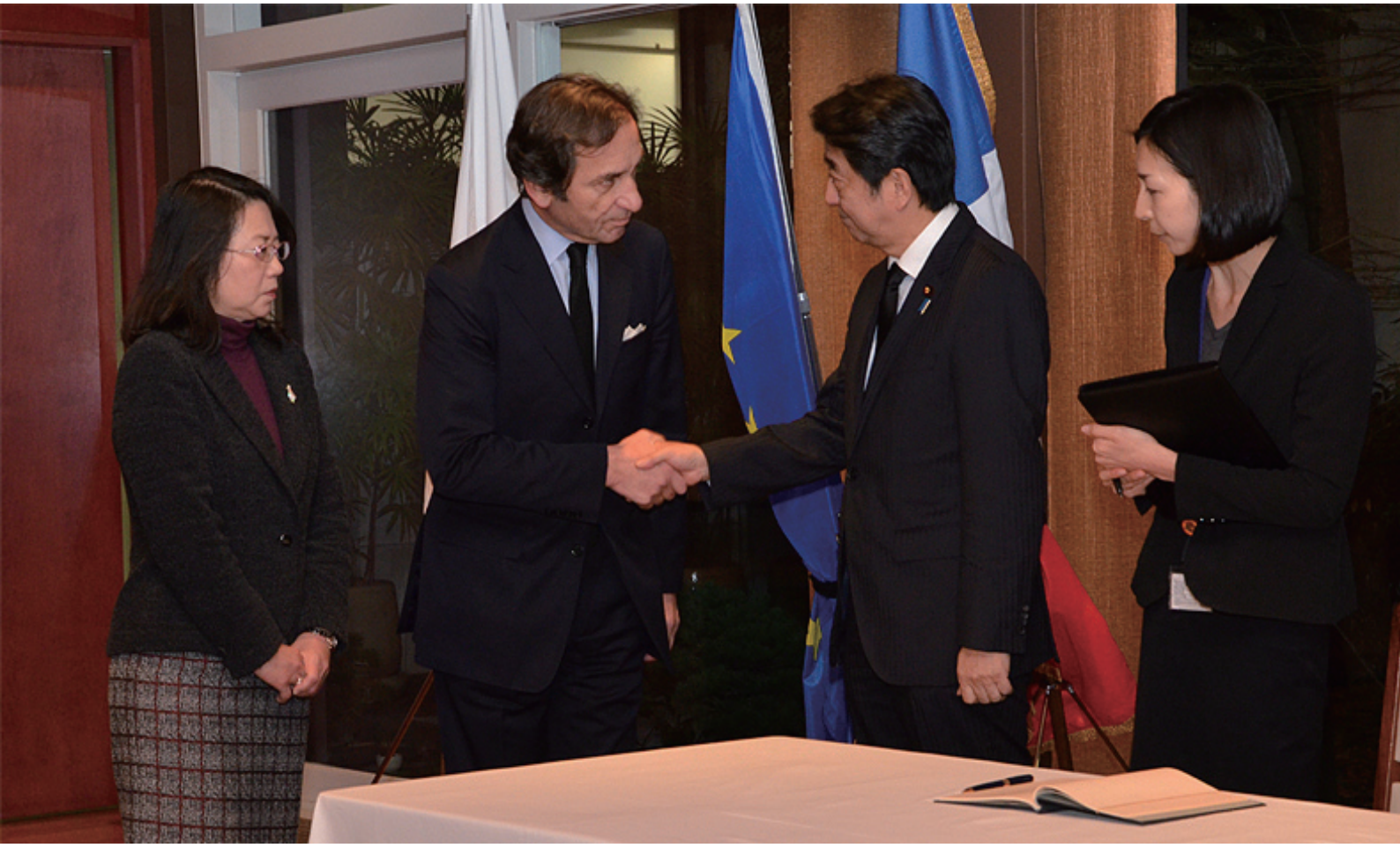
# We Are *Tomodachi*

## Disaster Prevention Edition 2015



The Government of Japan

# We Are *Tomodachi*

Disaster Prevention Edition 2015

Prime Minister Shinzo Abe signing a book of condolences at the French embassy in Tokyo following the terrorist attack at the office of a satirical magazine in Paris. After signing the book, he expressed his sympathy for the victims and solidarity with the French people (January 2015).

Prime Minister Abe receiving a courtesy call from representatives of the Global Youth Leaders Development Program 2014 (January 2015).

# *Yui*

結 *yui*

The character *yui* (結) is composed of two elements. The left half means "thread" while the right half means "to firmly tighten." Together they express the idea of "tying threads together."

*Yui* can also mean mutual cooperation through physical assistance. In the past, people gathered to help their neighbors whenever there were tasks requiring a lot of heavy physical labor, such as farm work or building houses. In this sense, *yui* is an expression of emotional connectedness and the spirit of mutual aid.

In Japan, a country that frequently suffers natural disasters, the spirit of *yui* is demonstrated spontaneously every time a disaster occurs. People feel a connection to others in need, and have overcome various difficulties by joining forces to assist each other.

Many global issues, such as natural disasters, environmental problems, and infectious diseases, need to be addressed at levels that go beyond the local and national. In the spirit of *yui*, Japan has a strong desire to share its technology and know-how with countries around the world. It wishes for its citizens to share wisdom and work hard in places where people are suffering and make a positive contribution to solving problems on a global scale.

# Contents

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# Flowers Herald the Spring

**Plum Trees: Kairakuen, Ibaraki Prefecture**

Since ancient times, people have loved plum blossoms as a flower of early spring. Plum blossoms come in many colors, from white to pale pink to red. They are beautiful in a way that is different from cherry blossoms.

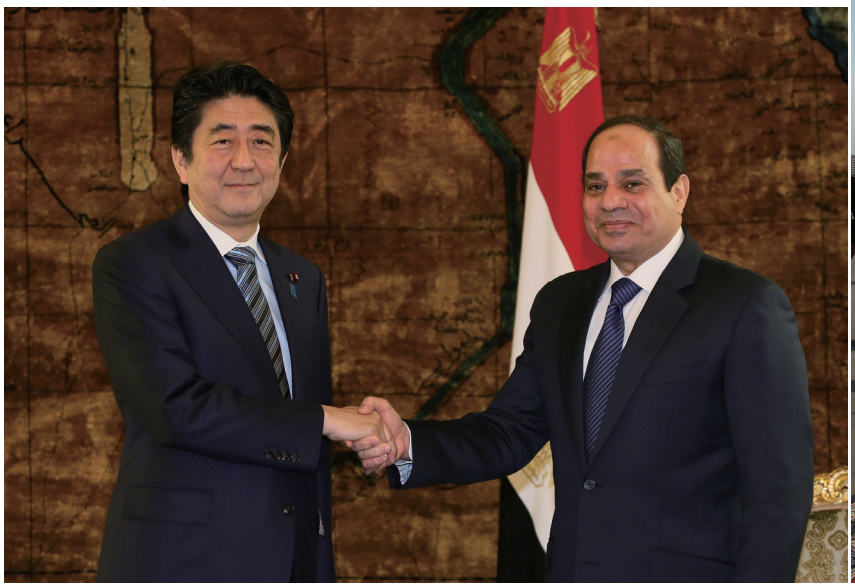
Kairakuen, which was completed in 1842, is located a seventy-minute train ride from Tokyo and has long been famous for its plum blossoms. About 3,000 plum trees of 100 different varieties are planted in the 13-hectare garden. Many people visit every year to see the plum trees in bloom.

A yellow-green Japanese white-eye (also known as *mejiro*) perched chirping among pink plum blossoms is a representative visual motif of the coming of spring.

**Rapeseed Blossoms: Hama-rikyu Gardens, Tokyo**

Many people are familiar with rapeseed blossoms as a sign of the arrival of spring. In that season, you can see them in many places. Rapeseed is a truly multitalented plant: the flowers are not just beautiful; they are also edible, and the seeds are a source of vegetable oil!

