# the japan times **World Bosai Forum Special**

### FRIDAY, NOVEMBER 8, 2019





**Right: Advance** preparation for natural disasters is key to minimizing damage. Above: The area where the Yoshida River in **Miyagi Prefecture** overflowed as of Oct. 14, 2019. GETTY IMAGES MASAKAZU HASHIMOTO







## A resolute pledge for universal disaster preparedness

Biennial event gathers experts, survivors from across cultures to share experiences and insight

#### STAFF REPORT

Disaster prevention experts from Japan and abroad will once again gather in the city of Sendai, Miyagi Prefecture, the biggest city in the Tohoku region devastated by the Great East Japan Earthquake in March 2011, to share their knowledge on disaster risk management, process of recovery and response to natural calamities.

The World Bosai Forum (WBF), launched in 2017 in partnership with the International Disaster and Risk Conference (IDRC) in Davos, Switzerland, is set to be held from Nov. 9 to 12 at Sendai International Center and Kawauchi Hagi Hall at Tohoku University.

The biennial forum will look into lessons learned from the calamitous magnitude 9.0 earthquake and giant tsunami of 2011 that took the lives of more than 15,000 people, and the importance of passing down the



experiences to future generations. It also aims to come up with practical solutions for reducing disaster risks around the globe.

"We hope the forum will be a place for people to pass on their knowledge and wisdom gained through experiencing natural disasters. We also want this to be a place where we can discuss new issues and ways to solve them," said Kanayo Kousaka, secretary-general of the World Bosai Forum Foundation.

The second WBF, organized by the World Bosai Forum Local Organizing Committee and World Bosai Forum International Steering Committee, is expected to see around 1,000 general public and disaster prevention specialists from various sectors such as research institutions, government organizations, private sectors and international organizations.

The forum will kick off on Nov. 9 with a pre-WBF festival that includes a Yuriage Taiko performance by Natori City Yuriage Daiko Preservation Society and Soma Bon Odori Dance performance by Soma City Minyo Dokokai and Minyo Shukakai with the Yarimasyou Bon odori executive committee.

A total of 64 sessions are scheduled to be held between Nov. 10 and 12, including a symposium by presidents of three leading universities in Tohoku — Iwate University, Tohoku University and Fukushima University — and several programs to introduce the latest disaster prevention efforts by private sector companies such as Yahoo Japan Corp., Japan Tobacco Inc. and Optage Inc.

Under the slogan "Sharing Bosai wisdom globally — Contributing to the Implementation of the Sendai Framework for Disaster Risk Reduction and Achievement of the Sendai Targets, in Particular Target E," this year's forum is set to promote implementation of the Sendai Framework for Disaster Risk Reduction, which is a guideline for global disaster prevention efforts adopted by U.N. member states in 2015 at the third U.N. World Conference on Disaster Risk Reduction that was also held in Sendai. Among seven

targets stipulated in the guideline, Target E aims to "substantially increase the number of countries with national and local disaster risk reduction strategies by 2020."

The Japan International Cooperation Agency is set to hold a discussion to find concrete solutions for achieving that target in a session titled "Accelerating Formulation of DRR Plans Toward the Next 10 Years of Their Implementation — How to Achieve Global Target E of the Sendai Framework?"

Meanwhile, the city of Sendai and the Miyagi Prefectural Government are set to hold a separate discussion to look into their disaster experiences in sessions called "Passing Down Disaster Experience — Its True Meaning and Reality" and "Moving Hearts' with Experiences and Lessons -Connecting Stories to Specific Disaster Prevention Measures," respectively.

The forum is also scheduled to hold sessions to share experiences of other Asian nations in dealing with natural disasters such as the 2018 tsunami in Indonesia and Cyclone Aila in Bangladesh in 2009.

Alongside the dozens of sessions on the program schedule, exhibitions and small presentations introducing works of participating organizations will take place at the Sendai International Center.

