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ABOUT THE COVER:

Indonesian medics cooperate with Singapore Airmen to evacuate a patient from the town of Wori in Northern Sulawesi, Indonesia. The drill was part of a weeklong disaster relief exercise, sponsored by the Association of Southeast Asian Nations Regional Forum, in March 2011.



Dear Readers,

elcome to the third 2011 issue of Asia Pacific Defense FORUM, which focuses on facilitating stability in the Asia Pacific. Stability has been at the heart of unprecedented economic prosperity in the

region over the past six decades. At the June 2010 Shangri-La Dialogue in Singapore, U.S. Secretary of Defense Robert Gates said the nations of the region have a "collective responsibility to protect the peace and reinforce stability in Asia."

However, sustaining the conditions that have underpinned prosperity remains challenging for a variety of reasons including: proliferation of weapons of mass destruction and associated technologies; violent extremist organizations; territorial disputes; increasingly persistent and sophisticated cyber threats; transnational criminal activity, including piracy and trafficking in narcotics and people; humanitarian crises such as pandemics and famines, as well as natural disasters such as tsunamis, earthquakes and volcanoes; and environmental degradation caused by poor resource management, the pillaging of natural resources and disputes over resource sovereignty.

Despite these complex challenges, the Asia Pacific has immense opportunity for peaceful growth, cooperation and prosperity. Seizing such opportunities depends on U.S., allied and partner abilities and willingness to collectively secure and protect the global commons upon which the region's livelihood depends. Such partnerships will define the future of the Asia Pacific, particularly in how we respond to potentially destabilizing threats.

One such threat comes from Somali pirates who are operating farther and farther east into the Indian Ocean and the Asia-Pacific region. Piracy disrupts sea lines of communication and threatens regional stability. To benefit the entire region, the United States is interested in partnering with India to combat this threat. The importance of India as a regional and international enabler of stability cannot be overstated. As U.S. President Barack Obama affirmed in the 2010 National Security Strategy, the U.S. "will seek to work with India to promote stability in South Asia and elsewhere in the world." Similarly, an enduring, positive U.S.-China relationship would have a stabilizing effect on the region. In fact, U.S. Secretary of State Hillary Clinton stated in January 2011 that the "U.S.-China relationship would bolster stability and security in the Asia-Pacific region."

As we discuss a stable future in the Asia Pacific, the conversation must also include the recent catastrophe in Japan. In March 2011, a 9.0-magnitude earthquake and severe aftershocks, a 10-meter-high tsunami and the resulting nuclear reactor accidents combined to create a great humanitarian crisis in Northeast Honshu. In response, the global community pulled together to help our ally, our partner, our friend. Fortunately, Japan's capable leadership and swift response will restore stability, safety and security to not only Japan but also the region. As evidenced by the overwhelming international response, as well as Japan's courage, strength and resolve, an encouraging deduction can be made from this tragedy: A secure, collaborative region is best suited to rebound from disasters and other threats to regional stability.

Please contact us at contact-apdf@apdforum.com with your comments and insights.

All the best,

Robert 7. Willard ROBERT F. WILLARD

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APD **FORUM**

Facilitating Stability

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"We Will Rebuild"

The relentless wall of water unleashed on Japan by a March 11, 2011, earthquake killed thousands, swept away whole towns, inundated roads, and knocked ports, oil refineries, steel plants and factories out of action. The disaster also triggered a crisis at a nuclear power plant, forcing tens of thousands living near it to evacuate.

Still, Prime Minister Naoto Kan vowed that the 9.0-magnitude quake and tsunami would not defeat the country. "We will rebuild Japan from scratch," he said in a nationally televised address, comparing the work with the country's emergence as a global power from the wreckage of World War II. "In our history, this small island nation has made miraculous economic growth thanks to the efforts of all Japanese citizens. That is how Japan was built." More than 70 nations offered aid.

Japan's government said the cost of the earthquake and tsunami that devastated the northeast part of the country could reach U.S. \$309 billion, making it the world's most expensive natural disaster on record. The Associated Press

INDIA

UNDOCUMENTED LANGUAGE FOUND

A "hidden" language spoken by only about 1,000 people was discovered in October 2010 in the remote northeast corner of India by a National Geographic expedition led by linguists K. David Harrison and Gregory Anderson.

At first the researchers thought they were documenting a dialect of the Aka culture, a tribal community that subsists on farming and hunting. But they found an entirely different vocabulary and linguistic structure. Even the speakers of the tongue, called Koro, did not realize they had a distinct language, Harrison said.

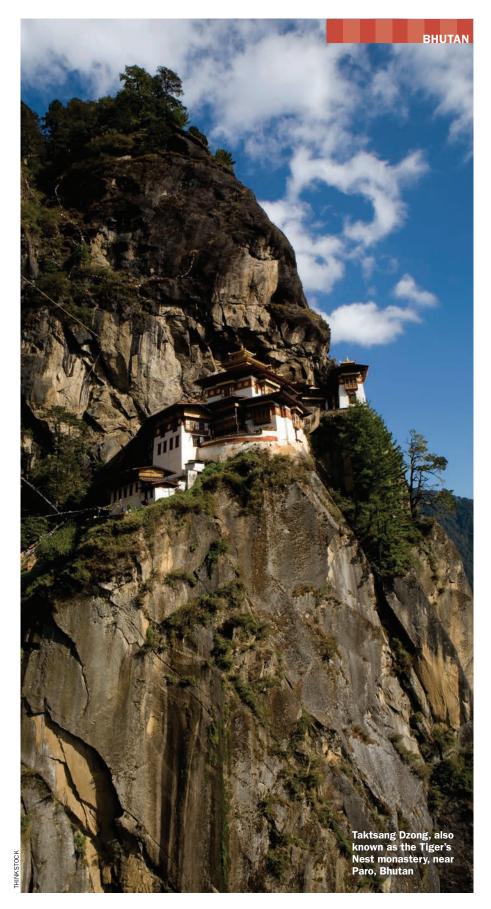
Culturally, the Koro speakers are part of the Aka community in India's Arunachal Pradesh state, and Harrison, a Swarthmore College linguistics professor, said both groups merely considered Koro a dialect of the Aka language.

But researchers studying the groups found they used different words for body parts, numbers and other concepts, establishing Koro as a separate language, Harrison said.

"Koro is quite distinct from the Aka language," said Anderson.

The Associated Press





Aiming to Triple Tourism

Bhutan, a remote Himalayan nation that charges tourists hundreds of dollars a day to visit, wants to triple the number of foreign visitors by 2012, the prime minister said in September 2010.

The insular Himalayan kingdom, famed for its adoption of "gross domestic happiness" as the key measurement of its success, has so far targeted visitors with deep pockets in a deliberate policy to promote "high value" tourism.

The online version of Bhutan's state-owned *Kuensel* newspaper said Thimpu, the capital and largest city, expected more than 30,000 tourists in 2010 in a first step to meet an ambitious target of luring 100,000 wealthy tourists to the hilly country by 2012.

"We want to expand this sector without compromising our policy of high quality, low impact and not volume tourism," *Kuensel* quoted Prime Minister Lyonchhoen Jigmi Thinley as saying in a September 2010 report.

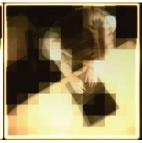
Western visitors to Bhutan must pay a minimum of U.S. \$200 a day for visa and government-approved travel agency fees.

Agence France-Presse















> AUTHORITIES ARREST 460 HACKERS

China cracked down on computer hackers in 2010. Authorities arrested 460 hackers, resolved 180 cases of computer crimes and closed 14 websites offering hacking software or training between January and the end of November 2010, the Ministry of Public Security reported in December 2010.

"Currently, the situation regarding cyber attacks in China is still extremely grim, and hacking attacks domestically are still widespread," the ministry said in a statement. State media in China are advising military

commanders to develop ways to address the challenge of information and Internet security and handle the issue of cyber warfare.

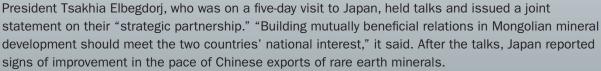
"China is rapidly entering the ascendant in the IT stakes, with the country now boasting the largest number of mobile phones of any country in the world. It's also clear that the country's Internet infrastructure is growing rapidly, along with the number of Internet users," Claire Sellick, event director for Infosecurity Europe, told the website eWeek.com. FORUM STAFF

JAPAN AND MONGOLIA

Cooperating on Rare Earth Minerals

Japan and Mongolia agreed in November 2010 to push for joint exploitation of rare earth minerals in the Central Asian country, officials said. Japan is searching for new sources of rare earth minerals — key elements for digital products such as cell phones, flat-screen TVs and hybrid cars.

Prime Minister Naoto Kan, shown at right, and Mongolian



The leader of Mongolia, which is located between China and Russia, also said it is "important for the country's diplomatic balance to invite economic investments from a third country." Agence France-Presse



Thai Police Link Forgery Arrests to Terrorists

JANESARA FUGAL/AGENCE FRANCE-PRESSE

Two Pakistanis and a Thai woman arrested on suspicion of making fake passports for al-Qaida-linked groups were part of criminal networks tied to "many terrorist attacks," Thai police said in December 2010 in Bangkok.

The arrests in Thailand formed part of an international operation to stamp out a huge cell that has been linked to the 2008 attacks in Mumbai and the Madrid train bombings in 2004.

Thai police arrested Pakistanis Muhammad Athar Butt, 39, and Zeeshan Ehsan Butt, 29, and Thai national Sirikanlaya Kijbumrung, 25, in Thailand in December 2010 as they attempted to flee into Laos.

"They are suspected of being part of a transnational criminal group, linked with terrorist organization Lashkar-e-Tayyiba and involved with many terrorist attacks in Spain and European Union countries," a Thai police statement said.

The Thai raids were coordinated with Spanish police, who arrested six Pakistanis and a Nigerian in raids in and around Barcelona, which has a large Pakistani community, late on November 30, 2010.

Thailand's Department of Special Investigation, working alongside authorities in Spain, found that criminal networks in South Asia, specifically Pakistan and Bangladesh, had used Thailand as a base for document forgery.

"These are linked with terrorist groups, credit fraud, human trafficking and arms traders, which use those forged passports to enter third countries," the statement said.

Police seized forged passports, immigration documents, faked rubber stamps, computers, mobile phones, passport photos, United Kingdom driver's licenses and other counterfeiting equipment.

At a news conference, Thai police linked the



Thai police escort Pakistani national Muhammad Athar Butt, suspected of providing forged passports to organizations linked to al-Qaida, out of the Department of Special Investigation building in Bangkok in December 2010.

group to a host of terrorist attacks including the Madrid bombings, when blasts on packed commuter trains in a city suburb killed 191 people and wounded 1,841 others.

"It is time for Thailand to arrest, eliminate and push out these criminals from our country because they are not welcome here," Special Branch Police Chief Tritos Ronritthiwichai told reporters.

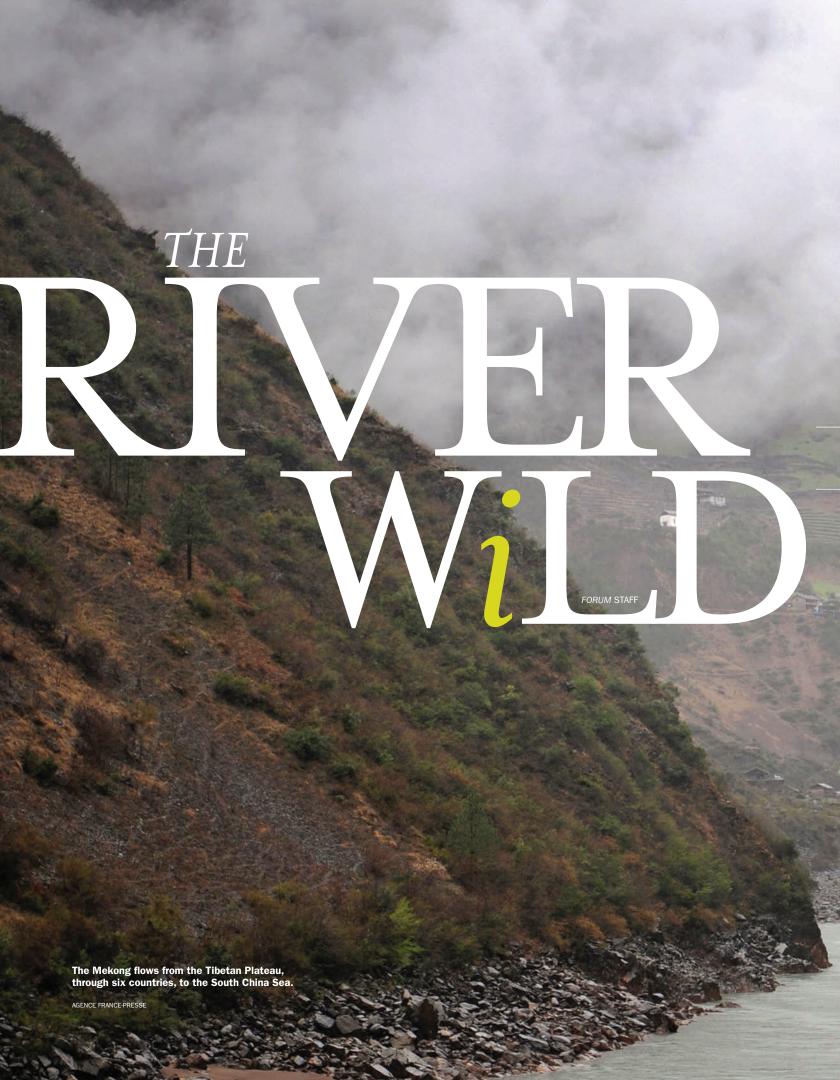
The three suspects were charged with passport and document forgery, which is punishable by up to 20 years in prison.

