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FOOD & AGRICULTURE NEWSLETTER

Message from ACFA Chairman

Dear Esteemed Members,

As Chairman of the Asian Council on Food and Agriculture, I am honoured to address you at this pivotal time. Our sector is undergoing profound transformations due to technological advancements, climate change, and evolving consumer preferences.



The global food system faces significant challenges and opportunities. Climate change impacts agricultural productivity, with extreme weather and shifting seasons affecting crop yields. We need innovative approaches to ensure food security and sustainability. Technological advancements, such as precision agriculture and biotechnology, offer promising solutions but must be accessible to smallholder farmers.

Consumer preferences are shifting towards sustainable, organic, and locally sourced foods, presenting opportunities for diversifying agricultural practices and tapping into niche markets. However, this requires adaptation and resilience from our farmers and food producers.

No country is entirely self-sufficient in food production. Understanding surplus food products across countries can help optimize land use and shift from dependency to a more independent system. This is crucial as we face food security issues and the increasing impact of global warming. The demand for organic food reflects changing eating habits, necessitating scientific approaches in multi-crop farming.

These factors profoundly impact our food systems, affecting supply chains, food prices, and nutrition. We must work collaboratively to address these challenges. Our Council remains committed to fostering dialogue, sharing knowledge, and advocating for policies that support sustainable and resilient food systems across Asia.

In the coming months, we will intensify our efforts to promote sustainable agricultural practices, support research and development, and enhance regional cooperation. Together, we can ensure a prosperous future for food and agriculture in Asia.

Thank you for your continued dedication and support.

Sincerely,

Pradeep Kumar Shrestha
Chairman
The Asian Council on Food and Agriculture (ACFA)

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As Sri Lanka struggles back from crisis, drought hits hard

By Uditha Jayasinghe

H.J.M. Seneviratne, 63, slices through yellowed paddy stems dried out by a drought that has destroyed over 95% of his crop and is threatening crisis-hit Sri Lanka's summer rice harvest.

The island's economy was crushed in 2022 by its worst financial crisis in over seven decades, caused by a severe shortage of foreign exchange reserves that triggered widespread unrest and ousted its former president.

Helped by a \$2.9 billion bailout from the International Monetary Fund (IMF) Sri Lanka has slowly stabilized its economy since March 2023, rebuilding its decimated reserves, moderating inflation and strengthening its currency.

But even before the country's agriculture sector could recover from skyrocketing prices of inputs from fertilizer to power, the rains failed.

"I've been a farmer for 40 years but I've never experienced a harder time than this," Seneviratne said, standing in the middle of a dusty field near Anamaduwa, a town in northwestern Sri Lanka, clutching a fistful of straw-like paddy stems with hollow rice kernels.

"We haven't had enough rain since May 2023. The harvest is so bad we don't even have seed paddy for the next season."

The southwest monsoon farmers rely on for the yala or summer harvest was scant in 2023 because of the El Nino weather pattern and the weather department estimates there will be no rains until October.

Typically, Seneviratne's 1.6 hectares yield about 4.5 to 6 tons of paddy for the summer harvest but this time he predicts he will get only about 150 kilograms. All but one of eight water tanks – large ponds in which rainwater is collected for irrigation – in the area have dried out, destroying about 80 hectares of paddy.

The paddy loss could be as much as 30,350 hectares, according to Agriculture Minister Mahinda Amaraweera, while other experts say full losses could be even higher as estimates are yet to be completed. Sri Lanka planted 526,000 hectares for the summer harvest, according to the Agriculture Ministry.

"We have lost at least 80,000 metric tons of paddy as per the latest data and it could be more," said Buddhi Marambe, a professor of crop science at Sri Lanka's Peradeniya University. In 2022, when the crop was decimated by a lack of fertilizer because of the economic crisis, the season produced 1.5 million tons of paddy.

The drought could reverse a recent trend of falling food prices, which dipped an annual 2.5% in July after rising 94% year-on-year in September 2022.

Sri Lanka's central bank warned that the dry weather coupled with higher global oil and commodity prices could also "weigh on expected growth in the near term," as the island struggles to limit economic contraction to 2% in 2023 after shrinking 7.8% in 2022.

Sri Lanka's northern neighbor India is also expected to have the driest August in more than a century, prompting it to restrict exports of certain categories of rice. Sri Lanka has



previously imported rice from India to bridge production shortfalls.

Sri Lanka has so far ruled out rice imports in 2023, a statement from the president's office said, as regions that have escaped the drought have produced higher yields.

Rice prices have remained largely unchanged at retail, edging up about 10 Sri Lankan rupees (about 3 U.S. cents) to 220 rupees per kg from July 2023. So far, rice stocks have staved off any impact but prices could tick up in coming months with a scant harvest.

Experts say they are worried that if Sri Lanka doesn't receive the rains it needs in March 2024 because of the continuing El Nino, the country will be left with such limited reserve stocks it will have to resort to large-scale, expensive imports.

El Nino, a warming of water surface temperatures in the eastern and central Pacific Ocean, is linked to extreme weather conditions from tropical cyclones and heavy rainfall to severe droughts.

During the last El Nino in 2016-2017, Sri Lanka suffered its worst drought in 40 years and rice output fell by nearly 50% year-on-year to 2.4 million metric tons over both its harvests.

Rice is the staple food of the country's 22 million people and its biggest crop. According to government data, 2 million people in the country are rice farmers out of 8.1 million people engaged in fishing and agriculture in the largely rural economy.

To limit the El Nino impact, Marambe says farmers will have to plant early during the maha paddy season that starts in October, as rains in March 2024 and midyear are uncertain.

"If rains fails in March it will impact our main paddy season and we could have a very, very dry season as well in the middle of 2024."

The drought has also wiped out the small chile, peanut and banana plants Seneviratne's wife, W.M. Makamma, 62, grows to feed her family. "Before the crisis we used to cook for all three meals but now it's only two," she said. "We've stopped buying eggs, chicken or fresh fish. Lunch is a cup of black tea.

"I feel like we have fallen completely and its very hard to get back up."

Reuters

Could Obesity Drugs Take a Bite Out of the Food Industry?

With the use of obesity medicines accelerating, millions of people could be eating less food overall and shunning unhealthy fare. This could have long-term impacts across food-related industries.

The latest hunger-suppressing weight-loss drugs are transforming the way obesity is treated in the U.S. The category has achieved blockbuster status over the course of a year, with more growth to come—Morgan Stanley Research analysts estimate that 24 million people, or 7% of the U.S. population, will be taking these drugs by 2035. This may be welcome news for the biopharma industry, but the drugs’ prevalence could have long-term implications for food-related sectors as consumers eat less and make more nutritious choices.

