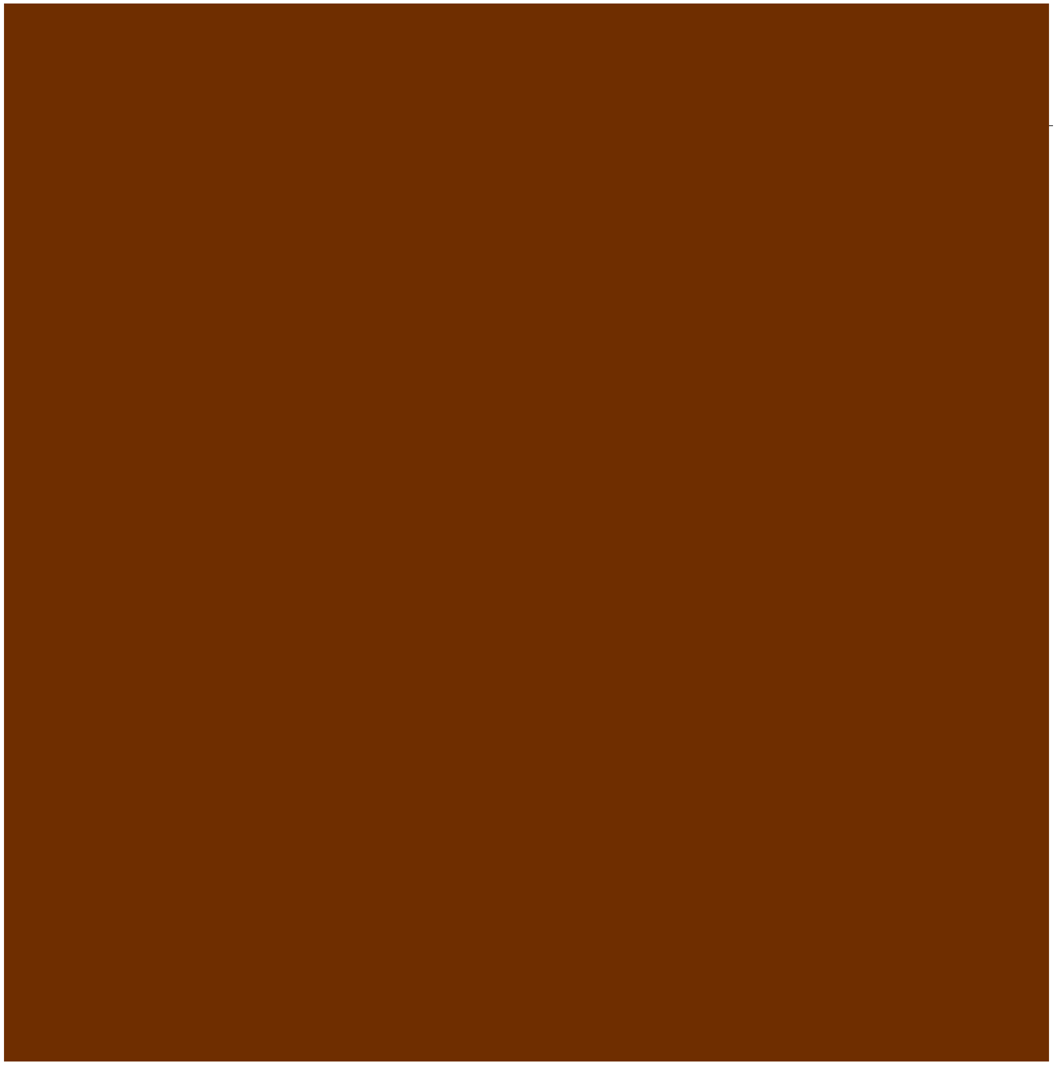
Going Global Together



Going Global Together

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APEC PHILIPPINES 2015 | ABAC APEC Business Advisory Council | AIM

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AIM STEPHEN ZUELLIG
GRADUATE SCHOOL OF
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FOREWORD

APEC was born 26 years ago, with the vision to achieve prosperity for the people of Asia-Pacific.

To reach its full potential, APEC needs to ensure that all segments of society are given meaningful and fair access to the vast business opportunities that free trade and regional economic integration bring.

In many economies of APEC, the vibrant private sector has propelled growth never seen before; however, micro, small, and medium enterprises (MSMEs) which make up between 94 percent and 98 percent of these enterprises, and employ more than half of the region's workforce, account for only 35 percent or less of cross-border trade. Thus, the APEC Business Advisory Council (ABAC) in 2015, guided by its theme, "Inclusive Growth: A Fair Deal for All," sought to enable more MSMEs to participate and benefit from global trade.

What is exciting is that bigger businesses actually have the power to make a significant difference by bringing smaller enterprises into their global value chain. After all, being competitive is no longer about a single company's performance, but that of its entire ecosystem. Drawing out the full potential of MSME's as partners—providing goods and services, or as creators of innovation—is simply good business.

This book chronicles inspiring stories of such "inclusive business models" that feature long-term, value-driven partnerships whereby bigger companies reach out to pull smaller companies up the supply chain, thus facilitating transfer of skills, knowledge and technology—building shared values in a seamless value chain.

The policy reforms that would support and strengthen trade and investment linkages between MSMEs and big businesses are also highlighted in the case studies.

This publication is ABAC and AIM's contribution to inspire more enlightened ways of doing business.

We applaud the companies featured in this book and hope that this effort to document "inclusive business" models is the beginning of many more great stories to come.

Doris Ho

Doris Magsaysay Ho
Chair
ABAC 2015

PREFACE

APEC economies have experienced rapid growth in the past decade, in part due to micro, small, and medium enterprises (MSMEs) that help the economies thrive even during the most volatile of times.

This book arrives at the most opportune time, coming on the heels of the 2014 APEC Accord on Innovative Development, Economic Reform and Growth, which committed to inclusive financial services for smaller business owners. The full potential of our economies is truly realized when these MSMEs are carefully integrated into expanding national and international ecosystems.

The APEC economies have such a rich tapestry of success stories. These stories and case studies on sustainable partnerships between big and small companies suggest remarkable innovations in the products, processes, and services they provide, ultimately contributing to the larger economic landscape among the APEC communities.

AIM is proud to be partnering with APEC Business Advisory Council (ABAC) in playing a small role in sharing these stories with vast audiences both in the Philippines and beyond its borders to inspire change and progress with these inclusive business models.

It is our collective intention, with the publication of this book, to reach out to the wider public engaged in businesses and share with them these chronicles, insights, and practices that could help them more efficiently participate in the global economy.

We hope that this book becomes a little spark for future generations in leading the economic change that we expect to see for all APEC economies.

Jikyeong Kang

JIKYEONG KANG
President
AIM

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In Good Company

In Good Company

The topic of global value chains (GVCs) sits at the heart of any modern discussion on international business and international trade. Developments in global logistics management, the spread of information and communication networks, and the adoption of bilateral and multilateral trade agreements have enabled businesses to access new markets and tap international suppliers and partners. Combined, these factors create an environment conducive to rich, new mechanisms for accelerating growth and creating resilience for companies.

Asia-Pacific Economic Cooperation (APEC) represents a significant portion of the GVC for many industries, emanating from its status as a factory of the world in many sectors. During the 22nd APEC Small and Medium Enterprise Ministerial Meeting, APEC noted that its 21 member-economies represent 44 percent of global trade and that its combined real gross domestic product (GDP) has doubled from just USD 16 trillion in 1989 to USD 31 trillion in 2013.

GVCs and MSMEs

Data from a 2013 United Nations Conference on Trade and Development (UNCTAD) report on GVCs and development estimated that the average global GVC participation rate in 2010 was 57 percent, with a five-year growth rate of 4.5 percent from 2005 to 2010. By contrast, the GVC participation rate in developing economies was 52 percent and the five-year growth rate was 6.1 percent. For the least developed economies, the report showed the GVC participation rate at 45 percent, with a five-year growth rate of 9.6 percent. Of the top 25 exporting economies as of 2010, 13 are in APEC: Chile, China, Chinese Taipei, Hong Kong, Indonesia, Republic of Korea, Malaysia, Mexico, Peru, the Philippines, Singapore, Thailand, and Vietnam.

Data from the World Factbook 2014 shows that, with the exception of Brunei (32.8 percent), China (48.2 percent), Indonesia (40.3 percent), Papua New Guinea (34.8 percent) and Vietnam (44 percent), the services sector represent majority of the GDP of APEC member-economies, ranging from 93.3 percent of GDP in Hong Kong to 55.8 percent of GDP in Thailand. The industry sector, on the other hand, is particularly important in Brunei (66.5 percent) and Indonesia (45.5 percent) but is negligible in Hong Kong (6.6 percent). In the rest of the economies, the industry sector as a percentage of GDP ranges from 42.6 percent in China to 20.7 percent in the United States of America. Except for Papua New Guinea (26.3 percent) and Vietnam (17.9 percent), the agriculture sector in all other member-economies are below 15 percent of GDP, the lowest being Singapore at zero percent.

The dominance of the services and industry sectors explains how crucial the information infrastructure is in APEC economies. It means any barrier to information and communication technology (ICT) access can hurt micro, small and medium enterprises (MSMEs).

MSMEs are important to the APEC economies, making up over 97 percent of all enterprises and generating more than 70 percent of all jobs in the region. However, the sector has yet to realize greater participation in global trade, on average accounting for less than 35 percent.

APEC members acknowledge the importance of GVCs as well as MSMEs to their economies. Philippine Trade Secretary Gregory Domingo says the bloc is "looking at global trade through the prism of MSMEs."

"If you look at the MSMEs participating in the global value chain, they are actually a minority, and so there's this big chunk of micro and small enterprises that are out of the loop and that's what we're addressing," Domingo says.

Over the years within APEC, numerous initiatives have been implemented to support MSMEs and promote their integration into the GVC, starting from the Leaders' instructions to convene the first SME Ministerial Meeting in 1993. This forum has generated a chain of valuable accomplishments, namely: the Action Program for Small and Medium Enterprises under the Osaka Action Agenda (OAA) in 1995; the preparation of the Integrated Plan of Action for SMEs (SPAN) in 1998; the series of Strategic Plans; the Daegu Initiative; the organization of the Joint SME-MRT (Ministers Responsible for Trade) Ministerial Meeting in 2011 to address top barriers to SME trade; as well as the Nanjing Declaration on Promoting Innovation and Sustainability.

In September 2015, APEC officials adopted the Philippine-led Iloilo Initiative, which seeks to provide "a bigger voice and better opportunities" for MSMEs by integrating them in international trade and global value chains through increased focus on the potential of the Internet, the digital economy, and e-commerce. Under the Iloilo Initiative, APEC economies are encouraged to establish and strengthen the operation of MSME associations across the Asia-Pacific region and build a network of MSMEs, incubators, accelerators and innovation centers to promote information exchanges, business networking and capacity building. It also aims to operationalize the "APEC MSME Marketplace"—an interactive repository of APEC activities and member-economies' individual efforts to promote cooperation and linkages across MSMEs and other stakeholders. The Marketplace will serve as an online portal to facilitate business matching, providing information about international trade standards and regulations. It will also provide information on available trade promotion assistance packages that APEC economies individually or collectively provide for MSME development and internationalization. The Marketplace will also help build networks and linkages among the MSMEs, academe, innovation centers, and other relevant stakeholders.

Working Together

Today, MSMEs relate to big businesses in many ways, and many different types of partnerships and linkages exist in almost every sector. The flexibility and efficiency enabled by GVCs, heightened concerns about the need for value chain resilience, and increased interest in corporate responsibility and sustainability have led large companies to increase engagement with MSMEs.

Within APEC, there are already many instances of MSMEs gaining access to the global value chain. In

many cases, large companies provide the mechanism through which MSMEs gain participation in GVCs. In this book, we provide a sampling of the many successful models that are being used by large firms and their partner MSMEs. These models are particularly interesting because they create value for both the large company and the MSMEs.

Not all forms of cooperation and linkages require a large corporate partner to access global markets or become part of the GVC. In some cases, MSMEs work together with each other, individuals and entrepreneurs, research organizations, state and non-state organizations.

In the case of the specialty clothing brand Filip+Inna, both the company and the tribal artisans that it partnered with started small. Yet by focusing on high-quality, hand-crafted clothes in a key cosmopolitan market, the brand very quickly gained entry to international markets.

This was also the case for the Community Health Education Emergency Rescue Services (CHEERS), a medium enterprise based in the Philippines that addresses the need for quality emergency medical services (EMS) training. The company, through STIKes Budi Luhur, is now providing EMS training to students in Indonesia.

For Chile, the development of a salmon industry second only to Norway's depended on key partnerships between state agencies, and universities and aid agencies outside the economy. This, in turn,

Filip+Inna: Inspired by Tradition

When Lenora Luisa Cabili started Filip+Inna, she made it her mission to create a brand "Filipinos everywhere can be proud of." Born to an artistic family in Mindanao, a culturally diverse island in the southern Philippines and home to 18 indigenous peoples (IPs), Cabili had only one goal in mind when she launched her women's clothing collection through a New York online distributor in 2011: "make the client and the IP artisans happy."

Filip+Inna's business model relies on the creation of a limited number of high-quality, hand-crafted clothes combining market inputs from international retailers, Cabili's design sensibilities, and the tradition, artistry, and skills of partner artisans.

Close collaboration with both distributors and IP artisans allowed Filip+Inna to achieve market success while creating social impact and maintaining profitability.

Every team of artisans belongs to a single tribe and village, preserving that tribe's unique heritage.

Collections begin with prototypes using materials and forms that Cabili provides, with embroidery and embellishments the artisans create. From these prototypes, she selects designs for commercial collections. Those that do not fit the collection are showcased in trunk shows as unique pieces.

The first production team of about 10 skilled artisans among the T'boli tribe in Lake Sebu increased to 60 embroiderers after three years.

"Our culture is our fingerprint—it is what defines us and we should have more of it in our everyday lives. We need to preserve it then take inspiration from it to keep it alive," Cabili said.

"Our mission is to create, while also reviving—even preserving —ancient traditions of the Philippines that are in danger of becoming lost. We work with many groups of talented artisans across the archipelago, giving them an opportunity to improve their livelihood," she added.

By 2014, three years after it started, Filip+Inna opened its first store in the Philippines. By this time, it already had distributors in the Bahamas, India and Greece. Using similar partnering approaches, the brand also started selling clothes for men and children, personal accessories, home décor and accents.

Collections from two new-production collaborators, the B'laan and the Manobo tribes, were launched in 2014. As of October 2015, Filip+Inna had partnerships with 21 IP groups.

CHEERS: Borderless Disaster Risk Management

The Community Health Education Emergency Rescue Services (CHEERS) is a medium enterprise based in the Philippines that addresses the need for quality emergency medical services (EMS) training in preparation for natural calamities in the Asia-Pacific region.

The company, which was organized by three health care professionals—Alvin Montano, Sandy Montano and Ahed Al Najjar—has been accredited by the American Heart Association International Training Center, Australasian Registry of Emergency Medical Technicians, American Safety and Health Institute, and the Emergency Care and Safety Institute Educational Center in the Philippines to conduct courses for healthcare providers and lay rescuers.

Under a technology transfer model, CHEERS was tapped by Indonesia's STIKes Budi Luhur to provide EMS training to its students. A significant challenge between the two companies was language, as English is not one of the official languages of Indonesia. However, one of the main reasons STIKes tapped CHEERS was to help its Indonesian students improve their proficiency in English. The partnership eventually opened the doors to more business opportunities in Indonesia for the Philippine-based company.

Since its inception, CHEERS has been able to train 33,721 health care students and professionals, disaster frontliners and ordinary citizens to be capable of responding to emergency situations to prevent unnecessary human, property and economic loss.

CHEERS also expanded its emergency-related capacity building and training services to production of Emergency Food Relief (EFR). The program came into place through a public-private partnership with the Department of Science and Technology (DOST). CHEERS initially bought PHP 10,000 worth of crops, including nutrient-rich cassava, *malunggay*, and *camote* from small farmers of Botolan, Zambales. The company also encouraged the farmer community to open a bank account for their cooperative.

One of the biggest threats to farm production is the imminent threat of climate change, and as the Philippines is located in the Pacific Ring of Fire, it is susceptible to numerous natural disasters such as typhoons, volcanic eruptions and earthquakes. Farmers in Zambales, in particular, are located near Mt. Pinatubo, an active volcano that last erupted in 1999, causing huge economic damage. Most of the farmers of Botolan also belong to the Aeta group of indigenous people.

The crops that the farmers produce now serve as raw materials for the emergency food reserve that CHEERS produces for both private and public institutions, including the Department of Social Welfare and Development.

Chilean Salmon: Fish for Success

Feeding the world's population by 2030 would mean finding 37 million tons more fish on top of the current 48 million tons already being produced, the United Nations Food and Agriculture Organization estimates. This puts a lot of pressure on economies where food security is at the top of the development agenda.

By learning from Chile, the world's second largest producer of salmon next to Norway, member-economies of the Asia-Pacific Economic Cooperation (APEC) could avert the next food crisis.

Developing the salmon industry was a painstaking process fraught with risk, but government support and technology transfer proved to be crucial ingredients.

Salmon was introduced in Chile by the Fisheries Development Institute, a non-profit institute of the Corporación de Fomento de la Producción (CORFO) in 1921. CORFO, together with the Chilean Agency for Agriculture and Fishing, collaborated with two universities in the United States—Oregon State University and University of Washington—to study the feasibility of fish farming and the conditions suitable for salmon breeding.

In 1969, the National Fishing Agency permitted the Japanese International Cooperation Agency to bring in 40 million eggs of Pacific salmon and to seed 26 million young salmon. In the process, many Chilean scientists were exposed to Japanese technologies and some Chilean officials were sent to Japan salmon centers for a technical exchange program.

From then, the industry started to expand from 36 salmon companies in 1985 to 56 companies in 1987 with about 117 farms. In 1991, there were 471 Atlantic salmon farms and 523 Pacific salmon farms. Supporting industries such as Fundación Chile and Instituto Tecnológico del Salmón were instrumental in the process. Fundación Chile, a technological think tank created by the Chilean government and private corporations, initiated a number of research activities and provided technical assistance to small and emerging producers. It established Salmones Antarctica as a limited company which first proved the commercial viability of salmon farming. This stimulated interest among domestic and foreign firms, which then marked the start of the industry's takeoff.

The industry producers also worked closely with the national government, aligning both of its goals in the development of licensing regulations, sanitary standards, and supporting research and development activities. The entry of foreign firms not only facilitated inter-firm vertical integration but also enabled the industry to assimilate foreign technologies while developing its indigenous technological capabilities, including the production of wellboats, sequencing of salmon pathogen genomes, and development of vaccines to control some salmon infections.

The takeoff of the Chilean salmon industry can be largely attributed to two broad elements—the strong collaboration between the public and private sector and a vertical industrial policy towards promoting micro, small and medium enterprises to gain a foothold in global value chains; and the successful technology transfer that required not only reliance on imported knowledge and technology but also on local capacity to assimilate, develop, and apply foreign technology.

enabled Chilean salmon farms to sell their produce to the world.

SL Agritech, a Philippine pioneer in hybrid rice research, received help and advice from another APEC economy—China—then worked with small farmers to convince them to plant its hybrid seeds. The company now exports its hybrid seeds to Bangladesh, Indonesia, Cambodia, Thailand, Malaysia, Vietnam, and Papua New Guinea.

Another example of a large company program created to help SMEs is the AIA Accelerator Programme, a collaboration between life insurer AIA and Hong Kong investment incubator, Nest. First held in 2014 and running again in 2015, the program is designed for start-ups aiming to "make a difference in people's lives." The 12-week program guides 8 startups through business development with mentoring from AIA and Nest. The program also provides free software, marketing training, and access to support partners and investors. Notable participants from 2014 include Angelo Umali, founder of "Simple Wearables," who developed Simple Wave, a wearable device designed to alert emergency contacts should the wearer take a sudden fall; and Jitesh Chhabria, who created a smart ankle sleeve designed to guide athletes

through post-injury training.

While some linkages immediately begin with a model that crosses borders, there are many that begin within an economy. The in-economy models are important too as, even in these, entrepreneurs and MSMEs become part of a larger value chain and gain knowledge and capabilities that would put them in a position to increase their reach.

Large companies enable entrepreneurs and MSMEs both through innovative business models and increased community engagement. Express Taxi, an Indonesian company, found it could create value both for itself and its driver-partners by providing the administrative, financial and technical backbone for the service while helping drivers buy their taxis. El Nido, on the other hand, improved the general economy and environment of their location by helping communities near its resorts to participate in ecotourism.

In four of the stories in this book, large businesses have partnered with smallholder farmers, providing technical training and advice that allow them to add to or replace current crops to augment income. The large companies, in turn, gain access to a reliable source of raw materials that meet their needs—and their standards. Together, these partnerships enable both large companies and MSMEs to participate more effectively in the GVC.

In Thailand, Double A Public

Rajawali Express Taxi: Drive to Own

Express Group (PT Express Transindo Utama Btk.) started as a subsidiary of Rajawali Corporation in 1989 in Indonesia where high population density and relatively poor quality of ground transport contribute to a preference for the use of taxis.

Operating under the brand name "Express Taksi," the company is Indonesia's second largest taxi operator with a nationwide market share of 15.1 percent.

After five years of operating as a conventional fleet that owned all the taxis, the Express Group introduced a new business model in 1994 where taxi drivers became partners and not just employees.

This approach solved the problem of absentee, late and careless drivers, as well as thefts of taxi units.

It was also acknowledged by the United Nations Development Program as an effective and mutually beneficial solution in fighting poverty while expanding the company's taxi services. While other taxi drivers in Indonesia earn on a commission basis, those who work for Express are treated like franchisees and given the opportunity to own a vehicle over a period of seven years.

In this model, Express acts as a loan guarantor and collects daily payments from their drivers. Payments are then remitted to the financing company on a weekly basis. This allows the company to achieve scalability and quality by engaging drivers as business partners, producing a sense of ownership which contributes to the reliability of Express Taksi.

At the beginning of the contract, partner-drivers pay a daily amount of USD 21.50. On the seventh year, the driver is given a 50-percent discount on the daily fixed payment.

The average monthly earnings of drivers contracted under the partnership agreement with Express ranges from USD 300 to USD 400, at par with taxi drivers who are engaged with other operators on a commission basis.

Karjono, a native of Karang Anyar, has worked as a driver-partner of Express Taksi for 14 years now. He has already paid off two taxi units and is working on the payment of his third.

"I have been so lucky. Express Taksi has really served as more than just a livelihood to us. It also served as our life investment. When I finished paying the first one, we sold the unit and bought a house. Then, the proceeds of my second taxi unit served as working capital for my wife's small business," he says.

Close to 100 percent of Express' partner-drivers who have completed their loan payments have filed for a second loan and often lease the first car to other drivers as a business.

Express, for its part, expanded by an average of 1,500 vehicles annually from 2009 to 2014.

Its fleet now includes 11,000 regular taxis, 400 premium taxis, 200 cars and 70 chartered buses.

Express Group also has more than 18,000 drivers and serves the Greater Jakarta Area as well as other major cities, including Medan, Surabaya, Semarang, Bandung, Bali and Lombok.

The company posted a 29.5 percent increase in revenue from USD 47.5 million in 2013 to USD 61.5 million in 2014.

El Nido Resorts: Involving Everyone in Ecotourism

As global competition heats up, the success of a tourism destination is no longer measured only by the number of its visitors but also by the seamless interaction among the critical elements of the tourism experience, which includes hotels and accommodations, transportation, attractions, food, and other complementary facilities.

For El Nido Resorts, a group of eco-resorts located in the El Nido and Taytay municipalities in northern Palawan, including micro, small, and medium enterprises (MSMEs) in their value chain is part of their model of sustainability and resilience. This is embodied in the resort's quadruple bottom line strategy of financial growth (generate profits while recognizing that operating efficiency is essential to sustainability); environmental stewardship (sustainable resort operating practices, environmental education, biodiversity protection, mangrove rehabilitation, environmental research, coastal cleanup, and coordination with law enforcement); community engagement (skills training, enhancements, and seminars, organic farm demonstrations, medical missions, and outreach programs); and organizational development (hire and train local employees).

Large tourism companies have also become involved with El Nido, mainly for transportation of tourists from their home economies, to Manila, and finally to Palawan. Island Transvoyager, Inc. (ITI) provides air transportation, offering three round-trip flights daily to and from Manila and El Nido. Large airline companies such as Philippine Airlines, Cebu Pacific, Air Asia-Philippines, and Tiger Airways also transport tourists daily to and from Manila and Puerto Princesa. For water travel, 2Go Travel has a Manila-Coron-Puerto Princesa service while outrigger boats go back and forth daily from El Nido to Coron in the municipality of Busuanga. For land travel, there are roll-on roll-off buses that depart from Puerto Princesa for El Nido.

Local businesses also benefit from tourism receipts of El Nido, and offer complementary activities such as island hopping, swimming, snorkeling, diving, paddling and kayaking, hiking and trekking, mountain biking, rock climbing, bird watching, sailing, mangrove tours and fishing. El Nido also purchases produce and livestock as well as local products and handicrafts supplied by nearby communities.

These partnerships have encouraged MSMEs to follow environmental rules and regulations, discontinue unsustainable practices, and collaborate with the company in times of calamity. For instance, when super typhoon Bopha struck in 2012, over 80 MSMEs catering to tourists on the mainland where El Nido's town center is located were asked to prioritize the safety of tourists.

El Nido has combined sustainability efforts from the national government, non-government organizations, the private sector, and local communities to achieve true ecotourism. With emphasis on sustainability that includes "green" and quality service, the company has been able to build brand loyalty and trust to ensure continued patronage of both domestic and foreign tourists.

Company Ltd., a fully integrated pulp and paper mill, convinced 1.5 million farmers to plant saplings of eucalyptus, also known as paper tree, along the khan-na or the idle spaces between the rice paddies used by farmers as pathways when they check on their crops. Under the "Paper from Khan-Na" program, the company pledged a buy-back guarantee for the mature trees and offered farmers free harvesting of trees and other logistics support. Double A's business model has led to an average increase of 8 percent in the income of farmers.

Nestlé SA, a multinational packaged food company, has convinced farmers in the southern part of the Philippines, to grow Robusta coffee beans for its Nescafé brand. Under the Nescafé Plan, the company offers a guaranteed buying price aligned with prevailing global market prices. Coconut farmers were also encouraged to grow coffee plants in between their trees to improve their income. Nestlé has already trained close to 60,000 farmers, coffee specialists, technicians, and students in coffee growing in the Philippines.

PepsiCo Inc., one of the world's leading food and beverage companies, piloted its Sustainable Farming Initiative in 2011 across 14 countries covering different crops in a bid to secure its supply chain. The company has revived the domestic sunflower market in Mexico where some farmers had turned to drug-related activities to make ends meet. The company has entered into an agreement with the local government to convert 50,000 hectares of land in the central Mexican states of Jalisco and Durango to sunflower production. This helped replace the imported palm oil that PepsiCo used to procure—saving on transportation and warehouse costs required by importation while making Mexico the economy with the ninth highest annual growth rate in sunflower production.

In Vietnam where there was no tradition of dairy farming, Vinamilk partnered with smallholder farmers who were tapped to raise cows. The company supports farmers by providing them with finance, facilities, techniques and technologies in breeding for its dairy farms that now have a total of 10,930 head of cow. Prior to this, Vietnam relied mostly on powdered milk imported from China and Australia to produce dairy products for the domestic market. Small farmers now supply 80 percent of the raw milk that Vinamilk processes and sells in Vietnam and in various export markets.

This book also features five large companies that have entered into contract farming partnerships, providing capacity building measures to enable their partner-farmers to comply with their supplier requirements.

Australian confectionery companies Haigh's Chocolates and Bahen & Co. have tapped Vanuatu farmers for their cocoa supply. The linkage was made possible when, in 2008, Vanuatu asked the Australian Centre for International Agricultural Research (ACIAR) to design and help implement a cash crop intensification program to motivate rural small farmers to increase their production. Under the partnership model, once the Vanuatu farmers harvest the cocoa, they send it to the chocolate makers for analysis. The chocolate companies in turn help them improve their bean-drying practices to create high-quality beans. Vanuatu cocoa farmers have recorded a 25 percent increase in their household income while the companies now have a sustainable supply of high-quality cocoa beans.

In the Philippines, Jollibee Foods Corporation, which operates the economy's largest fast food network, used to import most of its onions as local small-scale producers had a hard time meeting the company's

SL Agritech: Sowing the Seeds of Growth

The Philippines is the world's eighth-largest rice producer yet it is also one of the biggest importers of the grain. To improve the output of local rice fields, agribusiness entrepreneur Henry Lim Bon Liong, chief executive of the Sterling Paper Products Group, invested heavily in rice research, fulfilling his late mother's wish that he venture into agriculture to help the poor.

With an initial investment of PHP 100 million, SL Agritech started developing several hybrid rice parental lines that were later transferred to a 40-hectare farm in Sta. Cruz, Laguna, which now houses the company's research and breeding complex.

With scant knowledge of the business and given the riskiness of the venture, Lim sought and gained the assistance of Prof. Yuan Longping, widely acknowledged for helping China produce indica or long-grained non-glutinous rice, to find varieties that were suitable to the Philippines. As much as half of China's rice fields grow Yuan's hybrid rice species, yielding 60 percent of the economy's rice production.

From the government, SL Agritech obtained a number of incentives. It was initially selected to supply parental seeds of Mestizo 1 hybrid rice without undergoing any public bidding. It was also exempted from agrarian reform regulations that prohibit the purchase and ownership of 40 hectares of rice lands for its research center in the rapidly urbanizing Laguna province.

In the facility, Lim's team experimented on 800 varieties of rice from the Laguna-based International Rice Research Institute, cross-pollinating them to produce a high-yield hybrid. In 2002, researchers found a purple dot in the breeding laboratory, clearly denoting that the flowers for the hybrid rice had finally stabilized. This was the day SL8H hybrid rice was born.

The introduction of SL8H increased the yield of rice fields fivefold to 14.65 metric tons per hectare. As a result, farmers who grow hybrid rice now enjoy a better standard of living.

"It's your choice," Lim tells farmers in Filipino. "If you want to keep riding a tricycle, you keep using the traditional inbred rice. If you want to drive your own Pajero, then you shift to hybrid rice."

Farmers who use SL Agritech's hybrid rice varieties told The Philippine Star crop yields have gone up by at least 16 percent compared to when they used inbred rice seeds. Some even claimed their earnings have doubled, as their crops command higher prices due to better quality in terms of size, texture, and taste.

Today, SL Agritech accounts for 60 to 80 percent of the Philippines' hybrid rice seeds and supplies them to many economies in Asia-Pacific, including Bangladesh, Indonesia, Cambodia, Thailand, Malaysia, Vietnam, and even in places where rice has never been grown, like Papua New Guinea. Shortly after entering Papua New Guinea, it partnered with Australian firm Calmwind Pty Ltd., effectively sending hybrid seeds on to Samoa, Fiji, Solomon Island and Mozambique in Africa.

requirements. In 2008, Jollibee Foundation partnered with the National Livelihood Development Corporation and the Catholic Relief Services to put up the Farmers Entrepreneur Program to help small farmers organize into cooperatives. The partner-farmers were trained on new production technologies and standards to boost their ability to deliver the requirements of large buyers such as Jollibee. Now, JFC sources not just onions but also tomatoes, bell peppers, chili, and calamansi from farmer cooperatives. In return, these small farmers have seen their incomes increase by as much as 316 percent (from USD 420 per cropping before 2008 to USD 1,330 in 2011) by co-owning the value chain.

Charoen Pokphand Foods PCL, one of the world's largest producers of poultry, livestock and animal feed, is one of the pioneers in contract farming in Thailand. To ensure that their farmer-partners are well equipped, CPF supports them through knowledge and technology transfer as well as access to financing. Under its "complete package program," the large company selects farmers who have the production potential and are willing to invest in the type of facilities that CPF requires. Either the income or the price is guaranteed under the contract.

Colruyt SA, a chain of supermarkets in Belgium, partnered in 2009 with Vredeseilanden (VECO), a Belgium-based non-government organization that develops sustainable agricultural chains domestically and internationally in partnership with organized farmer groups, private companies, other NGOs, research institutions and government agencies. The two agreed to develop a green asparagus chain to meet Colruyt's demand for canned asparagus. They tapped Scana Noliko —Colruyt's importer of asparagus—to assess Peru's asparagus sector. Scana Noliko, in turn, identified Gandules, Inc. as its export partner given their existing partnership in canned bell pepper production. Gandules proposed tapping a farmers' association, REOPA, to deliver the necessary produce. The project has achieved the successful delivery of 150,000 cans of asparagus sourced from smallholders in Peru. REOPA, on the other hand, was able to commercialize 21 percent of its total production to markets that were not traditionally within their reach.

