

## INDONESIAN FARMERS BEFRIEND SOIL TO PROTECT HARVESTS

**PEMONGKONG, Indonesia:** In early 2016, when fellow farmers were despairing over plummeting yields linked to a major drought, Hamdi was busy harvesting maize from his land. He got 5.6 tonnes instead of the usual 4 tonnes from his one-hectare plot, despite living in West Nusa Tenggara, one of Indonesia's driest provinces where agriculture is at the mercy of extreme weather such as that brought by the El Nino climate pattern.

"El Nino did not affect those practicing conservation agriculture, but those who weren't suffered a lot," the 38-year-old told the Thomson Reuters Foundation on a sunny afternoon in Pemongkong village on Lombok island. Hamdi, who goes by one name only, was among the first in his village to adopt the natural farming method in Oct 2015, just before El Nino hit. He was initially attracted by talk of possible savings because conservation agriculture requires less fertilizer, as well as less labor for weeding and preparing land.

But the greatest benefit so far has been its ability to help Hamdi weather the long drought. Lombok farmers who practiced conservation agriculture were

more resilient to the effects of El Nino, harvesting about 70 percent more than those using traditional methods, according to the United Nations' Food and Agriculture Organization (FAO). "Conservation agriculture is about renewing the life of the soil," said John Weatherson, an advisor to the FAO. "It's about stabilizing yield so when the shocks come, the farmers are sitting pretty."

The method has always been around, but rising pressures from a changing climate, growing population and shrinking arable land have prompted "a search for more sustainable, ecologically conscious practices," said Catherine Chan-Halbrecht, an expert on the issue at the University of Hawaii. In conservation agriculture, soil disturbance is kept to a minimum, using permanent planting holes fertilized with compost instead of chemicals. The soil surface is covered with crop residues as mulch, and farmers rotate crops or intercrop between cereals and legumes.

These practices help reduce erosion and water run-off, and increase soil fertility and crop yields, experts say. Pemongkong villagers, who have tried

the method for two planting seasons, say yields have risen. Alongside lower costs for fertilizers and labor, they have more money in their hands.

### Better Diets

Conservation agriculture is being adopted in other places, including Siberia which has millions of hectares of degraded cropland and Canada, where crop rotation has added organic nitrogen to the soil and broken cycles of pests and diseases. In Indonesia, growing nutritious plants as cover crops has improved the diets of Pemongkong villagers, with many now eating long beans, soya beans and mung beans regularly. Saimah, 50, a rake-thin farmer whose two-hectare plot was affected by El Nino, used to have just one meal a day, but her crop yield has nearly doubled with conservation agriculture. "Now we eat eggs regularly and meat once a month. I can finally have savings," she said.

Despite its benefits, the concept was alien to many farmers when the FAO introduced it in West Nusa Tenggara and East Nusa Tenggara, two eastern provinces with high food insecurity, low

rainfall and weak agricultural productivity, said Ageng Herniato, the agency's assistant representative in Indonesia.

"The biggest challenge we faced was changing their mindsets," Herniato said. Conventional farming requires heavy soil preparation and burning of unwanted biomass, which releases the carbon stored in it, contributing to climate change - none of which happens with conservation agriculture. The FAO partnered with the Indonesian Agency for Agricultural Research and Development, and used demonstration plots to show farmers the new approach. It has now been taken up by nearly 13,000 farmers, and the FAO is working with the Indonesian government to incorporate it into national agricultural policy, the UN agency said.

### Challenges

Yet challenges remain, especially because many farmers are so used to conventional practices. The FAO provided Pemongkong villagers with high-quality composite maize seeds produced through open pollination, which can be reused several times and perform better

during extreme weather conditions, said Herniato. Yet Hamdi, who enjoyed two successful planting seasons, has no seeds left. He sold them all, partly because the price of maize was so good, and partly because he was worried yields would fall if he continued to use composite seeds.

For the coming season, he plans to revert to hybrid seeds, which cost between 50,000 and 65,000 rupiah (\$3.76-\$4.89) per kilo. Farmers say about 30 kg are needed per hectare. "With hybrids, I know I will have to buy them every year and I will spend more money," he said. "But hybrids are easier to find in the market and more resistant to pests."