“The food, beverage and restaurant industries could see softer demand, particularly for unhealthier foods and high-fat, sweet and salty options,” says Morgan Stanley’s tobacco and packaged food analyst Pamela Kaufman.

That’s because the new class of obesity medicines works by decreasing appetite and in turn can reduce calorie intake by 20% to 30% daily, according to findings from a Morgan Stanley research survey of 300 patients taking the drugs. Significantly, survey participants cut back the most on foods high in sugar and fat, reducing their consumption of confections, sugary drinks

and baked goods by as much as two-thirds. As more people in the U.S. use obesity drugs, overall consumption of carbonated soft drinks, baked goods and salty snacks may fall up to 3% by 2035.

That said, the expected 1% to 2% calorie reduction among U.S. consumers should be manageable across most industries. “Companies will likely adapt to changes in consumer behavior through innovation and by reshaping their product portfolios. Brands already offering healthier options will be in the best position to respond to the change,” Kaufman says.

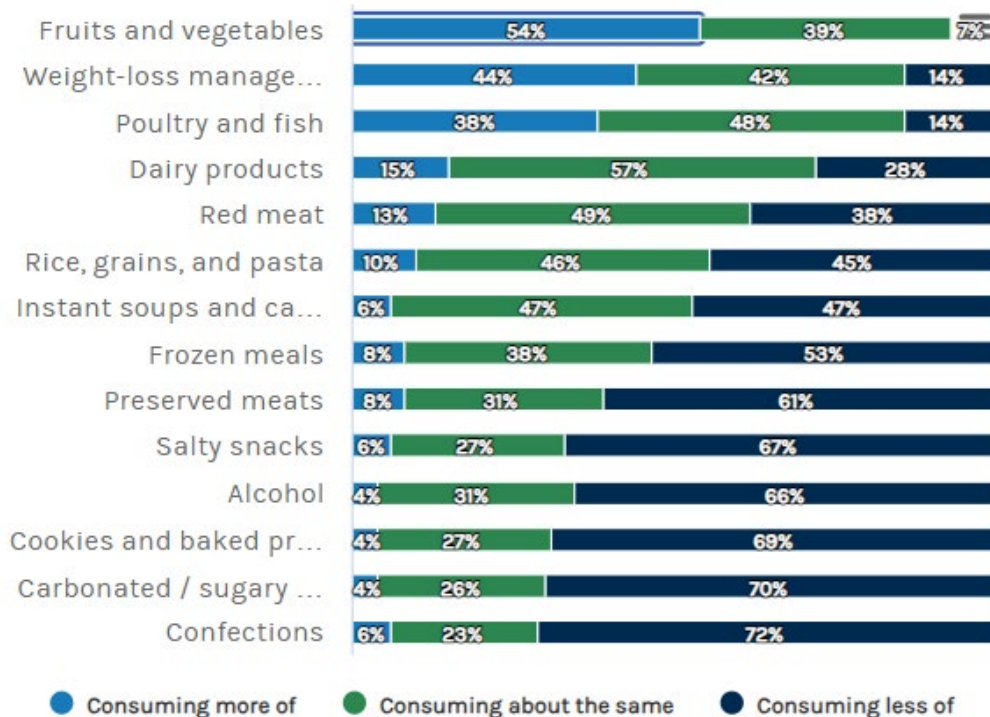
Here’s how the rise of obesity drugs could have an impact across food-related sectors:

Repackaging Packaged Food: Confectionery, baked goods and salty snacks appear to be most at risk from increased usage of obesity drugs, with analysts forecasting a drop in consumption of as much as 3% through 2035.

“Two-thirds of patients reported eating three or more snacks per day before starting the drugs, while 74% reported eating two snacks or less after starting the drugs,” says Kaufman.

On the other hand, demand should continue to grow for “weight-loss management foods” such as protein shakes and bars as a substitute for snacks and meals perceived as unhealthy (see Figure 1).

Exhibit 10: Healthier categories see a boost in consumption by patients after starting on AOM



Source: Morgan Stanley Research (including estimates)

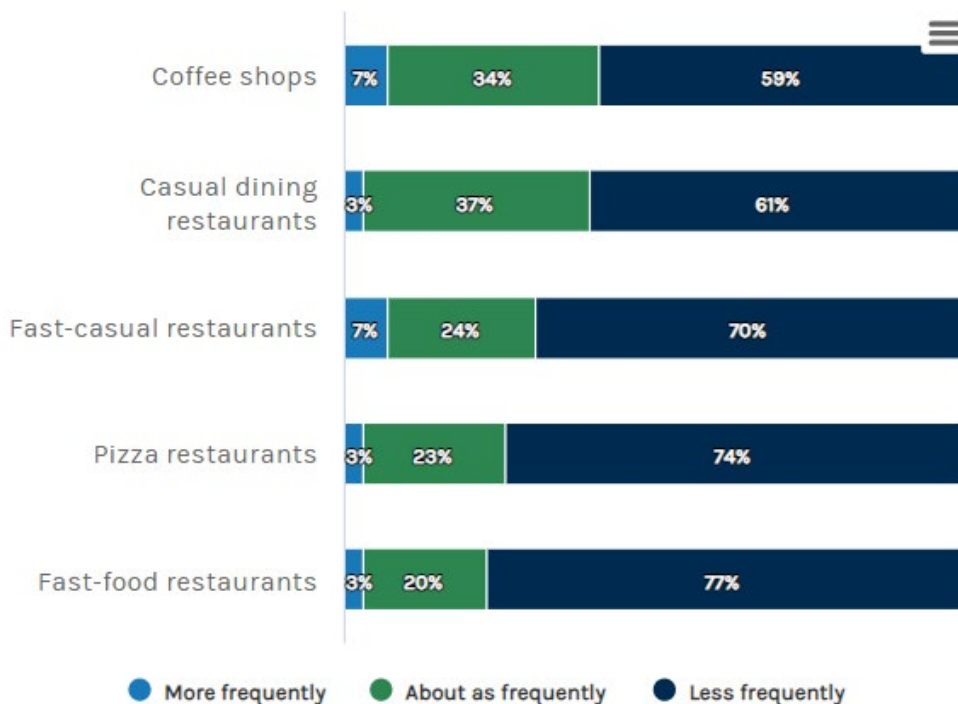
Beverages Lose Their Sparkle: Obesity drug patients reported cutting back considerably on both nonalcoholic and alcoholic beverages, with 65% consuming fewer sugary carbonated drinks and 62% drinking less alcohol. Nearly a quarter stopped drinking alcohol entirely and nearly 20% gave up sugary drinks. Analysts see U.S. focused alcohol companies facing the most exposure from increased obesity medicine usage and expect a roughly 2% drop in consumption by 2035.

