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30th CACCI Conference to Feature Roundtable Discussions on Food & Agriculture



The Confederation of Asia-Pacific Chambers of Commerce and Industry (CACCI) is pleased to invite all CACCI officers and members to the 30th CACCI Conference scheduled to take place on November 23-25, 2016 at The Marriott Hotel in Taipei, Taiwan.

To be co-hosted by the Chinese International Economic Cooperation Association (CIECA) and the Chinese National Association of Industry and Commerce (CNAIC), with the CTBC Bank as major sponsor, the two-day Conference is designed to provide another valuable platform for CACCI members and invited experts to exchange views on measures that the business sector and governments in the region can undertake to take full advantage of the opportunities offered not just by markets in the Asia-Pacific region but by countries in other parts of the world as well.

Focusing on the theme "The Rise of Asia: Taking a Bigger Role in the Global Economy", the 30th CACCI Conference this year will address the following questions: How can Asia play a much bigger role in shaping the global economy in the 21st century than it did in the latter half of the 20th century? What challenges

would Asian countries – individually and collectively – face in playing such a role and how will they meet these challenges? How should Asia – which in the past was heavily dependent on exports for its growth – nurture its new "second engine of growth", which is domestic demand, in order to sustain its strong performance?

Eminent speakers will be invited to speak during two Plenary Sessions which will focus on timely and relevant issues, including the following:

Plenary Session 1: Gaining Traction from Regional Economic Integration

Plenary Session 2: Promoting SME Development for Sustainable and Inclusive Growth

In addition, parallel sectoral roundtable discussions and special session will be organized that will gather government and private sector experts for dialogue and panel discussion on important sectoral issues, particularly on woman entrepreneurship, Information and Communication Technology, youth entrepreneurship, and food and agriculture.

Representatives from the food and agriculture sector in the region are cordially invited to join us at the 30th CACCI Conference.



Inside this issue

- To fight climate change, invest in agriculture
- Food security fears resurface in Asia as nations face rice shortage due to drought
- BSP issues new lending scheme to direct more funds to agri sector
- Growbots promise to transform Australian agriculture
- S'pore & Bali experience each other's culinary delights
- Mainstream restaurants join food-tracing movement at COA ceremony

- Groups join forces in farming program for people with disabilities
- Breed-your-own mealworm 'revolution' for your kitchen
- NGO's Japanese founder foments organic revolution in Vietnam
- Hi-tech agriculture a growing trend in Vietnam
- 'Smart Farms' the Future of Agriculture
- Japanese Govt launches domestic farm heritage system
- E-farmers sow seeds for business success in Taiwan

To fight climate change, invest in agriculture

Rural poor and smallholder farmers among hardest hit - FAO Deputy Director-General at signing of Paris Agreement



Farmers from Koinadugu Women's Vegetable Cooperative, harvesting carrots in the community crops.

In addition to reducing poverty and hunger, agriculture can play a crucial role in making the response to climate change responsible and more effective, Maria-Helena Semedo, UN Food and Agriculture Organization (FAO) Deputy Director-General for Natural Resources said.

Agriculture can help reduce the impact of climate change; thus fostering resilience among communities, she said during a High-Level Thematic Debate on Achieving the Sustainable Development Goals (SDGs) at the UN Headquarters. Semedo was in New York to attend the signing ceremony of the Paris Climate Change Agreement as well as other high level events.

Some 175 countries signed the historic accord — agreed last December in the French capital — at a ceremony at UN headquarters hosted by Secretary-General Ban Ki-moon on Friday, 22 April 2016.

The Agreement recognises "the fundamental priority of safeguarding food security and ending hunger, and the particular vulnerabilities of food production systems to the impacts of climate change".

It also highlights the need to "increase the ability to

adapt to the adverse impacts of climate change and foster climate resilience (...) in a manner that does not threaten food production."

Impact on agriculture

Agriculture is one of the main sectors of the economy that is severely affected by climate change. The recent El Niño phenomenon is a testimony to that, Semedo noted.

The support for the agreement comes at a time when some 60 million people around the world are being affected by the El Niño climate event.

It is important to note that the rural poor and small holder farmers are severely affected by climate change threats, Semedo stressed.

Role of farmers

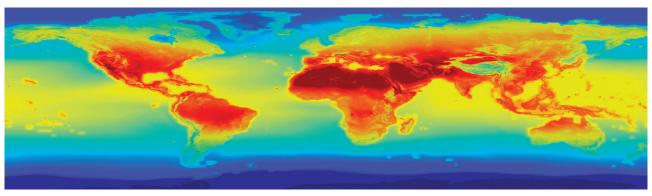
During speaking engagements at various high level events, the FAO Deputy-Director General reiterated the crucial role of family farmers in poverty and hunger eradication.

Poverty and hunger have similar causes and are often bound together - and must therefore be tackled together.

"Support to end extreme poverty, hunger and all other forms of malnutrition by 2030 - the key of SDGs 1 and 2. Nearly 80 per cent of the extreme poor and hungry people live in rural areas, so let's empower rural actors, small holders, rural women, youth, and indigenous peoples in our collective action," said Semedo.

Source: Food and Agriculture Organization (FAO) of the United Nations, April 22, 2016





Food security fears resurface in Asia as nations face rice shortage due to drought

By Naveen Thukral (Reuters)

Nearly a decade after a spike in global food prices sent shock waves around the world, Asia's top rice producers are suffering from a blistering drought that threatens to cut output and boost prices of a staple for half the world's population.

World rice production is expected to decline for the first time this year since 2010, as failing rains linked to an El Nino weather pattern cut crop yields in Asia's rice bowl.

A heat wave is sweeping top rice exporter India, while the No. 2 supplier Thailand is facing a second year of drought. Swathes of farmland in Vietnam, the thirdbiggest supplier, are also parched as irrigation fed by the Mekong River runs dry.

The three account for more than 60 percent of the global rice trade of about 43 million tons.

"As of now we haven't seen a large price reaction to hot and dry weather because we have had such significant surplus stocks in India and Thailand. But that can't last forever," said James Fell, an economist at the International Grains Council (IGC).

Rice inventories in the three top exporters are set to fall by about a third at the end of 2016 to 19 million tons, the biggest year-on-year drop since 2003, according to calculations based on U.S. Department of Agriculture data.

