



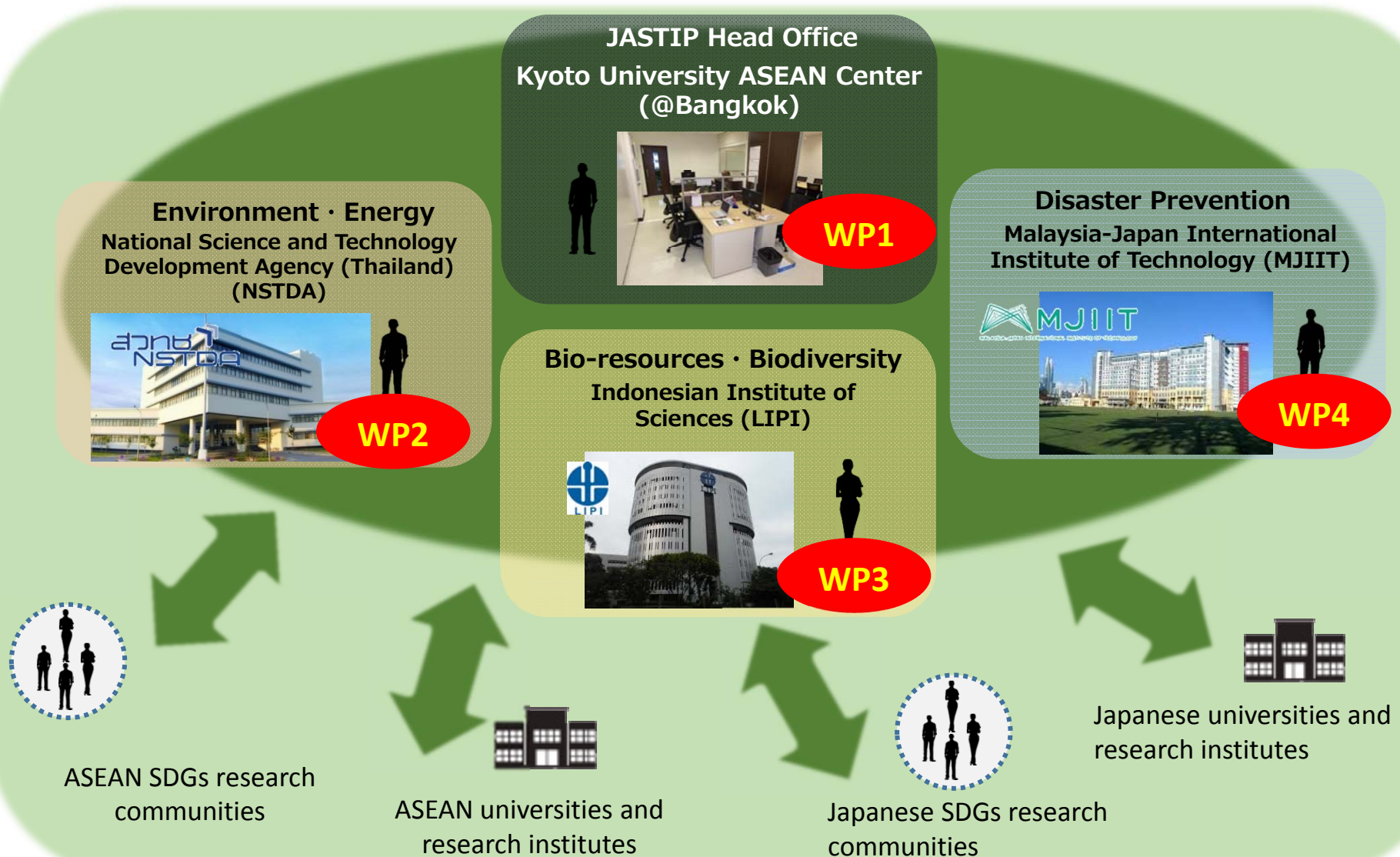
The Second Symposium on JASTIP Disaster
Prevention International Cooperation Research
March 22-23, 2017, Uji Campus, Kyoto University



Japan-ASEAN Science, Technology and Innovation Platform (JASTIP)