“While the drop in beverage consumption is

meaningful, companies should be able to manage the risk over time by shifting, for example, to low- or no-calorie offerings,” says beverages and household products analyst Dara Mohsenian.

Restaurant Rethink: Chains that mainly sell foods regarded as unhealthy face a longer-term risk, with same-store sales growth forecast to fall between 1% to 2%. But some fast casual chains are already adapting by offering healthier menus, while others, such as pizza, doughnut or fried-chicken chains, have less flexibility and could be more exposed (see Figure 2).

Exhibit 11: Patients report the most significant changes to fast food and pizza restaurant trips



Source: Morgan Stanley Research (including estimates)

“Many chains will evolve over time to respond to consumer tastes. Some have invested billions of dollars in stores and concepts to serve these changing preferences,” says Brian Harbour, who leads coverage of U.S. restaurants and food distributors. Harbour says he doesn’t view the rise of obesity drugs as an existential risk, for the most part: “Restaurants are never just about the food. They sell convenience, in the case of limited service, or an experience, in the case of full service. But they could face declining sales in the medium term.”

Retail Resilience: The short-term impact on grocery stores should be modest, though that could change over time as more people start taking weight-loss drugs. Conventional grocers and other food-focused retailers will face greater challenges from the shift, while mass retailers that sell many product categories along with food will be better insulated. Retailers with pharmacy departments could see stronger sales growth as demand for weight-management medicines increases.

“Retailers need to monitor the obesity drugs trend. They

should be prepared to make changes to their assortment and how they market to their core customers to maintain market share,” says Simeon Gutman, Morgan Stanley Research’s equity analyst covering hardline, broadline and food retail.

Reprogramming Weight Loss: Morgan Stanley data show the proportion of people subscribing to a weight-loss program fell from 29% to 20% once they began taking the drug. The uptake of appetite-suppressing medicines is already forcing weight-loss companies to shift their business models away from promoting diet and exercise as the best ways to lose pounds. One of the best-known digital-based dieting players has seen use fall by a third once people start taking obesity drugs and is moving into the drug space with the acquisition of a telehealth platform that lets members connect with doctors who can prescribe the medications.

Over time, telehealth could gain further share, especially as awareness around the offerings grows.

Morgan Stanley

Cuisine as a way to Taiwan's heart and identity

By Li Yuan

Taiwan is a self-ruling island of 24 million people that is officially known as the Republic of China. Only about a dozen countries recognize it as a nation because China claims it as one of its provinces. Taiwan is called “Chinese Taipei” by international organizations and at the Olympic Games.



The ambiguity of Taiwan's nationhood contrasts with a growing Taiwanese claim of identity. More than 60 percent of the people living on the island identify as Taiwanese, and roughly 30 percent identify as both Chinese and Taiwanese, according to the latest results of an annual survey conducted by National Chengchi University in Taipei. Only 2.5 percent consider themselves Chinese

exclusively.

But what makes them Taiwanese, not Chinese? How will they create a cohesive narrative about their identity? And how do they reconcile with their Chinese?

For many people, it's through food, one of the things the island is known for, aside from its semiconductor industry. In the past decade or so, restaurateurs, writers and scholars have started to promote the concept of Taiwanese cuisine, reviving traditional fine dining and incorporating local, especially Indigenous, produce and ingredients into cooking.

They are articulating and shaping a culinary culture that's distinct from that of China, highlighting a Taiwanese identity that's organic, tangible and immersed in everyday life. The food embodies Taiwan's yearning for recognition as a nation, or at least a culture of its own.

“For years, Taiwan's ‘nationhood’ has been an ambiguous concept,” Yu-Jen Chen, a food historian at National Taiwan Normal University in Taipei, wrote in a 2020 book. “And that makes the question ‘What Taiwanese cuisine is’ particularly interesting.” She said the efforts to define and shape the cuisine allowed the Taiwanese to “taste and feel the ‘nationhood.’”



Ian Lee is the owner and executive chef of the HoSu Restaurant in Taipei.

HoSu means “good island” in the Taiwanese dialect, and he uses his menu to express his love of the land of Taiwan – its produce, terrain and aroma.

One of Mr. Lee's dishes, a smoky chargrilled fish, draws inspiration from the cooking of the

Atayal, one of many Indigenous groups in Taiwan. The rice noodle soup Dingbiancuo, a famous street snack, is elevated to a main course. Taiwanese mango is

presented in the shape of the terraced fields where the decorative herb for the dessert is grown.

“I want the others to see how wonderful and vibrant Taiwan is by telling the stories of our homeland,” he said.

Mr. Lee believes his food could enhance the chances that the people of Taiwan will stand up to China, whose threat to take over the island by force looks more real than it has in many decades.

“We have to help people identify with this land so a national identity could emerge eventually,” he said, “So if something happens, we will be willing to fight for our homeland.”

Nowhere does food exist independently from politics. After Mexico's independence from Spain two centuries ago, the Mexican cuisine helped shape a national identity.

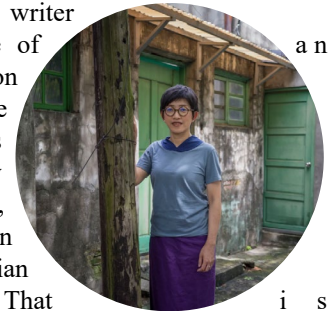
In March, China's top leader, Xi Jinping, said, “Whether the public can have vegetables on their tables is a political matter.”

In Taiwan, the idea of Taiwanese cuisine first appeared as a way to differentiate it from the cuisine of the island's colonial Japanese rulers in the early 20th century. During the authoritarian rule of the Nationalist Party, or Kuomintang, Taiwanese food was considered a regional cuisine like that of Shanghai and Sichuan, but it held a lower status.

After the lifting of martial law in 1987, especially after Chen Sui-bian, a Taiwanese-born nationalist, was elected president in 2000, Taiwanese snacks were served at state banquets. Cuisines of Indigenous groups and Hakka people, a Han Chinese sub-group, began to rise, reflecting the inclusiveness of a new democracy.

Today, as a dozen Taiwanese what Taiwanese cuisine means to them and you might get a dozen answers.

Ching-yi Chen, a food writer in Taipei, asked each attendee of an event to bring a dish that the person considered to be Taiwanese cuisine. A woman in her 20s brought mapo tofu, originally from China's Sichuan Province, because she grew up eating it. An older pro-independence politician brought a bowl of eel noodle. That is a dish from Tainan, the stronghold of the ruling Democratic Progressive Party, which promotes Taiwanese nationalism.



To Ms. Chen, both qualified as Taiwanese cuisines. “Anything on this land that is transformed and given a new form or life can be referred to as ‘Taiwanese cuisine,’” she said.