Any big supply disruption can be extremely sensitive.

In 2008, lower Asian rice output due to an El Nino prompted India to ban exports, sending global prices sky-rocketing and causing food riots in Haiti and panic measures in big importers such as the Philippines.

Manila at the time scrambled to crack down on hoarding, ordered troops to supervise subsidized rice sales and asked fast food chains to serve half-portions, as well as urging Vietnam and others to sell the country more rice.

The world has suffered a series of food crises over

the past decade involving a range of grains due to adverse weather.

In the case of rice, benchmark Thai prices hit a record around \$1,000 a ton in 2008. Price spikes like this typically also boost demand for other grains such as wheat, widely used for noodles in Asia, and soybeans and corn used for food or feed.

While currently far below 2008 highs, last month rice hit \$389.50, the strongest since July and up 13 percent from an eight-year low of \$344 in September.

Bruce Tolentino of the Philippines-based International Rice Research Institute is concerned about Asia's vulnerability.

"In general prices are still stable right now. They're inching up though, and what will drive things over the edge will be a major calamity in one of the major producing countries."

Although India's rice output in 2015 was largely stable, extremely hot temperatures are threatening a second crop in eastern regions.

Traders see further price gains by June as India's next big crop is not due until September and Thailand's main crop by year end.

The IGC sees a total world harvest in 2016 of 473 million tons, down from 479 million tons in 2015 and the first decline in six years.

Thailand's last main crop was only about half of the peak production a few years ago and the USDA has forecast output will drop by more than a fifth to 15.8 million tons this year.

"The government has been asking farmers not to plant rice as there is little water in the reservoirs after two years of drought," said one Bangkok-based trader.

In Vietnam, output could fall 1.5 percent this year



National Food Authority warehouse line at a rice-processing factory in lease" is seen standing in a droughtin the city of Taguig, south of the Vietnam's southern Mekong Delta affected rice field in Vietnam's Mekong Philippines of capital Manila, last city of Can Tho in August 2015. August. | REUTERS



REUTERS



Workers carry sacks of rice inside a Grains of rice are seen on an assembly A sign reading "Land for sale or for Delta province of Bac Lieu on March 30, 2016. | REUTERS

Food security

... Continued from page 3

In Vietnam, output could fall 1.5 percent this year to 44.5 million tons, while exports would be 8.7 million tons, steady on a previous projection, the government said.

As much as 240,000 hectares (593,000 acres) of paddy have been destroyed by drought and salination in the central area and southern Mekong Delta region, it said.

A Singapore-based trader said that while the annual decline appeared modest Vietnam's latest harvest "is 5 to 6 percent lower than last year."

Thailand and Vietnam harvest three crops a year.

Some Asian countries are already looking to raise imports.

Indonesia is expected to see 2016 purchases jump by

more than 60 percent to 2 million tons from a few years ago.

China, the world's top importer, taking about 5 million tons annually, is expected to continue this buying pace. IGC has forecast China's 2016 production will fall short of consumption for a third consecutive year.

In March the Philippines had the lowest stocks since October despite importing 750,000 tons and its procurement agency has standby authority to ship an additional 500,000 tons.

"Although El Nino has entered its weakening stage, the risk of higher food prices remains given the onset of the summer season," said Philippine Economic Planning Secretary Emmanuel Esguerra.

Source: Japan Times, May 2, 2016



BSP issues new lending scheme to direct more funds to agri sector

By Lee C. Chipongian

To encourage the flow of funds into the agricultural sector, the Bangko Sentral ng Pilipinas (BSP) has transferred some of the credit risks from a single farmer/fisherfolk-borrower to an agricultural value chain as a new lending scheme.

The BSP's Monetary Board issued Circular No. 908 (Agricultural Value Chain Financing Framework) on March 15, 2016 to implement a lending program that reduces the credit risk of farmers and fisherfolk by linking borrowing with a new type of financing or the agricultural value chain financing.

A value chain, as defined by the central bank, is a set of actors, suppliers, processors, and aggregators who conduct linked sequence of value-adding activities involved in bringing a product from its raw material stage to the consumers. A value chain finance, in the meantime, refers to the financial flows to those actors/players from both within the value chain and financial flows to those actors/players from the outside as a result of their being linked within a value chain.

Based on the circular memo, BSP deputy governor Nestor A. Espenilla Jr. said this type of financing would facilitate and allow small farmers and fisherfolks to have, if not more, access to credit. "This is expected to further improve productivity in the agriculture and fisheries sectors and at the same time uplift the lives of these marginalized farmers and fisherfolks."

Banks that will participate and will comply with regulations can also avail of incentives such as







compliance with the agri-agra requirement and an additional 25 percent increase in the single borrower's limit for such loans for a period of three years.

In a statement on March 15, 2016, the BSP said banks will be given time to implement what the BSP called "disaster contingency mechanism" which will require the adoption of risk mitigants to minimize losses and provide relief to a borrower to facilitate recovery.

The BSP has issued rules and perks to improve the agricultural sector's access to financing in past years, especially the smallholder farmers. But because of lack of access to funds they could not move up to higher value markets.

Banks and the whole financing sector considers the agricultural sector a high risk market as it is vulnerable to weather conditions.

The BSP, however, said that participation in a value chain allows farmers to leverage on effective farming technologies and methods and in turn it will improve access to formal financing and enjoy sustainable market demand.

"There are currently many pockets of successful agri-value chains in the country," said the BSP. An example are small onion farmers who were previously just producing for a small localized market. "By integrating into a value chain, they were able to access financing that allowed them to upgrade their products and processes, and to be assured of a steady market through a leading fast-food chain," explained the BSP. "The farmers are able to supply directly to institutional markets resulting to increased profit and greater opportunities for expansion. The objective is to see more of such successful stories."

Source: Manila Bulletin, March 16, 2016

Growbots promise to transform Australian agriculture

By Kaori Takahashi

Australia is 20 times the size of Japan, but has just a fifth of its population. To make use of this vast land for large-scale agriculture and mining, the support of robotics will be increasingly important. That is why, in 1997, the University of Sydney created the Australian Center for Field Robotics -- home to 120 researchers engaged in such fields as computer science, mechanical and electrical engineering, and math. Few institutions match the scale of the center's operations in field robotics, the study of robotics for outdoor use.