Kaoru Takara
JASTIP-WP4 Leader
Director, Disaster Prevention Research Institute
Kyoto University

JASTIP Core Organization and Networking



Promoting research and capacity building

- Developing joint laboratories
- Producing scientific outcomes, publishing internationally co-authored scientific papers and obtaining patent
- Fostering next-generation researchers

Establishing platform for science, technology and innovation collaboration

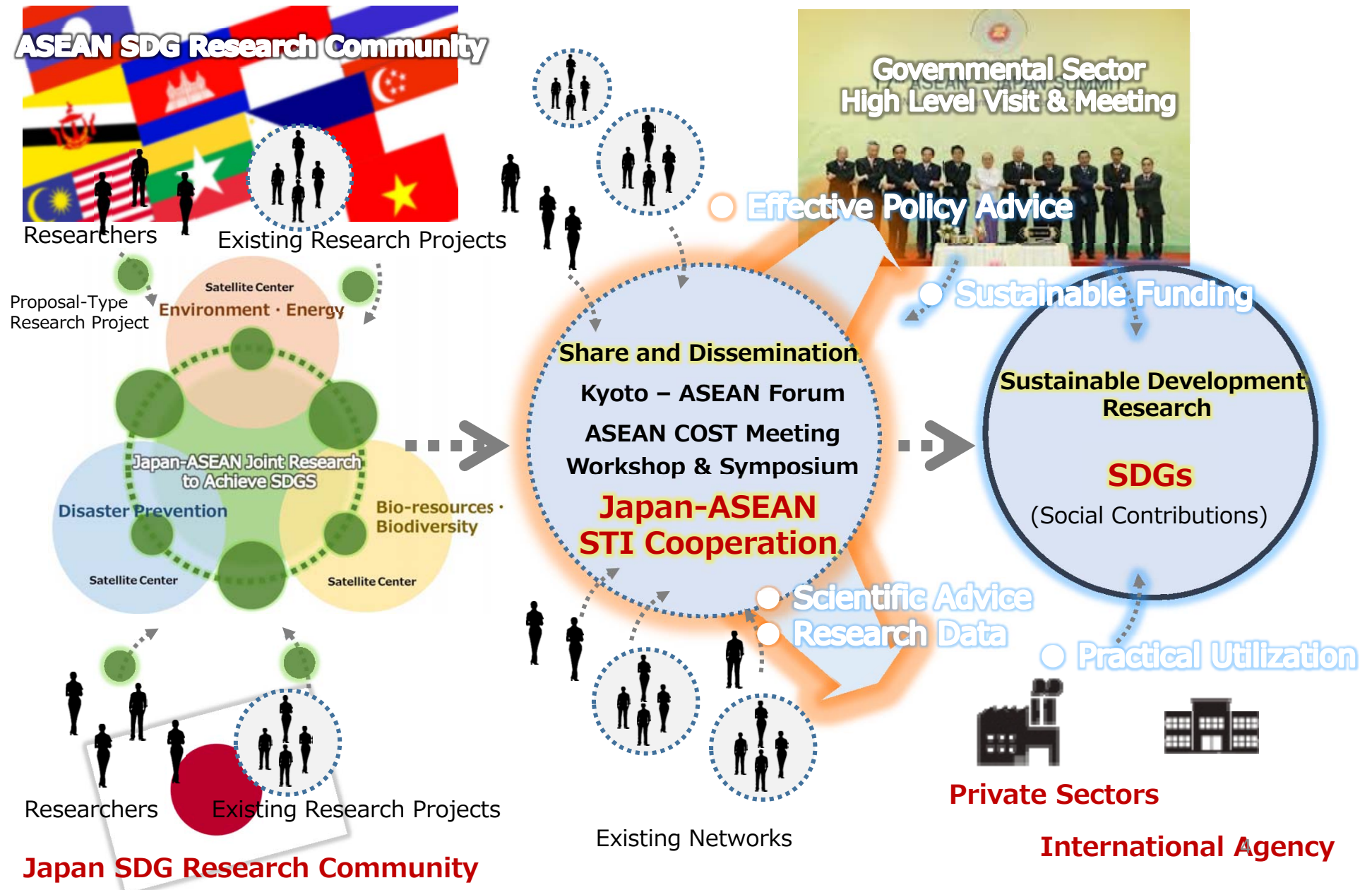
- Establishing information hub and providing one-stop service
- Exploring and expanding research network across Japan and ASEAN
- Supporting sustainable Japan-ASEAN research collaboration