Raising awareness for disaster prevention is becoming increasingly important as the world faces the growing threat of climate change. According to the Belgiumbased Centre for Research on the Epidemiology of Disasters, there were 315 natural disaster events recorded in 2018, affecting 68 million people. The disasters resulted in \$131.7 billion in economic losses across the world, it said.

In the case of disaster-prone Japan, thousands of people were affected by a string of catastrophes that hit the archipelago after the 2011 Tohoku earthquake and tsunami, including the 2016 Kumamoto earthquake, last July's torrential rains and floods that hit western parts of the country, and the recent Typhoon Hagibis that ravaged central and eastern Japan.

*Bōsai* is a holistic approach to reducing loss during natural disasters. This covers damage prevention, recovery, response and mitigation.

Still, there are many unaware of measures they can take to reduce disaster risks such as piling up sandbags to guard against floods, or securing cabinets to the walls to prevent them from falling when an earthquake hits, Kousaka said.

"It's important to keep questioning people what would they do if a natural disaster happens to them one day. Such questioning could lead them to think about disaster-preparedness," Kousaka said. "It would be great if this forum results in participants to use the knowledge they've learned to make disaster prevention efforts in their daily lives or give them a new business idea."

Visit http://www.worldbosaiforum. com/2019/english/ for more information.



The World Bosai Forum's mascot, Ono-kun. is inspired by sock monkeys made by housewives after the Great East Japan Earthquake and tsunami. © socialimagine

# World Bosai Forum special

### International forum aims to spread disaster relief awareness

YUICHI ONO FOUNDER AND CEO, WORLD BOSAI FORUM



**FUMIHIKO IMAMURA** 

ORGANIZING COMMITTEE

First of all, we pray for the repose of the souls of those who died in recent disasters, including Typhoon Faxai and Typhoon Hagibis, and extend our deepest sympathies to the many people

Sharing ideas on reconstruction

From the bottom of

like to welcome vis-

my heart, I would

itors to the World

Bosai Forum 2019

in the city of Sen-

dai. In preparation

for the opening of

the World Bosai

Forum, the World

affected.

Are these disasters due to the effects of climate change? Or have we again entered a natural cycle of strong typhoons like the 1950s and 1960s? Will this situation

CHAIR, WORLD BOSAI FORUM LOCAL

Bosai Forum Local Organizing Commit-

tee is holding a cultural event, a so-called

Pre-WBF Festival, to thank the world for

Tohoku disaster. This is to convey disaster

memories associated with March 11 and

to share our thoughts on reconstruction.

contributions made at the time of the

continue?

Remarkable progress has been made in forecasting typhoons. In fact, many local governments should have received timely and accurate warning information, including special warnings issued by the Japan Meteorological Agency, and taken the utmost precautions before the typhoons hit. It was also identified that associated flood hazard maps were quite accurate, matching those inundated areas. Then, what was the problem? How should we deal with such problems in the future? We plan to discuss these important topics together with the public because similar problems could happen in other countries.

The World Bosai Forum is an international forum on disaster risk reduction held in Sendai, Miyagi Prefecture, and in partner-

The festival's theme is "Linking 3.11 to

the Future." High school students from

and exchange opinions on the role of

young people in handing down earth-

quake disaster memories, and the circle

of exchange will be expanded through

local performing arts from the regions

moving toward recovery. I assure visitors

that it is going to be a moving and unfor-

gettable event; let us gather to reflect on

The festival will be held at Kawauchi

Hagi Hall, Tohoku University, adjacent

to the Sendai International Center, from

is an open event with no admission fee.

Japanese and overseas participants are

both welcome to attend.