The largest issue the center is tackling right now is the use of automation to cut labor costs. "Australia is a big place, we export about 70% of agriculture, and labor costs said Professor Salah Sukkarieh, the center's Center for Field Robotics) director of research and innovation. According

to the Organization for Economic Cooperation and Development, Australia's minimum wage is the world's third highest after Luxembourg and France, and 50% higher than the U.S. minimum wage. The intense heat that stretches over vast expanses of dry land also makes for labor shortages due to the harsh working conditions.

In Sukkarieh's vision of the future of agriculture, farmers no longer work in the fields but give commands to their robots from their living rooms. One step in that direction is the center's orchard robot, currently in development.

The robot uses GPS and sensors to navigate an orchard and takes a picture of each piece of fruit without human assistance. Information about flowering conditions can eventually help the farmer make crop predictions and target those fruits that need more water or fertilizer, contributing to a bigger harvest. The robot is able to identify fruits like mangoes and avocados but is unable yet to determine which crops are ready for picking.

How to then harvest the crops is also an issue that needs to be addressed, but Sukkarieh is optimistic. "The expectation is that large growers around the country will have their own bot, maybe 50 ... and probably in 2-3 years," he said.

Technology licensing and commercial application are forthcoming for another robot, nicknamed the "Ladybird", which was commissioned by an agricultural group. The unmanned robot roams the farmland on four wheels while its embedded sensors differentiate weeds from crops, spraying either fertilizer or weed killer. The



are very expensive, and availability is short, A robot nicknamed the "Ladybird" automatically sprays herbicides so we have to focus a lot on automation," and fertilizers. (Photo courtesy of the University of Sydney's Australian

machine uses only the minimum amount required, which translates into cost savings. And on sunny days, the Ladybird is powered by its solar panels. The robots will be priced so that farmers can recoup the cost in about two

Unmanned mining

Robot use is a few steps ahead in the mining industry, where advances are being made in remote management. The Rio Tinto Center for Mine Automation, a collaboration between the Center for Field Robotics and global mining firm Rio Tinto, has been playing an active role in bringing automation to its trucks and railroads for its unmanned mining operation.

According to Sukkarieh, Rio Tinto has contributed about 42 million Australian dollars (\$31.7 million) to the center. "Our main roles have been to develop new theories and algorithms that would support greater efficiencies in mining operations through automation," he

Ninety-five percent of the robotics center's operational funds come from industry in this way. The center has collaborated with 60 companies and is currently involved in joint projects with six or seven. Beyond practical applications, these projects are also aimed at deepening cooperation between industry and academia to uncover new fields of exploration for robotics.

Source: Nikkei Asian Review, April 28, 2016

S'pore & Bali experience each other's culinary delights

By Eunice Quek



Representatives from KG Food pose for a photo with their halal dim sum on January 3, 2016. From left, production operator Junaida bte Sharip, chef Mohamad Yahya bin Samsudin and production operator Sarina bte Atan. (Mugilan Rajasegeran, The Straits Times/Asia News Network)

Singapore and Bali are having a restaurant version of a cross-cultural exchange.

Balinese brands that have opened in Singapore include Potato Head Folk on Keong Saik Road; Bebek Tepi Sawah at Chijmes, known for its signature crispy duck; and Texas-style barbecue restaurant Decker Barbecue in Robertson Quay. The famous Naughty Nuri's, known for its ribs, will also open at Capitol Piazza in January 2016.

Savvy restaurateurs in Singapore are also taking their brands to the Indonesian island.

Spanish eatery My Little Spanish Place in Bukit Timah and Boat Quay will open by the end of next month in Jalan Laksmana in Seminyak, which is known as Eat Street for its international food offerings.

The restaurant will have a jamon bar serving Spanish ham, Spanish-style suckling pig, paella and tapas. Heading the kitchen is chef Bernat Playa, formerly the sous chef of Nu restaurant in Girona, Spain.

Marsk Ong, director of My Little Spanish Place, says: "Bali is a tourist paradise and the restaurant scene has become very cosmopolitan. Other than local food, there are many gourmet and chef-centric restaurants that have opened in recent years."

Restaurateur Beppe de Vito, 43, who runs ilLido in Sentosa, Aura at the National Gallery and Osteria Art on Market Street, among other restaurants, says he jumped at the opportunity to open ilLido in Bali with partners, who are the owners of popular fine-dining restaurant Kafe Warisan. ilLido in Jalan Raya Kerobokan in Seminyak

occupies the space vacated by Kafe Warisan. It opened in April last year.

To fit in with the laidback island lifestyle in Bali, hors d'oeuvres and entrée courses are served for sharing, instead of being individually plated.

Popular dishes so far include grilled octopus with nduja, which is a spreadable, spicy Calabrian sausage; ricotta cheese tortelli with amatriciana sauce; linguine with crab and mascarpone; and duck leg confit with smoked duck breast.

He says: "The biggest challenge is always with blending into the working culture. We needed to learn the workings behind the scene in a brand new environment and get the right sources for the products. Prior to launching ilLido Bali, we had to make multiple field trips to observe and study the landscape."

He is looking to open ilLido in Jakarta, as well as new restaurants in Bali. He says: "It's too early to expand further, but the next concept we open in Bali would be a chic and buzzy eatery and bar offering restaurant-quality food."

Kilo, which has restaurants in Kampong Bugis and Orchard Central, opened a branch in Bali in September 2014 in Jalan Drupadi, also in Seminyak, like the other two restaurants.

One of the partners, Joshua Adjodha, 33, says the restaurant has "just started to get its footing" in Bali. He says the owners were approached by a customer of Kilo who owns a villa resort in Seminyak called Uma Sapna and believed that Kilo would do well in Bali. Kilo Bali is located next to Uma Sapna and serves breakfast to the villa's guests.

He says: "Business in the beginning was a challenge and a huge learning curve for us. We faced many hurdles when it came to suppliers and there were language barriers. Business is completely different from Singapore, where we have our regulars.

"Bali is a revolving door of tourists visiting the island for a limited time, with many great restaurants to choose from. So in the beginning, people had no idea about us. We'd be lying if we say we didn't face some tough months."