Activating dialogue with stakeholders

- Promoting dialogue with policy makers and supporting capacity building of next-generation policy makers
- Promoting information exchange with the private sector
- Supporting linkage of scientific research and technology development to social innovation



Visualizing Japan-ASEAN STI Cooperation to Society





Head quarters: Coordination of the whole JASTIP project

● Project management

● Information collection and public relation

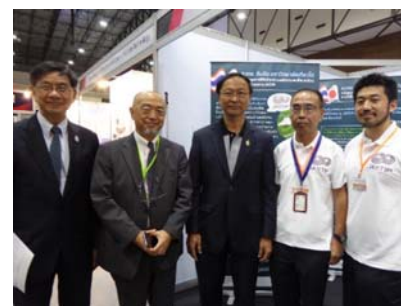
- Collection of research projects information
- Opening and regularly updating homepage
- Exploring and expanding research network across ASEAN



Opening ceremony of JASTIP



<https://www.facebook.com/jastip/>



National science and technology fair 2016 Thailand



● Networking

- Dialogue between academics and non-academic
- Linkage between academics and the private sector



meeting with private sectors
for an exchange of ideas



recruit new members through the JASTIP-Net

1st JASTIP-WP4 Symposium



The First Symposium on JASTIP Disaster Prevention International Cooperation Research,
JASTIP-WP4 Symposium, Kyoto University, Japan, March 24-26, 2016



What we discussed:

Work Sheet (JASTIP-WP4 Symp., March 26)

Possible Future Plan (added some inputs in the night of March 25, 2016)

Initiatives/Conferences:

- Water security --- international event in Bangkok, in November 2016
 - AUN/SEED-Net Regional Conference, September 6-7, 2016, MJIIT, UTM, Malaysia
 - JASTIP-WP4 2nd Symposium (when and where?) mid-Jan. 2017 ?? (Sep. 5?)
-
- Sharing data: satellite RS data may be shared, data for common use in JASTIP, data archive
 - Comparative studies to identify similarity and differences in ASEAN as well as outside (river basins, infrastructures, design standard, building codes,)

Common subjects, courses in education may be proposed

- Academic credits (units) may be interchangeable?
 - Seminar/WS certificates.
-
- How to disseminate information, outcomes, ideas, to governments, donors, communities/people.
Applicable, doable, tangible solutions: benefit to people

What we discussed:

Work Sheet (JASTIP-WP4 Symp., March 26)

- Sustainability of the project
- Funding ...
- Applications to e-Asia, SATREPS, or other sources/donors
- Modality ...
- Availability of JASTIP budget (clarification is necessary)
- Rapid growth: exposures, environments SDGs
- Industrial risk management, Natech type issues, BCM, disaster preparedness and risk perception (Ana Maria Cruz)
- The multi-lateral research might be grouped as (1) water hazards (CC, flood, drought, WQ) and (2) Geo hazard (Landslide, earthquake, volcano)