1:20 to 5:30 p.m., on Saturday, Nov. 9. This

and never forget the memories of the

disaster.

that are overcoming the disaster and

Miyagi and Kobe prefectures will report

#### Risk Conference (IDRC) in Davos, Switzerland, is organized by the Global Risk Forum. Domestic and international officials and experts from international organizations, governments, the private sector, academia, media and local citizens participate — yes, we welcome local citizen participation. The forum does not exclude them. The IDRC is a renowned conference that

ship with the International Disaster and

has been held during even-numbered years in Davos since 2006, and the majority of its participants are disaster risk reduction specialists from Europe or nearby regions. In contrast, the majority of World Bosai Forum participants are from the Asia-Pacific area, and we aim to increase the number of participants, especially from developing countries. We also have many citizen participants from Japan. The forum aims at pursuing practical solutions in disaster risk reduction through lessons learned from the Great East Japan Earthquake and tsunami in 2011 and other disasters from around the world. At the same time, the forum serves as a vehicle to mourn the nearly 15,000 victims of this disaster.

The subtheme of the 2019 forum is "Global Target E" in the Sendai Framework for Disaster Risk Reduction 2015-2030. This target aims to achieve a significant increase in the number of countries holding national and regional disaster management strategies by 2020. We will share many detailed contents to seek better measures, which contain structural (hard), nonstructural (soft) and human-oriented (heart) measures. We will also share information on how to deal with climate change, which has become more serious in recent years, and how to apply advanced technologies such as artificial intelligence or "internet of things" technology as part of disaster risk reduction.

Bosai is a convenient and traditional



Japanese term encompassing a comprehensive concept from disaster risk reduction to reconstruction and recovery. The first World Bosai Forum in 2017 achieved great success, bringing together 947 participants from over 42 countries and more than 10,000 local citizens.

Sendai is the birthplace of the Sendai Framework for Disaster Risk Reduction. We plan to host the forum in this sacred bōsai city in odd-numbered years. The forum would also contribute to accelerating disaster recovery in Tohoku. The city of Sendai will operate several study tours to tsunami-affected areas near Sendai during the forum. Further information is listed on the forum website.

Unlike other conferences, such as those organized by the United Nations, we will not negotiate with member countries and related stakeholders about submitted

documents. However, we plan to develop a chair's summary including major findings and common issues in terms of practical bosai solutions shared during the forum, as well as some recommendations.

In the long run, we humans tend to forget about previous disasters no matter how severe they were. The 1923 Great Kanto Earthquake caused around 100,000 deaths,

Memorial Park, Natori, Miyagi Prefecture SEBASTIEN BORET

and it was not the first mega earthquake disaster in that area. People forgot about previous disasters. In Tohoku, around the same number of people became tsunami victims in 1896. These people had also forgotten previous disasters. How to remember — and not forget — about previous disasters is challenging, and at the World Bosai Forum we would like to tackle this challenge. While strongly determined to never repeat forgetting about such global disasters, we want to pass on, and not waste, our bitter experiences in Tohoku disaster areas to future generations and the world.

The result of recovery efforts in the Onagawa Central District, Miyagi Prefecture, as of September. KATSUYA HIRANO



During the forum, associated events will be held at the same venue. One such event is the Sendai Bosai Future Forum organized by the city of Sendai (Japanese only) on Sunday, Nov. 10. This event will mainly address the Tohoku recovery as to attract a Japanese audience. The other event, held on Nov. 10 to 11, is The 10th Earthquake Technology Expo Tohoku organized by the firm, Exhibition Technology. This event will feature a number of bosai-related exhibitions by the private sector (we have made requests to the organizers for English explanations). We look forward to your participation and contribution to this event.



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Nov. 10-12

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### **Disaster Area Strengthening Project**

Based on a request from the government of Mozambique, a project was started to support reconstruction and recovery from Cyclone Idai disaster in 2019. We are supporting local governments and local communities to be able to understand their roles and take action in their respective positions.

### **Emergency Recovery Support**

In 2013, in order to reconstruct and recover from Typhoon Yolanda, we conducted simulation of storm surges, and based on the result, we supported evacuation planning and recovery planning for local governments in the Philippines. We contributed to improving disaster risk reduction capacity through workshops on how to utilize a hazard map with local governments and communities.