The Spanish interior ministry said Operation Kampai "neutralized a vast cell that helped provide passports for al-Qaida." The gang stole documents, including passports, which were sent to Thailand to be forged and then delivered to al-Qaida-linked terrorist groups.

A key customer was Pakistan-based Lashkar-e-Tayyiba, which has been accused of plotting the Mumbai attacks, the ministry said. Ten militants killed at least 166 people in three days of violence in the Indian city in November 2008.



Thai and Spanish authorities display seized passports at a December 2010 news conference announcing the arrest of two Pakistani men and a Thai woman suspected of providing the documents to terrorist organizations.









he mighty Mekong River awes and inspires, as it serves as the lifeblood for some 60 million people. As the longest river in Southeast Asia, it runs roughly 4,880 kilometers from the Tibetan Plateau through China's Yunnan province, Burma, Laos, Thailand, Cambodia and Vietnam, where it flows into the South China Sea, discharging an estimated 475 cubic kilometers of water annually. The Mekong basin comes in second only to the Amazon in terms of biodiversity. Researchers have identified more than 1,200 species of fish alone, 80 percent of which are migratory.

Over the centuries, the Mekong River has launched explorers into uncharted terrain, ushered refugees to safe lands, determined boundaries, transported goods, and sustained fisheries and rice fields. The annual catch in the Lower Mekong Region, which provides about 80 percent of the animal protein in the diets of Cambodians and Vietnamese, is conservatively valued at U.S. \$2.4 billion.

Now communities along its shores are increasingly looking to the river to provide energy and sustain development. To ensure the region's great resource is protected and properly managed, it is important that countries that are contemplating and already building projects work together, some experts say. The growing chorus includes officials from the governments of Cambodia, Laos, Thailand and Vietnam who comprise the Mekong River Commission, or MRC, as well as various conservationists. Cooperation between countries contemplating development of hydroelectric dams and other projects affecting down-river water levels and quality is essential to achieving long-term regional benefits, MRC officials and other experts say.

More than 130 hydropower projects, including 12 mainstream dams, are planned

or already operating along the river and its tributaries, according to MRC, which was founded in 1995 to manage development of the Mekong's resources. The Laos government, for example, has proposed creating a series of nine dams, the first of which is the 1,260-megawatt Xayabouri dam on the lower Mekong in Northern Laos. Cambodia is contemplating two dams of its own, while Thailand is considering diverting Mekong water to the country's drier, northeastern reaches.

An MRC report published in October 2010 predicts that the proposed series of dams could generate 14,697 megawatts and U.S. \$3.7 billion annually. Up to 31 percent of the funds would go into Laotian and Cambodian government coffers.



Leaders of Cambodia, Laos, Thailand and Vietnam, left to right, Hun Sen, Bouasone Bouphavanh, Abhisit Vejjajiva and Nguyen Tan Dung, toast the adoption of a Mekong River declaration during the April 2010 summit in Hua Hin, Thailand.

ENERGY AND FRICTION POTENTIALS

A single hydropower dam across the lower Mekong could permanently change the river, according to the report by an independent Australian consulting firm. Due to the complexity of the basin's ecosystem with its dry and wet seasons, the report recommends that the MRC postpone making any decisions on dam construction for a decade.

"It is far from clear that, among downstream countries, Laos and Cambodia are ready to abandon their plans for dams on the mainstream of the river as part of





a general effort to institute a program of governance for the river as a whole," Milton Osborne, a historian and visiting fellow at the Lowy Institute in Sydney, told *FORUM* in a December 2010 interview. Osborne authored the book "The Mekong: Turbulent Past, Uncertain Future." Meanwhile, China has indicated that "it will not brook any interference in its pursuit of its development plans for the Mekong within its own territory."

Dekila Chungyalpa, director of the Greater Mekong Program at the World Wildlife Fund in Washington, testified in September 2010 that the dams could reduce productivity of the fishery by as much as 60 percent. Not only could they destabilize the delta by disrupting the flood pulse and the replenishment of sediment, but they also would impede migration of some 150 species of fish that make up 80 percent of the population. Safeguarding the "free-flowing nature of its main stem is most important ... for a peaceful sustainable future of the Mekong region," Chungyalpa said before the



WHAT'S IN A NAME?

The Mekong's many names reflect its changing character as it flows from its source in the Tibetan Plateau to the South China Sea. The Tibetans called it Dza Chu, or "Water of Stone"; the Chinese gave it the appellation Lancang Jiang, or "Turbulent River"; the Lao and northern Thai dubbed it Mae Nam Kong, or "Kong, the Mother of Waters"; and the Vietnamese named it the Cuu Long, or "Nine-Tailed Dragon."



U.S. Senate Committee on Foreign Relations Subcommittee on East Asia and Pacific.

"The Mekong is very much an interconnected system," Jeremy Bird, chief executive officer of the MRC, based in Vientiane, Laos, told Bloomberg News in October 2010. "If you intervene in one area, you see consequences somewhere else."

Chinese officials contend their dam projects strive to improve the environment. Song Tao, China's vice minister of foreign affairs, speaking at an April 2010 MRC meeting, said that dam construction undertaken by the Chinese government aims to "vigorously develop renewable and clean energy and contribute to the global endeavor to counter climate change." Since 1980, China has built four dams on the Mekong. The fourth — Xiowan Dam, which stands at 292



meters tall and is as high as the Eiffel Tower — will become operational in 2012. China is also considering building four more.

The dams, however, could "create transboundary impacts and international tensions," according to the MRC report. Ukrit Pathmanand, a professor at Bangkok's Chulalongkorn University, explained at a 2010 campus seminar that building more dams could cause "nontraditional" security issues such as social unrest sparked by the loss of livelihoods of fishermen and farmers, *The Irawaddy*, a magazine covering Burma and Southeast Asia, reported in August 2010. However, Ukrit stressed the importance of weighing the pros of hydropower against the cons to the environment and individuals' incomes.

Vietnamese officials have also expressed reservations about the impact of dams, including those in Cambodia and Laos. "Vietnam has ... great concerns over the research results on the projects [the proposed dams], especially impacts on agriculture and fisheries likely caused by their dams, "Le Duc Trung, director general of the Vietnam National Mekong Committee, said in June 2010 at a workshop in Ho Chi Minh City, according to the *Viet Nam News* newspaper.

Many look to the MRC to mete out a regional course of development and evaluate such trade-offs. The four member countries, Cambodia, Laos, Thailand and Vietnam, held a summit for the first time in April 2010 in Hua Hin, Thailand. Thai Prime Minister Abhisit Vejjajiva said the summit reinforced



THE ASSOCIATED PRESS

LIFE IN THE VEKONG AGENCE FRANCE-PRESSE

Above: This giant Mekong catfish weighed in at 292 kilograms in 2005 when it was caught by a fisherman in northern Thailand. **Dam construction could** threaten the species.

Dracula fish, a bald songbird and a 7-meter-tall carnivorous plant are among several unusual new species found in the greater Mekong region last year, researchers said in October 2010.

Other new finds among the 145 new species include a frog that sounds like a cricket and a sucker fish, which uses its body to stick to rocks in fastflowing waters to move upstream, according to the conservation group World Wildlife Fund, or WWF.

With fangs at the front of each iaw, the Dracula minnow is one of the more bizarre new species found in 2009 in the Mekong River region, which comprises Cambodia, Laos, Burma, Thailand, Vietnam and China's Yunnan province. Discovered in a small stream in Burma, it is largely translucent and measures up to 1.7 centimeters long. It is not yet known whether the species is endemic to a single ecosystem within Burma or is spread throughout the region as a whole.

Other bizarre discoveries

include the Bare-Faced Bulbul bird, which is bereft of feathers on the face and side of the head and has pale blue skin on the rear of the head and around the eyes. It lives in sparse forest on limestone karsts in central Laos.

Among newly recorded plants, the Nepenthes bokorensis plant, found in southern Cambodia, has a climbing length of up to 7 meters, with pitchers that trap ants and other insects for food.

"The rate of discovery in the Mekong is almost without equal globally," WWF regional conservation director Stuart Chapman said. "That's attributed to the enormous geographical and climatic range within the region, going from high altitude to dense tropical forests through to some of the richest freshwater in the world."

"Undoubtedly, this region is one of the richest in terms of its biodiversity, but it's also one of the most threatened."

The greater Mekong region is home to some of the planet's most endangered wild species, including tiger, Asian elephant, Mekong dolphin and giant Mekong catfish, the fund said.

WWF has warned that the giant Mekong catfish one of the world's biggest freshwater fish — could be driven to extinction if plans to build hydropower dams on Southeast Asia's longest river go ahead, blocking spawning grounds. "We need to keep one of the treasure troves of the world properly conserved," Chapman said.



Scientists continue to discover new species in the greater Mekong region such as the Bare-Faced Bulbul bird.



AGENCE FRANCE-PRESSE

"that all countries in the Mekong Region, both its upper and lower parts, are stakeholders, and we all have to take joint responsibility for its long-term sustainability."

Osborne points out that a chief weakness of the MRC is that China and Burma are not official members. However, they became "dialogue partners" of the MRC in 1996. Moreover, the MRC does not have the authority to dictate what individual member nations do. Although the MRC conducts important scientific research that could "be taken into account by the sovereign governments in relation to the river, there is no compulsion for them to do so," Osborne told *FORUM*.

DIALOGUE AND COOPERATION

Outside countries can help to facilitate dialogue and cooperation among the Mekong River Commission nations and between the MRC and China, Professor Pham Hong Giang, chair of the Vietnam Association on Large Dams and Water Resources Development and vice chair of the International Commission on Large Dams, told the online newspaper *VietNamNet Bridge* in September 2010.

Japan met with Mekong countries on the sidelines of the Association of Southeast Asian Nations Regional Forum in Hanoi in July 2010 to create a Green Mekong initiative to address regional challenges such as natural disasters. In July 2009, the United States and four lower Mekong countries launched the Lower Mekong Initiative to focus on health, education, infrastructure and the environment.

Richard Cronin, head of the Southeast Asia program at Washington's Stimson Center, said U.S. interest could at least push China into "listening more to concerns of other stakeholders," according to an August 2010 *Viet Nam News* account.

Of course, competition over water resources is not unique to the Mekong region. "Water has emerged as a key issue that could determine if Asia is headed toward cooperation or competition. No country would influence that direction more than China, which controls the Tibetan Plateau, the source of most major rivers of Asia," Brahma Chellany, a professor at the Center for Policy Research in New Delhi, predicted in a *New York Times* newspaper opinion piece. "The forestalling of water wars demands a cooperative Asian framework among basin states to work toward common ownership of the resources."

When it comes to the Mekong River, one thing seems clear: Cooperation among Mekong countries is the only way to solve these transregional challenges. Mechanisms developed to share resources fairly in the Mekong could be applied more broadly.



TO THE RESCUE

Coordinating disaster relief: EXERCISE IN INDONESIA LEADS THE WAY

FORUM STAFF

The highly trained Indonesian frogman plunges several stories from the helicopter into the azure Bay of Manado off the Indonesian island of Sulawesi. Within seconds of hitting the water, he skillfully attaches a harness to the victim who has been swept offshore by a tsunami. The helicopter swiftly hoists the pair to safety before an awestruck crowd of thousands.

The drill, part of a weeklong disaster relief exercise organized by the Association of Southeast Asian Nations Regional Forum, illustrates the importance of coordination in rescue efforts. The ASEAN Regional Forum, or ARF, comprised of 27 members including all 10 ASEAN countries, the United States and China, held the exercise in Manado, the capital of North Sulawesi, Indonesia, March 14 through 18, 2011.

