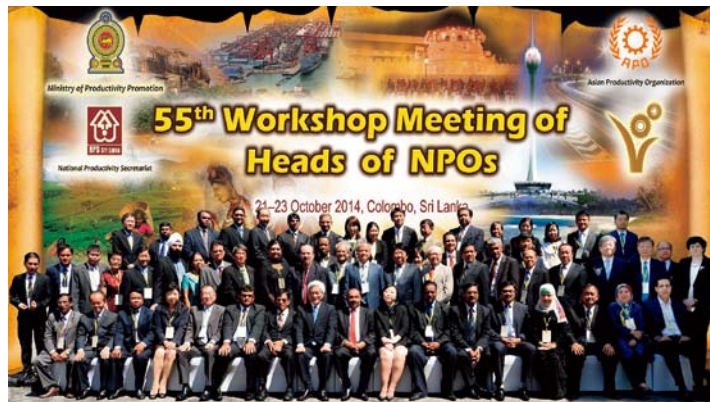




## Sri Lanka welcomes WSM delegates

The 55th Workshop Meeting of Heads of NPOs (WSM) convened in Colombo, 21–23 October. It was attended by 35 NPO and agriculture delegates and 17 advisers representing APO members at the meeting alongside observers from the World Bank, FAO, and Pan African Productivity Association. The main agenda items of the WSM were to deliberate on the APO Program Plan for the 2015–2016 Biennium, discuss the Proposed Roadmap to Achieve the APO Vision 2020, and present the third-party impact evaluation of 2012–2013 projects.

The meeting opened with welcome remarks by APO Director for Sri Lanka Upali Marasinghe, who reported that 2014 and 2015 would be another turning point in the productivity journey in Sri Lanka as, “The Ministry of Productivity Promotion has introduced several initiatives to formulate, implement, and reorient productivity policies. The assistance provided by the APO for various training courses, workshops, conferences, observational study missions, seminars, and e-learning programs has made a significant contribution to achieving expected goals.”



55th WSM delegates and advisers. Photo courtesy of National Productivity Secretariat.

He was followed by the opening remarks of HE Basheer Segudawood, Minister of Productivity Promotion, who declared that, “Sri Lanka is now moving from a factor-driven economy toward an efficiency-driven economy-cum-innovation-driven economy. Improvements in productivity and creativeness will result in innovations leading to higher productivity, which will yield higher per capita income for the country.”

HE Dr. Sarath Amunugama, Senior Minister of International Monetary Co-operation and Deputy Minister of Finance and Planning, delivered the inaugural address. He noted that that, “Sri Lanka has made valuable investments in technology fields” and emphasized balance among economic, political, and social aspects of technology-led economic growth to achieve sustainable, inclusive development benefitting the whole population.

During the WSM, NPO Delegate from Sri Lanka Marasinghe was elected Chair and NPO Delegate from Singapore Leung Wai Ling as Vice Chair. Secretary-General Mari Amano reiterated that, “Delegates at this WSM are expected to reconfirm their hosting of multicountry projects and propose modifications to projects, if any are necessary. Each member country should ideally host at least one multicountry project in the spirit of mutual cooperation.” Secretary-General Amano also pointed out that, “This will also help enhance the relevancy and raise the awareness and visibility of APO activities in host member countries.”

During Plenary Session 1, the APO Secretariat reported on the APO Center of Excellence on Green Productivity. That was followed by a summary of the Strategic Planning Workshop for APO Liaison Officers held in Tokyo in August. An update was also given on Category C projects. Two proposals on the creation of a National Follow-up Program Scheme and the Roadmap to Achieve the APO Vision 2020 were presented.

During Plenary Session 2, each NPO presented its country’s latest economic goals in key sectors. Strategic Planning Session 1 took place with delegates breaking out into different groups to discuss the Proposed Roadmap to Achieve the APO Vision 2020 in detail. The groups explained the various insights, suggestions, and recommendations of the breakout sessions to delegates the next day. On day two, delegates were involved in strategic planning sessions to reconfirm the APO Program Plan for the 2015–2016 Biennium.