#### Please come! Nov. 11 13:30-15:00 02-3

How to deal with intensifying cyclone disasters - lessons from the Built Back Better process

World BOSAI Forum 2019 official website www.worldbosaiforum.com/2019/english/

### Support for reconstruction after the Great East Japan Earthquake (2011.3.11)

Beginning with emergency measures after the Great East Japan Earthquake, we provide support for disaster areas, including restoration of any infrastructure and formulating recovery plans, and these activities have continued in various wavs.

Our activities exceeded 700 cases: we have contributed to national resilience by reconstruction of infrastructure, recovery of the industrial base and the revitalization of local communities,



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## World Bosai Forum special

## Past calamities revisited in regional collaborations

The devastating impact from powerful typhoons that hit Japan in September and October served as a fresh alarm to municipalities responsible for the welfare of local residents. Affected municipalities are working at full capacity to deal with the aftermath of the disasters, fix damaged infrastructure and provide various kinds of support to residents.

The disasters that hit mainly eastern Japan came after similarly violent typhoons caused devastating floods and landslides in western Japan during the summer of 2018. The government decided last December to set aside ¥7 trillion over a three-year period starting March this year to reinforce infrastructure, implement flood control measures, and prevent the

partial sinking of airports among other measures.

The budget is of great help to municipalities that are required to implement disaster risk reduction strategies because of Japan's high risk of natural disasters.

The Kyoto Prefectural Government's crisis management section was expanded to a department this year. The government co-organized a symposium on practical measures to strengthen Kyoto's naturaldisaster resistant infrastructure in May.

"One of the key policies of Kyoto Prefecture is to achieve top-class disaster risk reduction. Upgrading to a department has sped up decision-making processes and given us the authority to make formal requests of other departments," said



Firefighters during a disaster drill in Kyoto KYOTO PREFECTURE

studying prefectural responses to natural disasters that occurred in 2018 and has also held an annual meeting on disaster risk reduction, she said. The Multi-hazard Information Providing System, an online disaster map, is one

of many proactive measures implemented by the prefecture to mitigate disaster risks. (http://multi-hazard-map.pref.kyoto.jp/ top/top.asp) The system, which began operating in

Chiaki Nakamura, deputy director general

of the Department of Crisis Management,

Nakamura also emphasized that noti-

fying residents of this upgrade to depart-

ment status was a good opportunity to

remind residents of disaster risk aware-

ness. The residents are more aware than

before of the prefecture's priority for disas-

The department has, since April, been

Kyoto Prefecture.

ter risk reduction.

April 2016, enables residents to view information on multiple disasters simultaneously on a single map. For example, the system can create a map showing areas in danger of flooding, the projected height of tsunami following an earthquake, and evacuation centers for quakes and floods — all on a single map for each city, ward and town.

"Residents can print out a map and use it during disaster drills," Nakamura said, adding that the prefecture is training people whose work is related to disaster prevention to learn how to best utilize the system.

"We want residents to know their local risks and how to best evacuate using the Multi-hazard Information Providing System." she said.

Even though the prefecture is implementing such measures, residents'

To deal with the situation, the prefecture is training firefighters and others to encourage their neighbors to evacuate when they are supposed to so that actual evacuation numbers increase, she said.

The prefecture also has evacuation plans in place should a nuclear emergency occur because multiple nuclear power plants are in neighboring Fukui Prefecture. Kyoto has more residents living within a 5-km radius of the nuclear plant-concentrated area than Fukui and Shiga prefectures, she added.

As in the case of the torrential downpour in western Japan last summer, natural disasters provide valuable lessons on how to prepare for future disasters. Pre-

#### fectures affected by the Great East Japan Earthquake in March 2011 are currently looking into that incident to deal with the aftermath of the recent typhoons in September and October.

Internal located internal internal internal internal internal internal internal internal internal internal

The Great Hanshin Earthquake is another past disaster from which the world can learn how to cope in the aftermath of such an event. Hyogo Prefecture will next year mark the 25th year of the magnitude 7.3 quake, which killed 6,434 people and destroyed much infrastructure.