"Disaster relief is a complex and multidimensional work," Indonesian Vice President Boediono said during the opening ceremony of ARF Disaster Relief Exercise, or ARF-DIREX, which in addition to the Kopaska frogman featured an air and sea procession of military emergency response craft and teams. "It not only touches on cooperation and coordination, but it also deals with logistics, resource mobilization, command and control, the deployment of disaster forces, the actual operation itself, as well as information and the media."

Asia-Pacific nations in the Ring of Fire know their lands are prone to volcanic eruptions, earthquakes and tsunamis as well as other natural disasters such as floods and landslides. "We believe we can't fight natural [forces], but at the same time, if we have to face all these disasters, we have to minimize victims," Ignacio Kristanyo Hardojo, director for diplomatic security with the Indonesian ministry of foreign affairs, told *FORUM*.

Nothing — not tremor-resistant buildings, cutting-edge warning systems or the brightest nuclear engineers — could have prepared Japan for the menacing, 9.0-magnitude temblor and correspondingly massive tsunami that hit in March 2011. The event underscores the importance of regional cooperation in disaster relief management.

What happened in Japan, according to Dr. Surin Pitsuwan, ASEAN secretary-general, serves as "a clear reminder that natural disasters can occur anywhere, anytime." The first quarter of 2011 also saw floods in Australia and quakes in Christchurch, New Zealand, and China's Yunnan province.

In anticipation of such prevailing assaults, the ARF spent nearly two years planning the unprecedented exercise to improve disaster management in the Pacific Rim. Ironically, the exercise opened just three days after havoc wreaked Japan.

More than 560 representatives from more than 20 countries in North America, Europe, Asia, Oceania plus some 3,700 Indonesian military and civilian personnel participated in the exercise. Indonesia, which currently chairs ASEAN, hosted the event with Japan. The two nations are leading ASEAN's multilateral regional security, cooperation and interoperability drives in the Asia Pacific, especially in terms of humanitarian assistance and disaster relief. About 700 personnel from Japan, the Republic of Korea and the United States who had planned to attend went instead to Japan to help those in need. Indonesian and Indian assets filled in the exercise ranks.

"The ARF is one of the most effective frameworks in tackling these disasters and helping each other," said Makiko Kikuta, Japan's vice minister for foreign affairs, who, along with other key Japanese personnel, participated in the exercise





despite the catastrophe to show the nation's commitment. "Japan will continue to take leadership in further enhancing regional dialogue and cooperation in the political security field under the ARF."

The exercise succeeded as a first step toward building confidence in the region to enable future discussions about traditional security issues, according to Shingo Miyamoto, co-chair of the ARF-DIREX secretariat from Japan. ASEAN's goal "was to start with confidence building in nontraditional areas and move on to preventive diplomacy, but they haven't gotten to that point yet."

The multinational, civilian-led, military-supported exercise included field training drills, a tabletop exercise and various humanitarian civic actions. Ten aircraft flew 49 sorties, to support 88 land operations, including tsunami drills, medical evacuations and field hospital deployments. Eighteen ships conducted 72 naval operations, according to organizers. In total, participants provided medical treatment and services to more than 4,200 people in villages such as Maasing and Wori and surrounding islands such as Bunaken. China, for example, sent a 24-person team, including 15 doctors, to participate. The exercise built upon the ARF's Voluntary Demonstration of Relief exercise held in the Philippines in 2009.

The 2011 exercise, like the real-life disaster in Japan, revealed the complexity of coordination. "As a Japanese people, we are used to providing disaster assistance to other people all the time," Japanese diplomat Miyamoto explained. "When we were the provider of assistance, we always thought, 'Oh my god, why is this country not capable of coordinating what they receive?' But now since we're a recipient, it's clear to us how difficult it is when you're overwhelmed in a disaster situation, how difficult it is or even burdening in some respects."

Exercise participants emphasized the importance of military and civilian cooperation in disaster relief. They noted that although significant progress in developing regulations and coordination mechanisms had been made since the catastrophic 2004 earthquake and tsunami in the Indian Ocean that killed more than







100,000 people in Indonesia, Sri Lanka and Thailand, much more needs to be done to speed up and streamline the reception and delivery of assistance. For starters, processes need to be established to ensure the availability of assets, systems and tools. International dimensions including immigrations, customs, quarantines and security issues also factor in relief efforts.

It all boils down to coordination, Li Jia, a Chinese Foreign Affairs officer, told *FORUM*, echoing the sentiments of many delegates. "If we can figure out coordination, we will solve a lot of issues." Zhang Qiyue, China's ambassador to Indonesia, told reporters that the communication and exchange with other ARF members will help China improve its ability to cooperate in foreign multilateral disaster relief, according to the *People's Daily*, a Chinese newspaper.

The exercise moved ASEAN members closer to adopting standard operating procedures for standby arrangements and coordination of joint disaster relief and emergency response operations including facilitating use of military and civilian assets. Delegates also discussed the ASEAN agreement on disaster management and emergency response, which was ratified by all ASEAN countries in 2009, and the role of the newly emerged ASEAN Coordinating Centre for Humanitarian Assistance, headquartered in Jakarta, Indonesia, as the agreement's main driver.

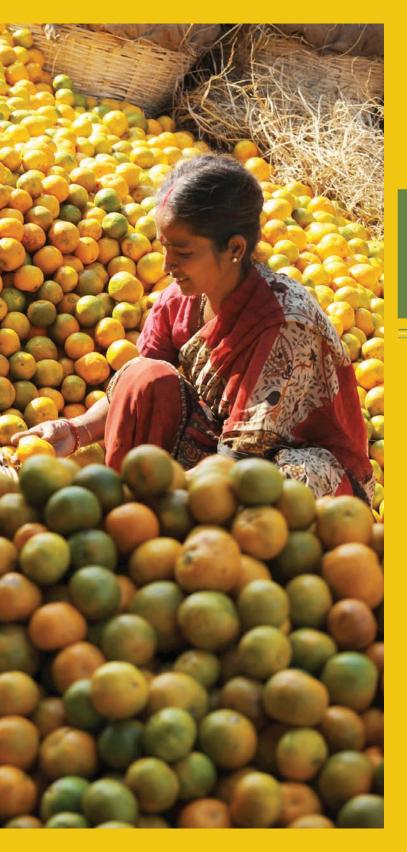
Besides building capacity across the region, organizers hope the lessons of the exercise will benefit Indonesians directly. "Everything starts from the local people," Indonesian security diplomat Kristanyo Hardojo, told *FORUM*. When disaster first strikes, he said, "only local governments and people can respond. What they should do and how — Japan now has the experience — that is one thing we can learn from them."







Indian workers sort oranges for packaging in Siliguri. West Bengal oranges are exported to neighboring countries such as Bangladesh and Bhutan as well as nearby states, strengthening the local economy.



Managing the BOOM

COOPERATION IS KEY TO STABILITY IN THE GROWING ASIAN ECONOMY

FORUM STAFF
PHOTOS BY AGENCE FRANCE-PRESSE

The Asia-Pacific region contains some of the fastest-growing economic areas in the world, full of potential for cross-border business opportunities. The rapid changes have spurred leaders across the region to call for stronger nation-to-nation partnerships that encourage sustainable development and stability on a multinational level.

"In recent years, the relations between Southeast Asian and East Asian countries have grown toward closer regional integration," Malaysia's Ministry of Foreign Affairs notes on its website. Malaysia's growing partnerships with countries in East Asia are "not solely aimed towards strengthening bilateral ties but regional links as well," the site says.

Toward facilitating those cross-border relationships, more than 200 people from "key positions" gathered in Hanoi, Vietnam, in July 2010 to discuss challenges and solutions for adjusting to Southeast Asia's economic buildup.

"Economically oriented development policy cooperation means strengthening the economies of partner countries, encouraging sustainable development and competitiveness," Luiz Ramlho, director of the Sustainable Business Development Department for the nonprofit organization Inwent, said on the group's website. "Only then can structural improvements to the political system or social advances lead to long-term success."

Inwent, which specializes in human resource development, training and dialogue, coordinated the conference in Hanoi.

Trade and investment have been the major forces behind Southeast Asia's economic gains in the past two decades, according to Suchat Katima, director of the Mekong Institute.

"Networking, diversity and virtual teamwork are vital to a true and lasting regional integration," Katima said, according to the Voice of Vietnam News.

Sadiq Ahmed, vice president of the Policy Research Institute of Bangladesh, described how recent regional cooperative initiatives will benefit Bangladesh's economy in an analysis for the East Asia Forum.

Ahmed outlined four areas of strategic partnership between India and Bangladesh that should result in a win-win for both sides and increased stability. They are:

- Trade and investment reform with Bangladesh, Bhutan, India and Nepal to reduce all trade and nontrade barriers beyond normal trade duties
- Regional transport connectivity
- Long-term energy cooperation through grid connection initiatives
- Regional water cooperation

"Over the long-term, more and better regional cooperation will help increase the Bangladesh growth rate by an additional 2 percent per year, and this is

Fostering partnerships

Groups such as the Association of Southeast Asian Nations, or ASEAN, and the South Asian Association for Regional Cooperation, or SAARC, aim to promote peace and stability, and improve the lives of citizens across South and Southeast Asia.

ASEAN seeks to accelerate economic growth, social progress and cultural development in the region through multinational collaborations that adhere to the principles of the U.N. Charter. ASEAN members include Brunei, Burma, Cambodia, Indonesia, Laos, Malaysia, Philippines, Singapore, Thailand and Vietnam.

Members of SAARC include Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka.



The Maitree Express, the first direct passenger train between India and Bangladesh in more than four decades, leaves for Kolkata, India, with more than 500 passengers from Dhaka, Bangladesh. The train started operating in April 2008.



a step forward for addressing long-term vulnerability from water shortage and flooding," Ahmed wrote.

Malaysia's prime minister welcomes what he calls "India's commitment to a renewed and reinvigorated regionalism," saying it's a view shared by the leadership in Malaysia.

"And one that I am working closely with your [the Indian] government to foster," Malaysian Prime Minister Dato' Sri Najib Tun Razak wrote in a December 2010 opinion published by *The Times of India* newspaper. "I am proud of the work we are doing together as strong and democratic Asian nations to promote development across our region and

to tackle the big issues of our day: combating terrorism, improving our infrastructure and ensuring the benefits of prosperity reach all our people, not just some of them."

India calls its efforts to extend regional relationships its "Look East" program. "India's Look East Policy is not merely an external economic policy, it is also a strategic shift in India's vision of the world and India's place in the evolving global economy," Indian Prime Minister Manmohan Singh said in a February 2010 review of the policy by South Asia Analysis Group. "Most of all, it is about reaching out to our civilizational neighbors in Southeast Asia and East Asia." □

A monorail makes its way through the business hub of Kuala Lumpur, Malaysia, in July 2010. Exportdependent Malaysia, Southeast Asia's third-largest economy, was hit hard by the global slowdown. The International Monetary Fund estimated Malaysia's growth at 6.7 percent for 2010.

Low Expectations at TALKS

A reactor building sits at the Russian-built Bushehr nuclear power plant in southern Iran. A ceremony in August 2010 marked the transfer of Russian-supplied fuel to the facility after more than three decades of delay.





outed as the toughest yet, a fourth round of sanctions was leveled against Iran by the U.N. Security Council in June 2010. Twelve members of the 15-nation council — including China — passed the resolution, which calls for measures against additional Iranian banks abroad if Iran is suspected of nuclear weapons or missile programs.

The sanctions are costing Iran an estimated U.S. \$60 billion in lost energy and oil investments, according to a December 2010 Bloomberg report. That toll was possibly a driving force behind Iranian President Mahmoud Ahmadinejad's statement in December 2010 indicating that he's prepared to sit down and negotiate with the European Union, which led the group pushing for sanctions.

The EU, along with Japan, South Korea and the United States, followed with country-specific sanctions against Iran. In Japan, the government announced a suspension of any new oil and gas investments in Iran, a major energy supplier.

"Our nation has traditionally had a close relationship with Iran," top Japanese government official Yoshito Sengoku told reporters, according to a September 2010 article by Al-Jazeera. "From this unique position, we will make persistent calls on the country for the peaceful and diplomatic resolution of this problem."

Despite its vote to support the sanctions against Iran, China has continued to support what it calls Iran's right to access and produce nuclear energy. Chinese officials publicly stated those opinions in December 2010 news reports.

"We respect Iran's right to access peaceful nuclear energy, believing that peace and security in the Middle East should be safeguarded," Chinese Foreign Minister Yang Jiechi said at the ninth Iran-China political consultation meeting, Iran's Fars News Agency reported in December 2010.