A field of rapeseed in bloom is like a yellow carpet spreading into the distance. At Hama-rikyu Gardens, in the heart of Tokyo, about 300,000 rapeseed plants bloom in spring. The contrast between the flowers in the foreground and the skyscrapers in the distance is the epitome of the Tokyo landscape.




# Moments of Prime Minister Abe in Winter 2015

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1. Prime Minister Abe at a bilateral meeting with Egyptian President Abdel Fattah el-Sisi (January 2015). 2. Prime Minister Abe being welcomed by Egyptian Prime Minister Ibrahim Mahlab (January 2015). 3. Prime Minister Abe being welcomed by His Majesty King Abdullah II of Jordan (January 2015). 4. Prime Minister Abe observing the construction site of the future Grand Egyptian Museum (January 2015).


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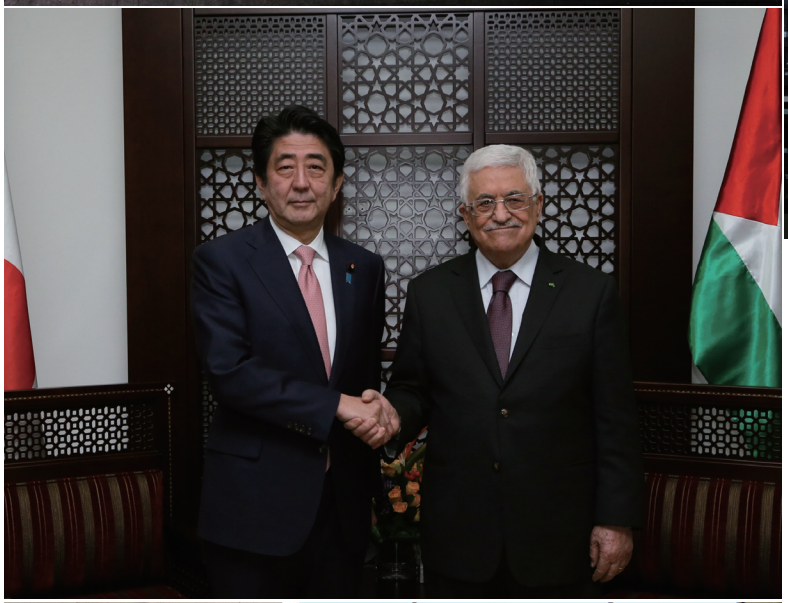
5. Welcome ceremony at the Office of the Prime Minister of Jordan (January 2015). 6. Prime Minister Abe at a bilateral meeting with His Majesty King Abdullah II of Jordan (January 2015). 7. Prime Minister Abe with Israeli Prime Minister Benjamin Netanyahu visiting an exhibition by Israeli companies (January 2015). 8. Prime Minister Abe at a bilateral meeting with Israeli Prime Minister Benjamin Netanyahu (January 2015). 9. Prime Minister Abe paying a courtesy call on Israeli President Reuven Rivlin (January 2015).

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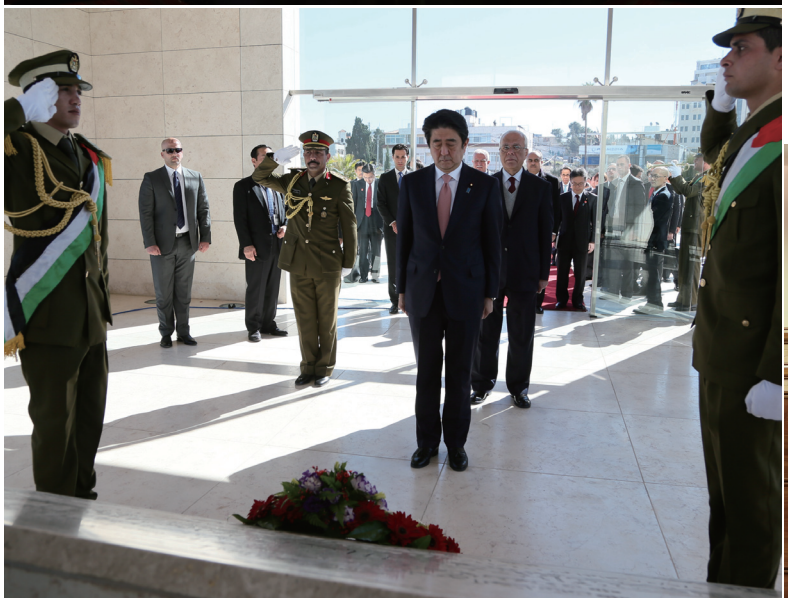
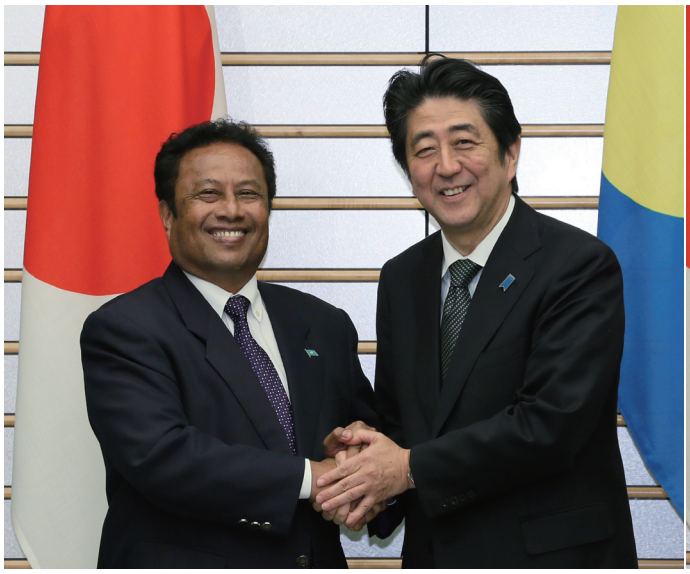
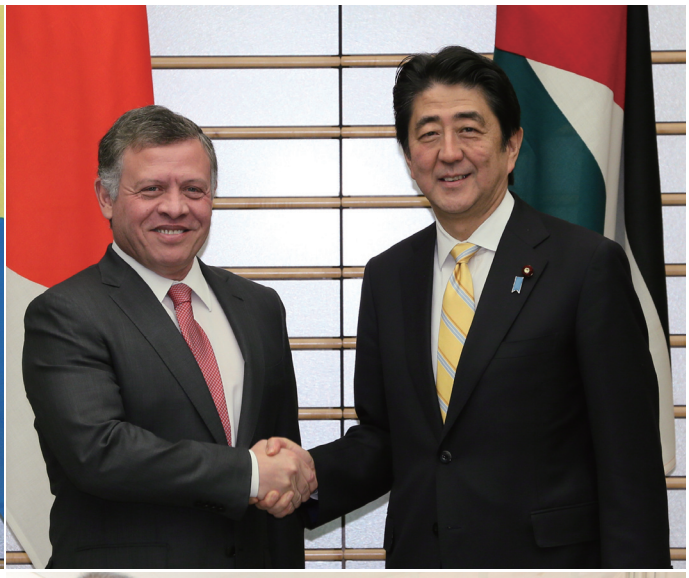
1&2. Prime Minister Abe visited the Yad Vashem Holocaust Memorial Museum in Israel and offered flowers at the Hall of Remembrance (January 2015). 3. Prime Minister Abe at a bilateral meeting with Palestinian President Mahmoud Abbas (January 2015). 4. Prime Minister Abe visiting the mausoleum of the late Yasser Arafat, chairman of the Palestine Liberation Organization, where he offered flowers at his grave (January 2015). 5. Prime Minister Abe making a joint press statement with President Mahmoud Abbas (January 2015).







6. Prime Minister Abe at a bilateral meeting with Palauan President Tommy E. Remengesau, Jr. in Japan (December 2014). 7. Prime Minister Abe at a bilateral meeting with His Majesty King Abdullah II of Jordan in Japan (November 2014). 8. Prime Minister Abe visiting a shelter for victims of the earthquake whose epicenter was in northern Nagano Prefecture (November 2014). 9. Prime Minister Abe taking the first mass-produced fuel cell vehicle (FCV) for a test drive at the Prime Minister's Office (January 2015).

