

FORUM

RAPID RESPONSE

Preparing for Natural and
Man-made Disasters



PLUS

Rules for First Responders

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Philippine Army Special Forces leap from a transport aircraft during the annual Balikatan bilateral training exercise.



ABOUT THE COVER:

This cover conveys a range of natural and man-made disasters that militaries often respond to in the Indo-Asia-Pacific region, to include earthquakes, cyclones/hurricanes, flooding and radiological hazards.

FORUM Illustration



U.S. PACIFIC COMMAND

Dear Readers,

Welcome to the latest edition of *Asia Pacific Defense FORUM*, which focuses on achieving and maintaining preparedness to face growing economic, political and military threats.

Collaboration and training among allied and partner militaries and security forces remain essential to rapidly and efficiently respond to a full spectrum of challenges. Gaining a clear understanding of regional, national and intrastate threats enables forces to act more successfully and safely, thereby

minimizing damage, morbidity and mortality of Soldiers and citizens.

In this issue, we highlight how innovations and improved best practices have reduced human losses. Increased bilateral and multilateral exercises, implementing and enforcing new laws, and employing social media messaging have all helped mitigate the destructive forces of disasters. Bangladesh, for example, has bolstered its disaster management programs by constructing hundreds of government structures that double as storm sanctuaries. The country is also creating a network of coastal crisis management centers to deploy humanitarian assistance and disaster relief.

Lessons on resiliency and renewal continue to emerge from the Philippines, which felt the devastation of Typhoon Haiyan (known locally as Yolanda) in November 2013. A Philippine official tells *FORUM* that the will to rebuild comes from the determination of the people, who have a spirit of preparedness instilled in them by their provinces. Schoolchildren in Capiz, for example, receive disaster preparedness training almost monthly.

In situations where an affected nation needs foreign assistance, those governments and militaries providing outside aid have rules for responding to the call. Keeping in mind that no two disasters are ever the same, we provide tips in this issue on staying up to date on the latest protocols for providing foreign assistance and offer guidance on what to expect during the first few days of a disaster.

When militaries and security forces identify and assess high priority threats — whether internal, external, natural or man-made — they're able to establish proper response procedures, dedicate resources and conduct training that yields the highest possible level of preparedness, including working with civilian and other internal agencies. To address such deepening of ties, we've included an article on the Association of Southeast Asian Nations' Post-2015 Vision about expanding partnerships for more peace, stability and prosperity in the region.

For nearly 40 years, *FORUM* has aimed to engage readers in discussions about challenges and related solutions that positively impact the lives of citizens locally, regionally and globally. I hope this issue sparks dialogue concerning other lessons learned about preparedness and how we can best protect our troops and citizens in the Indo Asia Pacific. We look forward to your feedback.

Please contact us at contact-apdf@apdforum.com with your thoughts.

All the best,

SAMUEL J. LOCKLEAR, III
Admiral, USN
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APD FORUM

Ready to Respond

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AGENCE FRANCE-PRESSE



H.E. LE LUONG MINH is secretary-general of the Association of Southeast Asian Nations (ASEAN). In this issue, *FORUM* publishes an excerpt of the keynote speech he gave during the International Conference on the Prospect of ASEAN-ROK Relations in Seoul, South Korea, on February 26, 2014. The ASEAN-Korea Centre organized the conference to further strengthen the ASEAN-South Korea dialogue.

Featured on Page 28

APCSS



DR. IMES CHIU won the Global Filipino Literary Award for Nonfiction for her cross-cultural study on the military, civilian and foreign adaptation of radically new technology and practices. She attended Cornell University for her doctorate and master's degree in Southeast Asian studies. She has taught at universities in the United States and the Philippines and is an expert on security in Southeast Asia.

Featured on Page 34

AFP/GETTY IMAGES



AMEERAH HAQ, United Nations undersecretary-general for field support, delivered the keynote address at the Pacific Armies Chiefs Conference on September 9, 2013, in Auckland, New Zealand. The conference focused on challenges faced by land forces deployed to peacekeeping operations and the duty of care entailed in the promotion of peace and security. Haq, the highest ranking Bangladeshi official at the U.N., has worked on peacekeeping missions in

Afghanistan, Sudan and, most recently, as Special Representative of the Secretary-General in Timor-Leste. *FORUM* publishes an excerpt of her New Zealand speech in this issue. Featured on Page 40

APCSS



JESSICA EAR, J.D., a professor at the Asia-Pacific Center for Security Studies, specializes in human security, disaster management and humanitarian assistance, civil societies and development, and food security. She adapted her article for the Voices department from her presentation at the Land Power in the Pacific (LANPAC) Symposium and Exposition sponsored by the Association of the United States Army Institute of Land Warfare in

Honolulu, Hawaii, in April 2014. Featured on Page 60

CELEBRATE IN THE NEXT ISSUE



Asia Pacific Defense FORUM caters to military and security personnel in the Asia-Pacific region. A product of U.S. Pacific Command, the quarterly magazine provides high-quality, in-depth content on topics that impact security efforts across the region — from counterterrorism to international cooperation and natural disasters.

FORUM encourages you to submit articles, pictures and topics of discussion for publication in the magazine along with other comments to EDITOR@APDF-MAGAZINE.com or at:

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SOUTH KOREA

SPACE ROCK CRAZE

HITS AFTER METEOR SHOWER

A corner of South Korea is in the grip of a frenzied hunt for valuable space souvenirs, following a rare meteor shower in March 2014.

Hundreds of people scoured hills and rice paddies for meteorites near the southeastern city of Jinju after the shower on March 9, 2014, some of them armed with GPS devices and metal detectors, according to media reports.

"Media hype claiming that chondrites [a type of meteorite] could bring you a bonanza sparked the fever for space rocks," an official from the Cultural Heritage Administration of Korea said.

Local greenhouse owners put up signs warning off

trespassers after the first large chunk of rock, weighing around 9 kilograms, was found in a greenhouse near Jinju.

A second piece weighing 4 kilograms was found by another local resident.

Scientists confirmed that both rocks, found in the two days after the meteor shower, had come from space.

Then-Prime Minister Chung Hong-won suggested the government should secure them for research or as a natural monument.

The Cultural Heritage official said the agency would designate any meteorites found as cultural assets to stop them from being taken out of South Korea.

Agence France-Presse

AFP/GETTY IMAGES

BILLBOARDS, TWEETS CONVEY THANKS TO WORLD FOR TYPHOON AID

The Philippines said "thank you" on billboards around the world in February 2014 for the outpouring of international help after Typhoon Haiyan killed about 8,000 people in November 2013.

Electronic billboards lit up with "thank you" signs at New York's Times Square, Galleries Lafayette in Paris, Tokyo's Shibuya Crossing, London's Piccadilly Circus and five other cities at 2040 Greenwich Mean Time on February 8, 2014, exactly three months after Haiyan, also known as Yolanda in the Philippines, struck the nation's central islands.

"The number of lives lost and affected is unprecedented. But ever since then, the world has been one with the Philippines in helping rebuild the nation," the Tourism Department that was behind the ad and social media campaign said on its website.

"The Philippines wants to say a big thank you to everyone who are helping us rebuild after



PHILIPPINE DEPARTMENT OF TOURISM

Typhoon Haiyan," the department said on its official Twitter page, where it later posted the billboard pictures.

Haiyan, one of the strongest typhoons ever to hit land, smashed across 171 towns and cities in the central islands with a combined land area the size of Portugal, wrecking the homes of more than 4 million people.

Agence France-Presse

INDONESIA



Island sees future in age-old

HORSEBACK BATTLE

Two teams of tribesmen on horseback charge at each other, hurling bamboo spears in a thousand-year-old ritual aimed at producing a prosperous rice harvest.

Spectators, their mouths reddened from chewing betel nut, cheer on the tribesmen from the sidelines of the show in Ratenggaro village.

The annual “pasola” — which comes from the word “spear” in a local tribal language — took place during four weeks in February and March 2014 in western Sumba, an island in the center of the sprawling Indonesian archipelago.

The spectacle attracts few foreign tourists — only about 10 attended in 2014 — but officials hope to use the festival to

boost the economy of the island, which is dependent on rice and corn farming and woven rattan goods.

“It’s a major attraction and has huge potential for development,” said Bona Fantura Rumat of the tourism board of East Nusa Tenggara province, which includes Sumba.

Despite its pristine beaches, azure seas and traditional villages, Sumba attracted about 2,500 tourists in 2013 — compared to more than 3 million who visited the nearby resort island of Bali.

Rumat said plans are afoot to promote the pasola more, improve infrastructure by building better roads and start flights to more destinations in Indonesia.

Agence France-Presse

FOR INDONESIAN JIHADISTS

Syrian Civil War Beckons

THE ASSOCIATED PRESS

The young Indonesian grew up in an extremist household and graduated from a boarding school notorious for teaching generations of terrorists. Not surprisingly, when Muhammad Fakhri Ihsani left to study in Pakistan, the lure of jihad proved inescapable.

The 21-year-old, however, didn't sneak into nearby Afghanistan or the lawless border areas, as scores of other foreigners have in recent years. Indonesian authorities believe that after flying to Turkey, he and three other Indonesian students traveled overland to Syria to fight there with fellow countrymen and jihadists from all over the world.

Their journey in August 2013 shows how determined some Indonesians are to join what has become the new theater of choice for international jihadists. It also points to an emerging threat for Southeast Asian authorities, who have successfully clamped down on militants in recent years, largely preventing them from forging links with their brethren overseas.

While security agencies in Europe and beyond are worried about militants returning from Syria, Indonesia knows only too well how foreign battlefields, training opportunities and contact with al-Qaida can lead to deadly results. Indonesian veterans of the Afghan jihad spearheaded attacks in the 2000s against local and Western targets, including nightclub bombings on the resort island of Bali that killed 202 people.

The Syrian conflict is also helping fuel an increasingly bitter hate campaign against Shias in Sunni-majority Indonesia, where until a few years ago, sectarian divisions, let alone conflict, rarely occurred.

Indonesian humanitarian groups staffed by hard-liners or those with known links to extremists have been raising funds across Indonesia with little transparency. Some are traveling to regions of Syria under the control of militants, treating fighters and handing out

cash and relief funds to civilians and local authorities.

Indonesia has more Muslims than any other nation, but the brand and practice of Islam is markedly different from the austere version common in parts of the Middle East and South Asia. Militant Islam has a long history in Indonesia, dating back to the country's birth in 1945, but it has struggled to gain significant followers, even as the torch of jihad has been handed down through the generations.

The Ngruki boarding school, on the main island of Java, and its network of teachers and ex-students have been central to militant activity in the country since the early 1990s. A close look at those taking part — and advocating for — the war in Syria reveals it remains a central node of extremism, apparently intent on making Syria a new venue for those wishing to take part in jihad.

Ihsani and the three other Indonesians who left Pakistan with him attended Ngruki. The first Indonesian known to be killed in the conflict, Riza Fardi, was also a graduate. His death was reported on Arabic jihadi websites in late November 2013, along with a photo of him taken in the region, smiling with other fighters.

"We have learned that some of our alumni are involved in the struggle in Syria, but once again I reiterate that we can't monitor or follow what our students do after they graduate," said Wahyudin, Ngruki's principal. Ihsani's father, Sholeh Ibrahim, has been a teacher at the school for years, and heads the extremist Jemaah Anshorut Tauhid (JAT) organization in Solo, where the school is located. JAT is campaigning for Islamic law in Indonesia, is anti-Christian and supports al-Qaida's vision. At least 30 members have been convicted of terrorist offenses in the past four years, and the U.S. State Department declared JAT a foreign terrorist organization in 2012.

A sustained crackdown by Indonesian authorities since 2002 has reduced the threat of large-scale terrorism against Western or





civilian targets in Indonesia and elsewhere in the region. Small groups of militants, however, continue to plot, train for and carry out attacks, mostly against police targets, across the country of 240 million people.

Syria represents a rare training and battle opportunity for the current generation of Indonesian militants.

Most of the foreign fighters in the country come from the Middle East. Estimates of the numbers of Western European fighters range from 396 to 1,937, according to a recent study by the International Centre for the Study of Radicalisation.

It's unclear where or with whom the Indonesians are fighting. According to the center, most of the foreigners are grouped with the al-Nusra Front or the Islamic State in Iraq, the two

opposition brigades that are closest to al-Qaida.

While the country's extremist fringe is rallying around Syria, it is also apparent most mainstream Indonesian Muslims are not signing up for the cause because it means having to embrace the uncompromising — and still unpopular — sectarian vision that is at the heart of the conflict.

Joserizal Jurnal, a doctor who has led humanitarian missions to help Muslims in Afghanistan, Lebanon and elsewhere, has angered many fellow Indonesian Islamists by refusing to go to Syria or support the cause.

He says those rallying around Syria are "those close to al-Qaida only."

"It's a sectarian war. It's not clear to me why we should be helping in the slaughter of other Muslims," he said.

Members of the militant Islamic Defenders Front pray during a rally outside the Burma Embassy in Jakarta, Indonesia, in May 2013. Hours after Indonesia announced it had foiled an alleged plot to bomb the embassy, hundreds of hard-line Muslims gathered to call for jihad to fight the perceived persecution of their Islamic brothers.

THE ASSOCIATED PRESS



BORDER

POSITION

ISTOCK

The Republic of Korea's Armed Forces Stand Ready to Deter Threats, Diminish Tensions and Safeguard the Peninsula

FORUM STAFF

Fleets of amphibious vehicles surged toward the beach in Pohang, South Korea, and unloaded waves of Marines on the shore. Dark smoke rings from artillery rounds detonated above the landing forces from the Republic of Korea (ROK), Australia and the United States to hide the scale of the onslaught. Higher overhead, jets and helicopters provided air support. To add realism, Marines portraying North Korean forces and manning tanks and heavy artillery waited to engage the would-be liberators on the beach.

The joint forces conducted the mock amphibious assault drill known as Ssang Yong, which means “twin dragons,” in Pohang, about 360 kilometers southeast of Seoul, in March 2014. The training scenario was part of the annual joint exercises known as Key Resolve and Foal Eagle, which test the readiness of the ROK's Armed Forces and its allies to deter threats from communist North Korea and maintain stability on the peninsula.

“I feel it is necessary for U.S. Marines to come and train with us,” ROK Marine Staff Sgt. Park Jong Kil said in a report published on the U.S. Marine Corps website in March 2014. “This was a good opportunity to bridge our capabilities.”

U.S. Army Gen. Curtis Scaparrotti, who leads the ROK-U.S. Combined Forces Command, said the exercises are “vital” in strengthening the readiness of the alliance. “The scenarios are realistic, enabling us to train on our essential tasks and respond to any crisis which may arise.”

Facing page: A section of the Demilitarized Zone, created in 1953, buffers North and South Korea.

Left and right: South Korean and U.S. Marines participate in an amphibious landing drill in Pohang, South Korea, in March 2014, part of the annual joint military exercise called Foal Eagle.

REUTERS



Today, the DMZ remains the **MOST HEAVILY GUARDED BORDER ON EARTH** and an epicenter of tension throughout the region.

IN THE ZONE

The heightened state of readiness is necessary because South Korea and North Korea technically remain at war. The conflict dates back 61 years, keeping the two nations — and the peninsula — divided. Ongoing tensions continue to permeate the borders of the Demilitarized Zone (DMZ) and radiate throughout the Korean Peninsula, influencing South Korea's security policy regarding the North.

In 1953, an armistice confirmed the division of Korea, and its terms also created the DMZ, a 250-kilometer-long, 4-kilometer-wide strip of land that runs along the 38th parallel and serves as a buffer zone between the South and North. The two nations never signed a peace treaty.

Today, the DMZ remains the most heavily guarded border on Earth and an epicenter of tension throughout the region. Razor-wire fences, guard towers and an untold number of land mines lace both sides of the DMZ. "There are some 20,000 artillery pieces and armored vehicles, as well as over 1 million troops, in the surrounding areas," according to a June 2013 Center for Strategic and International Studies (CSIS) analysis, "The Evolving Military Balance in the Korean Peninsula and Northeast Asia, Volume II: Conventional Balance, Asymmetric Forces and U.S. Forces."

Leaders signed the 1953 armistice in the abandoned town of Panmunjom, which "now consists of military barracks and buildings where North Korean soldiers can peer through windows to watch visitors from the South come close to the border," *The Australian* newspaper reported in April 2014. Amid the row of barracks in what is known as Panmunjom's Truce Village is an ankle-high slab of concrete that runs between the buildings, which denotes the border between South and North Korea.

"Panmunjom Truce Village is a study in barely contained hostility: On one side, South Korean border guards adopt the pugnacious stance — arms behind back, legs astride — that has become one of the abiding features of the DMZ," CNN reported in April 2013. "On the other side, the high-peaked hats of their North Korean antagonists glare through binoculars at their foes just a few hundred meters away."

About 600,000 South Korean Soldiers are stationed on the southern side of the DMZ, backed by 28,500 U.S. Soldiers and a security detail from the Australian Federal Police. North Korea has about 1.1 million troops on its side of the border, according to the CSIS.

"This is probably the tensest border on Earth," Australia's Prime Minister Tony Abbott told *The Australian* when he toured the DMZ in April 2014. "On the South Korean side, we have freedom, we have justice, we have democracy. On the North Korean side, we have an outlaw state which is a threat to world peace and a deadly danger to the people of South Korea."