On the last day, delegates made observational visits to Ape Gama and Laksala cultural center, Gold City, and the renowned Sri Lanka Tea Board before officially adopting the reports of the strategic planning sessions. ⚙️

November–December 2014  
Volume 44 Number 6  
ISSN: 1728-0834

### CONTENTS

- 2... Summary of the Secretary-General’s statement
- 3... Mass media familiarized with Japan’s technofarming culture
- 4... p-Tools
- 6... 10 most promising green energy technologies
- 7... APO/NPO update
- 7... New officer at the Secretariat
- 7... New APO publications
- 7... Free APO Mobile Productivity Database app now available
- 8... Mitigating negative effects of climate change on agriculture
- 8... NPO focus: Cambodia

The APO News is published bimonthly by the APO Secretariat. The online edition is available at: [www.apo-tokyo.org](http://www.apo-tokyo.org).

Asian Productivity Organization (APO)  
Leaf Square Hongo Building, 2F  
1-24-1 Hongo, Bunkyo-ku  
Tokyo 113-0033, Japan

Tel: 81-3-3830-0411

Fax: 81-3-5840-5322

e-Mail: [apo@apo-tokyo.org](mailto:apo@apo-tokyo.org)

## Summary of the Secretary-General's statement

Speaking to delegates, advisers, observers, and guests in the morning on 21 October, Secretary-General Mari Amano expressed gratitude to the Government of Sri Lanka for its hospitality and generosity in hosting the WSM. He then summarized the three primary objectives: reconfirm the lineup of projects for the 2015–2016 biennium; share objectives and plans in key economic sectors to guide the APO in the development of programs for 2017 and 2018; and discuss the draft APO 2020 roadmap before endorsing it for eventual approval by the Governing Body.

The preliminary 2015–2016 Program Plan had been approved by the 2014 GBM in Hanoi, along with a 5% increase in the budget without increasing total membership contributions. The increased budget made it possible to add projects: 10 more in 2015 and 12 in 2016, noted the Secretary-General. “Each member country should ideally host at least one multicountry project in the spirit of mutual cooperation. This will also help enhance the relevancy and raise the awareness and visibility of APO activities in host member countries,” he reminded the meeting.

As an “interesting” project completed this year, Secretary-General Amano cited the Eco-products International Fair (EPIF) held in Taipei, which attracted widespread media attention and high-level government support. The Taipei Outcome Document drafted at the parallel conference was accepted by the UN as part of the inputs into its new sustainable development goals. However, he regretfully stated that the EPIF would not take place in 2015 but assured the WSM that the Secretariat would instead focus on the 2016 fair.

Another interesting development was the official launch of a new three-year cooperative agreement with Cornell University. “The 19 participants in the inaugural program were the proud recipients of certificates issued jointly by the APO and Cornell University. The APO is now discussing deepening that cooperation, which will likely include joint research projects in agriculture,” announced the Secretary-General. “With the continued support and generosity of the Japanese government, we were also able to implement four highly visible projects covering diverse topics such as solar energy, wastewater management, and agribusiness,” he reported.



Secretary-General Mari Amano. Photo courtesy of National Productivity Secretariat.

Noting that individual-country programs had seen higher participation rates with the total number of projects rising to 78 to date compared with 56 in the same period last year, Secretary-General Amano pointed out that, “This is a huge 30% increase in APO activities within member countries which should also lead to more learning opportunities as well as higher visibility. Allow me to express the gratitude of the APO to some of the NPO heads present for throwing their support behind programs such as I-OSM and BCBN by agreeing to host more such projects in the APO spirit of mutual cooperation.”

In terms of visibility, this year alone APO activities had already been covered more than 760 times in media across Asia and in nonmember countries such as the UK and France, compared with 270 times in all of 2013. The Secretary-General thanked member countries for their tremendous efforts to coordinate with the Secretariat in creating newsworthy events. He referred to the renovated APO website with a more modern, user-friendly format and to plans for an APO Portal to serve as the focal point for liaison officers, participants, experts, and others to enable them to collaborate, access project information, browse databases, download e-books, and participate in e-learning courses.

An “exciting” development, said the Secretary-General, was the announcement of the first APO Mobile Productivity Database app and 2014 edition of the *APO Productivity Databook* at a press conference on 17 October in Tokyo. The app for smartphones gives easy access to com-

prehensive economic and productivity data and information on APO members as well as other major economies.