What we discussed on March 26

| Country (Coll. Lab.) | Bi-Lateral Research | Multi-Lateral Research | CB / Education | ASEAN | Japan |
|--|---|---|--|---|--|
| Malaysia (MUJIT-JASTIP) | X-band Radar Waste and Water | C.C. (design) Flood Drought; W.Q. BBB Earthquake | Post-Graduate Program at DPPC: Goto, Ali (MUJIT), Miyamoto (Tsukuba), Takara River education | Zulkifly Yusof , Eliza (UTM) Ismail, Remy, Taksiah (USM) | Tanaka, Nakakita, Sayama, Takara, Asanuma (Tsukuba) |
| Indonesia | Volcano Peatland-related W.Q. and environment | C.C. Flood Drought; Earthquake, Tsunami | Field studies (UGM-Tsukuba) | Apip (LIPI+APCE+ RCGTec) Krishna (ITB) Dwikorita, Jokolegono (UGM) | Tanaka, Sayama, Takara Iguchi Imamura (Tohoku) |
| Thailand | Geo-hazard (landslide); Dam safety and operation + sediment | C.C. (design; impact and adaptation) Flood Drought; W.Q. Earthquake, Tsunami | DPMM and CCSD at AIT: Babel Post-Graduate Program at Chula (Geotech and EQ) | Babel + ** (AIT), Likitlersuang (CU), Kanokvate, Udom (NECTEC) +Thammasat (wind lab.) Suttisak (Kasetsart) | Tobita, Katsumi, Otsu; Sumi, Wang, Tanaka, Sayama |
| The Philippines | Resilient buildings (BBB) engineering, architecture, policy making and risk perception | Earthquake, Typhoon, Wind engg., BBB | Design guidelines for stakeholders Disseminate outcomes 3 Faculties from UPD Locally developed skills in the construction industries | Espina, Madrid (UPD) | Nishijima, Kawase, Maki |
| Vietnam (Representative office with JASTIP logo) | Mekong River, salt water intrusion, sediment and dams, etc. Dam safety, Disaster risk management | C.C. (impact and adaptation); Drought Flood; W.Q. | MC in DM; WS Conflict management for young researchers (2017-) WS for local people, MRC, private sectors | Trung, PHNga, Song, Hoang, Binh, Dan (Thuyloi) | Sumi, Kantoush, Takemon, Kobayashi |
| Possible Funding | SATREPS, ADB | e-Asia, SATREPS, AUN/SEED-Net, ADB | AUN/SEED-Net Scholarships, JSPS | | River Foundation in Japan JSPS |
| | | | | | |



Japan-ASEAN Summit statement 2016

28th and 29th ASEAN Summits held on 6-7 September 2016 in Lao PDR .

JASTIP was mentioned in the Chairman's Statement of this ASEAN Summits.

"63. We noted with appreciation the increasing efforts to strengthen cooperation with dialogue and other partners in science, technology and innovation (STI). We welcomed the launching of the inaugural Exchange Programme for Young ASEAN Officials under the Sakura Science Plan; the Japan-ASEAN Science, Technology and Innovation Platform (JASTIP) and the Young Southeast Asian Leaders Initiative (YSEALI)....."

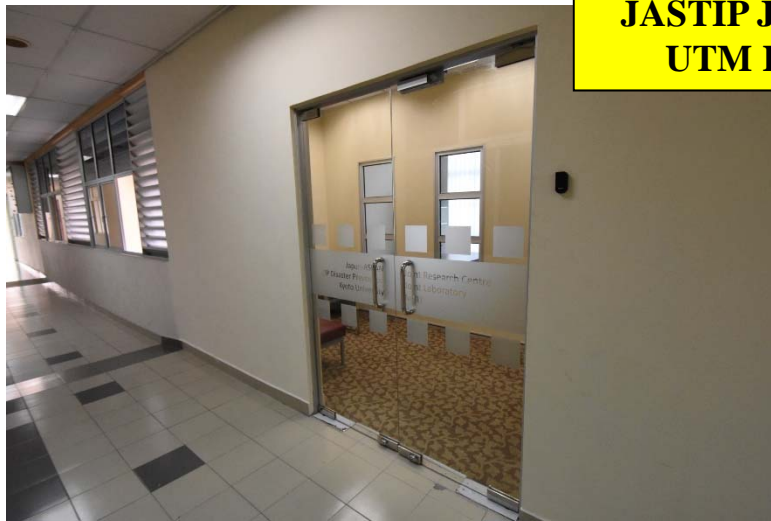
19th ASEAN-Japan Summit held on 7 September 2016 in Lao PDR.

JASTIP was mentioned in the Statement of this ASEAN-Japan Summits twice.