"The DMZ presents special problems for the ROK," the CSIS report said. Seoul, the capital of South Korea, is about 40 kilometers south of the DMZ, and Pyongyang, the North's capital, is about 125 kilometers north of the DMZ. Geography "allows North Korean forces to deploy much closer to the capital of South Korea than ROK forces can deploy near the capital of North Korea," the report said. North Korea "can threaten the ROK's capital, raid across the DMZ, provoke large-scale maritime clashes, provoke a major artillery strike, or raise the political ante with a new set of attacks on the ROK's leaders."

The threat is why the ROK emphasizes defense along the DMZ, with conventional military forces, air power, and air and missile





South Korean Soldiers watch as two North Korean soldiers approach the U.N. Truce Village building that sits on the border of the Demilitarized Zone, the military border separating the two Koreas.

THE ASSOCIATED PRESS

NORTH KOREA'S MISSILE-LAUNCH CAPABILITIES

FORUM STAFF

In March 2014, North Korea launched two midrange Rodong ballistic missiles that fell into the ocean between the Korean Peninsula and Japan without incident. The missile launches, along with several more that occurred during the annual Foal Eagle military exercises conducted by South Korea and the U.S., prompted U.S. Army Gen. Curtis Scaparrotti to inform U.S. lawmakers of North Korea's capability to launch missiles "on short notice, with very little warning," *Stars and Stripes* newspaper reported.

Scaparrotti also told the Senate Armed Services Committee in Washington, D.C., that North Korea's leader, Kim Jong Un, is more dangerous and unpredictable than his father, Kim Jong Il. "From what I've seen, he also is an independent actor and will tend to go his own way," Scaparrotti said.

North Korea has been prohibited by the United Nations Security Council from launching ballistic missiles, the result of its past missile launches and nuclear tests that were denounced by South Korea and its allies. The communist nation, however, is believed to have about 40 mobile launchers for Scud missiles, 40 launchers for Rodong missiles with a range of about 600 kilometers, and 14 mobile launchers for Musudan missiles with ranges of 2,500 kilometers to 4,000 kilometers, long enough to strike western Japan, Yonhap News Agency reported in March 2014.

North Korea's short-range missiles such as the KN-02 can reach up to 170 kilometers and could target military installations in South Korea, according to a March 2014 Yonhap News Agency report. North Korea's Scud-type missiles, known as Hwasong-5 and Hwasong-6, have longer ranges of 300 kilometers and 500 kilometers, respectively. "These missiles can deliver conventional warheads, but may also have biological, chemical and nuclear capabilities," the report said. North Korea is believed to have a total of more than 1,000 missiles of varying capabilities, BBC News Asia reported.

North Korea's launch of the Rodong missiles in March 2014 was its first test of midrange projectiles in five years, Kim Min-seok, spokesman for the South Korean Defense Ministry, told *The New York Times*. "By launching them from mobile vehicles which are difficult to monitor and allow North Korea to fire missiles from anywhere it wanted, the country appeared to show off its ability to attempt a surprise attack," Kim said. "This is a serious provocation against South Korea and the international community."

defense systems, the CSIS report said. South Korea can rely on the U.S. for precision air strikes, and stealth and cruise missiles. South Korea's strategy calls for "proactive deterrence," the report said, "needed even during times of relative peace in order to deter North Korean provocations. Credible intimidation to dissuade the adversary from even planning provocations is key."

This deterrence tactic prompted the ROK to add about 1,400 more tanks, 300 self-propelled howitzer cannons, 14 submarines, six naval destroyers and 224 combat aircraft in 2013. In comparison, North Korea has deployed many of its forces near the DMZ, along with special forces and naval forces that use mines and submersibles. North Korea emphasizes artillery, rockets and missiles along the border, the report said.

TENSIONS THROUGHOUT THE PENINSULA

Sporadic bursts of violence along the DMZ have claimed the lives of more than 500 South Korean and 50 U.S. Soldiers since 1953. The flare-ups are not isolated to the DMZ but the peninsula as a whole. In response to the ROK's joint exercises with the U.S. and other countries, known as Key Resolve and Foal Eagle, North Korea has claimed the drills are rehearsals for invasion and a prelude to war. The North's objections raise tensions across the region; often those objections turn into a show of force.

At the height of the Foal Eagle exercises in 2013, North Korea threatened Seoul and Washington, D.C. The nation said it was in a state of war and declared void the armistice that ended the Korean War. During the Foal Eagle exercises in late March 2014, the bulk of which took place hundreds of kilometers south of the DMZ, North Korea launched 46 short-range rockets from the town of Wonsan into the East Sea, the Korea JoongAng Daily website reported. Wonsan is about 100 kilometers north of the DMZ.

South Korea's annual exercises, while defensive, often cause North Korea to overreact, Paik Hak-soon, a researcher at the Sejong Institute in Seoul told *The Christian Science Monitor* newspaper in February 2014. Between February and March 2014, North Korea fired nearly 600 projectiles, including missiles, rockets and artillery, "in a show of force against the ongoing joint military drills between Seoul and Washington," Yonhap News Agency reported. In April 2014, North Korean troops fired more than 100 artillery rounds into South Korean waters as part of what North Korea said was a drill, according to Reuters. The shells landed past the Northern Limit Line, a maritime border in the Yellow Sea that South Korea denotes as the boundary of its waters.



“We believe the North’s maritime firing is a planned provocation and an attempt to test our military’s determination to defend the Northern Limit Line and to get an upper hand in South-North relations,” South Korean Defense Ministry spokesman Kim Min-seok told Reuters in April 2014. South Korea fired back with more than 300 rounds into the North’s waters.

NEGOTIATION AND RECONCILIATION
How South Korea handles the threats from its neighbor to the north not only shows its preparedness and military capability but also its ability to diffuse tensions and work toward peace. The framework for this approach comes from South Korean President Park Geun-hye’s policy of trustpolitik. “Park emphasizes that South Korea must first have the robust military capacities necessary to deter further North Korean attacks,” according to a report, “The U.S. Should Support New South Korean President’s Approach to North Korea,” published in April 2013 by the Washington, D.C.-based Heritage Foundation. “Building on that capability, South Korea could then pursue parallel inter-Korean and multilateral negotiations. If Pyongyang responded positively, the Koreans could expand engagement and work toward long-term unification.”

The ultimate goal of trustpolitik is to

develop trust between the two Koreas, according to South Korea’s Ministry of Foreign Affairs website. The policy lays “the foundation for a new Korean Peninsula, a new Asia, and eventually a new future.”

Park’s trustpolitik carried over when Key Resolve exercises began on February 24, 2014, amid a reconciliatory atmosphere. A few days before, 357 South Koreans were reunited with 88 elderly relatives from the North, in a series of three family reunions organized by both Koreas. They were the first family reunions held since 2010.

Perhaps the most optimistic sign for reconciliation could be flourishing between the barbed-wire fences of the DMZ. Due to the lack of human interference, the DMZ has become a haven for hundreds of species of flora and fauna and living proof of how time can heal the wounds of war. South Korea’s tourism website, Visit Korea, offers tours to view the preserve, which it calls “The Peace and Life Zone.”

“The DMZ and its surroundings were once the site of fierce battles, but [it] has recovered from its wounds over the last half-century to become a quiet, lush green area inhabited by diverse living creatures,” according to the website’s tourism literature. “This area has emerged from the ashes of the Korean War and has now become a symbol of peace and life.” □

A South Korean Soldier stands guard inside the U.N. Command Military Armistice Commission meeting room as a soldier from North Korea looks inside. The room is in the border village of the Panmunjom Demilitarized Zone that has separated the two Koreas for 61 years.



Indonesian Soldiers wear masks while marching at the haze-covered Pekanbaru airport in Riau province on Sumatra island in March 2014. The government deployed the military to back up forest firefighting efforts.



ACTION CALLED TO

MILITARIES INCREASINGLY PROVIDE FIRST-RESPONDER CAPABILITIES DURING DISASTERS, BUT RULES DICTATE WHEN AND HOW THEY DELIVER ASSISTANCE

FORUM STAFF

Disaster strikes. Suffering ensues. Mankind offers help.

This cycle of life repeats itself somewhere in the Indo-Asia-Pacific region almost continuously. For an affected nation, requesting the proper aid — and coordinating ways to receive it — doesn't always happen quickly or according to predetermined plans.

Because of their swift ability to mobilize, militaries have increasingly stepped into the nontraditional role of first responder to man-made and natural disasters. They have the right type of assets to deploy, provide foreign humanitarian assistance and restore order, making their

resources highly sought after and often expected by the public.

“For centuries, countries have raised militaries for the primary role of protecting their countries’ sovereignty and territorial integrity,” Channel NewsAsia reported Singapore Defense Minister Ng Eng Hen saying in April 2014. “But today, militaries are increasingly called upon to deal with transnational security challenges related to terrorism, drug and human trafficking, counterproliferation, natural disasters, biological pandemics and cyber security. Indeed, for many countries, Singapore included, the population expects the military to step in when these challenges arise.”



Cambodian military police officers stand with a U.S. Air Force member, second from left, next to items dropped to the ground during the Pacific Airlift Rally training. Representatives of Malaysia and Thailand also joined the training at Thmor Korl village, west of Phnom Penh, Cambodia, in June 2013.

The mere occurrence of human suffering brought on by disaster doesn't automatically trigger military action. Rules for responding exist that provide a framework to ensure the right kind of aid gets delivered, at the right time, without duplication or burdening the affected host nation. In addition, every country has unique laws that govern response procedures that must be respected.

Under the established protocols, foreign militaries should never take the lead. Host nation government officials, no matter how devastated, remain in control. Military assets "should be seen as tools that complement existing relief mechanisms in response to the humanitarian gap between the needs that the relief community is being asked to satisfy and the resources available to meet them," according to the U.N. Office for the Coordination of Humanitarian Affairs' (UNOCHA) manual, *Disaster Response in Asia and the Pacific: A Guide to International Tools and Services*.

THE U.S. RESPONSE PROCESS

U.S. law has three requirements for setting a formal disaster relief operation in motion:

- An event must extend beyond the ability of an affected

state to handle the crisis on its own.

- The affected state must formally request or be willing to accept U.S. assistance.
- The assistance must be within the U.S. strategic interests.

United States Pacific Command supports U.S. government efforts led by the U.S. Agency for International Development (USAID) Office of U.S. Foreign Disaster Assistance (OFDA).

"While humanitarian assistance is assumed to provide for urgent food, shelter and medical needs, the agencies within the U.S. government providing this support typically expand or contract the definition in response to circumstances," according to a February 2014 U.S. Congressional Research Service report on the U.S. and international response to Typhoon Haiyan (Yolanda) in the Philippines.

USAID/OFDA provides assistance and support in the areas of agriculture and livestock, economic recovery, health, nutrition and shelters, among other things.

A Disaster Assistance Response Team (DART) may also deploy within hours of an emergency. This team of experts and technical advisors helps assess the situation



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firsthand and coordinates a U.S. response.

OFDA responds to more than 70 disasters in 50 countries each year and stockpiles essential relief supplies — including blankets, emergency shelter materials and water treatment systems — at strategically located warehouses in Miami, Florida; Pisa, Italy; and Dubai, United Arab Emirates.

UNITED NATIONS TIMELINE OF RESPONSE

A variety of international teams stand ready to mobilize within hours of a disaster to support a government's relief efforts. The United Nations, for example, operates on a cluster approach. Clusters are groups of humanitarian organizations, whether U.N. or otherwise, that work with local and state authorities and civil society to provide the main needs for humanitarian response including shelter, food, security, early recovery and emergency telecommunications.

A number of United Nations and other humanitarian groups exist to bring better coordination and effective response to disasters. The U.N. cluster approach provides one way to share information among humanitarians and military actors.

It's important for these military and civilian organizations to maintain open lines of communication.

"The sharing of all available information relating to the disaster by all actors will deliver better humanitarian assistance outcomes. Reluctance of civilian and military actors to share available information relating to the disaster can undermine the efficient delivery of humanitarian assistance and place lives at risk," according to the report "Asia-Pacific Regional Guidelines for the Use of Foreign Military Assets in Natural Disaster Response Operations." "Mutual trust needs to be developed through civil-military coordination to foster a shared and coordinated team effort in responding to natural disasters. It will also assist in overcoming any misunderstanding that might arise between actors."

Here's a sampling of agencies that operate in the Indo-Asia-Pacific region by responding to disasters and coordinating with militaries to eliminate duplication in response.



- **FAO** — www.fao.org — The Food and Agriculture Organization helps developing countries and countries in transition to modernize and improve agriculture, forestry and fisheries practices and ensure good nutrition for all.



- **IFRC** — www.ifrc.org — The International Federation of Red Cross and Red Crescent Societies assists victims of disasters, combined with development work to strengthen the capacities of its member National Societies, with focus on promotion of humanitarian values, disaster response, disaster preparedness, and health and community care. The federation, together with National Societies and the International Committee of the Red Cross, make up the International Red Cross and Red Crescent Movement.



- **IOM** — www.iom.int — The International Organisation for Migration works to ensure the orderly and humane management of migration; promotes international cooperation on migration issues; assists in the search for practical solutions to migration problems; and provides humanitarian assistance to migrants in need, including refugees and internally displaced people.



- **Save the Children (Alliance)** — www.savethechildren.net — Save the Children secures and protects children's rights to food, shelter, health care, education and freedom from violence, abuse and exploitation.



- **UNDP** — www.undp.org — The U.N. Development Programme helps countries build and share solutions with regard to democratic governance poverty reduction, crisis prevention and recovery, environment and energy, and HIV/AIDS. The UNDP resident representative normally also serves as the resident coordinator of development activities for the U.N. system.



- **UNHCR** — www.unhcr.org — The Office of the U.N. High Commissioner for Refugees leads and coordinates international action to safeguard the rights and well-being of refugees and to ensure that everyone can exercise the right to seek asylum and find safe refuge in another state, with the option to return home voluntarily, integrate locally or to resettle in a third country.



- **UNICEF** — www.unicef.org — The U.N. Children's Fund upholds the Convention on the Rights of the Child, advocating for measures to give children the best start in life; promoting girls' education; acting so that all children are immunized against common childhood diseases and are well nourished; and working to prevent the spread of HIV/AIDS among young people.



- **UNOCHA** — <http://ochaonline.un.org> — The U.N. Office for the Coordination of Humanitarian Affairs mobilizes and coordinates effective and principled humanitarian action in partnership with national and international actors to alleviate human suffering in disasters and emergencies, advocates for the rights of people in need, promotes preparedness and prevention, and facilitates sustainable solutions. OCHA is headed by the emergency relief coordinator, responsible for oversight of all emergencies requiring U.N. humanitarian assistance.



- **WFP** — www.wfp.org — The World Food Programme uses food aid to support economic and social development; meet refugee and other emergency food needs, as well as the associated logistics support; and promote world food security.



- **WHO** — www.who.int — The World Health Organization provides leadership on global health matters with a six-point agenda to promote development; foster health security; strengthen health systems; harness research, information and evidence; enhance partnerships; and improve performance.

Source: Asia-Pacific Regional Guidelines for the Use of Foreign Military Assets in Natural Disaster Response Operations



A dog joins Metropolitan Manila Development Authority rescue personnel in an earthquake drill at a government school in the Philippines in July 2013.

AFP/GETTY IMAGES

SINGAPORE PROPOSES REGIONAL CRISIS CENTER

AGENCE FRANCE-PRESSE

Singapore has proposed hosting a regional crisis command center that would help coordinate governments' efforts after major natural disasters, the city-state's defense minister said in April 2014.

"We were obviously struck over the last decade by how many disasters there were" in the region, said Singapore Defence Minister Ng Eng Hen, citing earthquakes, tsunamis and typhoons that have cut a swath of destruction from the Philippines to Japan. "We recognized in the first critical 24, 48 hours, it is actually very difficult for the affected country to be able to set up a C2 [command and control] center, for the very reason they're the ones hit," he said during an Association of Southeast Asian

Nations (ASEAN) defense ministers meeting in Hawaii.

With communications knocked out, governments at the center of a natural disaster often are overwhelmed and don't have the ability to manage international offers of help, he said.

"In the discussion, we realized what was really needed was a crisis center that was stood up all the time, which of course could be scaled up," he said.

At the ASEAN gathering, defense ministers welcomed Singapore's proposal to host the crisis center at Changi Naval Base, Ng said. The agenda for the ASEAN meeting — focused on improving cooperation for humanitarian assistance — took on new importance in the wake of missing Malaysia Airlines Flight 370.

Singapore's idea is to "make a coherent picture for everyone to see," said Ng. "We evolved a concept, we call it 'plug and play,' " he added.

"We set up terminals, you bring in your systems, you give the information you feel comfortable with. ... We take all that information, fuse it and then pump it out. It's worked quite well."

U.S. Department of Defense Secretary Chuck Hagel praised Singapore's proposal for the crisis center to handle future natural disasters, which are expected to increase in frequency and scale due to climate change.

"This could be an important venue for nations in the region to coordinate military responses to disasters, and it's an idea that we're going to pursue," Hagel said.

"They are created when clear humanitarian needs exist within a sector, when there are numerous actors within sectors and when national authorities need coordination support," according to UNOCHA. "Clusters provide a clear point of contact and are accountable for adequate and appropriate humanitarian assistance. Clusters create partnerships between international humanitarian actors, national and local authorities and civil society."

What follows is a sampling from the UNOCHA timeline of disaster-response tools and services during medium- and large-scale emergencies within the first week of an event.