“In summary, during the first three quarters of 2014, the APO has undertaken 118 projects. The number of projects for the full year will exceed the 139 achieved for the whole of last year, with the final number depending largely on the utilization rate of individual-country programs by member countries,” pointed out the Secretary-General, adding that, “These numbers are expected to rise as the Secretariat is committed to implementing all 2014 projects within this year barring unforeseen circumstances as well as to undertaking five additional projects approved by the Governing Body about two months ago.” For 2015–2016, the number of projects implemented was bound to increase due to the 5% budget increase. He questioned whether the APO could significantly raise the visibility and impact of its activities by doubling or tripling the annual budget and how to bridge the gap between the high expectations of member countries and actual achievements. “This has been the dilemma facing me since I assumed the post of the APO Secretary-General just over a year ago,” he acknowledged.

He then explained some learning points from when he served as Deputy Secretary-General of the OECD. While admitting that it was not realistic to compare the two organizations in terms of size, budget, or staff strength, he suggested that the APO could adapt some good ideas, best practices, or signature activities from the OECD. An example was the OECD focus on making policy recommendations then implemented by member governments. The progress on the recommendations is tracked through peer reviews, which underpin the OECD monitoring mechanism. “The APO may perhaps wish to adopt a similar methodology to encourage member governments to implement policies,” he proposed.

“My hope is that delegates will be able to contribute even more and better ideas during the breakout sessions to discuss the draft roadmap that will help shape the future of APO programs. This will go a long way to help the APO become the leading international organization in the area of productivity. That can only happen if there is a strategic shift in the way the APO carries out its mission with the unequivocal support of all mem-

ber countries. I hope to count on your support to achieve this,” continued the Secretary-General.

Secretary-General Amano pointed out that the success of APO projects depended on both the ability of Secretariat staff and host countries to create high-quality programs with suitable experts and the quality of participants. He urged member countries to nominate only those meeting the criteria in project notifications. The Secretariat would start monitoring participants carefully and providing feedback to member countries.

As outlined at the last GBM, the idea of strengthening the working relationship between the Secretariat and NPOs through a one-year staff attachment scheme at the Secretariat was ready for a pilot test from 2015 with two NPO staff, reported the Secretary-General but, “Whether it takes off or not will depend on whether NPOs find it useful and relevant.” As also mentioned at that GBM, expansion of the reach of e-learning courses including translating the course materials into local languages was a high-priority area, and the Secretary-General invited delegates to provide suggestions on course subjects during the breakout sessions. He also touched on plans to increase the office space of the Secretariat and possibly acquire videoconference facilities.

The Secretary-General was happy to report that, “METI has approved an annual cash grant of about US\$600,000 for 2015 and 2016. This is on top of the special cash grants provided by the Ministry of Foreign Affairs and Ministry of Agriculture, Forestry and Fisheries. On behalf of the APO, I would like to thank the Government of Japan and the Government of the Republic of China for their generous cash grants.”

In concluding his statement, the Secretary-General reminded delegates that, “This WSM will be a very important exercise to plan for the future, and I am looking forward to our discussions over the next three days. There is another equally important reason to bring together all our key APO stakeholders, which is to create opportunities for you to build networks and friendships. The strategic objectives of the APO cannot be achieved without the mutual cooperation and strong bonds between everyone involved in the organization. I hope that this WSM will help to cement the already strong relationships that our NPOs enjoy. I once again thank our hosts, the Government of Sri Lanka, the National Productivity Secretariat, and other agencies that have helped make this WSM in Sri Lanka possible.” 🌟

## Mass media familiarized with Japan’s technofarming culture

**S**eventeen media representatives from 13 countries across the Asia-Pacific marveled at the lifestyles of villagers surrounded by modern amenities in the deep countryside. They observed these while becoming familiar with modern technologies, innovations, and best practices in Japan to improve agricultural productivity during the multicountry observational study mission on Best Practices in Promoting Innovation and Productivity in Agriculture for Mass Media Practitioners, 8–14 September.