High-end skin care and cosmetic product manufacturer and exporter VMV Hypoallergenics Limited Inc. has worked with farmers and cooperatives on a family-run estate in Leyte, the FRV Organic Homestead, for the production of certified organic virgin coconut oil (VCO), an antioxidant that acts as a soothing and anti-inflammatory agent. VMV provided the technology and the training to individual coconut farmers and farm cooperatives in the community. The partnership involves about 100 individual farmers and several farmer-members of the Santo Niño and Visares Multi-purpose Cooperative (SAVIMCO). The coconut farmers of FRV now supply 8,000 liters of VCO per month, up from only 2,000 liters in 2013. The VCO is shipped out to foreign markets as a key ingredient of VMV products.

Other large firms featured in this book have adopted various partnership models ranging from business matching to building a community of diverse suppliers.

Aero Montreal, an industry cluster composed of aerospace companies, universities, unions and four of Quebec's biggest original equipment manufacturers, launched the MACH Initiative in 2011 to optimize the performance of MSME suppliers in the aerospace supply chain. Under the MACH Initiative, MSME suppliers are paired with an original equipment manufacturer (OEM) or a Tier 1 supplier, which becomes its mentor throughout the process. The Canadian OEMs and Tier 1 suppliers are guaranteed on-time delivery and high-quality production while MSME participants gain exposure with the opportunity to win other contracts and increase their participation in the global value chain.

Caterpillar, the world's leading manufacturer of construction and mining equipment, launched its Supplier Diversity Program to increase opportunities for minority-owned, women-owned, veteran- and service-disabled owned, and small disadvantaged MSMEs while ensuring that the company's expectations are met with regard to quality, velocity, capacity and cost. The initiative benefits the company's diverse suppliers by increasing their incomes and enabling them to expand their participation in Caterpillar's global value chain.

In South Korea, CJ CheilJedang Corp., which has interests in food and food ingredients, biotechnology, feeds and livestock and health care, has contributed to the upgrade of both technical and managerial skills of the countries where it has subsidiaries. CheilJedang maintains a buy local policy. Through its program "Joy of Growing Together," CheilJedang partners with MSMEs to jointly process locally sourced produce, which it then markets globally under the MSMEs' brands.

Toyota Motor Corporation, Japan's largest automotive manufacturer and one of the world's largest makers of automobiles, has extended its "green" processes to its dealers who play a key role in the supply chain because they are the face of Toyota to customers. The company launched its Eco Dealership Outlet Program, which aims to convert existing dealerships into green buildings. In particular, Toyota Motor Thailand encourages dealers to reduce energy consumption, carbon dioxide emissions, water consumption and waste. Since 2012, 52 of 140 dealers in Thailand have enrolled in Toyota's eco-dealership program.

Five of the case studies included in this book deal with providing services and financing to MSMEs to make them more competitive as well as to give them access to the global market.

Inventec Corp., an original design manufacturer of notebook computers, servers and mobile devices, embarked on a program to transform itself from being a hardware provider to a world-class cloud systems and solutions provider. The decision came on the heels of a government move in 2010 to invest USD 24 billion on a cloud computing plan to provide, among others, a platform that would help MSMEs in Chinese Taipei grow and expand their businesses. As part of the cloud alliance and in partnership with Chunghwa Telecom, Inventec created HiCloud Mall, a portal through which MSMEs can sign up for cloud computing services and rent virtual machine servers.

Kickstart Ventures Inc., a wholly-owned subsidiary of Philippine-based telecommunications provider Globe Telecom, was established in 2012 with a seed fund of USD 2.4 million. The incubator aims to give emerging companies involved in digital technology access to funding, resources, and networks needed to scale up their businesses and to participate in the global value chain. By 2015, Kickstart Ventures had a portfolio of 19 startups focused on delivering solutions for e-lifestyle, e-commerce, software-as-a-service, and social impact. Kickstart also provides facilities and resources to startups, including free use of its co-working space and free credits from its partners Globe Digital Media, Amazon Web Services, ZenDesk customer service support, and Payroll Hero.

Maybank Islamic Bhd, the third largest Islamic bank in the world, offers Sharia-compliant services to Muslim MSMEs that have only limited access to funding from conventional financial institutions. For Maybank clients, this means little to no collateral requirements, flexible payment schedules, and ease of access in the form of hard and soft infrastructure. Maybank has provided financing through partnerships with the Credit Guarantee Corporation and Bumiputera Agenda Steering Unit (Teraju), and developed unique e-commerce tools designed specifically for MSMEs such as

myTrade2Cash and mPOS, which allow entrepreneurs to apply for financing schemes online and make card payments through their smartphones. In 2015, the MSME loan portfolio of Maybank Islamic stands at more than USD 800 million.

Startup Alliance Korea, a joint effort between the private sector and the South Korean government's Ministry of Science, ICT, and Future Planning, operates under the motto "connecting amazing people." It has forged partnerships with 50 key IT and startup organizations in Korea. While Startup Alliance is only two years old, it has already exposed promising Korean startups to potential Japanese investors and venture capitalists through a yearly event called Japan Boot Camp. The missions to Japan also encourage the fledgling companies to pitch their ideas with the view in mind of expanding their market to Japan.

Finally, the Alibaba Group is a Chinese e-commerce company that provides business-to-business (B2B), business-to-consumer (B2C) and consumer-to-consumer (C2C) services to some 300 million customers through web portals in 2015. By tapping Alibaba, MSMEs can connect to the global value chain to sell their products directly to a much wider market, or they can integrate themselves directly into the value chain to become service providers.

Lessons

These cases show the rich variety of mechanisms that allow MSMEs to partner with large companies and hence improve their ability to participate in GVCs. In many of these cases, large companies capacitate small suppliers to meet their requirements, providing MSMEs with a ready market while creating for themselves a more efficient and resilient supply chain. In many cases, these large buyers partner with other organizations, such as state agencies or non-government organizations (NGOs) to provide a diverse set of services to MSMEs, including access to financing and mentoring.

Large companies often have foundations that capacitate MSMEs in areas in which the large enterprise cannot be directly involved. NGOs and corporate foundations play an important role in many of these cooperative endeavors, and economic policies that grant them incentives—such as supportive tax policies—enable these organizations to forge effective linkages with MSMEs.

There are many commonalities between these cases. A key component of many models involves providing MSMEs with financing, training, access to facilities, and access to services, technology and markets. In some models, a large company or its foundation provides the platform for linking with the MSMEs. In other instances, the linkage platforms are provided through a cluster of large companies, often with other organizations such as foundations and NGOs. Such industry clusters can aggregate available services for MSMEs and also develop standards for joint certification. In the best-case scenario, joint certifications allow MSMEs to gain access to multiple buyers and markets through a single mechanism.

Organizations set up to leverage research to help MSMEs also enrich the partnerships and enable multi-company clustering approaches. In economies where inclusive finance is readily available and critical infrastructure such as roads and ICT—including broadband access—are in place, it is easier to capacitate MSMEs to link with large companies and to the GVC.

The cases here also highlight the potential for APEC member-economies in adopting a holistic view of GVCs and international production networks to design laws and regulations to strengthen trade and investment linkages among big businesses and MSMEs.

In 2015, the Asian Institute of Management (AIM) in partnership with the APEC Business Advisory Council (ABAC) conducted a survey on linkages between large enterprises and MSMEs. Responses were received from 20 APEC member-economies.

One question involved the motivation for forging linkages between big business and MSMEs. The results of the survey, reproduced in the annex, proved instructive.The top response of the MSMEs participating in the survey show that they view large enterprise engagement as profitable for the company in the long term, while the top response of large companies reflect their view that engagement with MSMEs has the potential to create benefits for all parties.

Clearly, many companies understand the potential for common good in these linkages. Policies that encourage these linkages between MSMEs, large companies and the GVC need to be pursued and put into place.

The respondents also identified obstacles to such linkages, including an unstable political situation, difficult or high cost of doing business, unstable economic performance, high market competition, government red tape and corruption, high tax burdens and regulations, lack of technological capacity, lack of human resources with adequate skills and knowledge, and limited access to financing.

Policies aimed at addressing these concerns would certainly ease the entry of MSMEs to the GVC. At the same time, some of these obstacles can be hurdled or at least managed with cooperation between large companies and MSMEs.

While the physical infrastructure of roads, ports and bridges continues to be important for industry, ICT has become a critical component of the infrastructure for virtually all businesses, and especially for those involving GVCs. Policies for ensuring ease of access of MSMEs to the global information and communication network are critical for MSME participation in GVCs.

Inclusive finance is clearly part of the foundation for MSME participation in GVCs. APEC could consider adopting a comprehensive suite of MSME financing mechanisms in their economies as well as regulatory reforms to promote innovative and alternative financing mechanisms. With respect to human resource development, the cases show how linkages in the GVC were able to facilitate transfer and upgrading of skills, knowledge and technology.

Technology and innovation are important to MSMEs, allowing them to compete with larger operations. MSMEs can be helped by policies and institutions aimed at facilitating research and development, technology dissemination, capacity-building, and the easing of access to intellectual property protection.

Way Forward

With MSMEs contributing 60 to 90 percent of employment in the bloc, APEC member-economies would benefit from implementing measures to help MSMEs grow and become more resilient and innovative.

APEC member-economies could adopt policies supporting sustainable and inclusive financing for MSMEs to make them more resilient against crises both man-made and natural. These policies could also facilitate supply chain finance; build a legal and policy environment to enable MSMEs to use their track record or movable assets as collateral; and encourage innovative mechanisms such as equity-based financing options and Islamic finance.

Access to global markets opens up new opportunities for MSMEs to tap niche markets, scale up their businesses, spread risks while lowering costs, and improve access to funding.

Policies and efforts to create beneficial industry alliances and institutionalize joint accreditation ease MSME participation in GVCs.

The cases presented here indicate that APEC member-economies would benefit from policies that promote innovation and access to cutting-edge technologies.

APEC member-economies could consider encouraging the adoption of Internet-based tools such as e-commerce platforms and online portals to help MSMEs explore and carry out cross-border transactions, as well as online tools to help them participate in the global value chain.

The Asia-Pacific Open Innovation Platform, a voluntary initiative to promote cross-border collaboration and facilitate technology development and market-driven dissemination, can serve as a model to enhance the business environment for MSMEs and startups throughout the region.

Finally, a holistic view of GVCs would enhance the designing of policies to strengthen trade and investment linkages between MSMEs and big business, with an eye toward breeding innovation and resilience among MSMEs and building their capacity to go global.

Better Together


To ensure a steady supply for their mills, Double A tapped over 1.5 million farmers in 60 Thai provinces to plant eucalyptus saplings along the idle spaces between their rice paddies.

Double A: Growing lucky angels

Narong Sopa is one of 1.5 million rice farmers in Thailand who have forged a partnership with Double A, a leading paper manufacturer.

Since 2011, he has been growing about 400 eucalyptus trees, also known as paper trees, along the khan-na or the space between the rice paddies on his farm.

"Growing Double A paper tree is easier than other tree species. Now I get extra income while waiting for the harvest season of rice. The income I'm getting from growing paper trees can support my child and gives me enough time to stay with my family," Sopa said.

> **"For Yothin, Double A is living proof of the company's 3S pillars — sustainable wood source, social harmony for communities and a self-sufficient or "no waste is wasted" production cycle.**

“

Double A’s contract farming model has led to an average increase of 8 percent in the income of farmers, helping in the growth of Thailand’s agriculture sector.

Double A’s “Paper from Khan-Na” program answered the company’s need for a steady supply of trees for pulp and paper processing without having to denude forests or coerce farmers to shift away from traditional crops such as rice and cassava. The company’s paper tree species was also modified to make it more conducive to the Thai climate and soil qualities—a result of more than 25 years of research the company undertook to improve the productivity of its paper trees.

Double A now sources 90 percent of its pulp requirements from the khan-na trees.

“We avoid cutting down natural rainforests and there is no displacement of farming communities,” said Thirawit Leetavorn, senior executive vice president of Double A.

Double A’s nursery in Prachinbury province houses 100 million saplings which are propagated each year. These saplings are then distributed to farmers all over Thailand. Only farmers under contract with Double A are allowed to purchase the company’s higher-yielding variety which are not available on the open market.

Double A also provides fertilizers, training, and technical advice to their contract farmers, and guarantees to buy the wood after a rotation of four or five years. In return, the contract farmers are obliged to sell their crop only to the company.

Double A’s business model also promotes self-sufficiency since all the waste from paper production is used as fuel for electricity generation within the factories and in the nearby communities.

While Double A buys logs based on world market prices, the company ensures farmers of a competitive purchase price that is not lower than THB 1,200 per ton or THB 30 each. The program was a success, with around 300 million eucalyptus trees grown for Double A’s paper production.

The process of convincing the farmers, though, was not easy at first.

“Convincing them to plant paper trees was more difficult than making a tree,” said Double A president Yothin Dumnernchanvanit.

Double A research showed that Thai farmers tended to resort to their “lucky angel” to ask for luck, material blessings, and even win the lottery. Centering on the image of the lucky angel, the company aggressively marketed their concept of the paper trees, launching ad campaigns depicting how these trees could bring them the material abundance they ask for—in essence, how the paper trees could be the “lucky angel” of Thai farmers.

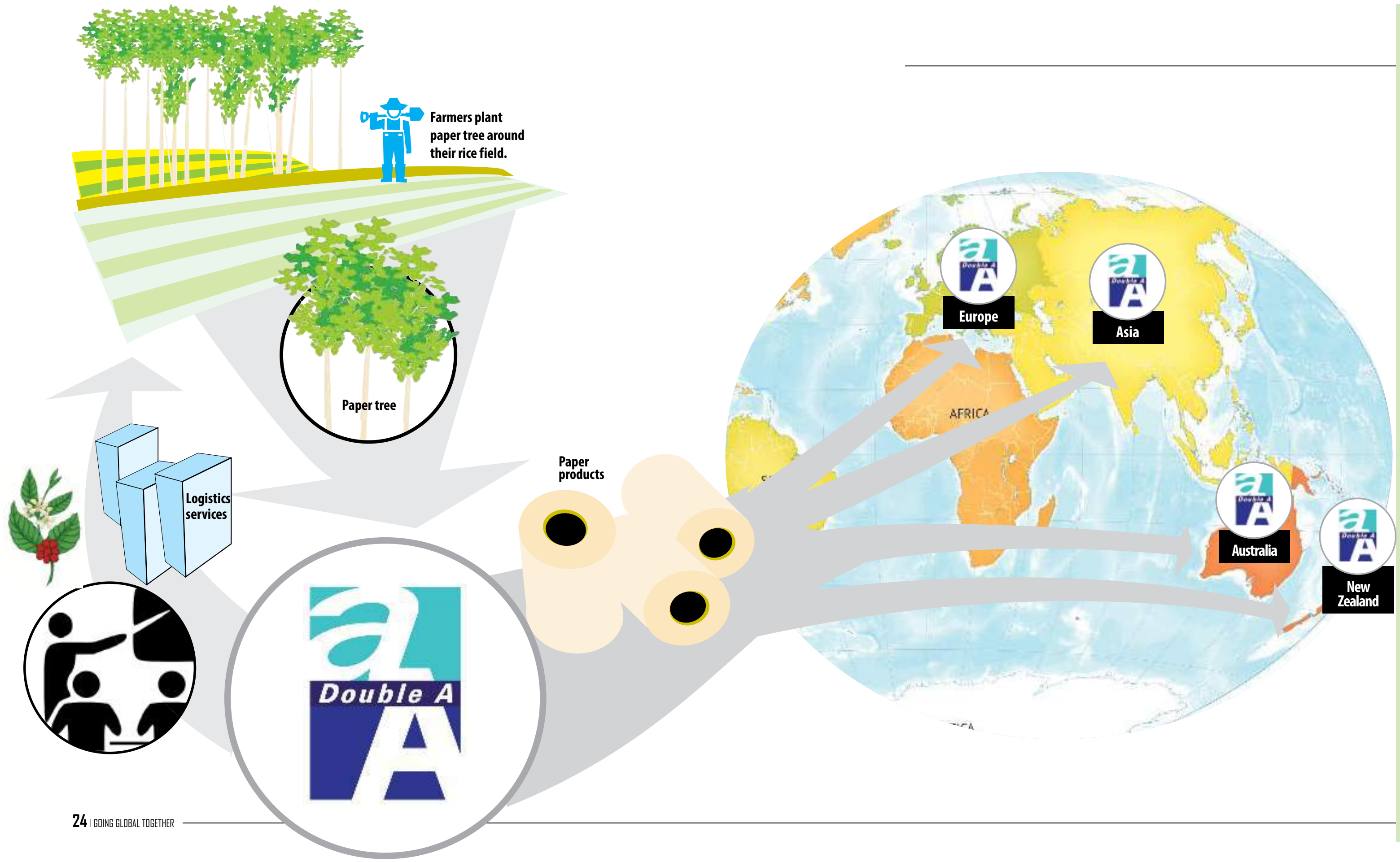
And it has been the case for the rice farmers contracted by Double A.

“At first I hesitated, as people were saying the trees destroy the rice, but nothing bad happened,” said Phayao Sirivoi, 42. Eight years after, she is now earning THB 1,200 a ton for her paper trees which she sells to Double A’s mill in Prachin Buri province.

For Yothin, Double A is living proof of the company’s 3S pillars —sustainable wood source, social harmony for communities and a self-sufficient or “no waste is wasted” production cycle.

“As we work with farmers, we create social harmony with the communities. Farmers earn additional income from growing our trees and this helps them pay off their debts and keep their children in schools, so they can grow up with more choices,” he said during the 3rd World Marketing Summit in Tokyo, Japan.

“Paper is my life and it has always been my goal to produce the best quality paper that is good for the world,” Yothin added.



Double A Public Company Ltd.

Double A Public Company Ltd. is a fully integrated pulp and paper mill incorporated in 1991. Located in Thailand's central plains in the province of Prachinburi, the mill began operating in 1995 and has an annual capacity of 600,000 tons of pulp and 600,000 tons of paper.

The company has THB 6,300,000,000 in share capital, and THB 5,323,831,080 of paid up capital.

Strategically situated 140 kilometers from Bangkok and 130 kilometers from Laem Chabang Seaport, the Double A mill is close to both a sustainable source of wood and a huge rainwater reservoir with a capacity of 36 million cubic meters to sustain its manufacture of pulp and paper.

The company's broad portfolio of products extends from quality short fiber large paper sheets to innovative stationery products and premium copy papers—all made of sustainable fiber from Double A's Paper Tree. The trees are grown along rice paddy ridges by more than 1.5 million farmers across Thailand.

The company was the first integrated pulp and paper manufacturing company in Thailand, and the first paper manufacturer in Southeast Asia to receive the ISO 14001 certification in environmental management standards.

In 2010, the company expanded its business by investing in Advance Paper Mill 3 Company Ltd. and registered a change of name from Advance Agro Public Company Ltd. to Double A Public Co. Ltd.

Double A exports two-thirds of its production to Asia, Australia, New Zealand, and Europe.

Paper from idle spaces

The traditional paper industry relies on consuming 50-year-old trees from the natural forest, a practice that harms the environment and is ultimately unsustainable.

Double A developed a new paper manufacturing technology and made Thai farmers its partners in the Farmed Tree concept which involves the cultivation of eucalyptus trees that can be harvested after only three to four years.

To propagate eucalyptus trees and ensure a steady supply for their mills, Double A tapped over 1.5 million farmers in 60 Thai provinces to plant saplings of the paper tree along the khan-na, or the idle spaces between the rice paddies used by farmers as pathways when they check on their crops.

The "Paper from Khan-Na" program allowed farmers to plant tree saplings that were harvestable after four years.

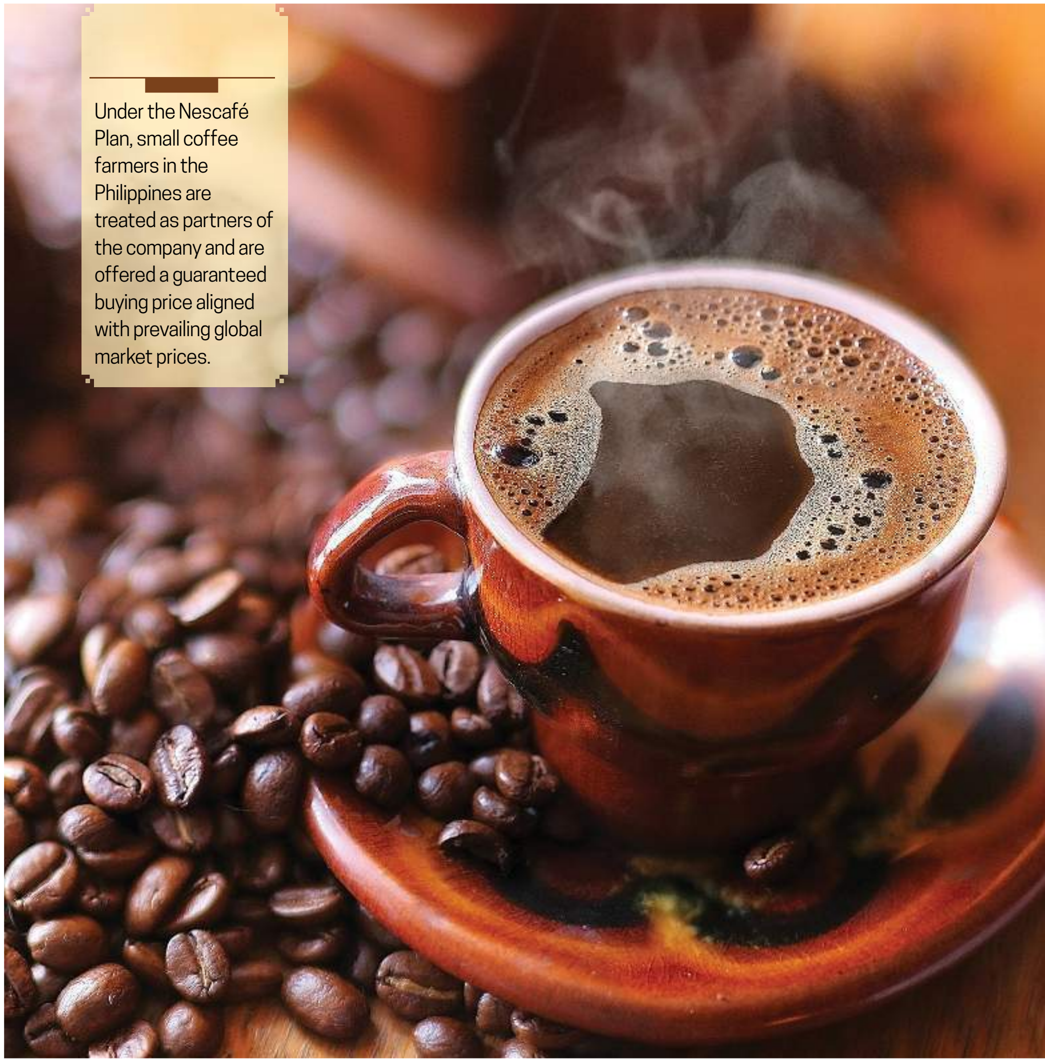
To ensure farmers a market for their product, Double A pledged a buy-back guarantee for the mature trees and offered farmers free cutting of trees and other logistics support. These trees were then sent to Double A's mills and processed as high-quality paper products distributed to 120 countries in Asia, Europe, the Middle East, Africa, and North America.

Double A's contract farming model has led to an average increase of 8 percent in the income of farmers, helping in the growth of Thailand's agriculture sector. According to Double A, this additional income is often used in community projects and educational purposes to help ensure a brighter future for the farmers' children.

The program also contributed to environmental preservation and food security as the farmed trees gave an alternative to the traditional practice of clearing forests for timber. It also helped reduce the practice of converting agricultural farms into paper tree farms. The khan-na trees are also estimated to absorb 6.7 million tons of carbon dioxide per year.

In October 2011, Double A's efforts to integrate village farmers into their global supply chain won the Asian Corporate Social Responsibility Award for Poverty Alleviation. The recognition hailed the impact of the company's khan-na program on Thai farmers, who were provided with jobs during off-peak seasons and who were protected from relying heavily on price-unstable cash crops such as rice and cassava.

Thai farmer Som Surinit says planting Double A paper tree has increased his income.



Nestlé: Robust harvest

Despite its geographical advantages and reputation as one of the world's great coffee producers, the Philippines today cannot produce enough beans even to meet the needs of domestic consumption, estimated at about 100,000 metric tons a year. As a result, up to 75 percent of the coffee consumed in the Philippines is imported from low-cost exporters such as Vietnam, Indonesia and Thailand, the Philippine Coffee Board says.

This was not always the case.

In 1880, the Philippines was the world's fourth biggest exporter of coffee beans, and when the coffee rust hit Brazil, Africa, and Java, it became the only source of coffee beans worldwide.

Up until the 1980s, the Philippines exported up to USD 100 million worth of coffee beans a year.

> **The Philippine coffee industry, which used to be an exporter in Asia, could aim to again produce for both the local and international market.**

Since 1996, Nestlé has trained close to 60,000 farmers, coffee specialists, technicians, and students in coffee growing.

Nestlé Philippines Inc. headquarters

But coffee production has been hurt by volatile weather and rapid urbanization and farmers, who cannot afford to buy seedlings without government support, take to planting inferior seedlings that produce sub-par coffee beans, said Peter Imbong, writing in the Nikkei Asian Review.

To address the supply shortage, Nestlé Philippines Inc. has been actively supporting smallholder farmers across the country to improve their production and income, while ensuring a steady supply of coffee beans for its operations.

In 2014, NPI partnered with the Philippine Coconut Authority to encourage farmers to plant coffee in between coconut trees as an added source of income. Among the projects initiated by the company was the distribution of 100,000 coffee seedlings in Davao Oriental where vast areas of coconut farms were destroyed by typhoon Bopha in December 2012.

Nestlé has also provided technical assistance to a cooperative composed of active and retired soldiers in Camp Kibaritan in Bukidnon for the development of 1,000 hectares in the next two years. The soldiers have already planted 200 hectares with coffee in 2015. The cooperative's coffee farms are part of the government's National Greening Program, and the Department of Environment and Natural Resources will also provide PHP 5 million for the establishment of a coffee plantation inside the military camp.

Edith de Leon, corporate affairs head of NPI, said sustainability in

Two Bukidnon indigenous tribesmen, Martin Ilaga and Mentilio Bajao, proudly show their harvest of coffee berries to a Philippine government official (middle).

"The lopsided ratio between supply and demand offers a glimpse of the many opportunities that await those in the local coffee industry.

production and consumption has long been the thrust of Nestlé.

"At the core of this thrust is the belief that long-term success can only come from creating shared value among all our stakeholders, most especially among farmers. The (Common Code for the Community) 4C certification of these Mindanao communities is yet another milestone in the journey towards sustainability, which we hope will help grow the local coffee industry and improve our long-term supply of coffee," De Leon said.

Nestlé Philippines' agricultural department head Arthur Baria said the company does not only encourage farmers to plant coffee but also to be selective in the quality of their planting materials.

Baria said the Philippine coffee industry, which used to be an exporter in Asia, could aim to again produce for both the local and international market.

"The high demand for coffee makes it an attractive investment option. The lopsided ratio between supply and demand offers a glimpse of the many opportunities that await those in the local coffee industry," he added.

The company says the Nescafé Plan is on top of Nestle's agenda in the Philippines for the long term.

"We commit to use the best of our resources and leverage our expertise to accelerate coffee growing in the country, with the end-goal of guaranteeing the long-term supply of quality coffee for Nescafé, and at the same time helping coffee farmers improve their harvests and thus, revive the once robust coffee industry," NPI said.

If exports get off the ground again, the farmers may well have found their link to the global value chain by way of their partnership with Nestlé.

Nestlé SA

Nestlé SA is a multinational packaged food company that manufactures and markets over 2,000 brands worldwide. It is ranked 30th in the 2015 Forbes Global 2000 list of the world's biggest public companies. As of May 2015, it had a market capitalization of USD 247.3 billion, 339,000 employees and operations in more than 197 countries. Nestlé SA's product line includes baby foods (Cerelac, Gerber); bottled water (Nestlé Pure Life, Perrier, S. Pellegrino); chocolate (Butterfinger, Crunch, Kitkat, Smarties); coffee (Nescafé line); dairy (Carnation, Coffee-mate, Nido); drinks (Milo, Nestea); and ice cream (Dreyer's, Häagen-Dazs, Mövenpick). Its top 10 markets are United States, China, France, Brazil, Germany, United Kingdom, Mexico, Philippines, Italy, Canada and Switzerland.

Its subsidiary, Nestlé Philippines Inc. (NPI), has operated in the country for over 100 years. Nestlé products have been available in the Philippines as early as 1895 but it was not until 1911 that the multinational firm established its first sales office in Binondo, Manila. In 2015, the company's work force numbered over 3,700 across the Philippines.

Nescafé Plan

Demand for coffee beans continues to rise, far outstripping supply. In the Philippines, Nestlé Philippines Inc. (NPI) alone purchases an estimated 70 percent of the Robusta coffee beans produced by local farmers for its Nescafé brand.

The company requires up to 76,000 tons of coffee beans annually, but the available supply is only 25,000 tons. The challenge is to encourage a sustainable and significant increase in the production of coffee beans.

The potential for coffee-growing in the Philippines is good, as the economy possesses the ideal climate and soil conditions, as well as large arable land areas suitable for agriculture, particularly in Mindanao. Thus, in 2011, when Nestlé launched its Nescafé Plan, a global initiative that aims to make coffee farming a sustainable livelihood, the Philippines was immediately included as a pilot area.

Under the Nescafé Plan, small coffee farmers in the Philippines are treated as partners of the company and are offered a guaranteed buying price aligned with prevailing global market prices.

At the core of the program are three integrated coffee centers in Bukidnon, Quirino, and Batangas provinces as well as Nestlé's coffee plantlet production and training center in Davao del Sur. These centers serve as a one-stop shop—serving as a Robusta seedling production nursery, a local research and development center for new coffee selections, training and techno-demo center, a buying station, and a composting facility for organic fertilizers.

The company also has a direct buying program that encourages small-scale farmers and intermediaries to sell their produce directly to Nestlé's 13 satellite buying stations, which are strategically located in key coffee-yielding regions: Cavite, Batangas, Cagayan Valley, Surigao del Sur, Misamis Oriental, Davao del Norte, South Cotabato, Bukidnon, Agusan del Norte, and Iloilo.

Through Nestlé's agronomy program, Filipino coffee farmers are provided access to technological advances, including ready-to-plant seedlings, with over 10 million already having been distributed from the four centers. Since 1996, Nestlé has also trained close to 60,000 farmers, coffee specialists, technicians, and students in coffee growing.

Over the years, the program has improved production and income of farmers across the Philippines while ensuring a sustainable supply of Robusta beans for Nestle.

Nestlé has also worked closely with the 4C (Common Code for the Coffee Community) Association, which awards international certificates for sustainable coffee production.

In 2014, the 4C Association awarded certificates to the coffee towns of Sen. Ninoy Aquino, Kalamansig, and Lebak in Sultan Kudarat, and the town of Tagbina in Surigao del Norte. The four towns are now part of the more than 150 coffee-producing groups in the world whose coffee has been verified to have been produced, processed and traded based on the 4C association's sustainability criteria.

Mexico's sunflower farmers were ushered into the formal economy through their links to PepsiCo's global value chain.

PepsiCo: Sunflower power

Sunflower farms used to be a thriving part of the Mexican economy. Through time, though, sunflowers were no longer cultivated and smallholder farmers turned to staple crops such as beans and corn, which they would sell only to their immediate communities.

Short of capacity to meet bank criteria for credit-worthiness (such as educational and financial literacy levels, availability of credit history, and presence of off-take partners), these farmers had little access to the working capital they needed to expand their farms.

To earn more, some farmers even resorted to illegal migration by trekking up the Jalisco mountain range to enter the United States, while others planted marijuana as an alternative crop.

> **"Through its Sustainable Farming Initiative, PepsiCo partnered with Mexico's sunflower farmers to improve their crop production.**

Enter PepsiCo—a multinational company that depends heavily on agriculture for its raw ingredients. Through its Sustainable Farming Initiative (SFI), PepsiCo partnered with Mexico's sunflower farmers to improve their crop production, ushering them into the formal economy by linking them with PepsiCo's value chain. On its pilot run, PepsiCo converted 350 hectares of land for around 850 sunflower farmers.

"Our initiative to develop the Mexican sunflower market is a powerful example of how we can bring together the resources of public and private sectors to work together to deliver real value for local communities, for our consumers and for our business," said PepsiCo Chairman and Chief Executive Officer Indra Nooyi.

PepsiCo teamed up with the Inter-American Development Bank (IDB), the largest multilateral provider of development financing for Latin America and the Caribbean, to provide microfinancing to the Mexican sunflower farmers. The company saw potential for reviving Mexico's highly lucrative yet forgotten industry, which is now no longer confined to ornamental uses.

"We joined forces with PepsiCo because of its strong presence in Latin America and the Caribbean and because of our shared view that investing in strategic social development initiatives will yield tangible economic benefits for a wide range of communities," said Luis Alberto Moreno, IDB president.

PepsiCo's Sabritas, a Mexican food producer which accounts for 80 percent of the domestic salty snack share, is retaining its leadership position by reducing its use of saturated palm oil and trans-fat after a Nielsen global consumer survey suggested that

"Our initiative to develop the Mexican sunflower market is a powerful example of how we can bring together the resources of public and private sectors to work together to deliver real value for local communities, our consumers and for our business. —PepsiCo

PepsiCo's top global brands

consumers prefer snacks that are low in sodium (34 percent), sugar (34 percent), fat (32 percent), and calories (30 percent), with ingredients that are sourced sustainably (35 percent).