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# "The Best Way Is to Go in the Middle: Towards a Stable Middle East Imbued with Vitality — Japan and Egypt Turning a New Page — "

## Excerpts from the Keynote Speech by Prime Minister Shinzo Abe Delivered in Egypt, January 17, 2015

Full text: http://japan.kantei.go.jp/97_abe/statement/201501/17egypt.html


Two years ago, when I announced in Jidda Japan's new policy towards the Middle East, I stated that I wished to make "harmony and tolerance (al-tasaamuh)," together with "coexistence and co-prosperity (al-ta'aaish)" and "collaboration (al-ta'aun)," our leading principles. I have pursued our Middle East policy exactly along those principles. This time my attention is on the idea "Khair Al-Umuri Ausatoha" or, "the best way is in the middle," which represents your ancestral wisdom. In terms of placing importance on tradition and valuing moderation, Japan and the Middle East share strong commonalities in our fundamental approaches to life.

It goes without saying that the stability of the Middle East is the foundation for peace and prosperity for the world, and of course for Japan. Should we leave terrorism or weapons of mass destruction to spread in this region, the loss imparted upon the international community would be immeasurable. Since the end of the Second World War, Japan has concentrated earnestly on building a nation that values freedom and democracy, human rights, and the rule of law. The unwavering path we have taken to this day is one adhering to peace. Japan, which now bears the banner of "Proactive Contribution to Peace Based on the Principle of International Cooperation," is determined to devote readily the experience, wisdom, and capacity it has nurtured towards enhancing world peace and stability. Based exactly on those thoughts, my government pledged two years ago assistance of 2.2 billion U.S. dollars towards the entire region of the Middle East. The entirety of that has already been put into execution. A stable Middle East that is vibrant. A stable Middle East backed by the spirit of Khair Al-Umuri Ausatoha. A stable Middle East where people can live without anxiety. Japan's assistance always aims at no less than restoring stability in the region. Let us just imagine how much potential you could unleash in Egypt, in the region, once your society has restored stability and again ensured the path towards growth. Japan wishes to be a never-failing running mate to you as you work towards that future. The Government of Japan will newly carry out assistance of 2.5 billion U.S. dollars in non-military fields including humanitarian assistance and infrastructure development, intended for the entire region.

In Egypt, we will assist in the expansion of Borg El-Arab International Airport, which is close and convenient to E-Just and to a promising industrial location. We have decided to provide

360 million U.S. dollars in ODA loans as assistance for this project and for the development of the power grid. Japan will provide state-of-the-art, environmentally friendly technologies as assistance towards your transportation infrastructure, like the Cairo Metro, as well as renewable energy and thermal power. These are intended to contribute to Egypt's development, and by extension, to widening the foundation for stability across the entire region.

First in Amman, I will confirm our unwavering support to the Government of Jordan, a country that stands at the front line facing the unfolding situation. I intend to express to King Abdullah II my sincere respect for his efforts towards interfaith reconciliation. In Palestine, I will set out measures that will help enhance the stability of people's livelihoods, in areas such as healthcare, water supply, and assistance for refugees in the West Bank and Gaza. We are going to provide assistance for refugees and displaced persons from Iraq and Syria. We are also going to support Turkey and Lebanon. All that, we shall do to help curb the threat ISIL poses. I will pledge assistance of a total of about 200 million U.S. dollars for those countries contending with ISIL, to help build their human capacities, infrastructure, and so on. In Iraq, it is absolutely necessary to have a stable government through a Cabinet of national reconciliation, inclusive of all political parties. Japan will continue to provide assistance to help support such efforts.

Believing that dialogue that includes neighboring countries is indispensable, and that cooperation and building trust among these countries are also indispensable in advancing the peace process, nine years ago Japan proposed launching a "Corridor for Peace and Prosperity" on the West Bank. The agro-industrial complex that is at the core of the corridor project has now taken shape. In the not so distant future, agricultural products from around Jericho will receive added value there. They will then make their way through the corridor to reach consumer markets in the neighborhood and in the Gulf region. Over time, the "Corridor for Peace and Prosperity" might well turn into a great destination for tourists. Shall we not work to make Palestine a place bustling with tourism? Japan will gladly serve as a catalyst to make that happen. Now, for 18 long years since 1997, the Japanese government has been inviting young men and women from both Israel and Palestine to Japan to let them mingle with each other while spending time in the country.

I would like these young people in particular to become a young force shouldering the responsibility of peace. Japan believes that the day will come in the near future when we can recognize Palestine as a state. In order for that day to arrive sooner, we will appeal to both Israel and Palestine to resume negotiations to advance the so-called Two-State Solution. Please also call to mind the framework known as the Conference on Cooperation among East Asian Countries for Palestinian Development, or "CEAPAD." Japan, which revived from the devastation of war, and the countries of Southeast Asia, which have achieved rapid economic progress in only a single generation, have an abundance of experience and wisdom to be harnessed in assisting Palestine. This framework began under the auspices of Japan and aims to help build collective knowledge to be used for Palestine. Japan has been a country engaged in enduring cooperation over the long term in order to cultivate trust, which is indispensable for peace in the Middle East. I would like to add that Japan stands ready to undertake with great willingness whatever role is appropriate for us to carry out.

The Middle East… that's the region endowed with great possibilities. And yet now it appears to be no exaggeration to say that the region is exposed to a challenge that is among the most serious in its modern history. I pay the greatest tribute to your efforts to stride towards stabilizing people's livelihoods over all else, by choosing not extremism but gradualism. The world will be truly blessed when the Middle East steadily takes that enormous step, aiming at tolerance rather than hatred, and embracing moderation. We pledge to continue our efforts to assist in bringing about coexistence and co-prosperity, harmony and tolerance through collaboration and, yes, moderation in the Middle East. To that end we will spare no effort to apply our capabilities and wisdom to the greatest possible extent.

# Struggling with Natural Disasters

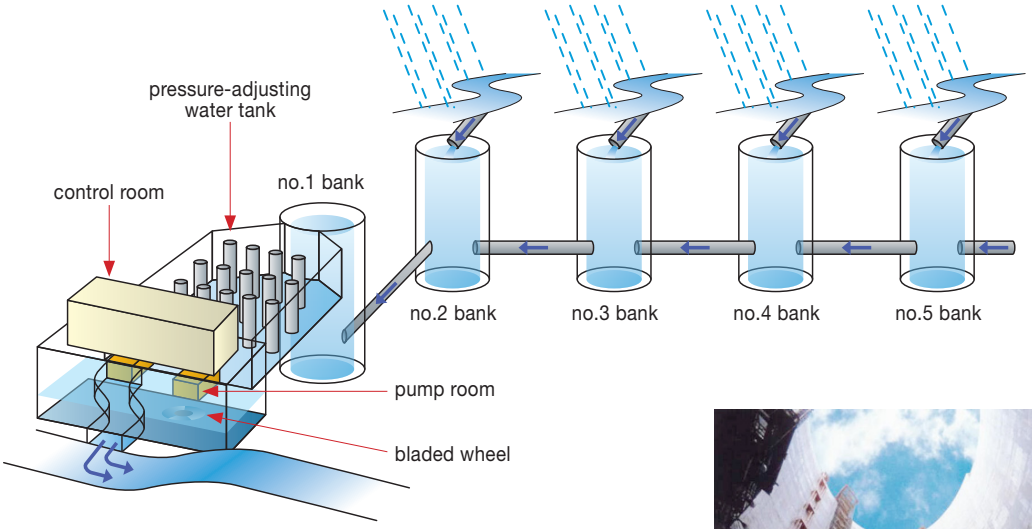
## Underground Facilities Protecting the City from Flood Damage

Inside of the pressure-adjusting water tank of the Metropolitan Area Outer Underground Discharge Channel.