Experts from the Ministry of Agriculture, Forestry and Fisheries, Agribusiness Support Center, Mebiol Inc., *The Japan Agricultural News*, Chiba University, TV Hamura, and Aomori prefecture introduced advanced farming technologies and innovations to raise farm productivity, agricultural product quality, and farmers’ incomes and quality of life. Site visits that demonstrated the interplay between agricultural technology and innovations included Taisei Industrial Co., Ltd., developer of unique cryotechnology for maintaining agrifood freshness; Inakadate village, originator of widely copied paddy field art; Hirosaki Apple Park; and Tsuji Farm’s film agrifacility utilizing Mebiol’s technology. Participants commented on the eye-opening experience of meeting small farmers in villages who rely on innovative technology and innovation to create prosperous livelihoods. They added that in their countries, farming often meant daily drudgery, discouraging many from the career.

One objective of the mission was to demonstrate how governments can transfer information more effectively to multitudes of farmers scattered in rural areas by leveraging mass media. In some countries, the media are involved in this through government sponsorships and private initiatives. Delegate from Sri Lanka Peiris Habaragamuralalage Harsha Udayakantha, Editor in Chief of *Treasure Island* magazine pointed out, “We are publishing a series



*Cambodian delegate and journalist Lamngeune Latsaath plucking apples at the Hirosaki Apple Park.*

of feature stories, news releases, reports, and pictorials in different media to encourage people, especially the young generation engaged in education, on readily available innovations in agrotechnology to improve agriculture and related segments and therefore ensure the future prosperity of the masses.”

This mission encouraged partnerships among media practitioners and the APO, NPOs, and other national organizations in promoting innovative ideas and techniques for improving productivity agriculture and the lives of farming families. 🌟





## Foundation building for incubation

### What are incubation centers?

SMEs are major sources of job growth. Large organizations continue to have a strong position in the market but are no longer the main source of new jobs. This trend is expected to continue, which is both positive and problematic. The more diverse the employment, the less vulnerable the economy is to concentration of jobs in relatively few corporations. It is problematic as large corporations typically produce more goods per person and pay better wages, so more jobs in SMEs may result in higher employment but lower productivity.

Assuming that SMEs will continue to fuel job growth, the challenge is how to develop and support SMEs that produce more goods per person and pay comparable (or better) wages as large corporations. Many countries are creating incubation centers to assist in the growth of SMEs. Governments are the primary source of funding (national, state, regional, and local governments all assist in this support). However, funding is limited and the success of incubation centers is still being debated. Governments determine the success of the centers by productivity improvements and how many jobs are created where employees are paid competitive wages. Future government support will be strongly influenced by the level of success.

Startup companies that are technology based and/or provide professional services typically have greater productivity and pay better than those focusing on local retail products and services. Most technology/professional startups are created by entrepreneurs who are young, lack fully developed skill sets, and have limited business experience. Incubation centers develop funding, networking, and mentorship programs to assist entrepreneurs in these areas. Some incubation centers believe that a mentorship program is the single most important service they provide. Another service high on the list is simply placing startups together in the same space where they can develop mutual support groups. Other services include physical space and administrative support. Not all centers provide all services; many do not provide mentorship.



**Photo 1.** Gathering in the Conrad Business, Entrepreneurship, and Technology space at the Communitech Hub high-tech industry association center.

### A success story

In its Startup Ecosystem Report 2012, Startup Genome identified the top 20 startup ecosystems worldwide. The Region of Waterloo, Ontario, Canada, with a population of 500,000, ranked 16th. The report indicated that Waterloo was in Canada, as most readers would not know Waterloo or its location. Nevertheless, Waterloo's technology sector now:

- 1) generates CDN\$30 billion in revenues;
- 2) has more than 1,000 technology firms;
- 3) has more than 700 active startups;
- 4) has created 30,000 new technology jobs (since 1997);
- 5) is actively recruiting for more than 1,000 technology jobs available; and
- 6) raised investment capital of CDN\$214 million in 2012 alone.

Waterloo's Accelerator Center has:

- 1) 43 current clients;
- 2) 108 clients since inception;
- 3) 28 graduate companies;
- 4) CDN\$81 million in revenue generated by client companies;
- 5) CDN\$117 million in funding received by client companies;
- 6) 950+ jobs created;
- 7) 17,000 hours of mentorship; and
- 8) 250+ advisors and mentors.

The University of Waterloo's Incubation Center, Velocity, has:

- 1) had over 3,000 students;
- 2) created more than 82 companies; and
- 3) over CDN\$100 million raised by those companies.