She pointed to the prevalence of miso soup in Taiwanese meals, a vestige of the Japanese colonial rule. In Taiwan, the soup can go with cold noodles, glutinous rice dumplings and even meatballs, she said, something that probably would not happen in Japan.

“The reinterpretation makes it a new dish and part of Taiwanese cuisine,” she said.

For both Taiwanese cuisine and identity, the trickiest

aspect is how to reconcile with its Chinese heritage.

“For me, the Chinese government and my Chinese ancestors are two separate things,” Ms. Chen said. “As much as we want to stay away from the Chinese government, most people probably won’t go as far as disowning their ancestors.”

For the most part, Taiwanese people seem to be at ease with their Chinese heritage. The streets of Taipei can feel like any city in southern China. Most people speak Mandarin Chinese even though the Taiwanese dialect is gaining popularity. Many roads and places are named after Chinese provinces. I stayed at a hotel on Jilin Road and ate pork liver soup at a night market named after my home region, Ningxia.

Many restaurants in Taipei claim to offer Sichuan, Hunan and Shanghai cuisines. But for those mainland Chinese who are looking for “authentic” regional Chinese food, they’re in the wrong place.

The dishes at a Hunan restaurant are not spicy at all. The Shanghai restaurant at the Shangri-La Hotel in Taipei is excellent. But the most memorable dish, for me, was teamed glutinous rice with mud crab, a signature Taiwanese dish.

A place where many Indigenous languages are spoken, and the first in Asia to allow same-sex marriage, Taiwan is an inclusive society. So is its cuisine. It’s fusion, or anything goes, said Jewel Tsai, another Taipei food writer.

“That’s why it’s difficult to define Taiwanese cuisine,” she said. “How are you going to define something that’s ever expanding like a snowball?”

One group in the movement is elevating original Taiwanese cuisine, which was diminished and looked down on during the more than half-century of political repression of Taiwanese civilians under the rule of the Kuomintang. Taiwanese elites were killed or jailed. Speaking the Taiwanese dialect in schools was subject to fines. High-end Taiwanese restaurants were converted into public canteens to accommodate the two million mainlanders who evacuated to the island after



the Kuomintang lost the civil war to the Communist Party in 1949.

Chefs at Mountain and Sea House, a fine dining restaurant that opened in Taipei in 2014, tracked down old recipes and reincarnated traditional Taiwanese banquet dishes from a century ago. One of its most exquisite items is a vegetable dum made of interweaving bottle gourd and carrot slices and stuffed with black pork and mushrooms.

The most audacious efforts in Taiwanese cuisine are made by those like Mr. Lee, the owner-chef of HoSu restaurant, who try to elevate the Indigenous cooking and ingredients.

In the political debate, Taiwanese nationalists often emphasize the existence of the Indigenous groups as evidence that Taiwan has its unique origins, of which the Chinese culture is only a part, Yu-Jen Chen, the food historian, wrote in her book.

Mr. Lee believes that the Ukrainians have put up a good fight against Russia because they identify strongly with their nationhood. He wants to use his cooking to advance the sense of Taiwanese identity.

“Everyone is a small screw,” he said. “We need to tighten and fasten these screws properly for the systems to function normally. When the system operates smoothly, I believe the other side will be less inclined to engage in aggression or attempts to annex.”

The New York Times

Chocolate-makers aim to stamp out child labor in supply chains

For many years, child labor in the cultivation of coca beans for export as a key ingredient for making chocolate has been a rampant problem in West Africa, with children held back from attending school and forced to harvest the crop on farms.

Though not many consumers in Japan are aware of or sensitive to the issue, some chocolate producers in the country have recently decided to take a stand through a campaign to source child labor-free cocoa and provide local farmers with assistance for improving working conditions.

One such company is Yuraku Confectionery, whose main products is its Black Thunder chocolate bar. The chocolate-



maker announced in 2020 that all the ingredients used in its products would be sourced from farms free of child labor by 2025.

Black Thunder chocolate bars are now free of ingredients linked with child labor, and roughly 96% of such produce has been removed from the company’s other products.

“I’ve always wanted to bring smiles to our customers’ faces through our products, but I felt it would be a contradiction if I was exploiting someone else’s smile in the process,”

said company president Tatsunobu Kawai, who first learned about the issue through Action against Child Exploitation, a nonprofit organization known as ACE.

Kawai took the initiative after hearing about how exploited children are often unable to attend school in Ghana, Japan's largest supplier of cocoa, because they are forced to work on farms to cultivate the crop.

Changing suppliers was not easy. "At the time they reacted reluctantly, saying that they were unable to suddenly start providing me with that kind of produce, and that costs would go up."

Eventually, the company signed a contract with a new overseas supplier that was able to source cocoa produced without using child labor.

Since then, the domestic companies that previously supplied Yuraku Confectionery have come to understand the importance of the company's stance, and now sell child labor-free cocoa and other ingredients.

In the spring, a group made up of international human rights organizations and others announced the Chocolate Scorecard, an annual ranking that rates how compliant major chocolate companies and trading firms are when it comes to upholding human rights and environmental standards in their supply chains.

Topping the rankings for Japanese companies was Fuji Oil Holdings, which develops, manufactures and sells food products derived from plant-based oils and fats. The Osaka-

based company also supplies Yuraku Confectionery with child labor-free cocoa.

Fuji Oil has set itself the goal of removing child labor from its supply chain by 2040 and is aiming to procure its ingredients more sustainably.

Hitoshi Shindachi, senior executive officer at the company, said, "At the root of child labor is poverty. The only way we can eliminate child labor is by enriching the livelihoods of individual farmers."

Fuji Oil's programs include helping farmers in West Africa grow cocoa beans that are more resilient to the adverse effects of climate change, in order to help boost their yields and income. It also focuses on using its local staff to monitor the prevalence of child labor practices in the region.

ACE Vice President Tomoko Shiroki welcomes the move, albeit belatedly, among Japanese businesses to deal with the issue.

"They have finally begun to take action against child labor in the cocoa industry, but there has been interest in this issue in Europe and the United States since around 2000."

She said that companies working together will be an essential step in rooting out child exploitation in the industry, adding that, "Consumer interest in Japan on the issue of child labor is growing, but it is still not widespread."

Japan Times

In India, 'Natural Farming' draws in Young People

By Roli Srivastava, Thomson Reuters Foundation

Seeking to boost interest in agriculture in his part of southern India, K. Rajendra quit his job running a computer training institute five years ago and now uses YouTube videos and WhatsApp messages to promote "natural farming" to young people.

"Most farmers in this region are aged between 60 and 80. Parents don't want their children to do farming, and ask them to migrate to cities," he said.

"Who will take farming forward?" asked Rajendra, 42, as his staff stacked organically grown lentils, rice and spices on shelves at his store in NTR District in Andhra Pradesh.

