus on Smart Grids and Green Energy was co-organized and hosted by the CPC, 5–9 September in Taipei. It was attended by 22 participants and three observers from 13 member countries. Resource persons from the ROC, Japan, and the USA provided an overview of the latest trends and applications of smart grids and renewable energy and their contributions to productivity enhancement in their countries as well as examples from projects in France, Spain, and the UK. The participants observed best practices and applications of technologies in the ROC and identified the potential and opportunities for applying them in their own countries.

Program coverage: Introduction to smart grids, green energy, and productivity enhancement; Concept, technology, infrastructure, and policy for smart grids; Smart grids in Taiwan; Smart grids and green energy; Experiences from Hawaii and the USA; and Experiences from Japan. Site visits were hosted by Chung Hsin Electric and Machinery, the Tatung Company micro-grid demonstration site, Living 3.0 Smart Household demonstration site, AU Optronics, and Taiwan Power Company, giving participants opportunities to observe the latest technologies in power generation and storage, applications of community and household micro-grids, the largest roof-top solar panels in the ROC, and the generation of wind and solar power.

### **Multicountry Observational Study Mission on Advanced Energy Technology**

Without adequate energy supplies, society cannot function and economic growth in the region cannot be achieved. Due to rapid economic growth that has caused dramatic increases in energy consumption in Asia, it is becoming critical to ensure energy security. Energy security can only be achieved by utilizing technologies that maximize the efficiency of fuel of all types.

The APO organized a workshop in 2015 on Advanced Energy Technologies in the Manufacturing Sector which identified 12 advanced energy technologies recommended for adoption in the Asia-Pacific region, including variable-frequency drives, energy-efficient motors, and top-gas recycling blast furnaces.

To manage energy security and find a different path from traditional high resource consumption for more energy-efficient, low-carbon economic growth, the APO in association with NIPO organized a multicountry observational study mission on Advanced Energy Technology, 1–5 October, in Tehran. Twenty participants from 10 APO member countries and 10 local observers attended. The project provided an opportunity to observe the practical adaptations and applications of advanced energy technology in IR Iran.

Program coverage: Introduction to advanced energy technologies; Application of advanced energy technologies; and Applicability of advanced energy technologies. Site visits were made to MAPNA Electric Control Co. and MAPNA Turbine Engineering and Manufacturing Company, as well as the TTS Group, which operates the Tehran Municipal Solid Waste Incineration Power Plant.

### **International Conference on Innovations and Applications of New Technologies to Improve Productivity**

Innovation is crucial for a firm, industry, and country to improve productivity and remain competitive. Several factors can drive innovation in an organization. It is therefore important for all stakeholders to have a clear understanding of innovation, the various models, and best practices across industries. Governments also need to develop environments that will foster nationwide innovation.

To share new knowledge of and best practices in innovation and the applications of cutting-edge technologies to increase the productivity of various industries and to identify a common agenda for action to promote innovation and improve the performance of APO members in the Global Innovations Rankings, the APO in cooperation with the NPS organized the International Conference on Innovations and Applications of New Technologies to Improve Productivity, 12–14 October in Veyangoda, Sri Lanka. Forty-nine participants from 15 member countries and 10 international and one local resource persons attended.

Program coverage: Concept of innovation and indicators of innovative economies and companies; Enablers of innovation in a country; The drivers of innovation in a business organization; Developing innovation ecosystems; Roles of innovation centers and incubation centers in the development of start-ups and SMEs; Innovations in micro and small enterprises; and Trends in global innovations: Open innovation, crowdsourcing, and crowdfunding.

**Asian Food and Agribusiness Conference: Greening the Food Supply Chain**

Agriculture is becoming more intensive in many countries in Asia due to the increasing domestic food demand as well as the fast-growing demand for agricultural commodities for fiber and fuel in global markets. In many countries where the arable land has reached the frontiers and cultivable land has been declining due to conversions to nonagricultural uses, farmers have resorted to excessive use of chemical fertilizers, pesticides, and other inputs to increase production, which has serious environmental, sustainability, and health impacts. Water pollution and land degradation are widespread. The varied activities across the supply chain produce effluents and emit greenhouse gases and nonbiodegradable waste, especially from plastics and packaging, which take another toll on the environment.

The APO in partnership with the Ministry of Village, Disadvantaged Areas Development, and Transmigration, NPO Indonesia, and CIRDAP organized the Asian Food and Agribusiness Conference: Greening the Food Supply Chain, in Bali, 26–28 October. Forty-three participants from 14 member countries along with eight resource persons from Australia, Bangladesh, India, Indonesia, the Philippines, Singapore, and Sri Lanka attended.

Program coverage: Linkage between agrifood supply chains, agriculture/rural development, and the environment; Policy environment for greening the supply chains; External standards and driving forces influencing the greening of food supply chains; Different models, tools, and techniques for greening the food supply chains; Green packaging; and Waste management in the food industry. The participants visited an organic farm located at Baturiti, Tabanan.



*Training of trainers in the GLOBALGAP Standard for Greater Market Access.*

**Training of Trainers in the GLOBALGAP Standard for Greater Market Access**

International trade in agricultural and food products is on the rise. Consumers are increasingly concerned about the safety and wholesomeness of the products they buy and how they are processed and handled. New pressures from consumers, retailers, and legislation have placed additional demands on farmers and producers, who are more often required to apply Good Agricultural Practices (GAP) in farming. Such trends create greater export opportunities for producers in developing countries in Asia and the Pacific. To take advantage of this growing export market, however, there is a need to establish credible systems of GAP standards and GAP certification systems.

To enhance the understanding of trainers, inspectors, and auditors of the intent, requirements, and applications of the GLOBALGAP standard, the APO in partnership with the NPO of Pakistan organized a training-of-trainers course in the GLOBALGAP Standard for Greater Market Access in Lahore, 5–10 December. Twenty-one participants from 11 member countries along with five resource persons from the ROK, Malaysia, Pakistan, and Thailand attended.

Program coverage: National, regional, and international GAP standards; Introduction to GLOBALGAP standards; Requirements of GLOBALGAP standards; GLOBALGAP implementation; GLOBALGAP inspection and certification; Challenges in GAP adoption and certification; Key success factors in GLOBALGAP



*Asia Food and Agribusiness Conference.*

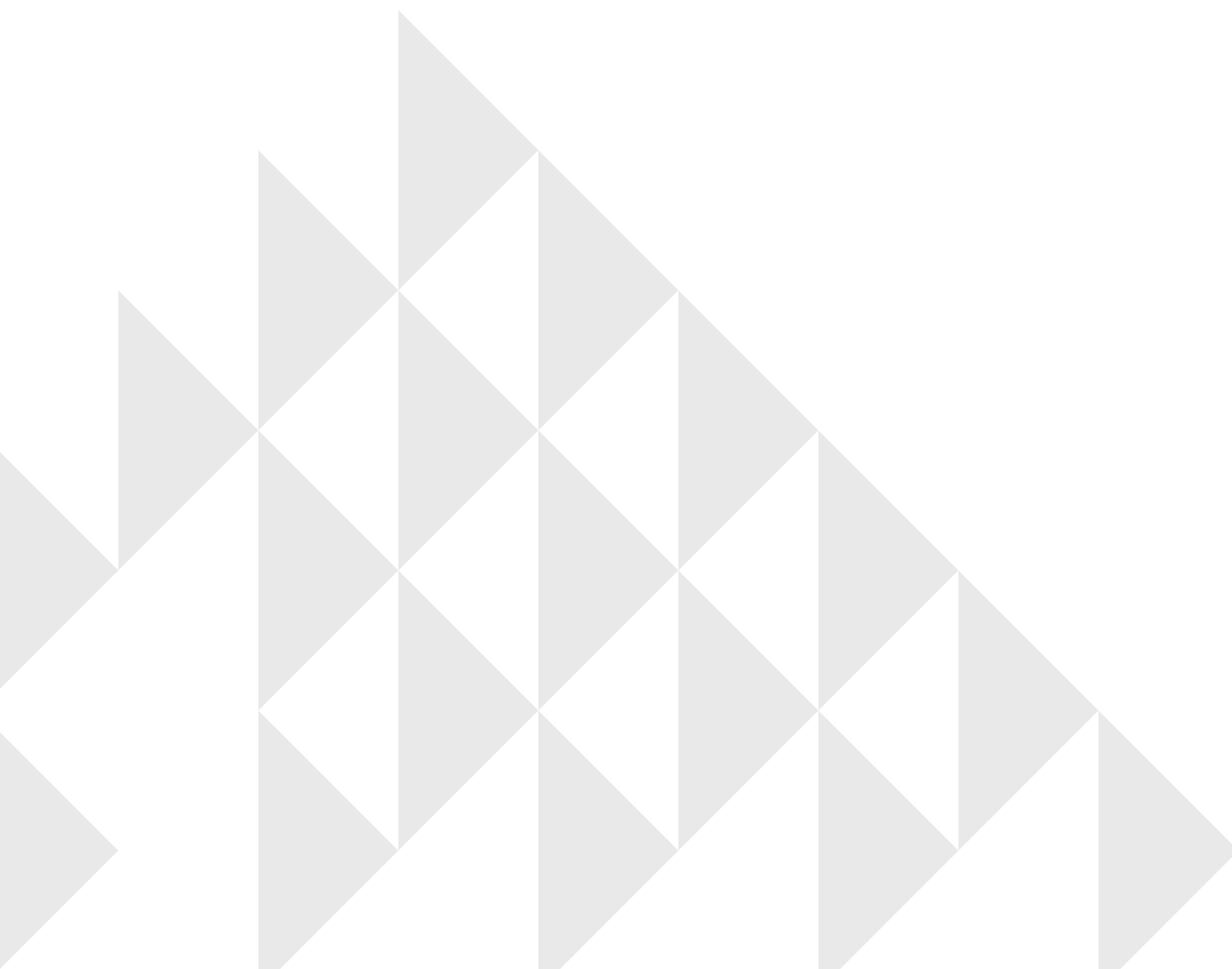
implementation; and Successful examples of GLOBALGAP adoption and certification.

### Research on the Status of Green Business in the Region

A green business adopts strategies that demonstrate commitment to a sustainable future. Many businesses are integrating environmental dimensions in their business planning and implementing sustainability action plans that will lead to greater value creation, improved productivity, and enhanced corporate image. In order to monitor and evaluate the effectiveness and performance of green businesses, indicators to measure the progress of environmental performance and sustainability are important.

In 2015, the APO commenced the Research on the Status of Green Business in the Region. One chief expert and six national experts from the ROC, India, Indonesia, ROK, Philippines, and Thailand were assigned to undertake the research. In 2016, the research team completed a report in which a framework of indicators to assess green businesses in APO member countries, i.e., the GP Excellence Framework, was refined. Based on the GP Excellence Framework, the research team was able to assess and rank all participating companies in the six countries in terms of green business. The final report will be published in 2017.

Program coverage: Green business definition, trends, and study; Analytical hierarchy process methodology; and GP Excellence Framework.



# INDIVIDUAL-COUNTRY PROGRAMS

## Training Course on Development of Productivity Practitioners for Colombia (DPP: Colombia)

Considering the success of the training course on Development of Productivity Practitioners (DPP) in producing productivity trainers and consultants in member countries and Africa, the APO implemented a similar course in Colombia in 2016 as part of its International Cooperation Program with nonmembers. Apart from transferring technical knowledge and expertise, the course also intended to showcase the success stories and best practices of the productivity movement in the Asia-Pacific region. In collaboration with the Centre of Science and Technology Antioquia (CTA), the two-week DPP course was held from 22 August to 2 September at Museo de Arte Moderno de Medellín, Medellín, Colombia.

The objective of DPP: Colombia was to develop the competencies of participants in the promotion and application of productivity

and quality techniques in organizations and industries. The participants were expected to provide advisory services to SMEs in Colombia on productivity enhancement and competitiveness after course completion. A total of 25 attended, comprising professionals from the public sector, academia, private sector, and SMEs. The APO deputed two resource persons from Singapore and Malaysia to conduct and facilitate the course.

Program coverage: Module I—Productivity concepts and implementation strategies; Module II—Productivity tools and techniques; Module III—Competencies as a productivity practitioner; and Module IV—Individual productivity and quality action plans. To observe and study productivity enhancement activities at the organizational level, participants visited two companies, lock, paint, and hardware manufacturer Dyna and advertising agency SM Digital. Both companies participated in ENPLANTA, a program organized by the CTA to improve productivity in Colombian SMEs.



Training course on the Development of Productivity Practitioners for the Science and Technology Centre of Antioquia, Colombia.

## Individual-country Observational Study Missions

Under the Individual-country Observational Study Mission (I-OSM) Program, a member country may send a mission(s) to one or more other member countries to study and observe recent developments and best practices in a particular area of interest relevant to its needs for productivity promotion. This program addresses individual member country needs in the pursuit of productivity enhancement.

In 2016, seven I-OSMs benefiting 50 professionals from six member countries were carried out on: Productivity and Quality Enhancement from India to the ROC; Productivity Movement for SME Development and Food Safety Management Systems for Enhancing the Productivity and Competitiveness of the Food Industry from Cambodia to Thailand; Productivity Measurement and Productivity Enhancement from Vietnam to the ROK; Improvement of Productivity and Quality of Big Companies through the Application of Productivity and Quality Models and Tools from Vietnam to Japan; Waste Management Systems and Policy from Thailand to the ROC; Productivity Measurement Implementation Study from Indonesia to Japan; and Promoting and Expanding Agricultural Business from the ROC to Vietnam.



*Delegates from Indonesia visiting the APO Secretariat.*

## Technical Expert Services

The main objectives of the Technical Expert Services (TES) Program are to develop trainers and consultants of NPOs as well as related organizations so that they can provide consultancy services to solve productivity-related issues. TES achieves these two main objectives through the assignment of experts who work closely with NPOs and other productivity stakeholders on the ground. The Secretariat plans and coordinates TES activities in close cooperation with the recipient NPO. The duration of TES projects is normally up to 12 days.

In 2016, 49 TES experts were assigned, with three carried over from 2015. The most experts assigned from within the APO membership were from Japan (15) and Singapore (eight), and the most from outside it were from the USA (four). Other experts came from Australia, Germany, Hong Kong, India, Indonesia, Jordan, ROK, Malaysia, New Zealand, and UK.

Overall, expert services received an average evaluation score of 91 out of 100 for the quality of service provided to members who utilized them. Based on information provided by NPOs, more than 5,000 participants, professionals, and employees benefited through lectures, presentations, consultations, and training conducted by the experts.

## Development of Demonstration Companies

Demonstration projects are designed to illustrate practical applications of productivity tools and techniques in businesses and other organizations. Demonstration companies convey success stories on the development and implementation of productivity improvement initiatives to inspire other organizations in their countries to make similar efforts. The APO assigns experts to the selected organizations to perform diagnostic studies, provide advice and consultancy on operations and management, suggest improvement plans, and help to implement the plans. The results are documented for learning by others.

Three demonstration projects started in 2015, including applications of material flow cost accounting (MFCA) in Mongolia, on-grid solar power systems for the promotion of renewable energy in Lao PDR, and applying resilient, resource-efficient, vibrant energy sources for the development of a green economy in India. Two of them were completed in 2016 and the one in India was ongoing. Another demonstration project on knowledge management for quality and productivity enhancement in the electricity and power sector was also introduced in IR Iran to follow up the commitment of the Secretariat in 2014. In 2016, four demonstration projects were initiated. The first involves the application of a quality management system (ISO 9001:2015) for SMEs in Cambodia, in collaboration with Honly Food & Beverages, Cam-Paint, and Leang Leng Fish Sauce Enterprise. The second covers MFCA-linked lean manufacturing for SMEs in the manufacturing sector in India, joining forces with Modvak Engineering India Pvt. Ltd., United Cores Pvt. Ltd., Reva Industries Ltd., Sanatan Autoplast Pvt. Ltd., Matrix Tools India, and Hind Hydraulics & Engineers. The third is to implement performance management architecture in Indonesia, in collaboration with Tesena Inovindo. The fourth is on the topic of MFCA in Pakistan, to be undertaken within Masood Textile Mills Limited. These four projects were scheduled to be completed in 2017.

## Bilateral Cooperation Between NPOs

NPOs carry out research, consultancy, training, and other capacity-building activities at national level based on their own unique structures and areas of expertise. The needs and requirements of NPOs are varied and continuously evolving in a rapidly changing socioeconomic situation in the region. The Bilateral Cooperation Between NPOs (BCBN) Program allows NPOs to learn from each other to address those unique needs and requirements. It also facilitates the dispatch of those

involved in the productivity movement from an NPO or similar organizations in one member country to another. The visits of high-level officials, policymakers, and opinion leaders to observe and study firsthand proven productivity policies and programs may be sponsored under this program.

In 2016, a total of nine BCBN study missions were organized by the APO involving eight participating countries: Cambodia; India; IR Iran; the ROK; Mongolia; Thailand; and Vietnam. Twenty-five delegates benefited from this program, and the missions covered different areas and perspectives based on the needs of each NPO, such as Best Practices and New Initiatives of NPOs in Promoting Productivity Improvement Programs, Development of Business Opportunities between NPOs, Productivity and Performance Excellence in the Public Sector, Innovation and Renewable Energy, and Green Productivity.

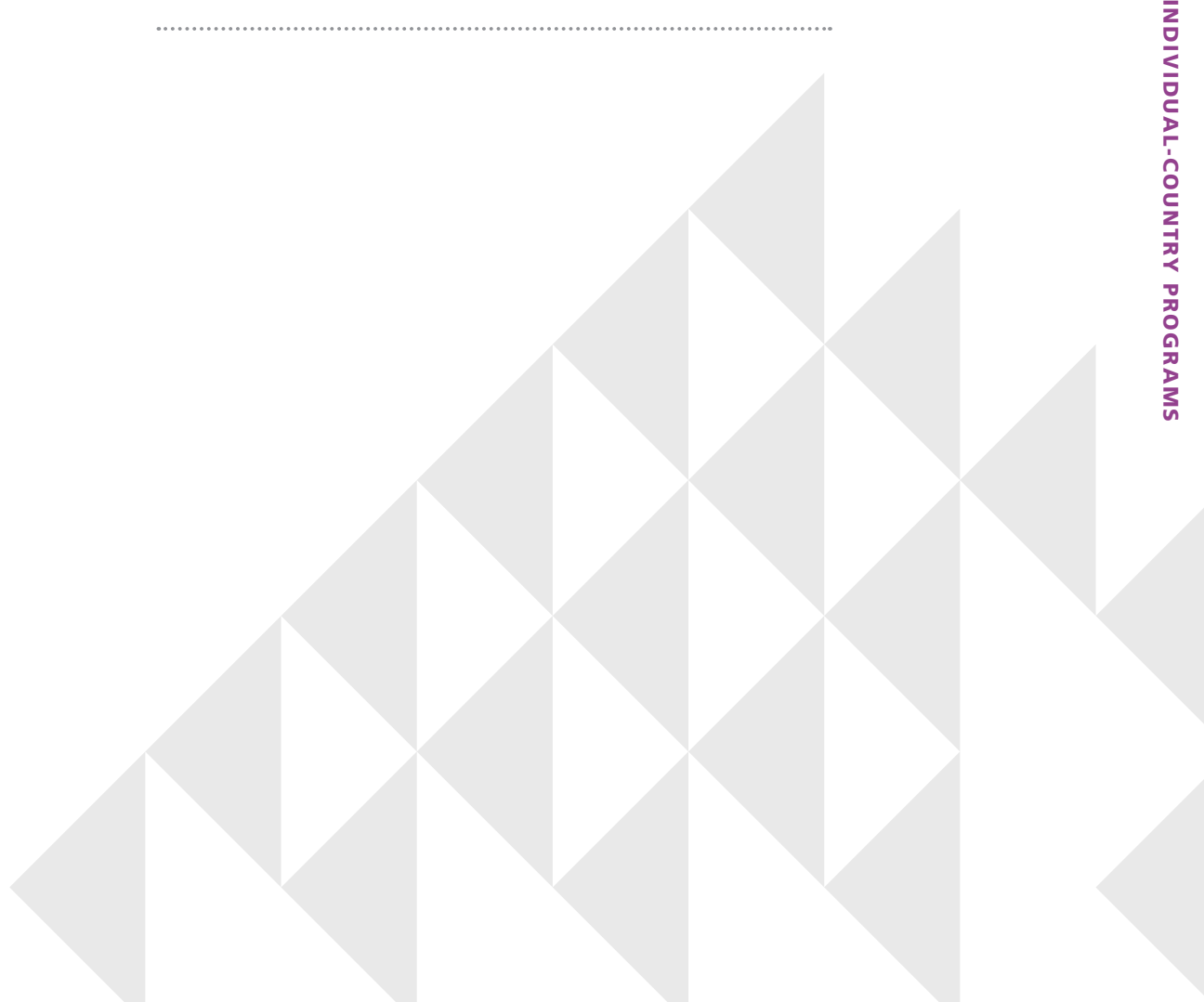
**National Follow-up Program**

Despite implementing several types of multicountry and individual-country projects, several NPOs raised concerns about the limited opportunities their countries had to participate in multicountry projects. Thus, the National Follow-up Program (NFP) was launched in 2015. The NFP is designed to provide equal opportunities for all countries to have better access to and benefit from APO projects dealing with subjects that are most relevant to their needs. Through the NFP, it was expected that

each country would have better access to APO technical and financial support and that the reach of APO projects would be expanded to wider groups of stakeholders.

The objectives of the NFP are to: 1) provide technical and financial assistance to NPOs or partner organizations in conducting national follow-up projects following specific multicountry projects; 2) support member countries in intensifying the dissemination of knowledge and information on productivity topics covered in multicountry projects; and 3) provide opportunities for more stakeholders from member countries to participate in national conferences, forums, workshops, and training courses on the themes and topics covered in multicountry projects. The aim is to strengthen the capacity of more numerous stakeholders in member countries in a cost-effective way and enhance the visibility of the APO.

In 2016, a total of 10 NFP projects were implemented in six APO member countries. Based on information provided by NPOs, more than 720 participants, professionals, and employees benefited from those programs. Ten resource persons from Germany, Malaysia, the Netherlands, Pakistan, Singapore, Sri Lanka, Thailand, and the USA conducted the national projects, supported by local experts/coordinators. Overall, the feedback from participants and implementing organizations was positive. The main challenge was that only a limited number of member countries have benefited from the NFP so far.





# EVALUATION OF APO PROJECTS

## Impact Evaluation Study of APO Projects Implemented in 2014–2015

The fifth Impact Evaluation Study (IES) was undertaken to determine the outputs, outcomes, and impacts of APO projects implemented in 2014 and 2015 in member countries and to draw up recommendations for the improvement of the design and implementation of future projects, including identification of possible new areas to address the needs of member countries. The study built on the insights gained from previous evaluation studies in approach and methodology and focused especially on assessing the achievement of results. Given the diversity of APO projects, six specific result chains formulated as part of the 2014 impact study were adopted in this study.

To reduce the considerable effort involved in collecting and processing huge amounts of quantitative data, SurveyMonkey was used as an online tool for collecting and analyzing the data. Around 2,500 participants were contacted by e-mail and around 300 responded, a good response rate considering the challenges of the online survey and narrow time frame.

In addition to the online survey questionnaire, semistructured interviews were conducted onsite through a short study mission to Lao PDR and the Philippines. The Strategic Planning Workshop for APO Liaison Officers in Tokyo provided the evaluator with an opportunity to interact with all Liaison Officers as well as APO Secretariat staff.

This impact study intentionally was not focused on the satisfaction rating of participants with the inputs or activities but rather on the achievement of results, factors contributing to those achievements, and the future course of improvements. The formulation of a result chain clearly defining the activities, outputs, outcomes, and impacts is not only necessary and useful for evaluating results transparently but also contributes to managing project/program planning, implementation, and monitoring in a result-oriented way.

The 2016 IES used an evaluation framework that is widely used and viewed as useful for evaluating projects and programs, i.e., the Organisation for Economic Co-operation and Development/Development Assistance Committee framework. It uses five criteria for assessing projects: relevance; effectiveness; efficiency;

impact; and sustainability. Using such an internationally recognized framework not only lends legitimacy to the impact assessment but also enables comparisons across different types of APO projects as well as the benchmarking of APO projects in the international arena.

The overall assessment of APO projects by the respondents was in general very positive. The total average rating was 86%, slightly higher than the previous IES rating of 85%. This places the APO at the higher end of programs implemented in the area of capacity development, particularly in the context of bilateral and multilateral cooperation.

The respondents rated Observational Study Missions (OSMs) (4.40) comparatively highly, followed by Workshops (WSPs) (4.37), Development of NPOs (DON) (4.37), Bilateral Cooperation Between NPOs (BCBN) (4.37), Conferences (CON) (4.33), and Training Courses (TRCs) (4.25). Comparing the overall assessment with the results of 2014, a slight improvement was identified in all six program types. To highlight only one aspect, TRCs were given comparatively low ratings, which is partly related to the nature of the program. However, an analysis of the comments of respondents showed that there are many possibilities to improve TRCs.

The respondents provided several suggestions, which are a rich resource for further analysis and including:

- ➊ APO projects should make more use of field visits, case studies, demonstrations, and practical examples so that productivity-related concepts and tools could be observed and analyzed as living examples, not as theoretical knowledge in a classroom setting.
- ➋ Networking and sharing of experience among peers were highly appreciated, and there was a demand for increasing efforts to create opportunities for more quality time for networking during projects as well as creating platforms for networking.
- ➌ Establishing a strong result-oriented monitoring system is a key to steering programs toward intended results as well as continuously improving results as a core management process.
- ➍ Improving result-based management is necessary to improve the visibility, continuity, and attractiveness of the APO–NPO network. In addition to increasing international pressure to become more effective, a strategy focusing on results is critical.



- 5 The competencies of key professionals in NPOs must be enhanced, making them champions to ensure the achievement of results.
- 6 Strengthen the capability of NPO consultants and ensure that their valuable knowledge and expertise contribute sustainably to the achievement of national goals and to the goals of partners.
- 7 Follow-up activities are required to anchor the learning and insights from APO projects as well as to provide further motivation to apply productivity concepts and tools. Some suggested that advanced courses should be created to deepen the knowledge of productivity subjects.
- 8 Improve the management of APO projects, as careful selection of relevant topics, appropriate participants, and capable resource persons defines not only their success but also their potential for yielding meaningful results.
- 9 Careful selection of participants in terms of age, language proficiency, and ability to transfer insights to their own organizations is crucial, as they also affect the motivation and learning opportunities of other project participants. Increasing the number of decision makers, especially from the public sector, in APO projects was another suggestion worth considering in future.
- 10 A significant group of respondents suggested improvement of applied training methodologies instead of expert-centered presentations. A more learner-centered approach, providing time for reflection, sharing, and development of new ideas for further improvement, might be valuable.
- 11 Action plan preparation exercises should be improved to make them more systematic and standardized, with clear follow-up mechanisms to track progress in terms of implementation.

### Onsite Evaluation of 2015 Projects

The APO implemented 56 multicountry projects for 1,180 participants in 2015. The evaluation of those projects was conducted based on end-of-project questionnaires intended to obtain feedback from participants on project content, project schedule, time allocation, time management, methodology used, physical arrangements, resource speakers/persons, field/observational/company visits, and overall evaluation. The evaluation report was finalized and submitted in 2016.


The feedback from participants indicated that their overall level of satisfaction with 2015 APO multicountry projects had increased compared with that in 2014 and 2013. Specifically, in the overall evaluation, 55% indicated that APO multicountry projects in 2015 were “more than expected.” This rating was a substantial improvement over the overall rating in the 2013 and 2014 evaluations. However, the inadequacy of site visits remained an issue over the last three years, as pointed out by participants in 10 of 56 projects. The resource persons cited the generally positive attitudes and enthusiasm of participants, who generally had a good mixture of experience in and knowledge of the subject. The same assessments were shared by the implementing organizations. Last-minute withdrawals or no-shows of participants were the only issue that affected some implementing organizations.

Some of the suggested recommendations to improve projects as well as to address associated issues included: extending project duration; increasing the number of site visits; and allocating more time for group discussions. One of the recommendations commonly shared by participants, resource persons, and implementing organizations was increasing the duration of some projects and organizing follow-up activities that would scale up learning to a more advanced level. There were also suggestions for the establishment of online discussion platforms for the sharing of best practices, success stories, and progress on action plans.