This highlights how much needs to be done for farmers to grasp the pros and cons of different seed varieties, said FAO advisor Weatherson, who practices conservation agriculture in Swaziland where he lives. Hybrid seeds have very high yield potential but require irrigation, or at least predictable rainfall and good fertilization, he said. "I think what the farmers need more than anything else is... to be given all the technical advice they need to be able to make informed decisions," he said. —Reuters

## US, AUSTRALIAN OFFICIALS WARN OF RETURNING FOREIGN FIGHTERS

### TILLERSON TELLS CHINA TO 'STEP UP' ON N KOREA

**SYDNEY:** Top US and Australian officials warned yesterday that battle-hardened and angry foreign fighters may return to Southeast Asia from the Middle East and take up arms in their own countries. The warning follows the weekend terror attacks in London, which were claimed by the Islamic State group, and comes amid a growing jihadist threat in the Philippines. IS fighters will "come back with battlefield skills, they'll come back with hardened ideology, they'll come back angry, frustrated, and we need to be very aware of that," Australian Defense Minister Marise Payne said.

She was speaking at an Australia-US ministerial summit also attended by Pentagon chief Jim

the agenda at yesterday's annual talks. Australian officials say they have prevented 12 terror attacks on home soil since 2014 with more than 60 people charged. In the Philippines, hundreds of civilians are trapped by fighting between the military and Islamist militants who have overrun the city of Marawi on the restive southern island of Mindanao. Separately, Tillerson said a decision on whether to send additional troops to try to stabilize the security crisis in Afghanistan was still under review.

### North Korea

Meanwhile, Tillerson said China and other nations must strengthen efforts to curb North

militarizing islands in the South China Sea or failing to put appropriate pressure on North Korea." He said China and other regional partners should "step up" efforts to help solve the North Korea situation, because it presents a threat to the "entire world".

China claims nearly all of the South China Sea despite partial counter-claims from Taiwan, the Philippines, Brunei, Malaysia and Vietnam. It has rapidly built reefs into artificial islands capable of hosting military planes. Tillerson reiterated US and Australian commitment to freedom of navigation in the South China Sea to "ensure unimpeded flow of lawful commerce in a rules-based order".

But reporters asked Tillerson if America was applying a double standard in telling countries to adhere to the international order while simultaneously pulling out of a trans-Pacific trade deal and the Paris climate accords - moves that prompted even longstanding allies to question whether America was retreating into isolationism. "That's why we're here, that's why we travel to the region, that's why we engage with our counterparts," Tillerson said, standing alongside Mattis, Bishop and Payne. We "travel to the region to meet with our counterparts and talk about all the issues that are important to them and hear from them concerns about where the (Trump) administration is positioned".

Responding to Tillerson's comments, China's foreign ministry urged "relevant countries" to support efforts by regional nations "to maintain peace and stability of the South China Sea, and play a constructive role in this regard rather than the opposite". Spokeswoman Hua Chunying, speaking at a regular Beijing briefing, also cited China's "enormous efforts" to reach a peaceful settlement of the North Korea nuclear issue.

### 'Remain united'

Addressing the situation in the Gulf, Tillerson called on countries there to stay united and work out their differences. "We certainly would encourage the parties to sit down together and address these differences," he said. "If there's any role that we can play in terms of helping them address those, we think it is important that the GCC (Gulf Cooperation Council) remain united." Riyadh cut diplomatic relations and closed borders with its neighbor Qatar to "protect its national security from the dangers of terrorism and extremism", the official Saudi Press Agency said.

Tillerson and Mattis both said they did not anticipate any impact on efforts by a US-led coalition to battle the Islamic State group in Iraq and Syria. The coalition currently conducts much of its operational planning and coordination from Al-Udeid air base in Qatar.