Traditionally, Sabritas sourced the oil used to cook its potato and corn chips from other Asian and African economies. After a careful study, a peculiar crop in Mexico was identified by PepsiCo as a cheaper and healthier alternative source of oil for processing its food—the sunflower. Sunflowers are sources of heart-healthy high-oleic sunflower oil (HOSO) that can be used for cooking chips, biscuits, nuts and other snacks.

PepsiCo has also started a partnership with corn and potato growers in Mexico using the same contract farming model it piloted for sunflower farmers.

“Some of us used to go north to work to make money to pay off debts, but no longer. In just three years, everything has changed,” Martín Ramos Torres, a corn farmer, told The New York Times in an interview.

“ Before I had to sell my cow to buy what I need. Now, I keep my cow and my family has milk while I grow my crop.— Guzman Santana, farmer

Sunflower oil can be used for cooking chips, biscuits, nuts and other snacks.

“Before, I had to sell my cow to buy what I needed,” said José Guzmán Santana, another farmer selling to Pepsi, in the same interview. “Now I keep the cow and my family has milk while I grow my crop.”

Finding the right supply chain partners has become critical as PepsiCo understands that much of its success will depend on its relationships with partner-growers across the globe. The global snack and dairy industry, after all, has already reached revenues of USD 469 billion in 2014. It is estimated that the industry will grow steadily over the next few years as consumers gain a healthy appetite for snacks, and PepsiCo has positioned itself well for a bigger market share while uplifting the livelihood of small farmers in Mexico.

PepsiCo Inc.

PepsiCo Inc. is an American multinational food, snack and beverage corporation with headquarters in Purchase, New York. The corporation was formed in 1965 with the merger of the Pepsi-Cola Company and Frito-Lay, Inc. It has since expanded to a broader range of food and beverage brands, the largest of which includes the acquisition of Tropicana in 1998 and of Quaker Oats in 2001.

It is one of the world's leading food and beverage companies with revenues reaching USD 66.68 billion in 2014.

PepsiCo has a global portfolio of 22 brands that each generates more than USD 1 billion in annual retail sales.

As of May 2015, PepsiCo had a market capitalization of USD 143 billion and had 271,000 employees worldwide. With an extensive global reach and diverse product portfolio, it was ranked 99th in the 2015 Forbes Global 2000.

The company has six global divisions—PepsiCo Americas Beverages (Pepsi, Diet Pepsi, Gatorade, Mountain Dew, Naked Juice, Sierra Mist, Izze, AMP Energy, Propel, Aquafina, Tropicana Pure Premium, Mug, Mirinda, SoBe and 7UP); Frito-Lay (Lay's, Doritos, Cheetos, Tostitos, Ruffeles, Fritos, and Santitas); Quaker Foods (Quaker oatmeal, Quaker chewy granola bars, Cap'n Crunch cereal, Life cereal, and Rice-A-Roni); Latin America Foods (Doritos, Marias Gamesa, Cheetos, Emperador, Sabritas, Elma Chips, Tostitos, Rosquinhas Mabel and Quaker-branded cereals and snacks); PepsiCo Europe (Lay's, Walkers, Doritos, Cheetos, Ruffles, Quaker-branded cereals and snacks, Pepsi, Pepsi Max, 7Up, Tropicana); and PepsiCo Asia, Middle East and Africa (Lay's, Kurkure, Chipsy, Doritos, Cheetos, Smith's, Quaker-branded cereals and snacks, Pepsi, Mirinda, 7UP, Mountain Dew, Aquafina and Tropicana).

Since its formation in 1965, PepsiCo has forged partnerships with other large companies to further diversify its product line. It has entered into a strategic alliance with Calbee Foods Company to make and sell a wide range of food products in Japan and a partnership with Starbucks to jointly develop ready-to-drink coffee beverages. More recently, PepsiCo also started to venture into niche products such as coconut water, which has been gaining healthy international demand.

PepsiCo piloted its Sustainable Farming Initiative in 2011 and 2012 across 14 countries covering different crops.

Sustainable Farming Initiative

With global operations and a broad range of food products, PepsiCo knew there was a pressing need to support its product portfolio with a variety of high-quality farm products. In particular, it needed to secure its supply chain, manage volatility, address regulations and legislation, and identify good practices, innovation and technology.

PepsiCo piloted its Sustainable Farming Initiative (SFI) in 2011 and 2012 across 14 countries covering different crops.

It officially rolled out SFI in 2013 across the United States, the United Kingdom, Brazil, Chile, Argentina and Mexico. In 2014, it scaled up to Vietnam after signing a sustainable contract potato farming deal that will benefit about 50 small-scale farmers in Lam Dong Province.

One of its most successful partnerships was in Mexico. The project revived the domestic sunflower market while improving the nutritional quality of PepsiCo's snacks. The company entered into an agreement with the local government to convert 50,000 hectares of land in the central Mexican states of Jalisco and Durango to sunflower production to generate 40,000 tons of sunflower oil. This helped replace the imported palm oil that PepsiCo used to procure, saving on transportation and warehouse costs required by importation. As the sunflower also uses minimal water, it also saved farmers from worrying too much about a scarce resource.

Under the contract farming agreement, PepsiCo agreed to buy 100 percent of the crops from 850 farmers for an estimated USD 52 million over seven years. The arrangement assured the company of the desired quantity and quality of crops on specified dates at agreed-upon prices. PepsiCo also agreed to invest USD 2.6 million to support crop management and technical training and basic education to small and mid-sized farmers.

The Inter-American Development Bank (IDB) established an alliance with Agrofinanzas and PepsiCo's Sabritas brand to collectively provide the needed financial resources for the project. Agrofinanzas made available USD 40.4 million for 2,000 microloans for farmers' working capital, purchase of seeds and expansion of their production of sunflower crops while IDB provided Agrofinanzas a partial credit guarantee for up to USD 5 million.

Buoyed by the partnership with PepsiCo, Mexico produced 9,000 metric tons of sunflower oil in 2014, making it the 24th largest producer of the commodity and the ninth economy with the highest annual growth rate in production.

Vinamilk aims to become one of the world's top 50 dairy companies by 2017.

Vinamilk: Milking opportunities

Like many other farmers in Long Thanh, Dong Nai province, Lam Quang Tri lived a hard life cultivating primarily cashews and rice, although he owned some goats and sold their milk. In 1982, he recognized that goat's milk was limited, with one goat producing only one liter a day. So he turned to dairy farming instead, starting with only six cows on a one-hectare piece of land.

In 2003, he signed a contract to sell a portion of his milk to the An Phuoc Milk Company, which sells processed milk to Vinamilk, and there has been no turning back since then. Lam Quang Tri now has 100 cows, and his farm has expanded to five hectares.

Vinamilk has treated its farmers as partners in the business, as they supply 80 percent of the company's raw milk requirements. The company has continued to upgrade the transfer stations where the milk is

> “In the localities where Vinamilk has business and production activities, it has created jobs and provided vocational training to the local labor force.

brought by the farmers and purchased by the company in the different towns across Vietnam. Improving the transfer stations is a way to encourage the farmers to maintain or increase contracts from Vinamilk. In 2014, 27 transfer stations were successfully upgraded, increasing the number of completely upgraded stations to 45. The company also trained farmers on new techniques in breeding while sharing modern dairy farming technologies.

Farmers like Lam Quang Tri sign a contract with Vinamilk to sell high quality raw milk. The company will purchase all the produce for as long as its farmer-partners meet standards.

Vinamilk pursued innovation in the dairy industry by inaugurating the world's most advanced liquid dairy plant in terms of automation and integration. The USD 110 million facility covers 20 hectares in Binh Duong and had a first phase annual capacity of 400 million liters of milk.

"The Vietnam Milk Factory is by far the most advanced plant in automation and integration that Tetra Pak has ever built," said Bert Jan Post, managing director of Tetra Pak Vietnam.

"This new plant has laid a solid foundation for Vinamilk to achieve its goal to become one of the world's top 50 dairies with more than USD 3 billion in revenues by 2017," added Post.

Aside from directly helping dairy farmers, Vinamilk has also established a "Stand Tall Vietnam" Milk Fund that has benefited more than 310,000 disadvantaged children in Vietnam with nearly 23.5 million glasses of milk. Founded in 2008 with the help of the Vietnam Children Fund, the program aims to reduce the child

Vinamilk's dairy plant is the most advanced in the world in terms of automation and integration.

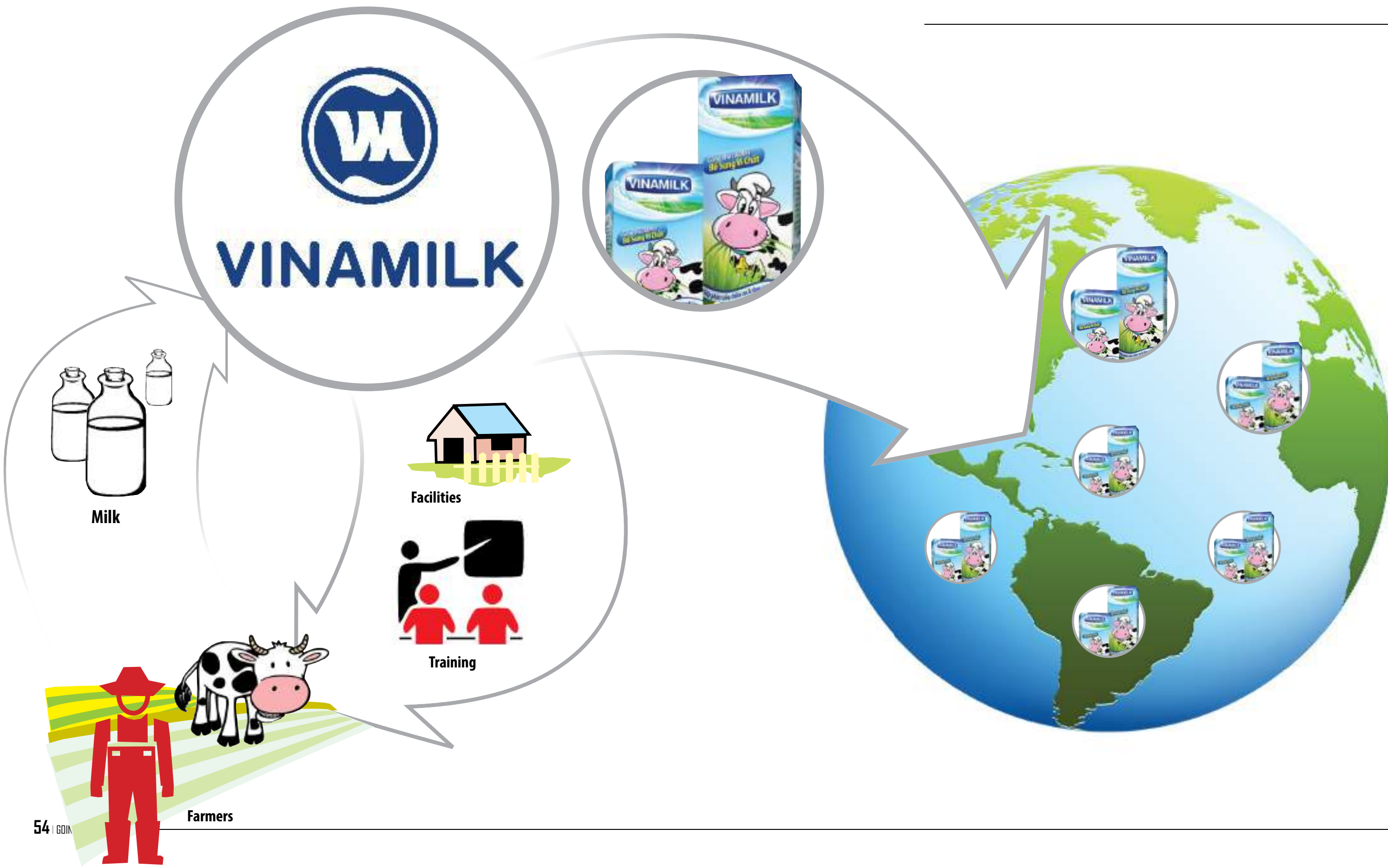
malnutrition rate in Vietnam with the motto that "every child has a right to drink milk every day."

With the Vietnam Environment Department, the company established a "1 Million Green Trees for Vietnam" Fund to improve the living environment of Vietnamese people. The program was extended to areas where green trees provide tangible benefits to the community, such as in residential areas, public parks, central roads, and schools. In 2012 and 2013, the program organized the planting of 100,000 trees in 10 cities across the country. In 2014, the program continued with approximately 150,000 trees planted.

Vinamilk has also started a program to encourage its customers to recycle their eco-friendly milk cartons.

"Every day Vinamilk provides nutrition products for millions of Vietnamese. Milk is commonly packaged into carton packs, which are considered the most eco-friendly compared to other types of packaging materials. All carton packs are made from plant-based renewable resource from newly-planted forest, unlike other plastic ones which are made from oil—a non-renewable material source. After being used, the milk cartons can be recycled to make useful products such as paper bags, carton boxes, envelopes or eco-roofs," the company said on its website. Walking the walk, Vinamilk's own dairy farm in Lam Dong uses eco-roofs made from recycled milk cartons.

> **"Vinamilk has treated its farmers as partners in the business, as they supply 80 percent of the company's raw milk requirements.**



Vinamilk

Vietnam Dairy Products JSC., also known as Vinamilk, is the largest dairy company in Vietnam.

Vinamilk generated group sales of USD 1.65 billion in December 2014, and, with a market capitalization of USD 6 billion as of September 2015, it is the biggest listed company in Vietnam.

In October 2015, media reported that Vietnam's government would sell off its 45 percent stake in Vinamilk, one of the country's most sought-after equity holdings. The next largest shareholder is F&N Dairy Investment, a unit of conglomerate Fraser and Neave, with 9.54 percent ownership.

Minor stakeholders include asset management firms Templeton and J.P. Morgan Singapore.

With 5,700 employees as of 2015, the company has several modern factories, including Da Nang Dairy Factory, Lam Son Dairy Factory, and Vietnam Beverages Factory. The company has also established a mega dairy factory in Binh Duong, considered the most modern fully automated dairy factory in the world.

Vinamilk has also opened two factories outside of Vietnam, in New Zealand and Cambodia, as it plans a global expansion to more than double annual revenue to USD3 billion by 2017.

Its principal activities include producing and trading dairy products and raising cattle.

Vinamilk's main products are powdered milk and nutrition powder (Dielac and Ridielac); condensed milk (Longevity Milk and Southern Star); liquid milk (Vinamilk 100% Flex and ADM); yoghurt ice cream; cheese (Susu and Probi); and soy milk (GoldSoy milk, Vfresh, and Icy).

Founded in 1976 in a bid to nationalize three private dairy factories, the company dominates Vietnam's dairy industry, enjoying a market share of roughly 50 percent for milk, 80 percent for condensed milk and 90 percent for yoghurt.

Its exports account for 10 percent of total revenue, covering overseas markets such as the United States, Middle East, Canada, France, Russia, Germany, Poland, Czech, and Asia.

As of end-2014, Vinamilk had six subsidiaries—Vietnam Dairy Cow-Member Co. Ltd., Lam Son Dairy One-Member Co. Ltd., Thong Nhat Thanh Hoa Dairy Cow Co. Ltd., Vinamilk Europe Spostka Organiczona Odpowiedzialnoscia, Driftwood Dairy Holdings Corp., and Angkor Dairy Products Co. Ltd.

Raising cows where there were none

With no tradition in dairy farming, Vietnam relied mostly on powdered milk imported from China and Australia to produce dairy products for the domestic market. To change this situation, dairy companies needed to work with farmers, who needed help in obtaining financing, techniques and technologies for raising dairy cows.

In the localities where Vinamilk has business and production activities, it has created jobs and provided vocational training to the local labor force. It has also partnered with eight micro, small, and medium enterprises that raise dairy cows.

The company supports farmers by providing them with finance, facilities, and techniques and technologies for its dairy farms that have a total of 10,930 heads of cow.

Five of its farms have already received certification from the International Standard Global Good Agricultural Practice. To get the certificate, a dairy farm has to have safe sewage treatment system, an energy and water saving program, and enough trees surrounding the farms. Even before applying for the certification, Vinamilk's safety standards were already high, as it invited experts from Australia to share their knowledge about dairy farming technologies.

To date, Vinamilk has trained 3,265 farming households to increase the value of products, with a focus on breeding techniques, and cow nutrition and diet combinations.

Today, small farmers supply 80 percent of the raw milk that Vinamilk processes and sells in Vietnam and various export markets.

Vinamilk believes "every child has a right to drink milk every day."

Chocolate companies help farmers improve their drying practices to create high quality beans used for high quality chocolates.

Australian cocoa: Sweeter together

On the island of Malekula, which accounts for more than 55 percent of the value of all cocoa produced in Vanuatu, small farmers had received high-yielding plant varieties and farm machinery to improve their production. For the longest time, these farmers had never tasted chocolate—the end-product of their beans—and hence never had a basis for understanding the quality of their produce.

With the help of the Pacific Agribusiness Research for Development Initiative (PARDI) of the Australian Centre for International Agricultural Research (ACIAR), these farmers were connected to large chocolate makers Haigh's Chocolate, Bahen & Co., and Guittard. This cooperation helped the cocoa farmers to produce better beans.

> **The model works for both the companies and the farmers, and for all consumers whose sweet tooth is satisfied by high-quality chocolates from high-quality Vanuatu beans.**

For the longest time, Vanuatu farmers had never tasted chocolate—the end-product of their cocoa beans.

"We are on a continual search for fine flavored cacao. Building long-term relationships with farmers based on solid principles of mutual benefit, transparency and fairness. By paying direct and cutting out the middleman, we exceed fair trade and pay prices that respect the farmer's efforts," Bahen said in a statement posted on its website.

"Our chocolate can only be as good as the quality of the cacao we source," the company added.

Haigh's Chocolates and University of Adelaide researchers have also been working with Vanuatu farmers to improve the quality of their cocoa beans, sharing their expertise on cocoa production to help farmers realize their competitive edge.

"High-end producers want them because they are scarce but they also want the quality, so I think Vanuatu can be a large share of the high-value beans," said University of Adelaide professor of Global Food Studies Randy Stringer in an interview with Adelaide Independent News.

"They can make two or three times as much from their cocoa, and it would go a long way in helping them fund a lot of basic needs. It's especially important for the villagers in terms of their ability to contribute to their kid's education, food security and poverty reduction," Stringer added.

The biggest challenges for Vanuatu's cocoa producers were the island's high humidity, and the need to change their drying process to avoid smoke-tainting the beans.

According to Ben Kolly, technical manager for Haigh's, chocolate tasting is an exacting science and a serious business. After all, the so-called food of the gods has more than 600 identifiable characteristics including floral, earthy, nutty and fruity flavors, smoke taint, astringency, bitterness and even mould, the latter from over-fermentation.

Chocolate, also known as food of the gods, has 600 identifiable characteristics.

"Chocolate is the most fascinating product. You can improve on the imperfections that we pick up, just by training the growers," Kolly said.

Basile Malily of the Vanuatu Cocoa Growers Association says that if this problem can be fixed, then

Our chocolate can only be as good as the quality of the cocoa we source.—Bahen & Co.

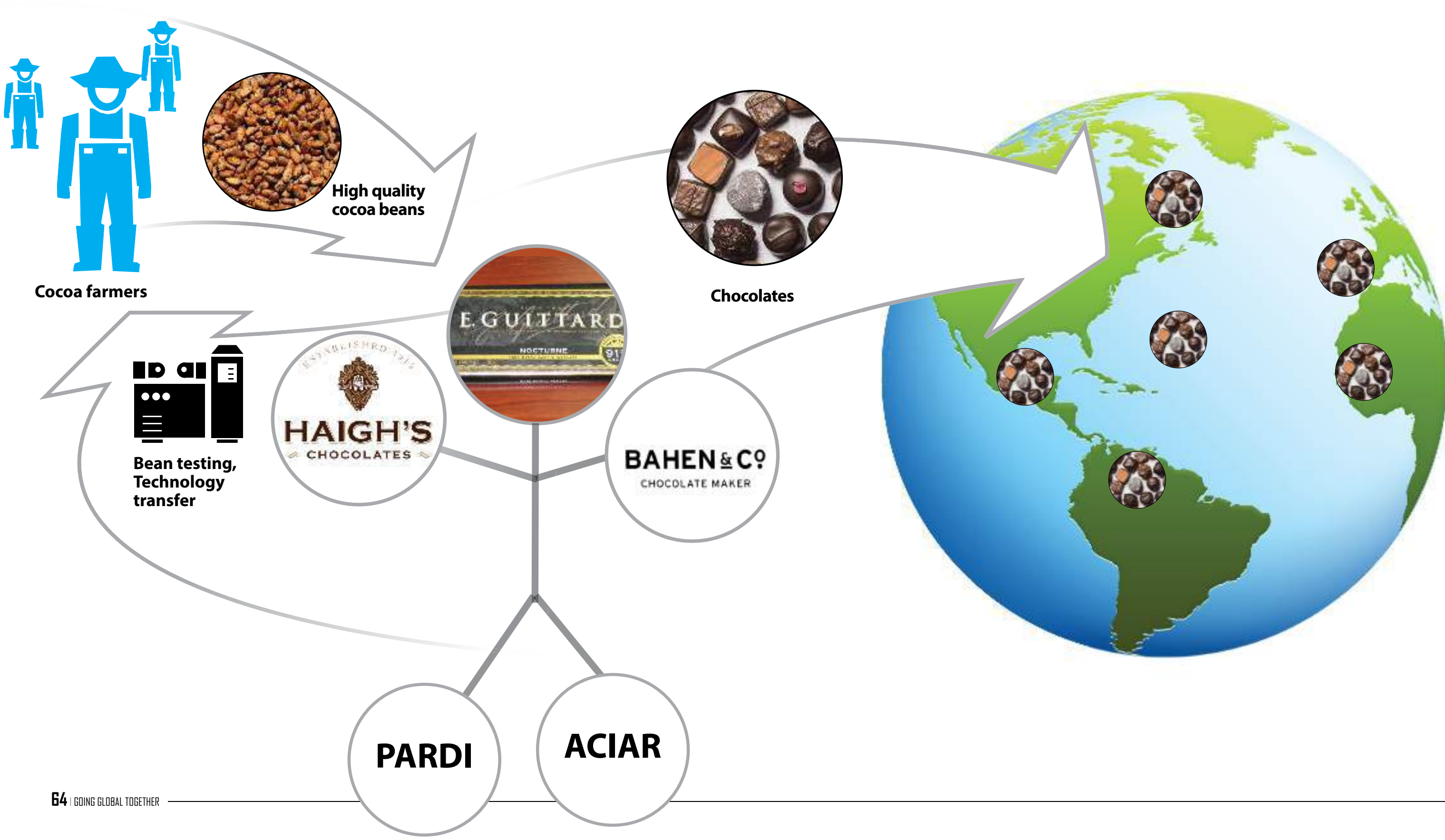
the value of the beans will increase to about USD 6 to USD 8 per kilo from only about USD 2, and farming communities will benefit greatly.

"I think in another 18 months, there'll be about 10 to 15 percent of these producers who will be getting a much higher price for their cocoa beans for some very small, modest investments in labor and time to meeting these higher end requirements, these high value chains. Over the next four or five years we'll see 25, 35 percent of the beans coming out of Vanuatu and you'll start seeing specialty single origin bars from Vanuatu in lots of stores around Australia," Stringer said.

At the retail end of the cocoa value chain partnership, the artisan and luxury chocolate-makers consortium is also expanding in positive ways, and looking at Vanuatu to source their beans. Rodney Nikkels, owner of the Dutch company Chocolatemakers, has announced a plan to visit Vanuatu. Chocolatemakers acts as a "lead representative agent" for dozens of other artisan chocolate companies in Europe and North America actively searching for suppliers of South Pacific cocoa beans.

For Josh Bahen, the model works for both the companies and the farmers, and for all consumers whose sweet tooth is satisfied by high-quality chocolates from high-quality Vanuatu beans.

"It's a business partnership [but] we also want an insight into their souls. We want to see the farmers grow," Bahen added.



Haigh's, Bahen & Co. and Guittard

Haigh's Chocolates is a private Australian confectionery company that makes and sells chocolate and related products to customers in South Australia, Victoria and New South Wales. The company, based in Adelaide, South Australia, employs over 500 people throughout its factory, administration and 14 retail stores located across Adelaide, Melbourne and Sydney.

Bahen & Co. makes stone ground chocolate from bean to bar, using a traditional approach and vintage equipment. Its chocolate factory operates from the family farm in Margaret River, Western Australia.

The Guittard Chocolate Company is an American-based chocolate maker that produces couverture chocolate using original formulas and traditional French methods. The company is headquartered in Burlingame, California, and is the oldest continuously family-owned chocolate company in the United States.

The three chocolate factories have one thing in common: they source most of their cocoa beans from the Republic of Vanuatu, the third largest cocoa exporter in the South Pacific.

These three companies have partnered with the Pacific Agribusiness Research for Development Initiative (PARDI) of the Australian Center for International Agricultural Research (ACIAR) to help Vanuatu farmers produce high-quality cocoa beans to ensure a sustainable and cost-effective supply chain.

Better beans, better chocolate

Two of the world's largest chocolate producers, Mars and Barry Callebaut, see a looming cocoa shortage by 2020 due to climate change, disease and drought. Demand for cocoa has seen a steady annual increase of about 3 percent for the past 100 years, making partnerships such as those forged with Vanuatu farmers more important.

To ensure a sustainable supply of good quality cocoa, chocolate producers have forged partnerships with Vanuatu farmers to improve their crop, expand their presence in the global value chain, and increase their income. The chocolate producers, in return, gain a steady supply of cocoa that meets their quality standards.

In 2008, the government of Vanuatu asked the Australian Centre for International Agricultural Research (ACIAR) to design and help implement a cash crop intensification program to motivate rural small farmers to increase the time and effort they expend on cocoa production. Vanuatu ranks 147th worldwide in per capita income based on 2014 data of World Bank. Australia, on the other hand, has had a long donor-development relationship with the Pacific Island state.

Before the partnership, no Vanuatu cocoa farmer had ever tasted the end-product of the bean they were producing, despite an annual cocoa production of 1,000 tons.

ACIAR's Pacific Agribusiness Research for Development Initiative (PARDI) began a project which helped Vanuatu cocoa farmers shift to producing a much higher value "niche market" product. The project framework was simple: once the Vanuatu farmers harvested the cocoa, they sent it to the chocolate-makers like Haigh's Chocolate, Bahen & Co., and Guittard for analysis. Researchers of the chocolate companies then went back to Vanuatu and conducted "taste-testing sessions" and, together with the farmers, identified which of the beans did not meet quality standards. Through the partnership, the chocolate companies helped the farmers improve their bean-drying practices to create high-quality beans used for high-quality chocolates.

The program began in 2011, and in two years, Vanuatu became the third largest cocoa producers in the South Pacific. Farmers also saw their household income increase by 25 percent as chocolate companies prefer to buy the now high quality Vanuatu beans.

The model helped all parties: the farmers, who increased their earnings, and the chocolate companies, which now have a sustainable supply chain of high quality cocoa beans.

Farmer-partners of Jollibee are assured of a steady market while improving their production and income.

Jollibee: Teaming with farmers

In the towns of Kaliwanagan and San Agustin in San Jose, Nueva Ecija, some 30 onion farmers formed a cooperative in 2008 and entered into a marketing agreement with Jollibee Foods Corp. (JFC) to supply white onions for the fast food giant's burger patties.

"Before, it was just a dream for any farmer to be able to supply big companies like Jollibee. If established traders have a hard time joining the supply chain, how much more for small farmers like us?" said Arnold Dizon, president of the Kalasag Farmer Producers Cooperative.

"This partnership is truly a big blessing. It is proof that farmers like us can dream, and we can turn our dreams into reality," Dizon added.

> **Under the FEP, small farmers were organized into clusters, which became the building blocks for cooperatives that now supply to high-value customers such as Jollibee.**

Kalasag farmers now enjoy improved production and increased financing and market access under the FEP.

Seven years later, more than 900 farmers from 15 provinces across the Philippines—including those belonging to Kalasag—enjoy improved production and increased financing and market access under the Farmer Entrepreneur Program.

Since 2011, Chowking, a subsidiary of JFC, has also started buying chili peppers from Kalasag farmers.

JFC chairman Tony Tan Caktiong believes opening up Jollibee's value chain to small farmers has become a mutually beneficial and profitable move.

"With the determination and passion to make things work, we can find more ways to help our local agricultural community," Tan Caktiong said.

Before the partnership with local farmers, Jollibee imported most of its onions even though this was more costly because it was difficult to get the required quantity, quality, and on-time delivery from small-scale producers in the Philippines.

FEP has become a model for value chain financing for agriculture products, backed by a strong partnership with local government units, other state agencies and micro-finance institutions.

The National Livelihood Development Corp., for instance, made financing available through the Alalay sa Kaunlaran Inc., a microfinance institution that has lent out PHP 6.52 million as of 2011.

The Agriculture Department, on the other hand, helped procure post-harvest facilities such as plastic crates, motorized sprayers, and a cold storage bin that allowed the farmers to meet JFC's demand for more white onions.

"Agriculture is one of the backbone industries of the country. It is really the dream for the program to help small-scale farmers not only to improve their livelihood but also to participate in nation building," said Grace Tan Caktiong, Jollibee Group Foundation president.

JFC chief finance officer Ysmael Baysa added that the program could inspire other partnerships between large companies and micro, small, and medium enterprises (MSMEs) not just in the Philippines but in other member economies of the Asia-Pacific Economic Cooperation (APEC).

"Work with us, work with the farmers, and this could become a big development in the agricultural sector," Baysa said.

APEC has committed to enhance value chains of production, processing and marketing in the Asia-Pacific agriculture and food sector in a bid to increase the industry's competitiveness.

In the 2014 Beijing Declaration on Food Security, ministers of the 21 member-economies of APEC, which comprise an estimated 44 percent of global trade, highlighted the need to establish linkages "where farmers and fisherfolk

"This partnership is truly a big blessing. It is proof that farmers like us can turn our dreams into reality. — Arnold Dizon, president of Kalasag Farmer Producers Cooperative

Farmer cooperatives supply white onions for Jollibee's burger patties.

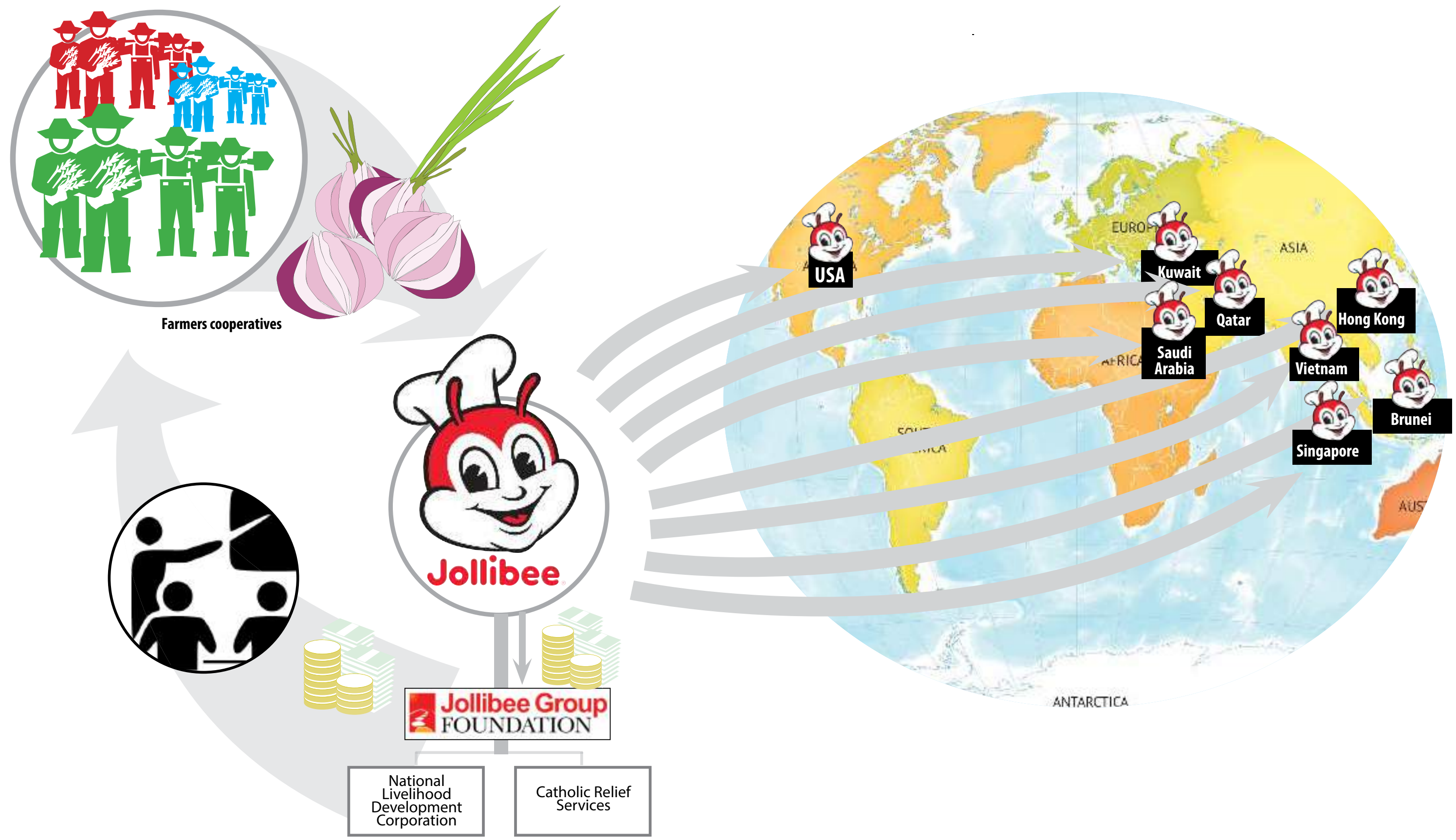
become direct beneficiaries of food trade and value-added processing through the development of global food value chains."