His work is part of a wider project in the state where about 800,000 farmers, most of them smallholders, have embraced natural farming – up from 40,000 when the state government launched a "community-managed natural farming" project in 2015.

Natural farming shuns synthetic fertilizers and pesticides, and involves the use of handmade or organic manure, growing multiple crops instead of one, and no tilling of the land.

In the past, Rhythu Rajendra – or Farmer Rajendra as he likes to be known – helped students chase their dreams of finding jobs as software engineers, especially in the United States.

Nowadays, he uploads videos of his natural farm on YouTube, runs more than a dozen groups on WhatsApp with over 100 farmers each to showcase techniques, and encourages young people to try their hand.

Among the recruits, his 17-year-old son has started



helping him on the farm.

The Andhra Pradesh project aims to protect agricultural livelihoods by improving crop yields and farmers' health, while cutting spending on chemical fertilizers and pesticides and reducing greenhouse gas emissions.

Globally, agriculture accounts for about 17% of humanity's planet-heating emissions, according to U.N. data for 2018.

The Asia-Pacific region is responsible for the highest emissions because of synthetic fertilizer use in rice cultivation, according to the Asian Development Bank.

Farmer numbers drop

Across India, farmer numbers overall have dropped in



recent decades as the business has become cost-intensive and riskier. Many doubt that natural farming will work on a large scale, fearing lower production and earnings.

Agriculture is still the biggest employers in the world's most populous nation, engaging 250 million people. But it accounted for 44% of total employment in 2021, down from 64% in 1991, World Bank data shows.

Climate change is making living off farming though as it hits harvests, fueling debt, migration and farmer suicides.

Nearly 11,000 farmers and agricultural laborers took their own lives in India in 202, government data shows.

Some farmers are trying to cope with losses to droughts and floods by using more chemical fertilizers to increase yields.

Others are joining green farming projects, which have taken root in India. But experts say their scale and success hinges on how well they can protect incomes for poor farmers.

Among the converts is Jalagam Syam, 34, who quit his pharmaceuticals job and returned to his parents' farm. He believes common stomach, skin and lung ailments in the region are linked to agricultural chemicals.

"The soil and air we breathe is already damaged. At this rate there won't be any food to eat in the future," he said.

But transitioning to natural farming brings challenges in one of India's top rice-producing regions, which is also among the most vulnerable to climate change and where farmers' incomes are wedded to the staple crop.

Sadhupati Srinivas Rao, 42, who grows cotton and rice on an 80-acre farm in Chevaturu village, has spent 1.6 million rupees (\$19,220) annually on fertilizers in the last two years.

"I farm on leased land and the landowner seeks profit," he said, explaining why he had not switched to natural farming.

The ecological push seeks to "find a long-term solution to the crisis in farmers' livelihoods," said T. Vijay Kumar, who leads the state's natural farming project.

Eight years on, the Andhra Pradesh project is aiming to insulate farm yields from erratic rains and extreme heat.

"I can't think of any farming method that is more relevant now, or in the context of what is going to come in terms of climate uncertainties," said Vijay Kumar, who is also executive vice-chairman of s state corporation for empowering farmers.

"We have made a beginning," he said.

Harvests fall then rebound

Officials say natural farming, if done right, can yield the same or better harvest than farming using chemicals.

Those who have made the switch said their pre-acre yield of rice dropped in the initial years to 18 bags of 75 kg from more than 45 bags with chemical farming – but harvests then picked up gradually as the soil health recovered.

The fall in yields was offset by up to 25% higher prices for natural produce and by big savings from ditching chemical fertilizers and pesticides, they added.

Nonetheless, many larger farmers find the natural farming processes of weeding and mixing manure labor-intensive. Nearly 80% of farmers who have signed up for the green approach own less than five acres of land.

And fertilizer use has continued to rise across India, jumping about tenfold from 1970 to 54 kg per acre in 2016. In Andhra Pradesh, it is now 100 kg per acre, official said.

Crop Diversity

Farmer P. Sabarinath's mother serves traditional Andhra meal with rice in the center and a cast of lentils, stir-fried vegetables, pickle and papadums arranged around it.

The plate reflects Sabarinath's farm, with the middle dedicated to the rice paddy and the borders used for growing vegetables and fruit, in line with the key natural farming technique of crop diversification.

The earth is kept fertile with a manure of cow dung and urine, gram flour made from chickpeas and jaggery, a mix of sugarcane and other ingredients. Seeds are also sprinkled on the fields after harvest and combined into the soil.

Villagers spoke of earthworms reappearing after decades.

Sabarinath, 35, who shut his cellphone repair shop seven years ago, switched to farming after he became worried about the deteriorating soil health on his family-owned plot.

"Most young people who inherit land from their parents lease it out to other farmers and take a share from the yield revenue. I too never thought of taking up farming," said Sabarinath, standing in the shade of an almond tree.

He now shows off chillies, guavas, pulses and rice he has grown on has solar-powered farm in Atlapragada Konduru village.

K. Krishna Mohan, who owns a 50-acre farm in a remote village in Krishna District, said he did not want to try natural farming because demand for such products is higher in cities.

In NTR District, where farmers transplanted paddy seedings under farms remain few and far between.

State project leader Vijay Kumar said it would take a long time to persuade farmers to make the shift, with the need to adapt to a warmer world just one incentive.

"Farmers sill consider climate change as an act of god," he said. "I sell natural farming on the basis of livelihood and health. Climate resilience is a byproduct."

Thomson Reuters Foundation

Nestlé ITR targets further growth in Asia Pacific region

By Liz Parker

[Nestlé Travel Retail International \(NITR\)](#) heads to this month's [TFWA Asia Pacific Conference & Exhibition](#) armed with new products and a strong story and strategy to share.

At the center of the company's focus are products within its VERSE (Value, Engagement, Regeneration, Sense of Place, and Execution) model, including new travel retail-exclusive lines led by Nestlé Sustainably Sourced Cocoa.

Nestlé Travel Retail International General Manager Stewart Dryburgh, says: "Asia Pacific is a key market for Nestlé. Our products are well known, and we enjoy strong collaborations with leading retailers within travel retail. That said, there is always room for further growth. Our focus on innovation and forward-thinking gives us the opportunity to not only improve our standing in this diverse region but also to extend the overall food and confectionery basket within the channel."

"TFWA Asia Pacific has established itself as a key event on the travel industry calendar and this year I believe it will provide a stage for growth and development plans unlike any the industry has seen in the past."

"We have a new and very exciting product to feature at the exhibition for the first time. Nestlé Sustainably Sourced Cocoa was officially launched last month and is already available in selected travel retail locations. The range is exclusive to the channel and as the name suggests, its focus is on sustainability. These two factors—exclusivity and sustainability—will set NITR, the confectionery category, and industry in general, apart in the future."