12-48 HOURS AFTER A DISASTER:

- Declaration of emergency by the affected government
- Request for and/or acceptance of international assistance by the affected government
- Potential deployment of regional disaster-response teams
- Potential deployment of disaster-assessment coordination teams

- Potential deployment of military-civil defense assets
- Determination of availability of International Federation of Red Cross and Red Crescent funding
- Production of U.N. situation report

60-72 HOURS AFTER A DISASTER:

- Potential appointment of a humanitarian coordinator
- Establishment of Humanitarian Information Center
- Creation of International Committee of the Red Cross Family Links Network

ONE WEEK AFTER A DISASTER:

- Launch a flash appeal to raise money for response efforts
- Dispatch survival items from the U.N. Humanitarian Response Depot
- Central Emergency Response Fund allocates initial monies
- Urban search and rescue teams exit seven to 10 days after deployment □

LESSONS LEARNED IN RESPONDING TO DISASTERS

The Indo Asia Pacific Presents a
Gallery of Security Innovations

FORUM Staff

Since the turn of the millennium, natural disasters in the Indo-Asia-Pacific region have affected more than 1.6 billion people, according to the World Bank, with more than 61 percent of global losses from disasters in the past 20 years occurring in the region. Not only has the frequency of natural disasters significantly increased in the past two decades but so has the intensity of many storms.

Natural disasters affect individuals, communities, nations and, increasingly, global economics. Worldwide, economic losses from disasters have been increasing, with costs 15 times higher in the 1990s than the 1950s. The year 2011 set the record as the costliest, with more than U.S. \$380 billion in losses, the World Bank reported. That year included the most financially devastating natural disaster on record, the earthquake and tsunami in Japan. Experts predict the increasing trends in frequency and severity will continue as a result of climate change and increases in population and urbanization.

Although many challenges remain, governments, defense, civilian and private

sector security agencies and nonprofit organizations have succeeded by working together in reducing the number of lives lost and in mitigating catastrophic losses to property and livelihood. Indo-Asia-Pacific nations “have moved from merely reacting to disasters to thinking ahead to preparation and mitigation,” disaster expert Thomas Peterman, Ph.D., of the Asia-Pacific Center for Security Studies told *FORUM*. Most important, annual deaths in the region have decreased drastically in the past five years, dropping from more than 230,000 in 2008 to fewer than 9,000 in 2013, according to his analysis of data from the Centre for Research on the Epidemiology of Disasters.

Innovations and improved best practices continue to emerge from the rubble and chaos wrought from cyclones, earthquakes, flooding, landslides, tsunamis, and other natural and man-made disasters. *FORUM* highlights some of the key successes across the region in providing humanitarian aid and disaster response and reducing human losses. They range from increasing bilateral and multinational exercises to implementing new laws to employing social media messaging in response plans.

CHALLENGE: Cyclones in Bangladesh

RESPONSE: Building more shelters and Coastal Crisis Management Centers

Cyclones and flooding seem inevitable in low-lying Bangladesh, which has seen more than 200 natural disasters in the past 40 years, according to the World Bank. Among the most devastating was Cyclone Bhola, which in 1970 killed about 470,000 people in Bangladesh alone.

Since then, the government, Bangladesh Red Crescent Society and myriad international organizations have bolstered disaster management programs to move people to shelters and help them recover after a storm. Today, this river delta country, which stands where the Ganges and the Brahmaputra converge, boasts more than 4,000 government structures that can double as storm sanctuaries. With a population of more than 150 million, Bangladesh could use more shelters still, experts contend.

To help increase survival odds, the country has created a network of Multi-purpose Cyclone Shelters (MPCS) and Coastal Crisis Management Centers (CCMCs). In 2010, Bangladesh officials introduced the innovative plan to build

30 CCMCs to establish a forward command and control platform for the Bangladesh Coast Guard (BCG) and other first responders from the Bangladesh Ministry of Home Affairs to conduct humanitarian assistance and disaster relief operations.

By early April 2014, the BCG, in partnership with the U.S. Pacific Command (PACOM), had completed building and moved into 12 of 30 planned CCMCs, and another seven centers were under construction, according to BCG Director General Adm. Makbul Hossain.

The CCMCs enhance the security environment in multiple ways. They serve as outposts for BCG maritime security operations as well as venues for first responder collaboration, training and preparedness planning, Hossain explained. Perhaps best of all, when storms hit, the two-story structures also double as cyclone shelters in key high-risk littoral areas and serve as a platform for local government or civic outreach. *FORUM Staff*

A man exits
a Chittagong
shelter before
Cyclone Mahasen
approaches in
May 2013.

REUTERS



CHALLENGE:

Complex Security Environment

RESPONSE:

Fellowship at the Asia-Pacific Center for Security Studies

A two-star Philippine police general tasked with security preparations for the Southeast Asia Games didn't have to look far for detailed plans of safety requirements. He simply reached out to fellow Asia-Pacific Center for Security Studies (APCSS) classmates. Those who had done it before didn't hesitate to help.

"He didn't have to start from scratch," John Gasner, APCSS Alumni Affairs chief, told *FORUM*. "Throughout my time here, there have been many examples like that."

For nearly 20 years, APCSS has facilitated connections among security professionals who live and work in the Indo Asia Pacific or partner with governments and organizations based there. The center "gives attention to the increasingly complex interrelationships of military, economic, political and diplomatic policies relevant to regional security issues through its three academic components: executive education, workshops and research, and publications efforts," according to its website.

APCSS fellows share life experiences and immerse themselves in the cultural nuances of those around them. Ambassadors and generals meet and interact with majors and lieutenant colonels. Inside the walls of APCSS, everyone has a voice and safe environment to express personal and professional challenges and lessons learned. "They often rely on relationships they've developed here to continue to connect with each other when they leave," Gasner said.

Part of that connection happens through APCSSLink, a virtual community providing education, online courses and exchange of ideas across a secure platform. Learn more about APCSS at www.apcss.org. *FORUM* Staff



CHALLENGE: Need for Multinational Dialogue and Cooperation

RESPONSE: Opening doors with exercises in Thailand

The Cobra Gold series in Thailand has successfully helped improve multinational military response to rapidly developing small scale contingencies and military operations other than war in the Indo Asia Pacific. Co-hosted by the Royal Thai Armed Forces and PACOM, the exercises have helped build a multinational network of planners. In 2014, about 13,000 Soldiers from seven countries participated, including Singapore, Indonesia, Japan, South Korea and Malaysia, in addition to the hosts. "Cobra Gold started as a bilateral exercise with one of our oldest exercises with our oldest alliance in the region. It's a leading example of what was bilateral and has expanded to a multilateral one over the years and is very important," U.S. Army Pacific Commander Gen. Vincent Brooks told *FORUM*. "It's opened doors for observers to come, where there might not have been an ability to meet before for whatever reason." For example, there might have been a diplomatic separation or a change in their form of government that stopped conversations. "Dialogue among nations matters," he explained. In 2014, nations participating as observers included Burma, Laos, Vietnam and China. "Military-to-military engagements help to enable our diplomatic missions." *FORUM* Staff

A Thai Navy instructor shows U.S. Marines how to handle a cobra during Cobra Gold 2014.

REUTERS

CHALLENGE: Frequency and Intensity of Natural Disasters

RESPONSE: Creating centers of excellence to enhance management capabilities

Military involvement in disaster response has grown with the increase in frequency and intensity of disasters. Analysts anticipate that even with improved national capabilities throughout the Indo Asia Pacific and the rise of regional forums to manage disaster response, militaries will be increasingly called to respond. Strengthening this response through improved civil-military relations remains one of the primary missions of the Center for Excellence in Disaster Management and Humanitarian Assistance (CFE-DHMA) in Honolulu, Hawaii.

The U.S. Congress established CFE-DHMA under the Office of the Secretary of Defense in 1994 to provide and facilitate education, training, and research in civil-military operations to enhance interagency coordination in international disaster management response efforts and to advance disaster management and humanitarian assistance capability.

The mission of CFE-DHMA is to facilitate collaborative partnerships, conduct applied research, and develop education, training, and information-sharing programs to

enhance U.S. and international civil-military preparedness, knowledge and performance in disaster management and humanitarian assistance. The vision of the center is to “promote excellence in disaster management by connecting people, improving coordination and building capability.” CFE-DHMA’s primary focus is disaster management and humanitarian aid pre-crisis preparedness. Priority of support is to the PACOM area of responsibility. Visit the CFE-DHMA online at <http://www.cfe-dmha.org>. FORUM Staff

CHALLENGE: Flooding in Cambodia

RESPONSE: Integrating mobile technology to disaster management

In 2009, the strongest storm Cambodia had ever experienced struck the northeastern part of the country. Unexpected flash flooding pushed 14 of 24 provinces into a state of emergency. Forty-three people died, and floodwaters displaced more than 66,000. The disaster cost the country more than U.S. \$140 million.

With the growing use of smartphones, computers, inexpensive netbooks and 3G tablets among the middle class, Cambodian authorities realized technological tools could help mitigate such losses. More than 85 percent of the nation’s territory lies in the lower basin of the Mekong River, rendering it susceptible to floods.

A consortium of civil organizations and governmental agencies started to map infrastructure and services and incorporate them into the country’s traditional early warning systems and response mechanisms. Since April 2013, the consortium has been using a mobile voice-messaging system to send text messages to first responders. The texts alert them to floods and related health risks.

The severe floods in October 2013 tested the system. “We were able to give firsthand information to the local authorities and subscribers via SMS [Short Message Service] and voice messages to people on the ground and gather voice reports from the victims,” explained Ros Chanborith, a technical advisor for the National Disaster Management Committee. Yet barriers remain.

Despite the potential power of crowdsourcing, for now satellite imaging remains the key resource for disaster management in Cambodia. “Access to communications is still a challenge in Cambodia,” Chanborith said. Researchers are working to incorporate social media data into disaster visualization to deliver more detailed, accurate and timely information to international organizations and governmental bodies. Clothilde Le Coz



A woman sells food from a small boat to people in a flooded village in Kandal province in October 2013. Heavy rains caused the Mekong River to break its banks, inundating thousands of communities across Cambodia. REUTERS

CHALLENGE: Typhoons in Vietnam

RESPONSE: Executing improved evacuation protocols

No nation could have prepared for the severity with which Typhoon Haiyan struck the Philippines in November 2013. Vietnam proved more fortunate because the ferocious storm's intensity had weakened considerably by the time it hit the country's shores. Haiyan, however, tested the nation's preparedness. Early warnings predicted the storm could impact 6.5 million Vietnamese, and authorities helped keep casualties to a minimum by

successfully implementing sound practices. Although 14 people died in the wake of the disaster, the measures proved effective, given the scale of the storm, analysts said.

The International Federation of Red Cross and Red Crescent Societies lauded the government's evacuation of more than 880,000 people from coastal provinces to safe zones. The government moved another 150,000 people to safe areas in northern provinces.

The U.N. praised Prime Minister Nguyen Tan Dung's leadership of the preparedness effort as well. U.N. Resident Coordinator Pratibha Mehta told VGP news, a Vietnamese government-run website: "We are impressed by the extraordinary preparedness measures taken by the government when confronted with this storm. Strong leadership, right from the highest level, played a key role in minimizing the impact and number of lives lost." *FORUM Staff*

CHALLENGE: Lack of Communication // **RESPONSE:** Sharing standard practices

Organizers of the world's largest multinational maritime exercise known as Rim of the Pacific (RIMPAC), held biennially in Hawaii, rely on the All Partners Access Network (APAN) to plan and execute crisis response training. Formerly known as the Asia-Pacific Area Network, APAN has proven key for sharing unclassified information for more than 15 years. The network provides a platform for information exchange and collaboration between the U.S. Department of Defense (DOD) and non-DOD entities.

That information is shared online through more than 1,500 APAN communities of interest, ranging from nongovernmental organizations to groups involved in brain research. Some of the interests on APAN include communities of practice, which encompass military exercises, and communities of response that allow for developing relationships for additional resources before a disaster happens. A key resource available on APAN is the distinct set of Multinational Force Standing Operating Procedures for limited-intensity combat and operations other than war. When disaster strikes, a lead nation may readily modify the procedures to adjust to the particulars of a given crisis and response.

"The use of APAN runs the gamut. There's an incredible array of different participation organizations," Jerry Giles, APAN's lead technical manager, told *FORUM*.

Many military exercises have an APAN component that not only introduces participants to the site through

a practical application but also gives them another tool to take home — where APAN can help those budding personal relationships continue to grow. "We have noticed with the Pacific nations that the longer APAN is around and the longer we use it, the more confident they are that they can share information," Giles said.

To learn more about APAN, register for an account to create a community of interest or join one, log onto community.apan.org. <http://www2.apan-info/mpat/>

FORUM Staff



An Indonesian Marine amphibious assault vehicle crosses a beach in Waimanalo, Hawaii, during Exercise Rim of the Pacific 2014. *REUTERS*



Residents push prams along an earthquake-damaged road near the northern port of Iquique, Chile, in April 2014.

REUTERS

CHALLENGE: Earthquakes in Chile

RESPONSE: Saving lives with strict building codes

A magnitude-8.2 temblor struck off the coast of Chile in early April 2014 and tested the nation's preparedness and resolve anew.

Although the quake seriously damaged 2,500 buildings and triggered landslides, power outages and a tsunami, Chile suffered fewer casualties than expected with seven. Officials consider the death toll, though still tragic, a relative success given the quake's magnitude, Lt. Gen. Luis Farias Gallardo, defense and military attaché to the Embassy of Chile, told *FORUM*.

Roughly 928,000 people successfully evacuated, according to Ricardo Toro, director of Chile's Office of National Emergency. "This is a great example to all of us that when we work together in an adequate manner and when we follow the plans that have been established in the region, we work well," Chilean President Michelle Bachelet told reporters after touring the damage.

In contrast, about 500 people died after a similar size Chilean earthquake in 2010. The devastating quake moved an entire city 3 meters, according to accounts. In a show of its resiliency, the country had already repaired the damage to the infrastructure from that seismic event when the April quake hit, Lt. Gen. Farias Gallardo explained to *FORUM*.

After each successive quake in the past century, Chile has responded by implementing stricter and stricter building codes and continually improving its evacuation plans, he said. "We've learned from every earthquake. With every earthquake, our standards have increased." After the 1985 Algarrobo earthquake, which destroyed more than 140,000 houses — leaving 177 people dead and a million homeless — Chile introduced tougher standards for construction. After the 2010 quake, officials introduced better drills and toughened building codes even further, he said. Though the learning curve may be painful, Lt. Gen. Farias Gallardo said, "each time we rebuild things better." *FORUM* Staff

CHALLENGE: Need for a Multinational Response Network

RESPONSE: Convening leaders and managers to forge new relationships

Army chiefs from 20 nations and top military managers from 26 nations, including China, met at the Pacific Armies Chiefs Conference (PACC) VIII and Pacific Armies Management Seminar (PAMS) XXXVII in Auckland, New Zealand, in 2013. The meeting, co-hosted by New Zealand and the U.S., helped foster important conversations between militaries.

"When there is a conflict or a pursuit of an agreement, dialogue matters. The absence of dialogue between nations can be a cause of miscalculation, misunderstanding, even conflict, and as we know, there are many examples of this throughout the region," U.S. Army Pacific Commander Gen. Vincent Brooks explained at a news conference in April 2014 in Honolulu.

Like military exercises, conferences that underpin international dialogues are leading examples of innovation in terms of multinational cooperation. For example, militaries across the Indo Asia Pacific are increasingly using Humanitarian Aid and Disaster Response (HADR) as a forum. "It is a mechanism that can help increase dialogue and trust among militaries," Gen. Brooks said. "So that there is not as great a potential for miscalculation, as nations do what they believe they need to do as sovereign nations."

In general, HADR is an area of common concern to most nations in the region and a useful framework for starting dialogue. "We know that is the case. We see that happening in our relationship with China," Gen. Brooks said.

"The goal is to be able to pick up a phone and say first, 'How are you doing' and then, 'What is your intention on this exercise' and 'We're about ready to do this, what do you think?'" Gen. Brooks said. "Wouldn't it be excellent if we had a dialogue with China like we do with so many other nations in the region? But we don't have that yet." *FORUM* Staff □

USHERING IN A NEW ERA OF
COLLABORATION
AND PROSPERITY



THE ASSOCIATION OF SOUTHEAST ASIAN NATIONS-REPUBLIC
OF KOREA (ASEAN-ROK) PARTNERSHIP STARTED 25 YEARS AGO

H.E. LE LUONG MINH

During the past five years, about 80 percent of the measures in the Roadmap for an ASEAN [Association of Southeast Asian Nations] Community (2009-2015) have been implemented. By putting most of the roadmap into practice before the December 2015 deadline, we have changed fundamentally the landscape of ASEAN in each of the three pillars of the community. With enhanced political cohesion, economic integration and social responsibility, the narrowed gap of development within and among member states and the fact that ASEAN has become more connected — not only physically but also institutionally and in people-to-people connectivity — the standing of ASEAN in the region and in the world has been elevated to the highest level ever.

Politically, with peace, security and stability in our region basically ensured, ASEAN has been increasingly speaking with one voice on regional and global issues of common interests, such as the South China Sea, the Korean Peninsula, the Middle East, counterterrorism, pandemics and climate change. Economically, substantial gains have been achieved in eliminating tariffs, facilitating trade and investment, integrating capital and aviation markets, enhancing food security, narrowing development gaps and promoting cooperation with external partners — all this contributing to ASEAN's ability to sustain growth in the region despite the volatile external environment resulting from the recent global and eurozone crisis. Socially, with the promotion of education and youth and cultural exchanges, progress in the implementation of the Agreement on Disaster Management and Emergency Response, and greater attention to disadvantaged groups such as disabled people, elements of a caring and sharing society are emerging.

