International Symposium on Resilience Nagoya – Osaka – Kobe January 11-14, 2017

Organized by National Resilience Promotion Office, Cabinet Secretariat, JAPAN

http://www.cas.go.jp/jp/seisaku/kokudo_kyoujinka/index_en.html

With Faculty of Societal Safety Science, Kansai University http://www.kansai-u.ac.jp/Fc_ss/english/index.html

Supported by Resilience Practice Unit, Kyoto University http://trans.kuciv.kyoto-u.ac.jp/resilience/

[PROGRAM outline]

Day 0 January, 10 Welcome Reception (Nagoya)

- from 5:00 pm at Meitetsu Grand Hotel

Day 1 January, 11 Field trip (Nagoya)

- start from Meitetsu Grand Hotel at 7:30 am, and arrival at the Hotel in Osaka in the evening.
- Visit: <u>earthquake resilience</u> museum, a local shrine, a wellknown dam and an embankment and a <u>flood resilience</u> museum in Nagoya

Day 2 January, 12 Workshop (Osaka)

- 9:00am 5:00 pm workshop at Kansai University
- 7:00pm conference dinner

Day 3 January, 13 Workshop (Osaka)

- 9:00am - 2:30 pm workshop at Kansai University

Day 4 January, 14 optional tour (Kobe)

- meeting at the Marriot hotel at 8:15am, trip to Kobe and return to Osaka at 6:00pm.
- town walk and museum tour showcasing examples of community led recovery following Kobe earthquake, presentations and free discussion with local community members regarding community led development (Machizukuri) after the Kobe Earthquake

[PROGRAM details]

Day 0 January 10, Welcome Reception

from 5:00 pm at "Sky Lounge 203" 18th Floor in Meitetsu Grand Hotel
1-2-5, Meieki, Nakamura-Ku, Nagoya, Aichi, JAPAN 450-0002, Tel:
(+81)052-582-2211 Fax: (+81)052-582-2230
(http://www.meitetsu-gh.co.jp/en/)

Day 1 January 11 – Technical Tour

- Meeting in the lobby (11F) of the Meitetsu Grand Hotel at 7:30 am.
- Whole day tour by bus to go to museum regarding earthquake resilience, shrine, dam, embankment and museum regarding flood resilience in Nagoya (details can be seen in the APPENDIX)
- Arrive at respective hotels in Osaka around at 6:00pm

Day 2 January 12 – Workshops in Kansai University

Venue: Special Conference Room, 12F of West Building Takatsuki Muse Campus,

Kansai University (7-1 Hakudaicho, Takatsuki-shi, Osaka, 569-1098, Japan)

Map of the Campus:

http://www.kansai-u.ac.jp/English/about_ku/muse_map.html

Map of the location of Takatsuki Muse Campus:

http://www.kansai-u.ac.jp/English/about_ku/location.html#muse

9:00 – 9:20 Opening / Greeting by Representatives of Resilience Promotion Office, Cabinet Secretariat, JAPAN and Faculty of Societal Safety Science, Kansai University

-Masato Koumura, Councillor, Cabinet Secretariat

- Toshihiro Kawaguchi, Ph.D. Deputy Dean, Faculty of Societal Safety Sciences, Kansai University.

- 9:20 10:10 Keynote lecture: Institutional Evolution Strategy for National Crisis in Japan Prof. Kawata, Kansai Univerisy, Central Disaster Management Council, Japanese Government
- 10:10 10:45 How it all started: disaster-prevention-and-reduction-new-deal policy

- Prof. Satoshi Fujii, Kyoto University, Special Advisor to the Cabinet

- 10:45 11:20 National resilience program: successes and challenges Presentation from National Resilience Promotion Office, Cabinet Secrerariat, JAPAN
- 11:20 11:50 Presentations by all international participants: Resilience latest developments and challenges(1)

(Each participant presents the latest thinking in their country or the most pressing / exciting development in the area of resilience, and discusses merits and challenges)

- Building Capabilities to Support Resilience in the U.S. (By Katherine Fox, U.S. Department of Homeland Security Federal Emergency Management Agency)

- 12:00 13:00 LUNCH
- 13:00 15:00 Presentations by all international participants: Resilience latest developments and challenges(2)

- Recent developments in Germany in the field of Resilience: New Strategic Concepts 2016 (By Friederike Dahns, Directorate for Crisis management and Civil Protection, Ministry of Interior, Head International Relations and Chair NATO Civil Protection Group.)

-National Security Strategy 2015: Current UK resilience priorities (Ian Whitehead, Deputy Director, Civil Contingencies, Cabinet Office. UK)

- From managing disasters to managing risks- guided by the Sendai Framework for Disaster Risk Reduction (By Mette Lindahl Olsson, Senior Adviser, Swedish Civil Contingencies Agency, MSB)

- Disaster resilience - latest developments and challenges: Australia's experience. (By Elizabeth Quinn, Attorney-Generral's Department, Australia)

- 15:00 15:30 Afternoon tea
- 15:30 17:00 Group discussion / workshop: What are the key developments and challenges for national resilience programs?
- 19:00 Symposium Dinner

Day 3 January 13 - Workshops (tentative program)

Awaji Earthquake (By Mampei Hayashi, Researcher, Asia Pacific Institute of Research)

9:30 – 10:00 How did recovery policies from 2011 disaster promote or reduce local resilience?'