He adds that in Singapore, diners reserve tables in advance, which allows the staff to be well-prepared.

"In Bali, on the other hand, we can start the night with two reservations and end up with a restaurant full of people who walk in, so it catches you by surprise at times."

The menu at Kilo Bali is similar to the menus here, with tweaks in the ingredients depending on the availability. For example, kailan is used instead of broccolini for the grilled broccolini and stracciatella dish in Bali.

Its bestsellers in Bali are squid ink rice with crispy baby squid, salmon roe and garlic aioli; wasabi tuna

S'pore & Bali

... Continued from page 6

tartare with avocado, sesame seeds and flour chips; and truffled tai yuzu rolls with fresh crab meat, snapper and tempura flakes.

This year, the restaurant group is looking to open a front deck area with an outdoor charcoal grill, and to open for lunch and brunch in the second quarter of the year.

Adjodha says: "We'd like to focus on strengthening what we currently have. We need to continue to stay consistent with what we do and improve our visibility to people coming in to the island.

"We strive to maintain the same standards of hospitality that we have here in Singapore. It's all about personalized service and creating the sense that you've stepped into someone's home, not a restaurant."

Source: The Straits Times/Asia News Network, January 5, 2016



Mainstream restaurants join food-tracing movement at COA ceremony

By Christine Chou

Wowprime Corp., a major restaurant group in Taiwan, was among the firms recognized for participating in the "traceable restaurant movement," at a ceremony held by the Agriculture Multi-Discipline Management of Technology (AMOT) and the Council of Agriculture (COA) on January 5, 2016.

AMOT released a three-star assessment standard for partnering eateries that have vowed to reveal comprehensive records of their ingredients, allowing consumers to track their food "from source to fork."

Wowprime Corp. Chairman Park Chen said they are very glad that their efforts in the past six months have received official recognition. This comes after the firm's revenues and reputation were heavily hit, due to involvement in an oil scare last year.

"Our costs have risen more than 10-percent since we participated in the traceability movement," said Chen. "We now put food safety above all else, in hopes of restoring consumer faith."

Minister of the COA Chen Bao-ji said the platform, Traceable Restaurants, has helped to create more value for farmers. Previously, farmers have expressed disappointment that their efforts in food profiling did not result in any substantial growth in the market.

However, this program could make quality agricultural goods stand out, said Chen.

Quality local produce needs to be known and appreciated by our consumers if we join the Trans-Pacific Partnership (TPP) in the future, remarked Chen.

The star standards credentials provide a helpful



An array of dishes lies on a table outside the award ceremony on Tuesday, Jan. 5, 2016. The displayed food received three star gold standards from food safety platform, Transparent Restaurants. With a swipe of a barcode, consumers are able to see a detailed profile of how the food on their table was sourced. (Christine Chou, The China Post)

guide for consumers, who can discover produce records and certified brands on the "traceable restaurant" cloud database and mobile app, said Vice Premier Chang Sancheng in his opening speech.

Chang urged restaurant owners to cherish their reputations and strive for food safety, even after they have received "stars."

The COA previously stated that there are more than 180 restaurants participating in the movement. Only those that preserve sourcing receipts and records in their entirety can claim that their dishes or restaurants use traceable ingredients.

Mainstream restaurants

... Continued from page 7

Restaurants that claim so without certified labeling could be liable to a fine of NT\$60,000 to NT\$300,000, said COA officials.

AMOT organized the ceremony to thank farmers for their devotion to manufacturing traceable produce, as





well as 30 traceable restaurants for their sustained cooperation.

For the first time, awards were given to restaurants that received stars in the latest round of assessments. Brands include Waynrime Co



include Wowprime Corp., Chiao-hsi Hotel Royal and Ootoya, among others.

Source: January 6, 2016

Groups join forces in farming program for people with disabilities

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Agriculture and welfare groups are joining hands to secure jobs for people with disabilities as part of a program that is also providing support to local farmers.

Tama Kusamura no Kai, a nonprofit organization, is one such group, growing potatoes, green onions, spinach, shiitake and other vegetables on farmland near Tama New Town, a residential area in Hachioji on the outskirts of Tokyo. The group calls the farmland, which is leased from an older local farmer, Yumebatake, or Dream Field.

Designated by the government as a farm to support the employment of people with disabilities, some 20 to 30 members of the organization, most of whom are mentally disabled, work there each day.

Yoshimasa Tebayashi, 65, who leads the work on the farm, said the participants' faces light up when they take part in "green jobs."

A 49-year-old man who began working on the farm three months ago said, "I now feel relaxed when I talk with other people."

Once harvested, the vegetables are sold at a local supermarket and used in a restaurant and cafe run by the organization.







Workers are given assignments to suit their conditions, such as planting, cropping and packing, and receive wages in line with their jobs. Although there are no employment contracts, wages average some \(\frac{4}{25}\),000 per month, \(\frac{4}{10}\),000 more than the national average for disabled workers on such programs, with some workers earning \(\frac{4}{50}\),000 or more.

"Sales of products and wages give (workers) a sense of achievement," Tebayashi said.

A number of members return to ordinary working life each year, he added.

As part of the initiative, the Ministry of Agriculture, Forestry and Fisheries provides subsidies for projects to make agricultural facilities barrier-free.

The Ministry of Health, Labor and Welfare has asked for a budget appropriation of ¥110 million for fiscal 2016 to support the employment of disabled people in agriculture. Last November, it held a fair in front of its building to sell products from collaborating farms.

Tama Kusamura no Kai originated from an association of families with mentally disabled members and was established under the leadership of Miyoko Kazama, who heads the group.

Kazama, 69, decided to form the association after recognizing the strong prejudice against mentally disabled people through her eldest son, who had schizophrenia.

The association started activities, such as running a group home and cafe. The cultivation of farm products started in 2000 at the request of some members.

Kazama said agriculture was very meaningful to people with a mental illness because they can relate to society by producing and selling farm products.

"We would like to offer them opportunities to work with pride rather than at other people's mercy," she added.

Kenji Hamada, chief researcher at JA Kyosai Research Institute, said, "People with disabilities can work confidently in local businesses and exert a social impact," because they act as a bridge for residents.