For the farmer-partners of Jollibee, being part of the supply chain of the number one fast food network in the Philippines assured them of a steady market while improving their production and income.

"Before, we didn't have a process when to plant and when to harvest. We were content as long as we had some produce to sell," said Ronaldo Castro, a farmer from Nueva Ecija who is now the chairman of

the Onion and Vegetable Producers Cooperative, a regular supplier of JFC.

"Farmers here used to just plant crops separately without cooperating with each other. Now, we have learned how to plant crops that are of high quality."



Jollibee Foods Corporation

Jollibee Foods Corporation operates the largest fast food network in the Philippines, comprising over 2,900 stores, with close to 80 percent based in the Philippines. The rest are spread across China, the United States, and markets in Southeast Asia and the Middle East.

Aside from its flagship brand Jollibee, the company also owns other fast food brands such as Chowking, Greenwich, Mang Inasal, and Red Ribbon, and owns the Philippine franchise for Burger King.

In China, Jollibee operates 310 Yonghe King noodle shops, 43 Hong Zhuang Yuan rice porridge restaurants and 48 San Ping Wang noodle eateries. In 2015, it signed a master franchise agreement with US-based Dunkin' Donuts Franchising to open doughnut shops in major cities in China.

In October 2015, Jollibee announced that it would invest USD 100 million to buy 40 percent of the US upmarket chain Smashburger Master LLC, which has 335 restaurants in 35 states and seven countries.

With a market value of USD 4.5 billion and annual sales of USD 2 billion, JFC made it to Forbes Asia's Fabulous 50 list in 2015, one of only two Filipino companies to do so.

Jollibee began as a small-scale enterprise in 1975 when Tony Tan Caktiong and his family opened an ice cream parlor in Cubao, Quezon City.

Three years later, on the advice of a management consultant, he and his siblings shifted the business focus from ice cream to hot dogs and burgers after studies showed a much larger market for fast food.

Farmers Entrepreneur Program

Farmers have long had to grapple with the volatility and uncertainty of markets for their produce. Farmgate prices for goods vary greatly depending on the season, and farmers sometimes end up planting crops that are not bought.

On the other end of the spectrum, large companies such as Jollibee often find it too complicated to work with small-scale producers due to large-scale requirements in terms of quantity, quality, and on-time delivery. This was the case with Jollibee and its need for onions.

In 2008, the Jollibee Foundation partnered with the National Livelihood Development Corporation and the Catholic Relief Services to put up the Farmers Entrepreneur Program, an innovative model that allowed small farmer cooperatives to be part of JFC's supply chain.

Under the FEP, small farmers were organized into clusters, which became the building blocks for cooperatives that now supply to high-value customers such as Jollibee.

The farmers are trained on new production technologies and standards to help raise their level of competitiveness, which includes their ability to deliver the requirements of large buyers such as Jollibee. The program also links the cooperatives to micro-financing institutions to ensure the delivery of the necessary volume of produce that meet the standards of Jollibee.

The FEP model had its fair share of challenges, ranging from the initial resistance of some farmers to diversify their products to unpaid loans – highlighting the need for government to foster a macroeconomic environment that makes value chain financing feasible and viable.

Now, JFC sources its onions, tomatoes, bell peppers, chili and calamansi, among others, from many farmer cooperatives. In turn, these small farmers have seen their incomes increase by as much as 316 percent (from USD 420 per cropping before 2008 to USD 1,330 in 2011).

More than 900 farmers from 15 provinces across the Philippines now enjoy improved production and increased financing and market access under the Farmers Entrepreneur Program, while JFC is assured of a steady supply of produce in the quantity and quality needed for its expanding food network.

The program exemplifies the Asia-Pacific Economic Cooperation (APEC) commitment to enhance value chains of production, processing and marketing in the Asia-Pacific agriculture and food sector to increase industry competitiveness.

VMV's business model has shown that big businesses can flourish if they take care of their people.

VMV Hypoallergenics : Farm-to-face

The global cosmetic market reached USD 460 billion in 2014, and is estimated to reach USD 675 billion by 2020, growing at a rate of 6.4 percent, with skin care having the highest market share.

Asia-Pacific economies lead the cosmetic industry with a market share of 35 percent in 2014. According to Research and Markets, the high market share of the bloc is attributed to the fact that customers are relatively more beauty conscious. Moreover, with the expected growth rate being highest among all regions, Asia-Pacific is the focus of many cosmetics companies.

"The global market for organic personal care is growing at an average of almost 10 percent annually. — Simon Pitman, editor of CosmeticsDesign

Simon Pitman, editor of CosmeticsDesign, says the global market for organic personal care is also continuing to grow at an average rate of almost 10 percent annually, spurred by increased production and more effective certification.

It's a collective farm that provides free education for farmers and schools in the area. — Laura Bertotto, VMV chief executive officer

VMV Hypoallergenics has gained international prominence not only among consumers, but also among dermatologists who prescribe VMV products to their patients as adjunct treatment.

Its skin care products, according to VMV chief executive officer Laura Bertotto, contain certified organic virgin coconut oil (VCO) that is extremely gentle on the skin and aids in the recovery or repair from continual exposure to the sun.

VMV sources organic VCO from FRV Organic Homestead, a company also owned by Bertotto. FRV Organic Homestead established a cold press VCO processing facility on a 40-hectare piece of land in Leyte, which is also home to a certified organic farm.

"We grow our own virgin coconut oil in our certified organic farm in Leyte, in the Philippines. It's a collective farm that provides free education for farmers and schools in the area, and shares food and techniques with neighbors," Bertotto says.

FRV Organic Homestead also sources coconuts from about 100 individual farmers and farmer-members of the Santo Niño and Visares Multi-purpose Cooperative, which was organized to manage the resources of the farmers in the immediate community.

The farm was hit badly in 2013 by typhoon Haiyan, one of the strongest

VMV sources its virgin coconut oil from FRV Organic Homestead.

tropical cyclones to affect the Philippines.

"Our farm took in 40 families. Its one remaining structure with an intact roof served as a refuge for almost 300 men, women and children, providing shelter as well as food and water from donations and a site for medical missions," Bertotto says.

Farmers who lost their livelihoods were also employed by the farm, which coordinated with the Philippine Coconut Authority to supply the seeds and seedling stocks.

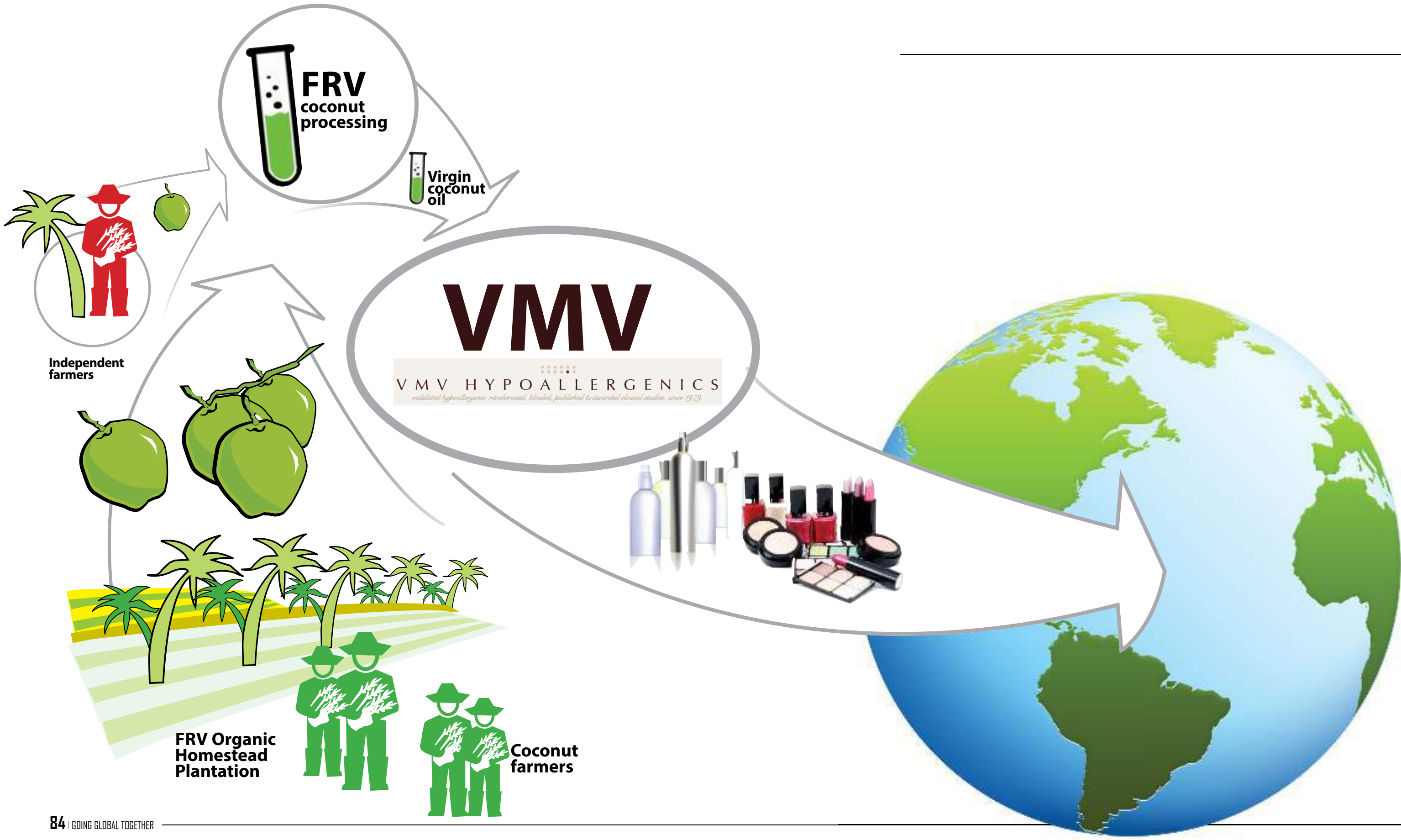
The company also requested the PCA to send decorticating machines for processing VCO by-products, such as coconut shells and husks, into high-value consumer products.

The company has also engaged Leyte State University to train the farmers in the immediate community on organic farming methods.

VMV's business model has shown that big businesses can flourish if they take care of their people and push for inclusive growth.

Bertotto has also embraced new technologies to digitize warehousing, selling, marketing, and shipping of VMV Hypoallergenics products.

"Especially for entrepreneurs who don't have the deep pockets of the larger industry global giants, innovative, out-of-the-box approaches can really bridge the gap," she says.



VMV Hypoallergenics Ltd.

VMV Hypoallergenics Limited Inc. is a privately-owned manufacturer, distributor and exporter of high-value skin care and cosmetic products that markets its products under the brand name VMW Hypoallergenics. The company has about 200 products in markets such as Australia, Mexico, Germany, India, Japan, and the United States.

VMV began as a micro-enterprise in 1979. It was founded by dermatologist Dr. Vermen Verallo-Rowell, who had many patients suffering from contact acne and contact allergies. When she could not find products that contained few or no acne-causing ingredients or allergens, she did her own research, which eventually led to the creation of her company's first patented product, the Retinoic Acid-Cindamycin Toner.

One of her patients responded well to the toner, and urged her to sell it commercially. The patient later became her husband, and together they started the business.

Now, VMV Hypoallergenics is managed by their daughter, Dr. Laura Bertotto, who strengthened the dermatological research center, VMV Skin and Research Center, founded by her mother.

VMV Hypoallergenics products are now globally sold side by side with high-end cosmetic products. All VMV Hypoallergenics cosmetic products are distributed through IDS Logistics Inc., a Hong Kong-based multinational company operating under the IDS Group, a full service logistics and supply chain management services corporation. The IDS Distribution Centers receive, store and distribute goods from the Philippines to key accounts in member-economies of the Asia-Pacific Economic Cooperation and the rest of the world.

Using their coconuts

The global trend in cosmetics formulation, particularly for skin care products, is to move toward ingredients derived from natural or organically grown plants and to use fewer chemicals such as surfactants, dyes, fragrances, phthalates, parabens, and preservatives that may irritate the skin. VMV Hypoallergenics skin care products contain certified organic virgin coconut oil (VCO), an antioxidant that acts as a soothing and anti-inflammatory agent.

To meet regulatory standards, the company needs to ensure that its supply of VCO from farmers and farmers cooperatives undergoes the correct process of sterilization, grating, settling, pressing and oil filtration, all without heat and all done organically.

To guarantee product quality, VMV Hypoallergenics works with farmers and cooperatives on a family-run estate in Leyte. The farm itself has been certified organic by the US Department of Agriculture.

By providing the technology and the training to individual coconut farmers and farm cooperatives in the community, VMV assured itself of a sustainable supply of indigenous raw materials or ingredients for their high-value cosmetic products and at the same time enabled the farmers to contribute to the global value chain.

The cooperative has been recognized as an environment-friendly operation that helps local farming communities with sponsored homes and other poverty alleviation programs. Nothing goes to waste — coconut by-products are used to feed fish in fresh flowing rivers, which have evolved naturally into bird sanctuaries for wild ducks, white herons, and hawks.

The FRV Organic Homestead sources its supply of coconuts from about 100 individual farmers and farmer-members of the Santo Niño and Visares Multi-purpose Cooperative (SAVIMCO), a cooperative of farmers which was organized to manage the resources of the farmers in the immediate community.

To ensure sustainability, Bertotto's family also donated one hectare of land to build a school within the farm. In collaboration with the Leyte State University, the farmers in the immediate community are trained on organic farming methods. The coconut farmers of FRV now supply 8,000 liters of VCO per month, up from only 2,000 liters when typhoon Haiyan struck in 2013. These are then brought to Manila, and later on shipped out to foreign markets as a key ingredient of VMV products.

Throughout the past four decades, farmers taking part in Charoen's contract farming program have enjoyed job and income security and better livelihood.

Charoen Pokphand Foods: Kitchen of the world

With a shared vision of being the "kitchen of the world," Charoen Pokphand Foods PCL (CPF) and the government of Thailand, have worked hand-in-hand to find ways to improve agricultural practices in the past decades. One practice that has proved beneficial to CPF and Thai farmers is contract farming, which was introduced in the 1970s.

Contract farming is an agricultural production scheme that entails a legal agreement between farmers and buyers, usually large private corporations like CPF. It typically involves at least three stakeholders: the farmers, the buyer or company, and a financial institution. The buyer acts as sponsoring party to small farmers by providing input material (whether as a subsidy or on credit), technology, and knowledge in exchange for farmers' labor and investments in land and facilities. Small farmers are usually able to get capital for such

> "Charoen believes that its success is tied to the success of its business partners, including its contract farmers.

arrangements through loans from financial institutions, often after being endorsed by the buying company.

CPF began with a small group of contract farmers for broiler chicken in Chonburi province. The program was expanded across Thailand, including the previously poor village of Nong-Wah. The company selected 50 eligible farmers from Nong-Wah, most of whom invested in their own land for the project through loans from Bangkok Bank. CPF sent them to training on animal raising for two weeks. Additionally, the farmers received land, houses, a swine facility, and material such as the breeds, feed, medicine, and farming equipment. In turn, the farmers were responsible for the production costs and the village was to invest in the construction of a feed mill for the project.

After CPF's contract farming was established in Thailand, it went on to expand operations to the Greater Mekong sub-region composed of

Myanmar, Laos, Cambodia, and Vietnam. Investment in contract farms in neighboring economies lowered production and logistics costs for CPF.

According to Narong Jiamjaibanjong, CPF senior vice president, the company has 4,999 farmer-partners under its contract farming scheme, which accounts for about 10 percent of the entire farmer population in Thailand.

"All roles and responsibilities are clearly laid out plus an agreement of how the future income will be shared. It is an outcome of active coordination by the three parties – farmer, private enterprise and financial institution," Narong said.

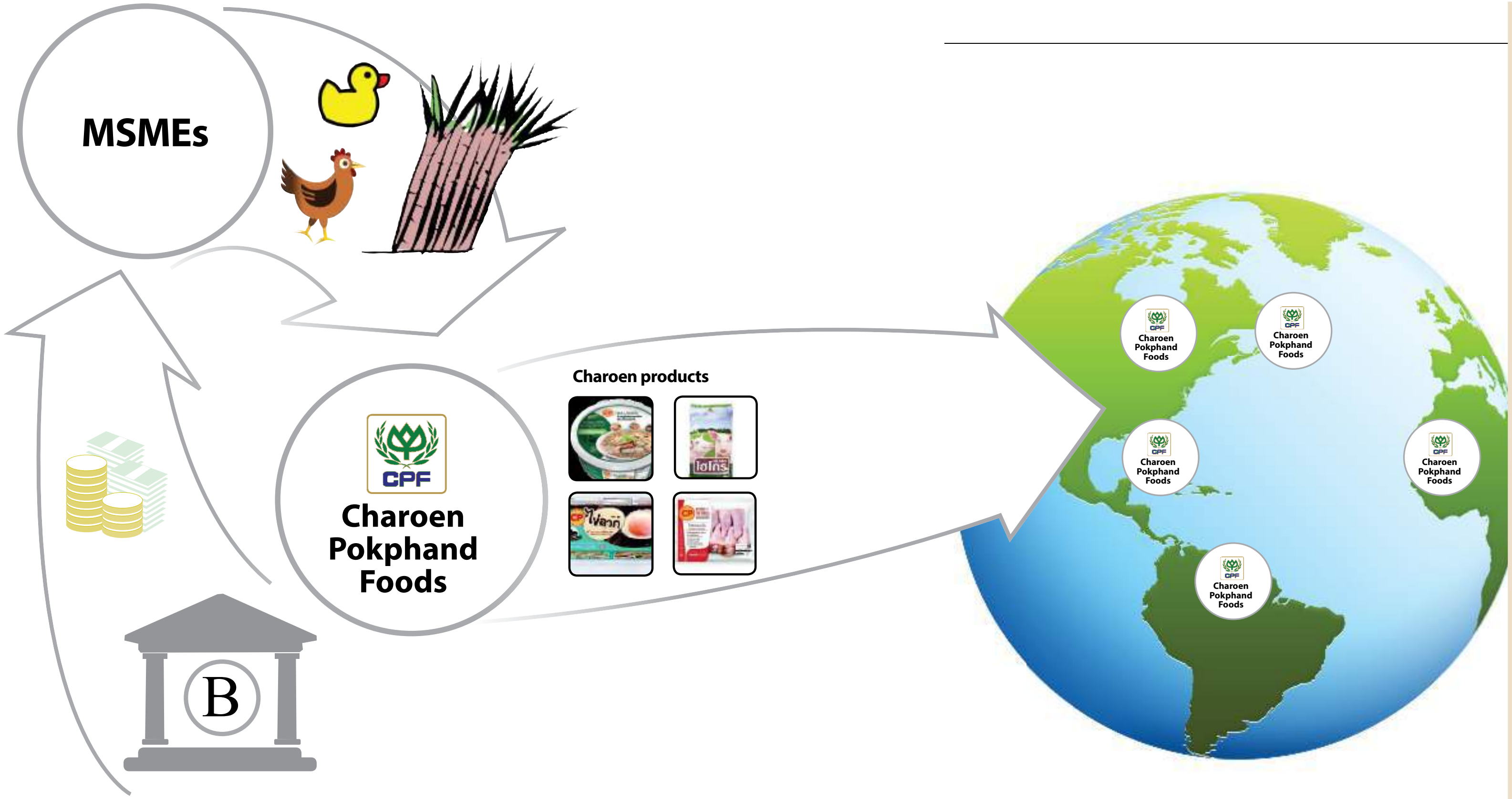
"At least 88 percent of farmers participating in the contract farming

scheme with CPF have their income guaranteed while another 12 percent have their product prices guaranteed. While the contract farming does involve certain risks in case of terrible epidemic and disaster, farmers in the program are exposed to far lesser risk than their independently-operated peers who have to absorb all the risks on their own," he added.

Narong said there are three indicators to help gauge whether farmers are better off after entering into the contract farming with CPF. First, as high as 98 percent of the farmers can repay their loans with financial institutions within the project's term which lasts for at least eight months. Second, more than 50 percent of the farmers have been in the contract farming scheme with CPF for more than a decade, reflective of a real sense of job security. And third, several farmers have been able to expand farms.

"When contract farming is mentioned, the first thing people usually think of is a big profit-oriented conglomerate, which, in this case, let the spotlight shine on CPF. But what is really significant is that the farmers in the project are exposed to minimal risk," he said.

"Throughout the past four decades, farmers taking part in the contract farming program have enjoyed not only job and income security but also better livelihood. What is more important is the fact that contract farming helps develop the agricultural sector, offering farmers job security while producing safe food for consumers, a win-win situation for everyone," Narong added.



Charoen Pokphand Foods PCL

Charoen Pokphand Foods PCL (CPF) is the leading producer of animal feed and one of the largest producers of poultry in the world. Established in 1978 in Thailand, it operates in both the livestock (swine, broilers, and ducks) and aquaculture (shrimp and fish) businesses. Its vertical production has incorporated the manufacturing of animal feed, meat processing, and manufacturing of semi-cooked and fully cooked meat and ready-to-eat meals.

It has operations and investments in 14 countries and exports to about 40 countries across six continents, catering to over 3 billion citizens of the world. Its products reflect CPF's extensive reach in member-economies of the Asia-Pacific Economic Cooperation (APEC), with a diversified product range that includes whole shrimp wonton soup, tom yum soup, chicken pho noodle soup, chicken pad thai, pork gyoza, Mexican wings, Italian dressing, and oyster sauce.

In 2014, CPF's profits rose 49 percent to USD 2.92 billion from sales of USD 11.7 billion.

A large portion of CPF's investment budget in 2014 went to ready-to-eat foods. To this end, the company invested in Tops Foods NV, Belgium's leading company in the production of ready-to-eat meals using the latest technology of microwave sterilization. Another investment was made in BHJ Kalino Food AB, a leading distributor of chilled and frozen meat and ready-to-eat foods in Sweden.

Investments were also made in Hefei Chia Tai Co. Ltd. and Kaifeng Chia Tai Co. Ltd., producers and distributors of animal feed in China. CPF also acquired Russia Baltic Pork Invest ASV, which holds stakes in companies in the swine business in Russia.

CPH was ranked 1,454th in the 2015 Forbes Global 2000, a listing of the world's biggest public companies. As of May 2015, its market capitalization stood at USD 5.4 billion. It has 23,337 employees.

Farmers as business partners

As a leading manufacturer of animal feed and poultry that has expanded beyond its home market of Thailand, Charoen Pokphand Foods PCL (CPF) saw the need to ensure its supply of livestock and other farm products. There was also a need to lower the company's production and logistics costs as it expanded to international markets.

Recognizing the importance of agriculture to the local and global economy, CPF became one of the pioneers in contract farming in Thailand in 1975. This followed the Thai government's endorsement of a model in which private companies would contract farmers for agricultural produce such as chicken, duck, maize and sugar cane in an effort to improve domestic agriculture.

CPF considers its suppliers, farmers, retailers and distributors as "business partners" vital to the company's value chain. The company believes that its success is tied to the success of its business partners, so it tries to involve them in its decision making through meetings and joint initiatives.

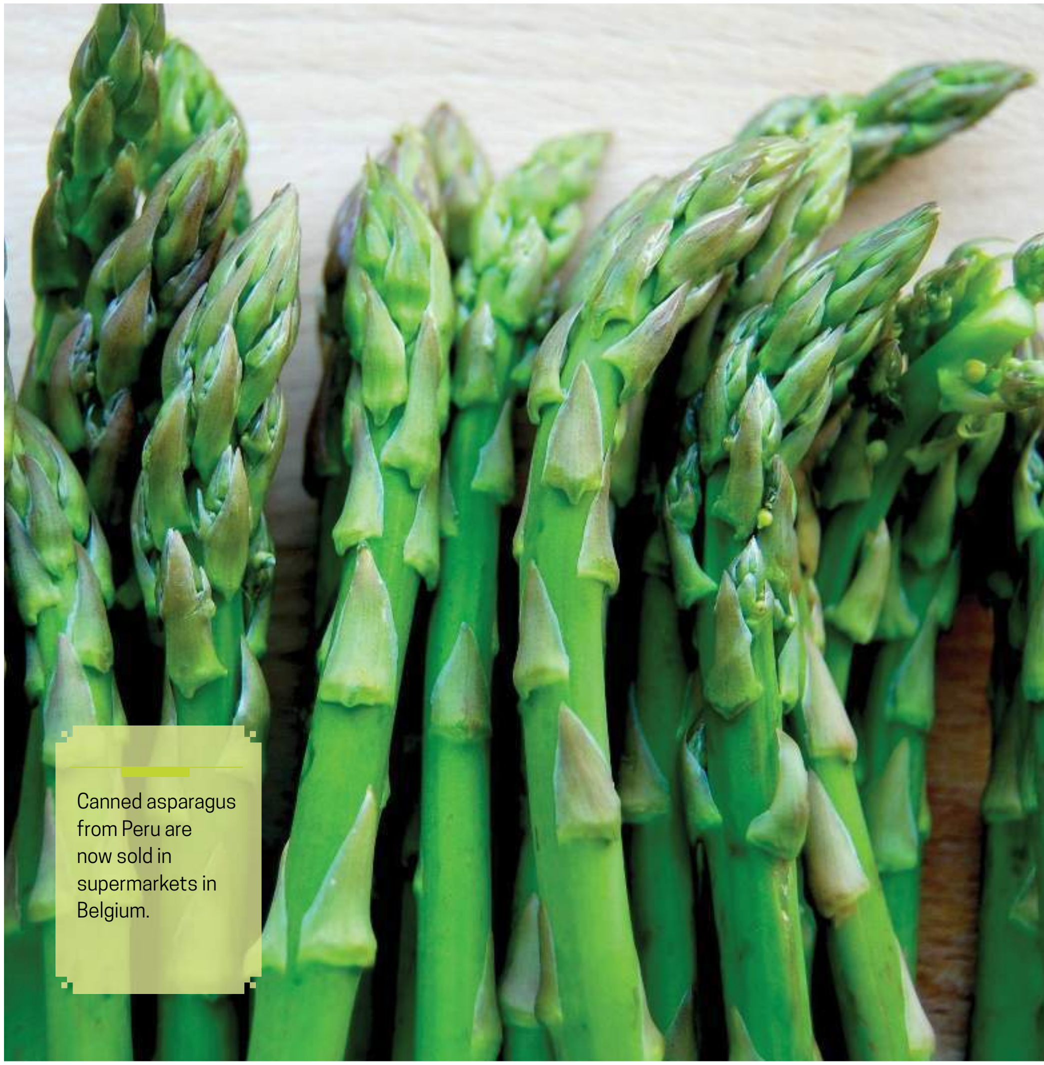
To ensure that their business partners are well equipped, CPF primarily supports them through knowledge and technology transfers to improve their capability and productivity, as well as access to financing.

CPF enters into contracts with farmers through its "complete package program." Under this program, the company selects farmers who have the production potential and are willing to invest in the type of facilities that CPF requires. This is where financial institutions come in as credit providers.

Either the income or the price is guaranteed under the contract. In the income guarantee model, CPF buys all the animals and the price is determined individually according to quality. In the price guarantee model, the price for each animal is determined at the start of the contract, but the company can choose not to buy all the animals if they are not up to standard. In cases of epidemic or natural disasters, farmers do not get compensation but the company bears the costs incurred.

Today, CPF contracts around 5,000 farmers all over Thailand. They supply raw materials to the company, and they are integrated into the global value chain as the company exports its products to various economies across six continents.

As high as 98 percent of the farmers repay their loans with financial institutions within the project's term. More than 50 percent of the farmers have been in the contract farming scheme with CPF for more than a decade, reflecting a real sense of job security. Several farmers have also been able to expand farms.



Canned asparagus from Peru are now sold in supermarkets in Belgium.

Peru Asparagus : Yes we can

Asparagus is the most important high-value crop that farmers can grow in coastal regions of Peru. Peru holds a strong position worldwide, competing with China in asparagus production. It also benefits well from its exports to US and Europe by virtue of preferential trade agreements.

The REOPA-Gandules-Scana Noliko-Colruyt partnership demonstrates how an inclusive and sustainable business model can incorporate smallholder farmers with large enterprises in the global value chain. Through this partnership, REOPA, an association of small-scale farmers which traditionally exported only fresh asparagus to the United States, is also now sending its produce to Europe.

"The project has achieved the successful delivery of 150,000 cans of asparagus sourced from smallholders to Colruyt's shelves.

Colruyt chose to work with about a hundred producers, who together formed the REOPA cooperative to improve crop production and sale. These "campesinos" have been farming green asparagus on small strips of sandy soil for generations.

The partnership has been especially beneficial for the smallholder farmers in summer because asparagus quality is poorer in those months. It is also the same time when Mexico, a competing economy, harvests its own asparagus for export to the United States, REOPA's traditonal market. The cooperation helped the farmers diversify export markets to include the shelves of Belgian supermarkets.

> These "campesinos" have been farming green asparagus on small strips of sandy soil for generations.

To set a fair purchasing price, Colruyt studied what a decent wage would be for a Peruvian farmer to enable them to meet their daily needs. Colruyt and VECO, a non-government organization, also promoted a more sustainable farming method with micro-irrigation of the farmland. The asparagus is also canned on-site in Peru, which supplies work to local processing facilities.

REOPA pays the total price of USD 0.86 per kilogram to its members, a highly attractive price compared to the USD 0.40 per kilogram market price. REOPA's services to its members — cheaper rental of machinery, training for farmers, technical assistance, support with cooperation projects, irrigation and a secure export market — also improved their production.

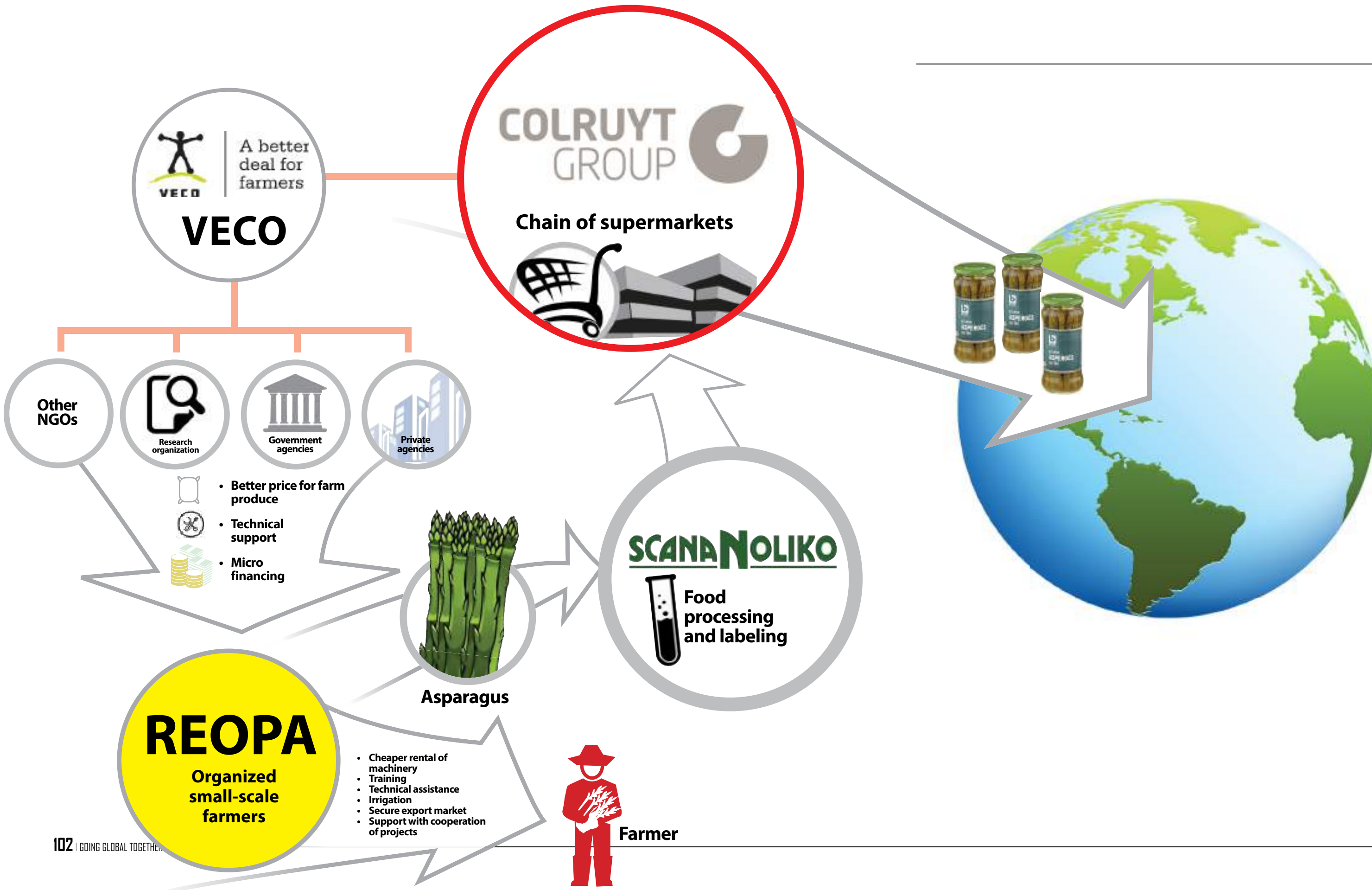
These benefits also accrue to wider social segments due to REOPA's gender sensitivity policies that promote inclusive labor opportunities. In production, 28 producers are women while 88 producers are men. In the packaging plant, female employees account for 60 percent of all workers.