"19.we noted with satisfaction the progress made on various exchange programmes under the Japan-East Asia Network of Exchange for Students and Youths (JENESYS) 2016, Ship for Southeast Asian and Japanese Youth Programme (SSEAYP), "WA-Project" and Sport for Tomorrow, Sakura Science Plan, ASEAN and Today's World (AsTW), Japan-ASEAN Science, Technology and Innovation Platform (JASTIP), as well as the ASEAN University Network/Southeast Asia Engineering Education Development Network (AUN/SEED-Net) Project Phase III. Moreover, recognizing various achievements between ASEAN and Japan in the field of Science, Technology and Innovation, we acknowledged the importance of promoting joint research and implementation of its outcome such as Science and Technology Research Partnership for Sustainable Development (SATREPS), e-ASIA Joint Research Program (e-ASIA JRP) and Japan ASEAN Science, Technology and Innovation Platform (JASTIP)/Collaboration Hubs for International Research Program (CHIRP)....."



JASTIP-WP4 Laboratories in Malaysia and Vietnam; MoU Between KU and UTM



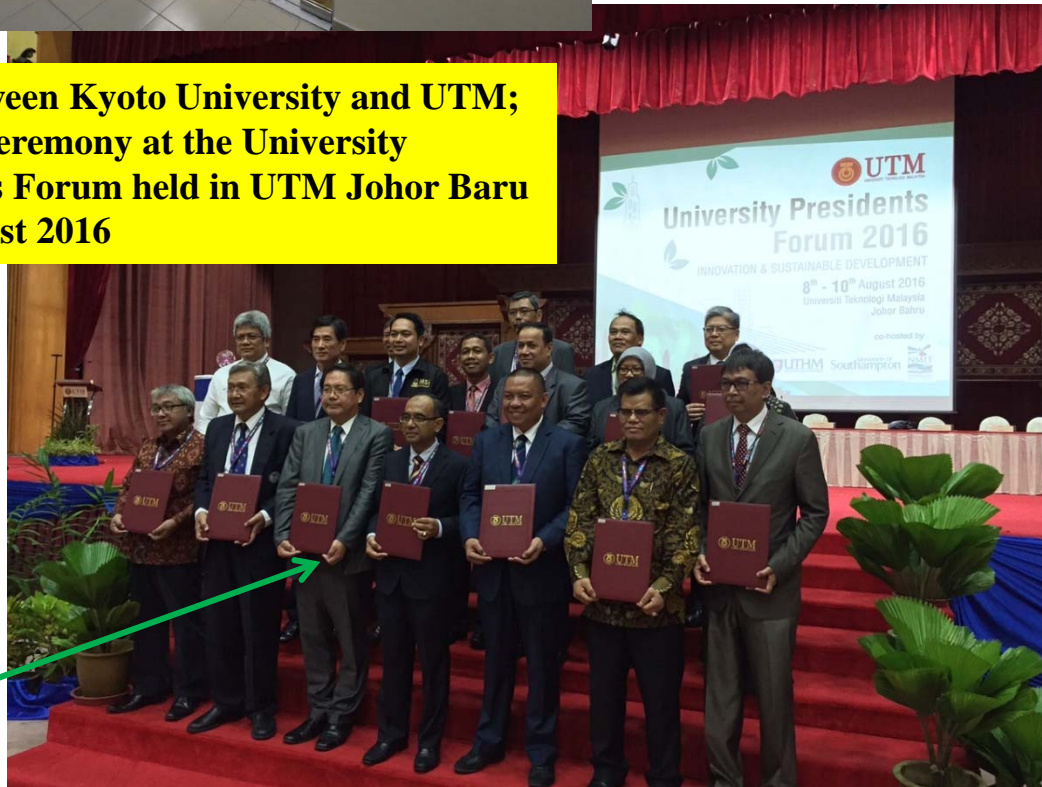
**JASTIP Joint Laboratory at MJIT,
UTM KL Campus in Malaysia**

Two joint Lab.
Established in
Malaysia and
Vietnam

**Kyoto University's office at TLU
(Thuyloi University), Vietnam**



**MoU between Kyoto University and UTM;
Signing Ceremony at the University
Presidents Forum held in UTM Johor Baru
on 9 August 2016**