COMMUNITY ROADMAP ON TRACK

With approximately 20 percent of the measures left for implementation in the next two years, we are on track in community building. Such progress has strengthened ASEAN itself as a platform for dialogue and cooperation to preserve and enhance peace and security, a locomotive for open trade, investment and economic growth in the region while maintaining its unity in diversity and its central role in regional mechanisms. Positive impacts of such progress in the process of community building on external relations



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Republic of Korea President Park Geun-hye, far right, joins hands with leaders of the Association of Southeast Asian Nations (ASEAN) at the 16th ASEAN-Korea Summit in Bandar Seri Begawan, Brunei, in October 2013. With Park was, from left, Singaporean Prime Minister Lee Hsien Loong, former Thai Prime Minister Yingluck Shinawatra, and Bruneian Sultan Hassanal Bolkiah. ASEAN and South Korea have had dialogue relations for 25 years.

are reflected in the number of non-ASEAN countries having acceded to the Treaty of Amity and Cooperation in Southeast Asia, which makes 22 of late — with two applications pending approval — and reflected in the number of countries having appointed envoys to ASEAN, which is 78. Those positive impacts also find their expression in the fact that ASEAN's relations with all major partners have moved far beyond trade investment and economic cooperation to more comprehensive partnerships encompassing joint projects and activities in all major spheres.

EMERGING POST-2015 VISION

In that context, with confidence in the prospect of a three-pillared community established by 2015, ASEAN has already started work on a Post-2015 Vision, with a view to setting a firm foundation for a stronger ASEAN community. While concrete elements of such a vision are still to be developed, there has been broad agreement among member states on its thrust. Member states shared the view that since



AFP/GETTY IMAGES

ASEAN defense ministers discuss issues during a meeting in Honolulu, Hawaii, in April 2014.

OUR RELATIONS HAVE EXPANDED TO COVER A RANGE OF AREAS OF POLITICAL-SECURITY, ECONOMIC AND SOCIAL-CULTURAL COOPERATION

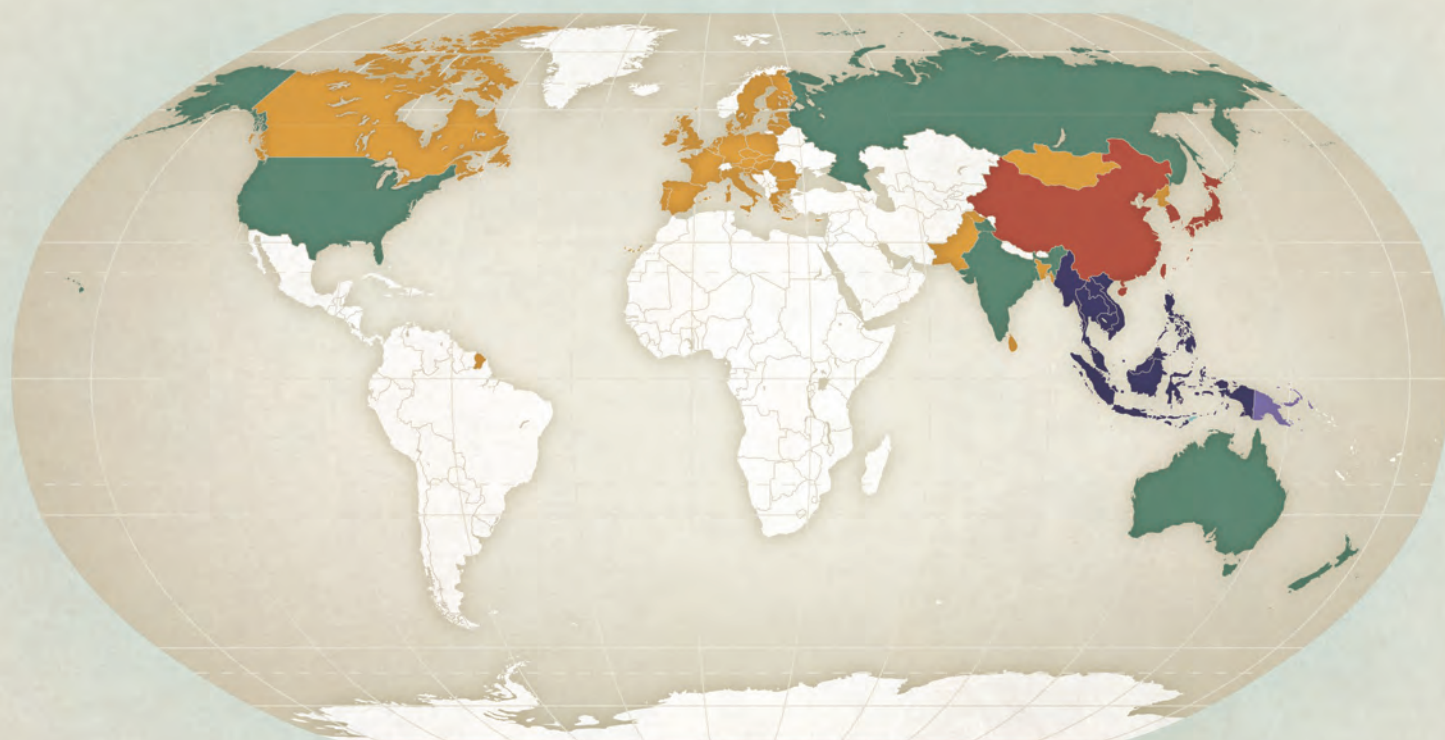
community-building is a process — a work in progress rather than an event — the Post-2015 Vision should be one to enhance and consolidate the ASEAN community through a continued but deeper and more comprehensive process of integration. The ultimate objective is to build an ASEAN that is politically cohesive, economically integrated and socially responsible; an ASEAN that is people-oriented, people-centered and rules-based; an ASEAN community that is well-integrated into the global community nations. It should build upon the achievements recorded in the implementation of the Roadmap for an ASEAN Community and address the needs of ASEAN in the new phase of development. While integration

and peace and stability will remain the preconditions for the region's economic growth, the Post-2015 Vision would lay a greater focus on improving the living conditions of the 600 million people of ASEAN. Thus, it should set concrete goals in economic growth, poverty reduction and narrowing development gaps with a view to ensuring equitable and sustainable development for all member states.

BUILDING AN IDENTITY

As ASEAN continues developing and strengthening an identity reflecting its unity in diversity, further promoting ASEAN cooperation in such areas as culture, people-to-people connectivity, tourism, education and sports, ASEAN would continue to strengthen its

Member States of ASEAN



KEY

■ ASEAN full members

■ ASEAN observers

■ ASEAN candidate members

■ ASEAN Plus Three

■ East Asia Summit

■ ASEAN Regional Forum

Source: Wikipedia

FORUM ILLUSTRATION

existing dialogue relations and at the same time reach out to new potential partners. In this process of global integration, ASEAN's Post-2015 Vision will need to be aligned to the Post-2015 Global Development Agenda. For it to effectively carry out such an ambitious community-building and strengthening agenda, ASEAN institutions and mechanisms would need to be strengthened.

Such an ambitious agenda will have significant implications for ASEAN's external relations, including its relations with its immediate East Asian partners. A strong, united and prosperous ASEAN community will certainly be an important factor for ensuring peace, stability, prosperity and cooperation in East Asia and the Asia Pacific. As ASEAN

is embarking toward these goals, we acknowledge the need to deepen and enhance ASEAN's dialogue partnership and external relations.

The ASEAN-ROK [Republic of Korea] dialogue relations have come a long way since the establishment of our partnership 25 years ago. Our relations have expanded to cover a range of areas of political-security, economic and social-cultural cooperation. The ROK has been one of the most active and important partners of ASEAN in regional cooperation mechanisms, such as the ASEAN Regional Forum, ASEAN Plus Three and the East Asia Summit. Trade between ASEAN and the ROK continues to grow steadily. The ROK is now the fifth-largest trading partner of ASEAN, while ASEAN has become the

AT THIS IMPORTANT JUNCTURE, WE NEED TO SEIZE THE NEW OPPORTUNITIES, BUILD UPON THE CURRENT MOMENTUM AND TAP OUR POTENTIALS TO FURTHER STRENGTHEN AND DEEPEN THE ASEAN-ROK STRATEGIC PARTNERSHIP

second-largest trading partner of the ROK. The ROK has extended continuous support for ASEAN's community-building efforts and ASEAN's central role in the regional mechanisms.

PROMOTING COOPERATION

The commemoration of the 25th anniversary of ASEAN-ROK dialogue relations is a good opportunity for us not only to reflect on past achievements but also to explore new ways to further promote and strengthen our cooperation on the basis of the many common interests that we share. The commemorative activities to be undertaken this year, culminating in the ASEAN-ROK Special Summit, which will be held in December 2014, will be a series of meaningful events to highlight further the significance of our strategic partnership and map out direction for ASEAN-ROK relations in the years to come.

At this important juncture, we need to seize the new opportunities, build upon the current momentum and tap our potentials to further strengthen and deepen the ASEAN-ROK Strategic Partnership. Looking ahead, ASEAN-ROK cooperation should be aligned with, and in support of, the ASEAN's Post-2015 Vision to enhance complementarity between them. The future ASEAN-ROK Plan of Action, in furtherance of the current one that will expire in 2015, should identify measures/ activities corresponding to the needs of ASEAN in the new stage of the ASEAN community. In so doing, there are a number of areas that ASEAN-ROK relations should focus on, among others:

- We should intensify economic cooperation in pursuit of a shared prosperity between ASEAN and the ROK and contributing to the overall economic growth and prosperity in East Asia. It is important to maintain the growth momentum of



trade toward achieving the target of U.S. \$150 billion by 2015 by fully utilizing and further liberalizing and improving the ASEAN-ROK Free Trade Area. Meanwhile, we should aim toward the timely conclusion of the negotiations of a Regional Comprehensive Economic Partnership by 2015, which would make it the second-largest trade agreement framework after the World Trade Organization, further strengthening the role of the East Asian region in the global economy.

- We will need to enhance mutual understanding and contribute to the maintenance of peace and security in the region. We should promote cooperation on areas of mutual concern, such as combating terrorism and transnational crimes, maintenance of maritime security and safety, disaster management and relief, and humanitarian assistance, fighting piracy and cyber crime.
- ASEAN looks forward to the ROK's support for enhancing ASEAN connectivity as

well as connectivity between ASEAN and the ROK and in East Asia, through the consultation mechanism that the ROK has established to work with the ASEAN Connectivity Coordinating Committee. We look forward to exploring potential cooperation in infrastructure, information and communication technology and mobilization of innovative financing for connectivity, including through public-private partnership.

- ASEAN looks forward to the ROK's continued support for narrowing development gaps and enhancing regional connectivity, particularly through the Mekong-ROK cooperation framework.
- We should continue to nurture the friendship between ASEAN and the ROK by promoting two-way cultural and people-to-people exchanges, especially among the younger generation and in the areas of academics, intellectual, arts, sports and tourism.
- We should enhance cooperation in addressing major global and transboundary challenges such as climate change and the environment, including close cooperation on low carbon green growth policy and the use of environmentally friendly technology, water management and forestry cooperation, in which ASEAN is interested to learn from the ROK's experiences.
- Finally, we should ensure that ASEAN-ROK relations are placed in the broader context of East Asia in the interests of our region and beyond. Therefore, we should continue to enhance collaboration and coordination in the broader regional frameworks, including in the ongoing work of the East Asian Vision Group 2 to promote cooperation in East Asia in which the ROK has been playing an active role.

In conclusion, as a key channel for enhancing trade, investment, tourism and cultural exchanges between ASEAN and the ROK, the ASEAN-ROK Centre has been playing and will continue to have an important role to play in promoting ASEAN-ROK cooperation. □



U.S. Secretary of Defense Chuck Hagel, third from right, hosts a round-table discussion with Commander of U.S. Pacific Command Adm. Samuel Locklear, right; USAID Administrator Rajiv Shah, second from right; ASEAN Secretary-General H.E. Le Luong Minh, fourth from right; and Brunei Energy Minister Pehin Dato Hj Mohammad Yasmin bin Umar, sixth from right; and other ministers in April 2014 in Honolulu, Hawaii.

DISASTER READINESS *in*





Capiz

IMES CHIU, PH.D.

Resiliency and Renewal after Typhoon Haiyan

When Typhoon Haiyan made landfall on November 8, 2013, idyllic life in the Philippine province of Capiz came to a halt. Haiyan (also known as Yolanda in the Philippines) hit Capiz, located on the bucolic island of Panay in the Western Visayas region, with unmatched fury. The storm impacted the lives of more than 695,000 people, most of the province's population, the website CapizNews.com reported.

Haiyan's Category 5 winds were the strongest ever observed at landfall, according to the Center for Disaster Management and Risk Reduction Technology, with gusts at 380 kilometers per hour shortly before impact at East Samar province and 312 kilometers per hour at landfall. The typhoon headed west, directly over Capiz about 300 kilometers away.

Haiyan's winds washed out 90 percent of the houses throughout the region and devastated the fishing and agricultural industries that provide most of the people's livelihoods. Known as the nation's seafood capital, Capiz has one of the richest fishing grounds in the Philippines, with 80 kilometers of coastline. Capiz agriculturist Sylvia Dela Cruz said the storm damaged or destroyed approximately 90 percent of the province's fishing boats and ponds, the Philippines news website Inquirer.net reported.

DISASTER PREPAREDNESS AS A WAY OF LIFE

In the face of major destruction, Capiz, with a population of 720,000, could have been expected to have suffered equally major casualties. Across the country's 81 provinces, the storm killed more than 6,000 people. In Capiz, however, only 57 people died, according to a November 15, 2013, report from the Capiz Provincial Disaster Risk Reduction and Management Council (PDRRMC). No child perished.

In an interview for *FORUM* a few days after the release of the report, Capiz Gov. Victor A. Tanco attributed Capiz's relatively low number of casualties to the various disaster preparedness initiatives in the province. The resiliency of the people comes from their spirit strengthened by the local government encouraging preparedness as a way of life among Capizeños, he said.

The key to Capiz's high survival rate lies in the culture of disaster preparedness in the province, Tanco said. "Capiz trains schoolchildren in disaster preparedness almost on a monthly basis," he said in the November 2013 interview for *FORUM*. The governor also serves as chairman of the PDRRMC.

"Several days before Haiyan struck, we pre-positioned relief goods and alerted our responders. Three days before the storm hit landfall, mass

*“Capizeños will not give up.
This is the time for us to stand up,
be strong and fight. And face the
challenges ahead of us.”*

CAPIZ GOV. VICTOR A. TANCO



Typhoon Haiyan survivors off-load relief supplies delivered via helicopter to the province of Capiz by the Armed Forces of the Philippines in November 2013.

AFP/GETTY IMAGES

evacuation commenced. You see, as a child, I witnessed and suffered through so many disasters — one particularly devastating — that, once in public service, I committed my administration to always be prepared for any disasters that come our way so we may save as many lives as possible,” Tanco said.

Despite Haiyan ravaging up to 95 percent of the Capiz economy, as cbcpnews.com reported in November 2013, Capizeños’ resiliency prevailed. Even in the face of disaster, Capiz emerged “victorious,” and survivors “still stand, united, harmonious and strong,” Tanco said, according to a February 2014 Capiz Provincial Press Bureau blog posting.

PROVINCIAL GOVERNMENT LEADERSHIP

The low casualty figures in Capiz, despite the massive loss of infrastructure, are attributable to the provincial government’s commitment to fund and execute disaster preparedness programs over the years, officials contend. Some examples of their efforts:

- About two months before Haiyan struck, the Department of the Interior and the government of Capiz signed an agreement with the nearby province of Iloilo to join forces to combat the effects of natural disasters and climate change, according to a Western Visayas Local Governance Regional Resource website.
- In 2012, three Capiz towns committed to share resources and efforts to unite their communities against disasters in a project called *Pagpakigbuylog sa Pagpangaman* (Partnership in Disaster Risk Reduction), the Philippine Information Agency (PIA) said. Through public-private partnerships, the Office of Civil Defense and the Pharmaceutical and Healthcare Association of the Philippines Cares Foundation Inc. signed an agreement in July 2012 to increase the resiliency of the Capiz towns by improving health services, increasing community awareness and sustaining disaster preparedness strategies, PIA said.
- Civil Defense also launched a project called *Building a Resilient and Gender Responsive Communities in Selected Hazard Prone Areas* in Western Visayas as a result of the Philippine Disaster Risk Reduction and Management Act of 2010. The law aims to strengthen the capacities of national and local governments together with partner stakeholders to build disaster-resilient communities, PIA said.
- During National Disaster Consciousness Month in October 2011, about two years before Haiyan struck, the Capiz provincial government declared disaster preparedness its top priority, according to the Philippines Department of the Interior and Local Government website.

PATH OF TYPHOON HAIYAN



FORUM ILLUSTRATION

PDRRMC Action Officer Esperidion Pelaez, one of the key leaders in Capiz’s disaster preparedness, response and recovery to Haiyan, led the Capiz Emergency Response Team, a multiagency and multisectoral team composed of rescue operators, police and military responders, and administrative staff to provide a whole-of-government approach.