"It is a great experience for us to have this market with Scana Noliko and Colruyt. And we can sit together to make business more inclusive, transparent and just. Another positive experience is that we have this opportunity of negotiation, which was our first experience with canned produce," said Juan Manuel Miranda, manager and vice president of REOPA.

The experience of this intricate partnership among many players in the value chain presents an inclusive business model that aims at social and economic sustainability. This linkage offers market opportunities that could empower even small businesses, which can now participate in global trade.

Around the world today, businesses are looking for innovative ways of fostering inclusive and sustainable value chains. The success of Peru's asparagus farmers have demonstrated the powerful advantage of a multi-stakeholder collaboration. These partnerships are especially important for the agribusiness sector, which will need to supply the needs of an estimated 9 billion food consumers by 2050.

> The experience of this intricate partnership among many players in the value chain presents an inclusive business model that aims at social and economic sustainability.



Colruyt SA, Scana Noliko and Gandules Inc.

Colruyt SA is a chain of supermarkets in Belgium that is part of the Colruyt Group, a multinational family business that focuses on wholesale distribution of food and non-food products. With a market capitalization of USD 7.2 billion as of May 2015, it was ranked 1,313rd in the 2015 Forbes Global 2000 list. It currently has 27,049 employees and its revenues in 2014 stood at USD 11.96 billion.

Scana Noliko, one of Colruyt's providers of canned goods, has been importing canned asparagus from Peru since 2011. The company processes harvest-fresh vegetables and fruits. It also prepares ready-to-eat food products, such as soups, sauces, dips and pasta dishes. With a turnover of 200 million euros, Noliko is one of the top five companies in Europe in this segment.

Gandules Inc., a Peruvian agri-business company, was chosen by Colruyt as its partner in exporting asparagus. Gandules is a leading company in the farming area of Chiclayo in Peru, being widely recognized for its quality, reliability and transparency in managing the business. Employing nearly 4,000 workers in all stages of the production chain, the company produces an extensive range of products, including pigeon peas, jalapeños, sweet peppers, chili peppers, asparagus, sweet corn, beets, and pineapple which it exports to more than 40 countries.

Green asparagus chain

Peru is the second largest producer and exporter of asparagus worldwide. However, even though small-scale producers largely outnumber the few large exporting companies, they only account for 6 percent of the export value in the sector. Less than half of their produce meets the requirements of fresh asparagus exports. This meant there was a surplus value in the farmers' output waiting to be tapped.

The market for high-value products such as asparagus is incredibly ripe with opportunities. Colruyt, in particular, considered canned asparagus to be an important part of their product line.

In 2009, Colruyt partnered with Vredeseilanden (VECO), a Belgium-based non-government organization that develops sustainable agricultural chains domestically and internationally in partnership with organized farmer groups, private companies, other NGOs, research institutions and government agencies.

Colruyt and VECO embarked on a partnership that evolved from a co-financing scheme in Indonesia and Benin to a project in Peru that focused on expanding the opportunities for a group of smallholder farmers by way of linkages to the global value chain for asparagus.

REOPA (La Red de Organizaciones Productivas Agropecuarias), an association of small-scale farmers founded in 1998 in the Peruvian region of La Libertad, was picked by Colruyt as its farmer organization. REOPA's main role is to produce asparagus that meets the standards defined by its partner firms. This is highly desirable for the organization because as much as 38 percent of REOPA's production do not meet quality requirements to be exported as fresh asparagus, but are excellent for frozen and canned asparagus.

The setup was that of a multi-stakeholder project in which VECO had a facilitating role, enabling interaction among the four partners.

The cooperation between VECO, a non-government organization, and Colruyt SA, a giant retailer in Belgium, is a good example of how synergistic partnerships can help create a new, sustainable model in agriculture.

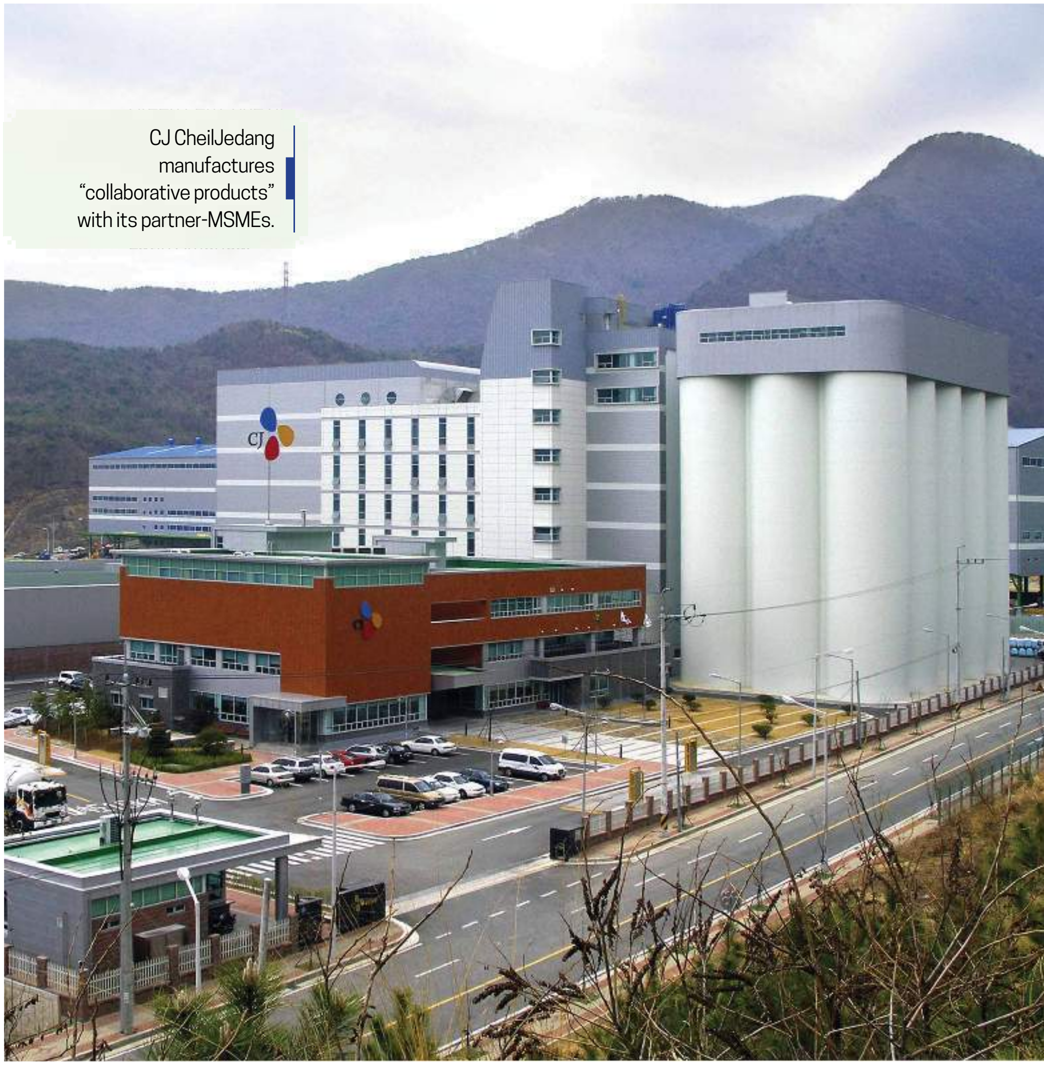
The idea started in 2009 when both agreed to develop a green asparagus chain that is sustainable in economic, social and ecologic terms. VECO and Colruyt recognized that for their initiative to succeed, they needed to identify a potential partner, namely an organized group of farmers with a reputation for scale and quality.

With that in mind, Colruyt and Scana Noliko, its business partner and importer of asparagus, flew to Peru in 2011 to assess the domestic asparagus sector. Scana Noliko easily identified Gandules, Inc. as its export partner given their existing partnership in canned bell pepper production and the Peruvian firm's wholly integrated production processes and exporting experience in more than 40 countries.

The raw produce of REOPA's farmers are processed by Gandules, before being sent to Scana Noliko for labeling. At the end of the supply chain is Colruyt, the biggest Belgian retail company.

With REOPA's canned asparagus finding its way to Colruyt, the partnership has generated a surplus value to farmer's asparagus production.

The project has achieved the successful delivery of 150,000 cans of asparagus sourced from smallholders on Colruyt's shelves. For REOPA, this meant that it was able to commercialize 21 percent of its total production to markets that are not traditionally within their reach. REOPA was also able to pay its members relatively better prices than others, who in turn invested back in the organization, with half going to members in the form of fertilizers, and the other half to the association.



CJ CheilJedang manufactures "collaborative products" with its partner-MSMEs.

CJ CheilJedang: Growing together

Based on its founding philosophy and corporate culture, CJ CheilJedang recognized the need for a win-win partnership with its suppliers and considers it a prerequisite for boosting corporate competitiveness.

The company has adopted a program called "Joy Of Growing Together" in manufacturing "collaborative products" with its partner MSMEs, mostly local traditional food companies that have preserved Korea's traditional taste. Under the program, CheilJedang uses the MSMEs' own brands, thereby enhancing the brand value of its small partners. The company's collaborative products include mustard leaf kimchi, red pepper paste, mulberry leaves tea, and makgeolli or rice wine in partnership with nine regional traditional food companies.

CheilJedang has actively pursued a "local purchase"

> CheilJedang contributes to the upgrade of both technical and managerial skills in the economies where it has subsidiaries.

policy not only to seek shared growth with partner companies but also to promote shared growth with local communities. Most of its "Joy Of Growing Together" brands are manufactured in collaboration with locally-based food companies, which in turn source raw materials from local farm houses. Its mulberry leaf tea beverage, for example, uses mulberry leaves from Naju City that are grown locally with eco-friendly farming methods, using no pesticides.

CheilJedang expanded the program in 2012 to launch the so-called "People's Food Products," which comprise 30 products in five categories of soybean sprout, noodle, kalguksu (handmade, knife-cut noodle), cellophane noodle and sweet radish pickle. With the collaboration, consumer prices of these products have gone down by 10 percent on average. CheilJedang decided to reduce, if not eliminate, its profits for these products to increase the profits for small- and medium-sized food companies.

The company also operates a Collaboration Academy to share expertise accumulated over the past six decades and to communicate with its suppliers and provide practical assistance to improve their skills. In 2012, a total of eight courses were offered and 107 employees — 43 from supplier companies — participated in the programs offered by the academy. CheilJedang also operates a department in charge of quality support for suppliers to improve their hygiene management levels.

CheilJedang provides practical assistance to its suppliers by providing financial support to partner companies to help them stay liquid. The company has created a shared growth fund worth KRW 30 billion and has lent KRW 27.17 billion to 41 suppliers at interest rates lower than market. It plans to increase the amount of the shared growth fund while shortening the duration of payment and expanding its beneficiaries.

CJ CheilJedang Corp.

CJ CheilJedang Corp. is a South Korean company with interests in food and food ingredients, biotechnology, feeds and livestock and health care. A subsidiary of the CJ Group, it was founded in 1953 and is headquartered in Seoul. It had a market capitalization of USD 3.56 billion as of May 2014.

The company manufactures sugar and café syrups, as well as Xylose and Tagatose sweeteners; flour; a variety of oils such as olive oil, grape seed oil, canola oil, and rice bran oil; and confectionery fat and fermented soybean meal for feed.

It also makes food products such as germinated brown rice, black rice, and multi-grain products, as well as instant cooked rice under the Hetbahn brand; and desserts and snacks.

CheilJedang operates 65 production bases in 13 countries and has two joint ventures and business offices in China and the United States. It also has 15 subsidiaries in China, Indonesia, the Philippines, and Vietnam — all member-economies of the Asia-Pacific Economic Cooperation.

CJ Philippines was established in 1997 with Daewoo International and a local sales company, Great Harvest Co. CJ Philippines manufactures animal feeds mainly for the local market and has an annual production output of around 150,000 tons.

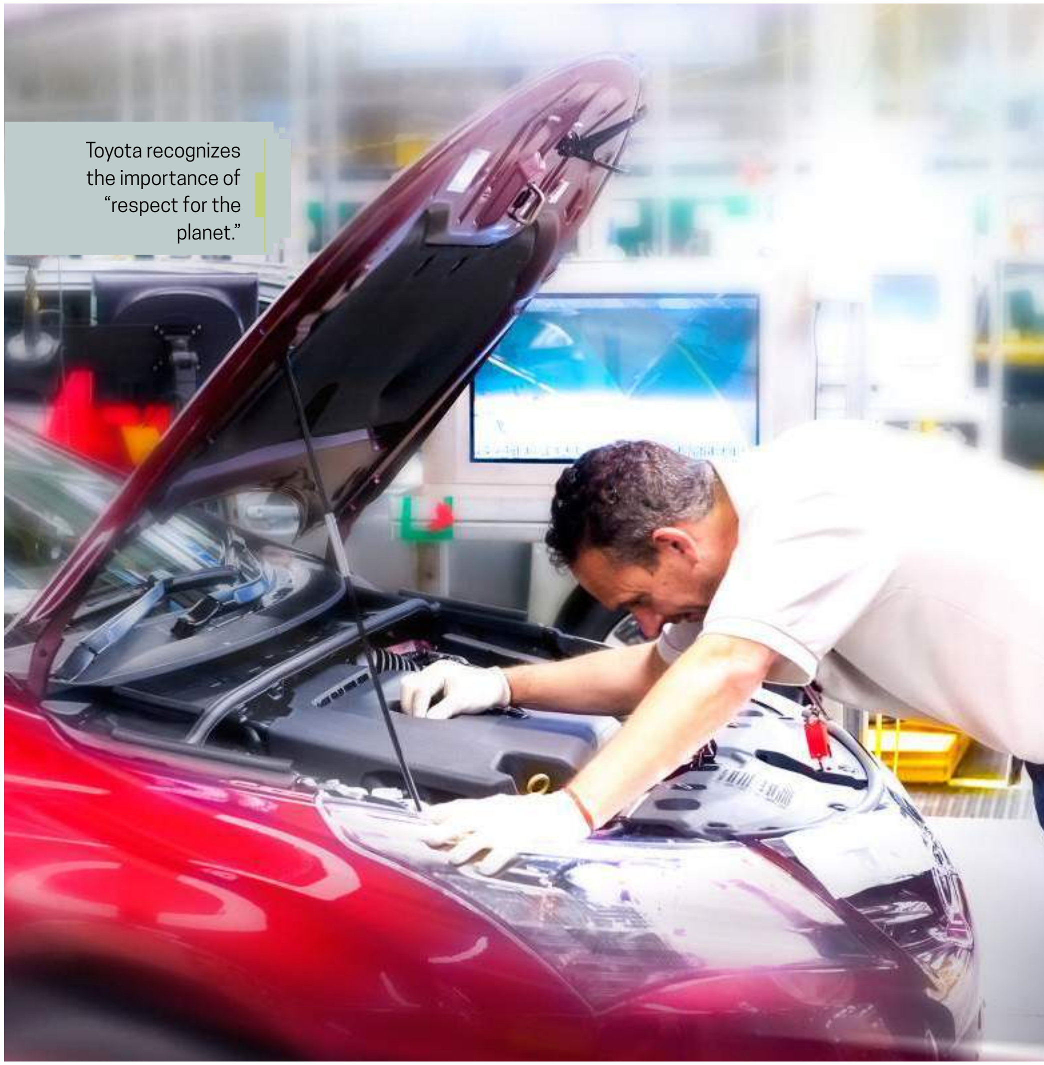
Joy of Growing Together

In an increasingly global economy where disruptions in one part of the world can have a major impact on the wellbeing of linked economies, supply chains must be strong enough to withstand normal shocks and changes. Under the Asia-Pacific Economic Cooperation (APEC) framework, they must also be able to respond to change and recover from disruptions rapidly, with surplus capacity, such as buffer stocks and emergency funds, built into the chain.

In response to this need, CheilJedang contributes to the upgrade of both technical and managerial skills in the economies where it has subsidiaries. Bioscience R&D centers in South Korea and abroad continuously apply new techniques and handle technology transfers to local plants. In the economies where it operates, CheilJedang employs locals to complement its South Korean employees, thus helping to develop the multi-cultural professional skills of its local employees.

Establishing the CJ Philippines plant in San Rafael, Bulacan entailed bringing in not only hardware such as feed production machinery, but also proprietary information in terms of product ingredient formulas, processing technology, quality management technology, and other R&D and intellectual property needed to keep the Philippine feed business on the cutting edge.

CJ Philippines also contributes to the progress of the local feed industry, especially for farmers and buyers of its feed products. It also spreads the principles of good hog raising for local livestock owners and entrepreneurs through its Philippine website, as evidenced in a seven-minute Tagalog-English video featured in its products page. This not only encourages the sales of its various products, but also educates the Philippine market on beneficial practices for raising swine, poultry and fish, which enables locals to make their businesses more profitable and successful.



Toyota recognizes the importance of "respect for the planet."

Toyota: Greening the last link

Hybrid cars such as the Toyota Prius are the most visible face to efforts by the automotive industry to reduce its environmental footprint.

But for top car manufacturer Toyota Motor Corp., green initiatives permeate the entire supply chain, starting from product design to purchasing, to the production of parts by its suppliers and their transportation to the assembly plant where vehicles are painted, assembled and inspected.

Since the start of the millennium, the company has also devoted its attention to the last stage of its supply chain—its dealers, who are the face of Toyota to its customers.

"Toyota dealers are also committed to protecting the environment," the company says

> "Green initiatives permeate Toyota's entire supply chain, starting from project design all the way to its dealers.

on its website.

As distributors of automobiles within the framework of Toyota Motor Corporation's Environmental Management, dealers are expected to use energy-efficient distribution methods that minimize energy usage, carbon emissions and transportation costs.

In 2006, the company introduced the Dealer Environmental Risk Audit Program (DERAP) to highlight five fundamental environmental requirements for the proper management of waste and treatment of waste water. In Fiscal Year 2006, audits were conducted in 30 of the 36 countries where the program had been introduced. At the time, only 19 percent met the standards in all five categories. By 2013, some 55 distributors and 3,338 dealers from 51 countries took part in the program, and 87 percent were able to satisfy all five requirements.

To bolster its efforts in this regard, Toyota introduced its Eco Dealership Outlet Program to get dealers to convert their dealership outlets into green buildings that comply with Toyota's Environment Management System.

Toyota also encouraged dealers to acquire third-party environmental accreditation.

The automotive industry has launched hybrid cars to reduce its environmental footprint.

In Japan, the Yokohama Toyopet led the way, with 80 of its dealerships obtaining ISO 140001 certification in 2007. Their pilot showroom, Shinomiya Gingaohashi Showroom, has been a model for reducing carbon emissions and energy consumption. To save on power costs, the showroom's walls and roof are covered with plants to improve air circulation inside and outside the building. The outlet also applies heat-shielding film on its glass to insulate the showroom from heat.

On its front wall, the Shinomiya Gingaohashi showroom is lined with photovoltaic panels that have been recycled from Toyota's end-of-life hybrid vehicles.

But Yokohama Toyopet is just one of the many examples of dealers that are committed to creating dealership outlets that are in line with Toyota's environmental plan of operating in harmony with the environment and the community.

Toyota's Eco Dealership Outlet Program aims to convert existing facilities into "green" buildings.

Toyota's "green" policies are implemented among its 558 affiliates around the world.

Dealers of Toyota Motor North America have also been taking part in the Eco Dealership program, starting with Pat Lobb Toyota in 2006, which became the first auto dealership to be certified by the US Green Building Council.

In Fiscal Year 2014-2015, 42 Toyota dealers had achieved LEED certification from the US Green Building Council; 53 more are targeted for certification in 2016.

The Mark Miller Toyota/Scion dealer in Salt Lake City, Utah, stands as one of the dealerships renowned for having achieved a Gold LEED certification for building renovation. Among its green features is a cistern system that collects rainwater and condensation from the air conditioning system. The water collected is used for washing cars and irrigation. In constructing the outlet, recycled materials were used for the tiles, carpets and wood panels. Recycled windshield glass were used as carpet backing.

The Eco Dealership program has made inroads in Europe as well. This is exemplified by the Toyota dealership in La Rochelle, France, which incorporated into the construction of its outlet a green roof, a cistern system to harvest rainwater and photovoltaic panels to generate electricity for emergency purposes. The 300,000 kilowatts worth of electricity produced annually from the solar panels can also be sold to La Rochelle authorities.

In Southeast Asia, the Eco Dealership Outlet Program began in Thailand in 2012. Under the program, dealers that meet specific standards such as energy, water and air quality management receive TREES (Thai Rating of Energy & Environment Sustainability) certification from the Thai Green Building Institute (TGBI).

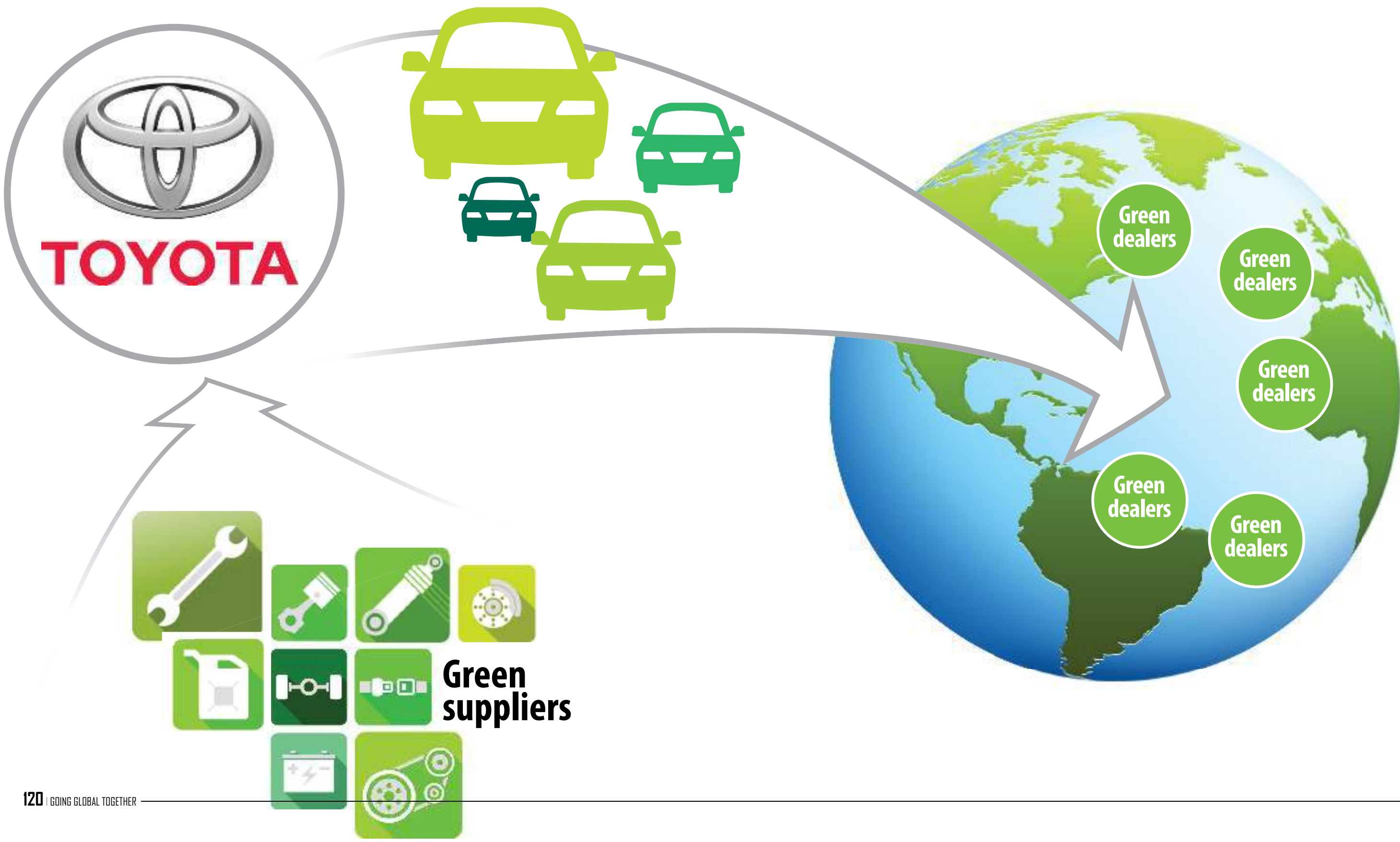
As a start, Toyota Motor Thailand and some 300 outlets converted to LED lighting for their corporate identification signs, a move that would cut energy use for those signs by 90 percent.

New dealerships would be designed from the start as TGBI-certified eco outlets that offer superior environmental performance.

The pilot Eco Dealership in Thailand not only cut power consumption, but also increased sales as customers said they were pleased with the improvements.

Toyota also benefits from the Eco Dealership program, which enhances its corporate image as a socially responsible company that champions environmentally sustainable practices, not only within the company but also extends the same to its dealer partners.

Toyota dealers use energy-efficient distribution methods.



Toyota Motor Corporation

Toyota Motor Corporation is Japan's largest automotive manufacturer and one of the world's largest makers of automobiles, with regional headquarters in North America, Europe and Asia.

With a market capitalization of USD 239 billion, Toyota Motor was No. 11 in the Forbes Global 2000 rankings for 2015. The company has 338,875 employees.

In Asia, its regional headquarters are divided into two: one in Singapore to manage regional marketing and sales support; and the other in Thailand, which is responsible for developing and manufacturing for the local market and to provide production support to Toyota's production partners in Asia, Oceania and the Middle East.

Toyota works under the principles of Jidoka, Kaizen and Just-in-Time, which allow for the reduction of inventories and defects in the plants and its suppliers. Toyota believes in the creation of relationships in which Toyota and its suppliers do business "on an equal footing based on mutual respect."

Toyota also believes that it is an imperative to work with suppliers in various economies and regions: a) to contribute to the sustainable development of society and the sustainability of the planet, b) to ensure legal compliance and respect for human rights, and c) to accomplish programs that benefit local communities and the greater global society.

Toyota's Guiding Principle, which was first established in 1992, paved the way for Toyota's philosophy and policy on the environment. The Toyota Earth Charter, established in 1992 and revised in 2000, contained Toyota's policies for environmental initiatives and is shared and implemented among the 558 Toyota affiliates around the world.

Recognizing the importance of "respect for the planet," Toyota set out in 2011 to realize a 25 percent improvement in global average fuel efficiency and to launch its enhanced line of hybrid vehicle models in 21 vehicle series by the end of 2015. Toyota is also developing a wide range of green technologies, including plug-in hybrids, electric vehicle, and fuel cell vehicles.

Eco Dealership Outlet Program

Toyota's supply chain management encompasses green concepts that affect product design, process design, purchasing and manufacturing practices. Toyota saw the need to also extend these green processes to its dealers, who play a key role in the supply chain because they are the face of Toyota to the customer.

To achieve this, Toyota has launched its Eco Dealership Outlet Program, which aims to convert existing dealerships into green buildings. The program, which has proved successful in Japan, the United States and Europe, was introduced in Southeast Asia in March 2012 in partnership with its dealers in Thailand.

Through this partnership, Toyota Motor Thailand encourages dealers to reduce energy consumption, carbon dioxide emissions, water consumption and waste.

By 2015, some 52 of 140 dealers in Thailand have enrolled in Toyota's eco-dealership program. Thirty-one (31) eco-dealerships are already operating, sixteen (16) are under construction, and five (5) are in the design phase. Some 3,000 people have visited a best-practices eco-dealership in Thailand since 2012 to learn more about green buildings.

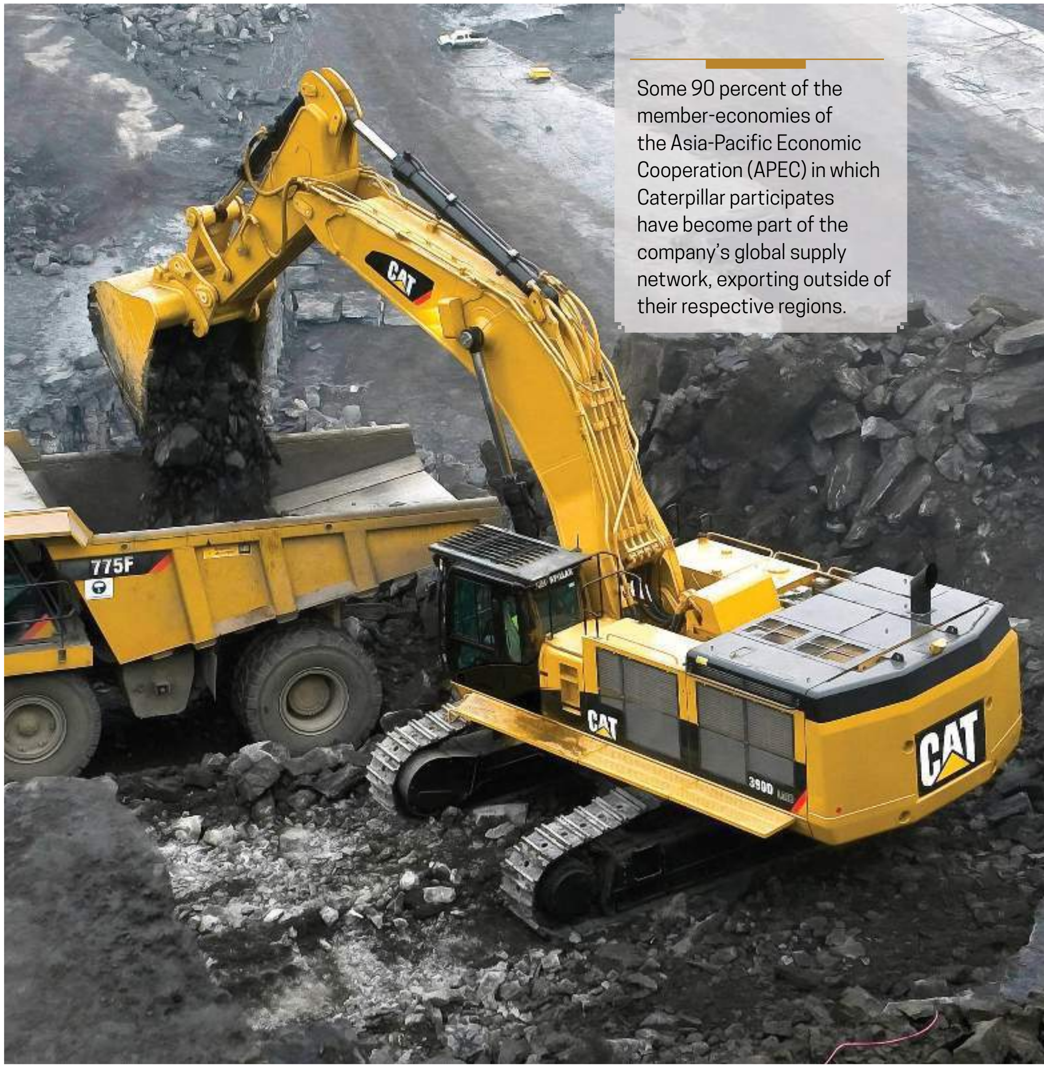
In terms of public policy, Singapore has strong government support for companies to make their buildings conform to green standards by 2030, while Thailand provides tax incentives (a 25 percent tax credit) to companies that set up green buildings.

According to a research by McGraw Hill Construction, building-related operating costs in Asia are projected to decrease by 21 percent over five years for newly constructed buildings and by 13 percent for conversion of already constructed buildings to green buildings. On average, the projected return on investment for green buildings is seven years in Asia. This is at par with the breakeven period for similar buildings in Singapore and faster than those in Europe or the United States.