Source: Japan Times, February 1, 2016

Breed-your-own mealworm 'revolution' for your kitchen

By Simon Sturdee

A seething mass of larvae in the kitchen is not everyone's cup of tea, particularly for squeamish Westerners. But for two young Austrian entrepreneurs, it's a food revolution that can help save the planet.

Katharina Unger and Julia Kaisinger, 25 and 28, have developed a device to breed in the comfort of your own home the protein-rich grubs of the meal beetle, to then eat.

"With this current design you can make 200-500 grams of mealworms every week," Unger told AFP at a recent tasting and fundraising event in Vienna.

"You freeze them and then you make them like any other type of meat. You can cook them, roast them, make them into burger patties and mix them into sauce for pasta," she said.

Into the top of the sleek, white "desktop hive" go pupae which then hatch into adults. In the next section, the "loveshack," the insects mate and their eggs fall into the next layer.

Helped by a controlled microclimate, the eggs hatch into larvae which gradually grow and descend to a drawer at the bottom where, around three centimeters long and plump, they are "harvested."

"Our team eats them almost every day," Unger said, showing off some of her creations — Greek salads topped by toasted grubs, quinoa-and-mealworm meatballs and even chocolate (and worm) cake.

Scorpion Lollipops

Eating insects — entomophagy — is not new. Humans have been doing so for thousands of years and today they are a common food in many developing countries across Asia, Africa, Latin America and Oceania.

The U.N. Food and Agriculture Organization (FAO) estimates that insects form part of the traditional diets of at least 2 billion people, with more than 1,900 species reportedly enjoyed worldwide.

In Europe, Romans and ancient Greeks ate them
— Aristotle was partial to cicada larvae — and some
European cheeses, like mimolette in France or the
Sardinian casu marzu, contain or use insects.

A few insect restaurants have sprung up in Europe and North America in recent years, and some products,





ranging from salt-and-vinegar crickets to lollipops with scorpions (actually arachnids), are available.

But for the most part, Westerners generally see bugs as a nuisance, not as nutrition.

This is a shame, Unger said, since insects are not only tasty but a more sustainable source of protein than traditional farmed livestock — and are vital to feeding the world's growing population.

"Compared to beef you need only 10 percent of the land to grow mealworms and you need only around a quarter of the feed that it typically takes to grow the equivalent amount of beef," she said.

Indeed a 2013 report by the FAO noted the "huge potential" of insects, not only for feeding people but also livestock, although it cautioned more research was needed.

The Yuck Factor

The mealworms are also nutritious, containing the same amount of protein as beef, more vitamin B12 than eggs and more fiber than broccoli, according to Unger and Kaisinger's firm, Livin Farms.

Alexandra Palla, a well-known Austrian food blogger present at the recent tasting event, plans to post a recipe of risotto with mealworm, calling the taste "nutty, or mushroomy," but "not spectacular."

But she said that it will take some time for people in Europe to get over the "yuck" factor and really embrace creepy-crawlies as food.

"The first step is mentally to get over the fact that you are eating an insect. Once you eat them you realize they're not so bad," she told AFP. "It's about getting rid of the fear."

"I think in the future everyone will eat insects, or at least almost everybody," predicted Kaisinger, the cofounder of Livin Farms, which already has 200 pre-orders for its US\$499 hives.

"People actually consume around half a kilo of insects every year without knowing it, from tiny traces in chocolate to orange juice and the like."

Source: Agence France-Presse (AFP), January 19, 2016

NGO's Japanese founder foments organic revolution in Vietnam

By Jon Mitchell

This year (2016) Vietnam marks the 30th anniversary of the launch of Doi Moi, the socialist government's series of reforms that loosened its control on free enterprise and opened the once-isolated nation to international trade. Although the changes succeeded in boosting exports and reducing overall poverty levels, they also created a widening economic gap between urban and rural areas, particularly among Vietnam's ethnic minorities.

Since 2009, the Japanese NGO Seed To Table has been supporting those who have fallen through the cracks in Doi Moi. Founded by Tokyo-born Mayu Ino, the organization helps farmers to survive, and prosper, in Vietnam's market-oriented economy.

"We encourage sustainable development by helping farmers to generate regular income. At the same time, we assist them to become more self- sufficient while protecting the natural resources in their communities," Ino says.

Seed To Table operates on a ¥15 million annual budget made possible by private donations and corporate funding, including contributions from U.K. cosmetics company Lush, the Mitsui and Co., Ltd. Environment Fund and Japan's Foreign Ministry. In the past three years alone, the NGO has alleviated poverty in more than 1,300 households.

All this is a long way from when Ino first arrived in Vietnam in 1997 as a student of language and culture at Hanoi National University.

Ino still remembers how painfully her mouth



Happy customers: Phan Thi Hong Nguyen and her son are among the many families in Ben Tre province helped by Seed To Table's "cow bank." | COURTESY OF MAYU INO

muscles ached as she tried to get her tongue around the six tones of Vietnamese pronunciation. After months of study, when she finally thought she was making progress, she asked her landlady in Vietnamese to take her to a bicycle shop to repair a punctured tire.

"The woman nodded like she'd understood. Then she went away and came back with a bowl of yogurt," recalls Ino with a laugh.

Undeterred, Ino persisted in her studies. After leaving Hanoi, she gained her master's in Southeast Asian studies at Hitotsubashi University in Tokyo, then joined the NGO Japanese International Volunteer Center (JVC) as program officer and then country representative for Vietnam. For six years Ino assisted community development projects such as constructing water spillways and planting tangerine seedlings to reduce soil erosion.

When JVC closed its Vietnam office in 2009, Ino wasn't ready to leave, so she founded Seed To Table. Today the NGO operates in two main areas: Hoa Binh province in the northern mountains and Ben Tre province in the Mekong Delta of Vietnam's south.

Hoa Binh is home to the Muong ethnic group, with whom Ino has been working off and on since 2003. One of the most serious problems in their community, explains Ino, is the overuse of agricultural chemicals, which have caused illnesses among local children.

"Farmers in Hoa Binh used to rely on natural ways to grow their crops of rice and sugar cane. But recently, they've become so dependent on pesticides and chemical fertilizers that many can't remember how to farm without them. We try to teach them the methods they've forgotten."