Still, the Chinese vote to support the sanctions caused a top nuclear official in Iran to send China this warning, "China is gradually losing its respectable position in the Islamic world," the *Christian Science Monitor* newspaper reported in June 2010.

Nevertheless, Ahmadinejad said the vote won't weaken Iran's relationship with China.

EU foreign policy chief Catherine Ashton said the EU believes Iran is disguising its nuclear weapons program through energy plans. She hosted talks in Geneva with Iran and members of the P5+1, a group of countries made up of the United States, Russia, China, Britain, France and Germany.

"We recognize Iran's rights [to nuclear power], but insist it fulfills its obligations," Ashton said in a December 2010 *Christian Science Monitor* article. "[In 2011 at a meeting in Istanbul,] we plan to discuss practical ideas and ways of cooperating toward the resolution of our full concerns about the nuclear issue."

Ahmadinejad was more pointed in his remarks after the talks.

"If you come to the negotiations by canceling all the nasty things and wrong decisions that you have adopted ... lift resolutions, sanctions and some restriction that you have created ... then the talks will definitely be fruitful," the Iranian president said at speech in central Iran.

The recent back and forth in talks between Iran and the EU-led groups caused one P5+1 official to tell The Associated Press, "We didn't get anywhere on substance. It was an exchange of views."

Other officials who participated in the talks came away saying their expectations of much, if any, immediate progress with Iran remained low. □





PROTECTING THE PROTECTION OF T

Sri Lanka
employs
inclusion
to build
stability

FORUM STAFF

defeated the Liberation Tigers of Tamil Eelam, or LTTE, in May 2009, it joined an elite club of nations whose legitimate rulers had engaged in prolonged conflicts with guerrilla insurgents and won. The Tamil Tigers' rebellion lasted 26 years, claiming the lives of more than 70,000 people and displacing hundreds of thousands of others. Malaysia's government, which defeated communist rebels in 1960 after a 12-year struggle, remains the only other example of such a victory in modern times in Asia.

"We want everybody to live peacefully as Sri Lankans, not as Singhalese or Tamils or Muslims."

-Nandasena Gotabhaya Rajapaksa. Sri Lankan defense secretary

With the war over, Sri Lanka's government now faces the comparable challenge of reuniting the nation. To foster lasting stability, the government is tackling economic, infrastructure, resettlement and conflict prevention issues as well as the reconciliation of minority Tamils who reside mainly in the northern and eastern provinces of the island. The goal of reunification is fraught with controversy, as the nation also seeks to restore the trust of the international community.

To ensure that civil war doesn't recur, "we have to develop the country, to improve living standards. We want everybody to live peacefully as Sri Lankans, not as Singhalese or Tamils or Muslims," Sri Lankan Defense Secretary Nandasena Gotabhaya Rajapaksa, the brother of President Mahinda Rajapaksa, told *The Australian* newspaper in October 2010. The powerful brothers hail from a political, ethnic Sinhalese family.

ECONOMIC EMPOWERMENT

Sri Lankan leaders are striving to unleash the war-torn nation's economic potential. Tourism has surged since the end of the war, according to Nalaka Godahewa, chairman of

Sri Lanka's Tourism Development Authority. Sri Lanka attracted an estimated 620,000 foreign visitors in 2010, about 59 percent more than in 2009, he said at a December 2010 news conference.

"Sri Lanka has now entered a period of relative peace and political stability, and international visitors are responding with strong demand," the Pacific Travel Association stated on its website in October 2010. In a travel piece, The New York Times newspaper counted Sri Lanka, rich with rainforests, wildlife preserves and unspoiled beaches, among the "31 places to visit in 2010." The National Geographic Channel ranked it the second "best island destination" to visit in the world after Cuba.

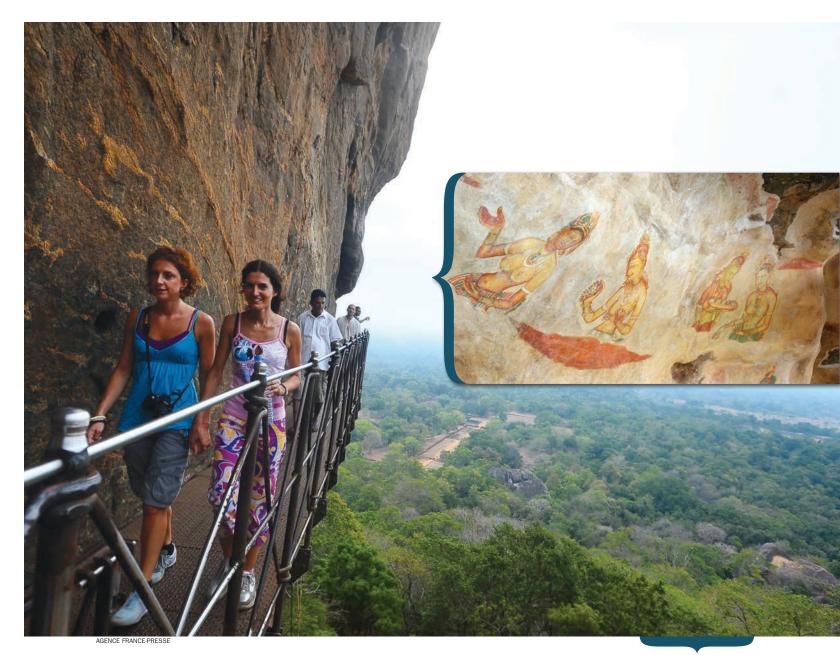
"This is an opportunity for expatriate Sri Lankans holding other citizenships, living overseas, to visit the island and bring along their friends from those countries. They will appreciate that they can visit the country without any fear for their safety, and I invite them all to enjoy what Sri Lanka can offer," Basil Rajapaksa, Sri Lanka's minister for economic development and another brother of Mahinda, told Colombo Page, an Internet news service. The government hopes to attract 2.5 million visitors a year and to add 25,000 hotel rooms by 2016, creating a U.S. billion-dollar industry, government officials said. International and local investors are exploring hotel development opportunities.

Sri Lanka also aspires to expand its industrial base, including its high-tech sector. Its rate of economic growth has climbed to nearly 8 percent since the war. The government aims to double per capita income, currently U.S. \$2,000, by 2015. Colombo is drawing business interest from around the world.

"A whole new situation has arisen with the defeat of terrorism. Sri Lanka is a country with immense potential. Our per



Sri Lankans work on the construction site of the Cinnamon Grand Hotel in Colombo in March 2010. The ambitious expansion comes amid a postwar revival that has bolstered hotel room rates.



capita income in the late 1940s and early 1950s was the highest in that part of the world — way ahead of Korea, Thailand and Malaysia. Then we had this problem [of the Tamil Tiger insurgency], which set us back. Now, all of that has been consigned to the past," Foreign Minister G.L. Peiris told the journal *Foreign Policy* in May 2010.

The military know-how that led the country to victory is now being applied to rebuild the country, officials said. The Air Force is addressing civilian transportation issues. To protect against floods, the Navy, meanwhile, is revamping the canals that the Dutch built centuries ago in Colombo. The Navy is also working to revitalize

the fishing industry by training the next generation of fishermen. In October 2010, Sri Lanka's state-owned Fisheries Corp. announced it had become profitable for the first time in 32 years, as shores in the Northern and Eastern provinces were opened after the war. The agency expects profits of 20 million rupees (about U.S. \$440,000) a month in 2011.

The Navy is also targeting illicit arms trafficking. Arms and munitions "are not being made here, so anyone who wants to cause trouble has to bring them by sea," Defense Minister Rajapaksa told *The Australian*. Beefing up naval patrols will help safeguard shipping lanes for developing trade.

Foreign tourists walk from the fortress of Sigiriya in north central Sri Lanka in August 2010. The Sigiriya rock, 160 kilometers north of Colombo, is a World Heritage site known for its frescoes (inset).





At the same time, the military needs to prevent renewed conflict. The Tamil Tigers are "no longer capable of military operations, but elements remain, including overseas, that are trying to regroup, and we have to be very vigilant. Now we need to bring stability and economic growth," Rajapaksa told *The Australian*. "This war went on for 30 years, and people were recruited from a very young age, they were brainwashed. Obviously we have to work gradually to tackle the remaining issues."

REBUILDING AND REHABILITATION

By October 2010, the Sri Lankan government said it had resettled 90 percent of the estimated 290,000 people displaced during the closing chapters of the war in the Tamil heartland in the Northern and Eastern provinces and de-mined about 70 percent of the region where most of the fighting occurred. In mid-November, nearly 18,800 displaced people, or 6 percent, remained to be resettled from camps, according to Milroy Fernando, minister of resettlement. The government, with funding from the Indian government, promised to start building 50,000 homes in former conflict zones after the monsoon period.

Sri Lanka, which has a U.S. \$42 billion economy, has started to rebuild its overall infrastructure, which generally has not been maintained for decades in conflict regions. With help from China, India, the World Bank and others, the government has initiated U.S. \$6 billion in infrastructure projects for 2011, including new ports, airports, railways and power plants. The government is also building schools, water facilities and other critical infrastructure to meet citizens' needs. Other programs target civil services such as initiatives to hire more Tamil-speaking police officers in Tamil-dominated areas of Sri Lanka.

For former Tamil fighters, the government has established rehabilitation programs. More than 4,000 former Tamil rebels were already reintegrated into society, Sri Lankan officials said in October 2010. "We accepted them with open arms and warm hearts, and have won their hearts and minds. They feel that they have seen the light at the end of the tunnel," Brig. Sudantha Ranasinghe, commissioner general of rehabilitation, told the *Sunday Observer* newspaper. "Six thousand more are to be rehabilitated," he told the Xinhua News Service.

S. Sathynadan, a Sri Lankan man from Jaffna, holds the hands of his granddaughter, a former Liberation Tigers of Tamil Eelam rebel, during his visit at a rehabilitation camp in Ratmalana in January 2009.

ELECTIONS AND POLITICS

President Mahinda Rajapaksa overwhelmingly won re-election with nearly 58 percent of the vote in January 2010. He defeated Sarath Fonseka, the general who led Sri Lanka's Army against the Tamil Tigers but then parted ways with the president's inner circle. First elected in 2005, Rajapaksa called for early elections after the Tamil rebels were defeated in 2009. His ruling coalition also swept the parliamentary elections in April 2010.

In September 2010, Sri Lanka's parliament approved a constitutional amendment by a 161 to 17 vote to remove the two-term presidential limit, enabling Rajapaksa to run again in 2016. The amendment additionally removes parliament's power to veto his appointments of top judges and election commissioners. Supporters argue that such measures bolster Sri Lankan democracy. "Political instability is the last thing we want in Sri Lanka as we seek to derive the fullest benefit for our people from the unique opportunity we have today having eradicated terrorism," Foreign Minister G.L. Peiris told parliament.

Some opponents including Fonseka, however, contend that such measures move the country away from democracy toward dictatorship. Fonseka, who was also a longtime parliament member, received a dishonorable discharge from the military in August 2010, and was subsequently courtmartialed for engaging in politics while still a member of the military. He is now serving a 30-month prison sentence.





Top: Sri Lanka's rainforests, wildlife preserves and unspoiled beaches attract many tourists.

Above: To cast their votes for president, Tamils, displaced by the war, search for their names in Sri Lanka electoral lists at the Vavuniya post office on January 26, 2010.

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Civil society also needs to contribute to the healing process. For example, school curricula need to be revamped, according to Vettivelu Nallainayagam, an economics professor at Mount Royal University in Canada who testified at an August 2010 Lessons Learnt and Reconciliation Commission, or LLRC, hearing. Both Sinhala and Tamil languages, as well as English, need to be taught in schools, and curricula need to emphasize the vibrant periods of peaceful co-existence between Tamils and Singhalese instead of the years of wars between the two kingdoms, he said, representing the expatriate Sri Lankan community. "And unfortunately in our teaching of Sri Lankan history, we have not emphasized the modern history where the Tamils, Sinhalese, Muslims all worked together to gain independence," he said. "We have to start working with the younger generation — people at the school level — in order to bring about a reconciliation, respect for each other's culture."

For his part, Defense Minister Rajapaksa told *The Australian* that he believes the government is winning the reunification battle as evidenced by mounting support of the Tamils to help rebuild Sri Lanka.

Nallainayagam's LLRC testimony in August 2010 supported that notion. "By and large I would say that most Tamils, they believe in a united country. I myself believed always in a country that was united not divided. We all believe in that. ... But what they want is to live in dignity, live in sort of fairness, to be treated as equal citizens, to be given the due rights. Now, this they think is possible only with some devolution of power because they are serious about that. They believe that Sri Lanka should be united, at the same time it has to have devolution of power."