As the only Toyota operation in Southeast Asia with an Eco Dealership Outlet Program, Toyota Motor Thailand can be used as a model for similar programs for the rest of the region.

From the Asia-Pacific Economic Cooperation (APEC) perspective, green initiatives in the automotive industry have focused mostly on the production side. However, the Automotive Dialogue recognizes participation of MSMEs, in this case, suppliers and dealers, in developing trade and investment in green technologies.

There is a growing trend for APEC economies to develop their green building codes with strong commonalities in their target areas. APEC member-economies have developed greener building codes that fit their respective economy's regulations and policies. As such, lessons can be drawn from Toyota's Eco Dealership Outlet Program, not only in Thailand, but also in Japan, the United States and Europe.



Some 90 percent of the member-economies of the Asia-Pacific Economic Cooperation (APEC) in which Caterpillar participates have become part of the company's global supply network, exporting outside of their respective regions.

Caterpillar: Reaching out

In 2015, Caterpillar was named on DiversityInc's Top 25 Noteworthy Companies for Diversity. The survey covers over 1,600 companies and criteria include talent management, senior leadership commitment, and supplier diversity.

When Caterpillar was named to the Top 25 list in 2014, Latasha Gillespie, the company's global diversity and inclusion director, said: "The diversity of our people and inclusiveness of our environment is what makes Caterpillar unique and helps us to be the recognized leader in our services and industries around the world."

Caterpillar's supplier diversity program aims to spur economic growth by increasing business opportunities to minority-owned, veteran-, and service-disabled owned, and small disadvantaged businesses while ensuring all the company's expectations are met.

> **"Developing an integrated supplier network which mirrors the breadth and diversity of Caterpillar's customers makes solid business sense.**
> **- Frank Crespo, Caterpillar vice president and chief procurement officer**

Caterpillar believes that to remain world class in a diverse world, its diverse suppliers must, in turn, be world class.

Finding micro, small and medium enterprises (MSMEs) that can meet requirements and requisite capacity is often a challenge for large enterprises. Caterpillar addresses this by leveraging market intelligence tools and other supplier development councils. But Caterpillar's commitment does not stop there.

"For Caterpillar, we are equally interested in our suppliers' growth and development for their own sustainability," explains Charly Ugorji, Caterpillar's small business and supplier diversity manager.

Caterpillar is also committed to helping suppliers through collaborative efforts and through supplier improvement and education programs. The Caterpillar Production System for Suppliers (CPS4S) seeks to empower suppliers worldwide using a collaborative "boots on the ground" 100-day transformation methodology. Mentors, called CPS Black Belts, ensure that suppliers identify and eliminate wastes in an "end-to-end" environment.

"We have one of our Black Belts spend 100 days with the selected supplier, immersed in their daily operations, working right beside a designated project lead and the company leadership as we teach them how to implement lean manufacturing, so that moving forward, they don't just sustain results – they live it," said Scott Koziniski, a CPS Master Black Belt.

Koziniski cited as example a supplier in Indonesia that was able to reduce a welding operation from 23 minutes a unit to 8 minutes a unit and a supplier in Thailand that attained a zero parts per million defect rate for manufacturing cylinders from 33,000 parts per million after undergoing the 100-day transformation.

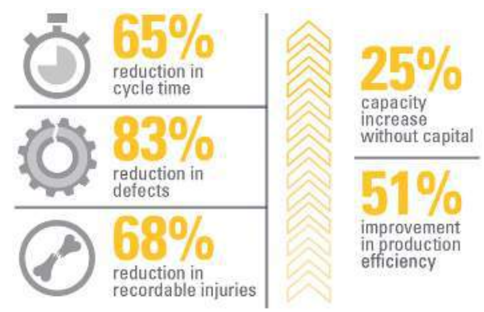
At its Akashi plant in Japan, the company partnered with Suitousha, which supplies Caterpillar facilities worldwide with a number of critical products, including high-pressure tubing, thin wall pipe, vent pipes, and low pressure tubing. When Suitousha was in the process of expanding its business in China, Caterpillar helped the company navigate complex business legalities.

Caterpillar also runs a Supplier Development College, which offers both free and fee-based courses for suppliers, including face-to-face and online programs. Suppliers are also trained to teach what they have learned to their colleagues. As of 2015, SDC has trained almost 4,000 employees from 1,800 companies in 48 countries.

Building and maintaining a community of diverse suppliers has increased Caterpillar's opportunity to hear new ideas, apply different approaches, and gain access to additional solutions that respond to customer needs. Such collaboration helped Caterpillar deliver innovation, quality products, and world-class equipment to a growing global marketplace.

In 2015, some 90 percent of the member-economies of the

Suppliers Engaged with CPS4S in APEC



Asia-Pacific Economic Cooperation (APEC) in which Caterpillar participates have become part of the company's global supply network, exporting outside of their respective regions.

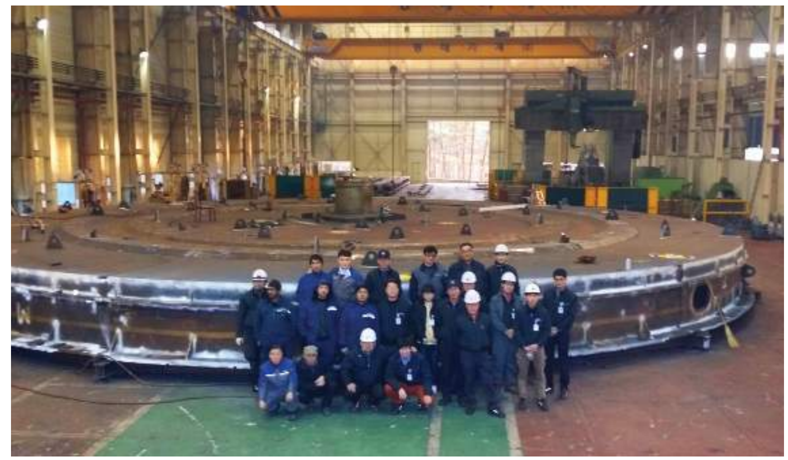
Frank Li, Caterpillar's Asia-Pacific fabrications and non-metallics purchasing manager said the best part of his job is seeing his small-sized suppliers grow into leaders in the region.

"In working with our supplier network, I see them grow every day. Caterpillar and the local community both benefit from our suppliers' success," Li said.

"We have maintained stability in our supply chain because right from the beginning of our relationship, we teach our suppliers to plan ahead

Caterpillar's world class Weld "Train the Trainer" program empowers its suppliers

Caterpillar's SDC offers on demand courses for suppliers

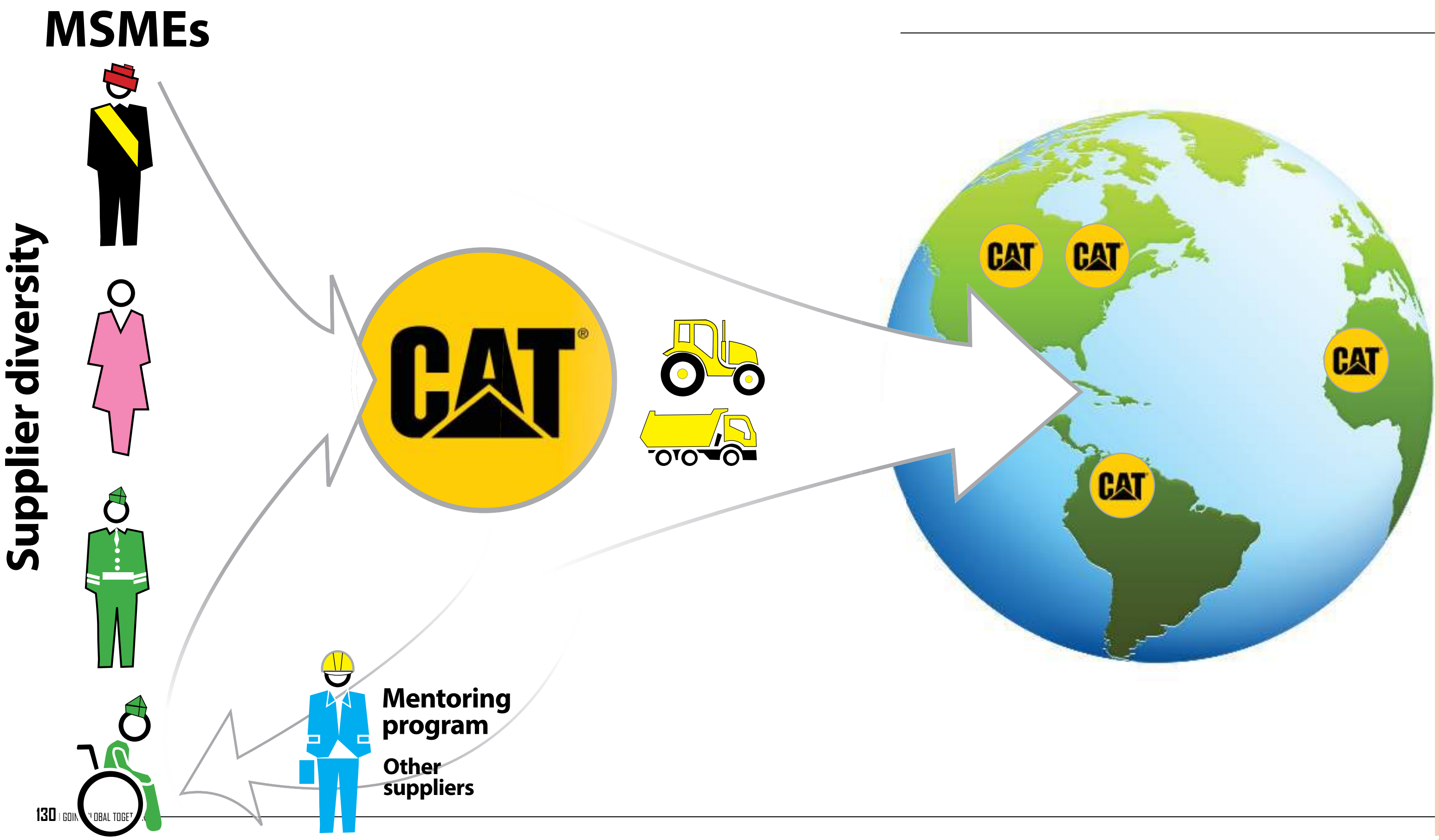


Partnership on a Dragline Development

for the long-term. They have learned from experience that they and their communities have room to grow with Caterpillar," he added.

"Our Supplier Diversity initiative is not just here to be part of an industry trend. It is becoming a part of our enterprise's DNA," said Ugorji.

"Our Supplier Diversity initiative is not just here to be part of an industry trend. It is becoming a part of our enterprise's DNA. - Charly Ugorji, Caterpillar Small Business and Supplier Diversity manager



Caterpillar Inc.

Caterpillar is the world's leading manufacturer of construction and mining equipment, diesel and natural gas engines, industrial gas turbines and diesel-electric locomotives. With a market capitalization of USD 49.4 billion as of May 2015, Caterpillar was ranked 136th in the 2015 Forbes Global 2000 list of the world's biggest public companies. In 2014, the company posted a net income of USD 3.7 billion on sales of USD 55.2 billion. In the same year, it had USD 84.7 billion in assets and 114,233 employees.

Caterpillar Inc. traces its origins to the 1925 merger of the Holt Manufacturing Company and the C. L. Best Tractor Company, creating a new entity, the Caterpillar Tractor Company. In 1986, the company reorganized itself as a Delaware corporation under the current name, Caterpillar Inc., with headquarters in Peoria, Illinois, United States.

Caterpillar serves customers in more than 180 countries with more than 300 products. More than half of the company's sales are outside the United States. Caterpillar's manufacturing, marketing, logistics, service, R&D and related facilities and its dealer locations total more than 500 locations worldwide, ensuring that it remains geographically close to its global customer base.

Supplier Diversity Program

Caterpillar has long worked on the assumption that its business success is tied to the quality and diversity of its suppliers and has initiated programs to help them develop their businesses.

Its Supplier Diversity program, in particular, spurs economic growth by increasing opportunities to minority-owned, women-owned, veteran-and service-disabled owned, and small disadvantaged businesses while ensuring Caterpillar's expectations are met with regard to quality, velocity, capacity and cost.

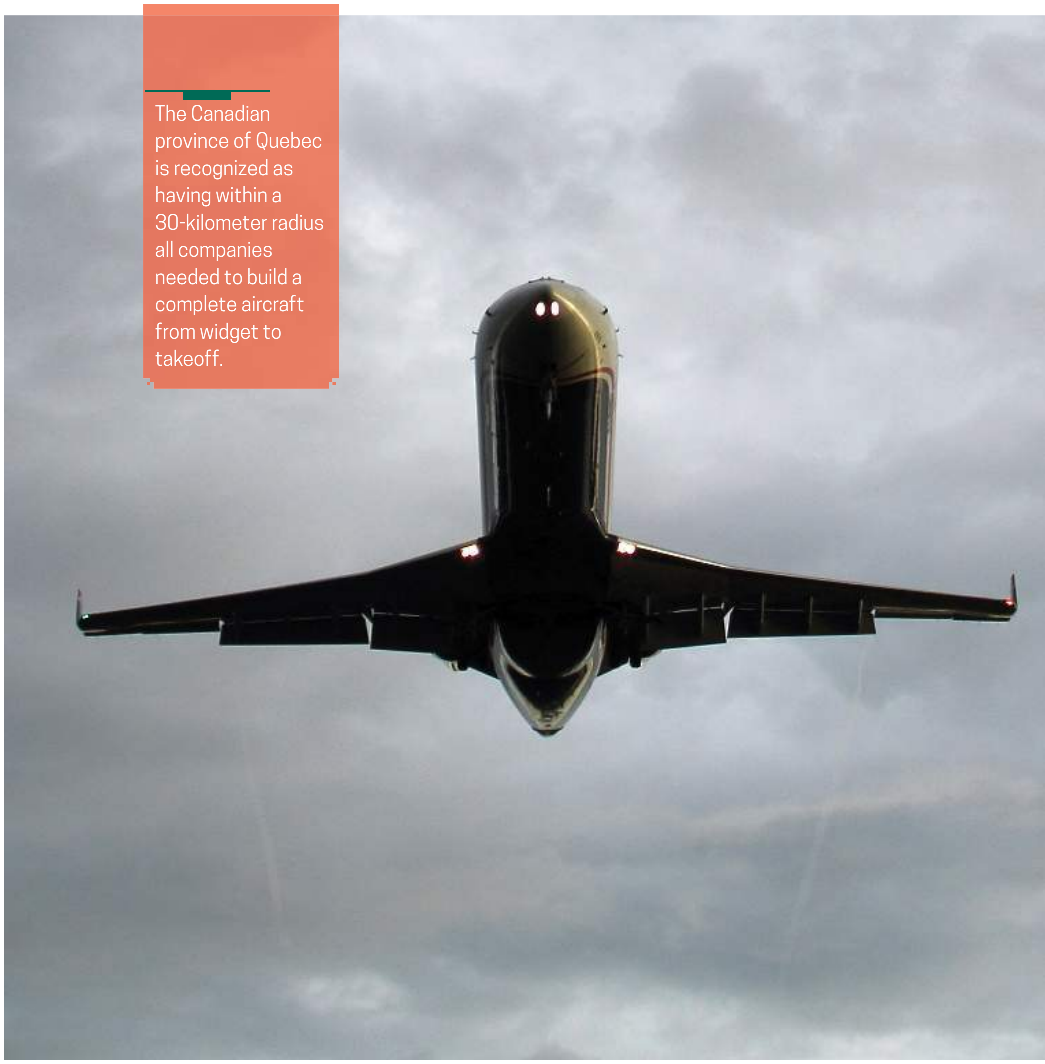
"We cannot be an effective global leader without diversity throughout the enterprise…It's more than social responsibility. Developing an integrated supplier network which mirrors the breadth and diversity of Caterpillar's customers just makes solid business sense," said Frank Crespo, Caterpillar vice president and chief procurement officer.

The company runs a Supplier Development College offering free and fee-based courses, including a "train the trainer" program to ensure that suppliers who enroll are able to cascade their knowledge to their co-workers. The Caterpillar Production System for Suppliers (CPS4S) is a 100-day transformation training aimed at helping suppliers adopt lean manufacturing processes to eliminate wastage in their operations.

The foundation of Caterpillar's global expansion strategy is the philosophy that emerging markets possess the necessary components to expand the company's supply base, and that the inclusion of micro, small, and medium enterprises (MSMEs) is crucial in meeting customer expectations.

In its 2011 High Level Policy Dialogue on Women and the Economy, APEC ministers observed that a lack of access to markets impedes the growth of women-owned businesses and restricts the number of jobs created.

One way to expand the markets for these businesses is to promote greater opportunities to obtain government and corporate contracts through supplier diversity initiatives, the APEC declaration said.



The Canadian province of Quebec is recognized as having within a 30-kilometer radius all companies needed to build a complete aircraft from widget to takeoff.

Aero Montreal: Clustering for competitiveness

Techniprodec, a Quebec-based manufacturer of landing gear parts and other small assemblies for helicopters, began as a small machine shop some 40 years ago. The company gained entry into the aerospace industry in the year 2000, and in 2009, dropped its molding operations to concentrate on its aviation parts business.

Over the last five years, Techniprodec's business grew by more than 15 percent annually, and in 2014, it moved to a new 25,000-square foot plant to double its capacity.

"Prior to the move, our manufacturing and assembly operations were disjointed; today we have the advantage of having everything under one roof. Additionally, as part of the upgrade, we purchased two new 5-axis machines, new lathes, and implemented vast improvements to our assembly area," said Sebastien Farkas, vice president of operations and Techniprodec in

"Aero Montreal established the MACH Initiative in 2011 to strengthen MSME links in the industry's supply chain.

The MACH program helps create a more robust and consolidated aerospace supply chain.

an interview with Global Business Reports.

Coinciding with this growth, Techniprodec became part of Aero Montreal's MACH Initiative, which was launched in 2011 to strengthen the competitiveness and integration of some 70 Quebec-based MSME aerospace suppliers into the global value chain.

"Initially, MACH was designed to replace the industry's fragmented system in which each Original Equipment Manufacturer (OEM) had its own unique accreditation process," Farkas said.

"The MACH initiative sought to consolidate the standards of the OEMs' pre-existing programs, thereby creating a uniform way of evaluating companies' supply chains. This also had the added benefit of creating a benchmark system within the industry. Techniprodec began as a MACH-2 company and has since earned MACH-3 status. When a company has matured and achieved higher levels of accreditation, it may be asked to sponsor another smaller company within the program. Overall, for Quebec in general, the MACH program helps create a more robust and consolidated aerospace supply chain."

Quebec, a province of Canada, is recognized as having within a 30-kilometer radius all the companies necessary to build a complete aircraft from widget to takeoff. The comprehensive suite of services and products and a track record of on-time and high quality production established Montreal—the largest city in Quebec—as one of the three leading global aerospace clusters.

But Canada's longstanding position as a center of global aerospace production has come under pressure in the last decade from new low-cost players from developing economies and rapid advances in technology. Infrastructure and expertise that once gave Canadian suppliers an edge were no longer as relevant and might even be seen as a disadvantage. For example, Canada's expertise in aluminum processing seemed less relevant with the shift toward lighter weight materials such as composites, titanium and plastics.

To address this problem, Aero Montreal, through its Supply Chain Development working group, created the MACH Initiative to strengthen the competitiveness of 70 Quebec-based MSMEs and ensure their integration

into the global value chain over the course of five years.

The program uses two tools to encourage MSME suppliers to strive for performance excellence: 1) the MACH Excellence Framework, which helps MSMEs assess their strengths and weaknesses, and 2) the creation of one-

on-one mentoring relationships between an OEM or Tier 1 contractor and its MSME supplier.

MSMEs in the program are assigned a MACH level from 1 (learning excellence) to 5 (enforcing excellence), with MACH 5 being the highest level of excellence.

The same scale is used to assess the companies on three key areas or levers—leadership, workforce planning, and operations.

Participating MSMEs are paired with mentors or sponsors based on the current and future strength of their business relationship. With the help of a consultant, STIQ, an initial audit is performed at the beginning of the MSME's first 12- to 14-month program cycle to identify performance gaps and assign an initial MACH score. An improvement plan is then developed and is executed through projects and training programs carried out by the MSME, its sponsor, and Aero Montreal. At the end of the cycle, the MSME is audited a second time and assigned a new MACH Level certification. By the end of the first MACH Initiative scheduled in 2016, the first group of MSME participants will have had the benefit of a five-year relationship with their mentors.

Since 2011, participating suppliers have completed 243 projects.

So far, three groups have gone through initial audits, and some have gone through subsequent audits, depending on the year they joined the program. The first batch, a group of 20 MSMEs, joined the program in July 2011 and has been through three cycles of assessment. The average score during this time rose from MACH 2 (committing to excellence) to MACH 3 (implementing excellence).

The second batch of 10 suppliers who joined in October 2012 received their second audit and also raised their mean group score from MACH 2 to MACH 3.

The third batch that joined in October 2013 had an initial group mean score of MACH 2.

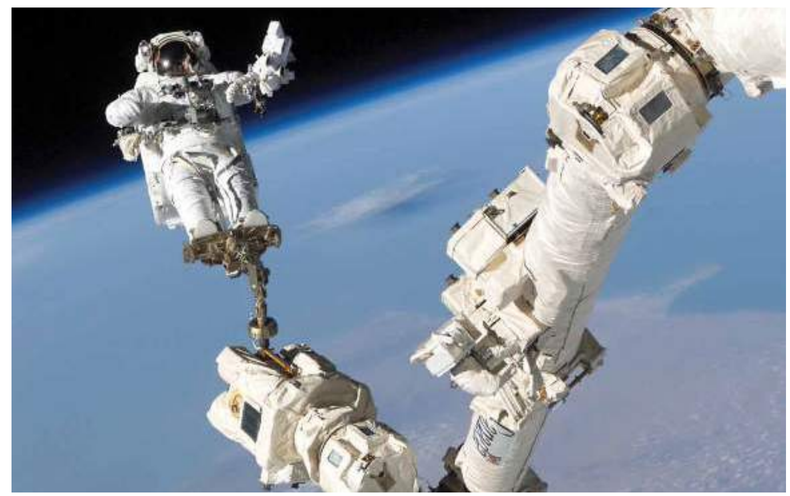
Collectively these 40 participating MSMEs hold the following distribution of MACH Levels: MACH 1 (3 MSMEs), MACH 2 (14 MSMEs), MACH 3 (20 MSMEs), and MACH 4 (3 MSMEs). No supplier has yet reached MACH 5.

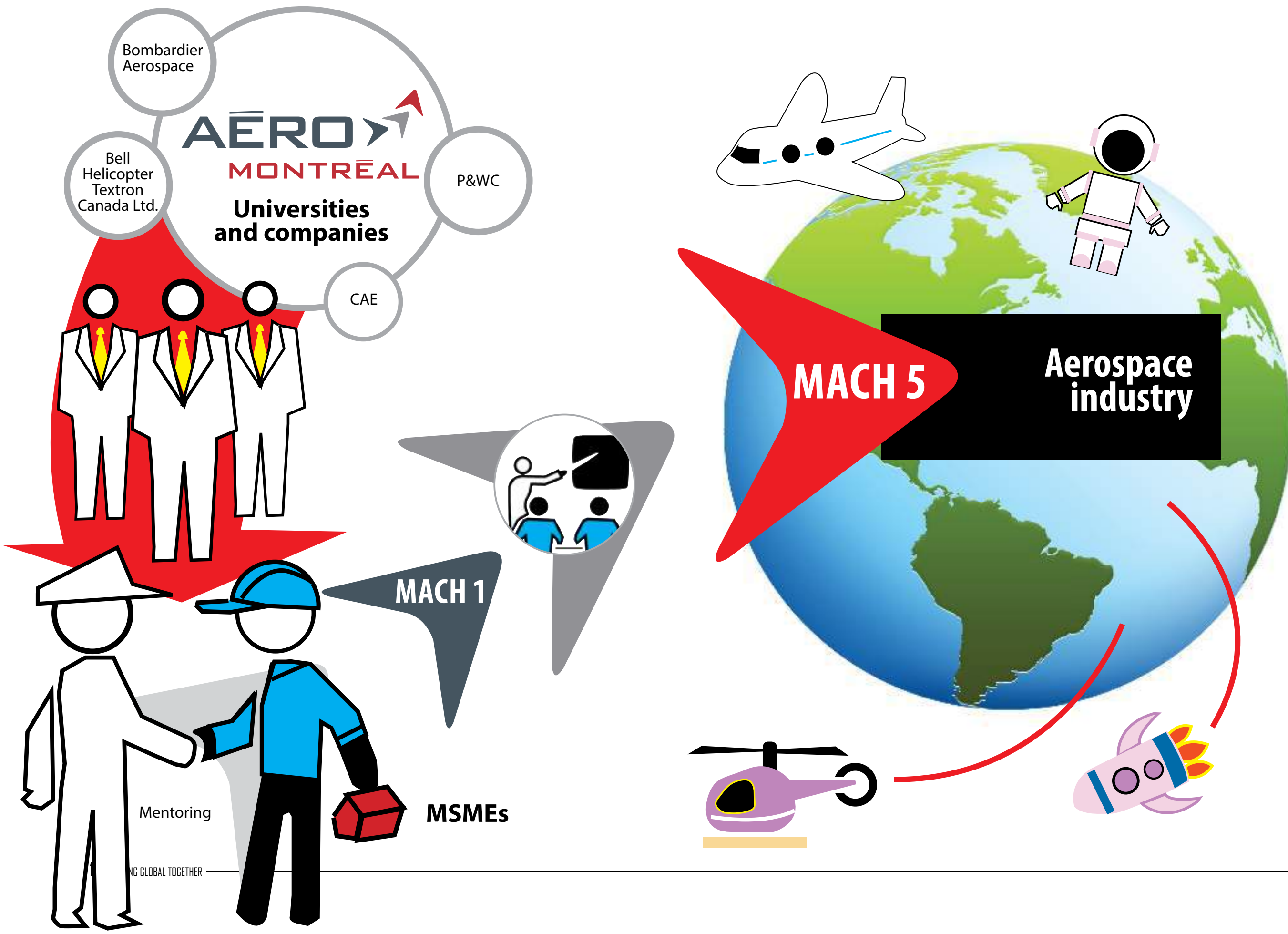
Of the 29 MSMEs that have been audited at least a second time, 62 percent experienced an increase in their MACH scores. Among companies that have been audited a third time, 74 percent saw an increase in their MACH scores.

Three of the participating suppliers went on to become sponsors themselves to work with other MSMEs, while maintaining their relationship with their original mentors.

Because of the promising results, the MACH Initiative has moved beyond Quebec, with a pilot test in Wallonia, Belgium, launched in 2014.

In 2015, the Canadian federal government announced it was allocating CAD 6 million to implement a national aerospace supplier initiative, thereby extending the MACH Initiative benefits to other parts of Canada.





Aero Montreal

Aero Montreal is an industry cluster established in 2006 to boost the productivity and growth of Québec's aerospace sector. It is composed of aerospace companies of all sizes, universities, unions and four of Quebec's biggest original equipment manufacturers:

Bombardier Aerospace, the world's third largest civil aircraft manufacturer. Bombardier is a leading designer and manufacturer of aviation products for the business, commercial, amphibious and specialized aircraft markets. The world's only manufacturer of both planes and trains, Bombardier is present in more than 60 countries, with 70,000 employees working in 76 production and engineering facilities. Over 15,000 of its employees are located in its Greater Montreal facilities. In 2014, it posted a net income of CAD 1.3 billion from sales of CAD 20.1 billion. With assets of CAD 27.6 billion, it had a market value of CAD 4.6 billion.

Pratt & Whitney Canada (P&WC), which develops and manufactures engines and offers support services to over 10,000 clients around the globe. The company has 9,000 employees, nearly 5,000 of whom are in the Greater Montréal area. A subsidiary of United Technologies Corp., a high- technology company based in Hartford, Connecticut, P&WC produces new generation engines for a vast array of helicopters and regional and business aircraft. Nearly 50,000 such engines are currently in service. In 2014, Pratt & Whitney, of which P&WC is a division, earned an operating profit of CAD 2 billion on net sales of CAD 14.5 billion.

Bell Helicopter Textron Canada Ltd. a division of Bell Helicopter Textron Inc., whose head office is in Fort Worth, Texas. Bell Helicopter is a world leader in the manufacture of commercial and military helicopters. Considered among the Canadian aerospace industry's flagship companies, it represents one of the great industrial success stories of Montréal's North Shore. Inaugurated in 1986, the 656,000-square foot Mirabel plant employs over 2,000 workers and has the exclusive mandate for the production of Bell Helicopter's commercial aircraft. It also provides complete flight test, certification and support services. To date, over 4,000 helicopters have been built at this facility. Bell Helicopter's parent company Textron reported profits of CAD 1.214 billion on net sales of CAD 13.878 billion in 2014.

CAE, a global leader in modelling, simulation and training for civil aviation and defense. Since its inception in 1947, it has sold more than 1,300 civil and military simulators around the world. Serving some 130 aviation companies and clients in 150 countries, the company employs more than 7,500 workers (3,500 in Montréal) at more than 100 sites and training locations in over 25 countries. For 2014, CAE posted a profit of CAD 191 million on revenues of CAD 2.11 billion

When it was first established, Aero Montreal recognized five major issues facing the industry and addressed each with a strategic working group. These were: Branding and Promotion; Innovation; Supply Chain Development; Human Resources; and National Security and Defense. A sixth working group, Market Development-SME, was added in 2012 to ensure a greater presence of MSMEs from Québec's aerospace sector at the national and international level.

MACH Initiative

Launched by Aero Montreal in 2011 with public and private funding, the MACH Initiative is designed to optimize the performance of MSME suppliers in Québec's aerospace supply chain and thereby increase their global competitiveness in the face of growing competition from other economies.

Measures deployed as part of the MACH Initiative allow suppliers to evaluate their situation, identify opportunities for improvement, and take appropriate action. It focuses on three main priorities aimed at improving supplier competitiveness: excellence in leadership, excellence in operations, and excellence in planning and human resource development. Excellence is measured on a scale of Mach 1 to Mach 5 allowing for an assessment of a supplier's mastery of 15 business processes and the awarding of a certificate of performance.

Through the program, MSME suppliers are paired with an OEM or Tier 1 supplier, which becomes its mentor throughout the process.

Within the framework of the Asia-Pacific Economic Cooperation (APEC), the MACH Initiative responds to the 2014 Nanjing Declaration on promoting MSME development through training and certification programs, mentoring and improving their awareness of standards as they move up the innovation value chain.

With strong partnerships between borrower and lender, and the principle of risk sharing, Islamic banking has been able to fare well during periods of crises.

Maybank Islamic: Banking on faith

The Islamic finance industry has proven its stability as a significant component of the global economy and is expected to grow further in response to the maturation of developing countries with large Muslim populations that are not as yet served by banks, especially among APEC economies.

The halal food industry, for example, is experiencing dramatic growth with reported global Muslim expenditures expected to reach USD 2.5 trillion in 2019. As it stands, select Muslim enterprises have excluded themselves from conventional financing for religious reasons. This creates an opportunity for Islamic banking to help connect micro, small, and medium enterprises (MSMEs) to enter the global value chain through innovative financing means such as micro-credit.

“The Islamic finance industry is expected to grow further in response to the needs of large Muslim populations that are not as yet served by traditional banks, especially among APEC economies.

Maybank Islamic CEO Dato' Muzaffar Hisham (right) with the Prime Minister of Malaysia (second from left) at the World Islamic Economic Forum in Dubai, UAE in October 2014.

Financing from Sharia-compliant services, including those offered by Maybank Islamic Bhd, offers a way to bridge the gap between the MSMEs and the global value chain.

"Islamic finance, by itself, is innovative. The type of product and services, the value that Islamic finance is able to put forward, now that in itself is innovation, or else we would not have been able to contribute to that growth, contribute to the profitability and contribute to the values that we put and that we cherish not only to our shareholders, but to our customers as well," said Maybank Islamic chief executive officer Muzzafar Hisham during the 10th World Islamic Economic Forum in 2014.

In a separate interview in March 2015 with The Star, Muzzafar underscored the need to help MSMEs in terms of access to financing.

"The importance of MSMEs in local communities and their economic contribution to the country cannot be underestimated. Their ability to succeed and grow underpins the future potential for jobs, growth and prosperity," Muzzafar said.

Maybank has provided MSME financing through partnerships with the Credit Guarantee Corporation and Bumiputera Agenda Steering Unit (Teraju). It also developed unique e-commerce tools designed specifically for MSMEs such as myTrade2Cash and mPOS, which allow entrepreneurs to apply for financing schemes online and make card payments through their smartphones.

Maybank Islamic CEO Dato' Muzaffar Hisham speaking at the 9th World Islamic Economic Forum in London.

MIB is only one of many organizations seeking to provide alternative financial services for those seeking to do business in compliance with Islamic principles.