These photos show the Metropolitan Area Outer Underground Discharge Channel. The facility, which is 6.3 kilometers (3.9 miles) long, is located 50 meters (164 feet) below the trunk road of metropolitan area. When heavy rain falls, it prevents floods by temporarily storing vast amounts of rainwater and discharging it to the remote rivers. It is an immense facility supported by a wide variety of new technologies, including flood flow inlets, water flow control mechanisms, and high-powered pumps to discharge the stored water to the rivers after the flooding has subsided. This has resulted in dramatically less flood damage in the 987-square-kilometer (381-square-mile) river basin surrounding Tokyo.

While structures such as river levees and dams are important in protecting residents from flood damage, facilities like this also play an unseen but crucial role.

## Design of the Metropolitan Area Outer Underground Discharge Channel

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1. Even the tunnels connecting each bank are immense. 2. View from inside one of the banks looking up. When flooding occurs, water comes down in torrents.

Due to its climatic and geological conditions, Japan experiences a variety of natural disasters including torrential rain caused by typhoons and seasonal rains, earthquakes and volcanic eruptions. And because a large portion of the country is steep mountainous terrain, most of its population and industry are concentrated in the limited flatlands. When a natural disaster occurs, its effects can easily escalate. Japan has continuously developed disaster measures to overcome such difficult conditions and is known as one of the most advanced countries in terms of disaster reduction. Following are some of Japan's latest efforts.

## Japanese Technology Takes on the Challenge of Water-Related Disasters

Since ancient times, Japan has persevered against frequent water-related disasters. Various technologies cultivated over many years of effort have yielded significant results in disaster reduction.

A continuous monitoring system is essential for reducing the damage caused by water-related disasters. Japan has honed weather observation and forecasting technology and developed an early warning information system that makes use of information and communications technology. By continuously monitoring the motion of the atmosphere from space with weather satellites, weather conditions can be ascertained as they change from one moment to the next.

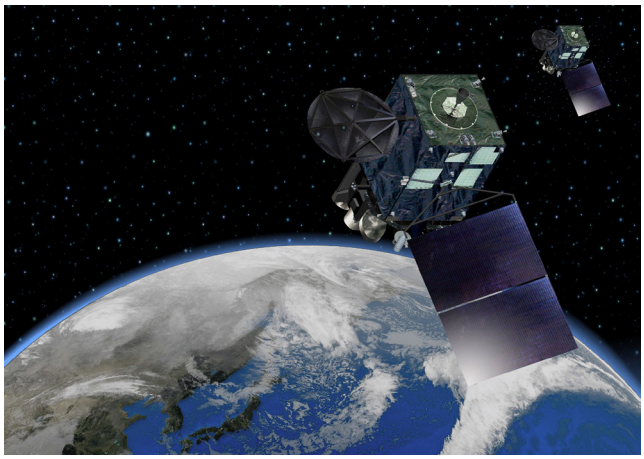
Japan plans to start operations of the world's first next-generation meteorological satellite (Himawari-8) in 2015. It is drawing attention from around the globe because of its sophisticated monitoring capabilities—boasting three times the number of functions, three times the observation frequency, and double the resolution of current satellites.

But this alone is not enough to grasp hard-to-ascertain localized weather conditions. To accomplish this, Japan has deployed the X-band polarimetric (multiparameter) Radar Information Network (XRAIN). The first of its kind to reach practical application, XRAIN provides detailed measurement of rainfall focusing on metropolitan areas. This radar network measures at a resolution sixteen times higher, and collects data at a frequency five times higher than that of conventional systems and sends that data in real time. By estimating rainfall from the shape of raindrops and ascertaining their direction and speed, it can accurately estimate the amount of rainfall—providing a powerful tool for predicting a water-related disaster within thirty or sixty minutes. The information obtained is widely accessible to the public via smartphone apps and other devices.

Furthermore, in response to a request for technical cooperation from the government of Thailand, which suffered from severe flood damage in 2011, Japan developed and provided a flood forecasting system. Implementing the latest technology combined with water-level observation and satellite data, it has become the world's first forecasting system capable of predicting areas where flooding may occur, with the accuracy and speed required for practical use. The flood forecast information is widely and easily accessible via computers and mobile devices.

A water management simulator was also developed at the same time, enabling the Thai government to achieve better flood management. It easily provides accurate results of simulations of river discharge related to operation of flood control facilities, including reservoirs. This simulator, jointly developed, was built based on the assumption that it would be operated by the Thai government, which greatly welcomed its development. In this way, Japan's cutting-edge technology is widely used by the people of Thailand today, and is effective in reducing flood damage.

By mobilizing its advanced technology, Japan continues its contribution to the reduction of damage from water-related disasters around the globe through utilizing such knowledge, technology, and experience.



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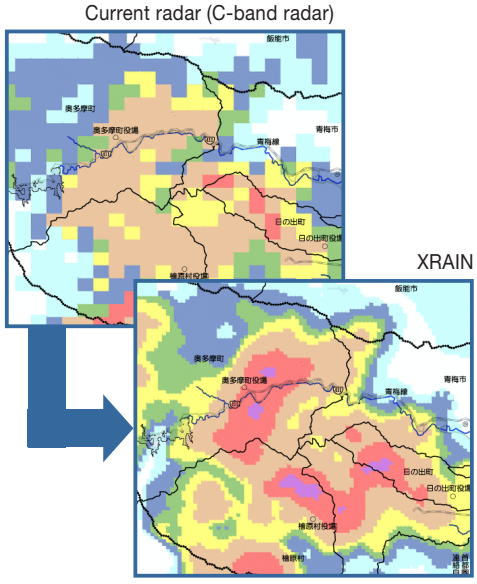
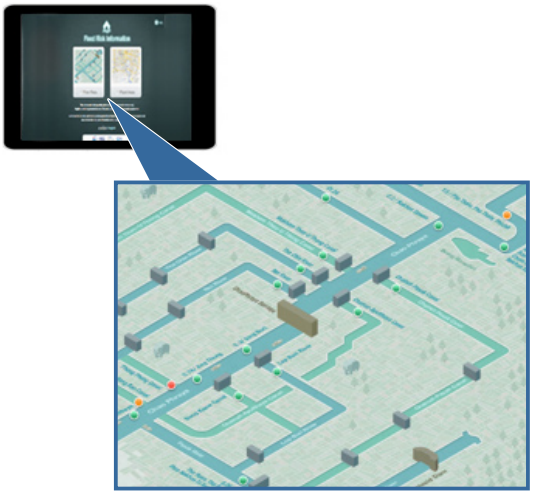
1. An Image of the Himawari-8 satellite, which is equipped with cutting-edge technology. *Himawari* means sunflower. 2. The XRAIN system can observe and distribute information about the precipitation in more detail. Compared to conventional systems, XRAIN can operate with five times higher frequency and in sixteen times higher resolution. 3. Useful observation data is distributed via mobile devices. By pointing your phone towards the sky, rain distribution is displayed on the screen, and by pointing it towards the ground, rainfall of the surrounding area is displayed. 4 & 5. The flood forecasting system for the Chao Phraya River in Thailand is easy to use even for non-specialists and can be accessed from tablet devices. Cutting-edge technology makes quick and accurate flood forecasting possible.





## Earthquake Countermeasures of the Shinkansen

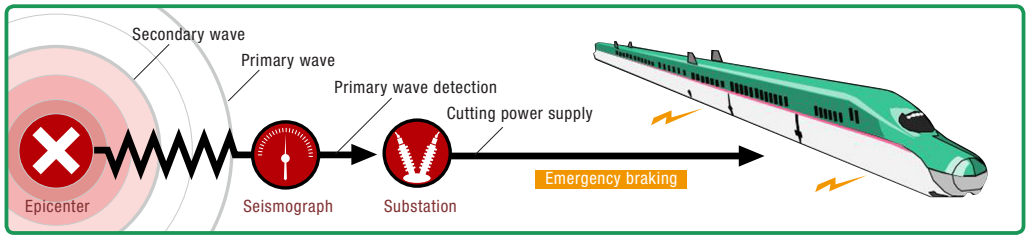
The year 2014 marked the fiftieth anniversary of the Shinkansen, Japan's high-speed rail. Its record of zero injuries and fatalities throughout numerous major earthquakes is due to the ceaseless efforts of everyone involved in its operation and development.