Similar to face-to-face projects, the videoconference (VC)-based e-learning courses were evaluated through end-of-project questionnaires to obtain participants’ feedback. Three VC-based e-learning projects were implemented in 2015, with a total of 655 participants. That was the first time for the APO to conduct e-learning courses through its in-house facilities instead of using the Tokyo Distance Learning Center facilities as in previous years.

Overall, more than one-third of participants believed that the e-learning courses were “more than expected,” while 60% rated them “as expected.” The e-learning courses received positive feedback from participants for good time management and physical arrangements. Participants also appreciated the interactive sessions with resource persons and groups of participants from other countries. Relevant, energetic resource persons with informative materials were also cited as a high point by participants. These were also the high points noted in the previous year’s evaluation. The views of all three parties were unified on organizing follow-up projects on more advanced topics and linking the e-learning to face-to-face follow-up training courses.

In addition to VC-based e-learning courses, the APO also offers the self-learning e-course format. In 2015, seven self-learning e-courses were implemented, an increase of two in comparison with 2014. Regardless of the increase in the number of courses conducted, in 2015, there was a decreasing trend in terms of the number of participants registered, number who took the final exams, and final exam pass rate in the APO’s self-learning e-courses. This indicates that the topics of the courses are neither up to date nor sufficiently attractive. More efforts are needed to make course contents more meaningful. NPOs should be encouraged to expand the participant database and improve the marketing of the e-learning courses. Linkages should be formed with academia, other associations, and APO alumni through NPOs to enhance the visibility of the courses. NPOs and the Secretariat should also explore other methods to increase the demand for these self-learning e-courses. In the near future, the ongoing effort of the Secretariat to move the self-learning e-courses to an interactive platform is expected to help revive interest in them, and more substantial courses with greater impact will be offered.



# INFORMATION PROGRAM

The APO Information Program includes information and communication technology (ICT) infrastructure, public relations (PR), and publications. While the ICT infrastructure is a critical organization-wide support on which the entire operations and work flow hinge, the other two components (PR and publications) play a key role in information dissemination, capacity building, and promoting the mission of the organization among stakeholders in member and nonmember countries as well as other organizations, including intergovernmental bodies and industry.

In a global economy that is now largely dependent on ICT to support and drive growth, while expanding cooperation and collaboration, in 2016 the Secretariat decided to move toward a digital office environment. It also decided to use online technologies and newer platforms like mobile devices to connect, communicate, and disseminate information as well as to conduct projects. Numerous efforts were made during the year to realign information programs and strategies.

## PR

In the course of its 56 years of existence, the APO has come a long way, playing a key role in dissemination of its vision and strategic goals, as well as in building capacities through various online and print publications, reports, and traditional PR activities. In over five decades, print served as the mainstay of all communication needs. However, the last several years have seen the effectiveness of print diminished and electronic media taking over its role. There has been a very rapid maturing of digital technologies, including mobile ones. The shrinking form factor of devices coupled with their increasing level of sophistication and computing power has brought about a disruptive change in the way strategic messaging is done and content is delivered.

In today's hyperconnected world, the needs and expectations of stakeholders and users are more multifaceted as they use different devices, digital channels, and platforms. To keep them informed, updated, and engaged, it is imperative that the Secretariat transform its messaging and communication models by leveraging a multimodal digital strategy. This approach is aligned with the Secretariat's vision of going digital and becoming a "less-paper" organization. In addition, the existing online platforms of the APO are fast approaching the end-of-

life stage, especially when it comes to serving the needs of stakeholders and users in an interactive, engaging manner.

In 2016, the Secretariat decided to review its communication and information dissemination systems and looked into the possibilities of an overhaul and transformation to utilize next-generation technologies and tools for its outreach programs. The digital communication transformation process envisages the use of an integrated approach, where all components including the underlying tools, technologies, and platforms for design, user interface, and navigation, as well as content development across various media, are knit together in a seamless, unified manner. This approach allows the information and public relations (IPR) team to optimize resources and management time by making the APO web portal, social media networks, and mobile apps a cornerstone of its communication strategy.

Work on part of the strategy, social media networks, was well underway during the year, while the initial research and planning for the revamp of the APO website was completed during 2016. The strategy includes creating more avenues for communicating APO success stories through the traditional text-based approach and a more impactful audiovisual approach, creating a platform for better engagement of APO alumni and experts, and setting up a knowledge portal. These initiatives will be carried forward for phased implementation in 2017.

## Social Media

In 2016, the APO made a strategic shift in its outreach approach by deciding to use social media platforms for increasing its visibility and positioning itself as a thought leader for productivity improvement and economic development in member countries. With social media networks gaining prominence worldwide as key information dissemination channels, the APO decided to adopt an integrated strategy for managing its social media program and related platforms for wider stakeholder outreach.

The APO Secretariat improved its Facebook presence and shared extensive information about the organization, its initiatives, plans, and developments with stakeholders, followers, and target audience groups. It also curated relevant news and research articles to engage individuals across the region and beyond. Social media channels were also used effectively to generate

**Asian Productivity Organization**  
December 5, 2016

Digital economies are driven by technology. To flourish in such a setting, we require a new generation of workers to help in transforming the country into a producer of technology, and not merely a user. In this respect, university education plays a big role in producing the 'innovative' worker, and collaboration seems to be the way forward. To know more, read: <http://bit.ly/2fOYaRy>



**Collaboration the way forward**

Technology is the backbone of a digital economy. To thrive in such an environment, we need a constant supply of workforce that is creative and innovative, with the knowledge and skills to use new technologies efficiently. We need a new...

NST.COM.MY

**Asian Productivity Organization** added 7 new photos.  
December 9, 2016

Participants attending the Multicountry Observational Study Mission on Strengthening Public-Private Partnerships (PPP) in Developing Competitive Agribusiness in Kuala Lumpur, Malaysia visited Holstein Milk Company, Fisheries Development Authorities of Malaysia (LKIM) in Kuantan, Padang, and Malaysia Agriculture, Horticulture & Agri-tourism (MAHA) as a part of the study mission during the last three days.

The field visits focused on trends, key issues and challenges in developing and sustaining PPP projects and review policies to create an enabling environment for PPPs to create sustainable, competitive agri-businesses in member countries.



interest in APO programs, projects, publications, and online initiatives. The APO adopted video streaming and offered the first live Facebook coverage of the inaugural session of the

57th Workshop Meeting of Heads of NPOs (WSM) in Putrajaya, Malaysia, in addition to live streaming of the Secretary-General's opening remarks during videoconferencing (VC)-based courses.

The Secretariat closed 2016 with a 106% increase in likes on the APO Facebook page. It also created more engaging content for its YouTube channel and established a presence on Twitter (@TheAPONews), with the overall content volume rising by over 200% across all social media channels as compared with December 2015. With a total reach of 636,217, APO posts created 1,489,621 impressions on Facebook. On Twitter, the Secretariat reached 61,465 unique accounts creating 70,655 impressions. An "impression" is the total number of times posts are delivered to the social media streams of accounts reached. The number of overall impressions generated by tweets posted is also known as "expression."

The main approach of the social media initiative was to achieve digital amplification of initiatives and events; promote member country-specific events and updates on workshops, training, and e-learning sessions; empower and engage member economies through "news-for-use" content; and make it easy for all to access APO-related news, as well as newer products like reports, books, and online tools, e.g., the Asian Economic Productivity Map (AEPM). As part of the initiative to strengthen its social media platform and bring more predictability to posts and tweets, the content was categorized into four basic types: News about the APO; News/Reports for Use; Announcements; and On-the-ball Project Updates. Accordingly, the social media team created relevant hashtags for each content type. The hashtags are keywords or phrases preceded by #, making the social media posts accessible to all with similar interests, even if they do not like or follow the handle or page by indexing all contents with that specific hashtag on the same page. It also makes social listening and tracking of the content easier and helps to promote the keywords better.

For the first time, the APO Secretariat decided to use social media for simultaneous dissemination of its press releases globally. The approach was used as a test case for the 57th WSM in Putrajaya and later for the release of the *APO Productivity Databook* and launch of the AEPM. An additional step was the social media campaign for the AEPM, as described below. The initiative helped the APO reach focus groups in member countries, as well as in Africa, Europe, and North America, with the databook and AEPM receiving more than 175 mentions in publications and journals. These included course materials used by professors at Harvard University, University of British Columbia, and University of Alberta, as well as the online library of the London School of Economics and Carleton University.

**AEPM Pilot Campaign**

While the APO social media team focused on curating relevant, thought-provoking content, including its own and third-party research reports and publications, for organic outreach on social

media platforms, in November 2016 the APO also conducted a pilot project to evaluate the outcome and impact of a paid social media campaign on two of its social media platforms, Facebook and Twitter, for member countries, North America, and Pan African Productivity Association members.

The three-day campaign from 9 to 11 November announced and promoted the AEPM, the open-data online resource launched as an extension of the *APO Productivity Databook* project research. Since the AEPM is an online tool that provides a dashboard view of productivity data on 30 Asian countries and key global reference economies covering 70 economic parameters, it was considered the most suitable for the pilot initiative in sync with the digital communication transformation strategy.

The campaign on Facebook and Twitter was aimed at assessing the level of engagement and how such efforts could help the APO increase its visibility. While the direct objective was to promote the AEPM and encourage people to use it, it also led to increased awareness of the APO and attracted more followers to its social media channels. The campaign increased traffic to the APO website since the updates had links to the AEPM section on it.

The IPR team tracked both APO website and AEPM traffic data before and after the campaign period to assess its impact. The results showed a greater than 1,000% increase in average weekly website visits and a 481% increase in page views during the period. There were also more than 15,000 new-user visits to the APO website, while Facebook page likes increased by 45% during the campaign period, crossing the 5,000 mark. The Twitter account launched in October registered a 400% increase in followers, from 35 to 175. The AEPM-related post received 35,577 clicks on Facebook and 20,000 clicks for tweets. Overall, 1.26 million online users were reached on the two platforms, 57% on Facebook and the remaining on Twitter.

During the AEPM pilot campaign period, 9–11 November, the APO website received 16,979 unique visitors with a total of 28,089 page views during 19,980 sessions.

### Integrated Social Media Program

During 2016, the Secretariat also worked to create a roadmap for its Integrated Social Media Program as part of the overall digital communication transformation strategy, including integration with the cloud-based customer relationship management (CRM) system expected to be introduced in 2018. The IPR team began consolidating the various APO pages and creating a separate channel for engaging APO alumni and experts on Facebook. While the YouTube channel will be integrated with the APO website to create APO TV, the Secretariat started expanding its presence on other platforms like LinkedIn, Slideshare, Instagram, and Google+. Beginning in 2017, the Secretariat will be opening those platforms in a phased manner.

The objectives of the Integrated Social Media Program are to:

- Strengthen the APO brand by increasing its voice and helping in overall reputation management.
- Increase the visibility of the APO and its activities; the level of engagement with stakeholders in member economies as well as nonmembers like Colombia, Myanmar, and Pan African Productivity Association; and reach more researchers, analysts, academia, think tanks, productivity practitioners, and domain experts in developing countries along with the mass media throughout its membership.
- Develop a wider network of international organizations and promote the APO as a credible partner and promoter of productivity in the region.
- Enable the APO to connect and develop wider networks in nonmember countries and with other international organizations/institutions like researchers, domain experts, key opinion leaders, and influencers.
- Create a simple, user-friendly system for exchanging ideas and feedback on services online.
- Disseminate information among the public about the APO, its workshops, conferences, various research initiatives, publications, and engagement opportunities, thereby creating awareness of productivity issues and approaches and widening outreach among different communities.
- Work as an additional channel for distributing press releases and supplement traditional methods of PR by enabling the Secretariat to attract an unstructured audience.
- Become more visible among similar organizations, agencies, and institutions as well as target groups like SMEs, universities, etc. to foster networks and relationships resulting in collaborations and partnerships.

### PR and Media Relations

While the Secretariat effectively used social media to disseminate press releases and reach global media, it also used an online wire service. That was used specifically for two major campaigns revolving around the Eco-products International Fair (EPIF) 2016 in Bangkok and for launching and promoting the AEPM. From August 2016, the Secretariat started using its social media platforms to circulate press releases and reach the unstructured global audience. The impact was a significant 61% rise in overall media coverage, up from 497 times in 2015 to 799 in 2016. The visibility created in member countries and other areas like Africa, Australia, Europe, Latin America, and North America generated an average overall advertising value equivalent of more than USD200,000.

The APO intends to create a digital newsroom as part of its new portal and will launch the monthly APO eNewsletter containing program updates, upcoming projects, new publication announcements, and insightful articles. The new strategy includes webinars to create awareness in the mass media and programs for journalists to build their capacities in reporting on productivity trends in the digital era and on the emerging areas of Industry 4.0, sustainable development, smart

agriculture, smart services, and technology-driven public service or e-governance.

**Branding and Logo**

Consistency in the brand image and logo is important for creating a mind share and increasing organization recall. During 2016, the Secretariat made efforts to maintain uniformity in design and content in across all external communications, including the Annual Report, reports of the WSM and Governing Body Meeting (GBM), project-related documents, reference papers, evaluation documents, circulars, etc. The uniformity of content and language ensures clarity during project implementation and among all stakeholders, while uniformity in design results in an easy brand connect and recall.

In 2016, a flyer was developed to support the AEPM campaign, which was used as both an insert in the *APO Productivity Databook 2016* and a post on social media. The IPR team also created a new

logo for the eAPO and the WSM in Putrajaya. Both logos drew inspiration and elements from the current APO logo and use the same orange and blue colors for a better brand connect.

The logo for the APO Sustainable Productivity Institute uses the gear element in the APO logo, with orange and blue. Half of the gear has a digitized look with dots moving outward. While this represents the digital world, the outward movement of the dots signifies out-of-the-box thinking. The logo features a representation of a human figure with scroll in hand, identifying the connection to a training institute.

The WSM logo was based on an abstract element from the APO logo by zooming in on the area between the gear teeth. This indicates that the mechanical benefit of gears can only be realized when many are in contact to move or deliver a load factor. Thus, to avoid wear and tear among the gears, their teeth and spaces should always be optimally lubricated. This corresponds to the meeting of NPO Heads as the “lubricant” essential to keep the APO moving forward. That movement is depicted by an abstract flying object. For the text, it was decided to use a modern version of a classic font recognized and appreciated internationally.



**Asian Economic Productivity Map**

Presenting the Asian Economic Productivity Map (AEPM), a user-friendly online resource that gives free access to productivity-related data of 30 economies and benchmarks.

The AEPM open data initiative is part of the APO mission to help raise productivity in the Asia-Pacific to new levels.

Come and be a part of this Big Data binge. Play with it, analyze it, benefit from it.



**Why AEPM?**

- FREE Subscription-free Access
- 40 Years' Empirical Data
- 70+ Productivity Parameters
- 33 Countries, 10 Economic Groups

**Who Can Use?**

- Government Planners
- Policymakers
- Business Analysts
- Economists & Academics
- Investment Bankers
- Trade Organizations
- Entrepreneurs
- Industry Leaders
- Media Correspondents

Data at a click of your mouse!

**ACCESS NOW**



<http://www.apo-tokyo.org/wedo/measurement/aepm/>



**EPIF 2016**

As part of initiatives to promote green, sustainable development in member economies, the APO has organized the EPIFs in coordination the Green Productivity Advisory Committee (GPAC) since 2004. During 2016, the Secretariat worked closely with the Federation of Thai Industries (FTI), Ministry of Industry of Thailand, and FTPI to organize the 10th EPIF at the Bangkok International Trade and Exhibition Centre, 8–11 June. The Secretariat also set up a booth at the EPIF to highlight the organization’s role in helping member economies improve their productivity.

While the first press conference to announce the EPIF in Bangkok was organized in December 2015, a series of promotional activities, including a mix of mass media interactions, general press releases, media visits, and a curtain-raising roadshow on the campus of the Office of the Prime Minister of Thailand were undertaken. The day before the Opening Ceremony, representatives from the FTI, FTPI, and APO also visited the Office of the Prime Minister to promote the EPIF 2016. A road show was organized during the occasion, and the Thai government expressed high expectations and support for the event.

The second press conference for the EPIF was organized in May 2016 in Bangkok to share details on the exhibition and the conference and updates on preparations for the fair with the Thai media. Two press releases (before and after the fair) were also issued in member countries through NPOs in June. A press release was also disseminated through the paid wire service. Media interactions with the Secretary-General, GPAC Chairperson, and other key dignitaries were organized during the four-day

fair and conference. The initiatives helped create high visibility in 16 countries in five major languages, including Chinese, English, Indonesian, Japanese, and Thai. The EPIF 2016 received coverage in 279 websites, newspapers, and magazines and on 22 TV and radio channels.

### Success Story Videos

The Secretariat developed eight short success story videos in 2016 to showcase the impact of APO projects in terms of individual benefit and overall community development, in the hope that they could be replicated in other member countries. The documentaries in English chronicle the stories in a lucid, free-flowing format and have been well received. The success stories were part of the mandate announced by the Secretary-General during the 57th GBM to show the results achieved by demonstration companies as well as testimonials of participants in APO projects. More success stories will be created by the APO in 2017.

### Website

The APO website continued to serve as a key repository of productivity-related information, from a basic glossary to program updates, productivity reports, and data. The website at [www.apo-tokyo.org](http://www.apo-tokyo.org) helped the Secretariat provide comprehensive information on the APO and its activities through news and photo articles, press releases, and special announcements. Other information tools for both APO members and the public were made available online, such as project notifications, e-editions of publications, current and past issues of the *APO News*, statements by the Secretary-General, and links to the websites of NPOs and APO-related organizations. Another resource was the database of APO-certified Productivity Practitioners and free-access productivity data from research the Secretariat conducts in partnership with Keio Economic Observatory of Keio University, Tokyo.

To make that research data more accessible, the Secretariat launched the online open-data AEPM that provides a graphic dashboard view of productivity and economic trends in 30 Asian countries and multiple benchmark economic groups including ASEAN, EU15, the Gulf Cooperation Council, South Asia, and USA. Besides data on per-worker labor productivity, per-hour labor productivity, and total factor productivity growth rates, the AEPM provides information on labor productivity growth for sectors like agriculture, manufacturing, wholesale and retail, transportation, and communication. Data on other economic parameters including output, capital, demand, income, population, and prices are available as one-point references on the AEPM.

During 2016, the Secretariat reviewed the existing website. For a better understanding of various end-user aspects, including the look, feel, and content layout, a benchmarking review was conducted against other economic, policy-oriented, and

macroeconomic sites, such as the Asian Development Bank, Organisation for Economic Co-operation and Development, World Bank, and World Economic Forum. The review indicated that there was a need to make the presentation, content design, and site navigation more contemporary and easier to search. It also helped identify new approaches to messaging and presentation formats.

Based on the review and feedback during the 57th WSM, it was decided to convert the APO website into a repository and knowledge management portal on productivity best practices and trends, a goal that was also cited by member countries. The new responsive portal will have an advanced content management system and be fully integrated with the social media platform, including blog, digital newsroom, APO TV, APO podcast, and webinar features. It will also host an online discussion forum, Digital Newsdeck, eLibrary, and interactive geotagging map for projects.

The digital age enables editors and content curators to determine which types of data, news, infographics, and videos work well with which audiences. The new portal will have features for user behavior analysis, including reports with geographic “heat maps” and demographic user segmentation in terms of preferred content. Those insights can be converted into actions by website content managers and editors and the digital newsroom. The new website will be responsive to the form factor and size of user devices, including laptops, tablets, and mobile phones. The new APO Portal will be developed in phases. While the new portal is scheduled to be launched in mid-2017, some of its functions will be completed by end of 2017.

### APO Honorary Fellows

Since 1978, the title of APO Honorary Fellow has been conferred by the APO Governing Body on former APO Directors, Alternate Directors, NPO Heads, Secretaries-General, or APO Liaison Officers in recognition of their outstanding contributions to the organization. The conferment includes the presentation of a certificate signed by the APO Chair and Secretary-General and a memento. The final list is selected based on the following guidelines set by the APO Governing Body at its 19th Session held in 1977:

Whenever an APO Director, Alternate Director or NPO Head as well as the Secretary-General have contributed to the APO by attending either the Governing Body Meeting (GBM) or the Workshop Meeting of Heads of NPOs (WSM) for five times or more, he or she shall, upon departure from their posts, be made an Honorary Fellow of the APO, and receive a certificate and appropriate memento.

When an APO Director, Alternate Director or NPO Head has served for a period of five years or more but do not satisfy the above-mentioned attendance requirement, and an APO Liaison Officer has done outstanding work and has attended

the Governing Body Meeting or the Workshop Meeting of Heads of NPOs, he or she may be eligible to become an Honorary Fellow of the APO subject to screening by a committee composed of the APO Chairman, Vice-Chairmen, and the Secretary-General.

Based on the above guidelines the Secretariat recommended five names for conferment of the title of APO Honorary Fellow 2016, which was sent for the approval of the APO Chair (APO Director for the Philippines), 1st Vice Chair (APO Director for Singapore), and 2nd Vice Chair (APO Director for Sri Lanka) for their concurrence. The Secretariat received approval from all of them for the following list of Honorary Fellows (in national alphabetical order):

- Dr. Md. Nazrul Islam, Former APO Alternate Director for Bangladesh and NPO Head
- Dr. Eugene Yu-Ying Lin, Former APO Liaison Officer for the ROC
- Mr. Taito Waqa, Former APO Director for Fiji
- Mr. Rajeshpal Sandhu Singh, Former APO Liaison Officer for Singapore
- Dr. Ngo Quy Viet, Former APO Director for Vietnam

### Productivity Promotional Materials

In its effort to popularize the productivity concept, the APO produces a wide range of promotional materials and distributes them to NPOs and others so that the productivity message can be conveyed to member countries and elsewhere. One of the key tools of such materials for branding and information dissemination is the APO desktop calendar. The Secretariat decided to use the 2017 calendar to communicate the changes being adopted by the organization.

Accordingly, the theme and design of the 2017 APO calendar reflect the spirit of innovation and transformation in the digital era. The 12 monthly themes were: Smart Farming; Smart Industry or Industry 4.0; Green Industrialization; Sustainable Development; Information Technology; The Internet of Everything; Autonomous Robotics; 3D Printing; Smart Cities; Smart Technology; Product Quality; and Green Energy. The 2017 calendar also featured national holidays of APO members with color coding for easy identification.

In addition, original APO items such as eco-bags and baseball caps with the APO logo were designed to be given to delegates or project participants at different venues. The eco-bags were distributed during the EPIF 2016.

### Publications

The APO produces productivity-related publications and training aid materials for dissemination to NPOs and stakeholders in member countries. Eight project-based reports and four books were published during 2016, including the *APO Databook 2016*. In future, the APO will actively engage with other international organizations and consulting firms to create high-value publications, white papers, periodicals, and journals.

Community-centric, content-based, capacity-building initiatives have gained greater prominence with the emergence of IT-based platforms, from social media and other web-based information dissemination tools to e-learning technologies. The active use of e-platforms by stakeholders in member countries has led to significant changes in the publication and dissemination strategies of the Secretariat.

In sync with new-age media, the IPR team has increased its focus on producing information materials, publications, and training aids in digital formats. This allows faster dissemination of information and greater outreach. The Secretariat has decided not to produce hard-copy editions of its publications. It plans to distribute publications through different web-based and mobile platforms. Overall, the APO has three publishing programs: General Publications; Report Format Titles; and Special Publications. While the APO has been producing more electronic editions in PDF of the Report Format Titles and Special Publications since 2003 and these are available in downloadable format through the APO website, the Secretariat is considering using more advanced digital publishing tools for all its publications.

### General Publications

The APO publishes a bimonthly newsletter in English, the *APO News*, which features write-ups on recent APO projects and activities, regular columns by international productivity experts, and coverage of NPO activities and other special events. Aside from its electronic version on the APO website, the print and e-mail versions of each issue are disseminated to over 9,800 readers worldwide, including NPOs, APO alumni, project participants, other international organizations, government agencies, NGOs, educational institutions, and individuals.

In 2016, the Secretariat decided to increase the number of *APO News* pages from eight to 12. The magazine was also redesigned to give it a contemporary look and feel with a higher visual-to-text ratio. While the increase in the number of pages allowed more content, the change in cover design and modern page design with standardized folio, grid, and thematic logos helped make the publication easier on the eye and more reader-friendly. Many efforts were made to improve the content quality by engaging domain experts to write on trends and technologies. The experts who contributed to the *APO News* in 2016 included Prof. Gunter Pauli, author of the bestselling *The Blue Economy*; Rae Kwon Chung, Advisor to the Chair of High-level Expert and Leaders Panel on Water and Disaster for the Secretary-General of the UN; and Dr. Woodrow Wilson Clark, Founder and Managing Director, Clark Strategic Partners.

Going ahead, the *APO News* will be converted into a monthly digital newsletter sent as an electronic digital mailer (EDM). This will improve reader accessibility through different form factor

devices, as well as through social media channels. It will also enable the Secretariat to increase its reach by making it easier for recipients to browse the content at the click of a button. Since the EDMs will lead readers to specific APO website pages, it will also help the Secretariat gather valuable insight into the types of content stakeholders are interested in, thereby enabling it to meet the specific information needs of member countries.

### Report Format Titles

The Report Format Titles are a unique set of publications resulting from specific APO projects, such as preliminary reports from selected research projects, proceedings of study meetings, and records from workshops or seminars. In 2016, the Secretariat published a total of nine such titles focusing on topics ranging from Green Productivity policy matters, the knowledge economy, entrepreneurship, benchmarking in food manufacturing as well as the logistics subsector, and public-sector productivity. The following publications were released in 2016:

- *Policy Development for Green Productivity Promotion: Evidence from Asian Productivity Organization Member Economies*
- *Development of a Framework for Cooperation between the APO, NPOs, and National Institutes of Technology for the Development of Productivity Courses*
- *New Perspectives on Productivity in the Knowledge Economy*
- *Report on Entrepreneurship Initiatives in APO Economies*
- *Benchmarking Research Project on the Food Manufacturing Sector in Asia*
- *Recent Trends in Public-sector Performance and Productivity in Europe*
- *Research on Need Assessment of APO Member Countries*
- *SME Warehouse Productivity: Benchmarking the Logistics Sector and Goals That Companies Should Go for*
- *Measuring Public-sector Productivity in Selected Asian Countries*

### Special Publications

Special Publications cater to specific purposes such as to assist NPOs and consultants in their training efforts or for special events organized by the APO. Among the five titles planned for release in 2016, the Secretariat published three since the contents of two of the planned manuals were not finalized. The Special Publications released during the year included the *APO Productivity Databook 2016*; *Manual on Good Agricultural Practices (GAP)*; and *Business Excellence Models and Awards for the Public Sector: A Guidebook for National Productivity Organizations*.

### Information Technology Program

Information technology (IT) plays a key strategic role in driving the digital initiatives undertaken by the APO. IT ensures the business continuity of the Secretariat, building and maintaining systems and networks so that its critical functions of electronic communication, system oversight, and

data access are not disrupted even in cases of unforeseen emergencies. Furthermore, protection of the valuable data and information resources of the organization is a priority for the sustainability of APO activities. Everything from PR to operations to human resources management relies on IT to provide support for the applications they use as well as the overall IT infrastructure.

During 2016 under the IT Program, the Secretariat launched the new self-e-learning portal, revamped the project management system (PMS) to ensure that the workflow and database structure were uniform, and created infrastructure that can run on similar lines as the proposed CRM system that is expected to be completely rolled out by 2018. During the year, the Secretariat continued VC-based e-learning courses, with the IT team providing important infrastructure support in Tokyo as well as in member countries where those courses were conducted.

With the need to adopt cloud-based IT infrastructure and improve the dataflow and speed of workflow transactions to connect internally and with member countries, the bandwidth connectivity speed was increased from 200 mbps to 1 Gbps. This was also done keeping in view the rollout of the CRM system and the enterprise resource planning (ERP) solution that the Secretariat is planning to implement in phases beginning in 2017, as well as to ensure seamless connectivity for the VC facility and to meet the larger objective of steering the Secretariat toward a digital workplace environment. While regular IT activities, including helpdesk support and maintenance, continued to remain the core of overall activities, the Secretariat also spent considerable time in process mapping and planning for the implementation of the CRM and ERP systems, and mobile app platform for the self-e-learning courses. The mobile e-learning platform will be released during the 59th GBM in IR Iran, 10–12 April 2017.