Petronas Twin Towers

Similar to MIB, Takaful Brunei — the top Islamic insurance company in Bandar Seri Begawan — has also been working to increase its market reach in the corporate sector, particularly MSMEs and large enterprises. Takaful is the Islamic alternative to conventional insurance and is based on the ideals of social solidarity, cooperation and joint indemnification of losses. It takes on a participatory form of insurance and reinsurance based on risk sharing by customers rather than a risk transfer model to a third party such as the company.

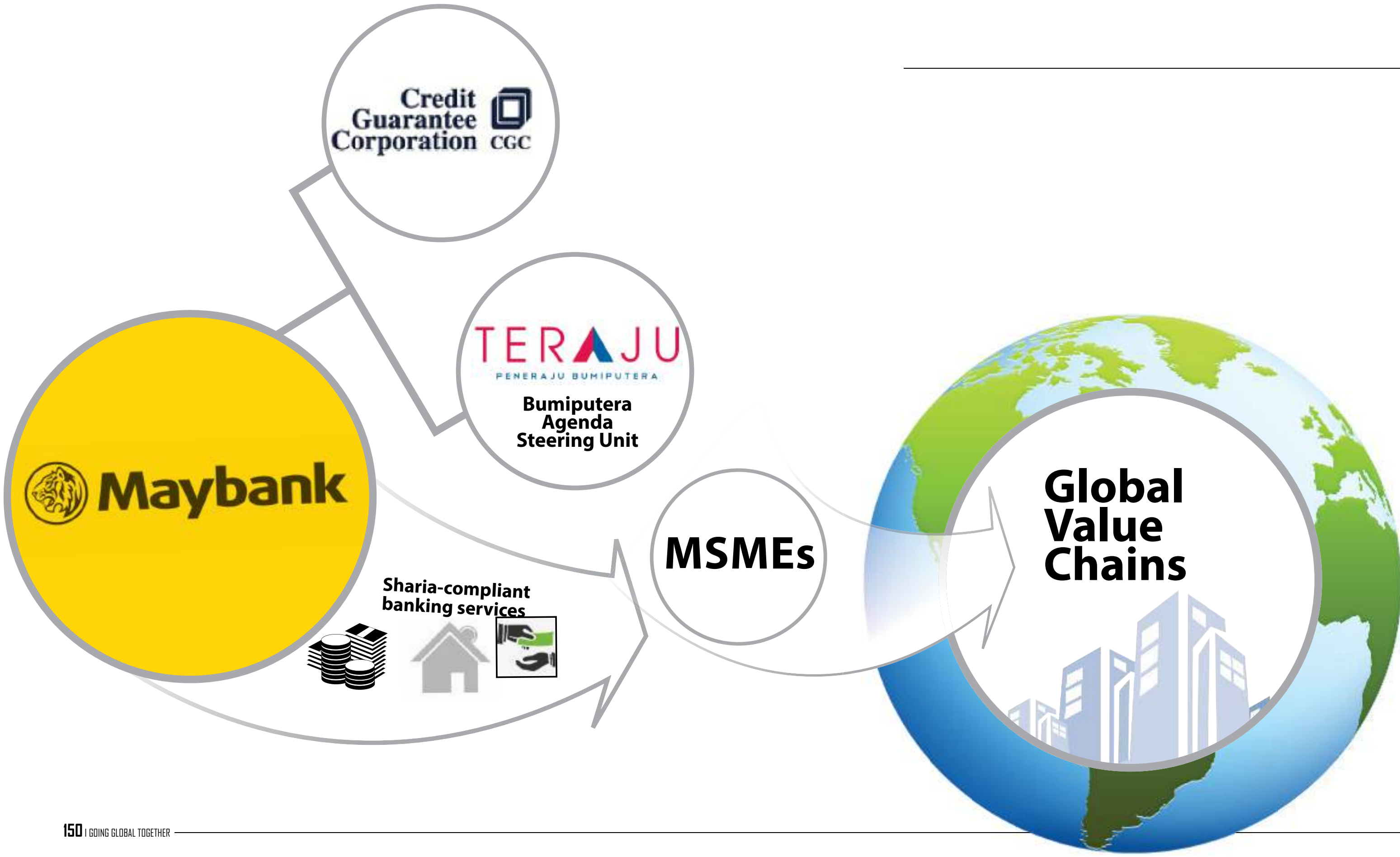
In the Philippines, Lending A Ranao was established in Marawi City. The name of the pawnshop was formulated from the concept of defense and protection — lending as an English term means giving a hand while the Maranaw term linding means to protect. As an Islamic pawnshop, it protects and defends the people of Lanao from the harm of riba (interest) which is considered to be against Sharia. Specifically, the purpose of the pawnshop is to provide credit within Islamic principles to poor and needy Muslims. It is limited only to payment of tuition, madrasah expenses, the purchase of medicines, and hospitalization.

With strong partnerships between borrower and lender, and the principle of risk sharing, Islamic banking has also been able to fare well during periods of crises. In the aftermath of the global financial crisis in 2007, for example, studies concluded Islamic banks exhibited greater resilience during the crisis.

Looking toward the future, member-economies of APEC could consider encouraging not only Islamic banking for the inclusion of those who seek Sharia-compliance, but also to encourage financial institutions to consider adopting the principles of financial inclusion.

Islamic financial institutions are socially obliged to invest with the purpose of empowering communities from a micro-scale all the way to big enterprises. More importantly, risk sharing is present across all operations in the belief that if the business community thrives, so will the other stakeholders.

“Financing from Sharia-compliant services, including those offered by Maybank Islamic Bhd, offers a way to bridge the gap between the MSMEs and the global value chain.



Maybank Islamic Bhd

Maybank Islamic Bhd (MIB) is a wholly-owned licensed Islamic bank under the Maybank Group and is one of the leaders in Islamic banking in the Association of Southeast Asian Nations.

It is the fourth biggest bank in ASEAN in terms of assets, which stood at USD 183 billion in 2014.

Maybank also landed in the 371st spot in the 2015 Forbes' latest annual Global 2000 ranking of the world's biggest public companies.

It is the largest public listed company on Bursa Malaysia, the Malaysian stock exchange, with a market capitalization of USD 24.4 billion as of 2014.

As the third largest Islamic bank in the world, MIB offers Sharia-compliant services in Malaysia, Singapore, Indonesia and Hong Kong.

Over the last decade, it has also been in the top three global arrangers for the sukuk market, or the Islamic bond market.

"The group's aspiration is humanizing financial services. Islamic finance plays a pivotal role in ensuring that the group realizes this theme. It's not just an up-in-the-air type of effect. It is walking the talk," said Nor Sharizan Sulaiman, deputy chief executive officer of MIB.

MIB's parent company — Malayan Banking Bhd or Maybank — has been ranked as among the world's top 20 strongest banks in 2014 by Bloomberg Markets.

Incorporated in 1960, Maybank boasts of an international reputation spanning 20 countries, 11 of which are member-economies of the Asia-Pacific Economic Cooperation.

Islamic principles in finance

Muslims seeking to bank in obedience to Islamic principles have no access to funding from conventional financial institutions. This deprives Muslim micro, small and medium enterprises (MSMEs) the funding help to grow that other similar companies might get from commercial banks.

Maybank Islamic Bhd has taken a unique approach to humanizing financial service since its inception in 2008 — that of highlighting the value chain.

It has personified inclusive growth through an assorted spectrum of Sharia-compliant mechanisms in such areas as micro-finance, financing packaged for MSMEs, and trade finance.

Specifically, Islamic banking focuses on the principle of financial inclusion while abstaining from riba (interest), gharar (risky investments), and financing of prohibited goods or services considered harmful to society. For Maybank, this means little to no collateral requirements, flexible payment schedules, and ease of access in the form of hard and soft infrastructure.

In addition, Islamic finance acts as the only channel for Muslims seeking to bank in obedience to Islam principles. Leveraging the large population of Muslims not using Islamic banking globally, Islamic finance has potential to see massive growth in the future, with global Islamic financial assets at USD 2 trillion.

Maybank Islamic, in particular, has harmonized its activities under three focus areas: empowering businesses to grow, creation of wealth for the individuals, and responsible contributions toward the development of the community.

When it was established, MIB also provided USD 231 million for a loan guarantee scheme that benefited 2133 entrepreneurs, 31 percent of whom practice Islamic banking. The MSME loan portfolio now stands at more than USD 800 million.

Maybank's experience has shown that risk-sharing and equity partnerships are fruitful solutions that can empower MSMEs. MSMEs and entrepreneurs have been able to expand their businesses better, not only in their communities, but also regionally and globally because of MIB's inclusive framework. This, in turn, has assured the bank's success.

INTERNATIONAL MARKETS

Bahrain	1 branch
Brunei	2 branches
Cambodia	Maybank (Cambodia) Plc: 21 branches
China	3 branches
Hong Kong	1 branch; 2 branches via Maybank Kim Eng
India	1 branch via Maybank Kim Eng; 1 branch in Mumbai via BII
Laos	1 branch
London	1 branch; 1 branch via Maybank Kim Eng
Labuan	Maybank International (L) Ltd: 1 branch
Myanmar	1 representative office
New York	1 branch; 1 branch via Maybank Kim Eng
Pakistan	1,242 branches via 20% owned MCB Bank; 4 branches via 32.5% owned Pak-Kuwait Takaful Company
Papua New Guinea	Maybank (PNG) Ltd: 2 branches
Philippines	Maybank Philippines Inc.: 79 branches; 3 branches via Maybank Kim Eng
Saudi Arabia	1 office via Anfaal Capital
Thailand	51 branches via Maybank Kim Eng
Uzbekistan	1 office via 35% owned Uzbek Leasing International
Vietnam	2 branches, 8 branches via Maybank Kim Eng; 145 branches via 20% owned An Binh Bank

Table from Maybank company website

Kickstart aims to give emerging companies involved in digital technology access to funding , resources, and networks needed to scale up their businesses.

Kickstart Ventures: Corporate hack

"We want people who make a difference."

These were the words that Pia Angeli Bernal, social enterprise investments manager at Kickstart Ventures, used to explain why her company invested in a vocational training center in Bago City in Negros Occidental in 2013.

In 2008, co-founders Ellwyn Tan and Ivan Lau led volunteer projects in Bago City while still college students at the National University of Singapore (NUS). Co-founder Zhihan Lee led projects in Laos. Exploring poverty first hand in Southeast Asia, they realized that many solutions to poverty were too slow to take effect or were simply unsustainable.

"

Kickstart, at its heart, is a corporate hack: a way of breaking through protocol and bureaucracy.
— Minette Navarette, Kickstart Ventures president

In 2010, after Lee returned from a study trip in rural India where a social enterprise trained illiterate youths to be data-entry workers, the three decided to pilot a model in Bago City in 2011.

"These young guys went to Bago City and founded a company that trains rural out-of-school youth to prepare them for jobs and the students are hired in two weeks. That makes a real difference," Bernal told the SunStar Bacolod. "Of course we want the big financial success stories but we also want stories of those who are making a real difference in people's lives."

BagoSphere provides skills-training to disadvantaged youth so that they can work in the call center industry, where demand for new workers is high. Students enrol on a "Study Now, Pay Later" scheme in which they can pay their tuition in affordable monthly installments after they are employed.

Globe Telecom chairman Jaime Zobel de Ayala

In its pilot phase, BagoSphere was supported by NUS and later signed up for seed investments from xchange, a social enterprise incubator in the Philippines; Kickstart Ventures; and Small World Group, an incubator in Singapore. As part of its corporate social responsibility commitments, Globe Telecom provided the training center with free Internet and mobile phone services for a year.

In 2015, BagoSphere expanded its operations with a branch in Bacolod City and planned to open a third branch in Quezon City.

"When we first started BagoSphere, we wanted to create an affordable solution to tackle youth unemployment. In the last two years (while) testing and implementing our training model in Bago City, we learned a lot about helping young people find meaningful jobs. We saw life-transforming results and measurable social impact," Lee said at a press conference in Bacolod City.

Founders of Kickstart-funded startups

Since January 2013, BagoSphere has trained 373 graduates, of which 240 have been hired by business process outsourcing companies—even though half of them had no previous work experience.

BagoSphere has also partnered with Teleperformance, Transcom, and Panasiatic, three of the leading global outsourcing companies in the Philippines, for immediate placements of its graduates, an approach it hopes to replicate in Bacolod and Quezon City.

The only brick-and-mortar company supported by Kickstart, BagoSphere illustrates how large companies can partner with small startups and help them grow.

The rest of Kickstart's portfolio comprises startups focused on digital technology solutions.

One of these is mClinica, which addresses the problem of fragmented supply chains in the pharmaceutical business. By building digital links, the company now has a growing network of over 1,400 pharmacies in the Philippines that provides access

Ernest Cu with Kickstart-funded startups (Jan. 2013)

> “Kickstart team members spend 40 to 50 percent of their time mentoring startup founders and opening up their business networks.

to over 20 million patients as of 2014. One in every two independent pharmacies in the Philippines is on the mClinica platform.

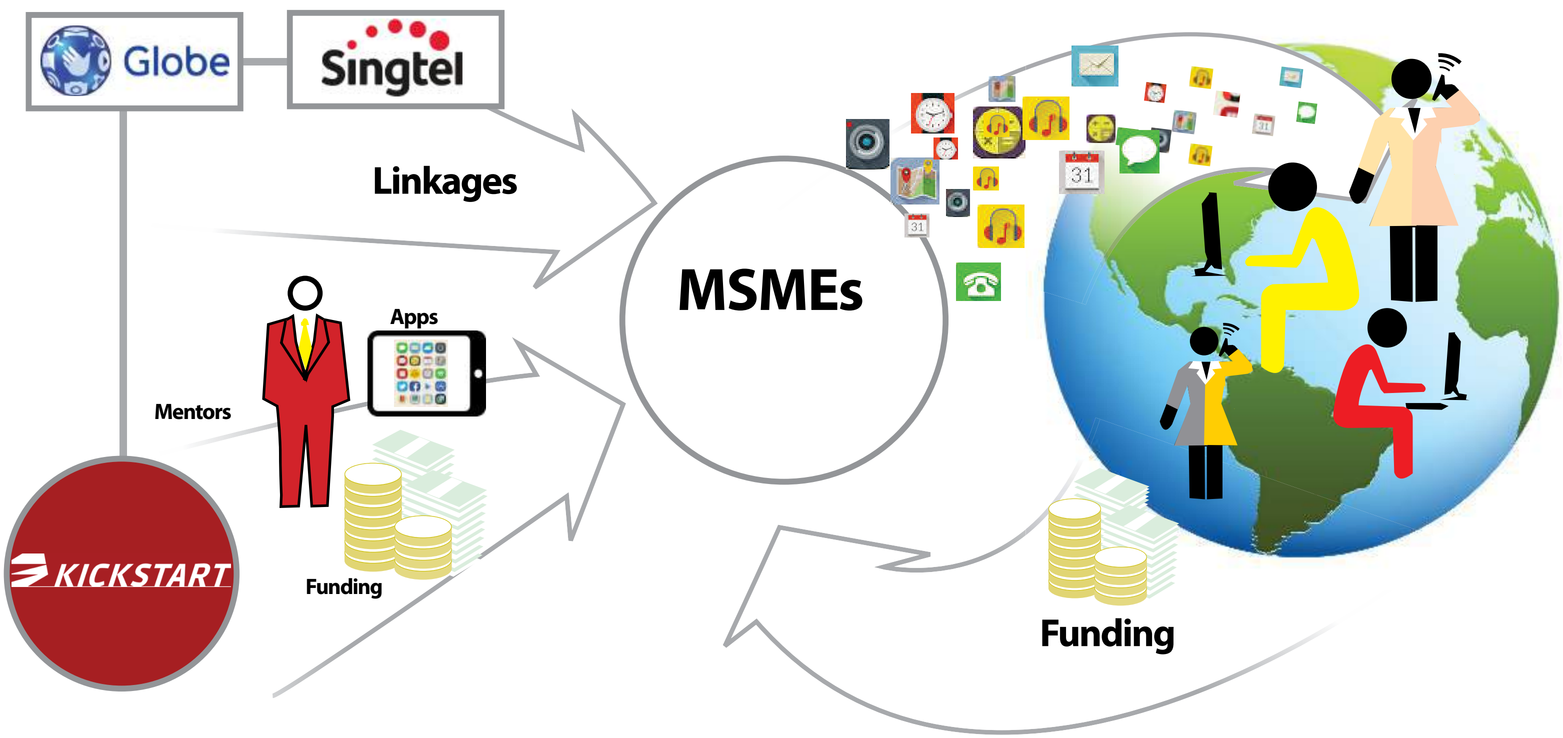
Lenddo, another Kickstart investment, is a service that uses online social networks and endorsements to calculate creditworthiness using a proprietary algorithm that produces a credit score based on social networks. Lenddo's investors include Accel Partners, Blumberg Capital, iNovia, Metamorphic and Omidyar Network. With offices in Manila, Bogotá, Mexico City and New York, Lenddo has helped over 500,000 emerging middle-class users around the world improve their lives using Lenddo's identity verification and credit scoring services.

In these and all its other portfolio of startups, Kickstart team members spend 40 to 50 percent of their time mentoring startup founders, and

Kickstart Mentor Phil Morle with Kickstart-funded startups

opening up their business networks to provide market access to affiliate companies in the Globe Telecom, Singtel, and Ayala Corporation,” said Minette Navarrete, president of Kickstart Ventures, in a recent interview with TechinAsia.com.

“We take our role as a startup community builder and thought leader seriously, the same way when we invest time, talent, and resources for our portfolio companies,” she added. “Unlike typical corporate incubators and venture capital initiatives, there was no top-down instruction. Kickstart, at its heart, is a corporate hack: a way of breaking through protocol and bureaucracy to accelerate collaboration between enterprise and startups, and a platform to create the environment and the momentum for ecosystem-wide innovation.”



Kickstart Ventures

Kickstart Ventures Inc. is a wholly-owned subsidiary of Globe Telecom, a joint venture between the Philippine conglomerate Ayala Corporation and SingTel.

Established in 2012 with a seed fund of USD 2.4 million, the incubator aims to give emerging companies involved in digital technology access to funding, resources and networks needed to scale up their businesses and to participate in the global value chain. The company received a USD 1.1 million top-up for 2015.

By 2015, Kickstart Ventures had a portfolio of 19 startups focused on delivering solutions for e-lifestyle, e-commerce, software-as-a-service, and social impact.

These companies include Kalibrr, an online talent sourcing, assessment, and recruitment platform for companies here and overseas; BagoSphere, which provides vocational training for rural youths to gain quick access to employment; and Lenddo, an online platform which uses big data algorithms to analyze a person's connections, relations, and reputation from multiple social media sites and other information sources to do identity verification and credit scoring.

Kickstart's investment targets can come from any country and are categorized by stages of their development. Early-stage startups mean closer and more frequent mentoring, so companies in this category (Fund 1) tend to have operations in the Philippines. Fund 2 companies, on the other hand, are more developed startups that have validated their product and market fit and are now looking to expand. In these instances, Kickstart aims to help drive rapid growth in startups focused on digital communications, which encompasses telecommunications, media, data analytics, financial services, health, education, IT security, and energy and spectral efficiency.

Overcoming the startup blues

Information technology has opened up new opportunities for digital startups. Many of these fledgling companies, however, face a variety of problems, including lack of market access, inadequate resources and funding, a faulty business model or poor management.

Kickstart provides portfolio development to ensure startups have access to mentors and experts who will help teams strengthen their information and business architecture. This improves a startup's operations and prepares it for scaling.

A pool of mentors composed of experienced startup founders and subject matter experts complement learning sessions on building lean startups, growth hacking, mobile application development and other topics.

Startups under the wing of Kickstart can leverage Kickstart's links to the networks of Ayala and SingTel—a stakeholder in Globe—and have their product undergo technical due diligence ahead of a market rollout, or obtain introductions to affiliate operating companies in the region as well as mentors, advisors and investor contracts.

Kickstart also provides facilities and resources to startups, including free use of its co-working space and free credits from its partners Globe Digital Media (PHP 2 million mobile ads); Amazon Web Services (USD 5,000 cloud hosting credits); ZenDesk (USD 3,450 customer service support x 12 months); and Payroll Hero (12 months).

Many of Kickstart's investments have grown and attracted follow-on funding from third-party investors, including recognized institutional investors such us Y Combinator, 500 Startups, Omidyar, Wavemaker, IMJ Investment Partners, FutureNow Ventures, Seawood Capital, Elea Foundation, and a number of local and overseas angel networks.

Kickstart's startup ecosystem allows the MSMEs in its startup portfolio to come up with innovative ideas to gain more investments.

Kickstart is also able to facilitate the use of information technology to empower MSMEs. This is in line with the APEC Business Advisory Council's recommendation that APEC economies promote the use of Internet technologies to enhance MSMEs access to international market and to promote their growth. On the other hand, Globe Telecom, through Kickstart, is able to find and work with smaller, innovative startups to improve the quality of its own customer experience.

Startup Alliance was created under the motto "connecting amazing people."

Startup Alliance: Making connections

Startup Alliance (SA) Korea, a partnership between the government and private companies, was established in 2013 to create a healthy environment for fledgling companies that have good ideas but may be short on the resources and expertise to move them forward and take them global.

"The mission of the Startup Alliance is to stimulate the startup ecosystem in South Korea by helping Korean startups, especially helping them to become more global," said SA's managing director, Jungwook Lim, who spent time in Silicon Valley as a consultant for Daum and as chief executive of Lycos.

"Our slogan is 'connecting amazing people.' One goal is to provide the opportunity for people to meet, because it's really from such meetings that

> "Startup Alliance links fledgling companies with leading Internet players, potential investors, incubators, and international startup accelerators.

startups are born," Lim added in an interview with the DreamPlus blog.

Startup Alliance was part of the Republic of Korea's push in 2013 to forge a "creative economy" that would reduce the economy's reliance on a small number of chaebols, which were at the center of the economy's industrial policy half a century ago, said Simon Mundy, writing in the Financial Times. Now the Republic of Korea is enlisting the help of leading Korean businesses, ironically to curb their dominance by fostering a new generation of businesses.

At SA's first international event, Korean startups pitched their ideas to Japanese venture capitalists during the 2014 Japan Boot Camp, giving each company the opportunity to reach a global market. In September 2015, SA brought 10 more startups to Japan, when each company was given five minutes to promote its apps and services.

The startup that was deemed the most ready to enter the Japanese market was JokerPack, which pitched a virtual canvas called Bee Canvas. With this app, users can drag and drop various files, links, photos, and videos onto their canvases and add sticky note-like text annotations, then share them as is, or open them up for collaboration with their colleagues.

The overall pitch winner, however, was Keukey, an app that makes it easy to correct mistakes in the middle of a text message.

Other ideas pitched included:

- Azar, an app from Hyperconnect that provides random live video and text chats that can be swiped away to start a new one. The app has been downloaded 25 million times, and the company earns more than half of its revenue from users in Europe and the Middle East.

- Musio, a cute robot that helps kids learn to speak English. Designed by AKA Intelligence, Musio has already raised USD 100,000 in funding from the crowd-funding site Indiegogo.

STARTUP ALLIANCE

Startup Alliance organizes seminars and conferences at which entrepreneurs can share their knowledge and experience.

We help entrepreneurs get connected and stay connected, allowing them to work together to solve problems. — Startup Alliance

Making their appearance in 2014's Boot Camp Japan were:

-Textat, an app that can analyze text messages and accurately predict the emotional patterns underlying the conversation. After answering a few questions and uploading a thread of messages into the Textat system, users will be able to determine whether their text partners are just friends or could possibly be more than just friends.

- Bapul, an application that enables students struggling with difficult math problems to get help by taking a photo of these on their smartphones and sending them to the Bapul system, which deploys experts who can suggest solutions in about 20 minutes; and

- 500 videos, a service that creates 15-second "video business cards" aimed at replacing PDF or PowerPoint introductions.

Lim acknowledged that there is much more work to be done. He observed, for example, that Korean startups tend to focus more on services and business ideas rather than on technological innovation.

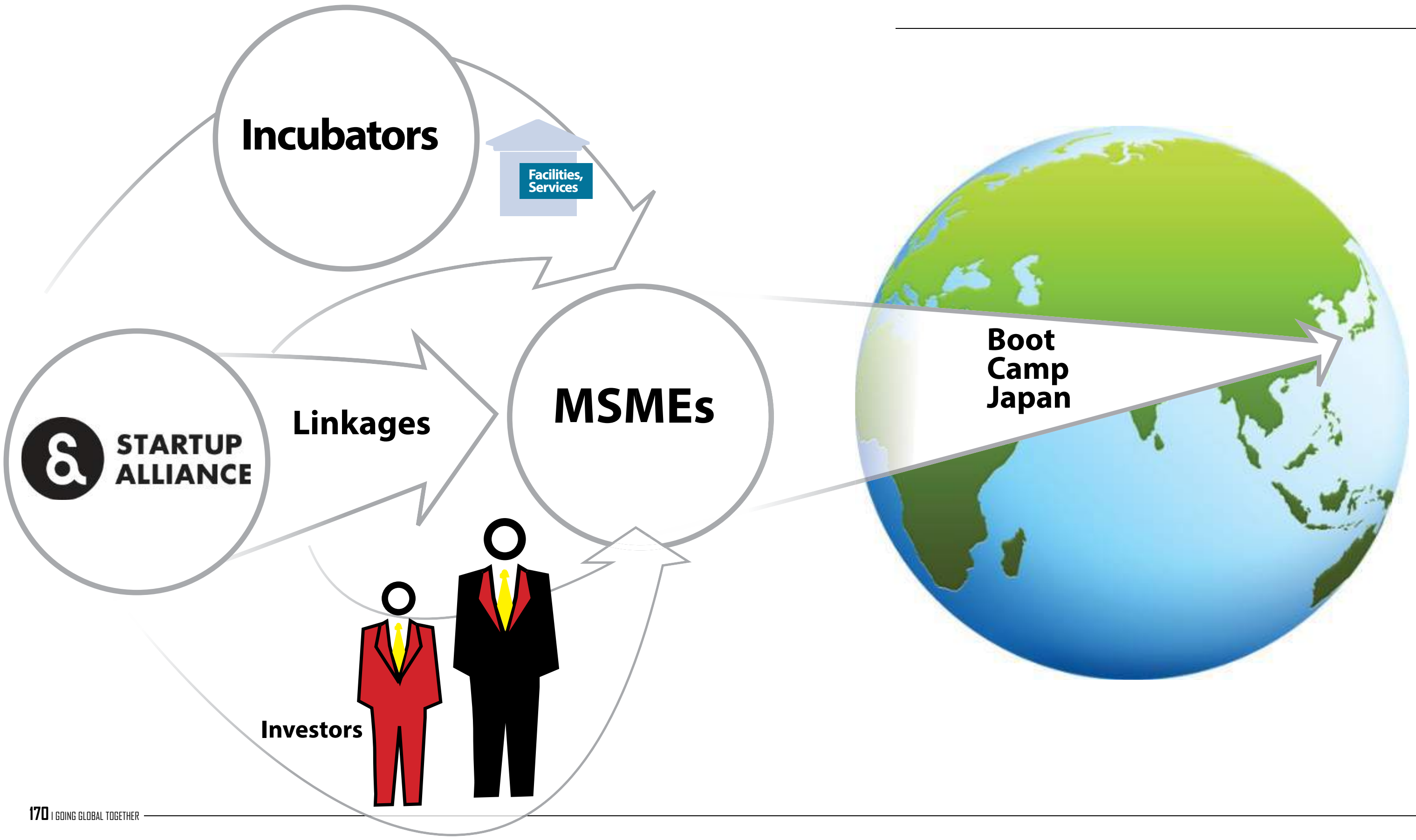
"Also, in a market dominated by major conglomerates, we have less of the disruptive spirit you see in Silicon Valley and which characterizes startups like Airbnb, Uber and Lyft," Lim said.

"You can look at the transportation market and think, 'why must it only be taxis? Why do banks have a monopoly on financial transactions? We can do it too!' It's possible to approach it in this way, but in South Korea, there's a tendency to think that because the conglomerates are already dominating a certain sector, a startup can't do much. The dreams are on a smaller scale."

On the other hand, Lim said the South Korean economy has distinct advantages.

"No other country in the world has such a high concentration of skilled workers. The scale of our economy ranks within the world's top 10. And we have big companies like Samsung and LG. Of course, one of our tasks is to ensure that these big companies help startups," he said.

We bridge Korean startups with overseas markets and international startup communities.— Startup Alliance



Startup Alliance Korea

Startup Alliance Korea, founded in 2013, is a joint effort between the private sector and the South Korean government's Ministry of Science, ICT, and Future Planning. Startup Alliance includes leading Korean IT companies such as Naver, Daumkakao, and SK Planet, as well as various investment companies, incubators, and accelerators. Its goal is to provide support for startups and to help establish a healthy ecosystem.

Created under the motto "Connecting amazing people," Startup Alliance forged partnerships with 50 key IT and startup organizations in Korea. Envisioned as a connector for startups, the organization links fledgling companies with leading Internet players, potential investors, incubators and international startup accelerators.

Its mission includes:

– Nurturing startups by empowering the community;

– Providing startups with office hours and mentoring programs from leading IT companies;

– Connecting sound, early-stage startups with high-profile investors;

– Providing networking opportunities for Korean startups to directly interact with global startups and investors; and

– Empowering communication and networking among the government, leading companies, angel investors and venture capitalists, schools, incubators and accelerators.

As part of its operations, Startup Alliance hosts meet-ups, roadshows, educational programs and mentorship sessions, all aimed at helping startups.

SA organizes a monthly event called Power Talk, where selected startups receive one-on-one mentoring sessions with management-level personnel from big technology companies.

For two years running, it has also organized Japan Boot Camp in which startups are flown to Japan to pitch their ideas to Japanese venture capitalists, businessmen and the media, with an eye toward expanding into the Japanese market. In 2014, some 19 startups joined the Boot Camp in Japan, when they visited the headquarters of Naver subsidiary Line Japan, and met with officials from Yahoo Japan and Google Japan.

SA also manages startup co-working spaces.

Connecting amazing people

In a land dominated by chaebol—giant conglomerates with extensive international operations—small but creative startups face numerous challenges, including lack of funding, market access, or even the correct business model needed to survive.

Startup Alliance bridges startups with other organizations, such as leading Internet companies, investors (both domestic and foreign), incubators, and international startup communities.

As part of its mandate as an environment enabler, SA also provides fledgling companies with co-working spaces and uses its business connections to organize regular demo day events in key global markets where the startups can pitch their products and services with an eye to growing and expanding their scope of operations.

While Startup Alliance is only two years old, it has already exposed promising Korean startups to potential Japanese investors and venture capitalists through a yearly event called Japan Boot Camp. The missions to Japan also encourage fledgling companies to pitch their ideas with the view in mind of expanding their market to Japan.

Startup Alliance's goals are in line with the strategy of the Asia-Pacific Economic Cooperation (APEC) to promote startups and entrepreneurship to enhance the competitiveness of APEC economies, and to develop added value and prosperity in the long term.

Strategies to do this were explored during the Start-Up APEC Conference III 2014: Global Thinking to Make Global Business in Peru. The conference offered an opportunity among member-economies to share knowledge on policies and strategies to promote a startup culture, best practices on models of incubators to nurture the acceleration start-ups, and experiences of entrepreneurs, startups, business angels and mentors.

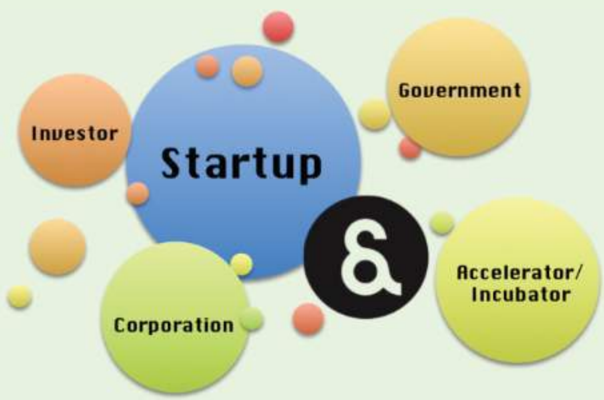


Figure from Startup Alliance website

In a highly competitive market, learning and innovation are crucial to survival.

Inventec: Looking to the cloud

When Inventec chairman Richard Lee surveyed the changing IT landscape in 2010, he saw that the emergence of cloud computing presented his company with an opportunity—and a threat.

Cloud computing, which enables companies to deliver software, storage and other services through the Web, marks a shift away from the PC-centric computing model that enabled Inventec and its major clients to thrive in the last two decades.

But as computing power migrates to server farms connected to the Internet, mobile devices such as tablets and smartphones are likely to take some of the sheen off the notebook computers that Inventec built for its clients.

"It might impact our legacy business," Lee told the

> **"Inventec worked with smaller suppliers, taking advantage of the high modularity of their products to participate in the GVC.**

“

Inventec’s cloud services help MSMEs reach a global market.

New York Times. “But the good news is that it could also push us into new cloud computing opportunities.”

The legacy business to which Lee referred began in 1975, when the company was established to manufacture electronic calculators. In the four decades since then, Inventec has become one of the world’s top contract manufacturers, building computer systems for major international customers such as Hewlett-Packard, Toshiba, Acer, and Fujitsu-Siemens.