Since it began service, the Shinkansen has been equipped with an early earthquake detection system. When the first slight tremors from seismic waves are detected, electrical power is shut down, and the emergency brakes are applied, thereby reducing the speed of the train to a considerable degree before the strong tremors hit. The system is constantly upgraded, and it currently takes only about two seconds for the system to activate the device after primary seismic waves are detected.

Sophisticated earthquake countermeasures have been implemented in ground facilities as well. During the Great Hanshin-Awaji Earthquake in January 1995, elevated rails of the Shinkansen collapsed, causing massive damage. In light of this bitter experience, the railway companies retrofitted the elevated rail bridges against earthquakes, performing work such as reinforcing the bridge piers with steel plates. Since then, no bridge piers have been seriously damaged in major earthquakes.

During the magnitude 6.8 Chuetsu Earthquake in October 2004, a train in service derailed. Fortunately, the cars did not come off the tracks completely and did not overturn because the rail became caught between the wheels and the equipment under the cars, causing the train to stop. Having learned from this incident, the railway companies equipped cars and tracks with derailment prevention devices.

These combined measures have proved successful, and during the Great East Japan Earthquake, all twenty-seven trains in service at the time stopped safely the moment the quake hit. Such accumulated countermeasures implemented in both ground facilities and trains, developed based on experience, ensure the safety of high-speed rail service.

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1. The Early Earthquake Detection System demonstrates its extraordinary effectiveness each time an earthquake hits, ensuring the safety of the high-speed rail service. Development is currently under way to improve the system's accuracy and response speed. 2. The pillars of elevated tracks have been seismically reinforced with steel plates. The white areas are the parts that have been reinforced. 3. Several measures are in place to prevent derailment. One such measure is the Derailment Prevention Guards installed inside the rails. Another measure is the installation of protrusions to prevent derailment placed on either side of the cars.

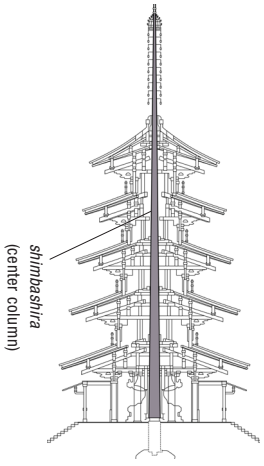
## World's Tallest Freestanding Broadcast Tower Fuses Traditional and Leading-Edge Technologies to Ensure Safety

Completed in February 2012, TOKYO SKYTREE® boasts a height of 634 meters (2,080 feet), making it the world's tallest freestanding broadcast tower. In Japan, a country prone to earthquakes, it is crucial that the tower be able to maintain its function as a broadcast tower and transmit information in times of disaster. Therefore it was extremely important that the tower be designed to withstand earthquakes.

One of the technologies to ensure this is the vibration control system developed for this tower. The system consists of two structurally independent parts, a center column, or *shimbashira* (心柱), and the surrounding frame (the main body of the tower), which sway differently when an earthquake hits, thereby counteracting the swaying of each structure, and reducing the overall shaking caused by the quake. A 375-meter (1,230-foot) column rises through the center of the tower. From the ground level for the first 125 meters (410 feet), it is fixed to the steel frame of the tower body, but beyond that it is separated from the frame, connected loosely only by oil dampers. During an earthquake, they move with different resonant frequencies, thus limiting the swaying of the tower.

The system gets its name from the center column used in wooden multistory pagodas—a traditional form of Japanese architecture. Among all the wooden multistory pagodas across Japan that have stood for hundreds of years, including the 31.5-meter (103-foot) five-story pagoda at Horyuji, a classic temple built around A.D. 680, almost none have collapsed in an earthquake. Its structure, in which the center column is structurally independent from the wooden frame of the main body, has remained the same for over 1,300 years, to this day.

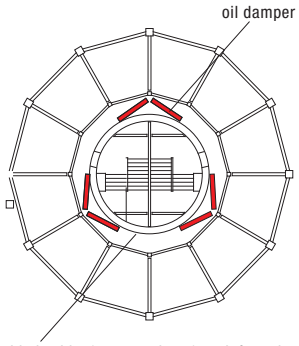
Japan's disaster countermeasures have evolved by combining traditional and advanced technologies.




Five-story pagoda and center column:
The center column that rises through the center of the tower connects to the main body only at the peak of the top story. There is a gap between the column and the body from the first through the fourth stories.

Image provided by A&W DESIGN.

**Cross-section showing shock-absorbing zone around the center column**




*shimbashira* (center column) : reinforced concrete cylinder

Image provided by Nikken Sekkei LTD.

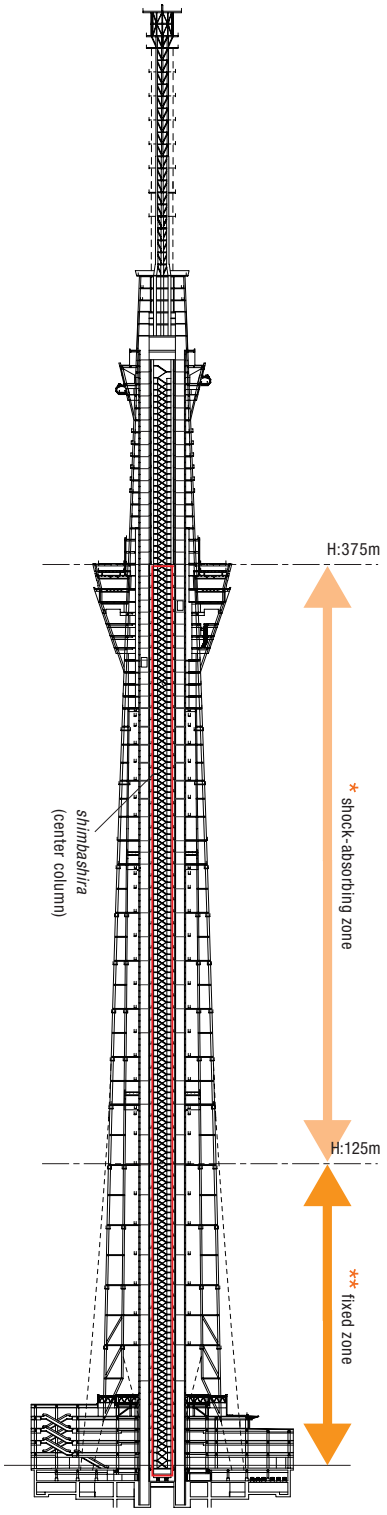



Image provided by Nikken Sekkei LTD.

* : The center column not fixed to the walls steadies the structure through the shock-absorbing function of the oil dampers.

** : The column is fixed to the surrounding steel structure with steel beams.

# International Disaster Relief Operations in the Philippines

From November 8 to 9, 2013, large-scale typhoon No. 30 directly hit the center of the Philippines. Following a request from the Philippine government, whose country suffered catastrophic damage, the Japanese government decided to conduct international disaster relief operations on November 12.

On that day, Japan's Self-Defense Forces (SDF) formed an international disaster relief team consisting of fifty people, including medical teams, and dispatched them to the Philippines one after another. After their arrival, the medical teams provided medical treatment in Tacloban and Cebu. In view of further requests sent by the government of the Philippines and the situation on the ground, Japan decided to expand their operations on November 15. Following this decision, the largest task force ever was formulated. An organization called the Joint Operations Coordination Center was also established in the capital city of Manila. This Center, consisting of 1,100 personnel, closely coordinated with the Embassy of Japan and Japan International Cooperation Agency (JICA) in the Philippines. It also coordinated with relevant Philippine organizations and other countries, such as Australia, the United Kingdom, and the United States, via the multinational coordination center set up in Manila.

The joint task force, named the "Philippines International Disaster Relief Team," conducted integrated operations on land, sea and in the air: 2,646 people received medical care; 11,924 people were vaccinated; epidemic control operations were conducted over approximately 95,600 square meters; approximately 630 tons of supplies were transported by air; and approximately 2,768 people were airlifted. Specifically, the SDF provided support that met regional needs by working closely with the local government and others. For example, Japan cooperated in a vaccination campaign following a local request and participated in epidemic control operations in Tacloban and neighboring areas.