### APO Self-e-learning Portal

The APO set up an e-learning portal (<http://www.apo-elearning.org/moodle19/>) on its website to host a variety of distance-learning projects, including web (Internet)-based courses and self-learning e-courses. The web-based courses require registered participants to log onto online sessions. Those taking self-learning e-courses can enroll directly or through their NPOs. In 2010, the Secretariat initiated intensive discussions to evolve more structured self-learning e-courses including monitoring of participants, examinations, and certification. IT played a key supporting role to ensure that each of these individual projects were implemented smoothly.

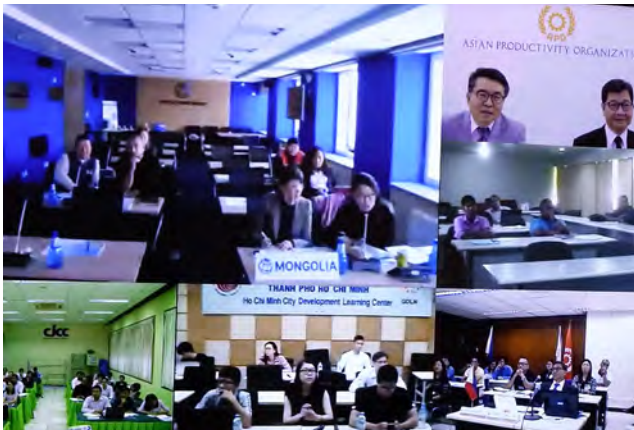
During 2016, the Secretariat launched a modern, responsive self-e-learning platform with new features, enhancements, and contemporary design. The new e-learning platform was developed to support the target of training 100,000 individuals as described in the APO Roadmap to Achieve Vision 2020. According to the roadmap, of the targeted 100,000 individuals



to be trained from member countries, nearly 70% should come from self-e-learning courses. Therefore, it was important to make the self-e-learning portal more user friendly, engaging, and interactive in nature. In terms of content, the Secretariat developed two pilot interactive courses covering industry and agriculture and made them available on the self-e-learning portal. It will continue to generate more interactive courses including those for a mobile device-based platform. The Secretariat rebranded the e-learning portal with the focus on sustainable productivity and growth. Accordingly, the beta version of the new e-learning portal of the APO Sustainable Productivity Institute was completed in December 2016. That new portal was expected to be launched during the next GBM in IR Iran. The Secretariat also initiated the development of a mobile app for the new e-learning portal to be launched in 2017.

**VC-based courses**

The Secretariat began developing its own VC platform to offer e-learning courses in 2015. In 2016, the APO organized three VC-based e-learning courses (in six sessions) on Total Productive Maintenance Applications in SMEs, Value Addition to Agrifood Products, and Innovative Approaches in Marketing of Agrifood Products, which attracted more than 550 participants from member countries. The Secretariat conducted surveys and coordinated with vendors including various VC centers to schedule those courses, ensuring that the sessions were executed flawlessly.



**PMS upgrade**

The Secretariat has been using a custom desktop-based PMS platform since 2010. The PMS is the digital repository of APO projects and other information such as the details of resource persons. Although the Secretariat is planning to migrate to a cloud-based CRM system, the need to ensure business continuity required urgent improvement of the current PMS, which was enhanced. This will be the final version of this PMS before the migration to a new cloud-based system in 2017 and 2018.

The PMS required analysis and review of program-related data by the APO and member countries, and new fields were added

the PMS database. The revamp also involved the creation of master data for country name sorting, a button to trigger the sorting function, and the addition of new fields in the database like project codes to enable advanced search functionality. The overall search functions of the PMS were improved through modification of the partial-match option and retrieval of full names on the Advanced Search page. New features include checkboxes to select participant and expert data for export, a field to enter values for venues, and revision of the project data import/export format. The revamped PMS supports changes in formatting for the export of finance-related data as an important feature.

**APO CRM System**

Another important area that the Secretariat examined in 2016 was a cloud-based CRM system to support new initiatives in coming years. Member countries had urged the Secretariat to become more cost-effective and productive, and thus in 2016 the Secretariat finalized a detailed plan after identifying the APO's requirements. The aim of the new CRM system was to replace the existing PMS by adopting a more advanced, agile, cloud-based CRM system for the greater benefit of member countries as well as of Secretariat staff. The CRM system deployment plan was discussed at the 2016 Liaison Officers' Strategic Planning Workshop. The Secretariat expected to introduce the new CRM in 2018.

The project was conceptualized keeping in view member country requirements for eliminating e-mail attachment-based communication and streamlining information sharing between the Secretariat and NPOs. Through a login-based control, the new system will allow NPOs to access program- and participant-related data directly as well to extract country-specific data for analysis and reporting. The CRM system will automate the nomination process, giving complete control of reviewing, selecting, and forwarding candidates' nominations to the Secretariat by NPOs online with one click. The cloud-based software will also compartmentalize country data for higher-level security and to meet privacy concerns, allowing NPOs to access only their country data.

Overall, the CRM system is aimed at driving the Secretariat's objective of improving efficiency by creating a digital workflow that is eventually expected to replace the current more manual processes, improving collaboration, transparency in processes, and accountability, as well as enabling data mining for faster, better, smarter operations and program delivery. The CRM system will eventually be integrated with the APO website to create a unique platform for knowledge sharing and information dissemination among stakeholders. The new platform has mobile capability that can be rolled out at a later stage. It will also help the Secretariat reduce administrative IT work for managing multiple systems and maintain a management dashboard for better control and evaluation of projects.

The new CRM system will help the Secretariat improve its ability to link separate databases on participants, experts, projects, member countries, and NPOs, while giving it the flexibility to search and cross-search various data across the platform using different parameters. The other key features of the proposed CRM are:

- Periodic (daily, monthly, etc.) status report capabilities
- Production/issuance of APO-specific documents linked with the database, e.g., project notifications, letters of assignment, letters of acceptance, visa-related documents
- Partner organization accessibility for NPOs, e.g., expert database portal, online nomination scheme
- Internal sharing within the Secretariat of knowledge on projects, participants, and experts, e.g., online versions of trip reports and project completion reports
- Communication and file-sharing tool for use by project participants, experts, and the Secretariat
- Project evaluation schemes, including six-month follow-up evaluations
- Integration of knowledge management and project management
- Linkage with self-e-learning sites
- Data mapping from the present PMS to the new system
- Data scrubbing of the present PMS, migration to the new system, etc.

### ERP and APO in the Cloud

To improve productivity and enhance the user experience, the Secretariat is planning to implement a cloud-based ERP platform. This will help reduce expenditure on hardware infrastructure over

the mid-term. The plan is to move from on-premise infrastructure to a cloud-based platform of software and services. The ERP system will be introduced during 2018–19 to complete the digitization process and enable the Secretariat to migrate to a single platform for integrated budget and workflow planning, human resources management, knowledge management, accounting, and other IT systems. All these initiatives will be undertaken in phases in coming years.

In 2016, the Secretariat migrated from the existing webserver to the Amazon Cloud to create a more robust, secure infrastructure for its e-learning portal. Plans were chalked out for migrating from its existing on-premise servers to a Microsoft Azure- and Office 365-based environment for better collaboration, improved efficiency, and cost benefits. It is important to note that the life cycle of on-premise servers is generally five years, compared with a cloud-based infrastructure offered as a pay-per-use service. The cloud-based version will help the APO avoid becoming tied to technology and hardware that may require replacement at the end of the product life cycle.

In addition, the cloud-based infrastructure requires minimal IT resources such as licenses and servers to utilize it and fewer software packages. It will help the Secretariat phase out physical computer devices, giving it more flexibility in IT asset management. The cloud environment was also chosen due to the availability of free software upgrades whenever new, better versions are released, thereby making it future proof. The cloud platform makes it more efficient to manage network configuration changes and add resources and makes more services available due to robust back-up cloud servers.

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# INTERNATIONAL COOPERATION

In an increasingly interconnected world, the APO recognizes the importance of expanding ties with other international organizations, national agencies, and relevant bodies within and outside the Asia-Pacific region. Its International Cooperation Program allows the APO to promote sustainable productivity initiatives, build its networks, and broaden the knowledge/resource base on topics important to member countries through information exchanges, international conferences, and study missions to observe recent advances or established best practices in non-APO countries. Member countries therefore have opportunities to establish bilateral business ties and networks with counterparts outside the region. The International Cooperation Program also contributes to expanding the pool of experts and resources for APO projects through partnerships and collaborations. The APO as a whole, its member countries, and its partners in cooperation all derive benefits from the synergies created.

## African-Asian Rural Development Organization

At the 57th Workshop Meeting of Heads of NPOs (WSM) held in Malaysia, Secretary-General Santhi held a meeting with Secretary-General Wassfi Hassan El-Sreihin of the African-Asian Rural Development Organization (AARDO), who attended the WSM as an observer. Both agreed that the APO and AARDO would continue to explore opportunities for future collaboration in the field of rural development, which is a common platform of the two organizations.

## Centre on Integrated Rural Development for Asia and the Pacific

The APO continues to strengthen its collaboration with the Centre on Integrated Rural Development for Asia and the Pacific (CIRDAP). Under a three-year MOU signed in January 2016, the APO and CIRDAP agreed to co-organize and implement four agriculture- and food-related projects in 2016.

In May 2016, Program Officer Dr. Shaikh Tanveer Hossain, Agriculture Department, APO Secretariat, was invited to attend the 31st Technical Committee Meeting on CIRDAP held in Kuala Lumpur, Malaysia, and made a presentation on the APO and its Green Productivity activities. He also joined the Open Discussion on the Role of CIRDAP Member Countries

in the Implementation–Collaboration in Light of the New Partnership Initiatives and Other Proposals, where he discussed possible future collaborations with CIRDAP-linked institutions that expressed interest in implementing specific APO 2017–2018 projects.

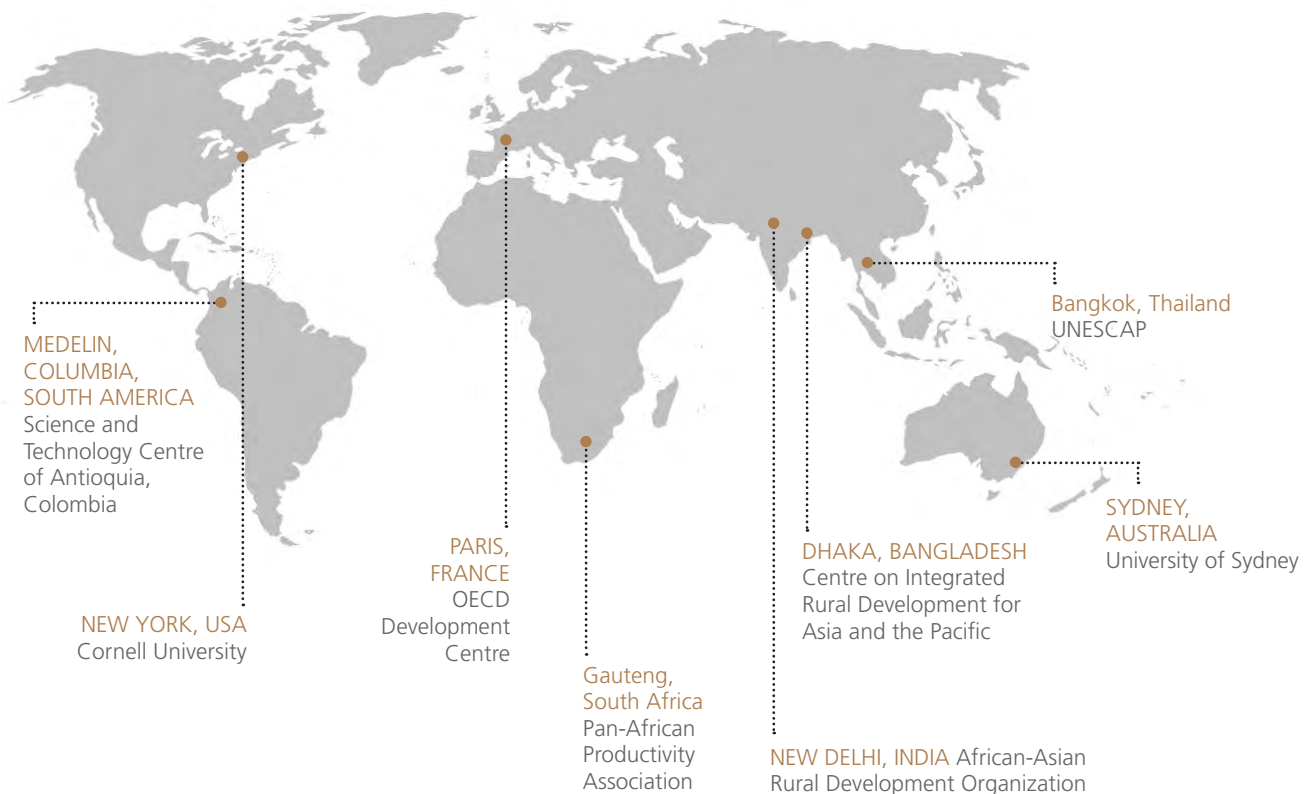
At the 57th WSM held in Malaysia in October, APO–CIRDAP collaborative projects for 2017 were discussed, which will be followed by a project agreement. Since CIRDAP has 13 member countries in common with the APO, this collaborative effort creates synergies in resource use and contributes to serving their memberships better in areas of mutual interest.

## Cornell University

The APO and Cornell University signed a Memorandum of Agreement (MoA) in 2014 to develop and implement Advanced Agribusiness Executive Management Workshops and conduct research on Successful Agribusiness Models. Under this three-year cooperative effort, three workshops were conducted in Bangkok, Thailand, annually starting from 2014. Similarly, research on Successful Agribusiness Models was implemented in three phases from 2014 to 2016. This Cornell–APO collaboration has provided advanced training to dozens of young



Guests from Cornell University at the APO Secretariat on 2 November 2016 (L–R): Jieun Kim of Cornell University; Cornell International Institute for Food, Agriculture and Development Director and Professor of Emerging Markets Dr. Ralph D. Christy; APO Secretary-General Dr. Santhi Kanoktanaporn; and APO Agriculture Department Director Dr. Muhammad Saeed.



food and agribusiness entrepreneurs and developed research studies on successful models of agribusiness to provide Asian executives with an international perspective and familiarity with how other businesses are coping with emerging issues and challenges and suggest appropriate solutions. These research case studies are in the process of publication. Encouraged by the excellent cooperative experience over the past three years, Cornell University and the APO have agreed to continue similar collaboration for another two years, from 2017 to 2018. Under the new two-year MoA, they plan to organize two Advanced Agribusiness Executive Management Workshops in Bali, Indonesia, and undertake another research project on Successful Agribusiness Models.

### OECD Development Center

Research collaboration among the APO, Organisation for Economic Co-operation and Development's (OECD's) Development Centre, United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), and the Economic Research Institute for ASEAN and East Asia has been ongoing, with the publication of a productivity outlook report being finalized for launching in 2017. The upcoming inaugural edition of the publication will feature Indonesia, the Philippines, and Vietnam and be comprised of three main parts, each highlighting a particular dimension of recent developments in macroproductivity trends in Asia. This will allow the APO to harmonize the indicators used by institutions as well as to impact the productivity-related policies of member

economies directly.

Collaboration will continue in 2017 as the APO and OECD plan to undertake another research project on the Construction of a Productivity Forecasting Model Framework, which will enhance the different models of productivity forecasting and analysis for the region.

### Pan-African Productivity Association

The APO remains active in Africa. The APO's institutional and capacity-building interventions in the region with generous financial support from the Government of Japan and through close collaboration with the Pan-African Productivity Association (PAPA) have been attended by over 180 PAPA participants in the Development of Productivity Practitioners (DPP): Basic and Advanced Courses. The interventions have enabled PAPA to train practitioners who are valuable resources for productivity improvement. Discussions are being held to tailor the traditional DPP courses to include and focus on areas that meet the specific needs of the African continent and PAPA to broaden and deepen their impact.

The APO will continue to put efforts into such outreach activities in nonmember countries and to sustain its engagement to raise productivity levels in Africa to achieve its vision of being the leading international organization on productivity enhancement.



Former APO Secretary-General Mari Amano (L) and CTA Productivity Deputy Director Jaime Arboleda Palacio exchanging the MOU documents on a jointly organized training course for the development of CTA productivity practitioners and independent consultants in Medellin.

**Science and Technology Centre of Antioquia, Colombia**

In July 2016, the APO and Science and Technology Centre of Antioquia (CTA), Medellin, Colombia, signed an agreement to train CTA professionals in applications of productivity and quality management techniques. The agreement follows the MOU signed by the APO and CTA in December 2015 to strengthen cooperation and exchanges between the two institutions and promote productivity and innovation.

The course with the training-of-trainers format was customized for CTA participants to identify, use, and explain productivity approaches and tools while adopting

an integrated productivity framework for diagnosing productivity issues and devising and implementing solutions. The active participation of CTA representatives provided learning opportunities for participants from Colombia as well as APO member countries. The two-week course was completed successfully in September. The APO is convinced that the training course for the CTA will open doors to similar successful initiatives in other non-APO member economies.

**UNESCAP**

Economic Affairs Officer Dr. Oliver Paddison of the Macroeconomic Policy and Financing for Development Division of UNESCAP met with Secretary-General Santhi at the 57th WSM. They exchanged views on productivity challenges in the Asia-Pacific region and agreed that the APO and UNESCAP would continue collaboration through APO projects to promote SME development by addressing public policy issues.

**University of Sydney**

The APO continues to expand its networks with other national/international organizations globally. As part of those efforts, Director Dr. Muhammad Saeed of the Secretariat Agriculture Department made a special presentation on Challenges to Enhancing Agricultural Productivity in Asian Countries in the Next Decade and the Role of the APO at the Plant Breeding Institute, University of Sydney, on 15 November, which was attended by a large number of institute staff and doctoral candidates. Dr. Saeed also had meetings with senior researchers including Professor Richard Trethowan, Director of the IA Watson Research Centre of the Plant Breeding Institute, to explore subjects of mutual interest and potential future collaborations. They expressed willingness to contribute to future APO projects by sharing knowledge and experience as resource persons.





MATION



# APO 2016 PROJECTS AT A GLANCE



**201**  
PROJECTS  
IN 2016



**7,208**  
PARTICIPANTS COMPLETED  
APO PROJECTS



**617**  
EXPERTS ASSIGNED  
TO APO PROJECTS



**30**  
NATIONAL COORDINATORS  
ASSISTED IN E-LEARNING PROJECTS



**51,060**  
VISITORS/OBSERVERS THROUGH APO  
PROJECTS/EVENTS OPEN TO THE PUBLIC





# 2016 APO PROJECT SUMMARY

In 2016, the APO conducted various projects covering a multitude of topics. Projects totaled 201 (177 projects had been completed and 24 were in progress at the time of writing), with 7,208 participants. A total of 617 experts (among whom 458 had completed their assignments in 2016 and 159 were involved in ongoing projects) facilitated these projects, assisted by 30 national coordinators who focused on e-learning courses. The APO also extended its outreach to 51,060 visitors/observers through projects/events open to the public.

## APO PROJECTS IN 2016

Type of projects	Completed	In progress
Multicountry projects	89	16
Individual-country projects	87	8
Nonmember country projects	1	0
<b>SUBTOTAL</b>	<b>177</b>	<b>24</b>
<b>TOTAL</b>	<b>201</b>	

## STRENGTHENING OF NPOS

Project title	Venue	Date/status	Participants
Expert (country) (*) Chief expert	Designation/organization		Assigned by
<b>Research on Need Assessment of Member Countries</b>	<b>APO Secretariat</b>	<b>Completed</b>	<b>-</b>
Kunitoshi Saito (Japan)*	Development Consultant-cum-Capacity Development and Need Assessment Specialist		APO
Dr. Johnson H.C. Lin (ROC)	Senior Consultant, Planning and Training Division, CPC		APO
Penitiko Aore (Fiji)	Deputy Director, Technical Training, NTPC, Fiji National University		APO
Dr. S.K. Chakravorty (India)	Deputy Director General and CEO, NPC		APO
Sayaka Harada (Japan)	Deputy Director, International Department, JPC		APO
Dr. Keun Hee Rhee (ROK)	Director and Senior Researcher, Productivity Research Institute, KPC		APO
Sayasith Khamphasith (Lao PDR)	Adviser to Department of SME Promotion, DOSMEP, LNPO, Ministry of Industry and Commerce		APO
Khidzir Ahmad (Malaysia)	Consultant, International Relations Unit, MPC		APO
Baigalmaa Purevdorj (Mongolia)	Deputy Director, MPO		APO
Prabin Kumar Acharya (Nepal)	Branch Chief, NPEDC		APO
Saif ur Rehman (Pakistan)	Deputy General Manager, Regional Office in Karachi, NPO		APO

## STRENGTHENING OF NPOS

Project title	Venue	Date/status	Participants
<b>Expert (country) (*) Chief expert</b>	<b>Designation/organization</b>		<b>Assigned by</b>
Carlos A. Sayco, Jr. (Philippines)	Vice President, International Relations, Innovation, Strategic Convergence Initiative and Partnerships, DAP		APO
Rajeshpal Singh (Singapore)	Senior Manager, Productivity Program Office, SPRING Singapore		APO
I.M.P. Gunaratna (Sri Lanka)	Deputy Director (Planning), Development Division, Ministry of Productivity Promotion		APO
Dr. Ketmanee Ausadamongkol (Thailand)	Advisor to the Executive Director, FTPI		APO
Nguyen Thu Hien (Vietnam)	Deputy Director, VNPI		APO
<b>APO Productivity Databook and Database (2016 edition)</b>		<b>APO Secretariat</b>	<b>Completed</b>
Dr. Koji Nomura (Japan)*	Associate Professor, Keio Economic Observatory, Keio University		APO
Dr. Dale W. Jorgenson (USA)	Samuel W. Morris University Professor, Department of Economics, Harvard University		APO
Dr. W. Erwin Diewert (Canada)	Professor of Economics, Vancouver School of Economics, University of British Columbia		APO
Keo Chettra (Cambodia)	Director, National Accounts Department, National Institute of Statistics		APO
Wei-Jie Huang (ROC)	Chief, National Accounts Section, Bureau of Statistics, Directorate-General of Budget, Accounting, and Statistics, Executive Yuan		APO
Navilini Singh (Fiji)	Senior Statistician, Economics Statistics Division, Fiji Bureau of Statistics		APO
Dr. Kolathupadavil Philipose Sunny (India)	Director and Group Head (Economic Services), NPC		APO
Harmawanti Marhaeni (Indonesia)	Chief of Subdirector of Statistical Analysis, Badan Pusat Statistik		APO
Behzad Mahmoodi (IR Iran)	Deputy of Auditing, Research and Technology, NIPO		APO
Dr. Rhee Keun Hee (ROK)	Director/Senior Researcher, Productivity Research Institute, KPC		APO
Salika Chanthavong (Lao PDR)	Head, National Accounts Division, Economic Statistics Department, Lao Statistics Bureau, Ministry of Planning and Investment		APO
Hezlin Suzliana Binti Abdul Halim (Malaysia)	Assistant Director, Department of Statistics, National Accounts Statistics Division		APO
Bayarmaa Baatarsuren (Mongolia)	Director of National Accounts Division, Macro-economic Statistical Department, National Statistical Office		APO
Dhital Rajesh (Nepal)	Director, Central Bureau of Statistics		APO
NPO, Pakistan	-		APO
Ma. Julieta P. Soliven (Philippines)	Statistician E, Philippine Statistics Authority		APO
Weerasinghe Wasala Mudiyansele Ananda Sarath Premakumara (Sri Lanka)	Additional Director General (Statistics I), Department of Census and Statistics		APO
Wirot Nararak (Thailand)	Director, National Accounts Office, National Economic and Social Development Board		APO
Duong Manh Hung (Vietnam)	Deputy Director, National Accounts Department, General Statistic Office of Vietnam		APO
<b>APO Productivity Databook and Database (2017 edition)</b>		<b>APO Secretariat</b>	<b>In progress</b>
Dr. Koji Nomura (Japan)*	Associate Professor, Keio Economic Observatory, Keio University		APO

## STRENGTHENING OF NPOS

Project title	Venue	Date/status	Participants
<b>Expert (country) (*) Chief expert</b>	<b>Designation/organization</b>		<b>Assigned by</b>
Dr. Dale W. Jorgenson (USA)	Samuel W. Morris University Professor, Department of Economics, Harvard University		APO
Dr. W. Erwin Diewert (Canada)	Professor of Economics, Vancouver School of Economics, University of British Columbia		APO
Ziauddin Ahmed (Bangladesh)	Joint Director, Bangladesh Bureau of Statistics, Ministry of Planning		APO
Chettra Keo (Cambodia)	Director, National Accounts Department, National Institute of Statistics		APO
Ming-Chun Yu (ROC)	Chief, National Accounts Section, Bureau of Statistics, Directorate-General of Budget, Accounting, and Statistics, Executive Yuan		APO
Navilini Singh (Fiji)	Senior Statistician, Economic Statistics, Fiji Bureau of Statistics		APO
Dr. Kolathupadevil Philipose Sunny (India)	Group Head (Economic Services), NPC		APO
Harmawanti Marhaeni (Indonesia)	Chief of Subdirector of Statistical Analysis, Badan Pusat Statistik		APO
Behzad Mahmoodi (IR Iran)	Head, Goods and Services Analyzing Section, Central Bank of IR Iran		APO
Salika Chanthavong (Lao PDR)	Head, National Accounts Division, Economics Statistics Department, Lao Statistics Bureau, Ministry of Planning and Investment		APO
Hezlin Suzliana Binti Abdul Halim (Malaysia)	Assistant Director, Department of Statistics, Malaysia, National Accounts Statistics Division		APO
Bayarmaa Baatarsuren (Mongolia)	Senior Statistician, National Accounts Section, Economic Statistical Department, National Statistical Office		APO
Dhital Rajesh (Nepal)	Director, Central Bureau of Statistics		APO
Fazil Mahmood Baig (Pakistan)	Director, National Accounts Wing, Statistics Division, Pakistan Bureau of Statistics		APO
Ma Julieta P. Soliven (Philippines)	Statistician E, Philippine Statistics Authority		APO
Weerasinghe Wasala Mudiyansele Ananda Sarath Premakumara (Sri Lanka)	Additional Director General (Statistics I), Department of Census and Statistics		APO
Wirot Nararak (Thailand)	Director, National Accounts Office, National Economic and Social Development Board		APO
Duong Manh Hung (Vietnam)	Deputy Director, National Accounts Department, General Statistics Office of Vietnam		APO
<b>Self-learning e-Course on Waste Management in Agribusiness</b>	-	<b>Completed</b>	<b>664</b>
<b>Self-learning e-Course on Organic Agriculture and Organic Agribusiness</b>	-	<b>1 February–30 June</b>	<b>420</b>
Gerald A. Herrmann (Germany)	Director, Organic Services GmbH		APO
<b>Self-learning e-Course on Productivity Tools and Techniques (Basic)</b>	-	<b>1 May–30 September</b>	<b>1265</b>
<b>Self-learning e-Course on Productivity Tools and Techniques (Advanced)</b>	-	<b>1 May–30 September</b>	<b>734</b>
<b>Self-learning e-Course on Material Flow Cost Accounting (ISO 14051)</b>	-	<b>1 June–31 October</b>	<b>466</b>
<b>Self-learning e-Course on Climate Change Impacts and Adaptation: Basic Course</b>	-	<b>1 June–31 October</b>	<b>551</b>