Waterloo's Industry Association, Communitech, over the last five years through its startup services, peer group meetings, and networking events, has:

- 1) created 2,421 new startup jobs;
- 2) created 1,189 new companies;
- 3) created 5,254 new jobs in existing companies;
- 4) retained 5,348 jobs;
- 5) attracted eight multinationals to locate in the region via acquisition; and
- 6) created CDN\$105.6 million in private-sector partnerships.

Why was Waterloo able to do this? The simple answer is because government, industry, academia, the community, and related associations all contributed in a collegial ecosystem. Various levels of government provided funding. The latest estimates are that for every dollar invested using public funds, \$12.63 in wealth was created. This is a great return on investment. Industry and businesspeople contributed countless hours to working with entrepreneurs and, in many cases, invested in them. Communities provided space and services at attractive rates. Postsecondary institutions were sources of entrepreneurs, research, and collaborations. Although many competitors were created, companies worked together to build an ecosystem of companies that support and compete with each other.

### Focus on postsecondary institutions

The role of postsecondary institutions, primarily universities, in developing an incubation ecosystem is vital. Typically, a university has an area of strength such as agriculture, engineering, or environment. Most likely, related industries sectors are well developed in the area. These links between academia and industry provide a base for strong partnerships.

The University of Waterloo was ranked 16th for venture capital funding of undergraduates by PitchBook in the August/September 2014 edition of *Venture Capital Monthly*. The University has the world's largest cooperative education program where 19,000 students alternate between four months at school and four months working in a related field. This has resulted in very close ties between industry and academia. Students also gain valuable business experience early.

The university also has an inventor-owned intellectual property policy where professors, staff, and students own what they create with no obligation to provide any profit to the university. As a result, many technologies have been spun into successful businesses, fostering strong ties between university researchers and the business community. The business have, in turn by their own choice, given back to the University of Waterloo in funding, research collaboration, and volunteer activities.

### Building industry support

One issue that tends to reduce support for incubation centers from industry is the notion of competition. In many cases, there is a reluctance to participate because there is a perception that businesspeople are creating their own competitors. This does not appear to be the case for three compelling reasons. The first is critical mass. A simple example is a community with many downtown restaurants versus a community with only a few. People will go to the community with more restaurants because they have greater choice. There will be more competition, better differentiation among competitors, and more customers.

Second, communities with greater critical mass also find more skilled workers in the area. There are more job opportunities for graduates from local postsecondary institutions. People who have been trained in one business are potential employees of others. The community also attracts skilled workers from elsewhere because there is a greater likelihood of finding a job matching their skill sets.

Third, networking groups, industry associations, joint industry-academia R&D, and government participation will all develop. Peer groups will form; community CEOs will get together to discuss issues, share experience, and help each other. This will be an evolutionary process where groups start discussing higher-level governance issues. As trust develops, the range of issues will increase into operational areas and likely into product development, licensing, and others with direct impact on products offered and markets addressed.

### Receiving government support

Governments must create economic development if they hope to improve productivity. With SMEs recognized as the engines for future growth in employment, governments are seriously studying how they can promote SMEs. However, they are reluctant to provide funding as they may be seen as spend-



**Photo 2.** Quantum Nano Centre at the University of Waterloo.

ing public funds on private-sector activities when there are pressing needs for social program support. Ultimately, a strong economy and higher productivity will result in an economy better able to address social needs. Interestingly, when a government works with the community, academia, and industry in a collegial process, there is stronger support for public funds being invested alongside the monetary and in-kind support provided by the other partners. Private-sector investment is a key component of government involvement.

Waterloo gained strong government support for its industry associations and incubation centers. It also demonstrated that the support received has resulted in substantial economic activity, job creation, and community development.