Based on consultation with the Philippine government, the Japanese Minister of Defense terminated disaster relief operations on December 13, 2013, wrapping up a month of activities. President of the Philippines Benigno Aquino III, the mayor of Daanbantayan (in northern Cebu), and other local authorities expressed their appreciation for Japan's support and the SDF activities. Local residents invited SDF representatives to ceremonies to thank them for medical assistance. Additionally in subsequent days, the government of the Philippines sent thank-you letters to each SDF member who worked on the international disaster relief operation.

The SDF will continue to work with other relevant organizations to actively promote international cooperation in relief operations in the wake of the major natural disasters and similar crises outside Japan. It will also contribute to the well-being of the international community, and fulfill Japan's obligations to the community of nations.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1 & 2. The Self-Defense Forces (SDF) medical team at work. 3. Epidemic control by SDF members. 4. Children pose for a photo with a member of the SDF. 5. Upon completion of the medical team's activities at a local elementary school, the team took a commemorative photo with local children.

# Japanese People Contributing Worldwide

## The Cardboard Tube Architect of Action

Often referred to as the "Nobel Prize of architecture," the Pritzker Architecture Prize is awarded to architects who have done remarkable work. In 2014, the prize was awarded to Japanese architect Shigeru Ban. His most important works include the Centre Pompidou-Metz in France and the Aspen Art Museum in the United States, but it was his relief efforts in disaster-stricken areas that won him the award. When asked about the reason for engaging in such efforts, Ban said, "An earthquake doesn't cause fatalities; the collapse of a building causes them. As an architect, I believe it is my responsibility to address this issue." It is this conviction that drove him to become an "architect of action."

One thing that makes him stand out is the unique building materials he uses. He incorporates bold ideas in his work, including using shipping containers, furniture, and even beer crates. But he is perhaps best known for his use of cardboard tubes made from recycled paper. They are readily available anywhere, lightweight, and recyclable. And treating them with fireproof and waterproof coating makes them an outstanding building material. He created the Japan Pavilion at Expo 2000 in Hanover, Germany, with cardboard tubes, and it attracted a great response.

Such efforts overlap with "ecological architecture," a field that has gained prominence in recent years. However, "That was not my aim," says Ban. "I was wondering whether there was a good alternative material to wood and came up with cardboard tubes." He continues, "The idea came from the constraint of trying to cut building costs as much as possible." The result was an ecological and sustainable design, and before he knew it, he found himself at the cutting edge of the field.

His disaster relief efforts began in Rwanda in 1994. Ban approached the Office of the United Nations High Commissioner for Refugees (UNHCR) on his own and proposed the idea of making temporary shelters for refugees with cardboard tubes and plastic sheets, which the office adopted. In 1995 he used cardboard tubes to rebuild a church in Kobe that had been destroyed by fire in the Great Hanshin-Awaji Earthquake. "If it is loved and cared for by the people who use it, a so-called 'temporary' structure can become a monument, something permanent," says Ban. And, true to his words, the "Paper Dome," originally built as a temporary church, was used with care for ten years. Then, in response to a request from an earthquake-stricken region in Taiwan, the structure was donated and shipped there, where it is loved by the local people to this day. This is what Ban strives for in his architecture.

Recently, he built the Cardboard Cathedral in Christchurch, New Zealand, which was struck by an earthquake in 2011. Locals expressed gratitude for the beautiful, warm building, saying that it "gave us hope" and "lifted our spirits."

"For me, both standard architecture and temporary housing are projects equally worth doing," explains Ban, "There is no difference between the two." After the Great East Japan Earthquake, he built temporary three-story housing using shipping containers. Tenants praised the amazing workmanship, with one resident saying, "Although it's supposed to be temporary, I want to live here forever." At present, Ban is engaging in previously unthought-of projects. One example is working with a home-building company to develop a material that combines polyurethane with fiberglass-reinforced plastic. The new material would be used to manufacture housing for low-income households in developing countries in normal times, and switching to manufacturing temporary housing for affected areas in times of disaster.

Shigeru Ban has consistently brought new perspectives to the world of architecture. The "architect of action" is constantly evolving and shows no sign of stopping.

**Shigeru Ban**

Born in Tokyo in 1957, Shigeru Ban graduated from the Cooper Union School of Architecture in New York in 1984. While enrolled, he worked for Arata Isozaki & Associates. In 1985 he founded Shigeru Ban Architects, which has offices in Tokyo, Paris, and New York. He was awarded the Order of Arts and Letters (with grade of commander) from France and the Pritzker Architecture Prize. His current architectural project is the Cité Musicale, a concert hall in Île Seguin, Paris.

One of Ban's most important works: the Centre Pompidou-Metz, a provincial branch of the Centre Pompidou built in 2010. Its roof is made of wood and features beautiful organic curves (photo by Didier Boy de la Tour).

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1. The Cardboard Cathedral in Christchurch, New Zealand, built with locally procured cardboard tubes and shipping containers. It can accommodate 700 people. (photo by Stephen Goodenough) 2. Paper Emergency Shelter for UNHCR, which Ban constructed as temporary shelters for Rwandan refugees (1999; Shigeru Ban Architects). 3. The Paper Dome transported from Kobe and rebuilt in Taiwan in 2008. It is currently being used as a community center. (photo by Yen Hsin-Chu)

# The Road to Revival

## Overseas Students and Local Leaders Working Together Towards Recovery and Beyond

As the cold winter wind blew outside, a group of young people from abroad visited enterprises in the areas hit by the Great East Japan Earthquake, discussing business strategies passionately. They were students from the Harvard Business School (HBS) with Professor Hirotaka Takeuchi, also of HBS. Their visit to Japan consisted of two weeks of fieldwork in the school's Immersion Experience Program, an elective course in the second year of the MBA program. Since 2012, HBS students have been coming to the Tohoku region every year. In 2015, the program had twenty-eight participants. Let's take a look at their activities.

### Aiming for the Global Market with High-Quality Marine Products

Five of the students visited a group of young fishermen and marine product retailers aiming to make changes in their industry. Yuki Tsuda runs fish shops based in Ishinomaki, Miyagi Prefecture, and he is working to raise the quality of marine products. "Branding, quality control, and marketing are important aspects of this business. I would like to establish unparalleled best practices that lead to a movement to increase the quality of all Japanese marine products." Tsuda and his colleagues are looking for new markets at home and overseas and will branch out into Southeast Asia. "I want people in other countries to taste the fresh, high-quality fish we produce in Japan. And we also want to disseminate ways of eating fish and the culture associated with it to avoid having our products be thought of as 'merely expensive.'"

The students were impressed by Tsuda's passion and asked him many questions. The discussion went on for over two hours. Comments by students included, "I was moved by the way he was working, not just for his own profit, but for the good of society," and "This will become a global case study for recovery and development after a natural disaster."

### Creating Local Employment with New Work Styles for Farming

Another four students visited a chrysanthemum and tomato farm in Minamisanriku, Miyagi Prefecture. Before the earthquake, Masamichi Ono ran a farm with his family. He established a company based on his family farming business to create employment and is now proposing new ways of working for people in the area who lost both their livelihoods and the occupations they loved. Says Ono, "It has nothing to do with age or experience. An hour at a time, even twice a week, is enough. I wanted people to come out to the fields the same way they'd go out for a walk and to make some money in agriculture—that's the sort of environment I wanted to create." People who suffered damage in the disaster have spent time together in the fields, and human contact has helped them recover. "When people told me they were sleeping better, I felt as though I had helped them in some ways," he says.

The students listened closely as Ono spoke with great conviction about his experiences. One student said, "It seemed very Japanese to me that he thought of his employees as if they were his own family and put the importance of his employees finding 'meaning in life' ahead of his own profits."


### Expanding Possibilities for New Businesses

Deeply inspired by the leaders of Tohoku recovering from the unprecedented Great East Japan Earthquake and their creating new ways to develop their enterprises, HBS students from overseas, offer ideas on management and business strategy. They will play a major role in the next-generation business arena, and this sort of collaboration will expand the possibilities for new businesses.