## STRENGTHENING OF NPOS

Project title	Venue	Date/status	Participants
Expert (country) (*) Chief expert	Designation/organization		Assigned by
<b>Self-learning e-Course on Green Productivity and the Environmental Management System (ISO 14001)</b>	-	<b>1 June–31 October</b>	<b>730</b>
<b>National Workshop on Agritourism Development</b>	<b>Cambodia</b>	<b>11–13 January</b>	<b>-</b>
Harro Boekhold (Netherlands)	Managing Director, F.R.E.S.H. Services Ltd.		APO
<b>Practice-oriented Workshop on Energy Efficiency in India</b>	<b>India</b>	<b>18–22 January</b>	<b>28</b>
R. Virendra (India)	Deputy Director General, Dr. Ambedkar Institute of Productivity, NPC		APO
<b>National Workshop on Measurement of Productivity in the Public Sector</b>	<b>Malaysia</b>	<b>19–22 January</b>	<b>-</b>
Dean Parham (Australia)	Research Fellow, School of Economics, University of Adelaide		APO
<b>National Workshop on Strengthening Food Quality Control Systems in Cambodia</b>	<b>Cambodia</b>	<b>16–19 May</b>	<b>-</b>
Yong Kok Seng (Malaysia)	Managing Director, QMC Resource Centre Sdn. Bhd.		APO
<b>National Follow-up Program to the Workshop on Developing and Strengthening Consulting Capacities of NPOs</b>	<b>Philippines</b>	<b>16–20 May</b>	<b>-</b>
Prof. Paul N. Friga (USA)	Clinical Associate Professor of Strategy and Entrepreneurship, Director of STAR Program, University of North Carolina at Chapel Hill, Kenan-Flagler Business School		APO
<b>National Training Course on Value Addition to Agrifood Products in Cambodia</b>	<b>Cambodia</b>	<b>17–20 August</b>	<b>-</b>
Waheed Ahmad (Pakistan)	Manager (Operations)/Consultant, Capital Food Industries		APO
<b>National Workshop on Nonchemical Pest Management in Agriculture for Enhancing Green Productivity</b>	<b>Cambodia</b>	<b>20–23 September</b>	<b>-</b>
Dr. Peter A.C. Ooi (Malaysia)	Professor, Department of Agricultural and Food Sciences, Faculty of Science, Universiti Tunku Abdul Rahman		APO
<b>National Follow-up Program to the National Workshop on Best Practices of Knowledge Management Implementation in NPOs and the Public Sector</b>	<b>Cambodia</b>	<b>26–28 September</b>	<b>-</b>
Praba Nair (Singapore)	Principal Consultant, KDi Asia		APO
<b>1st National Workshop-cum-Conference on Organic Certification in Mongolia</b>	<b>Mongolia</b>	<b>10–12 October</b>	<b>-</b>
Konrad Hauptfleisch (Germany)	Academy Manager, International Federation of Organic Agriculture Movements (IFOAM)-Organics International		APO
<b>National Training Course on Lean Manufacturing Systems</b>	<b>Sri Lanka</b>	<b>14–18 November</b>	<b>-</b>
George Wong (Singapore)	Managing Director/Principal Consultant, Hoclink Systems & Services Pte. Ltd.		APO
<b>National Workshop on Development and Promotion of Ecotourism Homestays in Luangprabang</b>	<b>Lao PDR</b>	<b>9–11 November</b>	<b>-</b>
Dr. Therdchai Choibamroong (Thailand)	Dean, Director of Ph.D. Program in Integrated Tourism Management, Graduate School of Tourism Management, National Institute of Development Administration		APO

## STRENGTHENING OF NPOS

Project title	Venue	Date/status	Participants	
Expert (country) (*) Chief expert	Designation/organization			Assigned by
<b>National Conference on Rural Tourism: Homestays</b>	<b>Nepal</b>	<b>20–22 December</b>	<b>-</b>	
Dr. Rohana Pandukabhaya Mahaliyanaarachchi (Sri Lanka)	Senior Professor, Department of Agri Business Management, Faculty of Agricultural Sciences, Sabaragamuwa University			APO
<b>Coordination Meeting on National Project Plans under the Special Program for Capacity Building in the Food Industry in ASEAN Least Developed Countries (ASEAN-LDCs)</b>	<b>Japan</b>	<b>2–4 March</b>	<b>9</b>	
Dr. Osamu Saito (Japan)	Professor, Food and Resources Economics Course, Graduate School of Horticulture, Faculty of Horticulture, Chiba University			APO
Shigeru Yoshida (Japan)	Managing Director, Kamaichi Co., Ltd.			APO
<b>Demonstration Company Project on Advanced Food Safety Management Systems for SMEs</b>	<b>Cambodia</b>	<b>12–21 October</b>	<b>-</b>	
Yong Kok Seng (Malaysia)	Managing Director, QMC Resource Centre Sdn. Bhd.			APO
<b>Impact Evaluation Study</b>	<b>MCs</b>	<b>1 April–30 September</b>	<b>-</b>	
Mohan Dhamotharan (Germany)	Consultant			APO
<b>Workshop on Strengthening Institutions Offering Productivity Courses</b>	<b>Indonesia</b>	<b>16–19 May</b>	<b>21</b>	
Dr. Pradip Kumar Ray (India)	Professor, Department of Industrial and Systems Engineering, Indian Institute of Technology Kharagpur			APO
Dr. Vincent Chye Huat Wee (Singapore)	Personal Consultant			APO
<b>Training Course on Development of Productivity Practitioners: Basic Program (DPP: Basic)</b>	<b>Philippines</b>	<b>6 June–1 July</b>	<b>22</b>	
Kelvin Chan Keng Chuen (Singapore)*	Director and Principal Consultant, Teian Consulting International Pte. Ltd.			APO
George Wong (Singapore)	Managing Director/Principal Consultant, Hoclink Systems & Services Pte. Ltd.			APO
Chantalux Mongkol (Thailand)	Productivity Promotion, Department Manager, FTPI			APO
<b>Training Course on Development of Productivity Practitioners: Advanced Program (DPP: Advanced)</b>	<b>Malaysia</b>	<b>8–26 August</b>	<b>21</b>	
Dr. Gan Kai William Lee (Singapore)*	Co-founder and Chief Trainer, The SMART Methodology Pte. Ltd.			APO
Takao Kasahara (Japan)	Managing Director, Streamline Strategy Japan, Inc.			APO
Ma. Theresa A. Agustin (Philippines)	Director, Industry Competitiveness and SME Productivity, Center of Quality and Competitiveness, DAP			APO
<b>Workshop on Best Practices of Knowledge Management Implementation in NPOs</b>	<b>Mongolia</b>	<b>14–17 June</b>	<b>25</b>	
Siddharth Sharma (India)	Deputy Director General, Information Technology and KM, Human Resource Management, Productivity Awareness and Awards, and Training, NPC			APO
Dr. Ida Yasin (Malaysia)	Senior Manager, Strategic Planning and Corporate Communication Department, NPC			APO

## STRENGTHENING OF NPOS

Project title	Venue	Date/status	Participants
<b>Expert (country) (*) Chief expert</b>	<b>Designation/organization</b>		<b>Assigned by</b>
Ronald Young (UK)	CEO and CKO, Knowledge Associates Cambridge Ltd.		APO
<b>Workshop on Social Marketing and Networking for National Productivity Organizations (NPOs) and Public-sector Organizations</b>	<b>Sri Lanka</b>	<b>21–24 June</b>	<b>29</b>
Sarimah Talib (Malaysia)	Director, Vale Malaysia Minerals Sdn. Bhd.		APO
Elizabeth C. Roxas (Philippines)	Executive Director, Environmental Broadcast Circle (EBC)		APO
<b>Strategic Planning Workshop for APO Liaison Officers</b>	<b>APO Secretariat</b>	<b>19–21 July</b>	<b>21</b>
<b>Development of the Center of Excellence: Expert Meeting for Development of a Course Manual on Developing Productivity Specialists in Public-sector Productivity</b>	<b>Philippines</b>	<b>2–4 August</b>	<b>-</b>
Dr. D. Brian Marson (Canada)*	Personal Consultant, DAP		APO
Dr. Anwar Sanusi (Indonesia)	Secretary General, Ministry of Villages, Development of Disadvantaged Regions, and Transmigration, Republic of Indonesia		APO
Dr. Shin Kim (ROK)	Director, Senior Research Fellow, Center for International Public Cooperation, Korea Institute of Public Administration		APO
Rauzah Zainal Abidin (Malaysia)	Director, MPC		APO
Magdalena Legaspi Mendoza (Philippines)	Senior Vice-President, DAP		APO
Dr. Ora-orn Poocharoen (Thailand)	Dean, Faculty of Political Science and Public Administration, Chiang Mai University		APO
<b>Workshop on Management of Consultancy Activities of NPOs</b>	<b>Fiji</b>	<b>15–19 August</b>	<b>23</b>
Yong Kok Seng (Malaysia)	Chief Executive Officer, QMC Resource Centre Sdn. Bhd.		APO
Enric Segarra Costa (Spain)	Lecturer in Business Strategy, Operations, Creative Thinking and Innovation		APO
Sachin Deo (Fiji)	Deputy Director, Division of Business and Information Technology, NTPC, Fiji National University		NPO
Amrish Ritesh Narayan (Fiji)	Head of Training, Productivity and Quality, NTPC, Fiji National University		NPO
<b>Training Course on Strengthening National Productivity Organizations for Productivity Promotion Practices and Strategies</b>	<b>ROK</b>	<b>6–9 September</b>	<b>18</b>
Kazuteru Kuroda (Japan)	Director, Consulting Department, JPC		APO
Izumi Ohno (Japan)	Professor, National Graduate Institute for Policy Studies		APO
Megat Akbarruddin Megat Ismail (Malaysia)	Senior Director, Productivity and Competitiveness Department, MPC		APO
<b>Institutional Strengthening of National Productivity Organizations by Development of Productivity Practitioners</b>	<b>Sri Lanka</b>	<b>12–24 September</b>	<b>50</b>
Mohd Lizuan Bin Abd. Latif (Malaysia)	Principal Consultancy, Qualitymind Sdn. Bhd.		APO
Nina Maria B. Estudillo (Philippines)	Independent Professional		APO

## STRENGTHENING OF NPOS

Project title	Venue	Date/status	Participants	Assigned by
<b>Institutional Strengthening of National Productivity Organizations by Development of Productivity Practitioners</b>	<b>Mongolia</b>	<b>24 October–4 November</b>	<b>19</b>	
Expert (country) (*) Chief expert	Designation/organization			Assigned by
Kabir Ahmad Mohd. Jamil (Malaysia)	Director, Regulatory Review Department, MPC			APO
Raluca Vintilla (Romania)	Instructional Design and E-Learning Coordinator, The KPI Institute			APO
<b>Institutional Strengthening of National Productivity Organizations by Development of Productivity Practitioners</b>	<b>Cambodia</b>	<b>5–16 December</b>	<b>27</b>	
Dr. Gan Kai William Lee (Singapore)	Associate Research Director, IDC Asia Pacific			APO
George Wong (Singapore)	Managing Director/Principal Consultant, Hoclink Systems & Services Pte. Ltd.			APO
<b>Training Course on Food Engineering</b>	<b>Cambodia</b>	<b>31 May–3 June</b>	<b>-</b>	
Dr. Sakamon Devahastin (Thailand)	Professor, Department of Food Engineering, King Mongkut University of Technology Thonburi			APO
<b>Individual-country Observational Study Mission on Food Safety Management Systems to Thailand from Lao PDR</b>	<b>Thailand</b>	<b>18–20 October</b>	<b>-</b>	
<b>National Conference on Promoting Public–private-sector Partnerships in Enhancing Food Value Chains in India</b>	<b>India</b>	<b>3–4 November</b>	<b>-</b>	
Motoyuki Hazu (Japan)	Executive Officer, General Manager, Overseas Business Development Division, Nichirei Logistics Group Inc.			APO
Dr. Navm S. Hettiarachchy (USA)	University Professor, Department of Food Science and Institute of Food Science and Engineering, University of Arkansas			APO
<b>National Conference and Workshop on Promoting Public–private-sector Partnerships in Enhancing Food Value Chains in Vietnam</b>	<b>Vietnam</b>	<b>12–15 December</b>	<b>-</b>	
Motoyuki Hazu (Japan)	Executive Officer, General Manager, Overseas Business Development Division, Nichirei Logistics Group Inc.			APO
Dr. Louie A. Divinagracia (Philippines)	Professorial Lecturer, College of Public Affairs			APO
<b>Workshop on Policies Impacting National Productivity Growth in APO Member Countries</b>	<b>Fiji</b>	<b>16–18 November</b>	<b>20</b>	
Dr. Sukanlaya Sawang (Australia)	Senior Lecturer in Small Business Innovation and Wellbeing, Digital Fellow of PwC Chair in Digital Economy, Queensland University of Technology			APO
Prof. Atsushi Sunami (Japan)	Vice President, Professor, National Graduate Institute for Policy Studies			APO
David Sehyeon Baek (ROK)	Director of Global Cooperation, Global Marketing, Global Business Gyeonggi Center for Creative Economy and Innovation			APO
<b>Research on Productivity Analysis for NPOs</b>	<b>APO Secretariat</b>	<b>In progress</b>	<b>-</b>	
Prof. Koji Nomura (Japan)*	Associate Professor, Keio Economic Observatory, Keio University			APO
P. Bhanumati (India)	Director, National Accounts Division, Central Statistics Office, Ministry of Statistics and Programme Implementation			APO
Dr. Arundhati Chattopadhyay (India)	Deputy Director (Economic Service), NPC (RPMG Mumbai)			APO
Ema Tusianti (Indonesia)	Head of Cross Sector Statistical Analysis Section, Statistics Indonesia			APO



## STRENGTHENING OF NPOS

Project title	Venue	Date/status	Participants
<b>Expert (country) (*) Chief expert</b>	<b>Designation/organization</b>		<b>Assigned by</b>
Sanggam Purba (Indonesia)	Head of Sub Directorate of Productivity Measurement, Ministry of Manpower and Transmigration		APO
Baasansuren Munkhjargal (Mongolia)	Expert, MPO		APO
Bayarmaa Baatarsuren (Mongolia)	Statistician, Macro-economic Statistical Department, National Statistical Office		APO
Dr. Carlos Catabay Tabunda, Jr. (Philippines)	Executive Fellow, DAP		APO
Estela Tormon De Guzman (Philippines)	Director (Interim Assistant National Statistician), Philippines Statistics Authority		APO
Weerasinghe Wasala Mudiyansele Ananda Sarath Premakumara (Sri Lanka)	Director Statistics, Department of Census and Statistics, Ministry of Finance and Planning		APO
Thudallage Shyama Nilanthi Fernando (Sri Lanka)	Productivity Development Assistant, NPS		APO
Patcharasri Dangthongdee (Thailand)	Productivity Researcher, FTPI		APO
Apichai Thamsermsukh (Thailand)	Director, Production Accounts Section, National Economic and Social Development Board		APO
Nguyen Thi Le Hoa (Vietnam)	Head, Office for Business Excellence, VNPI		APO
<b>Research on Institutions Offering Productivity Courses</b>		<b>APO Secretariat</b>	<b>In progress</b>
Dr. Pradip Kumar Ray (India)*	Professor, Department of Industrial and Systems Engineering, Indian Institute of Technology Kharagpur		APO
Dr. Md. Nazrul Islam (Bangladesh)	Director, NPO		APO
Dr. Zahir Javed Paracha (Pakistan)	Pro Vice Chancellor, Qarshi University Lahore		APO
Erwinson Bautista Atanacio (Philippines)	Vice President for Institutional Development and Director for Academic Affairs, National College of Science and Technology		APO
Nagare Gamage Kularatne (Sri Lanka)	External Consultant, NPS		APO
Nuntaporn Aungatichart (Thailand)	Director, Research Division, FTPI		APO
Do Thi Dong (Vietnam)	Lecturer, National Economics University		APO
<b>Development of the Center of Excellence: Research on GP for the Base of the Pyramid for Sustainable Development in APO Member Countries</b>		<b>APO Secretariat</b>	<b>In progress</b>
Dr. Allen H. Hu (ROC)*	Professor, Institute of Environmental Engineering and Management, National Taipei University of Technology		APO
Dr. Sadhan Kumar Ghosh (India)	Professor, Mechanical Engineering Department, Jadavpur University		APO
Dr. Semerdanta Pusaka (Indonesia)	Managing Partner, PT Aicon Global Indonesia		APO
Dr. Shaik Roslinah Bux (Malaysia)	Senior Manager-Productivity and Competitiveness Development, MPC		APO
Dr. Lynlei Lapis Pintor (Philippines)	Senior Science Research Specialist, Ecosystems Research and Development Bureau (ERDB)		APO
Dr. Prasert Tapaneeyangkul (Thailand)	Executive Board Member, National Environment Board, Ministry of Natural Resources and Environment		APO

## STRENGTHENING OF NPOS

Project title	Venue	Date/status	Participants
<b>Expert (country) (*) Chief expert</b>	<b>Designation/organization</b>		<b>Assigned by</b>
Prof. Edward David London (USA)	Vice President and Senior Research Fellow, William Davidson Institute, University of Michigan		APO
Nguyen Thi Thu Huyen (Vietnam)	Researcher, Central Institute for Economic Management		APO
<b>Development of the APO Certification System</b>		<b>In progress</b>	<b>-</b>
Ma. Theresa A. Agustin (Philippines)	Director, Industry Competitiveness and SME Productivity, DAP		APO
Kelvin Chan Keng Chuen (Singapore)	Director and Principal Consultant, Teian Consulting International Pte. Ltd.		APO
<b>Expert Meeting on Asian Productivity Outlook and Policy under the Project Development Fund</b>		<b>APO Secretariat</b>	<b>12 September</b>
Shandre Thangavelu (Australia)	University of Adelaide		-
Derek Carnegie (France)	Economist, OECD Development Centre		APO
Rafaelita Aldaba (Indonesia)	Economic Research Institute for ASEAN and East Asia		-
Yasushi Ueki (Japan)	Economist, Economic Research Institute for ASEAN and East Asia		-
Kensuke Tanaka (Japan)	Head of Asia Desk, OECD Development Centre		-
Rizalito Legaspi (Philippines)	DAP		-
Dr. Masato Abe (Thailand)	Economic Affairs Officer, Business and Development Section, Trade, Investment and Innovation Division, UN ESCAP		APO
Isnarti Hasan (Indonesia)	Deputy Director, Productivity Promotion and Cooperation Division, Directorate of Productivity and Entrepreneurship, Ministry of Manpower and Transmigration		APO
Faizal Safa (Indonesia)	Chairman, Association of Indonesian Industrial and Management Engineers		APO
Leonard Tampubolon (Indonesia)	Deputy Minister for Economic Affairs, National Development Planning Agency (Beppenas)		APO
Antonio D. Kalaw, Jr. (Philippines)	President, DAP		APO
Pham Chi Lan (Vietnam)	Economic Expert, Former General Secretary and Vice Chairwoman, Vietnam Chamber of Commerce and Industry, Member of Research Board of the Prime Minister		APO
Nguyen Anh Tuan (Vietnam)	Director of Institute, VNPI		APO
Dr. Nguyen Duc Thanh (Vietnam)	President, Vietnam Institute for Economics and Policy Research, Hanoi National University		APO
Nguyen Quang Vinh (Vietnam)	Vice General Secretary, Vietnam Chamber of Commerce and Industry		APO
<b>Self-learning e-Course on Agribusiness Management (Basic)</b>		<b>-</b>	<b>In progress</b>
Dr. Louie A. Divinagracia	Professional Lecturer, College of Public Affairs, University of the Philippines Los Baños		APO
<b>Self-learning e-Course on Controlled-environment Agriculture</b>		<b>-</b>	<b>In progress</b>
Dr. Gerard Bot (Netherlands)	Senior Researcher, Greenhouse Technology of BU Greenhouse Horticulture, Wageningen University		APO
<b>Research on Youth Employment Issues and Human Capital Development for APO Economies</b>		<b>APO Secretariat</b>	<b>In progress</b>
Prof. S. Mahendra Dev (India)*	Director and Vice Chancellor, Indira Gandhi Institute for Development Research		APO
Prof. Vedula Venkata Ramana (India)	Senior Professor and Coordinator/Technology Business Incubator, School of Management Studies, University of Hyderabad		APO

## STRENGTHENING OF NPOS

Project title	Venue	Date/status	Participants
<b>Expert (country) (*) Chief expert</b>	<b>Designation/organization</b>		<b>Assigned by</b>
Zantermans Rajagukguk (Indonesia)	Research Coordinator, Center for Manpower Research and Development, Ministry of Manpower		APO
Prabin Kumar Acharya (Nepal)	Branch Chief (Senior Consultant), Productivity Promotion Division, NPEDC		APO
Dr. Muhammad Idrees Khawaja (Pakistan)	Associate Professor, Pakistan Institute of Development Economics		APO
Dr. Ronahlee A. Asuncion (Philippines)	Dean/Assistant Professor 7, School of Labor and Industrial Relations, University of the Philippines Diliman		APO
Dr. Puchong Senanuch (Thailand)	Lecturer and Researcher, Faculty of Social Work and Social Welfare, Huachiew Chalermprakiet University		APO
Trinh Thu Nga (Vietnam)	Director, Research Centre for Population, Labour and Employment, Institute of Labour Sciences and Social Affairs, Ministry of Labour, Invalids and Social Affairs		APO
<b>National Training Course on Lean Production Systems in Agribusiness to Improve the Productivity and Sustainability of SME Agribusiness</b>	<b>IR Iran</b>	<b>In progress</b>	<b>-</b>
Dr. Gan Kai William Lee (Singapore)	Co-founder and Chief Trainer, The SMART Methodology Pte. Ltd.		APO

## PROMOTING THE DEVELOPMENT OF SMEs AND COMMUNITIES

Project title	Venue	Date/status	Participants
Expert (country) (*) Chief expert	Designation/organization		Assigned by
<b>Research on Entrepreneurship Initiatives in APO Economies</b>	<b>APO Secretariat</b>	<b>Completed</b>	<b>-</b>
Prof. Tsuneo Yanagi (Japan)*	Provost, Sakushin University, Professor Emeritus, Keio University		APO
Dr. Chea Peou (Cambodia)	Director, Internal Audit Department, Office of the Council of Ministers		APO
Dr. Chih-Yen Huang (ROC)	Assistant Professor, Graduate Institute of Public Policy, Feng Chia University		APO
Dr. Sudipto Bhattacharya (India)	Associate Professor, VIT Business School, VIT University		APO
Dr. Aji Hermawan (Indonesia)	Director, Recognition and Mentoring Program, Institute Pertanian Bogor, Bogor Agriculture Institute		APO
Kikuko Harada (Japan)	Chief Executive Director, Center for Entrepreneurship Development		APO
Dr. Muhammad Idrees Khawaja (Pakistan)	Associate Professor, Pakistan Institute of Development Economics		APO
Renato M. Pleno (Philippines)	Assistant Treasurer, Philippine Exporters Confederation Inc.		APO
Dr. Thanaphol Virasa (Thailand)	Deputy Dean and Chair, Entrepreneurship and Innovation Program, College of Management, Mahidol University		APO
<b>Research on Benchmarking Indexes for SMEs (Food Manufacturing Sector)</b>	<b>APO Secretariat</b>	<b>Completed</b>	<b>-</b>
Hock Wong (Singapore)*	Managing Director and Principal Consultant, Hoclink Systems & Services Pte. Ltd.		APO
Dr. Shin-Horng Chen (ROC)	Research Fellow, Director, International Division, Chung-Hua Institution for Economic Research		APO
Atsushi Miyasaka (Japan)	Producer, Management Consulting Department, JPC		APO
Sangmi Cha (ROK)	Researcher, Productivity Research Institute, KPC		APO
Mazlina Binti Shafi'i (Malaysia)	Senior Consultant, MPC		APO
Lim Jiakuan Gillian (Singapore)	Manager, Singapore Innovation and Productivity Institute Pte. Ltd.		APO
Janna Sanguanroongvong (Thailand)	GMP/HACCP/ISO 9000/ISO 22000/KM Consultant, FTPI		APO
<b>Research on Benchmarking Indexes for SMEs (Logistics Sector— Warehousing Subsector)</b>	<b>APO Secretariat</b>	<b>Completed</b>	<b>-</b>
Wong Hock (Singapore)*	Managing Director and Principal Consultant, Hoclink Systems and Services Pte. Ltd.		APO
Tomer Krishan Pal Singh (India)	Deputy Director, NPC		APO
Dr. Keun Hee Rhee (ROK)	Director and Senior Researcher, Productivity Research Institute, KPC		APO
Mun Sun Vincent Lee (Singapore)	Partner/Management Consultant, SCMi Group LLP		APO
Patcharasri Dangthongdee (Thailand)	Productivity Researcher, FTPI		APO
Nguyen Thi Van (Vietnam)	Director, Ho Chi Minh City, VNPI		APO
<b>Research on Successful Agribusiness Models: Case Studies of Value Chain Analysis for Agroprocessing Enterprises (2015)</b>	<b>APO Secretariat</b>	<b>Completed</b>	<b>-</b>

## PROMOTING THE DEVELOPMENT OF SMES AND COMMUNITIES

Project title	Venue	Date/status	Participants
<b>Expert (country) (*) Chief expert</b>	<b>Designation/organization</b>		<b>Assigned by</b>
Dr. Ralph D. Christy (USA)*	Chief Executive Manager, Market Matters Inc.		APO
<b>Research on Successful Agribusiness Models: Case Studies of Value Chain Analysis for Agroprocessing Enterprises (2016)</b>	<b>APO Secretariat</b>	<b>Completed</b>	<b>-</b>
Dr. Ralph D. Christy (USA)*	Chief Executive Manager, Market Matters Inc.		APO
<b>Multicountry Observational Study Mission on Food Safety Management Systems along Food Value Chains</b>	<b>Japan</b>	<b>23–28 May</b>	<b>18</b>
Dr. Yasuhiro Inatsu (Japan)	Leader of Food Hygiene Laboratory, Food Safety Division, National Food Research Institute, National Agriculture and Food Research Organization		APO
Dr. Yoko Niiyama (Japan)	Professor of Agricultural Economics and Food Systems, Division of Natural Resource Economics, Kyoto University		APO
Dr. Yoshihisa Onishi (Japan)	Technical Advisor, Japan Bentou Association		APO
Shigeru Yoshida (Japan)	Managing Director, QAS, Food Safety Auditor, Kamaichi Co., Ltd		APO
Dr. Goichiro Yukawa (Japan)	Professor of Safety Management in Food Supply Chains, Research Center for Advanced Science and Technology, Tokyo University of Marine Science and Technology		APO
<b>Training Course on Total Quality Management for SMEs in the Service Sector</b>	<b>ROC</b>	<b>30 May–3 June</b>	<b>22</b>
Yukitoshi Tanno (Japan)	Managing Director, Consultant, Aggregator Japan		APO
Shaharum Ashaari (Malaysia)	Principal Consultant, Synergy Assimilation of Knowledge Resources		APO
Prof. Thong Ngee Goh (Singapore)	Professor, Industrial and Systems Engineering Department, National University of Singapore		APO
Robert Lu (ROC)	Chairman, Golden Technology Venture Capital Investment Corp.		NPO
<b>Study Mission to a Nonmember Country on Planning and Management of Rural Tourism</b>	<b>USA</b>	<b>13–18 June</b>	<b>17</b>
Laurie Preece (USA)*	Principal, Pacific Tourism Institute		PTI
Frank Haas (USA)	Principal, Marketing Management, Inc.		PTI
David Preece (USA)	Principal/Professor, Pacific Tourism Institute/Brigham Young University-Hawaii		PTI
Lani Weigert (USA)	Executive Director, Hawaii Agritourism Association		PTI
Pomai Weigert (USA)	Marketing and Project Development		PTI
<b>Multicountry Observational Study Mission on SME Development</b>	<b>ROC</b>	<b>15–19 August</b>	<b>19</b>
George Wong (Singapore)*	Managing Director/Principal Consultant, Hoclink Systems & Services Pte. Ltd.		APO
Yasuhiko Inoue (Japan)	Counselor, International Cooperation Department, JPC		APO
Jamaludin Bin Maarof (Malaysia)	Owner and CEO, SHEQ Engineering and Consulting		APO
<b>Workshop on Customer Relationship Management (CRM) for SMEs</b>	<b>ROC</b>	<b>5–9 September</b>	<b>21</b>
Junkyo Fujieda (Japan)*	Chairman and CEO, CRM Association Japan c/o ReGIS Inc.		APO
A.S. Kumar (India)	Corporate Productivity and HR Consultant and Trainer		APO