### Creating a collegial community

Between competition, justification for spending public funds, private-sector attitude toward giving back to the community, and the ever-shortening time frame for expecting results, it is difficult to create a startup ecosystem with successful incubation centers. Waterloo is a “50-year instant success.” It started its technology journey in 1957 with the establishment of the university. Through visionary government and private-sector initiatives, the collaborative ecosystem developed, starting with a few spinoffs from the university and government-supported networking groups. To be successful in developing incubation centers, it is necessary to create a startup ecosystem with all stakeholders committed to a long-term vision, patient capital infusions, and a collegial environment. 🌀



*Dr. Wm. Douglas Beynon is a seasoned entrepreneur, executive, advisor, mentor, and investor with over 35 years of senior management experience. He has restructured organizations, managed SMEs, started private and public companies, advised and mentored corporations, and secured investment funding. Dr. Beynon is experienced in collaborative activities with technology commercialization through strong ties with a postsecondary institution and local businesses. He is an educator, providing a Master's level course in Creating Technology Based Ventures at an internationally recognized university.*

# 10 most promising green energy technologies

## **B**ackground

A study mission on Green Energy Technology was organized by the APO, 15–19 September 2014, in Taipei in collaboration with the Industrial Development Bureau, Ministry of Economic Affairs, Taiwan Environment Management Association, Foundation of Taiwan Industry Service, and China Productivity Center. The mission was attended by 24 green energy professionals from 14 APO member economies in the Asia-Pacific region. After intensive discussions and careful examination of various aspects over five days and review of regional and international initiatives such as ministerial meetings, the study mission identified the following 10 most promising green energy technologies/practices for the Asia-Pacific region. The document produced by the mission is reprinted below.

### Most promising green energy technologies

1. **Energy-Efficient Solid-State Lighting (SSL):** SSL lighting has superior energy conversion efficiency. Light-emitting diodes (LEDs) have revolutionized energy-efficient lighting, as have compact fluorescent light (CFL) bulbs. Supported by appropriate smart monitoring and control technologies, green building standards will help in constructing smart buildings that are more energy efficient.

2. **Advanced Biomass Energy Technologies:** Biomass contains stored energy because plants absorb energy from the sun through the process of photosynthesis. When biomass is burned as fuel, the stored energy is released as heat. Advanced technologies can help realize the true potential of millions of tons of available biomass to replace fossil fuels.

3. **Alternative-Fuel Vehicles:** Improving vehicle efficiency is the single most effective means to reduce petroleum dependence. In addition, progress in the development of alternative fuels will pave the way for low-carbon transportation systems. Electric and/or hydrogen fuel cell vehicles are currently being produced by most major automobile companies. Some countries are introducing the infrastructure required for electric charges on streets and in buildings. Hybrid vehicles can also continue to be utilized, supplemented with, for example, solar energy collected on carport roofs or in car parking facilities to power electric vehicles and batteries. Service stations of the future will not only charge electric vehicle batteries but also lease batteries for quick change/charge.

4. **Carbon Capture and Sequestration:** Carbon capture and sequestration is a technology that can capture the carbon dioxide (CO<sub>2</sub>) emissions produced by the use of fossil fuels, preventing the CO<sub>2</sub> from entering the atmosphere. Advances and cost reductions in carbon capture and sequestration technology are keys to reducing greenhouse gas emissions. Biomass and biofuel production acts as a form of sequestration, as found in current algae production trials in Australia and Southeast Asia utilizing CO<sub>2</sub> emissions from coal-fired power plants.


5. **Intelligent Energy Information and Communication Technology (ICT):** This includes wirelessly connected sensing devices allowing us to gather big real-time data on energy consumption so that intelligent decisions can be made for energy savings. Such systems can be employed as part of building/factory energy management systems. The technology also functions as a platform for exchanging success stories on energy conservation and efficient energy management systems. ICT-based monitoring and validation systems include technologies like variable-frequency drives (VFDs), which are utilized effectively in some industries but still relatively unknown and costly. Designing cost-effective VFDs therefore represents a business opportunity. The Institution of Energy Conservation Awards for building and factories are recognized as stimulating conservation and energy efficiency improvement efforts.

6. **Smart Micro Grids:** Smart micro grids have multiple benefits. They accelerate improvements in energy systems, increase grid reliability, help consumers save money, and reduce overall carbon footprints.

7. **Super-Efficient Solar, Offshore Wind, Ocean Wave, and Tidal Power:** Creating more efficient solar panels is a must to revolutionize the photovoltaic industry, although advanced production techniques in a number of countries have already reduced the cost of solar power. Offshore wind technologies that can convert wind off coasts into electricity will bring about a paradigm shift in wind power. The required technology exists and is already being applied to harvest wave and tidal power in some parts of the world, including the Asia-Pacific.