In time, the government intends to give former Tamil-controlled regions more autonomy. Although no timetable has been set, the government has promised to implement the 13th amendment, which will devolve powers to the provinces. The measure evolved out of a 1987 accord between India and Sri Lanka to appease minorities, primarily Tamils.

"Sri Lanka is resurrecting its electoral process to empower people and provide political space for minority Tamils so that they emerge as credible interlocutors for the community on the issue devolution of powers," Foreign Minister Peiris told reporters in October 2010.

"Any solution has to be within the framework of the unitary state. But within the unitary state, we are going to put in place a political solution that will be fair and equitable to all the communities that live in the country. [We need] to work toward the development of a national identity, a national consciousness," Peiris explained in a May 2010 interview with *Foreign Policy*. □



LESSONS LEARNT AND RECONCILIATION COMMISSION

President Mahinda Rajapaksa created the Lessons Learnt and Reconciliation Commission, or LLRC, in May 2010. He charged the eight-member panel with reporting on why the 2002 ceasefire between the government and Tamil Tigers fell apart and fighting ensued until May 2009, and with recommending measures to ensure that such a situation doesn't recur.

A chief concern is the treatment of civilians who were ensnared in the final drives of the military campaigns in 2009. Caught in the crossfire, women, children and elderly Tamils were allegedly mistreated in crowded displacement camps, even used as human shields. The United Nations estimated that at minimum 7,000 civilians were killed in the final months of the conflict.

Rajapaksa told the LLRC in August 2010 that 6,000 troops were killed and 30,000 wounded during operations to free

ethnic Tamil civilians from rebel forces, the Agence France-Presse reported. "We took great care to avoid civilians. It was a difficult period for us. Our military had

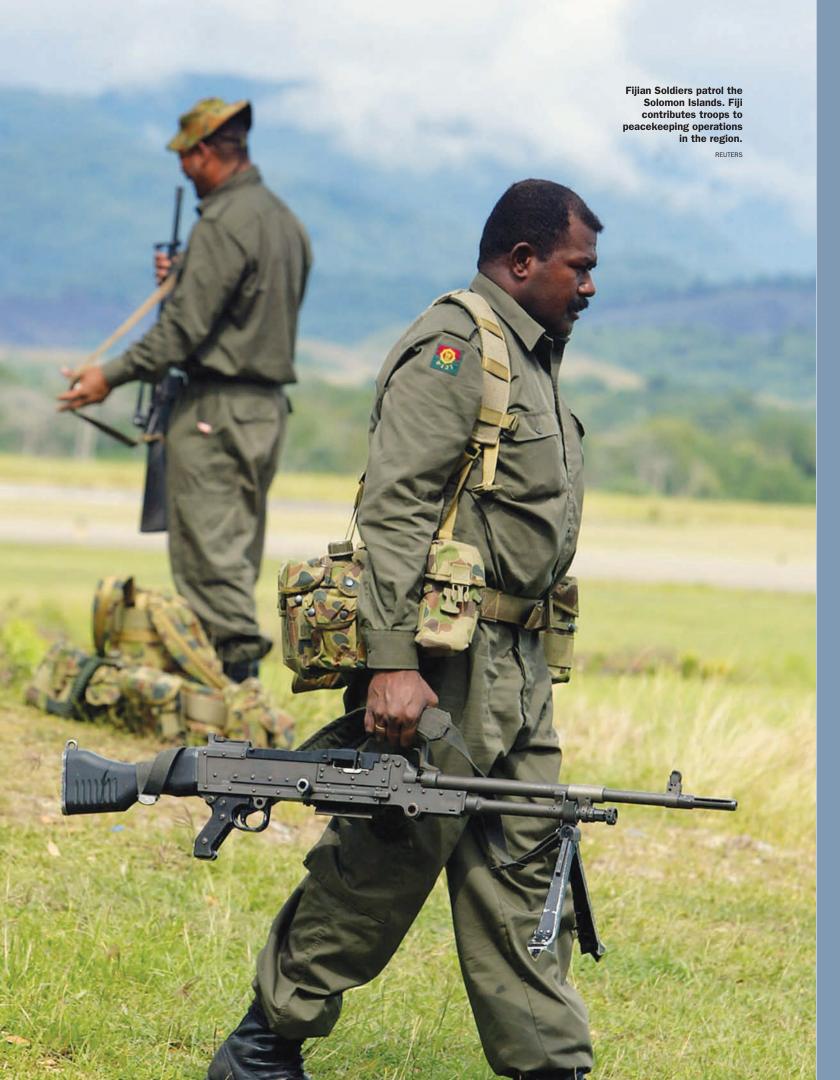
Former Sri Lankan militants share a meal at a rehabilitation center in Welikanda in eastern Sri Lanka in June 2009.

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to stop operations and give protection to people, food convoys," Rajapaksa testified to the LLRC.

Three international nongovernmental organizations, however, have alleged in a joint letter that the commission is "fundamentally flawed" because many of its members are retired senior government employees. The commission dismissed such allegations in an October 2010 response. The LLRC's independence "in all fairness must be judged by the performance of the commission and not on the basis of pre-conceived notions," the letter said.

In November 2010, Rajapaksa extended the reporting period of the commission, which is not tasked with investigating war crimes, by another six months. Sri Lanka has rejected calls for an independent, international probe of such allegations.





Patrolling the Pacific

FORUM STAFF

COLLABORATIVE PROGRAM
ACHIEVES SECURITY THROUGH
REGIONAL COOPERATION

olice Lt. Ian Tervet sat atop the deck of the PSS President H.I. Remeliik as the boat embarked from Malakal, Palau, on what appeared to be a routine mission in 2004. Tervet and his crew were tasked with a one-day fisheries surveillance patrol. Instead, the vessel responded to several time-sensitive issues and engaged in a 10-day operation. During the mission, the crew carried out a bust of a marijuana plantation, fined two fishing vessels caught poaching fish, detected and boarded nine unlicensed Filipino fishing vessels, and rescued a lost fishing boat, the Royal Australian Navy, or RAN, reported.

Tervet and his crew fulfilled their duties as part of a 12-nation maritime surveillance initiative known as the Pacific Patrol Boat Program, or PPBP. Though Palau is a small island nation of roughly 20,000 people, it is active in maritime security operations in the region through the program. The PSS President H.I. Remeliik, under Tervet's command, is one of the program's 22 vessels.

Regional security network

Palau, about 800 kilometers east of the Philippines, is also part of Oceania, a geographic region where nations share few land borders with neighboring countries. As a result, regional security in the Pacific is heavily dependent on effectively protecting and policing oceanic borders. Alone, any one of the individual states in Oceania, which embraces the coral atolls and volcanic islands of Micronesia, Melanesia, Polynesia and the Malay archipelago as well as Australia, is incapable of monitoring the expansive waters. Without collaborative efforts in attaining regional security, South Pacific states "are vulnerable to the undetected movement of sea craft, people and goods. ... The threat of transnational crime, in particular unauthorized fishing and smuggling, is complicated by the region's vast maritime boundaries," an Australian parliament report noted.

The 1982 United Nations Convention on the Law of the Sea underscored the need to build state-level maritime capacities as a means to achieve security throughout the Oceania region. This international agreement charged all states with policing the maritime territories that reside within 200 nautical miles of their borders. To comply, South Pacific island nations launched the PPBP program in 1985 with Australian backing, the Australian Department of Defence reported.



Rise of the initiative

Since 1985, the RAN has overseen the construction, distribution and maintenance of 22 vessels for 12 South Pacific nations, including the Cook Islands, the Federated States of Micronesia, Fiji, Kiribati, the Marshall Islands, Palau, Papua New Guinea, Samoa, the Solomon Islands, Tonga, Tuvalu and Vanuatu. Operating as part of the region's broader Defence Cooperation Program, or DCP, this maritime project is chiefly focused on assisting Pacific island countries to build their capacity to autonomously police their own maritime territories, the Nautilus Institute noted.

Through this fleet of vessels, which are managed and staffed by personnel from the cooperating nations, PPBP South Pacific states have developed a series of independent surveillance and maritime patrol capabilities. Highly mobile and equipped with armaments, the boats are designed to carry out surveillance and interdiction patrols, search and rescue operations, and fisheries protection. The vessels have a range of 2,500 nautical miles and a maximum speed of 20 knots. The fleet is regularly serviced and upgraded by Australian technicians to ensure the continuity of maritime operations. As PPBP operations expand, the size of the boats themselves and the overall quantity of the fleet is likely to increase, according to Australian Maritime Affairs, a RAN publication.

Law enforcement, police and Navy staff in participating PPBP nations receive regular training in maritime management, communications and operations from the RAN. Additionally, the RAN and South Pacific states have jointly established 17 Maritime Surveillance



Communications Network Centres throughout the region to foster greater collaboration and share best practices for maritime surveillance. In this spirit of cooperation, PPBP states regularly conduct multilateral maritime exercises that allow personnel to practice and hone their skills.

Since its founding in 1985, the program has made discernible progress. The presence of a well-trained, mobile and experienced transnational maritime security force has deterred the perpetrators of illegal fishing, smuggling and terrorism by limiting their operational capabilities and freedom of movement. The boats have also been used for quarantine, search and rescue, disaster relief, medical evacuation and general policing work, as reported by the Australian parliament.

Broader regional collaboration

Based on the success and effectiveness of the cooperating nations in their maritime operations through the PPBP, Australia, which provides the main financial backing for the program, extended the initiative in 2000 at U.S. \$346 million over a 25-year period from 2002 to 2027. "The patrol boats provide Pacific Island countries

with a visible and effective maritime surveillance capability, as well as a search-and-rescue capability. They are considered by the nations that have them to be a very valuable asset," noted former Australian Defence Minister John Moore.

The PPBP has promoted regional cooperation in a variety of other sectors under the umbrella of the DCP. Through the Army Aboriginal Community Assistance Program, army engineers from Australia, Papua New Guinea and Tonga work together on infrastructure development projects in local communities throughout the region. South Pacific states have also established the Pacific Small Arms Project, a regional initiative to improve the security of small arms, according to a 2007 report by Michael Pezzullo, the deputy secretary of strategy for the Australian Department of Defence.

All of the states that participate in the PPBP initiative are also members of the Pacific Islands Forum, or PIF, a multinational organization that builds cooperation between countries in the South Pacific region. In August 2010, the 41st PIF meeting was held in Vanuatu. PIF delegates made progress on several substantive issues, including developing a comprehensive regional strategy

Pacific Patrol Boat Program

VESSELS



The VOEA Pangai (P202), a Tongan Navy patrol boat, searches for survivors after a ferry sank in August 2009. The Pangai is part of the Pacific Patrol Boat Program.

Sources: Parliament of Australia (2010), World Navies Today: Other Asia-Pacific Navies (2002)

BOAT NO.	BOAT NAME	COUNTRY	HANDOVER DATE
1	HMPNGS Tarangau (P01)	Papua New Guinea	May 1987
2	RVS Tukoro	Vanuatu	June 1987
3	HMPNGS Dreger (P02)	Papua New Guinea	October 1987
4	Nafanua	Samoa	March 1988
5	Lata (03)	Solomon Islands	July 1988
6	HMPNGS Seeadler (P03)	Papua New Guinea	October 1988
7	Te Kukupa	Cook Islands	March 1989
8	HMPNGS Basilisk (P04)	Papua New Guinea	July 1989
9	VOEA Neiafu (P201)	Tonga	October 1989
10	FSS Palikir (01)	Federated States of Micronesia	March 1990
11	VOEA Pangai (P202)	Tonga	June 1990
12	FSS Micronesia (02)	Federated States of Micronesia	November 1990
13	VOEA Savea (P203)	Tonga	March 1991
14	RMIS Lomor (03)	Marshall Islands	June 1991
15	Auki (04)	Solomon Islands	November 1991
16	RKS Teanoai (301)	Kiribati	January 1994
17	RFNS Kula (201)	Fiji	May 1994
18	Te Mataili	Tuvalu	October 1994
19	RFNS Kikau (202)	Fiji	May 1995
20	RFNS Kiro (203)	Fiji	October 1995
21	PSS President H.I. Remeliik (001)	Palau	May 1996
22	FSS Independence (03)	Federated States of Micronesia	May 1997



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Top: Tuvaluan Sailors dive into the waters in the country's capital, Funafuti. Tuvaluan Navy personnel are part of the Pacific Patrol Boat Program.

Above: Former Vanuatu Prime Minister Nipake Edward Natapei Tutafanua' Ariki, left, talks with Secretary **General of the Pacific Islands Forum** Tuiloma Neroni Slade during the 41st **Pacific Islands Forum meeting in Port** Havannah, Vanuatu, in August 2010. The Pacific Islands Forum is a key regional organization in the South Pacific.

to address climate change, energy production, economic development and trade, fisheries conservation, aviation safety, transnational crime, arms regulation and disarmament, according to the PIF secretariat.