## PROMOTING THE DEVELOPMENT OF SMES AND COMMUNITIES

Project title	Venue	Date/status	Participants	Assigned by
<b>Expert (country) (*) Chief expert</b>	<b>Designation/organization</b>			
Yukitoshi Tanno (Japan)	Managing Director, Consultant, Aggregator Japan			APO
Chia-Shen Chen (ROC)	Professor, Department and Graduate Institute of Business Administration, College of Management, National Yunlin University of Science and Technology			NPO
Huan-Ming Chuang (ROC)	Chairman and Associate Professor, Department of Information Management, National Taiwan University			NPO
<b>Training Course on Food Safety Management Systems: Advanced Course for SMEs in the Agrifood Industry</b>	<b>ROC</b>	<b>3–7 October</b>	<b>24</b>	
K.V.R. Raju (India)	Regional Director, NPC			APO
Yong Kok Seng (Malaysia)	Managing Director, QMC Resource Centre Sdn. Bhd.			APO
Dr. Y. Martin Lo (ROC)	CEO and President, BioIntelliPro LLC			NPO
Dr. Tony J. Fang (ROC)	Deputy Director-General, Food Industry Research and Development Institute			NPO
<b>e-Learning Course on Total Productive Maintenance (TPM) Applications in SMEs (Session 1)</b>	<b>Cambodia, Fiji, Mongolia, Philippines, Vietnam</b>	<b>7–10 November</b>	<b>54</b>	
Kazuteru Chinone (Japan)*	Representative, Productivity Management Office			APO
<b>e-Learning Course on Total Productive Maintenance (TPM) Applications in SMEs (Session 2)</b>	<b>Bangladesh, India, IR Iran, Nepal, Pakistan, Sri Lanka</b>	<b>21–24 November</b>	<b>134</b>	
Kazuteru Chinone (Japan)*	Representative, Productivity Management Office			APO
<b>Multicountry Observational Study Mission on Industrial Engineering Techniques for Productivity Improvement in SMEs</b>	<b>Singapore</b>	<b>7–10 November</b>	<b>18</b>	
Dr. Chien Liang James Chen (ROC)	Professor, Department of IEEM, National Tsing Hua University			APO
Kritchai Anakamane (Thailand)	Lean and Productivity Consultant			APO
<b>Training Course for Women on Productivity Tools and Techniques for Improving the Productivity of Micro and Small Agrofood-processing Businesses</b>	<b>India</b>	<b>7–11 November</b>	<b>22</b>	
Nina Maria B. Estudillo (Philippines)	Independent Professional			APO
Dr. Louie A. Divinagracia (Philippines)	Professor/Lecturer, IDMG, College of Public Affairs and Development, University of the Philippines at Los Baños			APO
Darunee Edwards (Thailand)	Advisor, Food Science and Technology Association of Thailand, Government Council, International Union of Food Science and Technology			APO
Chayaa Nanjappa (India)	Nectar Fresh, Pure Honey and Food Products			NPO
<b>Workshop on MSME Development Policies</b>	<b>IR Iran</b>	<b>12–15 November</b>	<b>21</b>	
Dr. Tulus T.H. Tambunan (Indonesia)	Professor/Lecturer and Researcher, Center for Industry, SME and Business Competition Studies, University of Trisakti			APO

## PROMOTING THE DEVELOPMENT OF SMES AND COMMUNITIES

Project title	Venue	Date/status	Participants
<b>Expert (country) (*) Chief expert</b>	<b>Designation/organization</b>		<b>Assigned by</b>
Mohd. Rithaudden Bin Makip (Malaysia)	Senior Director, SME Corporation Malaysia		APO
Hamid Azizmohammadlou (IR Iran)	Professor, Imam Khomeini International University		NPO
Dr. Masato Abe (Thailand)	Economic Affairs Officer, Business and Development Section, Trade, Investment and Innovation Division, United Nations ESCAP		APO
<b>Workshop on Development of Rural Tourism Networks and Clusters for Enhancing the Competitiveness of Small Enterprises</b>	<b>Lao PDR</b>	<b>21–25 November</b>	<b>19</b>
Dr. Yung-Chieh (Fred) Chen (ROC)	Instructor, Department of Hospitality and Tourism Management, JinWen University of Science and Technology		APO
Dr. Stephen Pratt (ROC)	Assistant Professor, School of Hotel and Tourism Management, Hong Kong Polytechnic University		APO
Dr. Therdchai Choibamroong (Thailand)	Dean and Director, Ph.D. Program in Integrated Tourism Management, Graduate School of Tourism Management, National Institute of Development Administration		APO
<b>Workshop on Sustainability Assessment of Agribusiness Enterprises</b>	<b>Indonesia</b>	<b>28 November–2 December</b>	<b>24</b>
Dr. Gayatri Ramnath (Australia)	Regional Research Coordinator, Asia, Committee on Sustainability Assessment		APO
Emmy Hafild (Indonesia)	Vice President, PT. Eco Regions Indonesia		APO
Dr. Ir. Lukman Mohammad Baga (Indonesia)	Lecturer, Department of Agribusiness, Bogor Agricultural University		APO
Dr. John Reid (New Zealand)	Senior Research Fellow, Ngai Tahu Research Centre, University of Canterbury		APO
Moritz Michael Teriete (Switzerland)	General Manager (CEO), Sustainable Food Systems GmbH		APO
<b>Workshop on Agricultural Insurance Systems</b>	<b>Philippines</b>	<b>28 November–2 December</b>	<b>24</b>
Mayank Dubey (India)	Consultant, Weather Risk Management Services Pvt. Ltd.		APO
Peter Book (Singapore)	Head of Agriculture, Asia Pacific, Allianz SE Reinsurance Branch Asia Pacific		APO
Dr. Olena Sosenko (Switzerland)	Senior Expert, Agroinsurance International		APO

## CATALYZING INNOVATION-LED PRODUCTIVITY GROWTH

Project title	Venue	Date/status	Participants
Expert (country) (*) Chief expert	Designation/organization		Assigned by
<b>Research on Performance Management for Public-sector Organizations</b>	<b>APO Secretariat</b>	<b>Completed</b>	<b>-</b>
Dr. Hiroaki Inatsugu (Japan)*	Professor, Faculty of Economics and Political Science, Okuma School of Public Management, Waseda University		APO
Dr. Md. Nazrul Islam (Bangladesh)	Director, NPO		APO
Dr. Anwar Sanusi (Indonesia)	Director, Center for Institutional Performance Studies, National Institute of Public Administration		APO
Alaeddin Rafizadeh Bagrabad (IR Iran)	Deputy, Bureau of Performance Management, Vice-Presidency for Management and Human Capital Development		APO
Rabia Jamil (Pakistan)	Head, International Relations, NPO Pakistan		APO
Magdalena Legaspi Mendoza (Philippines)	Senior Vice President, DAP		APO
Dr. Indiketiya Hewage Kusumadasa Mahanama (Sri Lanka)	Additional Secretary, Prime Minister's Office		APO
Ratchada Asisonthisakul (Thailand)	Business Development and Support Manager, FTPI		APO
Tri Thanh Nguyen (Vietnam)	Senior Consultant/Managing Partner, Training and Consulting Firm iLumtics		APO
<b>Training Course on Lean Manufacturing Systems</b>	<b>Malaysia</b>	<b>15–26 February</b>	<b>21</b>
Narendra Chandahas (India)	Director, NPC		APO
Dr. Gan Kai William Lee (Singapore)	Co-founder and Chief Trainer, The SMART Methodology Pte. Ltd.		APO
George Wong (Singapore)	Managing Director/Principal Consultant, Hoclink Systems & Services Pte. Ltd.		APO
<b>National Workshops on Productivity Enhancement through Innovative Postharvest Management Tools and Technologies for Food, Fruit, and Vegetable Products</b>	<b>Vietnam</b>	<b>29 February–4 March</b>	<b>149</b>
Chan Seng Kit (Malaysia)	Managing Director, K-Farm Sdn. Bhd.		APO
<b>Asian Food and Agribusiness Conference: Strengthening Public-private-sector Partnerships for Sustainable, Competitive Agribusinesses</b>	<b>Indonesia</b>	<b>28–30 March</b>	<b>38</b>
Dr. Md. Khairul Bashar (Bangladesh)	Country Manager, HarvestPlus		APO
Pawanexh Kohli (India)	Advisor, National Centre for Cold-chain Development, Department of Agriculture and Cooperation, Ministry of Agriculture		APO
Seng Kit Chan (Malaysia)	Managing Director, K-Farm Sdn. Bhd.		APO
Senen C. Bacani (Philippines)	President, La Frutera, Inc.		APO
Pacita Juan (Philippines)	President, Philippine Coffee Board Inc.		APO
Darunee Edwards (Thailand)	Advisor, Food Science and Technology Association of Thailand, Governing Council, International Union of Food Science and Technology Fellow, International Academy of Food Science and Technology		APO
Dr. John Strak (UK)	Chairman, Euro PA Services Ltd.		APO



## CATALYZING INNOVATION-LED PRODUCTIVITY GROWTH

Project title	Venue	Date/status	Participants
<b>Expert (country) (*) Chief expert</b>	<b>Designation/organization</b>		<b>Assigned by</b>
Steven Chiang (USA)	Director and Executive Director, Agribusiness Incubator Program, University of Hawaii and GoFarm Hawaii, University of Hawaii		APO
Dr. Louie A. Divinagracia (Philippines)*	Professor/Lecturer, College of Public Affairs, University of the Philippines at Los Banos		APO
<b>Observational Study Mission on Innovation and Competitiveness in SMEs</b>	<b>ROK</b>	<b>29 March–1 April</b>	<b>17</b>
Junkyo Fujieda (Japan)	Chairman and CEO, CRM Association Japan c/o ReGIS Inc.		APO
George Wong (Singapore)	Managing Director and Principal Consultant, Hoclink Systems & Services Pte. Ltd.		APO
Dr. Tong Nge Lee (Singapore)	Principal Consultant, Asian Culinary Institute, College of Continuing Education, Nanyang Polytechnic		APO
Dong-Sun Kim (ROK)	Senior Advisor, Yoon & Yang LLC		NPO
Prof. Ki-Chan Kim (ROK)	President-Elect, International Council for Small Business		NPO
<b>Conference on Female Workforce Participation and Productivity Enhancement</b>	<b>APO Secretariat</b>	<b>5–7 April</b>	<b>25</b>
Prof. Arup Mitra (India)	Professor of Economics, Institute of Economic Growth, Delhi University Enclave		APO
Dr. Machiko Osawa (Japan)	Director, Research Institute for Women and Careers, Japan Women's University		APO
Dr. Hiroyuki Fujimura (Japan)	Professor, Hosei Business School of Innovation Management, Hosei University		APO
Dr. Lin Lean Lim (Malaysia)	Consultant		APO
Dr. Ramani Sonali Gunatilaka (Sri Lanka)	Consultant		APO
Dr. Priscilla D. Lilly Allen (USA)	Associate Professor, School of Social Work, Louisiana State University		APO
<b>Multicountry Study Mission on Local Government Service Delivery and Productivity</b>	<b>Sri Lanka</b>	<b>9–13 May</b>	<b>25</b>
Kate D. Johnston (Canada)	Manager, Service Delivery Improvement, Office of the CAO, Halton Region		APO
Dr. Anwar Sanusi (Indonesia)	Secretary-General, Ministry of Village, Disadvantaged Areas Development and Transmigration		APO
Dr. No-Wook Park (ROK)	Founding Director, Center for Performance Evaluation and Management, Korea Institute of Public Finance		APO
<b>Forum on Labor-Management Relations for Policymakers, Labor Unions, and Top Management</b>	<b>Japan</b>	<b>17–19 May</b>	<b>32</b>
Yasuhiko Inoue (Japan)*	Counselor, International Cooperation Department, JPC		APO
Seigo Kojima (Japan)	Adviser, Japan Council of Metalworkers' Unions		APO
Kenichi Kumagai (Japan)	Adviser, Japan International Labour Foundation		APO
Hiroyuki Matsui (Japan)	Senior Adviser, International Cooperation Bureau, Keidanren		APO
Kiichiro Yoshimura (Japan)	Senior Coordinator, Director-General for Policy Planning and Evaluation, Ministry of Health, Labor and Welfare		APO
<b>Training Course on Business Excellence for the Public Sector</b>	<b>Fiji</b>	<b>23–27 May</b>	<b>21</b>
Dr. Robin Mann (New Zealand)*	Director, Centre for Organisational Excellence Research, Massey University		APO

## CATALYZING INNOVATION-LED PRODUCTIVITY GROWTH

Project title	Venue	Date/status	Participants
<b>Expert (country) (*) Chief expert</b>	<b>Designation/organization</b>		<b>Assigned by</b>
Harek Singh (Singapore)	Vice-President and Director, Business Excellence, ST Engineering Ltd.		APO
Arndt Husar (Singapore)	Deputy Director, Global Centre for Public Service Excellence, UN Development Programme		APO
<b>Multicountry Observational Study Mission on Agricultural Innovations in Japan to Increase Productivity</b>	<b>Japan</b>	<b>6–10 June</b>	<b>18</b>
Dr. Michihisa Iida (Japan)	Professor, Laboratory of Field Robotics, Division of Environment and Science Technology, Graduate School of Agriculture, Kyoto University		APO
Hitoshi Kawabata (Japan)	Manager, Dietary Education and Horticulture Section, Ohmifuji Agricultural Co-op		APO
Dr. Toyoki Kozai (Japan)	Executive Director, and Professor Emeritus, Chiba University, Japan Plant Factory Association, Center for Environment, Health and Field Sciences		APO
Hajime Nakahigashi (Japan)	Director, Research Policy Planning Division, Agriculture, Forestry and Fisheries Research Council, Ministry of Agriculture, Forestry and Fisheries		APO
Dr. Sakae Shibusawa (Japan)	Professor, Department of Environmental and Agricultural Engineering, Tokyo University of Agriculture and Technology		APO
Dr. Mikio Umeda (Japan)	Professor Emeritus, Kyoto University, and Secretary-General, International Commission of Agricultural and Biosystems Engineering		APO
Dr. Satoshi Yoshinaga (Japan)	Chief Researcher, Hokuriku Research Center, Agricultural Research Center, National Agriculture and Food Research Organization		APO
Dr. Masayuki Yamaguchi (Japan)	Director, Division of Rice, Institute of Crop Science, National Agriculture and Food Research Organization		APO
<b>Workshop on Knowledge Management for SME Top Management</b>	<b>Cambodia</b>	<b>6–10 June</b>	<b>23</b>
Naoki Ogiwara (Japan)	President and Representative Director, Knowledge Associates Japan Co., Ltd.		APO
Elena Avedillo-Cruz (Philippines)	Consultant		APO
Praba Nair (Singapore)	Principal Consultant, KDi Asia Pte. Ltd.		APO
<b>Workshop on Sustainable Community Development and the Saemaul Undong</b>	<b>ROK</b>	<b>27 June–3 July</b>	<b>18</b>
Dr. Ki-Whan Chung (ROK)	President, Korea Institute for Rural Development		APO
Myung soo Cho (ROK)	Secretary General, Korea Saemaul Undong Center		APO
Chang Young Hwang (ROK)	Director General, International Cooperation Bureau, Korea Saemaul Undong Center		APO
Dong-Sun Kim (ROK)	Senior Advisor, Yoon & Yang LLC		APO
Kyoung-Won Yi (ROK)	General Manager, International Cooperation Bureau, Korea Saemaul Undong Center		APO
Kyong Koo Lee (ROK)	Senior Fellow and Director, International HRD Center, Korea Institute for Rural Development		APO
<b>Conference on State-of-the-art Technologies to Drive Agricultural Productivity in the Next Quarter of the Century</b>	<b>Japan</b>	<b>28–30 June</b>	<b>32</b>
<b>Multicountry Observational Study Mission on Cold Chain Systems for Perishable Food</b>	<b>Japan</b>	<b>4–8 July</b>	<b>18</b>
Avinash K. Srivastava (India)	Secretary, Ministry of Food Processing Industries		APO

## CATALYZING INNOVATION-LED PRODUCTIVITY GROWTH

Project title	Venue	Date/status	Participants
<b>Expert (country) (*) Chief expert</b>	<b>Designation/organization</b>		<b>Assigned by</b>
Dr. Takeo Shiina (Japan)	Professor, Graduate School of Horticulture, Faculty of Horticulture, Chiba University		APO
Motoyuki Hazu (Japan)	Executive Officer, General Manager, Overseas Business Development Division, Nichirei Logistics Group Inc.		APO
Dr. Takayuki Mori (Japan)	Professor, University of Marketing and Distribution Sciences		APO
Dr. Kheng Soon Rodney, Wee (Singapore)	Chief Executive/Principal Consultant, Asia Cold Chain Centre		APO
<b>Top Management Forum with Focus on Business Excellence for the Service Industry</b>	<b>ROK</b>	<b>12–14 July</b>	<b>17</b>
George Wong (Singapore)*	Managing Director and Principal Consultant, Hoclink Systems & Services Pte. Ltd.		APO
Cynthia Payne (Australia)	Chief Executive Officer, Summit Care		APO
Dr. Robin Mann (New Zealand)	Director, Centre for Organisational Excellence Research, Massey University		APO
Dr. Jae Yong Song (ROK)	Professor, College of Business Administration, Seoul National University		NPO
<b>Training Course on Innovative Agricultural Extension Systems to Improve Farm Productivity and Income</b>	<b>Philippines</b>	<b>25–29 July</b>	<b>26</b>
Dr. V.P. Sharma (India)	Director and Chairman, Agricultural Knowledge Management, ICTs and Mass Media, National Institute of Agricultural Extension Management		APO
Dr. M. Kalim Qamar (USA)	Consultant, Rural and Agriculture Development and Agricultural Extension		APO
Arnel D. Abanto (Philippines)	Vice-President and Managing Director, DAP		NPO
Melvin B. Carlos (Philippines)	Director, Technology Transfer of Promotion, Innovation and Technology Center		NPO
Susana Evangelita (Philippines)	Director IV, Bureau of Agriculture		NPO
<b>Advanced Agribusiness Management Course for Executives and Managers</b>	<b>Thailand</b>	<b>25–29 July</b>	<b>18</b>
Dr. Toyoki Kozai (Japan)	Executive Director, Japan Plant Factory Association, Center for Environment Health and Field Sciences		APO
Chan Seng Kit (Malaysia)	Managing Director, K-Farm Sdn. Bhd.		APO
Dr. V. Bruce J. Tolentino (Philippines)	Deputy Director-General and Secretary, IRRI Board of Trustees, International Rice Research Institute		APO
Dr. Ralph D. Christy (USA)	Director, Cornell International Institute for Food, Agriculture and Development and Professor of Applied Economics and Management, Cornell University		APO
Prof. Mohammad Karaan (South Africa)	Professor and Dean, Faculty of Agri-Sciences, University of Stellenbosch		Cornell Univ.
Lin Fu (USA)	Research Fellow, Cornell Institute for Food, Agriculture and Development		Cornell Univ.
Vimol Chhorn (Cambodia)	Sales and Marketing Director, Kirirom Food Production Co., Ltd.		Cornell Univ.
Dr. Aimee Hampel-Milagrosa (Germany)	Senior Researcher, Abt II Nachhaltige Wirtschafts und Sozialentwicklung, Department of Sustainable Economic and Social Development, German Development Institute		Cornell Univ.
Dr. Suwimon Keeratipibul (Thailand)	Professor, Department of Food Technology, Faculty of Science, Chulalongkorn University		NPO

## CATALYZING INNOVATION-LED PRODUCTIVITY GROWTH

Project title	Venue	Date/status	Participants
Expert (country) (*) Chief expert	Designation/organization		Assigned by
Paradon Munro (Thailand)	Chief Executive Officer, VDM Group Limited		NPO
<b>Asian Food and Agribusiness Conference: Innovations for Enhancing the Productivity and Sustainability of Enterprises in Agribusiness and the Food Industry</b>	<b>Sri Lanka</b>	<b>2–5 August</b>	<b>28</b>
Dr. Louie A. Divinagracia (Philippines)*	Professor/Lecturer, College of Public Affairs, University of the Philippines at Los Banos		APO
M.A. Matin (Bangladesh)	Director General (In-Charge), Rural Development Academy		APO
Harrace Hok Chung Lau (ROC)	Director, Asia Pacific, eOneNet Limited		APO
Chayaa Nanjappa (India)	Nectar Fresh, Pure Honey and Food Products		APO
Seng Kit Chan (Malaysia)	Managing Director, K-Farm Sdn. Bhd.		APO
Waheed Ahmad (Pakistan)	Manager (Operations)/Consultant, Capital Food Industries		APO
Prof. Paul Teng Piang Siong (Singapore)	Principal Officer, National Institute of Education, Nanyang Technological University		APO
Prof. M.I.M. Mowjood (Sri Lanka)	Department of Agricultural Engineering, Faculty of Agriculture, University of Peradeniya		NPO
S.M.A.C.U. Senarathna (Sri Lanka)	Scientist (Food Science and Postharvest Technology), Department of Agriculture, Horticultural Crops Research and Development Institute		NPO
Pascal Bernardoni (Switzerland)	Director, REDD		APO
<b>International Conference on Public-sector Productivity</b>	<b>Malaysia</b>	<b>9–11 August</b>	<b>36</b>
Dr. Shayne Silcox (Australia)	Chief Executive Officer, City of Melville		APO
Dr. Prijono Tjiptoherijanto (Indonesia)	Commissioner, National Civil Service Commission		APO
Masahiro Horie (Japan)	Senior Professor of Public Administration, National Graduate Institute for Policy Studies		APO
Dr. Shin Kim (ROK)	Director and Research Fellow, Center for International Public Cooperation, Korea Institute of Public Administration		APO
Dr. Nowook Park (ROK)	Director, Center for Performance Evaluation and Management, Korea Institute of Public Finance		APO
Magdalena Legaspi Mendoza (Philippines)	Acting Senior Vice President for Programs, DAP		APO
Patrick Lim (Singapore)	Director, Business and Service Excellence, SPRING Singapore		APO
Dr. Chung-An Chen (Singapore)	Public Policy and Global Affairs Programme, Nanyang Technological University		APO
<b>e-Learning Course on Value Addition to Agrifood Products (Session 1)</b>	<b>Bagladesh, India, IR Iran, Nepal</b>	<b>29 August–1 September</b>	<b>80</b>
Waheed Ahmad (Pakistan)	Manager/Consultant, Capital Food Industries		APO
Dr. Kheng Soon Rodney Wee (Singapore)	Chief Executive/Principal Consultant, Asia Cold Chain Centre		APO

## CATALYZING INNOVATION-LED PRODUCTIVITY GROWTH

Project title	Venue	Date/status	Participants
Expert (country) (*) Chief expert	Designation/organization		Assigned by
<b>e-Learning Course on Value Addition to Agrifood Products (Session 2)</b>	<b>Cambodia, Mongolia, Pakistan, Thailand, Vietnam</b>	<b>20–23 September</b>	<b>103</b>
Waheed Ahmad (Pakistan)	Manager/Consultant, Capital Food Industries		APO
Dr. Kheng Soon Rodney Wee (Singapore)	Chief Executive/Principal Consultant, Asia Cold Chian Centre		APO
<b>Conference on Raising Productivity in Higher Education</b>	<b>Indonesia</b>	<b>29 August–1 September</b>	<b>49</b>
Prof. Hamish Coates (Australia)	Chair of Higher Education, Melbourne Centre for the Study of Higher Education, University of Melbourne		APO
Prof. Jandhyala B.G. Tilak (India)	Professor and Head, Department of Educational Finance, National University of Educational Planning and Administration		APO
Prof. Reiko Yamada (Japan)	Professor, Faculty of Social Studies, Director, Center of Higher Education and Student Research, Doshisha University		APO
Prof. William F. Massy (USA)	Professor Emeritus, Education and Business Administration, Stanford University		APO
Dr. Paulina Pannen (Indonesia)	Senior Adviser on Academic Affairs, Ministry of Research Technology and Higher Education		NPO
Dr. Tengku Mohd Khairal Abdullah (Indonesia)	Head of Program, MM Online, Binus University Business School		NPO
<b>Training Course on Lean Applications Focusing on the Service Industry</b>	<b>Vietnam</b>	<b>19–23 September</b>	<b>23</b>
Kazuteru Kuroda (Japan)	Head, Global Management Center, JPC		APO
Masahisa Mizumoto (Japan)	Senior Management Consultant, Chu-San-Ren		APO
Kabir Ahmad Mohd. Jamil (Malaysia)	Director, Regulatory Review Department, MPC		APO
<b>Workshop on Performance Management for the Public Sector</b>	<b>Philippines</b>	<b>26–30 September</b>	<b>23</b>
Dr. Leslie A. Pal (Canada)	Chancellor's Professor, School of Public Policy and Administration, Carleton University		APO
Dr. Prajapati Trivedi (India)	Adjunct Professor of Public Policy, Indian School of Business		APO
Dr. Ora-Orn Poocharoen (Thailand)	Dean, Faculty of Political Science and Public Administration, Chiang Mai University		APO
<b>Conference on Customer Satisfaction (CS) Measurement and CS Index Development for the Service Industry</b>	<b>ROC</b>	<b>4–6 October</b>	<b>33</b>
Dr. Brian Marson (Canada)	President, The Public Service Excellence Institute		APO
Taro Asano (Japan)	Project Manager, SPRING (Service Productivity Innovation for Growth), Management Development Department, JPC		APO
Yongchang Chen (Singapore)	Head, Research and Consulting, Institute of Service Excellence, Singapore Management University		APO

## CATALYZING INNOVATION-LED PRODUCTIVITY GROWTH

Project title	Venue	Date/status	Participants	
Expert (country) (*) Chief expert	Designation/organization			Assigned by
<b>Training of Trainers on Business Excellence for SMEs</b>	<b>Singapore</b>	<b>24–27 October</b>	<b>20</b>	
Dr. Musli Bin Mohammad (Malaysia)	Associate Professor, Department of Manufacturing and Industrial Engineering, Faculty of Mechanical and Manufacturing Engineering, University Tun Hussein Onn			APO
Michael E. Voss (New Zealand)	BE Trainer and Facilitator, PYXIS			APO
<b>e-Learning Course on Innovative Approaches in Marketing of Agrifood Products (Session 1)</b>	<b>Cambodia, Mongolia, Philippines, Thailand, Vietnam</b>	<b>25–28 October</b>	<b>84</b>	
Jun Chanoki (Japan)	Senior Consultant, 5Plus2 Corporation Limited			APO
Chan Seng Kit (Malaysia)	Managing Director, K-Farm Sdn. Bhd.			APO
Nerlita M. Manalili (Philippines)	Managing Director, NEXUS Agribusiness Solutions			APO
<b>e-Learning Course on Innovative Approaches in Marketing of Agrifood Products (Session 2)</b>	<b>Bangladesh, India, IR Iran, Nepal, Pakistan</b>	<b>5–8 December</b>	<b>100</b>	
Jun Chanoki (Japan)	Senior Consultant, 5Plus2 Corporation Limited			APO
Nerlita M. Manalili (Philippines)	Managing Director, NEXUS Agribusiness Solutions			APO
Dr. Jan Mei Soon (UK)	Professor, International Institute of Nutritional Sciences and Applied Food Safety Studies, School of Sport and Wellbeing, University of Central Lancashire			APO
<b>Study Mission to a Nonmember Country on Regional Innovation Strategies and Knowledge Productivity</b>	<b>Switzerland</b>	<b>31 October–4 November</b>	<b>13</b>	
Cathy Jewell (Switzerland)	Senior Information Officer, Editor, WIPO Magazine Communications Division, World Intellectual Property Organization			Nexus Forum
Dr. Fabian Schnell (Switzerland)	Senior Fellow, Avenir Suisse			Nexus Forum
Dr. Martin Warland (Switzerland)	Center for Regional Economic Development, University of Bern			Nexus Forum
Dr. Manuel Aschwanden (Switzerland)	CEO, Optotune			Nexus Forum
Dr. Nanja Strecker (Switzerland)	ETH Zürich Industry Relations			Nexus Forum
Dr. Patrick Dümmler (Switzerland)	Senior Fellow Avenir, Avenir Suisse			Nexus Forum
Dr. Benoit Dubuis (Switzerland)	General Manager, Campus Biotech			Nexus Forum
Mergim Jahiu (Switzerland)	International Project Manager, Swiss Federal Institute for Vocational Education and Training			Nexus Forum
Nic Alexakis (Switzerland)	CEO, Swiss Biotech Association			Nexus Forum
Dr. Emile Dupont (Switzerland)	SME & Innovation Section Leader, EUresearch			Nexus Forum
Dr. Louisa Busca Grisoni (Switzerland)	Head of Corporate Relations & Director, Swiss Innovation Park West EPFL			Nexus Forum
Dr. Daniel Müller-Jentsch (Switzerland)	Senior Fellow, Avenir Suisse			Nexus Forum