Nestlé Sustainably Sourced Cocoa showcases Nestlé's work over the past 15 years in major cocoa growing regions via the Nestlé Cocoa Plan. It combines those efforts with almost 150 years of Swiss chocolate making expertise in a product, which as Dryburgh said "does good and tastes good. It's as simple as that."

"I am confident that Nestlé Sustainably Sourced Cocoa can drive incremental sales in the Asia Pacific region," he adds. "It is tailor made to suit the demands of the increasingly important Gen Z travelers who are seeking something different, something that lives up to its name. At the same time, it appeals to all chocolate lovers."

NITR's key KitKat offer, including KitKat Senses Cookie Dough, KitKat Senses Lotus & Milk and KitKat Destination Packs, will also be featured at the TFWA Asia Pacific event, along with Smarties products.



Nestlé Sustainably Sourced Cocoa: "Does Good. Tastes Great"

This new premium travel retail-exclusive product has strong sustainability credentials through the Nestlé Cocoa Plan. It features creamy smooth chocolate in a variety of flavors, crafted with care to support the education of over 156,000 children through Nestlé's collaboration with Rain Forest Alliance.

KitKat

KitKat Mini Moments Milk & Lotus (195.6 g) is new to Asia Pacific and already proving a popular line with Gen Z travelers, along with the KitKat Senses Cookie Dough and KitKat Destination Gift Pack.

The eye-catching premium packs contain 6x4 Finger KitKat bars. They target both gifting and Sense of Place with featured destinations including Singapore, Thailand, and Dubai and India's Mumbai.

Smarties

Smarties is another brand with strong sustainability credentials as the world's first global confectionery brand to switch to recyclable paper packaging across its entire portfolio. Travel retail exclusive products are key to its performance within the channel.

Its "Learn Through Play" concept features in six lines: Smarties Topper Cards, Smarties Topper Dice, Smarties Music Creator (38g), Smarties Activity Tin and (4x34 g), and Smarties Cool Creatures (130 g). Smarties also offers 240 g and 446 g Sharing Bags.

The Nestlé Cocoa Plan was launched in 2009. It has engaged more than 150,000 cocoa-farming families so far, building on three pillars: Better farming, aiming to improve livelihoods in communities; better lives, aiming to improve social conditions for families and better cocoa, aiming to improve product sustainability.

The concept also incorporates Nestlé's Income Accelerator Programme for selected KITKAT products which builds on the company's longstanding efforts to tackle child labor risks in cocoa production. The program aims to improve the livelihoods of cocoa-farming families and incentivize enrollment of children in school, while advancing regenerative agriculture practices and gender equality. It has impacted the lives of thousands of families.

Candy Industry

Governments put sustainable food systems on the table at COP28

Producing the world's food causes about one-third of planet-heating emissions, even as climate change makes the job even harder, plaguing farmers with more frequent floods and droughts.

Despite all this, and the need to nourish the planet's expanding population, food has barely made it onto the diplomatic table at the annual United Nations climate summits - until now, after the Covid pandemic and Russia-Ukraine war disrupted global supplies.



About 80 per cent of the global population at greatest risk from climate-driven crop failures and hunger live in sub-Saharan Africa, South Asia and Southeast Asia, the World Bank says.

At the COP28 talks in Dubai, a high-level declaration backed by 134 countries has placed food, how we grow it, and its relationship to climate change firmly on the international radar.

The nations that endorsed the declaration on Friday, representing more than 5.7 billion people, agreed to incorporate food and farming into their national climate action plans to cut greenhouse gas emissions and adapt to more extreme weather.

"Countries must put food systems and agriculture at the heart of their climate ambitions," Mariam bint Mohammed Almhairi, climate change and environment minister for the United Arab Emirates, told a COP28 launch event.

The declaration represents a "turning point" as countries look to address food system emissions and support farmers in dealing with the impacts of climate change, she added.

But critics pointed out that it does not explicitly mention fossil fuels - the main driver of greenhouse gas emissions.

Growing risk of hunger

Developing nations are particularly vulnerable to the harm rising temperatures could do to food supplies and food security.

About 80 per cent of the global population at greatest risk from climate-driven crop failures and hunger live in sub-Saharan Africa, South Asia and Southeast Asia, the World Bank says.

Edward Davey, partnerships director for the Food and Land Use Coalition (FOLU), said very few countries have incorporated food and land use into their national climate plans so far.

Davey - who worked on the COP28 food systems declaration - described it as a "quantum leap", because so many countries have now committed to do so in the next round of plans due by COP30 in Brazil in 2025.

A particular focus of efforts to make food systems more climate-resilient are small-scale farmers, who produce about one-third of the world's food and are struggling disproportionately with climate shifts.

"The critical role which small-scale family farmers play is recognised in the declaration - which is a good start," said Esther Penunia, secretary general of the Asian Farmers' Association for Sustainable Rural Development, a network of organisations representing 13 million family farmers.

"But there are no guarantees - it's up to governments to translate the declaration into action in their national climate plans and on the ground," she added.

The declaration aims to boost measures to support vulnerable producers, communities and agricultural workers, such as early warning systems, social safety nets, school feeding programmes, nature conservation and better water management.

Gates and UAE announce US\$200 million in funding

At the COP28 launch event, the UAE and the Bill and Melinda Gates Foundation announced a joint \$200 million investment for agricultural research, technical assistance and scaling-up existing innovations like regenerative agriculture.

Tech guru Bill Gates said he first became aware of climate change when he visited Africa and was shocked by the effects of crop failure on malnutrition and child development.

"We really owe it to the poor farmers to give them better tools," he said.

Gates said much of the new funding will go to CGIAR, a global research partnership focused on food security, which he said had saved more than 1 billion lives in its decades-long history through innovations to improve agriculture.

"That's right up there with the very best health interventions like vaccines," he said.

Enock Chikava, the Gates Foundation's director of agricultural delivery systems, said research needed to be relevant for local contexts as some key food crops have been neglected, including cassava, millet and sweet potatoes.

"What that means is you can't just do that research in Europe and try to copy and paste," he said. "It is understanding the needs of those farmers."

A distraction from fossil fuels?

While the new focus on food systems was broadly welcomed, some campaigners said it sidestepped the thorny issue of phasing down fossil fuels, which oil and gas-producing nations like the UAE have been reluctant to tackle.

Patty Fong, program director for climate and health at the Global Alliance for the Future of Food, a campaign group, said food systems account for at least 15 per cent of annual fossil fuel use.

"The COP28 declaration doesn't set out how

governments will tackle food emissions, and makes no reference to fossil fuels,” she said in a statement. “This is a glaring omission.”

Intensive agriculture causes carbon to be released from the soil, while chemical inputs like fertiliser are made from fossil fuels, and rice paddies are a

source of methane emissions.