PIF's Forum Fisheries Agency, for example, organizes a multilateral activity each year called Operation Kuru Kuru, in which countries cooperate to detect activities such as illegal fishing, smuggling and human trafficking. The 2010 exercise covered an area of 12 million square kilometers including the Exclusive Economic Zones of Cook Islands, Fiji, Kiribati, Niue, PNG, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu and Vanuatu and areas of the high seas. Police, fisheries and military personnel from these countries conducted surveillance for 10 days in their respective zones in cooperation with their counterparts from Australia, New Zealand, France and the United States.

The vast oceanic territories present a unique security challenge to states in the South Pacific. Without effective maritime surveillance capabilities, the region is vulnerable to a variety of criminal activities. The PPBP has strengthened the capacities of states throughout the South Pacific to effectively patrol and police their maritime territories and provided a valuable framework for achieving security through regional collaboration. □



Keeping the CYBER PEACE

THE EMERGING IMPORTANCE OF CYBER ALLIANCES IN THE ASIA PACIFIC

JOHN BUMGARNER

yber attacks are increasingly becoming a weapon of choice for extremists. Many of these incidents have affected countries in the Asia-Pacific region or their trading partners. In July 2009, a wave of Internet-launched strikes disrupted websites in the United States and the Republic of Korea. The following year, Japan's Defense Ministry and National Police Agency experienced similar assaults. In 2010, the government of Taiwan revealed that it is the target of about half a million cyber attacks every month, the majority of which originate outside the country.

Attacks on government computers were also reported in Australia, the Philippines and Vietnam in 2010. Furthermore, in December 2010, more than 200 websites, including that of the Central Bureau of Investigation of India, were attacked by so-called hacktivists.

These recent, high-profile cyber incidents have prompted many nations to re-examine their national security strategies for cyberspace. Compromises to cyber security in the Asia-Pacific region could have serious consequences not only for nations in this region but also for the rest of the world.

The increasingly global nature of the world economy makes the Asia-Pacific region more vulnerable to cyber attacks.



Several of the economies in the Asia-Pacific region, such as China and Japan, are some of the largest in the world, and many of the region's economies, such as Malaysia and Thailand, are growing exponentially. Many economies in the region are extremely vital to international trade. The volume of trade is significant, but so is the composition. Many of these nations produce intermediate goods as part of a global supply chain. In such a supply scenario, a disruption to production in one country can rapidly increase the scarcity of goods in other countries. The relative importance of countries in the Asia Pacific for international trade underscores the importance of preventing devastating cyber attacks against nations in this part of the world.

NEW VULNERABILITIES EXPOSED

The increasingly global nature of the world economy makes the Asia-Pacific region more vulnerable to cyber attacks. Many nations in this region supply the world with materials and equipment that are essential to critical infrastructure industries. A cyber attack in the Asia-Pacific region could interrupt the supply of these materials to the rest of the world or, perhaps worse, corrupt them. For example, the region is a large producer of electronic components that could be corrupted with malicious firmware during the manufacturing process. In this type of attack, the supply chain would be used to distribute the malicious programs or data structures throughout the world. The firmware could be designed to lie



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dormant for years before disabling critical computer systems and other vital equipment without warning.

Financial markets are also vulnerable to cyber attacks, and financial markets in the Asia-Pacific region have been growing in significance. A disruption in these markets could adversely impact financial markets worldwide as investors react to a crisis. In theory, it is possible to launch a coordinated cyber attack against the computerized financial systems used by most countries. A properly planned and executed cyber campaign against these critical systems could cause significant monetary disruptions and possibly irreparable damage to the affected country's economy.

An international effort could help to prevent these kinds of disruptions. Firms in critical infrastructure

industries must implement security measures to protect themselves and their trading partners from harm. But such measures will be effective only if contracts and standards can be enforced across national boundaries, which will require international agreements that are not yet in place.

Recovering from cyber attacks on critical infrastructure industries will also require international cooperation. No single country manufactures all of the components, supplies and know-how that would be required to remediate these industries after a major cyber attack. For example, the bulk electric power generators used in the United States are manufactured abroad, in France, Germany, Japan or Mexico. Some of the manufacturers of generators in these countries





depend on China for key manufacturing components. In addition, production facilities worldwide are limited, and inventories of bulk power generators are low, which presents logistical and political problems during periods of national crisis.

EMERGING CYBER ALLIANCES

Several countries in the Asia-Pacific region have begun to improve their national cyber defense capabilities. A central element of these cyber defense initiatives is the establishment of a national cyber security organization. Some notable examples include Cybersecurity Malaysia and the Singapore Infocomm Technology Security Authority.

International cyber alliances could further improve the effectiveness of these national organizations. Cyber alliances would require members to collaborate on transnational cyber defense issues, such as securing national critical infrastructures, protecting strategic supply chains from cyber threats and assisting member nations in the recovery efforts associated with a catastrophic cyber attack.

Mutual assistance agreements are crucial to cyber alliances, in part because of the difficulty of preventing attacks. Mutual assistance could include actions that are relatively simple, such as providing emergency hosting services for government websites that have been disabled by a distributed denial-of-service attack. Mutual assistance could also involve key resources, such as providing replacement components for the electrical grid or critical infrastructures destroyed by a cyber attack. In the event of a cyber attack, national Computer Emergency Response Teams, or CERT, could form a Joint Computer Emergency Response Team, or JCERT, to coordinate predetermined actions taken as part of a mutual assistance agreement. The international teams could not only aid in host nation recovery efforts but also assist in forensic evidence collection actions. Many nations in the Asia-Pacific region already have well-established national CERTs that could participate in JCERT operations tied to a mutual assistance agreement.

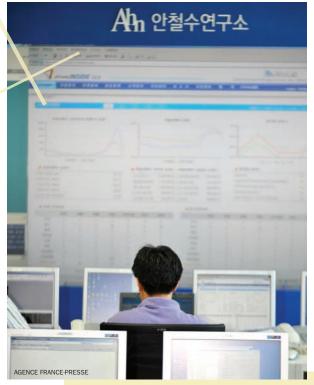
CYBER EXERCISE AND COUNTERMEASURES

Once a cyber alliance is established, cyber exercises could be conducted to test the effectiveness of the alliance and its components, such as the JCERTs. Cyber exercises would involve all of the entities that are likely to be affected by a cyber attack or called upon to act in response to a crisis, including government officials and departments, private-sector companies, and international organizations. Cyber exercises can be designed to test international collaboration and cooperation. For instance, a recent Estonian exercise centered on an escalating cyber conflict. Throughout the Estonian exercise, government agencies had to coordinate their response to the crisis and share information with other countries and international organizations.

A cyber alliance would facilitate the sharing of cyber threat information among member nations in an expedited manner. Initially the more technologically advanced members of the alliance could establish an entity similar to NORAD, or the North American Aerospace Defense Command, that would be focused primarily on cyberspace threats. This collaborative threat matrix would allow individual alliance members to monitor their segments of cyberspace and provide advance warnings of impending cyber attacks to other members. Although warnings might not succeed in preventing attacks, they could potentially lessen the severity of attacks that do happen. In addition, these threat centers could provide ongoing international situational awareness to members, especially during a cyber crisis.

As part of a cyber alliance, cyber peacekeepers could also be deployed to countries that experience ongoing cyber conflicts. Cyber peacekeepers could help to defuse cyber conflicts between disputing parties and aid in the peaceful resolution of the conflict. In the future, the United Nations will probably dispatch peacekeepers to monitor cyberspace peace agreements between disputing nations. Cyber alliances need to thoroughly explore the use of cyber peacekeepers within their sphere of influence and potentially in other nations when requested by the United Nations.

Establishing a framework for cyber alliances in the Asia-Pacific region will require a thorough examination of existing regional and international agreements, pacts and treaties. The creation of cyber alliances raises new legal questions as well, especially for the mutual assistance agreements. One of the key legal questions that arose from the



A South Korean security analyst for AhnLab Inc. conducts an investigation at the company's Security Operation Center in Seoul in July 2009. At the time, cyber attacks on South Korea were believed to have been mounted from 16 countries.

Georgian-Russian Crisis of 2008 was what action (for example, emergency Web hosting) by another nation (Estonia) constitutes material support for a foreign power engagement in war. Resolving such questions will require considerable foreign policy debate among alliance members and eventually at the United Nations. These obstacles are not insurmountable, however, and should not prevent the formation of cyber alliances.

In the 21st century, one nation's cyber security problems can become another country's concern almost instantaneously. This may be especially true in the Asia-Pacific region, which is a production hub for many critical infrastructure industries worldwide. Countries in this region can protect their national security interests by establishing cyber alliances with each other and with their trading partners. Several key elements needed to establish an effective cyber alliance already exist, but additional building blocks are needed to increase the resiliency of the Asia-Pacific region in the face of a cyber crisis. Several other features can be developed to increase the resilience of all nations in the face of a cyber attack. In the future, these cyber alliances will likely become just as important as other alliances have been in the past. \Box

John Bumgarner is chief technology officer for the U.S. Cyber Consequences Unit. He has served as an expert source for various publications, including *Business Week*, CNN, CBS, NBC, *Jane's Defence*, *The Wall Street Journal* and *The Guardian* in London.



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SEA OF TROUBLES

SOUTHEAST ASIAN NATIONS PUSH FOR A CODE OF CONDUCT WITH CHINA OVER DISPUTED TERRITORIES

FORUM STAFF

rains filled with Chinese military tanks made their way to a port in Yantai in China's Shandong Province in July 2010 just as the United States and South Korean Navies prepared to conduct a joint military exercise in and around parts of the same Yellow Sea.

Coincidental timing? Spectators think not. Some call China's move retaliation for the U.S.-South Korean exercise. The Chinese say they were merely carrying out a military supply drill.

The disputed waters of the Yellow Sea and the South China Sea include dozens of small islands and reefs, most located within the Paracel and Spratly Island chains. The South China Sea area is believed to be rich in natural resources such as oil and gas. Because of economic growth, oil consumption among Asian countries in the region could more than double by 2020, according to estimates by GlobalSecurity. org. Countries have gradually been more assertive in stating their claims over disputed territories within this region.

Members of the Association of Southeast Asian Nations, or ASEAN, have paid close attention to the Chinese strategy in asserting its claims and have begun their own redeployment of maritime resources, as well as seeking a resolution to the disputes. ASEAN countries — the Philippines, Malaysia, Thailand, Vietnam, Brunei, Singapore,

Laos, Cambodia, Indonesia and Burma — met in October 2010 with the Chinese to discuss improving cooperation among the disputed territories. Also in attendance at the meeting (the fifth East Asia Summit held in Vietnam) were representatives from Australia, India, Japan, New Zealand and South Korea.

Chinese fishing boats, center, band together with ropes to thwart an attempt by a South Korean Coast Guard ship to stop their alleged illegal fishing in the Yellow Sea off the coast of South Korea in December 2010. South Korean Coast Guard officials say they caught 332 Chinese boats in 2009.









The countries are in the process of drafting a binding code of conduct intended to "promote trust and confidence-building through cooperative activities ... pending the peaceful settlement of the territorial and jurisdictional issues."

DISPUTES IN THE "NEAR SEAS"

Covering about 3.5 million square kilometers (1.4 million square miles), the South China Sea stretches from Singapore to the Straits of Taiwan. China and Vietnam hold the largest claims to the waters.

China's ongoing maritime disputes with its Southeast Asian neighbors are often referred to as the "near seas construct." The term "near seas" encompasses all East Asian waters, extending to the First Island Chain and including the Bohai Gulf, Yellow Sea, East China Sea and South China Sea. The People's Liberation Army Navy of China adopted a "near sea defense" concept in the mid-1980s to extend its defensive depth from "coastal defense" to the First Island Chain. In 2009, China's official media outlet, Xinhua, noted that "to defend China's territory and sovereignty, and secure its maritime rights and interests, the navy decided to set its defense range as the Yellow Sea, the East China Sea and the South China Sea. This range covered the maritime territory that should be governed by China, according to the U.N. Convention on the Law of the Sea, as well as the islands in the South China Sea, which have been its territory since ancient times."

An escalation of conflict in the South China Sea due to unresolved disputes would create unfavorable implications throughout the region. Middle Eastern oil shipped to Japan would be at risk; economies in Northeast Asia might see a downturn; and trade between China and Southeast Asia would be faced with roadblocks, according to a September 2010 BBC News report.