## CATALYZING INNOVATION-LED PRODUCTIVITY GROWTH

Project title	Venue	Date/status	Participants
<b>Expert (country) (*) Chief expert</b>	<b>Designation/organization</b>		<b>Assigned by</b>
Dr. Rahel Byland (Switzerland)	Programme Manager, ETH Global		Nexus Forum
Sacha Wunsch Vincent (Switzerland)	Senior Economic Officer, Innovation Economics Section, World Intellectual Property Organization		Nexus Forum
Robert Slooves (Switzerland)	CEO, Geneva Biotech Center		Nexus Forum
<b>Study Mission to a Nonmember Country on Innovations in Agriculture to Increase Productivity and Profitability</b>	<b>Australia</b>	<b>7–12 November</b>	<b>22</b>
<b>Workshop on Developing the APO Public-sector Leadership Framework</b>	<b>Philippines</b>	<b>14–18 November</b>	<b>24</b>
Aurel Brudan (Australia)	Founder and CEO, The KPI Institute		APO
Dr. Tim A. Mau (Canada)	Associate Professor, Department of Political Science, University of Guelph		APO
Dr. Chung-An Chen (Singapore)	Adjunct Professor, Public Policy and Global Affairs Program, Nanyang Technological University		APO
<b>Workshop on Information Security Management (ISMS) Based on ISO 27000</b>	<b>Pakistan</b>	<b>21–25 November</b>	<b>23</b>
Cheong Weng Wai (Malaysia)	Consultant		APO
Mohd. Lizuan Bin Abd. Latif (Malaysia)	Principal Consultant, Qualitymind Sdn. Bhd.		APO
Dong Minh Quy (Vietnam)	Senior Auditor, TUV NORD Vietnam		APO
<b>Study Mission to a Nonmember Country on Cloud Computing Technology</b>	<b>USA</b>	<b>28 November–2 December</b>	<b>18</b>
<b>Multicountry Observational Study Mission on Strengthening Public–private-sector Partnerships in Developing Competitive Agribusiness</b>	<b>Malaysia</b>	<b>5–9 December</b>	<b>20</b>
Avinash K. Srivastava (India)	Secretary, Ministry of Food Processing Industries		APO
<b>Workshop on Developing the APO Toolkit for Designing and Implementing Performance Management Systems in the Public Sector</b>	<b>Japan</b>	<b>5–9 December</b>	<b>18</b>
Dr. Lanita Winata (Australia)	Professor, AFE Griffith University		APO
Dr. Helen K. Liu (PR China)	Assistant Professor, Department of Politics and Public Administration, University of Hong Kong		APO
Dr. Prajapati Trivedi (USA)	Senior Fellow (Governance), Adjunct Professor of Public Policy, Indian School of Business, Visiting Fellow, IBM Center of the Business of Government		APO
<b>Research on Agricultural Policies in Asia</b>	<b>APO Secretariat</b>	<b>In progress</b>	<b>-</b>
Prof. Kunio Tsubota (Japan)*	Professor, Department of Agri-food and Environmental Policy, School of Agriculture, Meiji University		APO
Dr. Mohammad Jahangir Alam (Bangladesh)	Associate Professor, Department of Agribusiness and Marketing, Faculty of Agricultural Economics and Rural Sociology, Bangladesh Agricultural University		APO
Dr. Yu-Hui Chen (ROC)	Professor, Department of Agricultural Economics, National Taiwan University		APO
Dr. Olga Melyukhina (France)	Agricultural Policy Analyst, Policies and Trade in Agriculture, Trade and Agriculture Directorate, OECD		APO

## CATALYZING INNOVATION-LED PRODUCTIVITY GROWTH

Project title	Venue	Date/status	Participants
<b>Expert (country) (*) Chief expert</b>	<b>Designation/organization</b>		<b>Assigned by</b>
Dr. Ashish Kumar Bhutani (India)	Joint Secretary, Credit and Cooperation, Ministry of Agriculture and Farmers' Welfare		APO
Dr. Sunitha Dara Raju (India)	Professor and Chairperson, Graduate Studies, Indian Institute of Foreign Trade		APO
Avinash K. Srivastava (India)	Additional Secretary, Department of Agriculture and Cooperation, Ministry of Agriculture		APO
Setyo Adhie (Indonesia)	Senior Planner, Directorate General, Processing and Marketing of Agricultural Products, Ministry of Agriculture		APO
Dr. Tengku Mohd. Ariff Tengku Ahmad (Malaysia)	Director, Economic and Technology Management, Malaysia Agricultural Research and Development Institute		APO
Dr. Abdul Salam (Pakistan)	Professor of Economics, Chairperson, School of Economics Sciences, Federal Urdu University of Arts, Science and Technology		APO
Dr. Rasnayaka Mudiyansele (Sri Lanka)	Senior Agriculture Economist, Socio Economics and Planning Centre, Department of Agriculture		APO
Dr. Boonjit Titapiwatanakun (Thailand)	Special Advisor and Resource Person, Department of Agricultural and Resource Economics, Faculty of Economics, Kasetsart University		APO
<b>Research on Measuring Productivity in Higher Education</b>	<b>APO Secretariat</b>	<b>In progress</b>	<b>-</b>
Dr. Hamish Coates (Australia)*	Professor, Higher Education, Centre for the Study of Higher Education, University of Melbourne		APO
Dr. Ngin Chanrith (Cambodia)	Dean, Faculty of Development Studies, Royal University of Phnom Penh		APO
Robert Victor Misau (Fiji)	Team Leader for Corporate Services, Acting Team Leader of Finance and Research, Fiji Higher Education Commission		APO
Dr. Ganesan Kannabiran (India)	Professor (Higher Academic Grade), National Institute of Technology		APO
Paulina Pannen (Indonesia)	Senior Adviser on Academic Affairs, Ministry of Research Technology and Higher Education		APO
Dr. Izhar Bin Che Mee (Malaysia)	Principal Consultant/Researcher, Enterprise Heartbeat MSC Sdn. Bhd.		APO
Shakeel Ahmad (Pakistan)	Assistant Professor, FAST National University of Computer and Emerging Sciences		APO
Dr. Conrado E. Inigo, Jr. (Philippines)	Vice-President, Academic Affairs, Lyceum of Philippines University		APO
G.M.R.D. Aponso (Sri Lanka)	Director (Planning), Ministry of Higher Education and Research		APO
Siriporn Petchkong (Thailand)	Researcher, Research Division, FTPI		APO
<b>Research on Aging Societies and Gender Mainstreaming in Human Capital Development</b>	<b>APO Secretariat</b>	<b>In progress</b>	<b>-</b>
Dr. Chin-Hui Hsiao (ROC)	Associate Professor, Chihlee University of Technology		APO
Dr. Seema Joshi (India)	Associate Professor of Economics, Kirori Mal College, University of Delhi		APO
Dr. Lilis Heri Mis Cich (Indonesia)	Researcher/Lecturer, Demographic Institute, Faculty of Economics and Business, University of Indonesia		APO
Kelvin Chee Meng Yeong (Malaysia)	Assistant Director, Economic Planning Unit, Prime Minister's Department		APO
Dr. Ronahlee A. Asuncion (Philippines)	Officer in Charge, School of Labor and Industrial Relations		APO
Dr. Wiraporn Pothisiri (Thailand)	Assistant Professor, College of Population Studies, Chulalongkorn University		APO



## CATALYZING INNOVATION-LED PRODUCTIVITY GROWTH

Project title	Venue	Date/status	Participants
Expert (country) (*) Chief expert	Designation/organization		Assigned by
<b>2nd Coordination Meeting of Research on Knowledge Management Models in the Public Sector</b>	<b>APO Secretariat</b>	<b>In progress</b>	<b>0</b>
Ronald Young (UK)*	CEO and CKO, Knowledge Associates Cambridge Ltd.		APO
Sapta Putra Yadi (Indonesia)	Director/Founder, ITTC-Knoco Indonesia		APO
Dr. Ida Yasin (Malaysia)	Senior Manager, Strategic Planning and Corporate Communication Department, MPC		APO
Magdalena Legaspi Mendoza (Philippines)	Senior Vice President, DAP		APO
Gopinathan (Singapore)	Consultant, Knowledge Associates Cambridge Ltd.		APO
Dr. Nguyen Van Thang (Vietnam)	Director, Asia Pacific Institute of Management, National Economics University		APO
Trevor Tin Shing Lui (PR China)	Partner Consultant, Wise Smart Consultants Limited		APO
<b>Research on Agricultural Productivity Measurement and Monitoring</b>	<b>APO Secretariat</b>	<b>In progress</b>	<b>-</b>
<b>Research on Case Studies of Diversity Management and Human Capital Strategy</b>	<b>APO Secretariat</b>	<b>In progress</b>	<b>-</b>
Noelle Richardson (Canada)*	Principal, Noelle Richardson Consulting		APO
Dr. Yu-Ping Wang (ROC)	Associate Director, Global Talent Center, College of Management, National Sun Yat-sen University		APO
Dr. Bharti Trivedi (India)	Co-Founder, Apex Technology		APO
Mohammad Ali Shahhoseini (IR Iran)	Research Vice-Chancellor, Faculty of Management, University of Tehran		APO
Anis Farizza Murad Sani (Malaysia)	CEO and Principal Consultant, One HR		APO
Dr. Ronahlee A. Asuncion (Philippines)	Dean/Assistant Professor 7, School of Labor and Industrial Relations, University fo the Philippines Diliman		APO
Dr. Bhubate Samutachak (Thailand)	Lecturer/Deputy Director for Academic and International Affairs, Institute for Population and Social Research, Mahidol University		APO
<b>Research on Measurement of Productivity in the Public Sector</b>	<b>APO Secretariat</b>	<b>In progress</b>	<b>-</b>
Dean Parham (Australia)*	Research Fellow, School of Economics, University of Adelaide		APO
M.L. Suryaprakash (India)	CEO/Principal Consultant, Brio Consultancy Services (Productivity, Quality and Lean Management Consultants)		APO
Dr. Bachtiar Horasman Simamora (Indonesia)	Leader, Research Performance Excellence Group, Binus University		APO
Abolfazl Khavari Nejad (IR Iran)	Consultant, NIPO		APO
Zaffrulla Bin Hussein (Malaysia)	Manager, MPC		APO
Dr. Muhammad Nadeem Javaid (Pakistan)	Chief Economist, Ministry of Planning, Development and Reform		APO
Arnel D. Abanto (Philippines)	Vice-President, DAP		APO
W.M.D.S. Gunarathne (Sri Lanka)	Additional Director, NPS		APO

## CATALYZING INNOVATION-LED PRODUCTIVITY GROWTH

Project title	Venue	Date/status	Participants
Expert (country) (*) Chief expert	Designation/organization		Assigned by
Patcharasri Dangthongdee (Thailand)	Productivity Researcher, FTPI		APO
<b>Research on Change Management in the Public Sector</b>	<b>Thailand</b>	<b>In progress</b>	<b>-</b>
Dr. Ora-orn Poocharoen (Thailand)*	Dean, Faculty of Political Science and Public Administration, Chiang Mai University		APO
Ajit Kumar Paul FCA (Bangladesh)	Director (Joint Secretary), NPO		APO
Dr. Kang Sovannara (Cambodia)	Dean of Graduate School, National University of Management		APO
Alaparti Sudarsana Kumar (India)	Corporate Productivity & HR Consultant and Trainer		APO
Irham Dilmy (Indonesia)	Vice Chairman & Commissioner, Indonesian Civil Service Commission		APO
Dr. Bayazid Mardukhi (IR Iran)	Member of Steering Committee, NIPO		APO
Dr. Mazrina Mohamed Ibramsah (Malaysia)	Senior Manager, MPC		APO
Dr. Muhammad Idrees Khawaja (Pakistan)	Senior Research Economist, Pakistan Institute of Development Economics		APO
Ramonesa R. Ricardo (Philippines)	Consultant		APO
W.M.A.S. Wickramasinghe (Sri Lanka)	Assistant Secretary (HRD), Ministry of Public Administration, Local Government and Democratic Governance		APO
Pikul Itthirunwong (Thailand)	Lecturer, Faculty of Political Science and Public Administration, Chiang Mai University		APO

## GREEN PRODUCTIVITY

Project title	Venue	Date/status	Participants
<b>Expert (country) (*) Chief expert</b>	<b>Designation/organization</b>		<b>Assigned by</b>
<b>Research on Green Productivity and Productivity Measurement Program for Myanmar</b>	<b>APO Secretariat</b>	<b>Completed</b>	<b>-</b>
<b>14th Annual Meeting of the Green Productivity Advisory Committee (GPAC)</b>	<b>Japan</b>	<b>3 February</b>	<b>-</b>
Prof. Ryoichi Yamamoto (Japan)	Professor Emeritus, University of Tokyo		APO
Jumrud Sawangsamud (Thailand)	Director-General, Federation of Thai Industries		APO
Venus Chantacheevakul (Thailand)	Business Support Manager, SCG Chemical Co. Ltd.		APO
<b>Development of a Network of Green Productivity Advisory Committees (GPACs): Workshop on the Development of the International Green Productivity Advisory Committee (I-GPAC)</b>	<b>Japan</b>	<b>28–30 November</b>	<b>13</b>
Hsueh Su-Ching (ROC)	Project Manager, CPC		APO
Masayuki Hamakawa (Japan)	Vice President, Green Business Innovation Division, Corporate Environmental Strategy Unit, Fujitsu Ltd.		APO
Osamu Uno (Japan)	Secretary-General, Eco Mark Office, Japan Environment Association		APO
Gakuji Fukatsu (Japan)	Director, Green Purchasing Network		APO
Prof. Ryoichi Yamamoto (Japan)	Emeritus Professor, University of Tokyo		APO
Koichi Yanagita (Japan)	General Manager, Corporate Sustainability, Kao Corporation		APO
J.M. Thilaka Jayasundara (Sri Lanka)	Director General, NPS		APO
<b>Training Course on Energy Conservation</b>	<b>Japan</b>	<b>15–26 February</b>	<b>38</b>
Masahide Shinohara (Japan)	General Manager, The Energy Conservation Center		APO
Shiro Imazu (Japan)	Team Leader, Kameyama Environmental Safety Promotion Center, Sharp Co., Ltd.		APO
Akio Yoshizaki (Japan)	Control/Energy System Technology Group, Solution Service Management Department, Hitachi Industrial Equipment Systems Co., Ltd.		APO
Fumio Akahori (Japan)	Facilities Department, Denso Corporation		APO
Kazuhiko Yoshida (Japan)	General Manager, The Energy Conservation Center		APO
Nicole Audrey Latham (USA)	Consulting Group, Tokyo CES Center, TLV Co., Ltd.		APO
<b>Training Course on Green Productivity</b>	<b>Fiji</b>	<b>21–25 March</b>	<b>22</b>
Kelvin Chan Keng Chuen (Singapore)*	Director and Principal Consultant, Teian Consulting International Pte. Ltd.		APO
Dr. Palaniappan Dharmalingam (India)	Director, NPC		APO
Alex Yap Yun Fung (Malaysia)	Consultant, EcoLean Consultancy Sdn. Bhd.		APO
<b>Workshop on Mainstreaming Climate Change Adaptation in Agriculture</b>	<b>Bangladesh</b>	<b>25–28 April</b>	<b>22</b>
Dr. Adriana Ignaciuk (France)	Economist/Policy Analyst, Trade and Agriculture Directorate, Natural Resources and Policies Division, OECD		APO

## GREEN PRODUCTIVITY

Project title	Venue	Date/status	Participants
<b>Expert (country) (*) Chief expert</b>	<b>Designation/organization</b>		<b>Assigned by</b>
Dr. Mamata Swain (India)	Professor of Economics, Ravenshaw University		APO
Dr. Venkatachalam Anbumozhi (Indonesia)	Senior Economist, Economic Research Institute for ASEAN and East Asia		APO
Dr. Ashfaq Ahmad Chatta (Pakistan)	Program Chair, Climate Change, U.S.–Pakistan Center for Advanced Studies in Agriculture and Food Security, University of Agriculture Faisalabad		APO
Mohammad Abdul Qayyum (Bangladesh)	Director General BRDB/Additional Secretary		NPO
Dr. Abu Wali Raghieb Hassan (Bangladesh)	Additional Director (Project Implementation and Evaluation), Planning, Project Implementation and ICT Wing, Department of Agricultural Extension, Ministry of Agriculture		NPO
<b>Training Course for Energy Management System Auditors: ISO 50001</b>	<b>Bangladesh</b>	<b>8–11 May</b>	<b>24</b>
Ha Wai Ng, Howie (PR China)	Technical Director, Hong Kong Veritas Limited		APO
Sanjiv Kumar Bose (India)	General Manager, Energy and Carbon Services, BSI Group India Pvt. Ltd.		APO
<b>Workshop on Advanced Renewable Energy Technologies and Assessing their Adoption and Application</b>	<b>IR Iran</b>	<b>14–18 May</b>	<b>23</b>
Dr. Naotsugu Ikeda (Japan)	Executive Officer and General Manager, Overseas Business Department, West Japan Engineering Consultants, Inc.		APO
Toru Nagao (Japan)	Director for International Cooperation, New Energy Foundation, and Professor, Graduate School, Ashikaga Institute of Technology		APO
Christophe Inglin (Singapore)	Managing Director, Energetix Pte. Ltd.		APO
<b>Development of Demonstration Companies: Mongolia (2nd visit)</b>	<b>Mongolia</b>	<b>16–20 May</b>	<b>-</b>
Kazuhiko Yoshida (Japan)	General Manager, The Energy Conservation Center		APO
<b>Development of Demonstration Companies: Sri Lanka (1st visit)</b>	<b>Sri Lanka</b>	<b>23–25 May</b>	<b>-</b>
Kazuhiko Yoshida (Japan)	General Manager, The Energy Conservation Center		APO
<b>Development of Demonstration Companies: Sri Lanka (2nd visit)</b>	<b>Sri Lanka</b>	<b>26–28 October</b>	<b>-</b>
Kazuhiko Yoshida (Japan)	General Manager, The Energy Conservation Center		APO
Junichi Noka (Japan)	Technical Expert, The Energy Conservation Center		APO
<b>Organic Agroindustry Development Leadership Course in Asia</b>	<b>Bangladesh</b>	<b>28 May–3 June</b>	<b>24</b>
Konrad Hauptfleisch (Germany)	Academy Manager, International Federation of Organic Agriculture Movements, Organics International		APO
Manoj Kumar Menon (India)	Executive Director, International Competence Centre for Organic Agriculture/Vice President, International Federation of Organic Agriculture Movements-Asia		APO
<b>Eco-products International Fair 2016</b>	<b>Thailand</b>	<b>8–11 June</b>	<b>-</b>
<b>Expansion of a Network of Green Productivity Advisory Committees (GPACs): Eco-products International Fair</b>	<b>Thailand</b>	<b>8–11 June</b>	<b>-</b>
Hajime Bada (Japan)	Honorary Adviser, JFE Holdings, Inc.		APO

## GREEN PRODUCTIVITY

Project title	Venue	Date/status	Participants
<b>Expert (country) (*) Chief expert</b>	<b>Designation/organization</b>		<b>Assigned by</b>
Shunichi Matsumura (Japan)	Senior Advisor for Technology, Teijin Corporation		APO
Prof. Ryoichi Yamamoto (Japan)	Professor Emeritus, University of Tokyo		APO
Yukio Yanase (Japan)	Honorary Advisor, ORIX Corporation		APO
<b>Asia EnviroEconomics Conference: Concerted Efforts for a Sustainable Future through 24-Hour Eco-life</b>	<b>Thailand</b>	<b>8–10 June</b>	<b>36</b>
Hitoshi Ikuma (Japan)	Director, Center for the Strategy of Emergence, The Japan Research Institute, Limited		APO
Yusuke Saraya (Japan)	President, Saraya Co., Ltd.		APO
Seiya Yamazaki (Japan)	Director, Green Solution Promotion Department, Green Business Innovation Division, Corporate Environmental Strategy Unit, Fujitsu Ltd.		APO
Shinichi Takemura (Japan)	Professor, Kyoto University of Art and Design, Director, Earth Literacy Program		APO
Prof. Ryoichi Yamamoto (Japan)	Professor Emeritus, University of Tokyo, Professor, Tokyo City University, and Honorary President, International Green Purchasing Network Secretariat		APO
Rae Kwon Chung (ROK)	Advisor to the Chair of High-level Experts and Leaders Panel on Water and Disaster for Secretary-General of the UN		APO
Prof. Gunter Arthur Martha Pauli (South Africa)	Economist, Zero Emissions Research and Initiatives		APO
Dr. Woodrow Wilson Clark (USA)	Founder and Managing Director, Clark Strategic Partners		APO
<b>Training of Trainers and Consultants in Green Productivity</b>	<b>ROC</b>	<b>4–22 July</b>	<b>22</b>
Alex Yap Yun Fung (Malaysia)	Consultant, EcoLean Consultancy Sdn. Bhd.		APO
Kelvin Chan Keng Chuen (Singapore)	Director and Principal Consultant, Teian Consulting International Pte. Ltd.		APO
Dr. Koh Niak Wu (Singapore)	Founder and Director, Cosmiqo International Pte. Ltd.		APO
<b>Advanced Training Course on Certification of Organic Products</b>	<b>IR Iran</b>	<b>20–24 August</b>	<b>24</b>
Dr. Zhou Zejiang (ROC)	President of IFOAM-Asia, International Federation of Organic Agriculture Movements		APO
Dr. Mohammad Reza Ardakani (IR Iran)	Professor, Islamic Azad Univeresity		NPO
Dr. Lorenzo Peris (Italy)	Consultant		APO
<b>1st International Conference on Biofertilizers and Biopesticides</b>	<b>ROC</b>	<b>23–26 August</b>	<b>46</b>
Dr. Ashok Kumar Yadav (India)	Advisor, Agricultural and Processed Food Export Development Authority, Ministry of Commerce and Industry		APO
Dr. Tadashi Yokoyama (Japan)	Professor, Institute of Agriculture, Tokyo University of Agriculture and Technology		APO
Dr. Tong-Min Sa (ROK)	Professor, Department of Agricultural Chemistry, Chungbuk National University		APO
Dr. M.S. Reddy (USA)	Chairman, Asian PGPR Society for Sustainable Agriculture, Department of Entomology and Plant Pathology, Auburn University		APO
Dr. Shan-Da Liu (ROC)	Chair Professor, Department of Biological Science and Technology, Meihu University		NPO
Dr. Ying Yeh (ROC)	Advisor, Agricultural Technology Research Institute		NPO

## GREEN PRODUCTIVITY

Project title	Venue	Date/status	Participants
<b>Expert (country) (*) Chief expert</b>	<b>Designation/organization</b>		<b>Assigned by</b>
Dr. Srinivasan Ramasamy (ROC)	Entomologist, Headquarters, Asian Vegetable Research and Development Center-World Vegetable Center		NPO
Dr. Chaur-Tsuen Lo (ROC)	Director, Office of Industry–Academia Collaboration and Service, National Formosa University		NPO
Dr. Fo-Ting Shen (ROC)	Assistant Professor, Department of Soil and Environmental Sciences, National Chung Hsing University		NPO
Dr. Frank Wei-Ren Tsai (ROC)	Chief, Applied Toxicology Division, Taiwan Agricultural Chemicals and Toxic Substances Research Institute, Council of Agriculture, Executive Yuan		NPO
<b>Multicountry Observational Study Mission: Promoting GP with Focus on Smart Grids and Green Energy</b>	<b>ROC</b>	<b>5–9 September</b>	<b>22</b>
Kazuyuki Takada (Japan)	Director, Smart Community Department, New Energy and Industrial Technology Development Organization		APO
Leon R. Roose (USA)	Chief Technologist, Hawaii Natural Energy Institute, University of Hawaii at Manoa		APO
<b>Multicountry Observational Study Mission on Advanced Energy Technology</b>	<b>IR Iran</b>	<b>1–5 October</b>	<b>20</b>
Mohan A. Patil (India)	Energy Efficiency Expert and Director, Federation of Indian Chamber of Commerce and Industries		APO
Hitoshi Kaji (Japan)	Engineer and Representative, Kaji Professional Engineer Office		APO
<b>International Conference on Innovations and Applications of New Technologies to Improve Productivity</b>	<b>Sri Lanka</b>	<b>12–14 October</b>	<b>49</b>
Dr. Tsai Chi Kuo (ROC)	Department Chair, Chung Yuan Christian University		APO
Dr. Aimee Hampel-Milagrosa (Germany)	Senior Researcher, German Development Institute		APO
Dr. Eva Diedrichs (Germany)	Managing Director, IMP <sup>3</sup> rove-European Innovation Management Academy EWIV		APO
Ravi Arora (India)	Vice President, Innovation (Group Technology and Innovation Office), Tata Sons Management Consulting		APO
Dr. Toyoki Kozai (Japan)	Executive Director, Japan Plant Factory Association, Center for Environment, Health & Field Sciences		APO
David Sehyeon Baek (ROK)	Chief, International Affairs Cooperation and Public Relations, Gyeonggi Center for Creative Economy and Innovation		APO
Abdul Razak Ahmad (Malaysia)	Programme Director, High Impact Program (HIP6), Yayasan Inovasi Malaysia		APO
Dr. Mark Goh Keng Hock (Singapore)	Director (Industry Research), The Logistics Institute-Asia Pacific, National University of Singapore		APO
Ron Young (UK)	CEO and CKO (Chief Knowledge Officer), Knowledge Associates Cambridge Ltd.		APO
Dr. Vijay Kumar Saraswat (India)	Member, Niti Aayog India		NPO
J.M. Thilaka Jayasundara (Sri Lanka)	Director General, NPS		NPO
<b>Asian Food and Agribusiness Conference: Greening the Food Supply Chain</b>	<b>Indonesia</b>	<b>26–28 October</b>	<b>43</b>
Victoria Mack (Australia)	Director, Secretariat for International Landcare Inc.		APO
Dr. Md. Jashim Uddin (Bangladesh)	Associate Professor, Department of Soil, Water and Environment, University of Dhaka		APO