But Davey from FOLU said the language on emissions was strong, including “shifting from higher greenhouse gas-emitting practices to more sustainable production and consumption approaches” by adopting eco-friendly farming methods and diets.

“All this food stuff is... not happening in any way to detract from those big issues,” he said. “It’s substantive in its own right.”

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Eco-Business

APAC pursues regulatory approval for cellular agriculture

Several Asia-Pacific nations sign an MOU and launch a new platform for cross-border collaboration to speed up regulatory review processes and approval.

Cultivated foods have garnered increased attention from policymakers in the Asia Pacific (APAC) region as this emerging food technology has the potential to deliver a steady supply of protein without conventional meat production’s associated environmental and ethical concerns.

“But very few regulators in the region have experience processing cultivated food applications, and many, therefore, have questions around existing safety assessment methodologies and the appropriate controls required to prevent potential hazards,” Mirte Gosker, managing director of the Good Food Institute (GFI) APAC, told Ingredients Network.

As a result, industry insiders from Singapore, Australia, China, Israel, India, Japan, South Korea, Malaysia, and Indonesia have signed an [MOU](#) to create an [industry forum](#) to bring together leading voices influencing the APAC cellular agriculture space and influence cultivated meat and seafood development.

Progressing regulations

Singapore and the US are the only global countries to have approved the commercial sale of certain cultivated meat products. Many other countries, however, are actively developing their regulatory frameworks or considering pursuing cellular agriculture in this way.

Currently, cultivated food products are also subject to different regulatory frameworks across the APAC region, with relevant regulatory authorities taking a case-by-case approach to their safety assessments. “A collaborative regulatory forum that brings together key stakeholders is thus a welcome step to further facilitate knowledge-sharing and to support cross-border coordination among the national food regulators in the APAC region,” Gosker continues.

In Asia, many countries have yet to create protocols to review cultivated meat and seafood applications. While this may not halt new product concepts and production, it is slowing market entry of more secure and sustainable foods, GFI stated in a recent press release.

The APAC Society for Cellular Agriculture (APAC-SCA) and the Good Food Institute APAC (GFI APAC) have set up the [APAC Regulatory Coordination Forum](#), in response. It aims “to effectively bring cultivated food products to the market across the world’s most populous region”, adds Gosker.

The arrival of the forum hopes to mark a new phase in cellular agriculture acceptance. The forum aims to facilitate



the coordination of regulatory efforts within APAC to build an effective cultivated food regulatory environment, minimising hurdles and bottlenecks. It seeks to standardise regulatory approaches on novel topics that have yet to be addressed, such as hybrid product definitions and novel cell cultivation technologies.

Also, the forum is designed to give mutual recognition of coordinated regulatory frameworks in APAC such as the alignment on criteria for safety testing, labelling, and inspections. The organisations behind its development note this would significantly reduce the time and resources needed for regulatory approval while minimising trade barriers and cost to consumers.

Focusing on this area may open up potential opportunities to develop trust between authorities, creating “fast lanes” to approve companies already authorised for sale in another regional country.

Aligning efforts

The duo has launched a new platform for cross-border collaboration to accelerate cultivated meat’s regulatory review processes and approval to promote its wider acceptance. It seeks to provide guidance rather than mandate how regulations should be. Therefore, Gosker says it “aims to coordinate and amplify existing work while serving as a complement to current developments”.

The forum will focus on all aspects of cultivated food regulations, including terminology, growth media components, cell line development, labelling, food safety, nutrition, religious rulings and standards, and any other topic relating to cellular agriculture that may contribute to developing regional best practice standards.

[Developed in November 2023](#) and coinciding with [Singapore International Agri-Food Week \(SIAW\)](#), the forum seeks to act as a formal mechanism for continuous and systematic cross-border dialogue between companies, industry

associations, think tanks, governmental agencies, and regulators in different jurisdictions. It strives to transparently share information, collaborate on inputs such as data or safety assessments, and provide open discussions and viewpoints between regional partners.

Further, it will coordinate information across borders to all participants transparently, bringing each participating member up to date with current developments and trends. The forum aims to ensure that cultivated foods can adhere to religious rulings and standards such as halal and kosher, where coordinated efforts are needed to build

consensus on this topic across the region.

Through the platform, the various bodies will collectively collaborate to develop clear and compelling pathways towards the commercialisation of cultivated foods, thereby reducing the time to market for cultivated food producers and creating a level playing field when it comes to imports and exports.

A global presence

To enable cultivated meat and seafood to reach their full potential as food security and climate solutions, they need to traverse from having a presence in early-adopter markets to attaining

global distribution, GFI APAC says.

“By bringing together industry leaders and regulatory officials from countries across Asia Pacific, we are working to reduce duplication of efforts, streamline international approval processes for novel food producers, and create a clear pathway to market for innovative new products,” Gosker added.

“Ultimately, we envision a clear and effective contingency for the industry as a whole towards commercialisation of cultivated food products across the region,” Peter Yu, programme director at APAC-SCA, said.

Ingredients Network

FAO Regional Office for Asia and the Pacific



an innovative geographical and environmental traceability tool that will link consumers and growers of special agricultural products (SAPs) to promote their unique qualities and cultural importance.

A Memorandum of Understanding (MoU) was signed between the Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences (IGSNRR-CAS) and the Food and Agriculture Organization of the United Nations (FAO) on the sidelines of the 37th FAO Regional Conference for Asia and the Pacific. The agreement will leverage the innovative Geographical Indications, Environment & Sustainability (GIES) methodology developed by IGSNRR-CAS to “energize implementation” of the FAO flagship One Country One Priority Product (OCOP) initiative in the Asia and Pacific region.

The global, country-led OCOP initiative is helping develop sustainable value chains for SAPs which are crops having unique qualities linked to specific locales, farming practices and cultural heritages. SAPs have special tastes and high nutritional value but are yet to be grown and marketed to reach their potential. The MoU will build capacities on application of GIES to SAP development, provide free technology transfer and will offer real time data on the geographical and environmental parameters of SAP production. This will help transform agrifood systems to be more resilient, sustainable, inclusive and efficient in support of the 2030 Agenda for Sustainable Development.

“At FAO we believe that science, technology and innovation are central to transforming agrifood systems. So today’s signing expresses our continued commitment to leveraging science and innovation. This agreement between FAO and IGSNRR-CAS will benefit not only the countries where we are working in, but farmers themselves,” said FAO Deputy Director-General, Beth Bechdol, welcoming participants to the signature ceremony.

FAO and China’s oldest land and environmental research institute signed an agreement today to harness



The agreement “will benefit not only the countries we are working in ...but most importantly, it will benefit farmers themselves,” she added. Noting that the institute has already been supporting the OCOP initiative, Ms Bechdol said the Institute “will add value to the special agricultural products by establishing both geographical and environmental traceability”.