In close cooperation with local farmers, Ino organizes the collection of insects and pond life in order to identify which are harmful — or helpful — for crops; farmers also gather native species of seeds to catalogue and save for future generations. Such seeds, explains Ino, are better suited to local conditions and can be grown in compost without the need for chemicals.

In 2014 these projects helped Hoa Binh farmers obtain organic certification, allowing them to sell their produce at higher prices than crops grown with chemicals. To promote Hoa Binh's organic pork, eggs and pomelo citrus fruit, Ino recently organized a meeting with the Hanoi Chefs Club, whose membership comprises staff from prestigious hotels and restaurants.

In Ino's southern base of operations, Ben Tre province, many residents of the Mekong Delta suffer

NGO's Japanese Continued from page 10

from extreme poverty. For example, processing seafood earns workers just 80,000 dong (¥400) a day, and many farmers work plots of land too small to support their families.

Ino helps Ben Tre's farmers to raise organic crops that sell at prices double or triple the market average. Among their most loyal customers are local schools keen to serve chemical-free lunches to their students. In 2015, Seed To Table arranged a competition for children to come up with a logo for organic-certified produce. Today the winning design, a cabbage wrapped in an "Organic" ribbon, adorns the packaging of certified fruit and vegetables together with the farmers' mobile phone numbers, so consumers can contact them directly with any queries or complaints.

As well as modern-day chemicals, Ben Tre residents are also concerned about contamination left over from the millions of liters of Agent Orange sprayed there during the Vietnam War. Today, approximately 13,300 people in the province (total population 1.5 million) are sick from dioxin exposure, including many children whose illnesses force their parents to stay home to provide care. Unable to work, these families receive support from Seed To Table in the form of home construction and upgrades of their care facilities. In 2014, for instance, private donations from Japan helped the NGO build a tiled bed/bath for a young hydrocephalus patient.

Although overwhelmingly supportive of Seed To Table's work, Vietnamese authorities have sometimes been skeptical about the lasting benefits of such small-scale projects. However, Ino is an ardent believer in the value of micro-support — and nothing exemplifies this better than her "duck banks."

Since 2012, Ino has arranged for families to borrow flocks of 25 ducklings that they then raise, breed and sell for meat.

"In Ben Tre, one family bred their first 25 ducklings and within a year they were able to make enough money to buy four water tanks. In turn, these tanks allowed them to grow more vegetables so, by the next year, they had enough money to buy their own land," explains Ino.

Ino also organizes a "cow bank" where farmers borrow a female cow at a very low price. After breeding it and returning one calf to the bank, they are allowed to keep the original cow and any further offspring.

Considering a full-grown cow can cost as much as 30 million dong (around ¥150,000), Ino's bank gives farmers a unique opportunity to take their first steps out of poverty.

To date, Seed to Table has loaned out 72 cows and tens of thousands of ducklings. The NGO also teaches farmers the fundamentals of bookkeeping so they can



Green shoots: Seed To Table founder Mayu Ino stands in an organic vegetable garden in Hoa Binh province. Ino has been in Vietnam on and off for nearly 20 years, and she still remembers how much her mouth muscles used to ache as she tried to mater the six tones of Vietnamese pronunciation.

better manage their newfound finances.

Initially skeptical of the benefits of small-scale projects, in January 2016 local authorities in Ben Tre announced they would start adopting similar approaches to community development in the future.

Despite these signs of progress, Vietnam's farmers face an uncertain future. In 2015 the government authorized the cultivation of genetically modified crops, a move that could threaten the local varieties that Ino has struggled so hard to protect. Moreover, Vietnam has signed the Trans-Pacific Partnership, which may leave farmers at the mercy of large multinational corporations.

No matter what changes these policies bring, Ino is committed to supporting those who need help the most. Short-term goals for Seed To Table include creating stronger support networks among women in rural communities to secure regular incomes. In the longer term, Ino plans to foster connections between Vietnamese farmers and markets in Japan, South Korea and Europe.

What gives Ino great optimism is the younger generation.

"More and more young people in the cities are becoming interested in agriculture. They are very techliterate and use social media to share information about the benefits of organic food. Recently they've even begun organizing eco-tours to rural areas to see firsthand how organic farms work."

Further information about Seed To Table can be found at www.seed-to-table.org and www.facebook.com/seedtotablevn Jon Mitchell received the inaugural Foreign Correspondents' Club of Japan Freedom of the Press Award for Lifetime Achievement for his investigations into U.S. military contamination on Okinawa and other base-related problems. Your comments and story ideas: community@japantimes.co.jp

Source: Japan Times, February 24, 2016

Hi-tech agriculture a growing trend in Vietnam

Technology is regarded as the key to agricultural restructuring and the solution to tackling food security and agricultural produce quality.

Director of the Institute of Policy and Strategy for Agriculture and Rural Development (IPSARD) Nguyen Do Anh Tuan stated that Vietnam's agriculture needed to develop in depth and on a broader scale to match integration requirements.

The only way to realise these goals, according to Tuan, is by promoting hi-tech agriculture to improve both quality and efficiency, meeting the increasingly diversified consumer demand.

"Science and technology applications in agricultural production need the engagement of not only the state and scientific research organisations, but also the participation of farmers and businesses. In fact, businesses play a growing role in raising the sector's technology level while increasing farmers' access to hi-tech applications," Tuan said, adding that businesses' engagement in agriculture could help tackle problems with capital and output markets for agricultural products.

Based on this theory, a raft of investment incentives for hi-tech agriculture was introduced.

The project to develop hi-tech agriculture by 2020, approved by the prime minister in 2010, awarded the highest incentives applicable to research and development activities to promote hi-tech agriculture, train workers, and support the development of hi-tech agricultural businesses.

Alongside national incentives, many cities and provinces have enacted specific mechanisms to assist businesses and push up administrative reforms to attract investors

Thus far, a number of cities and provinces have become desirable destinations for hi-tech agricultural businesses, such as Ho Chi Minh City, Lam Dong, Vinh Phuc, and Quang Ninh.

According to Deputy Chairman of the Quang Ninh People's Committee Dang Huy Hau, in light of the agricultural sector's five-year restructuring plan with a vision to 2030, science and technology will lay the groundwork to create breakthroughs in development.