## GREEN PRODUCTIVITY

Project title	Venue	Date/status	Participants
<b>Expert (country) (*) Chief expert</b>	<b>Designation/organization</b>		<b>Assigned by</b>
Manoj Kumar Menon (India)	Executive Director, International Competence Centre for Organic Agriculture		APO
Jose Apollo Y. Pacamalan (Philippines)	Executive Director and CEO, Rice-Duck Movement Inc.		APO
Dr. Louie A. Divinagracia (Philippines)	Professor Lecturer, College of Public Affairs, University of the Philippines at Los Baños		APO
Dr. Wee Kheng Soon Rodney (Singapore)	Chief Executive and Principal Consultant, Asia Cold Chain Centre		APO
Dr. M.I. Mohammed Mowjood (Sri Lanka)	Professor, Department of Agricultural Engineering, Faculty of Agriculture		APO
Dr. Cecep Effendi (Bangladesh)	Former Director General, Centre on Integrated Rural Development for Asia and Pacific		NPO
Eva Tuzon (Bangladesh)	Director, Pilot Projects, Centre on Integrated Rural Development for Asia and the Pacific		NPO
Dr. Anwar Sanusi (Indonesia)	Secretary-General, Ministry of Village, Disadvantaged Areas Development and Transmigration		NPO
Dr. Rusnadi Padjung (Indonesia)	Senior Advisor to Minister, Ministry of Village, Disadvantaged Areas Development and Transmigration		NPO
<b>Training of Trainers in the GLOBALGAP Standard for Greater Market Access</b>	<b>Pakistan</b>	<b>5–10 December</b>	<b>21</b>
Isidor Byeong Deok Yu (ROK)	Farm Assurer Manager, Isidor Sustainability Research Institute		APO
Chan Seng Kit (Malaysia)	Manging Director, K-Farm Sdn. Bhd.		APO
Pathom Taenkam (Thailand)	Agricultural Advisory Committee, FTPI		APO
Dr. Aman Ullah Malik (Pakistan)	Professor and Director, Institute of Horticultural Sciences, and Manager, Agriculture Innovation Program-US AID/UC Davis Funded, University of Agriculture		NPO
Dr. Waqar Ahmad (Pakistan)	Value Chain Development Specialist, U.S.–Pakistan Agriculture Market Development		NPO
<b>Research on the State of Green Business in the Region</b>	<b>APO Secretariat</b>	<b>In progress</b>	<b>-</b>
Dr. Jong-dall Kim (ROK)*	Professor, School of Economics and Trade, Kyungpook National University, and Director, Research Institute for Energy, Environment and Economy		APO
Dr. Lih-chyi Wen (ROC)	Director/Research Fellow, Chung-Hua Institution for Economic Research, Center for Green Economy		APO
Dr. Suporn Koottatep (Thailand)	Consultant		APO
Raghuram Virendra (India)	Deputy Director General, NPC		APO
Liana Bratasida (Indonesia)	Executive Director, Indonesian Pulp and Paper Association		APO
Joseph Benjamin Billones De La Torre (Philippines)	Programs Manager, Philippine Business for the Environment		APO
Dr. Keun Hee Rhee (ROK)	Director/Senior Researcher, Productivity Research Institute, KPC		APO

## PROJECTS FUNDED BY SPECIAL CASH GRANTS

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### GRANTS FROM THE GOVERNMENT OF JAPAN

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Conference on Female Workforce Participation and Productivity Enhancement

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Development of Demonstration Companies

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Forum on Labor–Management Relations for Policymakers, Labor Unions, and Top Management

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Multicountry Observational Study Mission on Agricultural Innovations in Japan to Increase Productivity

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Multicountry Observational Study Mission on Cold Chain Systems for Perishable Food

---

Multicountry Observational Study Mission on Food Safety Management Systems along Food Value Chains

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Research on Need Assessment for Energy Conservation in Member Countries

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Research on Green Productivity and Productivity Measurement Program for Myanmar

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Special Program for Capacity Building in the Food Industry in ASEAN Least Developed Countries

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Special Program for Promoting Public–private-sector Partnerships in Enhancing Food Value Chains in Asian Countries

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Training Course on Energy Conservation

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### GRANTS FROM THE GOVERNMENT OF THE ROK

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Workshop on Sustainable Community Development and the Saemaul Undong

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## INDIVIDUAL-COUNTRY PROGRAM

Project title	Venue	Date/status	Participants
<b>Training Course on the Development of Productivity Practitioners for the Science and Technology Centre of Antioquia (CTA)</b>	<b>Colombia</b>	<b>22 August–2 September</b>	<b>25</b>
Expert (country) (*) Chief expert	Designation/organization		Assigned by
Alex Yap Yun Fung (Malaysia)	Consultant, EcoLean Consultancy Sdn. Bhd.		APO
Kelvin Chan Keng Chuen (Singapore)	Director and Principal Consultant, Teian Consulting International Pte. Ltd.		APO

## INDIVIDUAL-COUNTRY OBSERVATIONAL STUDY MISSIONS

Subject	Deputing country	Venue	Date/status	Participants
Individual-country Observational Study Mission on Productivity and Quality Enhancement	India	ROC	21–25 Mar	5
Individual-country Observational Study Mission on Productivity Movement for SME Development and Food Safety Management System for Enhancing the Productivity and Competitiveness of the Food Industry	Cambodia	Thailand	24–27 May	12
Individual-country Observational Study Mission on Productivity Measurement and Productivity Enhancement	Vietnam	ROK	31 May–3 Jun	6
Individual-country Observational Study Mission on Improvement of Productivity and Quality of Big Companies through the Application of Productivity and Quality (P&Q) Models and Tools	Vietnam	Japan	4–7 Oct	5
Individual-country Observational Study Mission on Waste Management Systems and Policy	Thailand	ROC	12–14 Oct	5
Individual-country Observational Study Mission on Productivity Measurement and Implementation Study	Indonesia	Japan	24–25 Nov	5
Individual-country Observational Study Mission on Promoting and Expanding Agricultural Business	ROC	Vietnam	20–23 Dec	9

## DEVELOPMENT OF DEMONSTRATION COMPANIES

Project title	Venue	Date/status
<b>Development of Demonstration Companies (Knowledge Management for Quality and Productivity Enhancement in the Electricity and Power Industry, IR Iran)</b>	<b>IR Iran</b>	<b>In progress</b>
Expert (country) (*) Chief expert	Designation/organization	
Naoki Ogiwara (Japan)	Managing Director, Knowledge Associates Japan Co., Ltd.	
Assigned by	APO	
<b>Development of Demonstration Companies (Application of On-grid Solar Power Systems for Promotion of Renewable Energy, Lao PDR)</b>	<b>Lao PDR</b>	<b>Completed</b>
Dr. Chung-Hsien Chen (ROC)	Section Chief, Renewable Energy Section, Bureau of Energy, Ministry of Economic Affairs	
Mu Liang Chen (ROC)	Senior Engineer, Hengs Technology Co., Ltd.	
Assigned by	APO	

## INDIVIDUAL-COUNTRY PROGRAM

Project title	Venue	Date/status	
Expert (country) (*) Chief expert	Designation/organization		Assigned by
<b>Development of Demonstration Companies (Material Flow Cost Accounting, Mongolia) (3rd visit)</b>	<b>Mongolia</b>	<b>Completed</b>	
Hiroshi Tachikawa (Japan)	Managing Director, Propharm Japan Co., Ltd.		APO
<b>Development of Demonstration Companies (Application of Resilient, Resource-efficient, Vibrant Energy Sources for the Development of a Green Economy, India) (2nd visit)</b>	<b>India</b>	<b>In progress</b>	
Dr. Hsiao-Kang Ma (ROC)	Professor, National Taiwan University		APO
Shou-Chien Lee (ROC)	Section Chief, Recycling Fund Management Board, Environmental Protection Administration		APO
<b>Development of Demonstration Companies (Quality Management System ISO 9001:2015 for SMEs, Cambodia) (1st visit)</b>	<b>Cambodia</b>	<b>In progress</b>	
Yong Kok Seng (Malaysia)	Managing Director, QMC Resource Centre Sdn. Bhd.		APO
<b>Development of Demonstration Companies (MFCA-linked Lean Manufacturing for SMEs in the Manufacturing Sector, India)</b>	<b>India</b>	<b>In progress</b>	
Hiroshi Tachikawa (Japan)	Managing Director, Propharm Japan Co., Ltd.		APO
<b>Development of Demonstration Companies (Implementation of Performance Management Architecture, Indonesia)</b>	<b>Indonesia</b>	<b>In progress</b>	
Aurel Brudan (Australia)	Founder and CEO, The KPI Institute		APO

## PARTICIPATION UNDER BCBN PROJECTS

Subject	Deputing country	Venue	Date/status	Participants
Study of Best Practices and New Initiatives of NPOs for Productivity Improvement	India	Fiji	14–16 Mar	2
Mission to Develop Business Opportunities between the KPC and NPC	ROK	India	28–29 Mar	2
Productivity Excellence in the Public Sector	Thailand	Philippines and Malaysia	20–24 Jun	3
Productivity Movement, NPO and SME Development Strategy, and Government Policy on Productivity Enhancement in Mongolia	Cambodia	Mongolia	26–28 Jul	3
Public-sector Productivity and Performance Improvement Program in the Philippines	Mongolia	Philippines	19–21 Sep	3
Green Productivity and Tourism Management	IR Iran	ROC	26–30 Sep	3
Green Productivity	Vietnam	Japan	28–29 Sep	3
Public-sector Productivity and Performance Improvement Program in Sri Lanka	Mongolia	Sri Lanka	16–17 Nov	3
Innovation and Renewable Energy	IR Iran	ROK	19–23 Dec	3

## TECHNICAL EXPERT SERVICES

Expert (country of residence)	Subject	Venue	Duration
Hiroshi Tachikawa (Japan)	Train/Propagate SMEs and Stakeholders on MFCA by Conducting 2 Practice-oriented Certificate Courses and Awareness Program on MFCA in India	India	11 Jan–21 Jan
Dr. Suporn Koottatep (Thailand)	Green Productivity for Iranian Industries	IR Iran	25 Jan–28 Jan
Atsushi Maeda (Japan)	Constructing Agribusiness Innovative Business Model and Value-added System	ROC	29 Jan–30 Jan
Dr. Shin Kim (ROK)	Capacity Building on Regulatory Management and Regulatory Impact Assessment (RIA)	Philippines	8 Feb–12 Feb
Hiroshi Tachikawa (Japan)	Conference on Material Flow Cost Accounting	Indonesia	25 Apr–29 Apr
Yoshikuni Furukawa (Japan)	Conference on Material Flow Cost Accounting	Indonesia	25 Apr–29 Apr
Praba Nair (Singapore)	Train the Trainers Program on Knowledge Management and Innovation	Sri Lanka	25 Apr–6 May
Shaharum Ashaari (Malaysia)	Training Course on Six Sigma Green Belt	Fiji	9 May–13 May
Dr. Robin Mann (New Zealand)	Localizing the APO's COE Program on BE: Enhanced Adoption of the BE Framework in the Public Sector	Philippines	9 May–20 May
Hiroshi Tachikawa (Japan)	Workshop on MFCA and Business Diagnosis	ROC	10 May–12 May
Dr. Roslina Md. Isa (Malaysia)	Productivity Measuring and Enhancing the Role of Science and Technology in Economic Development in Vietnam	Vietnam	23 May–27 May
Hiroshi Tachikawa (Japan)	Three-day Theory-cum-Practice-oriented Training Program on Material Flow Cost Accounting	India	24 May–27 May
Kazuteru Kuroda (Japan)	Quality Management of Consultants and Business Advisers	Singapore	30 May–2 Jun
Atsushi Miyasaka (Japan)	Quality Management of Consultants and Business Advisers	Singapore	30 May–2 Jun
Anthony Robert Lavender (UK)	Manpower Audit for Industrial Efficiency Enhancement	Thailand	7 Jun–16 Jun
Ng Ha Wai, Howie (PR China)	Training Course on Implementing ISO 50001 Energy Management Systems	Fiji	27 Jun–1 Jul
Dr. Takeo Hoshi (USA)	Karuizawa Top Management Seminar: Productivity Innovation through Co-creation	Japan	6 Jul–8 Jul
Devadas Krishnadas (Singapore)	Foresight Framework and Scenario Planning	Thailand	11 Jul–15 Jul
Dr. Semerdanta Pusaka (Indonesia)	Fifth SR Asia International Conference on Implementation Challenges of SDGs and Global Partnership	Bangladesh	21 Jul–25 Jul
Birendra Raturi (India)	Fifth SR Asia International Conference on Implementation Challenges of SDGs and Global Partnership	Bangladesh	21 Jul–25 Jul
Gayatri Subramaniam (India)	Fifth SR Asia International Conference on Implementation Challenges of SDGs and Global Partnership	Bangladesh	21 Jul–25 Jul
Makoto Kawada (Japan)	Developing Kaizen Sharing Committees	IR Iran	30 Jul–4 Aug
Dr. Sakamon Devahastin (Thailand)	Development of Food Engineering and Technology in Cambodia	Cambodia	31 Jul–4 Aug
Harald Florin (Germany)	Training Program on Life Cycle Assessment (LCA)	India	8 Aug–12 Aug

## TECHNICAL EXPERT SERVICES

Expert (country of residence)	Subject	Venue	Duration
Dr. Minh Khuong Vu (Singapore)	2nd Malaysian Productivity-linked Wage Conference (2nd My-PLiC)	Malaysia	9 Aug–10 Aug
Dr. Dong-One Kim (ROK)	2nd Malaysian Productivity-linked Wage Conference (2nd My-PLiC)	Malaysia	9 Aug–10 Aug
Dr. John P. Girard (USA)	International Conference on Knowledge Management, Industry 4.0, and Big Data	ROC	17 Aug–19 Aug
Barinje Pravin Bhandary (India)	Training on Establishing Energy Management System and Conducting Internal Audits According to ISO 50001 Standard Requirements	Mongolia	22 Aug–31 Aug
Mark Warren (USA)	Apply Training within Industry (TWI) to Improve the Capacity of the Supervisors of Industrial Enterprises in Vietnam	Vietnam	22 Aug–2 Sep
Dr. Sakamon Devahastin (Thailand)	Development of Food Engineering and Technology in Cambodia	Cambodia	12 Sep–15 Sep
George Wong (Singapore)	Training on Knowledge Management and Innovation Performance	Mongolia	12 Sep–16 Sep
Prof. Hamish Coates (Australia)	Workshop on Productivity in Higher Education	India	19 Sep–22 Sep
Dr. Esha Sinha (USA)	Workshop on Productivity in Higher Education	India	19 Sep–22 Sep
Kalpana Awasthi (India)	2016 APO COE on GP International Forum on Green Leadership	ROC	21 Sep–23 Sep
Kabir Ahmad Mohd. Jamil (Malaysia)	Lean Application in the Service Sector	Vietnam	24 Sep–27 Sep
Mokhzani Aris Mohd. Yusof (Malaysia)	ISO 9001:2015 QMS Implementation	Mongolia	26 Sep–7 Oct
Keigo Fujii (Japan)	Constructing Smart Agriculture and Innovative Business Model	ROC	27 Sep–30 Sep
Dr. Dong-One Kim (ROK)	Capability-building Program on Gain-sharing Schemes and Productivity and Performance-based Pay for Micro, Small, and Medium Enterprises in the Philippines	Philippines	3 Oct–5 Oct
Shaharum bin Ashaari (Malaysia)	Lean Manufacturing Systems for Productivity Enhancement	Pakistan	3 Oct–15 Oct
Jamie Pritchard (UK)	Public Service Productivity Measurement Workshop with ONS	Malaysia	10 Oct–14 Oct
Dr. Yutaka Matsuo (Japan)	KPC CEO Book Club 2016	ROK	13 Oct–14 Oct
Shiddharth Sharma (India)	Training Course on the Information Security Management System Based on ISO 27000	Fiji	17 Oct–21 Oct
Masatoshi Matsuda (Japan)	Quality Trends Conference	ROC	20 Oct–22 Oct
Harnek Singh (Singapore)	National Quality and Productivity Convention and International Quality and Productivity Convention	Indonesia	7 Nov–9 Nov
Atsushi Miyasaka (Japan)	Productivity Champions on Productivity	Malaysia	7 Nov–9 Nov
Kazuteru Kuroda (Japan)	Productivity Champions on Productivity	Malaysia	9 Nov–11 Nov
Praba Nair (Singapore)	Human Resource Development Conference	IR Iran	13 Nov–14 Nov
Dr. Palaniappan Dharmalingam (India)	Training Course on Green Buildings	Fiji	14 Nov–17 Nov

## TECHNICAL EXPERT SERVICES

Expert (country of residence)	Subject	Venue	Duration
Malek Mohammed Odeh Ghazo (Jordan)	Workshop on Benchmarking	India	22 Nov–24 Nov
Dr. Shinichiro Kawaguchi (Japan)	Organizational Leadership and Strategic Planning	Mongolia	5 Dec–9 Dec
Dr. Mark Goh Keng Hock (Singapore)	China–Pakistan Economic Corridor and Regional Integration—The 32nd AGM & Conference of PSDE	Pakistan	13 Dec–17 Dec
George Wong (Singapore)	Developing SMEs	Sri Lanka	19 Dec–30 Dec

## INTERNATIONAL COOPERATION

### JOINT PROJECTS

Project	Collaborating organization
Asian Food and Agribusiness Conference: Greening the Food Supply Chain	Centre on Integrated Rural Development for Asia and the Pacific (CIRDAP)
Training Course for Women on Productivity Tools and Techniques for Improving the Productivity of Micro and Small Agrofood-processing Businesses	CIRDAP
Workshop on Agricultural Insurance Systems	CIRDAP
Organic Agroindustry Development Leadership Course in Asia	CIRDAP and IFOAM-Organics International
Advanced Agribusiness Management Course for Executives and Managers	Cornell University
National Conference and Workshop on Promoting Public-private-sector Partnerships in Enhancing Food Value Chains in Vietnam	Vietnam Chamber of Commerce and Industry

### SERVICES OF EXPERTS RECEIVED

Project	Collaborating organization
Conference on State-of-the-art Technologies to Drive Agricultural Productivity in the Next Quarter of the Century	International Atomic Energy Agency
Training Course on Business Excellence for the Public Sector	UN Development Programme
Expert Meeting on Asian Productivity Outlook and Policy under the Project Development Fund	Economic Research Institute for ASEAN and East Asia, OECD Development Centre
Research on Agricultural Policies in Asia	OECD
Workshop on Mainstreaming Climate Change Adaptation in Agriculture	Economic Research Institute for ASEAN and East Asia, OECD

### GUEST OBSERVERS RECEIVED

Project	Collaborating organization
58th Session of the APO Governing Body	CIRDAP/1
	ILO/1
	OECD/1
	Pan African Productivity Association/1
	Southeast Asian Regional Center for Graduate Study and Research in Agriculture/1
57th Workshop Meeting of Heads of NPOs	UNIDO/1
	African-Asian Rural Development Association/1
	CIRDAP/1
	OECD/1
	Pan-African Productivity Association/1
	UN ESCAP/1

## PARTICIPANTS FROM NONMEMBER COUNTRIES

Project	Collaborating organization
Asia EnviroEconomics Conference: Concerted Efforts for a Sustainable Future through 24-Hour Eco-Life	Colombia/3 (observers)
Coordination Meeting on National Project Plans under the Special Program for Capacity Building in the Food Industry in ASEAN Least Developed Countries (ASEAN-LDCs)	Myanmar/3
Training Course on Green Productivity	Colombia/3 (observers)
Training Course on the Development of Productivity Practitioners for the Science and Technology Centre of Antioquia (CTA)	Colombia/21
Workshop on Sustainable Community Development and the Saemaul Undong	Myanmar/1
Self-learning e-Course on Waste Management in Agribusiness	Australia/2, Kenya/1, Netherlands/1, Nigeria/1, Oman/1, Saudi Arabia/3, Turkey/1, Uganda/1, United Arab Emirates/2, USA/1
Self-learning e-Course on Organic Agriculture and Organic Agribusiness	Egypt/1, Kenya/1, Saudi Arabia/1, UAE/1, USA/1
Self-learning e-Course on Productivity Tools and Techniques (Basic)	Argentina/1, Australia/3, Botswana/1, PR China/1, Colombia/1, Egypt/1, Nigeria/3, Poland/1, Qatar/1, Tunisia/1, Turkey/1, UAE/4, Venezuela/1
Self-learning e-Course on Productivity Tools and Techniques (Advanced)	Australia/2, Botswana/1, Brazil/1, Egypt/1, Iraq/1, Nigeria/3, Poland/1, Qatar/1, South Africa/1, UAE/1
Self-learning e-Course on Material Flow Cost Accounting (ISO 14051)	Egypt/1, Jamaica/1, Myanmar/1, Nigeria/1, Palau/1, Poland/1, Saudi Arabia/1, UAE/2
Self-learning e-Course on Climate Change Impacts and Adaptation: Basic Course	Egypt/1, Ethiopia/1, Iraq/1, Myanmar/1, Nigeria/1, Poland/1, Qatar/1, UAE/1, UK/1, Zimbabwe/1
Self-learning e-Course on Green Productivity and the Environmental Management System (ISO 14001)	Australia/1, Colombia/2, Egypt/1, Iraq/1, Kenya/1, Nigeria/4, Palau/1, Peru/1, Poland/1, Saudi Arabia/1, UAE/1, Zimbabwe/1

## INTERNATIONAL/REGIONAL MEETINGS ATTENDED BY THE APO

Host organization	Title of meeting	Duration	Venue	Staff members involved
The Organization for Industrial, Spiritual and Cultural Advancement-International	Green Earth Festival to celebrate the International Day of Forests	26 March	Japan	Mitsuo Nakamura
Centre on Integrated Rural Development for Asia and the Pacific (CIRDAP)	31st Technical Committee Meeting of the CIRDAP	23–25 May	Malaysia	Dr. Shaikh Tanveer Hossain
OECD	Conference of the Global Forum on Productivity	7–8 July	Portugal	Joselito Cruz Bernardo Dr. Jose Elvinia
ADB	5th OECD–AMRO–ADB–ADBI–ERIA Asian Regional Roundtable: Macroeconomic and Structural Policy Challenges	14–15 July	Japan	Joselito Cruz Bernardo Dr. Jose Elvinia
University of Sydney	Special presentation session at the University of Sydney (presentation title: Challenges to Enhancing Agricultural Productivity in Asian Countries in the Next Decade and the Role of the APO)	15 November	Australia	Dr. Muhammad Saeed
World Bank	International Cooperation: World Bank Smart Cities Conference	17 November	Japan	Dr. Santhi Kanoktanaporn Joselito Cruz Bernardo Jun Ho Kim

## LIST OF NATIONAL COORDINATORS

Project title	
National coordinator (country of residence)	Designation/organization
<b>e-Learning Course on Value Addition to Agrifood Products (Session 1)</b>	
Md. Belayet Hussain Choudhury (Bangladesh)	
Dr. Rishipal Singh (India)	Director (Agri-Business), NPC
Dr. Mohammad Reza Ardakani (IR Iran)	Professor, Department of Agronomy, Azad University
Prabin Kumar Acharya (Nepal)	Branch Chief, NPEDC
<b>e-Learning Course on Value Addition to Agrifood Products (Session 2)</b>	
Um Serivuth (Cambodia)	Deputy Director, NPCC, Ministry of Industry and Handicraft
Baasansuren Munkhjargal (Mongolia)	Expert, MPO
Rabia Jamil (Pakistan)	Regional Head (Training, Consultancy, Project and Linkages), NPO, Ministry of Industries and Production
Pathom Taenkam (Thailand)	Vice President, Thai Fruits and Vegetables Producers' Association
Nguyen Le Duy (Vietnam)	Project Coordinator, International Cooperation Division, VNPI, Directorate for Standards, Metrology and Quality
<b>e-Learning Course on Innovative Approaches in Marketing of Agrifood Products (Session 1)</b>	
Um Serivuth (Cambodia)	Deputy Director, NPCC, Ministry of Industry and Handicraft
Baasansuren Munkhjargal (Mongolia)	Expert, MPO
Monica D. Saliendres (Philippines)	Director, Productivity Research Office, Productivity and Development Center, DAP
Pathom Taenkam (Thailand)	Vice President, Thai Fruits and Vegetables Producers' Association
Nguyen Le Duy (Vietnam)	Project Coordinator, International Cooperation Division, VNPI, Directorate for Standards, Metrology and Quality
<b>e-Learning Course on Innovative Approaches in Marketing of Agrifood Products (Session 2)</b>	
Md. Belayet Hussain Choudhury (Bangladesh)	Former Joint Director, NPO, Ministry of Industries
Rachana Shalini (India)	Deputy Director, Agri-Business, NPC
Dr. Mohammad Reza Ardakani (IR Iran)	Professor, Agroecologist, Department of Agronomy, Azad University
Prabin Kumar Acharya (Nepal)	Branch Chief, NPEDC
Rabia Jamil (Pakistan)	APO Liaison Officer, Head Regional Office Lahore, NPO, Ministry of Industries and Production



## LIST OF NATIONAL COORDINATORS

Project title	
National coordinator (country of residence)	Designation/organization
<b>e-Learning Course on Total Productive Maintenance (TPM) Applications in SMEs (Session 1)</b>	
Phanith Him (Cambodia)	Deputy Director, NPCC, Ministry of Industry and Handicraft
Sandeep Kumar (Fiji)	Training Instructor, Quality Management/Industrial Engineering, NTPC, Fiji National University
Ariunzaya Batsaikhan (Mongolia)	Expert, MPO
Homer H. Alcon (Philippines)	Project Officer, Productivity and Development Center, DAP
Nguyen Mai Nha Thuyen (Vietnam)	Service Development Officer, Ho Chi Minh Branch, VNPI
<b>e-Learning Course on Total Productive Maintenance (TPM) Applications in SMEs (Session 2)</b>	
Md. Belayet Hussain Choudhury (Bangladesh)	Former Joint Director, NPO
Shailesh Shrivastava (India)	Technical Director (TM and Training), NPC
Dr. Reza Shafiee Sabet (IR Iran)	Member, Steering Committee, NIPO
Devendra Bahadur Pradhan (Nepal)	Branch Chief, NPEDC
Zahid Nawaz Khan (Pakistan)	Deputy Manager (Training Office Capital), NPO
Uditha Senaratne (Sri Lanka)	Freelance Consultant



# **FINANCIAL REPORT**



## Independent auditor's report

To the Governing Body of Asian Productivity Organization

### Our opinion

In our opinion, Asian Productivity Organization (the Organization)'s financial statements present fairly, in all material respects the financial position of the Organization as at 31 December 2016, and its financial performance and its cash flows for the year then ended in accordance with International Financial Reporting Standards.

### What we have audited

The Organization's financial statements comprise:

- the statement of financial position as at 31 December 2016;
- the statement of revenues or expenses and other comprehensive income for the year then ended;
- the statement of changes in equity for the year then ended;
- the statement of cash flows for the year then ended; and
- the notes to the financial statements, which include a summary of significant accounting policies.

### Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the financial statements section of our report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

### Independence

We are independent of the Organization in accordance with the International Ethics Standards Board for Accountants' Code of Ethics for Professional Accountants (IESBA Code). We have fulfilled our other ethical responsibilities in accordance with the IESBA Code.

### Other Matter

The financial statements of the Organization for the year ended 31 December 2015 before amendment, were audited by another auditor who expressed a qualified opinion on those statements on 4th March 2016 due to the limitation on scope.

*PricewaterhouseCoopers Aarata LLC*

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3 March 2017  
 To the Governing Body of Asian Productivity Organization  
 Page 2

As part of our audit of the 2016 financial statements, we also audited the adjustments described in Note 17 that were applied to amend the 2015 financial statements. In our opinion, such adjustments are appropriate and have been properly applied. We were not engaged to audit, review, or apply any procedures to the 2015 financial statements of the Organization other than with respect to the adjustments and, accordingly, we do not express an opinion or any other form of assurance on the 2015 financial statements taken as a whole.

#### Responsibilities of management and those charged with governance for the financial statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with International Financial Reporting Standards, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Organization's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Organization or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Organization's financial reporting process.

#### Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.



3 March 2017

To the Governing Body of Asian Productivity Organization

Page 3

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Organization's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Organization's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Organization to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

*PricewaterhouseCoopers Sarata LLC*

3 March 2017

ASIAN PRODUCTIVITY ORGANIZATION  
STATEMENTS OF FINANCIAL POSITION  
31 DECEMBER 2016 AND 31 DECEMBER 2015

	2016	2015
		(US dollars)
<u>ASSETS</u>		
Cash and cash equivalents (Note 3)	\$28,348,301	\$16,252,913
Receivables (Note 4):		
Member countries	2,818,156	3,583,137
Others	80,697	262,859
Allowance for long-outstanding debts	(250,441)	(453,768)
Prepaid expenses	59,597	39,644
Deposits and other advance payments	87,257	64,857
Total current assets	31,143,566	19,749,641
Fund for severance payments (Note 11)	273,381	2,166,250
Property, plant and equipment (Note 5):		
Structure	349,440	349,440
Equipment	178,227	178,227
Automobile	72,935	72,935
Others	87,653	85,262
Accumulated depreciation	(359,030)	(248,129)
Intangible assets (Note 5)	97,823	56,858
Total noncurrent assets	700,430	2,660,844
Total assets	\$31,843,996	\$22,410,486
<u>LIABILITIES AND SURPLUS</u>		
Accounts payable	\$1,390,317	\$1,193,321
Withholding tax and social insurance	25,054	23,058
Other current liabilities (Note 8)	9,475,664	399,803
Total current liabilities	10,891,036	1,616,181
Accrued annual leave (Note 6)	593,353	560,313
Liability for severance payments (Note 12)	2,482,018	2,380,073
Other noncurrent liabilities	90,046	90,046
Total noncurrent liabilities	3,165,417	3,030,432
Total liabilities	14,056,454	4,646,614
Surplus:		
Appropriated for		
Working capital fund	6,000,000	6,000,000
Contingency fund (Note 2)	500,000	500,000
Continuing projects	5,517,674	4,728,165
Unappropriated surplus (Note 15)	5,971,638	6,804,033
Accumulated other comprehensive income (Note 12)	(201,769)	(268,325)
Total surplus	17,787,543	17,763,872
Total liabilities and surplus	\$31,843,996	\$22,410,486

The accompanying notes are integral part of these statements.