“This MoU will be a new milestone for FAO and our institute,” said Shenglin Wang, Deputy Director-General and Office-in-Charge, IGSNRR-CAS and a co-signatory of the MoU with Jong-Jin Kim, Assistant Director-General and FAO Regional Representative for Asia and the Pacific.

Wang asserted IGSNRR-CAS commitment to working with FAO on leveraging GIES for OCOP implementation and said the Institute will move “from commitment to action with technology transfer and knowledge sharing”.

In his remarks, Kim noted that the signing of the MoU marked “a very important milestone” in OCOP implementation in the region. “We are coming together as partners together to support our Member states.”

Tracing geographical origins of SAPs

The GIES methodology, pioneered by IGSSNRR, uses open science technology to trace the geographical origin of a specific special agricultural product by assessing and monitoring the quality of the local environment where the product grows. It connects the specific SAP, the local productive environment,

the local SAP producer groups, and consumers with open data access. The Institute has made great progress in realizing the positive socioeconomic potential of several special agricultural products in China while ensuring production is environmentally sustainable.

OCOP increasingly popular in Asia and the Pacific

Twenty-two countries in the region have joined the OCOP initiative and nominated 20 SAPs for developing sustainable value chains to promote food security and nutrition, the effective use of unutilized resources, farmers' livelihoods and economic growth while protecting the environment and

biodiversity.

In the Asia-Pacific region, OCOP implementation is following a dual-track strategy of country-level projects and regional knowledge sharing that has FAO working with partners to coordinate sharing of knowledge, practices and experience of OCOP implantation at country and regional levels.

The Institute is one of the four core members of the Regional Organizing Group set up by FAO to coordinate OCOP implementation in the region and support the Global OCOP Steering Committee at FAO headquarters as well as country-level National OCOP Task Forces.

Food and Agriculture Organization of the United Nations (FAO)

WFP Chief Urges Stronger Partnerships for Asia-Pacific Climate Resilience



The United Nations World Food Programme (WFP) Executive Director Cindy McCain today called for strengthened partnerships in Asia and the Pacific, to increase climate resilience and financing for smallholder communities vulnerable to food insecurity. She was speaking at the Asian Development

Bank's (ADB) Asia and the Pacific Food Security Forum in the Philippines.

Half of the world's climate-related emergencies have been recorded in Asia and the Pacific, where 72 million people are food-insecure. Climate crises in the region are fueling hunger, displacement and even conflict.

"We must increase efforts to empower farmers and rural communities across the Asia-Pacific region to protect their food security and nutrition against the growing threat from climate change. In a region rich in ideas and resources, innovation and partnerships are essential to support climate-smart agriculture and sustainable livelihoods", said Executive Director McCain. "WFP is fully committed to working with the Asian Development Bank, national governments and local communities to invest in long-term solutions to hunger."

WFP and ADB have expanded their partnership since 2020, working together from Afghanistan to Lao PDR and the



Philippines - supporting communities to build climate resilience and improve nutrition. This collaboration will soon reach Bangladesh, Pakistan and Sri Lanka.

On her first visit to Manila since taking office, the WFP Executive Director met Philippine President Ferdinand Marcos Jr. to consolidate the partnership with the Government to address hunger, malnutrition and climate resilience.

WFP is supporting the Government in its efforts to provide nutritious school meals to all schoolchildren by 2030 and reach 1 million food-insecure families with food e-vouchers by 2027. WFP's work in the Philippines also focuses on emergency preparedness and response and the provision of technical and supply chain services.

Mirage News

EU provides 1.5 million euros for smart agriculture in Laos

The European Union (EU) has approved 1.5 million euros for implementing a project in Laos to promote smart agriculture to respond to climate change and to address the needs of vulnerable women and youth farmers' groups.

A memorandum of understanding (MOU) for the project was signed in Vientiane yesterday by

Oxfam's Country Director in Laos, Mr Thasphorn Butaling, and Director of the Lao National Agriculture and Forestry Institute (NAFRI), Dr Chanthakhone Boualaphanh.

The project will be implemented in 15 villages in seven districts, of which three districts, Xepon, Vilabouly and Champhone are in Savannakhet province and four districts, Xiengneun, Nan,

Chomphet and Phoukhoun are in Luang Prabang province.

The project is expected to directly benefit a total of 300,000 farming families and 100,000 other people, especially through the provision of techniques, knowledge and skills related to Climate Smart Agriculture (CSA). It is also expected to improve yields, livelihoods, nutrition and food security.

The main objective of the project is to reinforce the capacities of women, youngsters, local authorities and groups of vulnerable farmers, and to promote CSA innovations and practices.

The activities of projects include building capacities to promote CSA practice among stakeholders at the central and local levels.

Laos is particularly affected by the impacts of climate change. Rising temperatures are causing seasonal changes in weather patterns, leading to increased flooding and extended periods of drought.

Currently, 72 percent of arable land is used for growing rice and more than 70 percent of the Lao population depends on agriculture for their livelihood, and 26 percent of these people live in poverty.

Many farmers engage in unsustainable agricultural practices that further degrade land and forests and exacerbate the impacts of climate change. This has the potential to expose a significant proportion of the population to worsening food insecurity, and stall or even reverse Laos' efforts to reduce poverty and achieve the sustainable development goals (SDGs).

Women are particularly at risk from the impacts of climate change as they comprise more than 50 percent of the agricultural workforce.

These impacts are particularly severe if they also suffer



Mr Thasphorn Butaling (right) displays the document after signing it with Ms Chanthakhone Boualaphanh at a ceremony in Vientiane

from intersectional discrimination, associated with characteristics such as ethnicity, disability, and the need to care for children and elderly relatives.

There is an urgent need to introduce gender-transformative CSA practices, such as agro-ecology. These practices will help poor farmers adapt to the changing climate and mitigate against it more severe impacts.

The Lao Government has produced policies, strategies and plans, especially the Agricultural Development Strategy till 2025 and Vision 2030, to help introduce more sustainable practices and increase farmers' incomes by enhancing agricultural value chains and increasing their productivity.

However, these are often poorly implemented due to disjunctive coordination between agencies, a lack of resources and the limited opportunity for poor farmers, particularly women, to participate in agricultural policy-making at the local and national levels.

This project can play a vital role in building capacities to stakeholders in central and local levels to effectively conduct advocacy campaign on CSA practices and strengthening CSA knowledge and supporting CSA practice to rural farmers to do it sustainably for adaptation and mitigation to impacts of climate change.

Asia News Network

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 (NGO) 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.

As an NGO, CACCI is 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.

For more information, please visit www.cacci.biz.

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