8. **Energy Storage Systems:** Advanced energy storage systems are an emerging industry with great relevance to renewable energy. Successful applications of this technology will contribute significantly to stabilizing renewable energy flows.

9. **Renewable Hybrid Energy Systems:** There is a significant increase in energy production when hybrid systems are set up to include multiple renewable energy sources. Such systems can provide energy during most weather conditions. Hybrid systems can be installed as either on grid or off grid. They reinforce renewable energy by leveraging the synergy between different sources.

10. **High-Voltage Direct-Current (HVDC) Electric Power Transmission Systems:** HVDC electric power transmission systems use direct current for the transmission of electrical power. HVDC systems are less expensive and result in less electrical power loss during long-distance transmission. HVDC also allows power transmission between unsynchronized alternating-current systems. It can carry high-voltage currents efficiently across regions. 

## APO/NPO update

### *Fiji*

#### **New APO Liaison Officer**

Name: Vani Varea

Designation: Director, Labour Policy and Productivity, Ministry of Employment, and Industrial Relations

Effective date: 30 September 2014

### *Japan*

#### **New APO Alternate Director**

Name: Ken Okaniwa

Designation: Assistant Director-General, International Cooperation Bureau, Ministry of Foreign Affairs

Effective date: 15 October 2014

### *Nepal*

#### **New APO Director**

Name: Uttam Kumar Bhattarai

Designation: Secretary, Ministry of Industry

Effective date: 18 August 2014

### *Pakistan*

#### **New APO Alternate Director**

Name: Khizar Hayat Khan

Designation: Additional Secretary-I, Ministry of Industries and Production

Effective date: 25 July 2014

### *Thailand*

#### **New APO Director**

Name: Dr. Atchaka Sibunruang

Designation: Permanent Secretary, Ministry of Industry

Effective date: 1 October 2014

#### **New APO Alternate Director and NPO Head**

Name: Dr. Santhi Kanoktanaporn

Designation: Executive Director, Thailand Productivity Institute

Effective date: 16 October 2014

## New finance officer at the Secretariat

Starting on 2 September, Natsuyo Kitazawa began serving as the new finance officer in the APO Secretariat. She brings more than 10 years of experience in financial affairs in international companies in the private sector, involved in fields as diverse as consulting, automobiles, technology, and pharmaceuticals. Despite the serious, demanding nature of her work, Secretariat staff have rapidly become accustomed to her cheerful demeanor. Kitazawa studied Japanese literature at Otsuma Women's University in Tokyo before going on to receive a Master's in Business Administration, International Business, and a Postgraduate Diploma and Certificate in Management from the University of Southern Queensland Graduate School of Business in Australia. Kitazawa's favored leisure-time activities are driving and shopping. In the future, she hopes to visit as many APO member countries as possible.



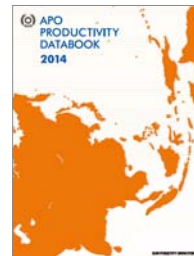
## New APO publications

### APO Productivity Databook 2014

ISBN: 978-92-833-2456-0 (paperback)

ISBN: 978-92-833-2457-7 (PDF edition)

The 7th edition in the series presents comparative data on productivity and economic growth covering 29 Asian economies and Australia, the EU, Turkey, and the USA as reference economies covering 1970–2011. A new feature is the inclusion of total factor productivity calculations for Bangladesh for the first time.

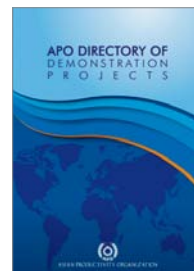


### APO Directory of Demonstration Projects

ISBN: 978-92-833-2441-6 (paperback)

ISBN: 978-92-833-2442-3 (PDF edition)

A compilation of 13 demonstration projects conducted in nine member countries, 2007–2011, detailing productivity-related problems and how they were resolved. Abundant figures and tables, with before-and-after photos, document the results.



### Manual on Material Flow Cost Accounting: ISO 14051

ISBN: 978-92-833-2449-2 (paperback)

ISBN: 978-92-833-2450-8 (PDF edition)

Developed in the late 1990s, MFCA is an environmental management tool since it increases the transparency of material flows, thus decreasing waste. This easy-to-understand manual contains six modules and a case study.