- Additionally, Tanco obtained approval in 2011 to allocate 5 percent of the total provincial budget to the disaster preparedness and quick response fund. Capiz built five evacuation centers, increased mangrove and tree nurseries, acquired additional firetrucks and speedboats, repaired PDRRMC vehicles and established other measures to mitigate and address the impacts of disasters, the Capiz Provincial Press Bureau reported in February 2014.
- To strengthen its communication system during emergencies, in 2011 Capiz instituted a repeater antenna for a two-way radio in order to receive weak or low-level amateur radio signals and transmit them at higher signals over greater distances, the Lakeshore Repeater Association website reported. Since 2011, the PDRRMC also has conducted six water search and rescue trainings led by Pelaez. The training covers rope and knot skills, basic life support, vehicular accident extrication, mass casualty incidents and an incident command system, the

Panay News newspaper reported. “Each batch will have 53 participants composed of barangay officials as well as members of civilian volunteer organizations and some municipal employees,” Pelaez said.

CAPIZEÑOS RISE UP

Capiz’s preparedness fueled the immediate recovery of the province in the face of widespread devastation, according to media accounts. The Capiz Department of Tourism launched the slogan “Tindog Capiz!” (Stand up, Capiz!) aimed at getting the region back on its feet, the *Panay News* reported.

The Capiz Tourism and Cultural Affairs agency instituted a “voluntourism” campaign in cooperation with the greater Department of Tourism-Western Visayas Region. The program combines tourism and volunteerism through a hands-on experience of helping with Capiz rehabilitation efforts, Philstar.com reported in January 2014. “Tindog Capiz! is a way for us to turn a crisis into an opportunity,” said Provincial Administrator Jose O. Villanueva, who chaired the weeklong Thanksgiving festivities 100 days after Haiyan struck, the PIA reported.

The various commemorative ceremonies, in collaboration with the United Nations Development Programme, showcased Capiz’s resiliency, strength and camaraderie in times of crisis. Activities included flag raising, photo exhibits and free services through public-private partnership programs, such as complimentary health checkups, legal consultations and other free services, the Capiz Provincial Press Bureau reported. The 100-day celebration also recognized the work of the local government unit.

United Nations Undersecretary-General for Humanitarian Affairs and Emergency Relief Coordinator Valerie Ann Amos lauded Capiz for its disaster preparedness and leadership when she visited Roxas City, the provincial capital, on November 20, 2013, according to the Capiz Provincial Press Bureau. “The early warnings that you personally give and the leadership you showed are absolutely critical,” Amos told Capiz provincial leaders.

BEST PRACTICES RECOGNIZED

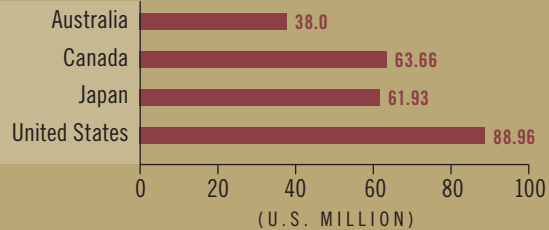
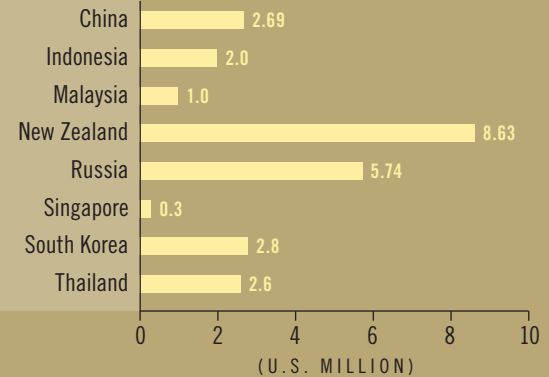
Many seasoned humanitarian responders described the Capiz model as a “textbook response” that is “as good as it gets” in a January 2014 report by the Center for Excellence in Disaster Management and Humanitarian Assistance. The report, titled “Lessons from Civil-Military Disaster Management and Humanitarian Response to Typhoon Haiyan

Canadian Disaster Assistance Response Team, U.N. agencies, international and humanitarian organizations collaborate after Typhoon Haiyan in a command center set up in Capiz by the provincial governor. IMES CHIU

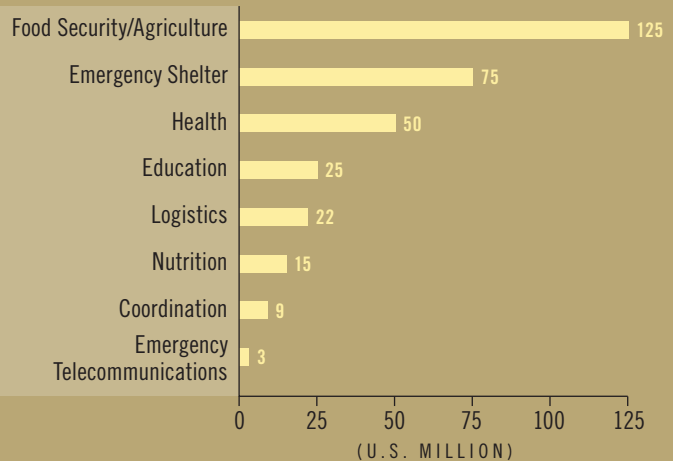
AID AFTER THE STORM

Aid Contributions

The Philippines received international aid contributions totaling U.S. \$836.7 million through July 16, 2014, according to the Financial Tracking Service. Below is a sampling of donations from 12 countries in the Indo-Asia-Pacific region.



Contribution Allocation



Source: U.N. Office for the Coordination of Humanitarian Affairs

FORUM ILLUSTRATION



Typhoon Haiyan destroyed 90 percent of homes in Capiz in November 2013, but local preparedness practices helped casualties remain relatively low.

AFP/GETTY IMAGES



(Yolanda),” captured the close coordination of the Capiz provincial government, U.N. Office for the Coordination of Humanitarian Affairs, the Canadian Disaster Assistance Response Team (DART) and more than 50 humanitarian organizations.

During the response, the Capiz governor transformed his provincial offices into a command center, with all responders working closely together on one floor. The daily cluster meetings, led by the provincial administrator and the PDRRMC action officer, exemplified the best practices in civil-military coordination, according to the 2014 report.

In partnership with the Philippine 3rd Infantry Division, the Canadian DART played a critical role in supporting the local government units and humanitarian organizations in delivering a well-calibrated and highly coordinated response and recovery effort, the report said. With the rising death toll in the Visayas region, Canadian Prime Minister Stephen Harper said DART was deployed to areas less served by the humanitarian organizations, which tended to congregate in Tacloban, The Canadian Press news agency reported.

After consultations with Manila, Canada’s advanced planning team, in partnership with Philippine government authorities, determined that the DART could best focus its relief efforts in the Capiz province where international assistance was relatively scant. Canadian Defense Minister Rob Nicholson said, “They will be able to assist governmental and nongovernmental agencies in restoring essential services in the area,” The Canadian Press reported.

About two weeks after the arrival of the Canadian DART team, the number of humanitarian organizations grew rapidly to more than 50. The Capiz provincial government provided leadership for a comprehensive multisectoral and international disaster management intervention. As a result of this exemplary leadership, the Philippine Army’s 3rd Infantry Division named Tanco a recipient of the Armed Forces of the Philippines (AFP) Bayanihan Award, Philippine media reported.

Bayanihan, which means “working and cooperating together as a community,” has also come to signify the AFP strategic objectives and mission in “Winning the Peace” through a whole-of-government approach to internal security and stability.

A DIFFERENT HAIYAN STORY

The story of Capiz defies many common misperceptions of the Haiyan Philippine experience. Although the devastation Haiyan wrought on the Western Visayas paints an image of vulnerability and confusion in the Philippines, there are many untold stories such as that of Capiz — a story of professionalism and heroism, cooperation and proactive governance, resiliency and revival. The spirit of Capiz, along with its strength and beauty, were captured by Tanco in a statement one month after Haiyan struck: “We are converting tragedy into [something] positive. ... Capizeños will not give up. ... This is the time for us to stand up, be strong and fight. And face the challenges ahead of us.” □



The nature of

DEFINING

U.N. peacekeeping missions evolves

OPERATIONS

with emerging threats to security



AMEERAH HAQ

Peacekeeping is among the most visible, challenging and important of the many roles played by the United Nations. The U.N. Charter asserts that the principle purpose of the U.N. is “to maintain peace and security, and to that end, to take effective collective measures for the prevention and removal of threats to the peace.” The Charter’s preamble begins with the lofty aspiration, “To save succeeding generations from the scourge of war ...”

The first U.N. peacekeeping mission was established in 1948 with a mandate to observe the implementation of armistice agreements between Israel and four of its neighbors. Today, “blue helmets” — peacekeepers are known by their headgear — are involved in the stabilization of post-conflict situations, the protection of

civilians, support to national elections, and the conduct of targeted offensive operations against armed groups, among other tasks.

In Mali, the U.N. confronts extremist groups that blend in easily with the local communities of the north. In Haiti, peacekeepers support the country’s resurgence from protracted political and communal violence and successive natural disasters. In the Democratic Republic of the Congo (DRC), perhaps the most robust mandate in U.N. history allows U.N. forces to “neutralize” armed groups. In Somalia, the U.N. provides logistics and sustainment support to troops of the African Union, a new model in our relationship with regional organizations.

It was not always like this. The early years of U.N. peacekeeping were characterized by a predominance of observer troops who supervised the implementation of peace agreements;

Left: U.N. police attend a ceremony in Dili, Timor-Leste, in October 2012 for the withdrawal of U.N. peacekeeping troops. AFP/GETTY IMAGES

Above: Ameerah Haq, U.N. undersecretary-general for field support, speaks at the inauguration ceremony of the Vietnam Peacekeeping Center in Hanoi in May 2014. AFP/GETTY IMAGES

their mere presence was a powerful deterrent to breaches of the peace. Today, the threat we face is less visible, more insidious and closer, at least in geographic proximity, to civilian communities. U.N. peacekeeping mandates today are increasingly focused on containing armed groups that bear no loyalty to any official military or sovereign political power. Groups such as the Yau Yau group, an armed militia of the Murle tribe in South Sudan, are more representative of the military units that cause instability today. The M23 [March 23 Movement, a rebel military group] active in the eastern DRC, is another unconventional force that is increasingly the rule rather than the exception.

MODERN REALITIES

In August 2013, suicide bombers affiliated with the al-Shabab group in Somalia entered the U.N. complex in Mogadishu and self-detonated, killing U.N. national and international personnel. In 2009, Taliban militants stormed an international guesthouse in Kabul, killing 12 people, including six U.N. personnel. In April 2013, in South Sudan, an Indian contingent in Jonglei state was deliberately targeted — and five troops ended up losing their lives.

Incidents such as these highlight a modern-day reality faced by U.N. peacekeepers. It is not only that we are dealing increasingly with nontraditional forces. It is that U.N. troops and U.N. civilians are, more so than ever before, targets in the complex calculus of insurrection, insurgency, and terrorism.

In 2003, Sergio Vieira de Mello, the special representative of the secretary-general in Iraq, and nearly two-dozen members of his team, were killed when a truck bomb rolled into a relatively unprotected compound. On that day, August 19, 2003, U.N. peacekeeping entered the modern era. Thereafter, armed militants could — and would — actively seek to harm U.N. troops and civilians, something that would have been taboo, unthinkable and supremely counter to their political interests until then.

The implications for U.N. peacekeeping ever since have been profound. With the collapse of the Canal Hotel in Baghdad, so did the U.N.'s sense of security effectively disintegrate overnight.

The U.N. has been in a state of alert since, with troops — many of your troops — devoting more time and energy to protecting U.N. personnel and property. An age of innocence, of sorts, has passed, and with it, our ability to stand above the fray.

Across the 15 peacekeeping operations currently managed by the U.N., 116 nations contribute approximately 91,000 troops and police to this collective effort. The total cost of U.N. peacekeeping today is just under U.S. \$8 billion annually. The main cost component of this total — 37 percent at last count — is paid directly to governments for their contribution of military and police. A further 8 percent is for rations and rotation movements for uniformed personnel.

While the overall budget of U.N. peacekeeping is at an all-time high, the per capita cost of established missions [in

U.N. Undersecretary-General for Field Support Ameerah Haq greets a Ugandan police officer working in Mogadishu with the African Union Mission in Somalia in November 2012.

AFP/GETTY IMAGES



“Building on the same concept of shared services, we are improving the efficiency of U.N. peacekeeping through inter-mission cooperation.”





2012-13] has actually decreased by 8 percent in real terms, compared to 2008-2009. New missions such as those in Mali ratchet up the overall budget, but established missions have for some time been engaged in a persistent and largely successful campaign to reduce costs.


Herein defines another key attribute of modern-day peacekeeping — the ever-present search for efficiency gains. Faster, better, safer peacekeeping, yes — but also, less costly and more efficient. How to increase cost-effectiveness without any adverse impact on mandate implementation is a difficult balancing act. The mantra of the day is to “do more with less.”

My department, the Department of Field Support, has sought in several ways to achieve “win-win” outcomes where greater impact and lower cost can be achieved in tandem. One approach is to introduce what we call shared services. Rather than each peacekeeping

mission having its own back office to handle procurement, human resources, and financial matters, we can consolidate these functions in regional service centers, where a critical mass of skilled personnel provides services to multiple missions.

We have located our information technology equipment and logistics support at these regional centers. Many of you are familiar with our regional service center in Entebbe, Uganda, and our main logistics base in Brindisi, Italy.

Building on the same concept of shared services, we are improving the efficiency of U.N. peacekeeping through inter-mission cooperation. In 2012, in Syria, the U.N. did something that it had never done before. It set up a fully functioning mission — the U.N. Supervision Mission in Syria, or UNSMIS — within one month of the adoption of the Security Council resolution that mandated it. The startup of UNSMIS



was telling in several ways. First, the speed with which it was set up was attainable only because of a high degree of inter-mission cooperation. The United Nations Interim Force in Lebanon (UNIFIL), United Nations Disengagement Operations Force (UNDOF), United Nations Truce Supervision Organization (UNTSO) and United Nations Peacekeeping Force in Cyprus (UNFICYP) — all established missions in the neighborhood — worked together and resolved many of the challenges by digging deep within their limited reserves and deploying assets in support of the new operation. This included the provision of equipment and supplies, telecommunications, and the administration of personnel. Our base in Brindisi provided critical support that allowed our civilians — and your military observers — to hit the ground running.

NEW WAYS OF DOING BUSINESS

Modern technology holds much promise in allowing U.N. peacekeepers to protect civilians, as well as themselves. Unmanned aircraft systems, for example, have the potential to improve surveillance and situational awareness, and enhance information gathering. In June 2012, seven peacekeepers from Niger were ambushed and killed in southwest Côte d'Ivoire, a tragedy that we believe could have been mitigated or even avoided if we had better visibility from above. We have recently concluded the process of procuring an unmanned aircraft system for use in U.N. peacekeeping. In 2014, we will roll out the technology in the DRC at the invitation of the government there.

Innovative technologies are also urgently needed to minimize the environmental impact of U.N. peacekeeping operations. For too long, we have not attached enough importance to minimizing our environmental footprint. Today, technologies are such that we can improve our environmental footprint while also reducing cost. For example, 15 percent of the energy requirement of our mission in south Lebanon is now produced by solar power.

The convergence of interests in peacekeeping on the one hand and environmental sustainability on the other will continue. Many of the conflicts that our respective forces are involved in today find some of their origins in the age-old struggle for basic resources: land, water, minerals. This struggle will only intensify in the coming decades due to increased desertification, rising sea levels and the easy availability of small arms. It behooves all of us to better understand, and prepare for, the rise of resource-based conflict in the years ahead.

With regard to military assets, experience makes clear that the availability of air assets can make or break a mission. In places such as Mali and South Sudan, characterized by vast distances and limited infrastructure, a huge proportion of goods and services

must be transported by air. In such scenarios, the combination of limited air assets and a shortage of engineering teams to build or maintain runways can seriously impede our efforts.

In addition, aviation assets that can provide timely casualty evacuation (CASEVAC) and medical evacuation (MEDEVAC) services, and support land operations through mobility, observation and close air support are in short supply. We have been told that in 2014, with the international community winding down in Afghanistan, more air assets will become available. To those of you in the audience with any say in the matter, let me take this opportunity to state unequivocally that U.N. peacekeeping would benefit immensely from even a small portion of these assets.

No discussion on new challenges in U.N. peacekeeping would be complete without some mention of the Force Intervention Brigade that we have deployed in the eastern DRC. The Security Council has authorized the mission there to confront armed groups with a robust mandate and rules of engagement. A Force Intervention Brigade was established in response to repeated incursions into and around the town of Goma in the eastern DRC.

Let there be no mistake: Giving U.N. peacekeepers the ability to neutralize and disarm others is different from past practice. The explicit task of conducting “targeted offensive operations” is new. This new mandate represents an important point of inflection that brings with it conceptual, operational and, indeed, doctrinal questions that we are working through with our member states and on the field. For example, the potential impact of collateral damage and the need for actively managed “hearts and minds” campaigns bring political as well as operational challenges for us to navigate with our partners.