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1. HBS students observe farmed oysters being shucked at an oyster plant. 2. A discussion between Yuki Tsuda and the students. 3. Says Tsuda, "I would like to increase the awareness of problems among people connected to the fisheries and expand our group." 4. Kazuki Suzuki and his freshly harvested farmed oysters. 5. Students and Professor Takeuchi meet with local fishermen.

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6. HBS students listen closely to Masamichi Ono (center) at his workshop. 7. Delicate chrysanthemums raised by Ono. One of the students said, "I can almost see Mr. Ono's gentle personality in his chrysanthemums." 8. A smiling Ono shows the group his chrysanthemum greenhouse. 9. Students make bouquets of chrysanthemums and discuss ideas on how to turn them into products.

# Tokyo DMAT—Saving the Lives of Thousands

## Achievements of the Mobile Emergency Care System

Have you ever heard of "crush syndrome"? It refers to situations in which a person has been crushed under a heavy load, such as bricks, for a long period of time and, after being rescued, dies suddenly; crush syndrome drew significant attention after the Great Hanshin-Awaji Earthquake. This syndrome, against the backdrop of an increased need for appropriate on-site medical treatment, prompted the Tokyo Metropolitan Government to launch a new emergency care system of rapid-response medical teams in order to reduce such preventable fatalities after a disaster. The teams are known as the Tokyo DMAT (Tokyo Disaster Medical Assistance Team).

There is a reason this is called a "new" emergency care system. Conventionally, emergency medical treatment during a disaster consists of the rescued patients being transported by an emergency response team to a hospital equipped to take them, where they receive medical treatment. But Tokyo DMAT takes a new approach, in which doctors team up with nurses and other medical personnel and rush to the scene of the disaster. The teams are operated by the Tokyo Metropolitan Government, which enables them to work closely with the Tokyo Fire Department. When the department receives an emergency call, it first sends a team to the hospital to pick up DMAT-certified doctors and nurses. Then the team speeds to the disaster scene where injured victims are. This way the doctors can start treatment promptly under safe conditions and let the firefighters concentrate on rescue operations. Furthermore, performing triage—a process of quickly determining the priority of patients' need for treatment based on the severity of their injuries—has enabled them to reduce preventable disaster fatalities as much as possible.

As the Tokyo DMAT is run by the Tokyo Metropolitan Government, not by hospitals, it can operate 24 hours a day, 365 days a year, and it takes only five minutes to dispatch a team to the scene of a disaster when it occurs. Teams consist of a minimum of three people, and treatment is provided free of charge. Aside from disasters, their remarkable efforts can also be witnessed in other situations where treatment is needed, such as rail and traffic accidents. Currently, over 65 percent of the cases they respond to are accidents such as these.

When an accident or disaster occurs, Tokyo DMAT is on the scene to save as many lives as possible, regardless of which country the victims are from or where they live. And it continues to enhance its system and personnel. Its membership is growing steadily—at times, the program even receives more applicants than the number required—and all Tokyo DMAT personnel must undergo training in preparation for an actual disaster or accident.

It is difficult to measure the reduction of preventable disaster fatalities in numbers. But Tokyo DMAT continues its core efforts, filled with a mission to save as many precious lives as possible of those in immediate need, and to make Tokyo a place where everyone can live in safety.

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1. DMAT rushed to the area affected by the Great East Japan Earthquake. 2. DMAT rushing to the scene of an accident in Tokyo. (photo by The Mainichi Newspapers) 3. Training drill for triage on severely injured victims.


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4. DMAT requires many pieces of equipment. Teams must be equipped not only to perform first-aid measures inside the ambulance but also to carry out necessary medical treatment. 5. There is one DMAT car for each of the twenty-five designated hospitals in Tokyo. Each car is equipped with enough supplies, such as simple beds and food, to enable four adults to live for five days.

# Tsuruga: Port of Humanity

## International Exchange Seventy-Five Years Ago in Japan

Tsuruga is a port city in Fukui Prefecture facing the Sea of Japan. It is located where Japan's main island narrows in the middle, about 100 km (60 miles) northeast of Kyoto. At the turn of the twentieth century, when the Trans-Siberian Railway was completed, Tsuruga was the gateway for the fastest route between Japan and Europe. Ships carried passengers from Russia's easternmost city, Vladivostok, to Tsuruga, and the Europe Asia International Express was set up to run the last leg of the journey to Tokyo, making Tsuruga a very important transfer point. The city was filled with travelers, as were the shops and accommodations that served them. One little-known aspect of its history, though, is that many Jews fleeing Europe came to Tsuruga.

In 1939, when Nazi Germany was expanding its power in Europe, Jews in Poland were being driven from their own country. Many rushed to the Trans-Siberian Railway, the only escape route open to them. However, to board the train, one needed to have a visa for another country. Jews lined up for visas at the Japanese consulate in neighboring Lithuania. The vice consul, Chiune Sugihara, issued Japanese visas to as many Polish Jews as he could at his personal discretion, and, ultimately, these visas saved the lives of some 6,000 Jewish refugees. These are historical facts described as a Japanese version of *Schindler's List*.

With their visas, these Jews, having traveled across Siberia by railway and then crossing the Sea of Japan by ship, landed in Tsuruga, earning it the nickname "Port of Humanity." After a short stay in Tsuruga to prepare and arrange further travel, they continued on to Kobe or Yokohama, both of which are major port cities of Japan, and boarded ships for their final destinations.

These historical facts have been hidden away in dark memories surrounding the war. Even the people of Tsuruga are largely unaware of the role their town played, and, to make matters worse, many documents related to this story were destroyed in firebombing near the end of World War II. These memories were in danger of being lost. With the start of the twenty-first century, however, the heroic actions of Sugihara are coming back into the limelight. This has brought new opportunities to secure Tsuruga's place in history, and an attempt has been made to record the oral histories of local residents. As those with personal experience of interacting with the wartime refugees are now advanced in years, opportunities to speak with them directly are rapidly dwindling. That is why the information they provided was extremely valuable. Their interviews highlight what it was like. At first, the people of Tsuruga were fearful of their unfamiliar guests but eventually could communicate in some ways: seeing them in their forlorn state, a boy gave them apples, and the locals opened the public bath to them and provided them with the funds they needed.

These recollections have been gathered and displayed in the Tsuruga Museum, built near the harbor where the Jews had landed. Video interviews with surviving Jews who went on to live in other countries can also be seen there, alongside precious artifacts of wartime life.

So that these memories will not fade away forever, lessons on this dimension of Tsuruga's history have been incorporated in the curricula of local elementary and junior high schools, and new exhibits are being added to the museum's displays. These will serve to communicate the role of Tsuruga to future generations.

According to representatives of Tsuruga, "We hope that many people come to visit our museum to see the role Tsuruga has played in history and how people interacted with the Jewish refugees, and also to get to know the Tsuruga of today." One can sense the great pride and comfort that the people of Tsuruga take in their history.

Port of Humanity, Tsuruga Museum's official website:
www.tmo-tsuruga.com/kk-museum/index_e.html

©The Asahi Shimbun


The international shipping route from Vladivostok to Japan which was in regular operation.

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1. The port of Tsuruga at the time. It played an important role as a gateway to Europe. 2. The Jewish refugees arriving at the port of Tsuruga.

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3 & 4. Records including photographs, displays, and video footage in the Museum tell the story of the exchange between the townspeople and the Jews to the present generation. 5. View of the Tsuruga Museum, built on the site of the former Tsuruga Port Station.

# Friends of Japan

In this report we introduce the life and work of a friend of Japan.

## Rogier Uitenboogaart

Born in The Hague, the Netherlands, in 1955.
After coming to Japan in 1980, he has spent thirty-five years making paper by hand as a *washi* artist.