To achieve this growth, Inventec followed the now well-established approach taken by contract manufacturers to work with smaller suppliers in the electronics industry and to take advantage of the high modularity of their products to participate in the global value chain. This approach worked not only for Inventec, but for Chinese Taipei, which developed into a major electronics hub for the world and created thousands of jobs at home.

In a highly competitive market, however, learning and innovation are crucial to survival.

And, as cloud computing takes hold, traditional hardware companies such as Inventec need to focus more on software services, Lee said.

“We’re our own worst enemy—there has been too much emphasis on hardware,” Lee told the New York Times back in 2010.

In 2013, the company unveiled a plan to transform itself from a leading hardware provider to a world-class cloud systems and solutions provider. The plan would tap its strength as a leading manufacturer of servers.

The decision came on the heels of a government move in 2010 to invest USD 24 billion in a cloud computing plan that includes setting up research centers and establishing a cloud computing industry alliance that would involve the telecommunications industry, hardware manufacturers, software developers, service providers, and system integrators, to provide a platform that would help micro, small and medium

Inventec builds computers for major international customers.

enterprises (MSMEs) to grow and expand their businesses.

The initiative could have a substantial impact, given that there are some 1.3 million MSMEs in Chinese Taipei, accounting for 97.7 percent of all businesses and employing 78.1 percent of the workforce.

As part of the cloud alliance, Inventec has been promoting the use of cloud computing to MSMEs as a way to help MSMEs reduce IT costs while improving their efficiency.

In partnership with Chunghwa Telecom, Inventec also created HiCloud Mall, a portal through which MSMEs can sign up for cloud computing services and rent virtual machine servers.

Inventec has also set up a factory in Taipei that start-up businesses can share. The factory is equipped with electric tool sets, industrial design machines and measurement verification systems to help start-up companies do pilot production of their designs or undertake small-volume production. Some 24 startups have already taken advantage of the factory.

Inventec's strategy focuses on developing world-class integrated server, storage and network offerings and building smart devices to support the cloud. Toward this end, the company announced plans to establish more partnerships with software, systems, and application vendors.

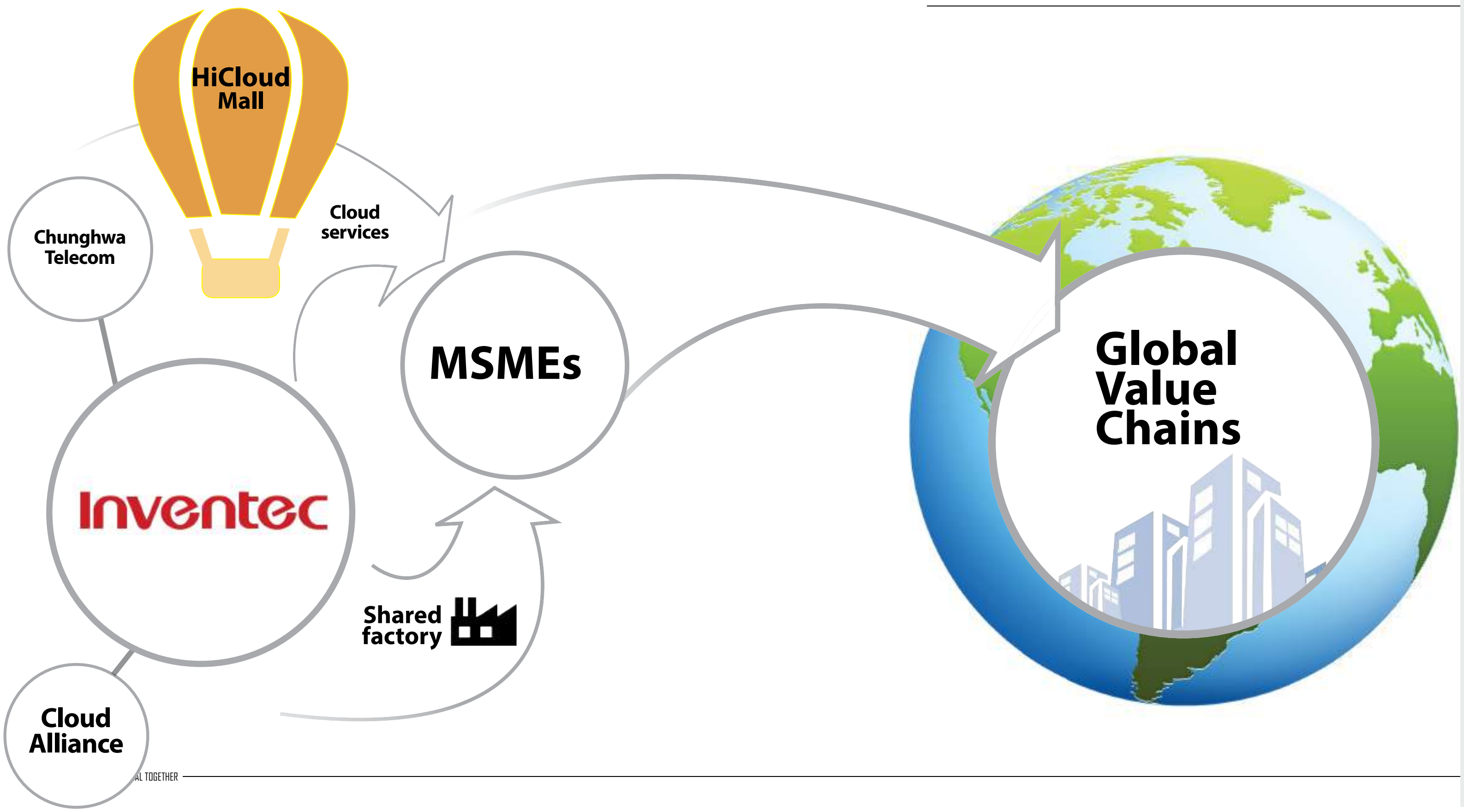
In 2015, Inventec restructured its cloud business department to include the emerging "Internet of Things" market in which ordinary household devices are connected and communicate through the Internet.

Inventec ultrabook

Combining the gadget-making that Chinese Taipei is already strong in with software services will be the key to thriving in the age of cloud computing, Lee said back in 2010. Inventec's subsequent actions show how seriously the company is taking those words.

2008 Computex Inventec Dr.eye Health Plus USB Drive

Inventec-n18



Inventec Corporation

Inventec Corporation is an original design manufacturer of notebook computers, servers, and mobile devices with headquarters in Chinese Taipei. Established in 1975 to develop and manufacture electronic calculators, the company has since grown to become one of the world's top computer manufacturers, with major customers such as Hewlett-Packard, Toshiba, Acer, and Fujitsu-Siemens.

Inventec has major development and manufacturing facilities in China, and is one of China's largest exporters. The company opened its first development center in China in 1991 and its first manufacturing facility in Shanghai in 1995. In addition, the company has configuration and service centers in the United States, Europe and Mexico. It also planned to open a plant in Chennai, India in the second half of 2015 to assemble smartphones for Xiaomi, the world's fourth largest cell phone maker and a major Inventec client.

Since 1999, the company has set up or invested in some 30 subsidiaries, including companies that make smartphones, electronic dictionaries, all-in-one devices and solar batteries.

A major computer manufacturer, Inventec has an annual production capacity of 30 million notebook computers and 3 million servers. As of May 2015, its market capitalization was USD 2.5 billion.

In 2014, the company posted a net income of TWD 7.1 billion from revenues of TWD 435.60 billion. Total assets in the same year stood at TWD 195 billion.

Looking to the cloud

While Inventec followed the traditional path as a contract manufacturer for international brands, the company has embarked on a program to transform itself from being a hardware provider to a world-class cloud systems and solutions provider.

The decision came on the heels of a government move to invest on a cloud computing plan that includes setting up research centers and establishing a cloud computing industry alliance to provide a platform that would help micro, small, and medium enterprises (MSMEs) to grow and expand their businesses.

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In partnership with Chunghwa Telecom, Inventec also created HiCloud Mall, a portal trough which MSMEs can sign up for cloud computing services .

The cloud alliance has also developed a system that enables third-party independent software vendors to develop and sell software-as-a-service (SaS) products similar to Gmail or Dropbox directly to enterprises, thereby creating a cloud computing application market for MSMEs.

Inventec has also set up a factory in Taipei that start-up businesses can share. The factory is equipped with electric tool sets, industrial design machines, and measurement verification systems to help start-up companies engage in pilot production of their designs or undertake small-volume production. Some 24 startups have already taken advantage of the factory.

Through the HiCloud Mall, MSMEs are able to improve their efficiency and flexibility and reach a larger, global market. By removing their need to set up their own data centers, the cloud computing model also enables MSMEs to save on acquisition, labor, energy, and maintenance costs. Because they pay only for what they use, it also turns fixed costs into variable costs.

Involvement in the cloud system also benefits Inventec, giving the company access to innovative ideas in R&D, product design, and business development strategies from MSMEs.

The emphasis on cloud computing for MSMEs is in line with the Asia-Pacific Economic Cooperation (APEC) 40th Small and Medium Enterprises Working Group meeting in Atlanta in June 2015.

The meeting emphasized that there was increasing evidence of the positive contributions from IT, and that increasing adoption of IT implies a better performance for MSMEs, which can optimize activities in the areas of planning, control, collaboration and communication.

Alibaba's e-commerce platform is a portal for MSMEs that want to sell their products to the world.

Alibaba: Opening doors

When former English teacher-turned-entrepreneur Jack Ma began an e-commerce system in China, he thought about opening doors.

"One day I was in San Francisco in a coffee shop, and I was thinking Alibaba is a good name," he told CNN's Talk Asia in 2006. "And then a waitress came, and I said, do you know about Alibaba? And she said yes. I said what do you know about Alibaba, and she said 'Open Sesame.' And I said yes, this is the name!"

He found the same name recognition in India, Germany, Tokyo and China. People all knew about Alibaba, open sesame and the 40 thieves.

> **Alibaba's business-to-consumer website has given birth to at least 20 "Taobao villages" where more than 10 percent of households are involved in e-commerce.**

"[But] Alibaba is not a thief. Alibaba is a kind, smart business person and he helped the village… Alibaba opens sesame for small- to medium-sized companies."

Our village was a traditional farming village. Now in our village, most people own cars. — Sun Han, furniture maker

One village that Alibaba transformed is East Wind in China's Jiangsu province, where villagers mostly exported wheat, rice and soybean—and young men looked for jobs in the big cities.

"Our village was a traditional farming village," one of the residents, Sun Han told NPR in a radio feature that aired in 2014. "People tilled the fields and raised pigs."

Sun Han, 31, runs a furniture factory in East Wind, where Alibaba's e-commerce platform helped create a furniture industry, NPR reported. Previously villagers had mostly farmed wheat, rice, and corn.

But the launch of Taobao by Alibaba in 2003 allowed people in remote villages such as East Wind to sell their products to a vast market.

Today, Sun Han's furniture factory is one of more than 600 in East Wind, and he ships his products all over China and to as far away as New Zealand.

"Now in our village, most people own cars," said Sun. "Not only do they own cars, they compare who owns the better car."

Almost 3.5 million businesses—many of them small and medium enterprises—sell products on Alibaba's Taobao online marketplace and employ millions of people across China.

In East Wind, shipping firms, paint manufacturers, and veneer makers have sprouted up to support the furniture industry, NPR reported.

A new entrepreneur in the shipping business in East Wind said: "As villages develop, they become stronger. Taobao drives the economy. It increases migrant workers' employment opportunities. It drives everything."

Alibaba's business-to-consumer (B2C) website has given birth to at least 20 "Taobao villages" such as East Wind, where more than 10 percent of households are involved in e-commerce and where the volume of transactions in 2014 exceed RMB 10 million per year.

One million shops based in rural China are active in Taobao and Tmall, selling farm products, furniture, and crafts, and providing jobs in logistics and web design deep in the countryside.

In these villages, migration to the cities, especially among recent graduates, has also been checked.

Alibaba began in Ma's apartment in 1999, where he pitched his vision to 18 people, who got together USD 60,000 to start the company.

"We're in China today because I

As villages develop, they become stronger. Taobao drives the economy.

Grand Opening of a branch of Alibaba Group

believe in one thing: global vision, local win," Ma told the magazine Inc. "We designed the business model ourselves. Our focus is on helping small and medium-size companies make money."

By leveraging buyer and seller data from this ecosystem, Alibaba has created a product that gives it a complete view of a customer at any phase of his or her purchase journey, resulting in a highly successful marketing and e-commerce business that generates significant revenues.

With 225 million buyers and 8 million sellers, and operations in more than 190 countries, Alibaba has also used its heft to help MSMEs participate in the global value chain, including granting loans to some 365,000 MSMEs or individuals.

In the Alibaba ecosystem, MSMEs can be sellers, buyers or service providers. While buyers and sellers can come from anywhere in the world, most of the 760 million products sold through its platform come from China, creating substantial benefits for the host economy.

Third-party service providers add value to Alibaba's platform through service offerings that make it easier for buyers and sellers to do business. The third-party participants in the Alibaba ecosystem include a payment services provider, logistics providers, retail operational partners, marketing affiliates, independent software vendors, and various professional service providers.

The interactions between buyers and sellers create a virtuous cycle in which more merchants attract more consumers, and more consumers attract more merchants.

In 2014, Alibaba became the biggest US initial public offering of all time, raising USD 21.8 billion on the New York Stock Exchange, outpacing Visa's USD 19.7 billion in 2008 and General Motor's USD 18.1 billion in 2010.

While Alibaba's success story is uniquely Chinese, its experience offers a number of lessons that might be applied in other APEC economies.

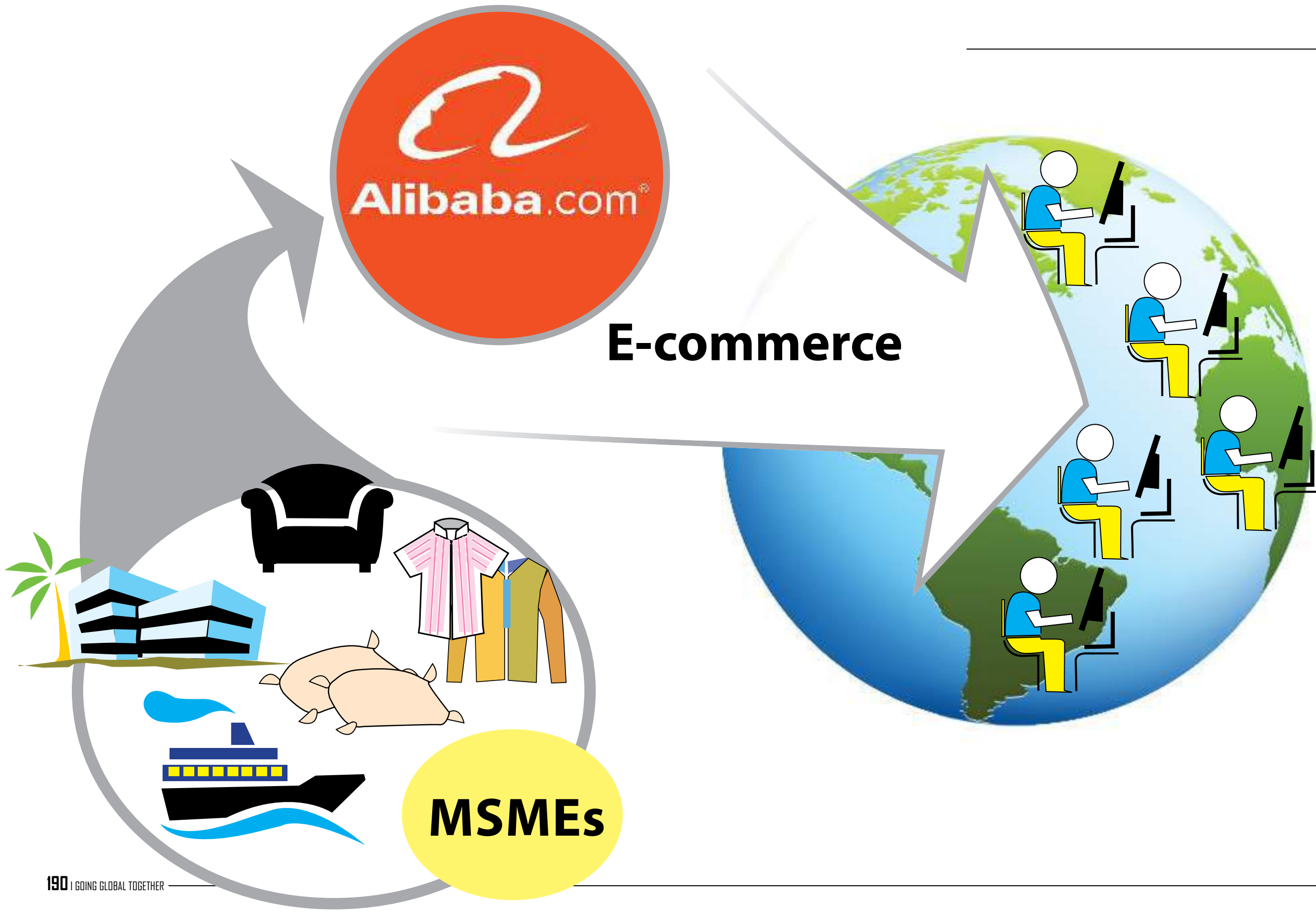
By connecting MSMEs to the global marketplace, e-commerce companies can help create a new entrepreneurial class and generate jobs for millions of people entering the workforce every year.

At the same time, a technology-driven platform like Alibaba's can connect millions of MSMEs to the formal economy, leading to the growth of new industries, improving living standards in rural communities and creating a larger tax base for the government that had been previously untapped.

To build confidence in online transactions, e-commerce companies can create a payment system similar to Alibaba's Alipay, which protects customers against fraud by withholding payments until the goods are received.

They can also take a page from Alibaba and provide financial services to MSMEs that normally do not have access to them, and spur business activity in their respective economies by quickening the pace of financial intermediation.

> **"With 225 million buyers and 8 million sellers in more than 190 countries, Alibaba uses its heft to help MSMEs participate in the global value chain.**



Alibaba Group

The Alibaba Group is a Chinese e-commerce company that provides business-to-business (B2B), business-to-consumer (B2C) and consumer-to-consumer (C2C) services to some 300 million customers through web portals in 2015. Its flagship Alibaba.com is the world's largest online B2B trading platform for small businesses in terms of sales. It ranked No. 269 in the 2015 Forbes Global 2000 listing of the world's biggest public companies, with a market value of USD 201.7 billion. The company reported USD 4.4 billion in profits from USD 11.5 billion in revenues.

Founded by an English teacher-turned-entrepreneur who gathered 18 friends in his apartment to pitch his idea of an online marketplace, Alibaba today executes about four-fifths of all e-commerce transactions in China. In 2013, Alibaba posted sales of USD 240 million, more than Amazon and eBay combined. When it went public in September 2014, its initial public offering was the world's largest ever at USD 25 billion, making it the most valuable e-commerce firm in the world.

Its businesses include:

Alibaba.com, the primary company of Alibaba. Founded in Hangzhou in eastern China, Alibaba.com has three main services. The company's English language portal Alibaba.com handles sales between importers and exporters from more than 240 countries and regions. The Chinese portal 1688.com was developed for domestic B2B trade in China. In addition, Alibaba.com offers a transaction-based retail website, AliExpress.com, which allows smaller buyers to buy small quantities of goods at wholesale prices. In 2014, the company reported that it handled more than RMB 1.8 trillion (about USD 296 billion) worth of transactions for 279 million active users across its three Chinese online marketplaces in 2013.

Taobao Marketplace. Taobao is China's largest consumer-to-consumer (C2C) online shopping platform. Founded in 2003, it offers a variety of products for retail sale. In January 2015, it was the second most visited website in China, according to Alexa.com. Taobao's growth was attributed to its offering of free registration and commission-free transactions using a free third-party payment platform. Advertising makes up 85 percent of the company's total revenue, allowing it to break even in 2009. Taobao's 2010 profit was estimated to be RMB 1.5 billion (USD 235.7 million), only about 0.4 percent of their total sales figure of 400 billion yuan (USD 62.9 billion) that year.

Tmall.com. Tmall.com was introduced in April 2008 as an online retail platform to complement the Taobao consumer-to-consumer portal and became a separate business in June 2011. As of October 2013, it was the eighth most visited website in China, offering global brands to an increasingly affluent Chinese consumer base.

Alipay. Launched in 2004, Alipay is a third-party online payment platform with no transaction fees. It also provides an escrow service, in which buyers can verify whether they are happy with goods they have bought before releasing money to the seller. Alibaba Group spun off Alipay in 2010. One market analyst estimates that it has the biggest market share in China with 300 million users and controls just under half of China's online payment market in 2014.

AliExpress. Launched in 2010, AliExpress.com is an online retail service made up of mostly small Chinese businesses offering products to international online buyers. It is the most visited e-commerce website in Russia.

The company has also branched out to group and comparison shopping websites, cloud computing services, instant messaging, media, and online video and music, expanding beyond e-commerce and China through investments and acquisitions.

E-commerce platform for MSMEs

Distribution has historically been a key barrier for micro, small, and medium enterprises (MSMEs) wishing to access a larger global market. China, long the world's factory, historically penetrated the world market place through original equipment manufacturer (OEM) arrangements. In many of these arrangements, while all the products were manufactured and assembled in China, Chinese MSMEs had to compete on price, resulting in razor thin profit margins of only 2 to 3 percent.

A cross-border e-commerce platform such as Alibaba enables manufacturers to move up the value chain, bypassing the middlemen, and reaching end-users directly. Direct access to customers provides manufacturers, especially MSMEs, with access to information about their customers and direct power over their own pricing.

While MSMEs can typically achieve profit margins of 5 percent, this can go up to 30 percent or even 40 percent with a cross-border e-commerce platform.

By tapping Alibaba, MSMEs can connect to the global value chain to sell their products directly to a much wider market, or they can integrate themselves directly into the value chain to become service providers. These third-party value added service providers help MSMEs access international markets through cross-border e-commerce.

Marketing service companies, for example, can help edit product descriptions, decorate online shops, and upload and display products. Logistics companies help identify the best shipping routes and choose the most cost-effective shipping channels and carriers at the best prices.

Payment service companies help MSMEs transfer money in a safer and faster way.

Other service providers take care of Customs and clearance, micro finance, tax returns, and insurance.

An e-commerce platform that integrates MSMEs into global value chains brings micro-economic and macro-economic benefits. At the micro-economic level, it enhances the technical capability of MSMEs, increase the use of their operational capacity and production efficiency, builds prestige and credibility, and provides a gradual and sustainable way to access global markets. It also enables them to reach more consumers worldwide and bring more flexibility and creativity to product design.

On a macro-economic level, a well-connected MSME sector brings job opportunities, increases export value, and builds up an economy's foreign exchange reserves. More importantly, it provides a means to transform the domestic economy into a more productive and competitive environment.

From an APEC perspective, Alibaba's partnership with MSMEs is a good example of the Nanjing Declaration's call to promote the use of information technology among MSMEs and improve the level of information technology adoption in research and design, production and distribution, and business management.

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Photos and Images

Some of the photos and images used for the Caterpillar chapter were provided by Capterpillar. The Filip+inna photo was provided by Filip+Inna and was taken by Paco Guerrero. A photo of the Jollibee mascot used in the chapter on Jollibee was taken by Arne Kuilman. All other images used in this book were taken from online sources available under the Creative Commons or labeled for re-use. All logos and trademarks used are the property of the respective companies.

Appendix

Survey of Stakeholders

The Asian Institute of Management (AIM), in cooperation with the APEC Business Advisory Council (ABAC), conducted a survey of stakeholders in order to determine their views on partnerships between large and small enterprises. Seventy-five individuals from 20 APEC member-economies responded. Fifteen of the respondents were from government, 24 from large enterprises, 19 from non-government organizations and 17 from micro, small, and medium enterprises (MSMEs).

While almost every member of APEC was represented, most of the respondents came from Southeast Asia.

Motivation

Large enterprises and MSMEs gave various reasons for engaging with each other. The top response among MSMEs was that they saw such engagements as profitable for their company in the long term. On the other hand, the top response for the large enterprises was that such linkages benefit all parties.

Main motivation for linkages (Combined LE & MSME Sets, N=41)

	MSME	LE	TOTAL
It is profitable for my company in the long term.	6	7	13
It is profitable for my company in the short term.	2	1	3
It will improve the welfare of my company.	1	X	1
It will improve the welfare of SMMEs engaged by my company.	X	1	1
It will raise the productivity level of my company.	0	0	0
It will force my company to adopt new technologies to improve or diversify products/services.	5	X	5
It will promote greater good for all parties involved.	3	15	18

Roles

Asked what role MSMEs played in relation to large enterprises, most respondents (58 responses) said they were suppliers of raw materials or inputs to big business. Other responses were the provision of related services (50 responses), logistics and provision of transport for distribution (44 responses), provision of human resources (30 responses), and increasing the market reach and scope (25 responses).

Role of MSMEs (N=75)

	MSME	LE	ORG	GOV	TOTAL
Supply of raw materials and/or inputs to production	9	16	19	14	58
Provision of related services	8	15	17	10	50
Provision of human resources	4	8	10	8	30
Logistics / Transport and Distribution	5	17	14	8	44
Increase market reach and scope	5	8	5	7	25
Marketing and brand development	3	7	5	5	20
Research and Development	3	7	5	X	15
Product Design	5	6	4	1	16
Others	1	1	2	1	5

Asked what role large enterprises played in relation to MSMEs, most respondents (35 responses) cited technology transfer. Other responses were research and development (32 responses), links to a wider market (28 responses), the raising of product or services standards (28 responses), business development strategies (27 responses), and training and development (27 responses).

Role of large enterprises (N=60)

	MSME	LE	ORG	TOTAL
Research and development	15	8	9	32
Product design	2	6	6	14
Business development strategies	3	10	14	27
Training and development	1	11	15	27
Providing financing	2	9	10	21
Linking them to a wider market	1	14	13	28
Raising product/services to higher standards	0	15	13	28
Technology transfer	14	8	13	35

Impact

Respondents said partnerships had a major impact on productivity, innovation, and cost reduction.

Level of impact of productivity, reducing costs, and innovation of the linkage

Level of Impact					
Productivity	MSME	LE	ORG	GOV	TOTAL
Extremely Low Impact	1	1	0	2	4
Low Impact	1	0	0	0	1
Neutral	2	6	4	1	13
High Impact	11	16	15	11	53
Extremely High Impact	2	1	0	1	4
Reducing Costs	MSME	LE	ORG	GOV	TOTAL
Extremely Low Impact	1	0	0	0	1
Low Impact	2	1	1	2	6
Neutral	4	8	6	3	21
High Impact	8	11	9	10	38
Extremely High Impact	2	4	3	0	9
Innovation	MSME	LE	ORG	GOV	TOTAL
Extremely Low Impact	1	1	0	1	3
Low Impact	1	2	0	1	4
Neutral	4	8	8	3	23
High Impact	9	9	8	8	34
Extremely High Impact	2	4	3	2	11

Respondents

Breakdown of total respondents by economy (N=75)

ECONOMY	MSME	LE	ORG	GOV	TOTAL
Australia	1	1	1		3
Brunei Darussalam	1		1	3	5
Canada		1		2	3
Chinese Taipei	1	2	1	1	5
Chile				1	1
Hong Kong	2	1	3		6
Indonesia			1		1
Japan		4			4
Malaysia		1	1	1	3
Mexico	3	1	4	1	9
Papua New Guinea	3				3
People’s Republic of China		3			3
Peru		2		1	3
Philippines	1	1	1	2	5
Republic of Korea	2	2	2	1	7
Russia		1		1	2
Singapore	3		1		4
Thailand		1	1		2
United States		3	1	1	5
Vietnam			1		1
SUM	17	24	19	15	75

APEC BUSINESS ADVISORY COUNCIL (ABAC)

The APEC Business Advisory Council (ABAC) was created by the APEC Economic Leaders in November 1995 to provide advice on the implementation of the Osaka Action Agenda and on other specific business sector priorities, and to respond when the various APEC fora request information about business-related issues or to provide the business perspective on specific areas of cooperation.

ABAC comprises of up to three members of the private sector from each economy. ABAC members are appointed by their respective Leaders, and represent a range of business sectors, including small and medium enterprises. The economy determines the term of membership of each appointee as well as its own administrative arrangements and staff support.

This private sector body presents recommendations to APEC Leaders in an annual dialogue and advises APEC officials on business sector priorities and concerns. ABAC meets four times per year, and ABAC representatives also attend Senior Officials' Meetings, the Annual Ministerial Meeting and the sectoral Ministerial Meetings.

ASIAN INSTITUTE OF MANAGEMENT (AIM)

The Asian Institute of Management (AIM) is the Asian pioneer in management education. Since it was founded in 1968 by the Harvard Business School and academics as well as prominent business leaders of the Philippines, AIM has been committed to contributing to sustaining the growth of Asian businesses and societies by developing professional, entrepreneurial, and socially responsible managers and leaders.

AIM's 40,000-strong alumni have profited from its proven strength in practitioner-based education offered through the Washington SyCip Graduate School of Business and the unique development management education provided by the Zuellig School of Development Management, both under one roof. Today, AIM alumni are well recognized for their ability to navigate complex and dynamic spaces, and occupy key positions in business, state and development organizations all over the world.

AIM's education and training meet the global accreditation standards of the US-based Association to Advance Collegiate Schools of Business (AACSB). AIM offers three degree programs: Master in Business Administration (both full time and executive), and Master in Development Management. The Institute is also recognized for open enrollment and custom executive programs for business as well as non-business organizations. For more information please visit www.aim.edu.

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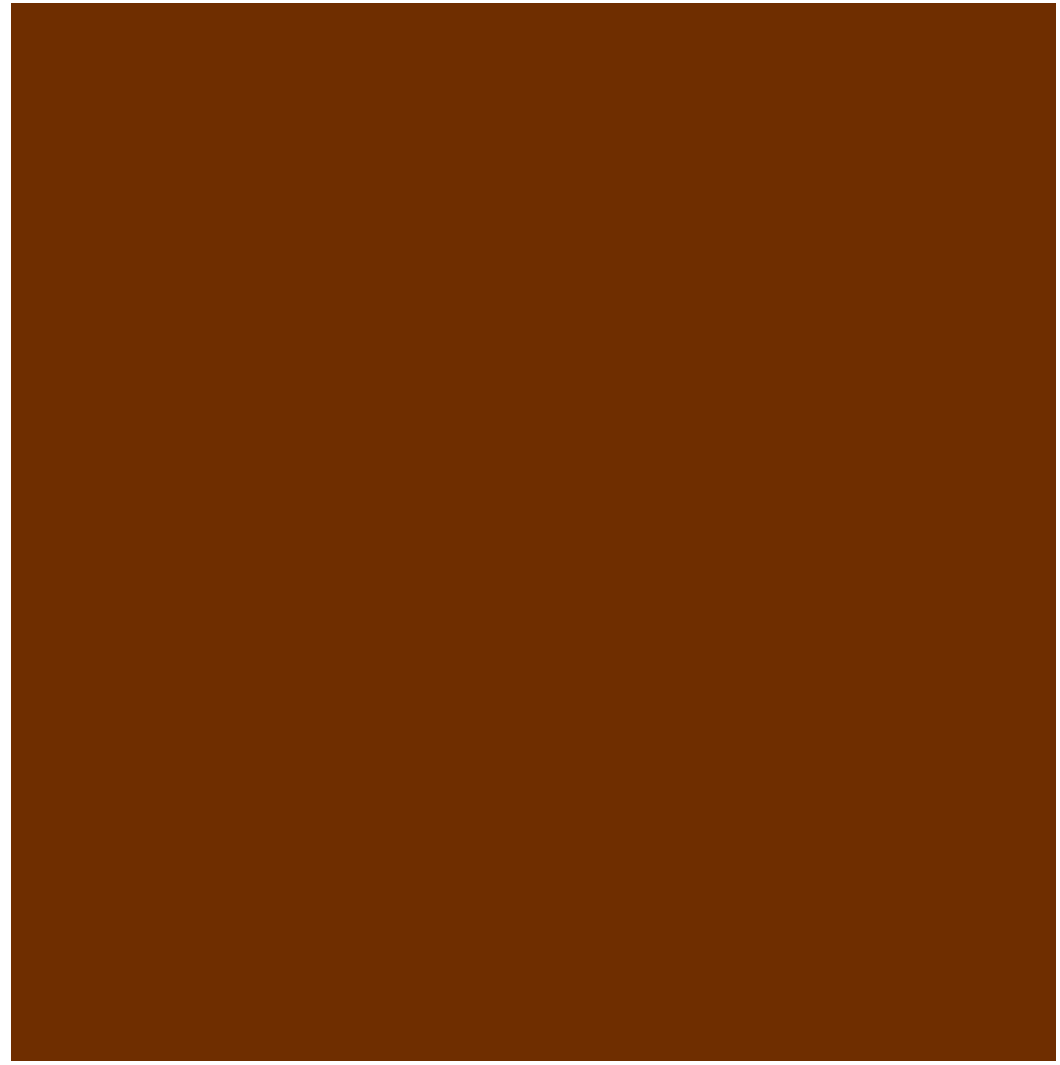

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