"I am confident there will be no implications coming out of this diplomatic situation at all, and I say that based on the commitment that each of these nations... have made to this fight," Mattis said. The US defense secretary blasted Iran for its "various destabilizing efforts" in the region, referring to Iranian support for Syrian President Bashar Al-Assad and Tehran's involvement in the Yemen war. — Agencies



**SYDNEY:** US Secretary of State Rex Tillerson (second left), Australia's Foreign Minister Julie Bishop (left), US Secretary of Defense Jim Mattis (right) and Australia's Defense Minister Marise Payne (second right) take a garden walk at Government House during the 2017 Australia-US Ministerial Consultations (AUSMIN) yesterday. —AFP

Mattis, US Secretary of State Rex Tillerson and his Australian counterpart Julie Bishop. Reacting to the London attacks, Mattis said: "We are united... in our resolve, even against an enemy that thinks by hurting us, that we can scare us. Well, we don't scare." US President Donald Trump has instructed the Pentagon to "annihilate" IS to try to prevent foreign fighters from escaping and returning home as they lose ground in Iraq and Syria.

The aim is to encircle and kill as many militants as possible in place, rather than letting them exit a city and targeting them as they flee. This reflects an increasing urgent attempt to stop the fighters bringing their military expertise and ideology back to the West. "Before, we were shelling them from one town to another," Mattis said. "We now take the time... to make certain that foreign fighters do not stay to return to Paris, France, to Australia, to wherever they came from, and bring their message of hatred and their skills back to those places and attack innocent people."

The issue of countering terrorism was high on

Korea's nuclear weapons program, while also calling out Beijing over its South China Sea activities. America's top diplomat, speaking after talks in Sydney, also gave a brief response to the unfolding crisis in the Gulf, where Saudi Arabia, Bahrain, the United Arab Emirates and Egypt have all announced they are severing ties with gas-rich Qatar.

In the Asia-Pacific region, the United States has spent recent weeks trying to reassure allies it can maintain a tough line against China's "militarization" of the South China Sea while at the same time seeking help from Beijing. Trump - who frequently denounced China on the campaign trail - has turned to Beijing to help rein in ally North Korea's weapons program, prompting concern among Asian allies that America might go easy on the South China Sea territorial dispute.

"We desire productive relationships," Tillerson said after annual discussions with his Australian counterpart Julie Bishop in Sydney. "But we cannot allow China to use its economic power to buy its way out of other problems, whether it's



**Evacuees from Marawi City rest at the Saguiaran Townhall in Lanao del Sur on the southern island of Mindanao yesterday. — AFP**

## MILITANTS IN PHILIPPINES CITY DUG IN FOR PROTRACTED BATTLE

**MARAWI, Philippines:** Islamist militants holed up in a southern Philippines town stocked weapons and food in mosques, tunnels and basements to prepare for a long siege, officials said yesterday as the battle for control of Marawi City came to the end of its second week. Their comments underlined the level of organization among fighters linked to the Islamic State group, whose ranks of several hundred included foreigners from Indonesia, Malaysia, India, Saudi Arabia, Chechnya and Morocco.

The battle for Marawi City has raised concerns that the ultra-radical Islamic State is building a Southeast Asia base on the island of Mindanao at the southern end of the Philippines. Parrying questions on why the fighters had been able to resist an onslaught from the Philippines army for so long, senior officers said the main problem was that 500-600 civilians were still trapped in the urban heart of the town.

Philippines President Rodrigo Duterte said on Saturday that Marawi City would be fully liberated within three days, but yesterday, officials were more circumspect on the timing and gave conflicting estimates of how many combatants were holding out. Major General Carlito Galvez, head of the military command in Western Mindanao region, said as many as 200 fighters from the Maute militant group and others were still inside the town, and had made preparations in advance for a drawn-out standoff. "In houses we take over, we see .50 calibre, .30 calibre, and the ammunitions are huge. And the Maute, even if they fight two months they will not starve here," he told a news conference about one kilometre from the fighting. "If you look at it, there are underground tunnels and basements that even a

500-pounder cannot destroy." He said that days before seizing Marawi City the militants placed supplies in mosques and madrasas, the religious schools of a town whose population of over 200,000 is overwhelmingly Muslim in a country where the majority of people are Christians.