ASIAN PRODUCTIVITY ORGANIZATION  
STATEMENTS OF REVENUES OR EXPENSES AND OTHER COMPREHENSIVE INCOME  
YEARS ENDED 31 DECEMBER 2016 AND 2015

(US dollars)

	2016	2015
Revenues:		
Membership contributions (Note 7)	\$11,986,035	\$11,986,035
Special cash grants (Note 8)	915,134	1,076,956
Mandatory contribution for rent (Note 9)	237,924	220,619
Participation by member countries	6,576	6,562
Miscellaneous	102,825	20,021
Total revenues	<u>13,248,494</u>	<u>13,310,193</u>
Expenses:		
Projects		
Current year's project costs:		
APO share	5,127,683	4,388,859
Subtotal	<u>5,127,683</u>	<u>4,388,859</u>
Prior years' continuing project costs:		
APO share	2,309,779	1,781,313
Subtotal	<u>2,309,779</u>	<u>1,781,313</u>
Allocation to project costs from administration expenses (Note 10)	1,679,105	1,537,312
Total	<u>9,116,567</u>	<u>7,707,484</u>
Administration		
Staff expenses (Note 12)	4,976,585	4,491,928
Office maintenance (Note 13)	247,432	231,345
Depreciation Expenses (Note 5)	94,823	92,679
Operations	70,388	69,043
Miscellaneous	253,973	177,291
Allocation to project costs (Note 10)	(1,851,458)	(1,668,492)
Total	<u>3,791,741</u>	<u>3,393,794</u>
Exchange (gain)/loss	591,369	40,736
Provision for (reversal of) allowance for long outstanding debts	(203,327)	(345,304)
Total	<u>388,042</u>	<u>(304,568)</u>
Total expenses	<u>13,296,350</u>	<u>10,796,710</u>
Net adjustment for closed projects (Note 14)	(4,971)	(4,595)
Excess of revenues over expenses	<u>(42,886)</u>	<u>2,518,078</u>
Other comprehensive income (loss):		
Pension liability adjustments (Note 12)	66,557	(42,739)
Total other comprehensive income (loss)	<u>66,557</u>	<u>(42,739)</u>
Total comprehensive income (loss)	<u>\$23,671</u>	<u>\$2,475,339</u>

The accompanying notes are integral part of these statements.



ASIAN PRODUCTIVITY ORGANIZATION  
STATEMENTS OF CHANGES IN SURPLUS  
YEARS ENDED 31 DECEMBER 2016 AND 2015

(US dollars)

	<u>Appropriated for</u>				<u>Accumulated other comprehensive income</u>	<u>Total</u>
	<u>Working capital fund</u>	<u>Contingency fund</u>	<u>Continuing projects</u>	<u>Unappropriated</u>		
<u>2015</u>						
Surplus as of 1 January 2015	\$6,000,000	\$500,000	\$3,886,577	\$5,127,543	(\$225,587)	\$15,288,532
Excess of revenues over expenses	-	-	-	2,518,078	-	2,518,078
Transfer to continuing projects	-	-	841,588	(841,588)	-	-
Pension liability adjustment (Note 12)	-	-	-	-	(42,739)	(42,739)
Surplus as of 31 December 2015	<u>\$6,000,000</u>	<u>\$500,000</u>	<u>\$4,728,165</u>	<u>\$6,804,033</u>	<u>(\$268,325)</u>	<u>\$17,763,872</u>
<u>2016</u>						
Excess of revenues over expenses	-	-	-	(42,886)	-	(42,886)
Transfer to continuing projects	-	-	789,509	(789,509)	-	-
Pension liability adjustment (Note 12)	-	-	-	-	66,557	66,557
Surplus as of 31 December 2016	<u>\$6,000,000</u>	<u>\$500,000</u>	<u>\$5,517,674</u>	<u>\$5,971,638</u>	<u>(\$201,769)</u>	<u>\$17,787,543</u>

The accompanying notes are integral part of these statements.

ASIAN PRODUCTIVITY ORGANIZATIONSTATEMENTS OF CASH FLOWSYEARS ENDED 31 DECEMBER 2016 AND 2015

	(US dollars)	
	<u>2016</u>	<u>2015</u>
Cash Flows from Operating Activities:		
Excess of revenues over expenses	(\$42,886)	\$2,518,078
Adjustments:		
Depreciation and amortization	123,536	102,644
Provision for losses on accounts receivable	(203,327)	(345,304)
Interest income	(19,493)	(11,061)
Exchange variance	716,531	76,509
Decrease (increase) in receivables from member countries	764,981	(1,903,135)
Decrease (increase) in receivables - others	182,162	(145,795)
Decrease (increase) in other current assets	(75,853)	85,288
Decrease (increase) in funds for severance payments	1,892,869	(1,164)
Disposal (purchase) in property, plant and equipment	(22,491)	(226,969)
Increase (decrease) in accounts payable	196,997	107,601
Increase (decrease) in other current liabilities	9,077,858	341,125
Increase (decrease) in accrued annual leave	33,040	29,620
Increase (decrease) in liability for severance payments	168,501	176,091
Increase (decrease) in other non-current liabilities	-	14,446
Subtotal	<u>12,792,426</u>	<u>817,975</u>
Interest Received	19,493	11,061
Net cash flow from operating activities	12,811,919	829,035
Effect of exchange rate changes on cash and cash equivalents	(716,531)	(76,509)
Net increase (decrease) in cash and cash equivalents	<u>12,095,388</u>	<u>752,526</u>
Cash and cash equivalents at beginning of year	<u>16,252,913</u>	<u>15,500,387</u>
Cash and cash equivalents at end of year (Note 3)	<u>\$ 28,348,301</u>	<u>\$ 16,252,913</u>

The accompanying notes are integral part of these statements.

## **ASIAN PRODUCTIVITY ORGANIZATION**

### **NOTES TO FINANCIAL STATEMENTS**

#### **1. Organization, business, and source of funding**

The Asian Productivity Organization (the “Organization” or “APO”) is an intergovernmental regional organization established in 1961 by several governments in Asia with its headquarters in Tokyo, Japan, and continues to operate from this location. The Organization is nonpolitical, nonprofit making, and nondiscriminatory.

The objective of the Organization is to increase productivity and thereby accelerate economic development in Asia through mutual cooperation among member countries. To fulfill its objective, the Organization institutes programs for the development of productivity, provides information and advice for productivity improvement, and promotes and disseminates modern productivity skills and techniques in the agriculture, industry, and service sectors.

The Organization membership is open to all Asian and Pacific governments that are members of the United Nations Economic and Social Commission for Asia and the Pacific. From 1 July 1997, the Hong Kong Productivity Council was instructed to cease all APO activities when sovereignty was transferred to the People’s Republic of China.

The Organization performs activities in cooperation with national productivity organizations (NPOs) and other international organizations. NPOs in member countries that deal with productivity activities at the national level act as implementing agencies for the Organization’s projects and nominate participants from their countries to attend those projects.

The budget of the Organization is composed of the budget covering the program of action of the Organization and staff, administrative, and nonproject expenses. The Governing Body, which is the supreme organ of the Organization, meets once a year to decide on policy matters concerning program and budget, finances, and membership. The sources for the budget are:

- (a) Annual membership contributions based on gross national income;
- (b) Special cash grants given by member governments and external assistance from cooperating agencies and institutions;
- (c) Project implementation grants given by member governments that host projects and other governments and organizations that organize projects jointly with the Organization; and
- (d) Miscellaneous income such as proceeds from interest income.

## **2. Significant accounting policies**

### **(1) Basis of preparation of accompanying financial statements**

The financial statements of the Organization are prepared based on the Convention and the Financial Regulations established by the APO, which is in line with International Financial Reporting Standards (“IFRS”).

### **(2) Allowance for long-outstanding debts**

The Organization uses the “aging the accounts” method as the estimation technique of the net realizable value of receivables. Although the Organization believes that the allowance is adequate to provide for losses that are inherent in the year-end accounts receivable balance, actual results could differ from those estimates.

### **(3) Property, plant and equipment and intangible assets**

Property, plant and equipment and intangible assets consist of the furniture and fixtures, building improvements, structures and equipment which the Organization obtained at the time of relocation. The Organization books on the statements of financial position for the items whose acquisition cost amount is significant.

Depreciation is calculated to write off the cost of items of property, plant and equipment and intangible assets using the straight-line method over their estimated useful lives, and is recognized in profit or loss.

The estimated useful lives of the property, plant and equipment and intangible assets are as follows:

- Structure: 5–8 years
- Equipment: 5–8 years
- Automobile: 6 years
- Software: 5 years
- Others: 5–10 years

Depreciation methods and useful lives are reviewed at each reporting date and adjusted if appropriate.

**(4) Fund for severance payments**

The fund for severance payments consists of an insurance endowment fund and money market fund and is stated at fair value. The fair values of the fund for severance payments are estimated based on values quoted by financial institutions.

IFRS 7 “Financial Instruments—Disclosures” defines fair value and establishes a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The three levels of the fair value hierarchy are as follows:

Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities

Level 2: Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly

Level 3: Unobservable inputs for the asset or liability

The insurance endowment fund held by the Organization is classified into Level 2 assets.

**(5) Liability for severance payments**

Staff members terminating their employment with the Organization are entitled, under most circumstances, to severance payments based upon the monthly basic pay at the time of termination of employment and years of service. The cost of the severance payments is determined using the Projected Unit Credit Method, with actuarial valuations being carried out at the end of each reporting period. Remeasurements of the Organization’s defined benefit obligation, which comprise actuarial gains and losses are recognized immediately in other comprehensive income.

**(6) Accrued annual leave**

Based on Rule 5.01 of APO Staff Regulation V, annual leave is accumulated up to 90 days, which does not expire until leaving the Organization. In 2016, the Organization recorded accrued annual leave of 68 days (69 days in 2015) for staff members who had annual leave of more than 68 days as a liability, since the unused accrued annual leave up to 60 days is paid by a sum of money equivalent to their salary for the period of the accrued annual leave upon separation from the Organization, and in consideration of the possible utilization of unused accrued annual leave in excess of 60 days upon separation.

**(7) Revenue recognition**

Major sources of revenues of the Organization are membership contributions and special cash grants, among others. Membership contributions, which are approved by the Session of the Governing Body (GBM), are recognized as revenues on 1 January of each fiscal year. Special cash grants are recognized as revenues over the period necessary to match them with the costs that they are intended to compensate.

**(8) Appropriation for working capital fund**

Based on Regulation 7 of the Financial Regulations, a working capital fund is established from which advances may be made to finance budgetary appropriations to the extent that this is necessary in anticipation of pledged but unpaid contributions.

Based on the decision in the 54th GBM, the Organization has set up a contingency fund amounting to \$500,000.

**(9) Appropriation for continuing projects**

The outstanding balance of commitments for continuing projects at year-end, which has been funded mainly from membership contributions and special cash grants, is appropriated for continuing projects. The balance for continuing projects funded from special cash grants includes unspent balances of special cash grants, which are balances generated from completion of some projects prior to the year-end being reallocated for the following year's projects in the same programs.

**(10) Translation of foreign currencies**

For the purpose of the financial statements, the results and financial position of the Organization are expressed in US dollars, which is the functional currency of the Organization and presentation currency for the financial statements. The Organization's books of account are maintained both in Japanese yen and US dollars. Assets and liabilities denominated in Japanese yen are translated into US dollars at the appropriate exchange rate on the statements of financial position date. For revenue and expense accounts, average rates for the prior month of the transactions are applied. Revenue and expense accounts of other currencies except Japanese yen are translated into US dollars at the rates prevailing at the time of the transactions. The resulting unrealized gain/loss from translation is included in exchange gain/loss in the statement of revenues or expenses and other comprehensive income.

**(11) Taxes**

The Organization is exempt from direct taxes on assets or income and from customs duties.

**(12) Use of estimates**

The Organization makes estimates and assumptions to prepare the financial statements. Such estimates and assumptions affect the reported amounts of assets, liabilities and expenses. Actual results could differ from those estimates.

### 3. Cash and cash equivalents

Cash and cash equivalents include all highly liquid investments, generally with original maturities of three months or less, which are readily convertible to known amounts of cash and are so near maturity that they present insignificant risk of changes in value because of changes in interest rates. Money market funds, which are treated as cash and cash equivalents except for specific use of the funds for severance payments, are carried at cost plus accrued interest.

Cash and cash equivalents	2016	2015
Current Deposits	\$26,324,333	\$16,201,366
Time Deposits	1,972,201	-
MMF	51,767	51,548
Total	\$28,348,301	\$16,252,913

### 4. Receivables of membership contributions, participating country expenses, and others

The allowance for receivables of membership contributions overdue for one year and longer amounts to \$248,125 for a long-outstanding receivable for the membership contribution from Hong Kong since 31 December 1999, because there has been no communication from Hong Kong after the transfer of sovereignty. The Organization has also recorded allowance for the outstanding debt for receivables of participating country expenses amounting to \$1,364 and for other receivable amounting to \$952 respectively, as of 31 December 2016.

Allowances for outstanding debts as of 31 December 2016 and 2015 were as follows:

Receivables overdue for 1 year and longer	2016		2015	
	Provided by percent of	Allowance	Provided by percent of	Allowance
Membership contributions	100	\$248,125	100	\$452,320
Participating country expenses	100	1,364	100	1,448
Others	100	952		-
		\$250,441		\$453,768

Movements in the allowance for outstanding debts for the year ended 31 December 2016 were as follows:

	Membership contributions	Participating country expenses	Others	Total
Balance at beginning of the year	\$452,320	\$1,448	-	\$453,768
Amounts recovered during the year	(204,195)	(656)	-	(204,851)
Loss recognized on receivables	-	572	952	1,524
Balance at end of the year	\$248,125	\$1,364	\$952	\$250,441

Movements in the allowance for outstanding debts for the year ended 31 December 2015 were as follows:

	Membership contributions	Participating country expenses	Others	Total
Balance at beginning of the year	\$798,572	\$500	-	\$799,072
Amounts recovered during the year	(414,269)	(122)	-	(414,391)
Loss recognized on receivables	68,017	1,070	-	69,087
Balance at end of the year	\$452,320	\$1,448	-	\$453,768



## 5. Property, plant and equipment and intangible assets

Movements in property, plant and equipment and intangible assets for the year ended 31 December 2016 were as follows:

	Structure	Equipment	Automobile	Others	Total	Software
<b>Cost</b>						
On 1 January 2016	\$349,440	\$178,227	\$72,935	\$85,262	\$685,865	\$63,176
Additions	-	-	-	2,391	2,391	53,600
Disposals	-	-	-	-	-	-
On 31 December 2016	349,440	178,227	72,935	87,653	688,256	116,776
<b>Accumulated depreciation</b>						
On 1 January 2016	142,265	57,848	23,299	24,717	248,128	6,318
Depreciation	52,385	33,716	12,156	12,644	110,901	12,635
Disposals	-	-	-	-	-	-
On 31 December 2016	194,650	91,564	35,455	37,360	359,030	18,953
<b>Net Book value</b>						
On 1 January 2016	207,176	120,379	49,637	60,545	437,737	56,858
On 31 December 2016	\$154,790	\$86,663	\$37,481	\$50,293	\$329,227	\$97,823

Movements in property, plant and equipment and intangible assets for the year ended 31 December 2015 were as follows:

	Structure	Equipment	Automobile	Others	Total	Software
<b>Cost</b>						
On 1 January 2015	\$309,501	\$85,716	\$72,935	\$56,165	\$524,317	-
Additions	48,562	92,512	-	29,097	170,170	\$63,176
Disposals	(8,622)	-	-	-	(8,622)	-
On 31 December 2015	349,440	178,227	72,935	85,262	685,865	63,176
<b>Accumulated depreciation</b>						
On 1 January 2015	95,577	31,696	11,143	15,633	154,048	-
Depreciation	48,933	26,153	12,156	9,084	96,326	6,318
Disposals	(2,245)	-	-	-	(2,245)	-
On 31 December 2015	142,265	57,848	23,299	24,717	248,129	6,318
<b>Net Book value</b>						
On 1 January 2015	213,924	54,020	61,792	40,533	370,269	-
On 31 December 2015	\$207,176	\$120,379	\$49,637	\$60,545	\$437,737	\$56,858

## 6. Accrued annual leave

Movements in accrued annual leave for the year ended 31 December 2016 were as follows:

On 1 January 2016	\$560,313
Additional accrual during the year	118,487
Payments made during the year	(100,998)
Foreign exchange movements	15,551
On 31 December 2016	<u>\$593,353</u>

Movements in accrued annual leave for the year ended 31 December 2015 were as follows:

On 1 January 2015	\$530,694
Additional accrual during the year	102,878
Payments made during the year	(75,585)
Foreign exchange movements	2,326
On 31 December 2015	<u>\$560,313</u>

## 7. Membership contributions

The apportionment of total membership contributions for 2015/2016 was based on the long-term permanent membership contribution formula based on the six-year average GNI as approved by the 55th GBM held in May 2013. There are no unfulfilled conditions or other contingencies attaching to these contributions.

## 8. Special cash grants

Special cash grants are used for specific programs and other administrative expenses for which member governments are encouraged to cooperate with the APO in addition to their membership contributions. There are no unfulfilled conditions or other contingencies attaching to these grants. The Organization will recognize special cash grants received from Government of Japan of \$9,460,617 as revenues over the period necessary to match them with the costs that they are intended to compensate. This was included in other current liabilities.

The detailed amounts of the special cash grants for the years ended 31 December 2016 and 2015 were as follows:

<u>Purpose of grants</u>	<u>2016</u>	<u>2015</u>
Project costs	\$915,134	\$1,076,956
	<u>\$915,134</u>	<u>\$1,076,956</u>

## 9. Mandatory contribution for rent

The 54th GBM decided that the cost of the annual rental for the APO Secretariat Office from 2013 onward shall be borne by the host government, the Government of Japan. This amount, which shall not exceed JPY 26 million, is to be considered as a mandatory contribution of the host government, distinct and separate from its annual membership contribution to the APO.

## 10. Allocation to project costs

The APO allocated administration expenses which are directly or indirectly related to project activities to project costs.

## 11. Fund for severance payments

The balances of the fund for severance payments represent the amounts for the severance payments resulting from employees' termination of employment and comprise the following:

	2016	2015
Insurance endowment fund	\$273,381	\$259,440
Money market fund	-	1,906,810
	<u>\$273,381</u>	<u>\$2,166,250</u>
Time Deposit	\$1,972,201	-

The fund for severance payments is exposed to a variety of financial risks, including the effects of change in debt and equity market prices, foreign currency exchange rates, and interest rates. The Organization has a policy of considering economic conditions at the time of the contract and consistently monitors the effectiveness of its selection. In 2001, the APO purchased three types of insurance for each employee, of which the beneficiary is the APO. In addition, the Organization managed a money market fund (MMF) in Japanese yen for the purpose of severance payments. The purpose of the insurance and MMF was to pay for the severance payments. Funds in MMF of \$1,972,201 were transferred into time deposit account in 2016 and classified in cash and cash equivalents as of the statement of financial position date. Net gains on the fund for severance payments for the years ended 31 December 2016 and 2015 were \$5,609 and \$1,166, respectively, and were included in miscellaneous revenues.

## 12. Liability for severance payments

For the purposes of the actuarial valuations, the Organization used the discount rate of 0.38% per annum for the year ended 31 December 2016 and 0.3% for the year ended 31 December 2015. The expected rate of salary increases was applied in determining the projected benefit obligation and the expected rate was compiled from data of employee's basis salary.

Amounts recognized in profit or loss in respect of the defined benefit plan were as follows:

	2016	2015
Current service cost	\$318,013	\$354,650
Interest on obligation	7,685	6,234
Net periodic pension cost	<u>\$325,698</u>	<u>\$360,883</u>

Movements in the present value of the defined benefit obligation in the current period and the amount included in the statements of financial positions arising from the Organization's obligation in respect of its defined benefit plan were as follows:

	2016	2015
Opening defined benefit obligation	\$2,380,073	\$2,161,244
Current service cost	318,013	354,650
Interest cost	7,685	6,234
Remeasurements (actuarial loss (gain))	(66,557)	42,739
Benefits paid	(221,255)	(186,333)
Foreign currency translation adjustments	64,059	1,538
Closing defined benefit obligation	<u>\$2,482,018</u>	<u>\$2,380,073</u>

The impact of the value of the defined benefit obligation of a reasonably possible change to the discount rate of 0.3% per annum for the year ended 31 December 2016, holding all other assumption constant, is presented in the increase of US\$13,842.

The impact of the value of the defined benefit obligation of a reasonably possible change to the discount rate of 0.7% per annum for the year ended 31 December 2015, holding all other assumptions constant, is presented in the decrease of \$70,450.

### 13. Operating leases

The Organization leases office space under a cancelable lease agreement. The contract can be terminated at any time by either party with six-month advance notice in writing. No rental deposit for the lease has been paid to the building owner. Rental expenses under operating leases for the years ended 31 December 2016 and 2015 were \$225,582 and \$205,923 respectively.

### 14. Net adjustment for closed projects

Adjusted revenues and expenses attributed to projects that have already been closed prior to this financial year have been recorded in account of revenues and expenses retroactive year.



# THE NPOs

(AS OF 15 JUNE 2017)



## Bangladesh

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## Republic of China

China Productivity Center (CPC)  
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## Fiji

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## Hong Kong

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## Indonesia

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 e-Mail : nposlanka@gmail.com  
 Website : http://productivity.lk/



**Nepal**

National Productivity and Economic Development Centre (NPED)  
 Balaju Industrial District  
 Balaju P.O. Box 1318, Kathmandu  
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**Pakistan**

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# ABBREVIATIONS AND ACRONYMS

<b>AARDO</b>	African-Asian Rural Development Organization
<b>ADB</b>	Asian Development Bank
<b>AEPM</b>	Asian Economy and Productivity Map
<b>AES</b>	Agriculture extension service
<b>AI</b>	Agricultural insurance
<b>APOP</b>	Asian Productivity Outlook and Policy
<b>AREO</b>	Agricultural Research and Education Organization
<b>ASEAN</b>	Association of Southeast Asian Nations
<b>BB</b>	Biofertilizers and biopesticides
<b>BCBN</b>	Bilateral Cooperation Between NPOs
<b>BE</b>	Business excellence
<b>BoP</b>	Base of the pyramid
<b>CEA</b>	Controlled-environment agriculture
<b>CIIFAD</b>	Cornell Institute for Food, Agriculture and Development
<b>CIRDAP</b>	Centre on Integrated Rural Development for Asian and the Pacific
<b>CJCC</b>	Cambodia-Japan Cooperation Center
<b>COE</b>	Center of Excellence
<b>CPC</b>	China Productivity Center
<b>CRM</b>	Customer relationship management
<b>CS</b>	Customer satisfaction
<b>CTA</b>	Centre of Science and Technology Antioquia, Medellin, Colombia
<b>DAP</b>	Development Academy of the Philippines
<b>DLP</b>	Digital Learning Program
<b>DMP</b>	Demonstration Company Program
<b>DON</b>	Development of NPOs
<b>DOSMEP</b>	Department of Small and Medium Enterprise Promotion
<b>DPP</b>	Development of Productivity Practitioners
<b>EMS</b>	Environmental Management System
<b>EPIF</b>	Eco-products International Fair
<b>ERIA</b>	Economic Research Institute for ASEAN and East Asia
<b>ESCAP</b>	Economic and Social Commission for Asia and the Pacific
<b>EU</b>	European Union
<b>FAO</b>	Food and Agriculture Organization of the United Nations
<b>FFV</b>	Fresh fruit and vegetables
<b>FLFP</b>	Female labor force participation
<b>FNU</b>	Fiji National University
<b>FQCS</b>	Food quality control system
<b>FSMS</b>	Food safety management system
<b>FTI</b>	Federation of Thai Industries
<b>FTPI</b>	Thailand Productivity Institute
<b>FVC</b>	Food value chain
<b>GAP</b>	Good Agricultural Practices
<b>GBM</b>	Governing Body Meeting
<b>GOJ</b>	Government of Japan
<b>GP</b>	Green Productivity
<b>GPAC</b>	Green Productivity Advisory Committee
<b>HACCP</b>	Hazard and critical control point
<b>I-GPAC</b>	International Green Productivity Advisory Committee
<b>ILO</b>	International Labour Organization



<b>I-OSM</b>	Individual-country Observational Study Mission
<b>IAEA</b>	International Atomic Energy Agency
<b>ICT</b>	Information and communication technology
<b>IE</b>	Industrial engineering
<b>IES</b>	Impact evaluation study
<b>IFOAM</b>	International Federation of Organic Agricultural Movements
<b>IOT</b>	Internet of Things
<b>IPR</b>	Information and public relations
<b>ISMS</b>	Information security management system
<b>ISO</b>	International Standardization Organization
<b>IT</b>	Information technology
<b>KM</b>	Knowledge management
<b>KPC</b>	Korea Productivity Center
<b>KPI</b>	Key performance indicator
<b>LDC</b>	Least developed country
<b>LNPO</b>	Lao National Productivity Organization
<b>LO</b>	Liaison officer
<b>LPS</b>	Lean production system
<b>MFCA</b>	Material flow cost accounting
<b>MoFA</b>	Ministry of Food and Agriculture of Mongolia
<b>MOFA</b>	Ministry of Foreign Affairs of Japan
<b>MOU</b>	Memorandum of Understanding
<b>MPC</b>	Malaysia Productivity Corporation
<b>MPO</b>	Mongolian Productivity Organization
<b>MSME</b>	Micro, small, and medium enterprise
<b>NCPM</b>	Nonchemical pest management
<b>NFP</b>	National Follow-up Program
<b>NGO</b>	Nongovernmental organization
<b>NIPO</b>	National Iranian Productivity Organization
<b>NPC</b>	National Productivity Council, India
<b>NPCC</b>	National Productivity Centre, Cambodia
<b>NPEDC</b>	National Productivity and Economic Centre, Nepal
<b>NPO</b>	National productivity organization; National Productivity Organisation (Bangladesh); National Productivity Organization (Pakistan)
<b>NPS</b>	National Productivity Secretariat, Sri Lanka
<b>NTPC</b>	National Training & Productivity Centre, Fiji National University
<b>OECD</b>	Organisation for Economic Co-operation and Development
<b>PAPA</b>	Pan African Productivity Association
<b>PHM</b>	Postharvest management
<b>PMS</b>	Performance management system
<b>PPP</b>	Public-private partnership
<b>PR</b>	Public relations
<b>PSE</b>	Producer support estimates
<b>PSP</b>	Public-sector productivity
<b>SEARCA</b>	Southeast Asian Regional Center for Graduate Study and Research in Agriculture
<b>SMART</b>	Student Multidisciplinary Applied Research Team, Cornell University
<b>TES</b>	Technical Expert Services
<b>TPM</b>	Total productive maintenance
<b>TPS</b>	Toyota Production System
<b>TQM</b>	Total quality management
<b>UN</b>	United Nations
<b>UNCRD</b>	United Nations Centre for Regional Development
<b>UN DESA</b>	United Nations Department of Economic and Social Affairs
<b>UNIDO</b>	United Nations Industrial Development Organization
<b>VC</b>	Videoconference/videoconferencing
<b>VNPI</b>	Vietnam National Productivity Institute
<b>WSM</b>	Workshop Meeting of Heads of NPOs



# **ANNUAL REPORT**

## 2016

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