Chinese military leaders call the Yellow Sea a gateway to China's capital region and a "vital passage" to its heartland. A prominent Chinese daily newspaper recently wrote, "China has clearly declared a red line regarding its stance and interests in the Yellow Sea, East China Sea and South China Sea."



Japanese Prime Minister Naoto Kan, left; South Korean President Lee Myung-bak, center; and Chinese Premier Wen Jiabao participated in a trilateral meeting at the 13th Association of Southeast Asian Nations Summit in Hanoi, Vietnam, in October 2010. Southeast Asian nations have been trying to hammer out a code of conduct with China.

THE ASSOCIATED PRESS

"In history, foreign invaders repeatedly took the Yellow Sea as an entrance to enter the heartland of Beijing and Tianjin," Maj. Gen. Luo Yuan, deputy secretary general for the People's Liberation Army Academy of Military Sciences, said in a July 2010 New York Times newspaper article. "The drill area selected by the United States and South Korea is only 500 kilometers away from Beijing. China will be aware of the security pressure from military exercises conducted by any country in an area that is so close to China's heartland."

It's China's recent increases in maritime movements that have pushed ASEAN members to move on building up their own maritime fronts, Hitoshi Tanaka, a former diplomat turned senior fellow at the Japan Center for International Exchange in Tokyo, told *Bloomberg Businessweek* in October 2010. "We need to use pressure to encourage China to behave constructively within the international community," Tanaka said.

ASEAN members increased military spending up to U.S. \$27.5 billion in 2009, according to the Stockholm International Peace Research Institute. Vietnam upgraded its military with fighter jets, surface-to-air missiles and warships, according to the October 2010 Bloomberg Businessweek report, as well as Russian-built submarines. Indonesia has plans to purchase 180 Russian Sukhoi fighter jets and an undisclosed number of F-16 warplanes, according to the same report.

"For countries in Southeast Asia, which have had centuries of experiencing the ups and downs of dealings with their giant neighbor, the image of a furry and cuddly animal is not one that comes to mind when looking at China," Dewi Fortuna Anwar, research professor at the Indonesian Institute of Sciences, wrote in an August 2010 opinion article for *The Jakarta Post* newspaper. "Southeast Asians were, and continue to be, fully aware of both the inherent promises and dangers that China represents, whose traditional symbol is after all a dragon. During the Cold War, China was regarded as an unmitigated threat. Today, however, ASEAN believes that the best course of dealing with China, with its vast economic potential and growing military might, is to engage and integrate it fully into the regional order."

SEEKING REGIONAL STABILITY

In 2003, China agreed to a regional code of conduct with ASEAN called the Treaty of Amity and Cooperation, or TAC, which renounces threats and the use of force when attempting to settle a dispute. A similar agreement between China and ASEAN also emerged in 2002 called the Declaration on the Conduct of Parties in the South China Sea, or DOC. The DOC's purpose was to maintain peace and help countries in conflict over territories to focus on economic development despite their disputes.

"ASEAN clearly hopes that China will adhere to [the] TAC and is undoubtedly disappointed, if not alarmed, with the recent display of military force in [the] South China



Sea," Anwar wrote in *The Fakarta Post*, adding that recent events in the South China Sea may "spur ASEAN states to pursue various steps to beef up their security, including by enhancing military cooperating with the U.S."

During the fifth East Asia Summit in October 2010, ASEAN leaders and China moved a step closer to creating regional stability. China and ASEAN countries signed a "Plan of Action to Implement the Joint Declaration on ASEAN-China Strategic Partnership for Peace and Prosperity." In essence, the plan represents a commitment from China to eventually sign the legally binding Code of Conduct in the South China Sea.

The code calls for countries to respect the freedom of international air and maritime navigation, and it calls for a prohibition on the use of threats of force, among other things.

Previous attempts by ASEAN to get China to sign and adhere to a code of conduct when dealing with issues surrounding the South China Sea haven't fully materialized, the BBC News reported, because certain "confidence-building measures" were never implemented to make it a reality. Officials involved in the latest round of talks say an agreement on a legally binding code must be reached and signed to solidify a single ASEAN market economy by 2015. □

A Vietnamese guard station floats offshore near Truong Sa or Spratly Islands in April 2010 in what remains a disputed area in the South China Sea.

SHARED SPACE



ussia's Dmitry Kondratyev,
NASA astronaut Catherine
Coleman and the European
Space Agency's Paolo Nespoli of
Italy launched from the Baikonur
Cosmodrome in December 2010
onboard a Russian-made Soyuz TMA20. Their destination: the International
Space Station.

The three will spend five months at the space station, which has a full schedule for 2011 with the arrival of several cargo craft delivered by the U.S., Russian, European and Japanese space agencies.

As the crew onboard the International Space Station on the 50th anniversary of the first human flight into space by Yuri Gagarin, "we won't be walking on the pages of history, we'll be floating," Coleman said.

International space operations will

enter a new phase in 2011 after the U.S. shuttle fleet is mothballed. Two more shuttle missions are planned, after which Soyuz will be the only vehicle available to transport crews to the orbiting laboratory. A round-trip ticket to the space station in 2011 and 2012 will cost NASA as much as U.S. \$51 million, up from the current U.S. \$26 million.

The U.S. wants NASA focused on next-generation rockets and spacecraft that could carry astronauts to asteroids and Mars, and it hopes to rely on private business to develop craft capable of ferrying cargo and crew to the space station.

"If we want to keep going on with this exploration, going back to the moon or Mars ... we need to put together all the resources that are around the world," Nespoli said. The Associated Press

Navy tests supersonic CANNON

he U.S. Navy successfully tested an electromagnetic cannon capable of firing a projectile 200 kilometers at five times the speed of sound.

"This demonstration moves us one day closer to getting this advanced capability to sea," said Rear Adm. Nevin Carr, chief of naval research.

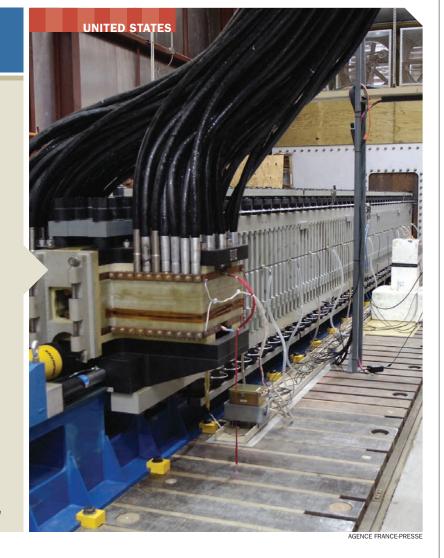
Tested at the Navy's Dahlgren Surface Warfare Center in Virginia in December 2010, the futuristic weapon uses powerful jolts of electric current to propel a nonexplosive slug along rails before launching it at supersonic velocities.

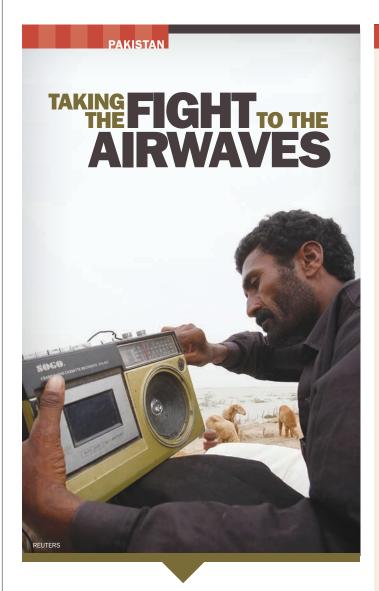
The latest test involved a 33-megajoule shot, the most powerful ever attempted and three times that of the previous test in January 2008.

"Today's railgun test demonstrates the tactical relevance of this technology, which could one day complement traditional surface ship combat systems." Carr said.

The test model bears little resemblance to a gun. Instead, thick black cables plug into the rear of what looks like a long rectangular grill. That armature holds the rails together as a powerful electric current surges through them, pushing the slug forward.

Agence France-Presse





The Pakistani government plans to establish 11 new radio stations in the Federally Administered Tribal Areas, or FATA, as a nonmilitary weapon against the militancy.

The stations will operate in North Waziristan and South Waziristan; the Kurram, Orakzai, Khyber and Bajaur agencies; and Frontier Regions Bannu and Kohat.

"The government has plans to establish the radio stations in various locations in FATA that would help in establishing writ of the government by defeating militants' propaganda and would also help to pave the way for development and peace,"

FATA Director of Information Kifayatullah Durrani told Central Asia Online in December 2010.

FATA's airwaves have become the region's most important nonmilitary battleground, as no other medium — TV, print or Internet — can operate effectively in the area, given its poor infrastructure, low literacy rate, and unique culture and values. Central Asia Online

UNITED KINGDOM

OUTSMARTING TRAFFICKERS

The U.K. Border Agency released a list of the 10 most unusual drug concealment techniques interdicted in 2010. The illicit substances included cannabis, cocaine, heroin and liquid cocaine.

CONCEALMENT TECHNIQUE	SOURCE OR ORIGIN
Hidden in metal drums containing powdered nuts.	Mexico *destined for Australia
Hidden in packets of nuts.	Jamaica
Concealed within a truck's motor, rear bulkhead and roof space of the cab. Additionally, some of the drug was strapped to the driver's body.	Netherlands
Concealed within a wooden- framed painting of Emmanuel Adebayor, Togolese soccer player.	Togo
Hidden in hollowed out yams that were glued to seem whole.	Ghana
Hidden in woven baskets.	Tanzania
Stuffed inside glass ornaments.	Peru
Hidden in a birthday card.	Global
Traffickers swallowed packages of drugs, with further quantities stuffed inside their bodies.	Global
Hidden in two bottles of Baileys liquor.	Trinidad and Tobago

The U.K. Border Agency uses a range of methods to detect drugs being smuggled through ports, airports and postal sorting offices across the country. Intelligence about potential drug trafficking routes and would-be smugglers is the agency's "most important weapon in the fight against drug smuggling," said Brodie Clark, head of the border force.

The border agency uses detection dogs, X-ray machines, lontrack and lonscan machines that detect traces of drugs from a passenger's baggage and low-dose radiation body-scanners for those suspected of concealing drugs internally. Suspects have a right to refuse a scan or a hospital X-ray — but if they do so, they are likely to be kept in detention until nature takes its course.

U.K. Border Agency website, The Associated Press

APDF VOICE

INDIA'S VITAL ROLE IN THE INDIAN OCEAN



Above: Indian naval warships participate in an exercise in the Bay of Bengal off the coast of Chennai.

Left: An Indian police officer stands watch near the Porbandar coast, west of Ahmadabad.



SPECIAL CORRESPONDENT/THE HINDU

Underscoring India's important responsibilities in the Indian Ocean region, Foreign Secretary of India Nirupama Rao suggested that all stakeholders in the area should contribute to regional security.

Ruling out the inevitability of conflict — a theme often talked about in media — she said India views the emerging trends with realism. Building sustainable regional security would require a cooperative effort among all regional countries, on the one hand, and all users of the Indian Ocean, she said.

"As the main resident power in the Indian Ocean region, we have a vital stake in the evolution of a stable, open, inclusive, and balanced security and cooperation architecture in the region. By definition, this would need to be a consensus-based process, where all the stakeholders who have a legitimate presence in the region make their respective contributions to regional security," she said in her lecture "India as a Consensual Stake Holder in the Indian Ocean: Policy Contours," organized by the National Maritime Foundation in November 2010.

Outlining India's vision, she emphasized that the country stood for harnessing the forces of geopolitics for new forms of cooperation rather than using them as an excuse for domination by a single country.

Rao said that as an emerging global economic and trading power, India has a vital interest in maritime security, especially since global mercantile trade now constitutes 41 percent of the gross domestic product. Of this, 77 percent of the trade and more than 90 percent by volume was carried by sea. Now 70 percent of petroleum products are being carried through the Indian Ocean.

Amid increasing voices from the West that India assume a greater role in the region, Rao said that although the country was seen as a net security provider, it could not carry the burden of regional security on its shoulders alone. She said that considering the role the international community expected India to play, a credible naval presence with adequate assets would have to be developed.

"The era of gunboat diplomacy is long over. A robust Indian naval presence is seen as a necessary contribution to a cooperative regional security order," she said, pointing to the burden sharing of naval forces to fight piracy off the Somalia coast. At the same time, she said, while addressing the threats posed by nonstate actors was important, states should also abide by the "rules of the road." The rules require a common vision of maritime security and freedom of navigation in accordance with universally agreed upon principles of international law.



French forces parade Somali pirates captured in the Indian Ocean at the northern port town of Bosasso, Somalia.

REUTERS

"The era of gunboat diplomacy is long over. A robust Indian naval presence is seen as a necessary contribution to a cooperative regional security order."