Damage from the quake in January 1995 was so severe that the prefecture has examined the scale of the incident and its response in preparation for future similar disasters. For example, it has published a booklet aimed at residents to raise awareness of disaster risks and how to reduce them.

Hyogo Prefecture has become an international hub of disaster risk reduction. Some institutions located in the Kobe New Eastern City Center formed the Disaster Reduction Alliance to strengthen collaboration, conduct international training and hold international symposiums. Alliance members include the World Health Organization Centre for Health Development, commonly known as WHO Kobe Centre; Japan International Cooperation Agency Kansai Center; Asia Disaster Risk

Having recovered from the Great Hanshin Earthquake, Hyogo Prefecture was one of the first prefectures to gain realtime experience in providing damage control from natural disasters. It dispatched officials to the Tohoku area after the Great East Japan Earthquake and subsequent tsunami, as well as other areas hit by other disasters.

Regional prefectures have formed the Union of Kansai Government with Hyogo Prefecture in charge of disaster risk reduction and taking a leading role. It comes up with and executes plans, and makes arrangements for providing and receiving support in times of emergency among other activities.

The prefecture also collaborates with the Hyogo Earthquake Engineering Research Center, a public institute under the Ministry of Education, Culture, Sports, Science and Technology.

The prefecture and the center have conducted joint experiments to inspect the quake-resistance of roads using the center's facility, E-Defense. This enables researchers to observe how structures are being destroyed in measuring their fragility to quakes.

In a measure to support disaster victims, the prefecture in September 2005 began offering insurance-like financial support for those whose houses were damaged by

## Event to explore media's role in public education

KANAYO KOUSAKA

SECRETARY-GENERAL WORLD BOSAI FORUM FOUNDATION

Despite the difficulties she has faced in

life so far, she has stood up with strong

The main body of the World Bosai

Forum 2019 consists of 90-minute ses-

sions where various organizations share

practical solutions concerning disaster

risk reduction. There are approximately

60-plus such sessions, and 30 of these

society and she is a good example.

determination to help develop a disaster-

resilient society. It is one's will that changes



are organized by academia, followed by 13 private sector, 10 governmental, and eight international organizations, including United Nations agencies, and a few other nongovernmental organizations and in Tohoku and its recovery from the Great East Japan Earthquake and tsunami.

How to pass down experience and lessons learned about such disasters is one of the focuses. Fukushima-related issues will

organized by NHK World and Kahoku Shimpo.

The application of advanced science and technology to disaster risk reduction is crucial. Several sessions will cover this topic,

E-Defense is a facility that enables researchers to observe how structures are being destroyed by measuring their fragility to quakes. HYOGO EARTHQUAKE ENGINEERING RESEARCH CENTER awareness of local disaster risks remains wanting. During the heavy rain in July last year, only about 4,200 out of 620,000 residents recommended to evacuate actually did, Nakamura said.

# E-FA72/

国立研究開発法人

防災科学技術研究所

兵庫耐震工学研究センター



in disaster risk reduction from all over the world will attend the World Bosai Forum, but the keynote speech will be given by a young girl who is a survivor of the Great East Japan Earthquake and tsunami.

media According to the subtheme of the forum,

"Global Target E" of the Sendai Framework for Disaster Risk Reduction 2015-2030, which is due 2020, the Japan International Cooperation Agency is organizing a thematic session to identify concrete ways to implement this target. It is envisaged that the forum will include a special message from Mami Mizutori, a Special Representative of U.N. Secretary-General on Disaster **Risk Reduction.** 

Several sessions, in particular on Sunday, Nov. 10 and presented by several organizations, including the city of Sendai, Miyagi Prefecture: Tohoku University: and the Tohoku Regional Bureau of the Ministry of Land, Infrastructure, Transport and Tourism, among others, focus on the spirit of better rebuilding. These sessions will share the current situation and challenges faced

be covered in two such sessions. Media perspectives are a key in advancing a disaster risk reduction agenda; not only during emergencies, but also during nondisaster periods as they have great potential to educate people, especially in Japan.