- Prof. Shingo Nagamatsu, Faculty of Societal Safety Science, Kansai Universy.

10:00 – 10:45 Presentations by all international participants: Resilience latest developments and challenges(3)

- Singapore's Resilience Landscape, Thoughts on Resilience in the Singapore Context (Sunit Singh, Prime Minister's Office, Singapore)

-A Calculation Methodology of Disaster Damage Costs Based on a Resilience Triangle & Korean Experiences (Seungjae Lee, University of Seoul, Korea)

10:45-12:00 Special presentations on community resilience from international

participants, and free discussions

- Canada's Approach to Strengthening Community Resilience (By Durand Stephanie, Director General, Emergency Management Policy and Planning Directorate, Public Safety Canada)

- Social Media, Crisis Management, and Community Resilience (Senior Fellow, Swedish National Center for Crisis Management Research and Training, Sweden

-Resilience and the Japanese practice of Machizukuri (By Ljubica Seadon, Director, Seadon Consulting & Research, formerly in charge of national resilience programme)

12:00 - 13:00 LUNCH

13:00 - 14:30 Workshop: what to take away from this symposium?

Day 4 January 14 – Optional Tour

Meeting at Hotel Lobby at 8:15 am (trip by train)

- 10:00am Disaster Reduction and Human Renovation Institute (DRI): Participants can see the museum of the 1995 earthquake, and hear stories from the survivors. See the link below for more information <u>http://www.dri.ne.jp/en</u>. (trip by train)
- 12:15am Lunch
- 1:30pm Mikura area, Nagata ward (Following activities will be provided by Machicommunication, a notable local NGO that has been involved in recovery of

the area.

- Presentation about the reconstruction and recovery process of Mikura area,
- Town walking,
- Discussion with local residents about local

resilience. (For more information on Machi Communication,

http://park15.wakwak.com/~m-comi/project/25/m-comi-info-Engver.pdf http://park15.wakwak.com/~m-comi/project/25/m-comi-manu-Eng-ver.pdf) (trip by train)

18:00 Break up at Shin-Osaka station

[Accommodation]

- 1) See separate document of "Accomodation information for International Symposium on Resilience in Japan,"
- 2) Fill in "application_form_mwt.xls,"
- 3) Send it to Satoshi Fujii, <u>fujii@trans.kuciv.kyoto-u.ac.jp</u>.

[Symposium Fee]

- If you select tour options A, B, C or D, the fee for the options includes the symposium fee. If you book hotels by yourself, we will ask for the symposium fee of JPE 10,000.
- We will ask you payment of the fee for the optional tour on the day that will include transportation, lunch, admission fee of DRI, that would be just few thousands JPE.

[Flight and Transportation to Nagoya]

- For the 1st day technical tour, Central Japan International Airport (Chubu Centrair, International Airport, Nagoya) will be convenient. <u>http://www.centrair.jp/en/</u>. It will be around 40 minutes from the airport to the Nagoya station, by train (Meitetsu Limited Express).
- You can fliy to other international airports in Japan (such as Kansai, Narita or Haneda), and it is convenient for you to go from these airport to Nagoya by Shinkansen train.

APPENDIX: STUDYTOUR PLAN(2017/1/11)



<u>Schedule (11 Jan)</u>

7:30	meeting at Meitetsu Grand Hotel 11F Lob	by		
9:30	[Inspect 1] Neodani fault & museum		10:10	Dep.
11:20	[Inspect 2] Leaning museum of nature and hydro	blogy	11:40	Dep.
13:10	[Inspect 3] "WAJU"~Circle Levee: prevented	1976 flood disaster	13:40	Dep.
14:00	[Lunch] with Presentation by Mayor of Kaizu City	у	15:00 E	Dep.
15:25	[Inspect 4] "Chisuijinja-shrine" etc.		16:10 I	Сер.
16:30	[Inspect 5] Embankment for storm surge		16:45 [Dep.
(via.	Shin-Meishin expressway)	at about 19:00, arriv	e at OS	AKA

SUMMARY OF STUDY TOUR

[Inspect 1] Neodani fault & museum

This is a large fault of 6m high and 8m wide (at their largest), which appeared on the earth's surface around the Midori area in Neo village (present Motosu city) that was the seismic center of the Noubi earthquake. The Noubi earthquake occurred in October 1891, killing 7,273 people and completely destroying 142,177 houses.

As a result of investigation, a fault about 80 km long from Aichi-ken to Fukui-ken was discovered, and the part of the fault which had appeared on the earth's surface was named the "Neodani Dansou (fault)."

In 1927, the fault was designated as a national natural monument. And in 1952, it was designated as a special national natural monument. In 1988, the village of Neo, together with specialists, started seeking some means to permanently preserve the fault as a historic heritage. As a result of the investigation, the village decided to dig the ground to make a trench which would enable visitors to view the fault from underground, and established there "the Neodani fault museum" including the trench.