### Free APO Mobile Productivity Database app now available for on-the-go access



The APO Mobile Productivity Database presents 95 economic indicators closely related to productivity in a format specially designed for smartphones. This app gives easy access to comprehensive statistical data.



## Mitigating negative effects of climate change on agriculture

The effects of climate change on agriculture are becoming more obvious. They pose serious threats and challenges to food security and sustainability in agriculture under the business-as-usual situation. It is therefore critical to transform practices for increasing agricultural productivity, while reducing greenhouse gas emissions to ensure sustainable food production to feed more than nine billion people in 2050. To explore strategies, approaches, and good practices of climate change adaptation and mitigation in agriculture, the APO in collaboration with the Ministry of Agriculture and Ministry of Manpower and Transmigration of the Republic of Indonesia organized a forum on Mitigating Negative Effects of Climate Change on Agriculture in Bali, 30 September to 3 October. The Indonesian Agency of Agricultural Research and Development (IAARD) in collaboration with the NPO of Indonesia implemented the program.

More than 50 policymakers and planners, government officers, agricultural professionals, scientists, practitioners, and executives of NGOs and NPOs representing 18 economies contributed in-depth knowledge, discussed related issues and challenges, and provided valuable inputs for promoting climate change adaptation and mitigation policies, strategies, approaches, and practices in the agricultural sector.

The forum consisted of six thematic sessions: assessment of climate change impacts on agricultural productivity; efficient, effective resource manage-



Delegates to the forum on Mitigating Negative Effects of Climate Change on Agriculture. Photo courtesy of IAARD.

ment for climate change mitigation and adaptation; innovations in farming systems for mitigation of and adaptation to climate change; tools and technologies for agricultural adaptation to climate change; policy and institutional settings for building resilience for adaptation to climate change; and mainstreaming good practices of agricultural adaptation to climate change into sectoral planning. To observe climate-smart agricultural and agribusiness practices, the participants visited the Subak Guama Cooperative in Bali.

After intensive deliberations, the forum agreed on a set of findings and recommendations titled “The Bali Declaration on Climate Change Adaptation and Mitigation in Agriculture in the Asia-Pacific,” which is available on the APO website: <http://www.apo-tokyo.org/publications/>.



### 5S Award Competition for 2013

Joining the APO in 2004, Cambodia remains the youngest APO member country. The National Productivity Center of Cambodia (NPCC) was initially under the auspices of the Ministry of Industry Mines and Energy, which has been recently split into the Ministry of Industry and Handicraft and Ministry of Mines and Energy. The NPCC is currently under the former.

5S was introduced in Cambodia in 2005, one year after the NPCC was established. To support SMEs, fundamental 5S, kaizen, productivity awareness, production management, and quality control toolkits have been translated into Khmer for easy use by owners, workers, and others who may not be proficient in English.

Currently, 5S implementation has been mainstreamed in the service, agriculture, and industry sectors in most provinces, including Battambang, Kompong Cham, Kompong Som, and Pursat. A 5S demonstration project was carried out in 2009 and 2010 to spread the word to more remote areas of the country. Twelve model companies were selected to undertake the project with the NPCC, most of which were food-processing manufacturers.

To encourage the development of strong SMEs, the General Depart-

ment of Industry and NPCC, with generous funding from the ADB, started a 5S Award Competition program. The program started on 16 May 2013 and the award ceremony was held on 25 April 2014. Ten companies were unanimously selected to participate

in the 5S Award Competition. Those in the top three places received trophies and certificates: LyLy Food Industry Co., Ltd.; Eurotech Company Co., Ltd., a producer of pure bottled beverages; and ABC Bakery. Those ranked fourth to seventh for their 5S initiatives received certificates of appreciation, and those placing eighth through tenth can proudly display certificates of participation. The award ceremony was presided over by Minister of Industry and Handicraft Dr. Cham Prasidh. Additionally, all seven companies that met the selection criteria during the audition stage will now be permitted to use the 5S logo on their products.



Representatives of 5S award competitors gather for a commemorative photo with Senior Minister Dr. Cham Prasidh.