# Under the Spell of *Washi* for Thirty-Five Years

Handmade *washi* (Japanese paper) is admired for its unique texture and beauty all over the world. Drawn by its appeal, Rogier Uitenboogaart traveled from the Netherlands to Japan thirty-five years ago and has dedicated himself to making *washi* ever since. He works at his own studio in Yusuhara, a mountain community in Kochi Prefecture with just fifty inhabitants, and in 2007 he was certified as a master of traditional craftsmanship in the local certification program. Through exhibitions of his work and apprentice training, he is also working to share the magic of *washi* with others.

Uitenboogaart first encountered *washi* in 1980, when he was working at a bookbinding studio while studying modern art at an art university in Amsterdam. While examining a collection of binding samples, he discovered something that he had never seen before: traditional Japanese paper. "A new world opened up in the texture of the paper. If I held it up to the light, beautiful ethereal rays burst through into my vision and stirred my spirit." He decided that he wanted to see a country where people lived in homes made of wood and paper. Six months later, he was heading east on the Trans-Siberian Railway.

After visiting *washi* studios around Japan, he studied how to make paper in Ino, Kochi Prefecture, for eleven years. In 1992, he moved to Yusuhara in the same prefecture, where the water is clear, the climate cool, the traditional mountain village culture remains, and established his own studio. He follows a basic policy of growing his own paper mulberry trees and *mitsumata* bushes for raw materials and using no chemicals, such as preservatives and bleaching agents. "I believe good paper can be made only when there is a connection with nature," Uitenboogaart says. This is why he insists on sticking firmly to traditional methods.

It is also important to him to maintain an active relationship with the local people and community. He teaches children from area elementary schools to make *washi*, and every year the sixth-graders make the paper for their graduation certificates themselves. He has also worked with local people to grow and harvest *mitsumata* bushes.

In November 2014, the craftsmanship of traditional Japanese handmade paper was added to the UNESCO Intangible Cultural Heritage of Humanity list. Despite this global recognition of *washi*'s charms, Japanese people have less and less opportunity to encounter handmade paper in their modern lives.

"Even young people who know hardly anything about *washi* feel nostalgia and peace of mind when they touch a sheet of this paper. In itself, *washi* tells us of the relationship between humans and nature in ancient Japan, and I think that moves people's hearts," Uitenboogaart says. "Traditional papermaking consists of a series of processes completed by hand together with nature. *Washi* is made in dialogue with nature. Sometimes it goes well, and sometimes it doesn't, but that shows learning doesn't end and makes it fun."

# Websites

## Official Websites of the Government and Related Organizations

The following websites offer information from various ministries, information for tourists, and other information relating to the contents of this magazine.

### Prime Minister of Japan and His Cabinet


Cabinet Public Relations Office, Cabinet Secretariat

Information in English about Japanese government policies, speeches and statements by the prime minister, and press conferences by the chief cabinet secretary.

WEB http://japan.kantei.go.jp

https://www.facebook.com/Japan.PMO

https://twitter.com/JPN_PMO

### Japanese Government Internet TV


Public Relations Office, Cabinet Office

Videos from the Japanese government relating to the prime minister, press conferences by the chief cabinet secretary, videos of the imperial family, and more.

WEB http://nettv.gov-online.go.jp/eng/

### Ministry of Foreign Affairs of Japan


Ministry of Foreign Affairs

Information from Japan's Ministry of Foreign Affairs, with links to embassies and consulates overseas.

WEB http://www.mofa.go.jp

https://www.facebook.com/Mofa.Japan.en

https://twitter.com/MofaJapan_en

### JNTO (Japan National Tourism Organization)


Japan National Tourism Organization (JNTO)

Information about tourism in Japan, including videos and photos. In English and many other languages, including Chinese, Korean, French, and German.

WEB http://www.jnto.go.jp/

http://www.jnto.go.jp/eng/fb/index.html

(US)
https://twitter.com/Visit_Japan

### JETRO (Japan External Trade Organization)


Japan External Trade Organization (JETRO)

Information about how JETRO supports Japanese companies overseas, attracts foreign companies to the Japanese market, contributes to Japan's trade policy and conducts activities in developing countries.

WEB http://www.jetro.go.jp/

### JET (Japan Exchange and Teaching) Programme


Council of Local Authorities for International Relations (CLAIR)

Information about the Japan Exchange and Teaching Programme.

WEB http://www.jetprogramme.org

https://www.facebook.com/pages/JET-Programme/219440938121634

(US)
https://twitter.com/JETProgram

# Publications

## Official Publications from the Government and Related Organizations

The government of Japan and various organizations publish the following periodicals.

### Cabinet Office


#### "Highlighting JAPAN"

Aimed at people in other countries, this regular publication introduces the latest major government policies.

http://www.gov-online.go.jp/eng/publicity/book/hlj/index.html

E-BOOK PDF HTML

Monthly

### Ministry of Foreign Affairs


#### "niponica"

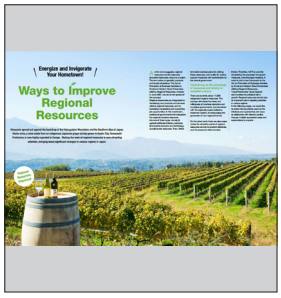
Using beautiful photographs, this journal illustrates the appeal of present-day Japan.

http://web-japan.org/niponica/index_en.html

E-BOOK PDF HTML

Three times a year

### Ministry of Economy, Trade and Industry




#### "METI Journal"

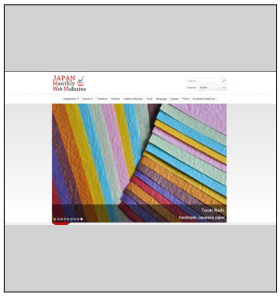
Explains policies being instituted by the Ministry of Economy, Trade, and Industry (METI) in an easy-to-understand manner.

http://www.meti.go.jp/english/publications/index.html

PDF

Bimonthly

### Japan National Tourism Organization



#### "Monthly Web Magazine"

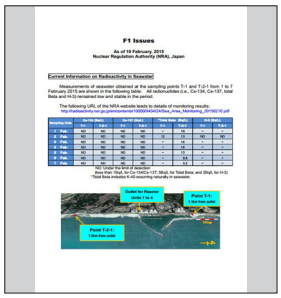
Each issue provides seasonal and updated information on three select features.

http://japan-magazine.jnto.go.jp/en/

HTML

Monthly

### Nuclear Regulation Authority




#### "F1 Issues Fukushima Daiichi NPS's Issues"

This releases information about the Fukushima Daiichi Nuclear Power Station, such as details about the monitoring of seawater since the accident caused by the Great East Japan Earthquake and subsequent tsunami.

http://www.nsr.go.jp/english/

PDF

About once a week

### Ministry of Defense


#### "Japan Defense Focus"

A monthly magazine that introduces various activities of the Ministry of Defense and Self-Defense Forces.

http://www.mod.go.jp/e/jdf/index.html#sub01

PDF HTML

Monthly

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Links to the websites of ministries

Cabinet Office http://www.cao.go.jp/index-e.html

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Ministry of Defense http://www.mod.go.jp/e/

Ministry of Economy, Trade and Industry http://www.meti.go.jp/english/

Ministry of Education, Culture, Sports, Science and Technology http://www.mext.go.jp/english/

Ministry of the Environment http://www.env.go.jp/en/

Ministry of Finance https://www.mof.go.jp/english/index.htm

Ministry of Foreign Affairs http://www.mofa.go.jp

Ministry of Health, Labour and Welfare http://www.mhlw.go.jp/english/

Ministry of Internal Affairs and Communications http://www.soumu.go.jp/english/index.html

Ministry of Justice http://www.moj.go.jp/ENGLISH/index.html

Ministry of Land, Infrastructure, Transport and Tourism https://www.mlit.go.jp/en/

Reconstruction Agency http://www.reconstruction.go.jp/english/

Nuclear Regulation Authority http://www.nsr.go.jp/english/

# The Government of Japan


JapanGov website


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WEB http://www.japan.go.jp

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iOS https://itunes.apple.com/app/japangov-official-gateway/id893574708?mt=8

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Kindle http://www.amazon.com/The-Government-of-Japan-JapanGov/dp/B00LEAM0I0

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