CIVILIAN TARGETS

The U.N. political mission in Afghanistan, known as UNAMA, in August 2013 reported that the number of Afghan civilians killed or injured in the first half of 2013 rose by 23 percent compared to the same period in 2012. In Syria, more than 100,000 people have been killed since the conflict erupted two years ago, with nearly 2 million more displaced. Roughly 2 million civilians were killed and 4 million displaced during the second Sudanese civil war from 1983-2005. In the DRC, nearly 3.5 million have died because of the conflicts there, many due to disease and starvation.

These figures remind us once again of a critical trend that underpins all of the issues on the agenda of this conference: Today, more so than ever before, civilians are being intentionally targeted by established militaries and armed militias alike. This reality requires that we move aggressively in identifying solutions that place civilian protection at the heart of approaches to collective security. □



HONORING THE DEPARTED

**SOLDIERS AND WORKERS RECOVERING
BODIES AFTER NATURAL DISASTERS MUST
MINIMIZE POTENTIAL HEALTH RISKS AND
RESPECT LOCAL FUNERAL CUSTOMS**



STORY BY FORUM STAFF
PHOTOS BY THE ASSOCIATED PRESS

IN March 2011, a crowd gathered on a windy hilltop in Higashimatsushima, Japan, to say goodbye to friends and relatives lost when the massive Tohoku earthquake and tsunami razed their town and other cities along the country's northern coast. The survivors gazed into narrow trenches about 90 meters long, where workers had placed plywood pieces to separate makeshift coffins. The survivors, hobbled with grief, also struggled with the unorthodox idea of burying their loved ones. In Japan, cremation has been the prevailing funeral rite for decades. Under normal circumstances, the dead are rarely buried — let alone in mass graves. The practice is partially rooted in Buddhism and partially in the evolution of efficiency and hygiene standards after World War II.

"Families may be unwilling to bury, but in this case, many have no choice," because of the potential health threat, especially for first responders and relief workers, Yoshio

Suzuki, an official at Higashimatsushima's environmental office told *The Wall Street Journal* in March 2011.

Relatives and government officials reluctantly approved the mass burial because the death toll — which Japan's National Police Agency said was 15,885 as of February 2014 — overwhelmed local mortuaries and crematoriums in the aftermath of the tsunami.

What happened in Japan illustrates the complicated issues that may arise in any country where natural disasters strike. Soldiers and government officials responding to the crisis must not only act quickly to locate, identify and remove bodies from the rubble but also be sensitive to local funeral customs. It is a delicate balancing act for government and military personnel to handle potentially thousands of bodies in a short time and minimize potential health risks while being aware of how a country or a community honors its dead.

"Governments are frequently overwhelmed by such large numbers of dead and may order mass burials in the interests of protecting

Members of the Japan Ground Self Defense Force pray for victims of the March 2011 earthquake and tsunami at a mass grave site in Yamamoto, Miyagi prefecture, northeastern Japan. The devastating earthquake and tsunami left a backlog of thousands of bodies in makeshift morgues, leaving local governments no choice but to bury them in hastily dug mass graves.

A Buddhist prays for passengers on the missing Malaysia Airlines Flight 370 at a Bentong retreat outside Kuala Lumpur, Malaysia, in April 2014. Some passengers' relatives suffered anguish because traditional rites could not be performed without the body or time of death.



public health,” according to “Care of the Dead in Disasters,” a fact sheet published by the World Health Organization (WHO). “Initial media focus is often on the dead, and graphic images of dead bodies among the debris create pressure on governments to do something.”

WHO’s field manual, *Environmental Health in Emergencies and Disasters: A Practical Guide*, posits that in large-scale natural disasters, “ritualized behaviors normally available to deal with death may be swept aside. The large number of deaths occurring together, the lack of advanced warning, the previous good health of so many victims, and the clustering of deaths within households can overwhelm normal coping mechanisms and leave survivors with profound and possibly lifelong trauma.”

The field manual encourages rescue personnel to abide by cultural traditions when possible and that governments should avoid hastily covering bodies with lime or disposing of remains in “undignified” mass burnings. “Authorities should resist this: Ceremonial grieving for the dead is the beginning of recovery in the disaster-recovery cycle. Relief organizations should cooperate with the authorities in the disaster area to facilitate ceremonial burials.”

MINIMIZING HEALTH RISKS

Soldiers and emergency responders who come into direct contact with human remains for retrieval, identification and disposal face the greatest potential health risks. Personnel tasked with that grim duty

“may be exposed to chronic infectious hazards, including hepatitis B virus, hepatitis C virus, human immunodeficiency virus (HIV)” and other blood-borne infections contracted from open wounds or inflamed skin, according to the fact sheet, “Handling of Human Remains from Natural Disasters,” published by the U.S. Army Center for Health Promotion and Preventive Medicine. Soldiers handling human remains could also be exposed to gastrointestinal organisms from the bodies and could contract insect-borne diseases from flies feeding on contaminated material then transferring the contamination directly to people or to food supplies.

The center recommends that Soldiers wear disposable clothing where temporary morgues have been set up, but that traditional uniforms are “preferable owing to their strength, especially when lifting bodies.” All equipment, “including clothes, stretchers, and vehicles used for transportation” should be washed with disinfectant after and before reuse. Surgical masks and eyewear are only recommended when “large quantities or splashes of blood are anticipated,” but are “probably not necessary when handling bodies following a natural disaster.”

The most important task, according to health professionals, is the prompt removal of human remains in areas also occupied by survivors. “Where there are many fatalities, the collection and disposal of bodies becomes an urgent need,” according to the “Disposal of Dead Bodies in Emergency Situations” instructions on



Japanese Soldiers salute after placing a coffin containing a victim of the March 2011 earthquake and tsunami into a mass grave in Higashimatsushima, northeastern Japan.

WHO's website. "This is not usually due to any health-related risks, which are likely to be negligible, but is important because of the possible social and political impact and trauma.

"So emergency relief teams should primarily be concerned with the mental health of the community and its need to carry out the cultural obligations and traditions to take care of the dead, rather than potential disease transmission."

Decomposing bodies actually present a minimal threat to the general public because disaster survivors, unlike Soldiers and rescue personnel, rarely have direct contact with cadavers for an extended period of time, according to a WHO fact sheet. "There is a widespread and erroneous belief, even among some health professionals, that dead bodies are a source of disease and therefore a threat to public health. This is untrue. There has never been a documented case of an epidemic occurring after a natural disaster that could be traced to the exposure of dead bodies."

People killed in natural disasters "are generally healthy at the time of their death, and therefore very unlikely to be a source of infection to others. The microorganisms responsible for the decomposition of bodies are not capable of causing disease in living people," WHO officials say. Instead, the risk of epidemics can be increased by a lack of access to unspoiled food and safe drinking water, and a dearth of facilities for personal hygiene and safe sanitation.

PERFORMING LAST RITES

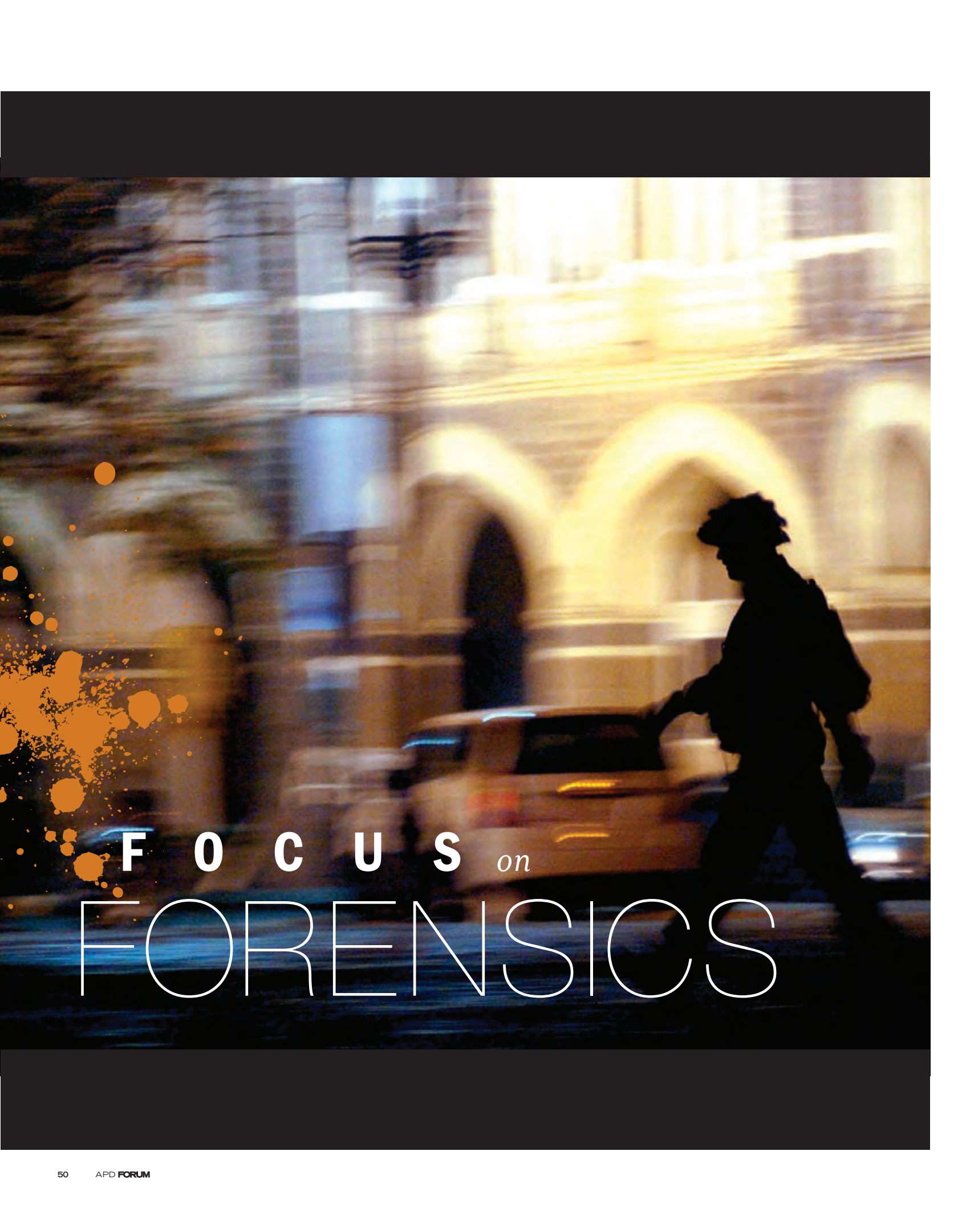
The need to perform local funeral customs was again put to the test when Typhoon Haiyan surged through the central Philippines in November 2013; one of the hardest-hit cities was Tacloban. Mayor Alfred Romualdez told *The Wall Street Journal* two days after the devastating storm that workers retrieved body bags that had lined streets, while other corpses were tagged with the name of the deceased for relatives to retrieve for private funeral ceremonies. Philippine law, he said, dictates that "bodies shouldn't be buried before the government does everything it can to identify, photograph and document them."

Much like government workers in Higashimatsushima, officials in Tacloban had to resort to digging mass graves due to the sheer number of fatalities. City Hall staffer Gloria Enriquez Fabrigas told *The Wall Street Journal* in November 2013 that the very least the government could do for the survivors was to give them the time to pray for their loved ones as the bodies were buried. "Catholic, whatever prayer, there's a Muslim prayer, a Christian prayer — the family can decide," she said.

Even small-scale disasters take a toll on family members seeking closure. During the massive, multinational hunt for the missing Malaysia Airlines Flight 370 in 2014, some relatives could not perform funeral rites because passengers' bodies had not been found. Hindus needed the precise date and time of a person's death, and "lengthy prayers were needed to liberate the soul," *The Star Online* in Malaysia reported. Taoists required the location and time of death for last rites to be completed. "If the relatives are not given their final rites, they become lost souls," Tan Hoe Chiew, president of the Federation of Taoist Associations Malaysia, told *The Star Online*. The Rev. Lawrence Andrew, a Catholic priest, said the body was not necessary in his faith because "prayers could be performed for those who have departed."

This is the challenge facing nations and people in the wake of disaster. There is an urgent need to retrieve bodies and rebuild lives, but there is also the basic human desire amid the chaos for the opportunity to say goodbye and honor the dead.

It is a challenge the residents of Higashimatsushima became all too familiar with after the March 2011 tsunami. After families agreed to the mass burial, a small shrine was built near the gravesite for people to light incense and pray, according to *The New York Times*. Soldiers saluted after they lowered each coffin while Buddhist monks offered prayers. Survivors placed items such as rice and coffee in the graves, a local tradition that eases the deceased's journey to the afterlife. Fujimi Kimura left rice balls, a banana and a few yen in her husband's grave and then quietly said goodbye, *The New York Times* reported. "I cannot meet you now, but I will definitely come to see you in the future," she said as she closed the coffin. □



F O C U S *on*
FORENSICS

CRIME SCENE SCIENCE IN THE INDO-ASIA- PACIFIC REGION HAS COME OF AGE, WITH CUTTING-EDGE INVESTIGATIVE CAPABILITIES PLAYING A VITAL ROLE IN CLOSING CASES AND PREVENTING TERRORIST THREATS

FORUM STAFF

In November 2008, a small group of men in inflatable speedboats sneaked into Mumbai, the entertainment and financial capital of India, and turned the tourist hot spot into a hub of horror. Armed with bombs and bullets, the 10 Pakistani men — associated with terror group Lashkar-e Tayyiba — attacked people at major landmarks including the iconic Taj Mahal Palace hotel, killing 166 and wounding about 300 others. The rampage ended 60 hours later, after Indian Soldiers and police killed nine extremists, captured one, secured buildings under siege and rescued survivors.

Years after the November 26, 2008, attack, Mumbai's citizens have resumed their lives, but scars remain. At the Leopold Café, a bar popular

with foreigners and one of the locations where the terrorists first opened fire, framed posters have been moved around to hide the bullet holes in the wall, *The Times of India* newspaper reported in November 2013. Armored vehicles patrol downtown, and a cadre of police commandos remains stationed at the Gateway of India, a grand monument overlooking the Arabian Sea, *The Telegraph* newspaper in the United Kingdom reported in November 2013.

India's government has provided more training for its Soldiers and police as well as improved a key aspect of the investigation process to prevent future attacks: forensic science. At the time of the carnage, Indian law enforcement "were aware they lacked the ability to secure a trail of evidence which they knew would go back to Pakistan," according to a November 2013 report in the *Hindustan Times*.

Indian investigators were aided by FBI and CIA forensic experts from the United States, who worked together to crack the terrorists' identities and affiliation. The teams collected serial numbers from the guns and grenades used in the attack along with DNA samples of the terrorists and victims, according to the *Hindustan Times*. Investigators discovered the terrorists "used Arges grenades, a defunct Austrian brand — whose only remaining factory was in Pakistan," the *Hindustan Times* reported.

The forensic teams also found GPS handsets and managed to retrieve tracking information from the equipment, tracing the extremists' path from Karachi, Pakistan, to Mumbai, the newspaper said. "One of the handsets had the various targets including the Leopold Café and the hotels," the newspaper reported. "This was so beyond Indian forensic ability at the time that it was cited in the official charge sheet: 'These GPS handsets were sent to the FBI laboratory and the detail of the data

Opposite page: A Soldier walks near the Taj Mahal Palace hotel in Mumbai, India, where terrorists holed up for three days during the November 2008 attack. India has poured more funding and resources into forensic science, modernizing facilities and providing more training for investigators.

THE ASSOCIATED PRESS



recovered.’” India plans to fully modernize its police force by 2017, equipping it with the latest forensic equipment, building forensic science laboratories and providing more training for forensic investigators, according to a year-end review published in December 2013 by India’s Ministry of Home Affairs. India’s focus on forensics comes at a time when many countries in the Indo-Asia-Pacific region seek to enhance their capabilities for forensic analysis to combat crime. These nations are not only training more investigators in forensic science and investing in cutting-edge technology to secure their own borders but also are collaborating with other countries to tackle issues that impact the region. Forensic science, with its capabilities of deciphering DNA strands, lines of computer code or the trajectories of bullets, is a vital tool in preventing terrorist threats and catching violent criminals, experts say.

FORMING A FORENSICS NETWORK
Countries in the Indo Asia Pacific are rapidly catching up to the rest of the world in the forensics field. During the past 30 years, dozens of forensic science networks have formed in regions such as Europe and Latin America, but the Indo Asia Pacific had lacked a formal network. Scientists in laboratories and agencies such as the Central Institute of Forensic Science in Thailand and the National Bureau of Investigation in the Philippines were separated from their colleagues. Different languages, judicial systems and investigative capabilities posed challenges.