The power of youth is stressed by a UNESCO session. The importance of education and raising public awareness in disaster risk reduction will be highlighted in sessions organized by Miyagi University of Education, Tokyo University, and the University of the Philippines at Diliman. This theme will also be addressed in a featured session jointly organized by Tohoku University, Iwate University and Fukushima University from tsunami-affected areas with the presence of their presidents for the first time since 2011.

The role of media before, during, and after such disasters is captured in sessions

encompassing information and communications technology, drone technology, artificial intelligence, satellite and remote sensing. Among them, a session organized by Optage Inc. proposes a revolutionary method to reduce earthquake damage.

How to cope with climate change is presented by Pacific Consultants and the Typhoon Committee.

The role of the private sector in disaster risk reduction will be discussed in a session led by Japan Tobacco, an active supporter of recovery in Tohoku.

Regarding linkage to the U.N.'s sustainable development goals, at least two sessions will focus on an inclusiveness agenda, namely, gender and disability. A session on the roles of various organizations for disaster risk reduction also contributes to this agenda. We look forward to your participation in Sendai.

Reduction Center; United Nations Office for Disaster Risk Reduction and other organizations.

natural disasters. Residents pay ¥5,000 a year to receive up to ¥6 million to repair or rebuild their houses.



A member of Fire And Safety Team, a volunteer group of university students in Kyoto, instruct school children during a disaster drill in Kyoto. KYOTO PREFECTURE

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# World Bosai Forum special

## Life post-3/11: Sendai's recovery through a global lens

#### KAZUKO KOHRI MAYOR, CITY OF SENDAI



that the second World Bosai Forum will be held in the city of Sendai, following the first World Disaster **Reduction Forum** held two years ago. I would also like to

express my heartfelt gratitude to those concerned, including the newly established World Bosai Forum Foundation, in order for it to serve as the forum secretariat.

As the only city in the region with a population of 1 million, Sendai suffered severe damage in the 2011 Great East Japan Earthquake and tsunami. In addition, as a host city of the third U.N. World Conference on Disaster Risk Reduction held in 2015 that adopted the "Sendai Framework for Disaster Risk Reduction 2015-2030," we feel we have a responsibility to continuously disseminate experiences and lessons learned from these disasters to the world.

At the World Bosai Forum, the city of Sendai will host and disseminate a session on women's leadership and the disaster risk reduction industry, as well as a session on the theme of sharing experiences and memories of disaster across generations.

In addition, the city of Sendai is holding the "Sendai Symposium for Disaster Risk Reduction and the Future" at the same time; here, citizens can learn about disaster risk reduction through presentations, exhibitions and experience-based programs. and share information on their daily activities. This event provides an opportunity to learn about disaster risk reduction at the global level.

On the event day, there will be many





opportunities for visitors to learn about disaster risk reduction, such as the "Earthquake Technology Expo, which will exhibit the latest *bosai* technologies and products. We hope that many people will visit.

I hope that the World Bosai Forum and associated events will deepen understanding of bosai culture around the world through sharing knowledge and active discussions.

World Conference on

Disaster Risk Reduc-

March 2015. Left: A

new Sendai City Fire

facility that opened

displaced in March

2011, the corps had

been renting facilities

from other organiza-

tions. SENDAICITY

last April. After being

tion in Sendai in

**Aviation Corps** 







Top: A berm for a road that was further elevated for protection from tsunami in Sendai's Arahama Ohori area. Left: The Sendai 3/11 Memorial Community Center, opened on Feb. 13, 2016, serves as a time capsule and educational space. SENDAI CITY

**Residents of Sendai's** Tagonishi area conduct a disaster drill. SENDAI CITY

## **WORLD BOSAI FORUM** SPECIAL PRESENTATION

Date NOV. 10 (SUN) 11:00am Venue Sendai International Center **Conference Bldg** 

 The Role of Public Broadcast for Better Bosai

NHK World-Japan will present the various services it is currently providing, including its role in issuing multilanguage emergency warnings to help foreign language speakers in Japan.



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