### Trapped Civilians Low on Food and Water

The area of the town occupied by the militants had shrunk to less than 10 percent, military spokesman Brigadier General Restituto Padilla told a news conference, adding that the army was pressing on to meet Duterte's deadline but it was not easy. "Complications have been coming out: the continued use of civilians, potential hostages that may still be in their hands, the use of places of worship... and other factors that complicates the battle because of its urban terrain," he said.

Military choppers made combat sorties and machinegun fire rattled and smoke billowed in a neighborhood of the town on Monday, Reuters correspondents said. A four-hour ceasefire to evacuate residents was marred by gunfire on Sunday, leaving hundreds of civilians who had hoped to flee the fighting stuck in their homes. Padilla said that 1,467 civilians had been rescued so far, and the 500-600 still trapped were low on food and water. "There are places which we use as passageways to enemy territory - when we reach those areas, sometimes we see old people who are weak, cannot move on their own, because of lack of food," he said. A presidential spokesman said 120 militants have died in the battle, along with 38 government forces. The authorities have put the civilian death toll at between 20 and 38. — Reuters



**YANGON:** Reporters of The Voice Daily work in their newsroom at its office yesterday. —AP

## MYANMAR JOURNALISTS ARRESTED OVER SATIRE

**YANGON:** Police in Myanmar have arrested a newspaper's chief editor and a columnist for allegedly defaming the military by publishing an article mocking its role in the country's efforts to reach a peace agreement with fractious minority groups, one of their lawyers said yesterday. The lawyer for The Voice Daily editor Kyaw Min Swe said that the two were not released after being called in for questioning Friday over a lawsuit filed by the military under the country's Telecommunications Law. A broadly defined offense under the law sets a prison term of up to three years for material judged defamatory that is transmitted over any telecommunications network, including online.

Free speech advocates have criticized the law, and several journalists said they

plan to wear armbands in protest of the arrests. The lawyer, Khin Maung Myint, said the trial of the editor and columnist Ko Ko Maung would begin Thursday. Article 66 (D) of the Telecommunications Law, which targets anyone "extorting, coercing, restraining wrongfully defaming, disturbing, causing undue influence or threatening to any person," had been used by the repressive former military government to punish its critics, particularly members of the country's pro-democracy movement.

To the surprise of many who expected a new era of freedom of expression, prosecutions have continued under the government of pro-democracy leader Aung San Suu Kyi, whose political party took power last year. — AP

## AUSTRALIA POLICE KILL HOSTAGE-TAKER



**MELBOURNE:** An armed police officer walks at the scene in the bayside suburb of Brighton yesterday after a woman was held against her will in an apartment block. —AFP

**SYDNEY:** Australian police yesterday shot dead a man who had taken a woman hostage in a Melbourne apartment and said they were investigating whether the incident was terror-related. Police responding to reports of an explosion at the apartment block in the suburb of Brighton had earlier found the body of another man in the foyer. The siege ended when the suspect exited the apartment complex and opened fire. The woman escaped safely but three officers were injured by gunshots. Police returned fire and killed the man.

Authorities have yet to determine whether the incident in the affluent beach-side suburb was terrorism-related but Victoria state police said it was one line of inquiry. "We do have our counter-terrorism command working on it with our crime department investigators," deputy police commissioner Andrew Crisp told reporters yesterday night. "It's early days and it's one line of inquiry."

Australian officials are growing increasingly concerned at the threat of militant attacks. Officials say they have prevented 12 such attacks on home soil since the threat level was raised in Sept 2014, with 61 people charged. But four have gone ahead, including the murder of a Sydney police employee in 2015 by a 15-year-old boy. In the latest incident police responded to a phone call to emergency services, advising that a man had been killed and a hostage was being held. Witnesses recalled a frightening situation with multiple shots fired in the suburb.

"I got told there was an explosion around 4:00pm. I hung around for a while and I heard gunshots, about 10 shots, and we got told it was a hostage situation," local resident Will Reid told the Australian Broadcasting Corporation. "It was frightening: You wouldn't expect that in Brighton at all." The injuries to the police officers were not life-threatening. —AFP