The Asian Forensics Sciences Network (AFSN) has filled that gap. Formed in 2008, AFSN seeks to shore up deficiencies in forensic practices across the region through a tight-knit community that keeps pace with the latest techniques and procedures. “Criminal activities that once were more or less geographically

MEMBERS OF THE **ASIAN FORENSIC SCIENCES NETWORK**

BANGLADESH

National Forensic DNA Profiling Laboratory

BRUNEI

Department of Scientific Services

CHINA

Forensic Center of Guangdong Provincial
Public Security Department

Guangzhou Forensic Science Institute

Institute of Forensic Science,
Ministry of Public Security

Institute of Forensic Science, Tianjin Public
Safety Bureau

The Institute of Evidence Law and Forensic
Science, China University of Political
Science and Law

Forensic Science Division, Department
of Fujian Provincial Public Security

INDIA

Centre for DNA Fingerprinting and Diagnostics

INDONESIA

Department of Police Medicine of the
Indonesian National Police

Eijkman Institute for Molecular Biology

Forensic Laboratory Centre of Indonesian
National Police Headquarters

Laboratory of National Narcotics Board

Indonesian Association of Forensic
Pathologists

LAOS

Food and Drug Quality Control
Center Macau

Forensic Science Department of
Judiciary Police

MALAYSIA

Department of Chemistry

CyberSecurity Malaysia

Royal Malaysia Police Forensic Laboratory

MONGOLIA

Mongolian National Institute of Forensic
Science

THE PHILIPPINES

Laboratory Service, Philippine Drug
Enforcement Agency

National Bureau of Investigation

Natural Sciences Research Institute,
University of the Philippines

Philippines National Police Crime
Laboratory

SINGAPORE

Health Sciences Authority

SOUTH KOREA

National Forensic Service

Scientific Investigation Laboratory

Korea Coast Guard Research Institute

THAILAND

Central Institute of Forensic Science

Department of Forensic Medicine,
Chulalongkorn University

Department of Forensic Medicine,
Siriraj Hospital

Department of Medical Sciences

Faculty of Medicine,
Chiang Mai University

Human Genetics Unit, Department of
Pathology, Ramathibodi Hospital

Institute of Forensic Medicine, Police

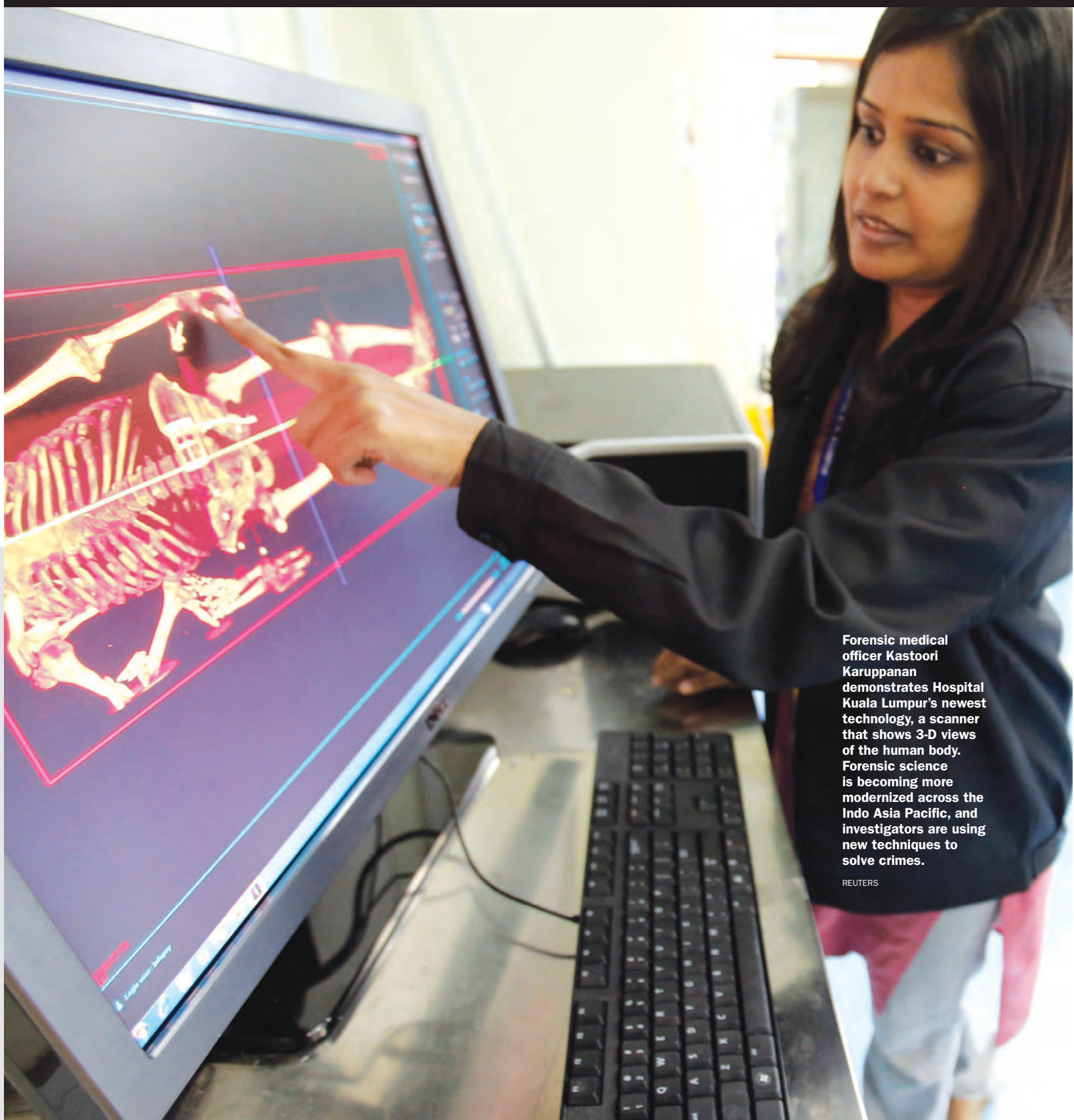
General Hospital, Royal Thai Police

Office of Narcotics Control Board

VIETNAM

Vietnam Forensic Science Institute

Source: Asian Forensics Sciences Network



Forensic medical officer Kastoori Karuppanan demonstrates Hospital Kuala Lumpur's newest technology, a scanner that shows 3-D views of the human body. Forensic science is becoming more modernized across the Indo Asia Pacific, and investigators are using new techniques to solve crimes.

REUTERS



A lab officer prepares a blood sample for DNA testing in Singapore. Thirty-five agencies in 12 countries are members of the Asian Forensic Sciences Network that strives to develop best practices in the field and encourages collaboration.

THE ASSOCIATED PRESS

limited now infiltrate different societies and far-flung jurisdictions,” Paul Chui, former AFSN president, wrote in the inaugural issue of the network’s publication, *ForensicAsia*, in December 2009. “Examples can be found in illicit drug trafficking, cybercrime, terrorism and pedophilia-related crimes,” wrote Chui, now the director of the forensic medicine division at the Health Sciences Authority in Singapore. “These challenges make it imperative for the forensic science community to work closely together, to collaborate and share experiences, to develop best practices and build stronger and sustainable scientific and organizational systems that provide robustness and integrity to the work that we do,” he added.

AFSN helps ensure that military and law enforcement agencies follow best practices

for forensic sciences. AFSN has reached out to agencies across the region and, as of 2013, the organization has 35 members from 12 countries in its network. Its members meet annually at a conference to discuss the latest techniques and share information. At its fifth meeting in Singapore in November 2013, AFSN-affiliated scientists held workshops on fingerprint and DNA identification and how to process and analyze evidence at crime scenes. AFSN has formed work groups to further improve investigative methods in specific areas.

The network’s Crime Scene Investigation Network Workgroup, for example, seeks to “enhance the standardization and modernization of the techniques used in crime scene investigation,” enhance training in CSI and “promote the technical exchange

and cooperation in crime scene investigation,” AFSN member Fu Huanzhang wrote in the December 2013 issue of *ForensicAsia*. The work group tackled case studies of tire tracks, paint flecks and drug residue evidence during the 2013 conference to foster such collaboration.

AFSN members have already put newly acquired skills and knowledge into practice. For example, the National Forensic DNA Profiling Laboratory in Bangladesh, an AFSN member, identified hundreds of victims after a commercial building collapsed in Dhaka, the

country’s capital, in April 2013, according to the *Dhaka Tribune* newspaper. In Thailand, the government has trained Soldiers to use forensic science to analyze the remains of improvised explosive devices, cellphone records and DNA samples to track known insurgents.

“The result has been a markedly improved capacity for detailed mapping of the insurgency’s human terrain,” security analyst Anthony Davis wrote in October 2013 for Asia Times Online, referring to the growth of forensic science in Thailand. “Increased understanding of local insurgent command structures and networks has played back into offensive operations in terms of arrests, raids and, when necessary, the selective elimination of known insurgent leaders or key operatives.”

GLOBAL STATUS

Today a globally recognized organization, AFSN stands on par with long-existing and well-regarded groups such as the European Network of Forensic Science Institutes and the Academia Iberoamericana de Criminalística y Estudios Forenses (AICEF), based in Latin America.

Former AICEF President Jose Lorente explained in the December 2009 issue of *ForensicAsia* that his network served as a successful model for the creation of AFSN because challenges in his region — differences in cultures, legal systems and criminal prosecution — are similar

to those in the Indo Asia Pacific. “It was a real challenge to have all the different forensic institutions working together,” Lorente wrote.

Founding AFSN members managed to work through “all the existing difficulties, starting with the different local languages and the need

to use English as the official language,” Lorente said, because scientists realized the importance of establishing a forensic network comparable to others around the world.

AFSN also belongs to the International Forensic Strategic Alliance (IFSA), an umbrella organization that oversees forensic science networks worldwide. IFSA strives to promote the growth of forensic science in developing countries, and its members work with Interpol and the United Nations Office of Drugs and Crime to improve the forensic study of crime scenes, drug trafficking and identity fraud.

Investigators in the Indo-Asia-Pacific region increasingly rely on forensic evidence for solving crimes, preventing terrorism and assisting in disaster relief. Chui, in his inaugural address to AFSN members, said the network was established to provide the expertise and capacity to handle those domestic and regional forensic challenges. A stronger network is the goal, he said, one that works toward “enhancing the quality of forensic services in member countries and establish links with other regional networks in the global forensic community.” □



A police forensic team member sketches a diagram showing the location of bodies identified near city hall after Typhoon Haiyan battered Tacloban, Philippines, in November 2013. Forensic science not only is vital in solving crimes but also in assisting in the aftermath of natural disasters. REUTERS

EARTHQUAKE PREPAREDNESS

Alaska Shield 14 Builds Interagency Partnerships, Stores Alaska Knowledge

CAPT. MELONIE SAN-PIETRO, JOINT TASK FORCE-ALASKA PUBLIC AFFAIRS

Alaska reigns as the most seismically active region in North America. On any given day, 50 to 100 earthquakes occur across the state. Many go unnoticed. Others leave a permanent mark on the state and its residents. Fifty years ago on March 27, 1964, the Great Alaska Earthquake struck outside Anchorage. At a magnitude of 9.2, it was the second most powerful earthquake recorded in world history, killing 131 people and causing U.S. \$300 million in damage. To commemorate the 50th anniversary and to simulate response to a catastrophic natural disaster resembling the events of 1964, federal, state and local officials integrated many large-scale demonstrations under the National Exercise Program's Capstone Exercise 2014 known as Alaska Shield 14.

Included were U.S. Northern Command's Exercise Ardent Sentry, Joint Task Force (JTF)-Alaska's Exercise Arctic Edge, the Alaska National Guard's Exercise Vigilant Guard and the state's longstanding Exercise Alaska Shield.

Anniversary Kickoff

The joint exercise began with an earthquake scenario at 10:10 a.m. March 27. For the next seven days, more than 11,000 participants from state, local and federal agencies, along with 20 nongovernmental organizations, joined forces. Entire communities across the state participated in scenarios that tested search and rescue, immediate response, mission assurance, patient movement and many other capabilities.

By working together to develop solutions, interagency teams fostered cooperation and strengthened partnerships across Alaska and the nation.

JTF-Alaska played a major role in the exercise and worked closely with the state. "We have longstanding operational relationships with the military," said John Madden, director of the Alaska Division of Homeland Security and Emergency Management (DHSEM).

During the seven days of 24-hour operations, which included moving hundreds of patients and offloading

tons of cargo, participants identified things that were done well, lessons learned and areas for improvement.

Improvement Targets

Participants recognized the importance of building a general knowledge base for non-Alaskans. Because Alaska's geography is so different from other states, officials often struggle to relate its complexities to nonresidents. "One of the hardest things is communicating the uniqueness of Alaska to the leaders on the East Coast who don't live here," said DHSEM Deputy Director Michael O'Hare. Alaska Shield made this disconnect clear and provided an opportunity to teach federal partners about Alaska's size, topography and demographics.

Logistics also was targeted as an area for improvement during Alaska Shield 2014. Moving resources into, out of and throughout the state proves challenging under normal circumstances, but when a natural disaster strikes, delivering the right resources to the right places on a tight timeline will prove even more difficult.

Participants recommended a Joint Logistics Over the Shore (JLOTS) capability as a way to distribute supplies if the Port of Anchorage, for example, were destroyed. During the exercise, the Navy worked alongside Army active duty and reserve units to support local citizens with ships to transport cargo onto shore. Exercise organizers tasked the Navy Cargo Handling Battalion One of Williamsburg, Virginia, to unload containers from the USNS Mendonca and transfer them to smaller vessels operated by the Army. The joint forces worked closely to move food, military vehicles and other supplies and equipment needed for Alaska Shield.

"JTF-Alaska took a very big step in managing the logistics pipeline," said Col. Kendra Mathews, director of logistics for JTF-Alaska. "We still have a long way to go to build an interagency Movement Control Group and establish inland distribution, but we are headed in the right direction."



A Valdez firefighter climbs inside a crevasse to rescue a simulated victim during Alaska Shield 2014.

SGT. BENJAMIN JOHN/U.S. ARMY



U.S. Air Force members transport a mannequin from a staging facility to an aircraft waiting to depart to a hospital in the continental U.S. during Alaska Shield 2014.

SGT. SHANE DORSCHNER/U.S. ARMY

Consensus and Relationship Building

All agencies involved agreed that Alaska Shield 2014 was an overall success and that much of the success resulted from strong relationships and knowing one another's missions. "JTF-Alaska did a great job of working with our partners to anticipate needs and capabilities as soon as possible," said Col. Joseph Kunkel, director of operations for JTF-Alaska. "I was proud of the way our staff came together as a team to get the job done."

"Our integration with the state of Alaska was seamless," added Col. Mathews. "We've developed a close relationship with state executives, which has enhanced our preparedness."

Alaska Shield 2014 provided a remarkable training opportunity, organizers said. It identified gaps between the myriad participants and

opportunities for improvement. A series of follow-on events are already in the works, designed to incorporate lessons from the exercise and improve capabilities. Working together, federal, state and local agencies are striving toward the common goal of making the state of Alaska and the rest of the nation prepared and resilient. "This is an exercise of national significance," said Madden. "What we learned will save many lives and serve many nations." □



PARIS

ART

with a

PUNCH

Agence France-Presse

Liu Bolin, China's Andy Warhol

Emerging from the acrid fumes at a steelworks, artist Liu Bolin inspects the progress of his latest work — a giant iron fist, poised to punch a hole through modern China.

Weighing more than 7 tons and standing 3.6 meters tall, the sculpture went on display in Paris in March 2014, as Chinese President Xi Jinping visited the country.

"The inspiration for my *Iron Fist* comes from my reflections on the realities of China," Liu said.

"People are under pressure from so many things — their living conditions, the political situation, even the air around us."

Liu is best known globally for his "invisible man" photographs, in which he wears makeup and clothes daubed in camouflage paint to blend almost seamlessly into everyday backgrounds, from supermarket shelves to bulldozers.

A leader of China's crowded contemporary art scene, Liu and his use of consumerist subjects have earned comparisons with American artist Andy Warhol and his *Campbell's Soup Cans*. Liu, however, says his motivations and messages differ from those of Warhol.

"I try to use my works to let people think about what to do and the reasons for living," Liu said.

MARRIED for 50 YEARS?

You deserve a medal

Gray-haired and grinning, two-dozen couples hold champagne flutes at a Warsaw ceremony in their honor. They survived 50 years of marriage, and in Poland, that is reason enough for a presidential medal.

"To qualify, you have to put in over 18,000 solid days of work. Other medals require less, so it really is a considerable feat to have spent the last half century together," Warsaw Mayor Hanna Gronkiewicz-Waltz said during the February 2014 event.

The lucky-in-loves take turns walking down the red carpet to accept their medals — silver-plated with intertwined roses at the center and a pink ribbon — while family members cheer and play paparazzi at the back of the room at the so-called Wedding Palace.

The tradition is regularly played out in cities across the heavily Catholic country, with an average of 65,000 medals awarded each year, according to the president's office.

Marital milestones are also recognized elsewhere. In the United States, a golden anniversary will get you a greeting from the White House, while Britain sets the bar a notch higher: Couples have to make it through six decades to get a message from the queen. She herself qualified seven years ago. *Agence France-Presse*



AFP/GETTY IMAGES



British citizen Neil Christie now owns the Spanish village of Arrunado.

SPAIN

AFP/GETTY IMAGES

Abandoned villages given away for free

For sale: Hamlet in Spain. Needs work. Price: Zero euros.

Like thousands of abandoned villages in Spain, A Barca — with its 12 crumbling stone homes covered in moss and ivy — is seeking a new owner to bring it back to life.

Local officials in Spain's verdant northwestern region of Galicia hope to give away the hamlet, nestled in a hillside overlooking the Mino river near the Portuguese border.

The successful applicant must present a development project for the village, which dates back to the 15th century, that will preserve all its buildings.

Several proposals have already been made, but Avelino Luis de Francisco Martinez, the mayor of Cortegada, the municipality that oversees A Barca, said he would prefer a tourism project.

"Something that would provide work to villagers and local businesses," he said.

The residents of A Barca left in the 1960s when a dam flooded their farmland.

Most of Spain's abandoned hamlets have been deserted by residents who moved to larger cities or better land for farming.

Spain's National Statistics Institute estimates that there are about 2,900 empty villages across the country.