This is a signal for the participation of businesses from assorted economic sectors to enter into the restructuring process. These businesses will be a central factor in the process, creating spill-over effects linking farmers and from there spurring production.

Most recently, Quang Ninh has invested intensively into developing a hi-tech agricultural zone in the province's Dong Trieu district, calling on companies and organisations to promote research and application of science and technology in agricultural production.



The province's efforts were duly rewarded. Vietnam's leading private group Vingroup is carrying out the first phase of a VND650 billion (US\$29.8 million) hi-tech agricultural centre project on 43 out of 200 hectares, producing about 20 types of vegetables and fruit that comply with VietGap standards.

The initial output is from 2.5-3 tonnes per day for supply to its VinMart system, helping to generate jobs for nearly 200 local labourers.

The project employs cutting-edge technologies from Japan, Israel, and the Republic of Korea to ensure products meet VietGap, GlobalGap, and organic food standards.

They are striving to shape a hi-tech agricultural production zone with the centre for procuring, processing, product preservation, and technology transfer located in Dong Trieu district's Hong Thai Tay commune.

Dong Trieu district is also co-operating with diverse enterprises and the Crop Institute to promote hi-tech agricultural development models which are rooted on the collaboration between the state, scientists, businesses, and farmers.

Minister of Agriculture and Rural Development confirmed that his ministry was prioritising hi-tech development as a key method in driving agricultural restructuring and to build a new countryside model.

He expected more and more firms would come on board with hi-tech agriculture development on account of cities and provinces' proven commitment in the field.

Promoting the public-private partnership model in hitech agriculture

Vietnam has tremendous potential for hi-tech agricultural development, which explains why many

Hi-tech agriculture

. . . . Continued from page 11

leading local groups such as Vinamilk, TH True Milk, and Duc Long Gia Lai have all ventured into the sector.

In fact, according to Tuan, a slew of foreign investors have made forays into Vietnamese agriculture.

"Agriculture has great potential for development in Vietnam. In addition, the country's agricultural exports have unprecedented opportunities as a string of free trade agreements between Vietnam and other countries have been or will soon be signed. Investment in this sector is expected to continue rising in the near future," Tuan commented.

According to national targets, by 2020 Vietnam will be home to 200 hi-tech agricultural businesses and 10 hi-tech agricultural zones.

However, according to general secretary of the Association of Hi-tech Application Agricultural Enterprises Ngo Tien Dung, Vietnam currently only reports 22 hi-tech agricultural businesses out of thousands of agricultural firms.

That was because companies face numerous difficulties in capital and investment incentives, while this field is capital-intensive and requires a long time to recoup seed funds.

Experts therefore suggest attracting investment into agriculture by promoting a public-private partnership model, as applied by Quang Ninh. The province's results have thus far been encouraging.

Under this model, the state sets out standards and implements concrete policies to encourage businesses to use technological advances in agriculture.

The government also plans agricultural production zones and clarifies its policies for farmers and businesses.

Cities and provinces can work closely with businesses during project implementation to clear space, convince local residents to support businesses, and establish hotline channels to help firms tackle impediments.

Source: News VietNamNet, May 6, 2016

'Smart Farms' the Future of Agriculture

By M.H.Lee

The Ministry of Agriculture, Food and Rural Affairs announced the development of 'smart farm' technology, which equips existing dairy farms with information and communications technology (ICT).

Equipment that helps enhance productivity in breeding farm animals, such as robot milking machines, automatic calf feeders, and self-regulation cattle bowls will be provided so that farms can become 'smarter'.

When a cow enters the milking machines, a computer controls robot arms and the milking equipment so that the right amount can be milked from the cows. Automatic calf feeders provide milk to calves based on data related to their size.



Systems that allow farmers to maintain their barns remotely were also developed. The temperature, humidity, and ventilation status of a barn can be controlled from afar, so that animals can live in a pleasant environment. The system also allows farmers to spot abnormal conditions quickly.

The automatic system analyzes information on animal growth and the barn environment. Once the big data generated is analyzed comprehensively, the amount of food and manpower needed to raise the animals can be minimized, and diseases can be prevented at the same time.

As the 'smart farm' system can also be adopted in the overall management of farms, farmers can run their farms more efficiently based on science and data. This way, productivity can improve, and farmers can have a better quality of life.

The ministry plans to investigate demand for the system over the next month. After consulting with farms on the support they will receive during the month of May, 'smart farm' systems will be officially provided to farms starting in June. The ministry is expected to provide farmers with 100 million won in equipment per 50 animals.

Source: Korea Bizwire, March 29, 2016

Japanese Govt launches domestic farm heritage system



Houses surrounded by small groves called igune amid water-filled rice paddies in Osaki, Miyagi Prefecture / Courtesy of Ryozo Otomo

The Yomiuri ShimbunThe Agriculture, Forestry and Fisheries Ministry has established a domestic system for certifying traditional agricultural methods and landscapes.

The system is based on the Globally Important Agricultural Heritage Systems (GIAHS)*. As the average age of the nation's farmers rises, traditional farming and other agricultural features are at risk of being lost.

However, at a time when other nations and regions of Asia are dominating GIAHS certifications, Japan is facing a harder time gaining recognition.

Under the circumstances, the government hopes that acknowledging sites and practices with a domestic "official seal" will help vitalize regional areas.

Groves of Miyagi

A grain-producing area known as Osaki-kodo extends over Osaki, Miyagi Prefecture, and other areas.

Its rice paddies are dotted with small groves called igune that surround farmhouses, protecting them from wind and snow. When the paddies are filled with water in spring, the houses look like little islands floating on the surface of the water.

The area is a wintering ground for about 100,000 white-fronted geese, which feed off grains of unhulled rice.

A wetland registered under the Ramsar Convention adds to the area's rich environment. But the aging population means fewer people are available for maintenance. As lifestyles change, this unique landscape is at risk of being lost.

"Igune can play a role in disasters and serve as habitats for animals," said local resident Reiko Oyakawa,

67. "I want to tell later generations what it's like to live with igune, which have been protected by our ancestors."

The city is working with four surrounding towns to gain GIAHS certification, but local officials are also showing interest in the domestic system.

A Japanese agricultural heritage system "could bring new appreciation to the value of the region," said Shusaku Hirayama, head of the city's industrial promotion bureau.