— Indian Foreign Secretary Nirupama Rao

ROWING THE DRAGON

Cultural sport holds global appeal



ooden representations of the mystical creature's head bob slightly in the water, their colorful noses nudging the gentle breeze. Seated two-bytwo behind the dragon heads are men from

different backgrounds. Some work as police or firefighters, others as farmers or carpenters. Today, they're one team with one goal — to win.

A starter horn sounds, and paddles that once hovered over the water shatter the still, glassy surface as teams row fast and furious to push ahead of the competition. With each beat of a drummer sitting at the bow, each stroke becomes stronger and more powerful than the last.

Rooted in Chinese culture, dragon boat racing scenes like this have come to span the globe. The key to winning is universal and clear: Paddle in unison. Drown out the surrounding noise. Work as a team, and never stop rowing.

"The ... esprit of racing dragon boats goes far beyond a mere sports spectacle and embraces a rich and dynamic cultural fabric that has been observed uninterrupted for more than 25 centuries," Adrian Lee, an International Dragon Boat Association, or IDBA, historian, writes on the organization's website.

Older than the Olympic Games of ancient Greece, the sport's participants include more than 50 million people in Asia and more than 60 countries worldwide, according to Lee.

Indonesia's men's dragon boat team exemplified that spirit of never giving up even before securing a spot to race in the 16th Asian Games in Guangzhou, China, in 2010.

Several times, sports officials had rejected the team's proposal to compete. "They thought we would never win any medals," Indonesian team captain Asnawir told *The Jakarta Post* newspaper.

Their persistence paid off, and the team won approval from the newly established Indonesian Gold Program to attend the November 2010 Asian Games, where the men claimed three gold medals.

"It felt good," Asnawir told *The Jakarta Post* after the team's second gold medal win.

Indonesia's Office of the State Minister for Youth and

Sports Affairs plans to give each member of the men's dragon boat team U.S. \$45,000 for their win, according to *The Post*.

Dragon boat racing's popularity increased in 1976, when the Hong Kong Tourism Association organized the first international dragon boat race. In 2009, UNESCO inscribed the dragon boat festival on its Intangible Cultural Heritage of Humanity Representative List.

"The dragon boat festival strengthens bonds within families and establishes a harmonious relationship between humanity and nature," according to the UNESCO website. "It also encourages the expression of imagination and creativity, contributing to a vivid

In addition to dragon boating, the festival includes a memorial service for Qu Yuan, a Chinese poet at the center of the tale about dragon boats' beginnings.

sense of cultural identity."

Exiled by the king for writing poems critical of the government, Yuan became frustrated and drowned himself in the Miluo River, northeast of Hunan Province, China, according to lore. Fishermen trying to rescue him threw food in the water, beat drums and splashed their paddles to ward off fish they feared would eat Yuan.

In the United States, Tampa, Florida, will host the International

Dragon Boat Federation's 2011 World Dragon Boat Racing Championship. Tampa Bay Dragon Boat Institute executive director Christine Canevari says the sport offers something for everyone.

"I love that you can participate in so many different ways, from paddling, to steering, to drumming on a team, to coaching or just spectating," Canevari told *FORUM*.

Lee, the IDBA's historian, points out that camaraderie comes along with the sport as well. On the IDBA website, Lee writes, "Today, contemporary values such as teamwork, cultural diversity, brotherhood, community spirit, athleticism, fortitude and fitness are all glorified in both the Dragon Boat Festival and the modern Olympic Games."

Dragon Boat FACTS

- The standard boat is 12 meters (40 feet) in length, and the small boat is 9 meters (30 feet) long. However, some Asian boats hold up to 100 crew members.
- No less than 20 paddlers constitute a crew, plus a drummer and steerer.
- The steerer at the rear, or helm, of the boat — controls the boat with a steering oar.
- The drummer in the front, or bow, of the boat — dictates the rate of the rowing, which affects the boat's speed.



From left: Contestants paddle their boat during a dragon boat race in a small village in China in June 2009. | Qu Yuan | A local Taiwanese fisherman guards dragon boats.



HIGH WIRED

Everest summit connected to 3G Internet

SUBEL BHANDARI/AGENCE FRANCE-PRESSE

Climbers at the top of Mount Everest, the world's highest peak, will now be able to make video calls and surf the Internet on their mobile phones, a Nepalese telecom group says.

Ncell, a subsidiary of Swedish phone giant TeliaSonera, said it has set up a high-speed, third-generation (3G) phone base station at an altitude of 5,200 meters near Gorakshep village in the Everest region.

"Today we made the [world's] highest video call from Mount Everest base camp successfully," Ncell Nepal chief Pasi Koistinen told reporters in Kathmandu in October 2010. "The coverage of the network will reach up to the peak of the Everest," he added.

Climbers who reached Everest's 8,848-meter peak previously depended on spotty and costly satellite phone coverage and a voice-only network set up by China Mobile in 2007 on the Chinese side of the mountain. The installation will also help tens of thousands of tourists and trekkers who visit the Everest region every year.

"This is a great milestone for mobile communications as the 3G, high-speed Internet will bring faster, more affordable telecommunication services from the world's tallest mountain," said Lars Nyberg, chief executive of TeliaSonera, which owns 80 percent of Ncell.

The 3G services will allow Everest climbers to make video calls and use the Internet, according to the company, which also claims the world's lowest 3G base at 1,400 meters below sea level in a mine in Europe. Eight base stations, four of which will run on solar power, have been installed in the Everest region with the lowest at 2,870 meters at Lukla, where the airport for the area is situated.



Mount Everest, the world's highest mountain, now boasts a high-speed, third-generation Internet connection at its base camp at 5,164 meters, according to Ncell. Climbers can make video calls and surf the Net.

"The erratic and expensive satellite connection that many times does not work for days will be replaced with this service, making it possible for all climbers to keep in touch with their organizers and family," said Ang Tshering Sherpa, a member of the International Mountain Protection Commission. "This will also be helpful, possibly, when there is an accident or an expedition mishap," he added.

Despite the installation at Everest, telecom services cover less than one-third of the 28 million people of Nepal, one of the poorest countries in the world. TeliaSonera said it planned to invest U.S. \$100 million in the next year to ensure that mobile coverage increases to more than 90 percent of the Himalayan nation's population.

About 3,000 people have climbed to the Everest summit since Edmund Hillary and Tenzing Norgay became the first people to conquer the peak in 1953.

APDF SPORTS

Taking Flight Nepal's new sport: parahawking

CLAIRE COZENS/AGENCE FRANCE-PRESSE

At a lakeside resort in the mountains of western Nepal in November 2010, the paragliding season is in full swing, and local champion Kevin is training to get back to full fitness.

His unerring ability to find the thermals that allow paragliders to defy gravity, soaring through the air with vertigo-inducing speed, has made Kevin a minor celebrity in the world of this exhilarating sport.

Kevin, a 4-year-old bird who was rescued as a chick after falling out of the nest, is the world's first paragliding vulture.

His owner, Scott Mason, a 38-yearold Londoner with a lifelong passion for bird conservation, traveled to Nepal a decade ago. Almost by accident, he invented the new extreme sport of parahawking.

The birds fly with the paraglider, guiding the pilot to the thermals that the birds have a natural instinct for finding. They are then rewarded with meat and are trained to land on a passenger's gloved hand when called.

Nepal has long been an international center for paragliding, thanks to its stunning mountain scenery and clear, dry winters. It wasn't long before Mason came up with the idea of training birds to help locate the thermals.

He teamed with a fellow Briton who ran a local paragliding center, and their early attempts to fly with birds proved successful. In 2003, the pair made a short film on parahawking, winning international awards and generating a buzz in the adventure sports community. "It was becoming more and more obvious that we'd hit on something that was very unique, that could generate a lot of international attention," said Mason.

South Asia's vultures have been driven to the brink of extinction, and conservationists have discovered the main cause — the birds were being poisoned by diclofenac, a drug found in the carrion they eat. The catastrophic decline in vulture numbers across Nepal, India and

Pakistan has dramatic ecological and social consequences, not least because the birds once played a vital role in preventing disease by cleaning up carrion.

"These declines are right across South Asia and are completely unprecedented," said Chris Bowden, vulture program manager for Britain's Royal Society for the Protection of Birds. "We went from tens of millions to just a few thousand in 15 years or so." Diclofenac has since been banned and a safe alternative, meloxicam, introduced.

When Kevin, an Egyptian vulture, was brought to the rescue center in 2006, Mason decided to start offering tandem flights commercially and realized they could be used to highlight the plight of the often misunderstood birds. By 2009, Mason was piloting about 370 commercial flights a year.

"Flying with birds is a bit like swimming with dolphins — it's something people never imagine they could actually do," Mason said.





Every year on December 5, the Philippines celebrates Volkswagen Day. Owners displayed more than 200 vintage cars in Manila during the event in 2010. Clubs across the country sponsor similar gatherings for competitions, socializing and trading parts and memorabilia. Agence France-Presse



Special Delivery

Singapore's Jurong Bird Park is having a baby boom of sorts. Its birdlife conservation program successfully hatched Black Palm Cockatoos three months in a row September, October and November of 2010. Workers showed this 23-day-old cockatoo to the media in December 2010.



Home Economics

A 24-year-old architect from China's Hunan province created an economical, egg-shaped mobile home on a Beijing sidewalk and moved into it in October 2010.

Constructed of bamboo strips, furnished with a mattress, and covered with an insulating and waterproof material, the home cost about U.S. \$1,000 to build, according to the China Daily newspaper. The home is also covered with bags of processed wood chips and grass seed, so grass eventually will cover the house like a quilt.

Whether the design helps solve housing problems on a larger scale remains to be seen. But some environmentalists have lauded his solarpowered design.



CHIHUAHUA TO THE RESCUE

A Japanese police department appointed a Chihuahua as a member of its disaster rescue squad in November 2010. The long-haired pooch will serve alongside retrievers and German shepherds.

Seven-year-old Momo, which means "Peach," earned its top dog credentials by passing a canine rescue test, said a spokeswoman for the Nara Police Department in western Japan. The 3-kilogram dog was given the scent of a human "survivor" in a disaster simulation and took less than five minutes to sniff out the target person in a 100-square-meter area.

"We would like it to work hard by taking advantage of its small size," a Nara Police Department official told the Sankei Shimbun daily.

Agence France-Presse



Preparing for an Aging World

FORUM STAFF

Countries can learn from one another's experiences

The world's population is getting older. That is, the fraction of the world's population 65 and older is rapidly growing. Increasing longevity and declining fertility rates are contributing to the shift. Nowhere is the demographic trend starker than in parts of Asia, according to a December 2010 report by the national science academies of China, India, Indonesia, Japan and the United States.

The portion of the population age 65 and older will more than triple in China, India and Indonesia, and more than double in Japan between 2000 and 2050, according to the report, titled "Preparing for the Challenges of Population Aging in Asia." The demographic shift is coinciding with dramatic economic and social changes in Asia, including changing family structures and large-scale migrations from rural to urban areas.

Managing a rapidly aging population will be one of the greatest challenges Asian governments face in the first half of this century, said the report, which was released at a Beijing conference on aging in Asia. The longer governments wait to develop health, pension and employment policies to support the well-being of expanding populations of older citizens, "the more constrained their choices will be," the report said. Policies that depend on asset accumulation, such as programs that encourage retirement saving, need time to provide benefits.

In Asia, most older people rely on their children for assistance, the report said. In India, for instance, more than 75 percent of the elderly live with their children, according to findings published in 2010 in International Social Security Review. At the same time, reductions in family size mean that older generations will have fewer children to support them. Adult children will also have to provide for elderly parents for longer time periods as life expectancy continues to increase, the joint report by the academies said.

The trends bring some advantages. "Better jobs will provide children with more resources to offer their parents," the report said. Grandparents, who will be living longer, productive lives, will be better able to assist with raising grandchildren, enabling mothers to rejoin the workforce, the report said.

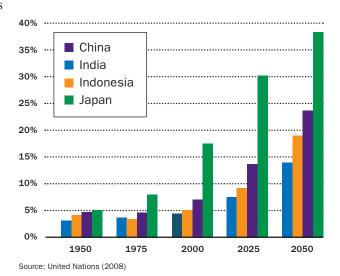
Governments in Asia still have time to respond



An elderly Chinese couple chat in a Shanghai park. By 2050, the fraction of the population age 65 and older in many Asian countries will be much larger than it is today.

The Changing Demography of Asia

Percentage of population 65 and older, 1950-2050



to the demographic transformation, the report said. The academies called for more research to better understand changing roles in families, retirement planning and demands on health care systems. "Although each country's approach to social policy is unique and influenced by different historical and cultural factors, nations can learn much from one another," the report added.



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