Agence France-Presse

FUTURE FORECAST

A dramatic photograph of a massive, turbulent wave crashing over a blue and white structure, likely a pier or breakwater. The water is a murky, churning brown, and the white foam of the wave is prominent. A person is visible on the structure, providing a sense of scale to the immense power of the water.

FACTORING GLOBAL TRENDS IN DISASTER RELIEF MISSIONS

JESSICA EAR, PH.D.

Government, military and civil sector leaders should consider global trends when planning for future humanitarian assistance and disaster response (HADR) in the Indo-Asia-Pacific region.

Demographic and development changes will result in greater disaster risks worldwide. The United Nations estimates the world population at 7 billion people. By the year 2050, that number will increase to 9.1 billion — with most of this growth occurring in developing countries of Africa and Asia. About 70 percent of the world population will live in cities, dense urban areas or seacoasts, in conditions that will leave many vulnerable to natural disasters.

To enhance capacity for future disaster response, civilian agencies and defense forces need to anticipate and understand greater risks associated with densely populated areas, urban centers and seacoasts, especially in countries projected to have large urban bulges. To readily assist vulnerable countries, HADR providers will need more capabilities such as linguistics, cultural awareness, critical infrastructure restoration, and urban search and rescue.

Technology and social advances also bring new and emerging man-made risks associated with industry improvement and change. Although technological advances can improve HADR capacity, the potentially detrimental applications also raise issues of public concern. Developments in energy such as nuclear, hydropower and hydraulic fracking, for example, have the potential to improve energy security, but the advantages must be balanced with environmental impacts, public trust and safety. Communication drivers, such as increasing mobile phone use and social media connectivity, will continue to check government transparency and information dissemination, but such capabilities may also pose security risks if not properly managed.

HADR providers should be prepared to address complex, technology-related disasters with industry-specific skills and expertise. HADR providers will also need to stay abreast of technology trends and understand how to leverage the power and influences of rapidly changing information, social networks and cyber-based media. This means employing and coordinating management of forums, classified and unclassified networks, and technologies to

ensure that information created, distributed and shared during a crisis remains clear, credible and relevant.

Economic and political drivers will continue to create a more globalized world, connected through trade, banking and investments. Due to increasing economic and political ties, disasters will progressively have an international impact. A crisis in one country has the potential to destabilize markets and economies in other parts of the world. Multisector cooperation, not only among the three D's — diplomacy, defense and development — but also in particular partnerships with the private sector, will be key to managing disaster risk and response.

In the fiscal climate of the future, gaining greater private-sector inclusion to practice risk mitigation and building partnerships to optimize available resources will be both a challenge and an immense opportunity for governments and HADR providers. Leaders must also continue to promote disaster-risk sharing among diverse HADR stakeholders.

Environmental and climate trends, whether believed to be man-made or natural, will threaten the planet's air, land and sea conditions to create more extreme and frequent weather patterns and sea level changes. Regardless of the cause, many experts predict climate change could significantly impact the security environment. Are nations prepared to adapt to changing climates and potentially rising sea levels? Are HADR providers, along with national and regional partners, planning for the possibility that entire island states will be submerged or that large port cities such as Tokyo, Shanghai, Bangkok, Ho Chi Minh City, New York and many other significant coastal areas will be vulnerable to constant flooding? Is the global community addressing livelihoods that will be lost and the millions who will be displaced?

Climate change and other global trends raise these and many other questions that require constant assessment of existing disaster management strategies and HADR approaches. As the world advances into the future, governments and HADR providers should continue to ask whether nations, individually and collectively, are prepared for these global trends and the impacts to come.

The author is an associate professor at the Asia-Pacific Center for Security Studies.



Waves caused by Typhoon Usagi rock boats anchored at a port in Quanzhou, Fujian province, China, in September 2013.



Bubbling ambitions in China's **'HOT POT CITY'**

AGENCE FRANCE-PRESSE

Thousands of vats of hot pot seasoning thicken the air around Nie Ganru's home with a miasma of chili as flame-red paste, thick with oil, bakes in the sun.

Nie lives and effectively breathes hot pot, the spicy cook-it-yourself communal Chinese meal that made his fortune. He has built a pot-shaped six-story museum dedicated to the dish, and his hometown of Chongqing is seeking national, and ultimately global, recognition for the food.

"It's numbing, it's hot, it's very flavorful, it has an aroma that hits you in the face, and that's why everybody likes it," says the 70-year-old tycoon, who eats it about every other day.

Seated at a wooden table crowded with dipping options, Nie plunks capsules of duck blood into a simmering broth teeming with oil, chilies, and hot and numbing Sichuan peppers. Others ladle out oil-coated slices of lotus root and cool their tongues with pickled vegetables.

"Everyone gathers around a table to eat and it's harmonious, it's lively, it's warm — it's a great environment," he says.

The museum houses hundreds of pots Nie has collected for more than a decade, including one supposedly used in the palace of the Qing dynasty's Qianlong Emperor in the 1700s, and another dating to the Western Zhou dynasty of 1046 to 771 B.C.

EMPERORS AND CONFUCIUS

Hot pot originated a century ago as a low-brow meal for peasants squatting by the river to cook ox tripe and other offal, but it has since followed China into prosperity.

The first restaurant opened in the 1930s, and the meal's popularity spread when Chongqing became China's capital during World War II, drawing the displaced from around the country.

As China's economy exploded in recent decades, hot pot, too, has boomed, with other regions offering different varieties and upscale venues serving delicacies such as fatty mutton slices, rabbit kidney, prawns and mushrooms.

By Nie's telling, hot pot also played a starring role in modern Chinese history. Communist leader Mao Zedong shared the meal with Nationalist rival Chiang Kai-shek before ousting him in civil war in 1949, his exhibits show.

Another mural depicts paramount leader Deng Xiaoping treating officials to hot pot in the late 1970s while strategizing the Reform and Opening overhaul that would transform the country.



Pots of fermenting chili peppers sit at a hot pot museum and factory in Chongqing, China. AFP/GETTY IMAGES

Yet competition for a place on the national list of "intangible cultural heritage" is tough in a huge country with a rich culinary tradition.

Only a handful of the list's more than 1,200 entries are foods, each heavy with history — dishes served in the residences of emperors and the sage Confucius, salt from the ancient Zigong wells and a rice dumpling brand dating back to the 1800s.



Workers enjoy a meal at a hot pot museum and factory in Chongqing, China.

AFP/GETTY IMAGES

‘GOOD FOR THE BODY’

The megalopolis of Chongqing — which was split out of the more culinary-renowned province of Sichuan in 1997 — is just one of many locales trying to cook up attention by winning recognition for native dishes, says Fuchsia Dunlop, a Chinese food expert and author of *Shark’s Fin and Sichuan Pepper: A Sweet-Sour Memoir of Eating in China*.

“Certainly the Chongqing hot pot is very distinctive and hugely popular,” Dunlop said. “The entire surface of the pot is covered with these spices. ... It will really blow your head off.”

She added, “If you start trying to label things, intangible cultural heritage in China, where do you stop? It’s such a rich and wonderful culinary culture, and there are so many dishes that go back centuries.”

In 2007, Chongqing managed to get itself christened “China’s hot pot city” by the China

Cuisine Association. It has added hot pot to its own catalog of intangible cultural heritage, which boasts 278 entries — although half the country’s provinces have compiled even longer lists.

The Chongqing Hot Pot Association, which applied for national recognition, also aspires to someday join UNESCO’s global list — which only features a few food entries, including a set of cuisine customs called washoku from China’s longtime rival Japan, but none from China.

“Eating hot pot makes you feel hot, and this can be good for the body,” says 20-year-old Chongqing resident Li Yao. “It helps you sweat.”

Zhang Jingnan, 44, also loves the meal but admits overindulging is unwise.

“From a health point of view, it’s not very good,” Jingnan, a doctor, said as she sat with her family around a bubbling vat and bowls of rice. “I don’t think I could live without hot pot.”

WI-FI IN THE SKY SET FOR TAKEOFF

Wi-Fi in aircraft, hobbled in the past by slow speeds, could soon take off as new technology enables passengers to surf the Web as if they were in a coffee shop.

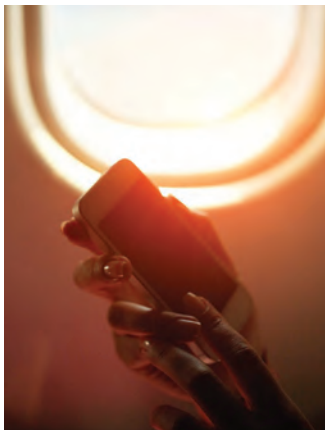
Public demand for Wi-Fi on planes has increased, and more airlines are rolling out new and improved services due to satellite technology, industry leaders said at the Singapore Airshow in February 2014.

U.S.-based Honeywell Aerospace and Gogo, which supply in-flight connectivity systems to airlines, are collaborating with satellite giant Inmarsat to implement the “first global high-speed broadband for the skies,” dubbed the Global Xpress Aviation network.

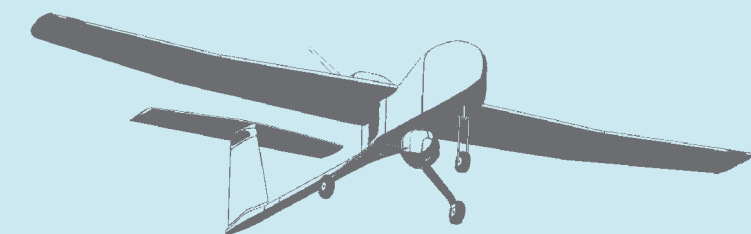
Briand Greer, president of Honeywell Aerospace Asia Pacific, said in-flight Wi-Fi could generate U.S. \$2.8 billion for the company during the next 20 years.

He estimates that 7 to 8 percent of airlines offer wireless connection, but he expects this number to grow to 25 percent by 2018.

After years of being bogged down by weak demand due to poor signal quality, in-flight Wi-Fi can now enable download speeds of up to 50 megabits per second, Greer said. Agence France-Presse



ISTOCK



Australia to Spend U.S. \$3.7 Billion on Surveillance Drones

Australia announced plans in March 2014 for a fleet of giant high-tech unmanned drones to help patrol the nation's borders, monitor energy infrastructure and spot attempts to enter the country illegally.

Prime Minister Tony Abbott said the Triton Unmanned Aerial Vehicles, which can remain airborne for 33 hours and fly to an altitude of 16,800 meters, will be based in the southern city of Adelaide.

Australia plans to use the drones to patrol vast areas of the Indian Ocean, which has become one of the world's most vital energy supply routes.

The government committed in February 2014 to buy eight new Poseidon aircraft for U.S. \$3.7 billion to form the core of its surveillance and maritime strike capacity for decades to come.

Agence France-Presse

FORUM ILLUSTRATION



GETTY IMAGES

Video Games **TARGET** Japan's Silver Generation

At a nursing home in suburban Tokyo, octogenarian Saburo Sakamoto darts his fingers energetically to catch characters that appear on a touch screen in front of him.

Peals of laughter erupt from the other side of the room when other 80-somethings wallop plastic alligators that appear from little holes or wield foam hammers to crush frogs as they pop up.

An offshoot of Namco Bandai runs the nursing home. The company brought video games to a mass youth market in the 1980s with arcade phenomenon Pac-Man and his pill-chomping escapades.

The firm is part of a small but growing band of groups developing video games and home computer entertainment for the “silver generation” – Japan's burgeoning army of elderly people – who are living longer and healthier lives.

Japan's population has been declining since 2007, and the country is graying: It has one of the world's lowest birth rates and highest life expectancies.

Day visitors, whose average age is 85, have a choice of activities at this government-approved center, including assisted bathing, physiotherapy, lunch and a series of arcade and video games.

Agence France-Presse

SOMETIMES BAD THINGS COME IN SMALL PACKAGES

REUTERS

A microbe that spewed humongous amounts of methane into Earth's atmosphere triggered a global catastrophe 252 million years ago that wiped out more than 90 percent of marine species and 70 percent of land vertebrates.

Researchers offered this hypothesis in March 2014 to solve one of science's enduring mysteries: What happened at the end of the Permian period to cause the worst of the five mass extinctions in Earth's history?



Colony of
Methanosarcina mazei

RALPH ROBINSON/VISUALS UNLIMITED

The scale of such a calamity would make the one that doomed the dinosaurs 65 million years ago, a 9.6-kilometer-wide asteroid smacking the planet, seem like a picnic.

The implicated microbe, *Methanosarcina*, belongs to a kingdom of single-celled organisms distinct from bacteria called archaea that lack a

nucleus and other usual cell structures.

"The end-Permian extinction is the closest animal life has ever come to being totally wiped out, and it may have come pretty close," said Massachusetts Institute of Technology biologist Greg Fournier, one of the researchers.

"Many, if not most, of the surviving groups of organisms barely hung on, with only a few species making it through, many probably by chance," Fournier added.

Other previously proposed explanations for the Permian extinction include an asteroid impact and large-scale volcanism. These researchers, however, suggest a microscope would be needed to find the actual culprit.

They posit that *Methanosarcina* grew in a frenzy in the seas, disgorging huge quantities of methane into Earth's atmosphere.

This dramatically heated up the climate and fundamentally altered the chemistry of the oceans by driving up acid levels, causing unlivable conditions for many species, they added.

The horseshoe crablike trilobites and the sea scorpions, denizens of the seas for hundreds of millions of years, simply vanished. Other marine groups barely avoided oblivion, including common creatures with tentacles and shells called ammonites, according to the hypothesis published in the journal *Proceedings of the National Academy of Sciences*.

On land, most of the dominant mammal-like reptiles died, with the exception of a handful of lineages. Among those were the ancestors of modern mammals, including people.



Driver's Licenses Lure CHINESE TO KOREA

Chinese shoppers already have a seemingly insatiable appetite for South Korean pop music, TV dramas, cosmetics and fashion. Now they're after another must-have item: a driver's license.

In China, would-be drivers can wait up to a year for a license and pay double the U.S. \$420 that one costs in South Korea. That has fueled a boom in Chinese visitors taking South Korean driving tests and converting the licenses when they return home.

At a driving school in the suburbs of Seoul, a buzzing operation that sees about 200 Chinese applicants a month, half the class listens to a Korean-speaking teacher while the Chinese visitors

watch a TV screen showing sample questions for written tests in Mandarin.

"It is easy to get a driver's license in South Korea. Although I feel nervous, it is fast and easy to convert into a Chinese one," said Wang Yingfang, a 46-year-old Chinese applicant on her first drive in Korea.

It takes a week to get a license at state-appointed driving schools. Applicants can even do their driving tests on rooftop tracks, meaning they have little experience in dealing with actual traffic.

Wang traveled to South Korea by ferry with four other hopefuls. If she gets her license, she can convert it to a Chinese one by sitting for a written test back home. Reuters

GOOGLE LAUNCHES DIGITAL TOUR OF CAMBODIA'S ANGKOR WAT



Cambodia's Angkor Wat has been digitally mapped for the first time, allowing people to visit the World Heritage Site from the comfort of an armchair using Google Street View.

The project is part of a growing trend aimed at Internet users who might otherwise never have the chance to visit the cultural and architectural wonders of the world.

Google took more than a million photos of Angkor — the result is 90,000, 360-degree views of more than 100 temples. Street View allows Web users to zoom in on an area and then explore.

"Recently, we've done the Taj Mahal, the Grand Canyon, Mount Fuji," said Manik Gupta, project manager at Google Maps.

"But the scale of Angkor Wat is what makes this unprecedented," he said in April 2014. "It is such an iconic place — people say it is the eighth wonder of the world, and it gives you this incredible sense. Look at every single small nook and cranny — you'll find artwork."

The Angkor Archaeological Park contains the remains of the different capitals of the Khmer Empire, dating from the ninth to the 15th centuries. Agence France-Presse

PHILIPPINES TO BUILD ELEPHANT MONUMENT FROM DESTROYED IVORY



The Philippines plans to build an elephant monument from the ashes of seized tusks destroyed in a landmark action against the ivory trade, an official said in March 2014.

Officials will mix the ash with concrete to build a giant sculpture of a mother elephant protecting her calf, said Josie de Leon, chief of the Environment Department's Wildlife Division.

"It is a reminder to everyone about the Philippines' historical action regarding the destruction of ivory," she said.

The sculpture will stand about 4 meters tall when completed in late 2014 at the same Manila park where the tusks were destroyed, de Leon said.

The Philippines crushed 5 tons of elephant tusks with a backhoe in June 2013, becoming the first Asian country and the first country without native elephants to destroy illegal, confiscated ivory.

The United Nations and conservation groups have warned that the demand for ivory has led to the slaughter of thousands of African elephants each year, possibly leading to their extinction. Agence France-Presse

LEAPS AND BOUNDS



Philippine Army Special Forces depart from a KC-130J transport aircraft during Balikatan 2014, the 30th iteration of the annual bilateral training exercise. The free-fall parachutists, stationed at Fort Magsaysay, performed high-altitude, low-opening jumps into Crow Valley, Philippines. About 3,000 Filipino Soldiers and 2,500 U.S. military personnel

participated in the exercise, which focused on maritime security, humanitarian assistance and disaster response, and humanitarian civic assistance. The exercise followed on the heels of the April 2014 signing of the Enhanced Defense Cooperation Agreement between the Republic of the Philippines and the United States.

Photo By
LANCE CPL. ALLISON DEVRIES
U.S. Marine Corps

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