[Inspect 2] Learning museum of nature and hydrology

The Tokuyama Dam is a multi-purpose dam located on the upper stream of the Ibigawa river. Its purposes are flood control, the maintenance of normal non-specified river flow, the development of new water supply, and hydropower generation. The dam was completed in 2008. Its total capacity is 660 million m2 (including 123 million m2 for flood control). It is the largest multi-purpose dam in Japan.

The mean annual precipitation of the Tokuyama area in Ibigawa town where the catchment area of the dam spreads is 2,862mm, which is 1.7 times as much as the mean annual precipitation of Japan (1,690mm). In some years, it rains even over 3,000mm per year. So, the flood control function of the Tokuyama dam is very important to deter flood disasters in the lower reach, which have repeatedly occurred. The Tokuyama dam is now functioning as a flood controller in cooperation with the Yokoyama dam located just below The Tokuyama dam.

On the other hand, in the neighboring areas of the Ibigawa basin, water supply shortages sometimes happen. So, a water conveyance program that uses the Tokuyama dam's water capacity is being promoted.

[Inspect3] "WAJU" ~Circle Levee~: prevented 1976 flood disaster

The lower-middle reaches of the Ibigawa river run close to two other big rivers, the Nagaragawa and the Kisogawa. Until about the 19th century, these three big rivers had flowed meandering and crisscrossing as if making a web of water. Therefore, villages in this area were formed into islands surrounded by these river flows. So, circle levees were constructed surrounding every village to protect inhabitants from flood disasters. This circle levee is called "WAJU."

Since the second half of the 19th century, the WAJUs, losing their role, were leveled down one by one, because the modern countermeasures for floods had been strengthened such as the separation of the three big rivers, the construction of embankments, and widening of river channels.

But the Jurenbou levee, the inspection point here, is preserved as it was, although two entrances to the village were cut out.

In heavy rain in September 1976, a part of the embankment of the Nagaragawa river in Anpachi town broke down, and a muddy stream began to flow into Wanouchi town located downstream.

The mayor of Wanouchi town ordered the town residents to evacuate, and quickly blocked the two entrances of the Jurenbou levee with sandbags. Thus, Wanouchi town escaped from the flood disaster.

[Inspect4]Chisuijinja Shrine

At the lower reaches of the Ibigawa river, when it heavily rained, first, the water level of the Ibigawa river rose, followed by that of the Nagaragawa river after several hours, and finally, that of the Kisogawa river. This relayed and prolonged water level raising, caused by the differences of the lengths of the three big rivers, was one of the main causes of the flood damages in this area. So, about three hundred year ago, people in this area had petitioned the Edo Shogunate Government to separate the three big rivers from each other.

In December 1753, the Edo Shogunate ordered the Satsuma Clan to conduct the Kiso-Sansen Tripotamia Flood Control Works (knows as the Horeki Flood Control Works).

The Satsuma Clan began these construction works in 1754, and one and a half years later, they completed the embankment which separated two rivers, where the Chisuijinjashrine is now located (Senbonnmatubara). This embankment has contributed to dramatically decreasing the damage from floods since then. But, the construction works were so difficult that many samurai of the Satsuma Clan died in performing the duty, and the work's leader Yukie Hirata (minister of the Satsuma Clan) killed himself by hara-kiri, taking responsibility for the many samurai who lost their lives and the huge expenditure. In 1938, Chisuijinja shrine was built to enshrine the spirit of Yukie Hirata and the many Satsuma samurai.

Actually, the construction of the Kiso-Sansen Tripotamia Flood Control Works was not completely finished by Satsuma's works in 1754. It was the works conducted under the guidance of Johannis de Rijke, a Dutch civil engineer, from 1887 to 1912 that completed the Tripotamia Works including the change of the river course of the Kisogawa river. The works roughly created today's landscape of this area.

Now, we can learn information in detail on these three rivers at the exhibition in Kisosannsenn park near Chisuijinja shrine. We can also see the three big rivers from the observation tower in the park.

[Inspect5]Embankment for storm surge

The Isewan typhoon (1959) made a big storm surge. This storm surge overlapped with the high tide of the Isewan bay and broke many parts of the embankment in the river mouth of the three big rivers.

Since the elevation of Nagasima town, where we will visit, is below sea level, the whole town was submerged by the flood water for a long time and many people perished.

After this disaster, the embankment, where we will visit, was reconstructed to protect the town from a storm surge of the Isewan typhoon class.

Then, because the ground around here has been sinking, some repair and enforcement works of the embankment for storm surges are progressing now.

[The others]

We can see small buildings through the windows of the bus, which are called "Mizuya," on the sides of houses in this area. Mizuya are built on the ground several meters higher than their surroundings, and are protected by stone walls. Usually, they serve as warehouses, but when a flood comes, they become shelters. Mizuya are one of the time-honored countermeasures which shows our ancestors' preparedness against floods.

After the tour, we will move for Osaka via the Shin-Meishin expressway. The Shin-Meishin expressway complements the Meishin expressway which was constructed in 1960, and gives us redundancy by constituting a double highway system on the main axis of land transport of Japan (Tokyo-Nagoya- Osaka)