Little local appreciation

The creation of a domestic certification system comes amid an aging farming population, farmworker shortages, and risks that traditional farming methods and landscapes around the country could be lost. One of other backgrounds is that locals

may consider them to be nothing out of the ordinary, so tend to place little value on them, although outsiders may consider them valuable.

At the same time, Japan is facing stiff competition for GIAHS certification — 28 of the 36 sites that have been certified by the system are in other nations and regions of Asia. "The regional bias probably means it won't be easy to get more Japanese sites certified," a senior ministry official said.

The ministry decided to create the domestic system in the hope that granting an official seal of approval will generate new appreciation among local people for their areas and aid regional vitalization.

Like the international system, in the domestic version the agriculture minister will certify sites that have practiced a farming method for many years in harmony with the local natural environment. The domestic system will also consider factors such as the ability to survive disasters and initiatives for processing and shipping agricultural products.

The ministry plans to solicit applications until the end of September and grant the first round of certifications sometime this fiscal year.

Tourism, branding

The regions home to the eight domestic GIAHS sites have seen an increase in tourism and established brand-name produce.

The Minabe-Tanabe Ume System, which involves growing ume plum trees on steep slopes not suited for other forms of agriculture, was certified in 2012. "Many

Japanese Govt

.... Continued from page 14

more people came than we expected," said an official of the city government of Tanabe, Wakayama Prefecture.

About 9,500 tourists visited the Kishu Ishigami Tanabe plum orchard from Feb. 6 to March 6 this year, double the number in the same period last year.

City officials said the certification has had an effect. "Being featured in newspapers and on television was important," one of them said.

The Traditional Tea-Grass Integrated System in Shizuoka, a GIAHS-designated area that covers Kakegawa, Shizuoka Prefecture, was certified in 2013. In this system, Japanese pampas grass is cut and spread over raised mounds in tea fields.

Local tea products comprising more than a certain percentage of leaves grown using this method can carry a

special sticker. About 1.34 million stickers had been sold as of the end of January.

There are many other stories of regions making good use of GIAHS certification. A ministry survey last October found 13 regions that intend to seek certification.

* Globally Important Agricultural Heritage Systems (GIAHS)

A certification system for agricultural methods that should be protected and maintained for posterity that is managed by the Food and Agriculture Organization of the United Nations. Since its establishment in 2002, 36 sites in 15 countries have been certified. Eight sites in Japan have been certified, including "Satoyama in harmony with Japanese crested ibis" in Niigata Prefecture in 2011.

Source: Japan News, April 24, 2016

E-farmers sow seeds for business success in Taiwan

The number of farmers selling produce online is set to rise in Taiwan courtesy of a Council of Agriculture (COA) training program in the last half of 2016 aimed at equipping members of the agricultural sector with the skills and knowledge required for successfully conducting e-commerce businesses.

Conducted outside the planting and harvesting seasons, the courses cover key areas like Internet marketing and the e-commerce business model. Priority for enrolment is given to 855 organic and small farmers whose products are included in the COA's Taiwan Agriculture and Food Traceability System.

The system was established in 2007 to provide full information on the origins of Taiwan's agricultural produce, food and ingredients. It plays an important role in safeguarding the health of consumers.

Yuan Hwa-hsing, head of international marketing at the COA Department of International Affairs, said more consumers, particularly younger females, are shopping for fruit and vegetables online—a trend largely due to improved packaging, refrigeration, delivery processes and conducive to expand market for farmers. As online shoppers are more willing to pay for better quality produce, more farmers are enticed to go organic.

The COA's training program seeks to springboard off this development by connecting farmers with the market through major Taiwan e-commerce programs like GoHappy, PChome24h and Yahoo Shopping.

"The training program is a real plus for organic and small producers looking to operate outside Taiwan's traditional system involving middlemen taking large cuts of the profits," Yuan said. "We envisage a 10 percent rise



A farmer inspects a gourd destined for e-market at Tenha Organic Farm in Tainan City, southern Taiwan. (Staff photo/Jimmy Lin)

in margins for those electing to trade electronically.

"By using the e-commerce platforms, farmers are helping promote the origins of their produce and forging emotional bonds with consumers on the road to delivering a win-win outcome for all."

The training program is part of government efforts spurring Taiwan's total production value selling produce via e-commerce platforms. It is anticipated this figure will rise from NT\$15 billion (US\$463.5 million) in 2015 to NT\$25 billion by 2020, as well boosting exports of agricultural products to Asian markets through cooperating with regional e-commerce platforms.

Source: Taiwan Today, April 27, 2016

ABOUT CACCI

The Confederation of Asia-Pacific Chambers of Commerce and Industry (CACCI) is a regional grouping of apex national chambers of commerce and industry, business associations and business enterprises in Asia and the Western Pacific.

It is a non-governmental organization serving as a forum for promoting the vital role of businessmen in the region, increasing regional business interaction, and enhancing regional economic growth. Since its establishment in 1966, CACCI has grown into a network of national chambers of commerce with a total now of 29 Primary Members from 27 Asian countries and independent economies. It cuts across national boundaries to link businessmen and promote economic growth throughout the Asia-Pacific region. CACCI is a non-governmental organization (NGO) granted consultative status, Roster category, under the United Nations. It is a member of the Conference on NGOs (CoNGO), an association of NGOs with UN consultative status.

Among the benefits of membership in CACCI are the following:

- 1. Policy Advocacy CACCI aims to play a strong policy advocacy role in order to establish a business environment conducive to creating better opportunities for CACCI members.
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- 3. Participation in CACCI Annual Conferences and Training Programs Members are invited to participate in the annual Conferences and various training programs which CACCI regularly conducts either on its own or in cooperation with other international organizations and member chambers.
- 4. Interaction in Product and Service Councils Membership in CACCI allows participation in the activities of the various Product and Service Councils (PSCs) of the organization. PSCs are business groupings organized along product or service lines with a primary objective of promoting business cooperation, personal contacts, and technology transfer.
- 5. Access to CACCI publications CACCI publishes the CACCI Profile, its monthly newsletter, and the CACCI Journal of Commerce and Industry, a bi-annual publication which features papers, speeches, and other articles pertaining to issues affecting the regional economy.

For more information, please visit www.cacci.biz

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