Prof.
Takara



Prof. Sumi

JASTIP-Net Projects in WP4

Prof. Norio Maki and Mr. Kensuke Otsuyama (**KU-DPRI**):

- Pre-disaster recovery planning in ASEAN –evaluation of recovery plans in Indonesia, Philippines, and Myanmar

Prof. Muhamad Ali bin Muhammad Yuzir and Prof. Masafumi Goto (**MJIIT**):

- Assessing water quality in the Langat river basin during disaster period using integrated remote sensing and modeling methodologies

Dr. Natt Leelawat and Prof. Imamura (**Tohoku Univ. IRIDeS**):

- ICT use in disaster evacuation of ASEAN citizens: Lessons learned from the 2011 Great East Japan earthquake and the 2016 Kumamoto earthquake.

Dr. Kenichiro Kobayashi (**Kobe Univ.**) and Prof. Yasuto Tachikawa (**KU-Engineering**):

- Development of hydroinformatics platform for hydrohazard resilient in Asia

Dr. Nor Eliza binti Alias (**UTM**):

- Identifying the meteorologically Homogeneous Zones within ASEAN (Malaysia-Indonesia) and its application for Extreme Rainfall Analysis and Climate Change

Adapted and Funded in September 2016 to March 2017.

These JASTIP-Net Projects will be continued and funded up to March 2018.

Depending on the outcomes they may be further continued from April 2018.

Research Site Examples

Mae Sai, Chiang Rai:
Northern Thai earthquakes
Vulnerability, Geotechnical studies



Baler: Met. Obs. And
Cyclone Shelter



Samar: Rebuilt bamboo house



Hinthada: Rebuilt bamboo house

Hinthada,
Ayeyarwarddy, Myanmar
Flood, 2015

Aceh, Indonesia
Earthquake, 2016

● JASTIP-Net (Maki-Otsuyama)

Flood in the Langat River Basin, Malaysia



Mekong Delta:
Upstream Dams effects
on discharge and sediment;
TLU Labo. was established

Tacloban & Samar,
Philippines
Typhoon, 2013

MJIIT Labo was established

We need such mapping and Photos of each activity

Steps for JASTIP-WP4 (Disaster Prevention)

- Establishment and equipping of satellite sites and conclusion of MoCs

JASTIP-WP4 Symp. #1 in Kyoto (Mar. 2016)

MJIIT Lab., TLU Lab.

MoU with UTM-MJIIT (Aug. 2016)

- Establishment of cooperation system and HRD (human resources development) program

MJIIT Disaster Management Master Program launched in September 2016

The 4th AUN/SEED-NET Regional Conference on Natural Disaster 2016 (RCND2016) KL in Sep. 2016

- Promotion of joint research in ASEAN countries

JASTIP-WP4 Symp. #2 in Kyoto (Mar. 2017)

- Feedback on case studies of large-scale natural disaster early-warning systems, etc.

JASTIP-WP4 Symp. #3 in Manila, the Philippines ? (T.B.D., Nov. 2017)

- Construction of ASEAN disaster prevention research cooperation and transmission of joint research outcomes
- Diffusion across the whole ASEAN and the promotion of an HRD program
- Establishment of framework for ASEAN joint research on disaster prevention

Tentative: We need to collect more ASEAN Team achievement

| Items | Notes | Number |
|-------------------------------------|------------------------------------|----------------|
| Journal Papers | Co-authored by Japan-ASEAN | 2 |
| | Authored by Japanese Research Team | 10 |
| | Authored by ASEAN Research Team | 3 |
| Conference Papers/ Presentations | Co-authored by Japan-ASEAN | 3 |
| | Authored by Japanese Research Team | 16 |
| | Authored by ASEAN Research Team | 6 |
| Workshops/Seminars/ Symposia | | 4 |
| Outbound (Japan→ Overseas) | Japanese Team (registered) members | 181 person-day |
| | Non-registered Japanese members | 41 person-day |
| Inbound (Overseas→Japan) | ASEAN Team (registered) members | 142 person-day |
| | Non-registered ASEAN members | 54 person-day |
| Application for patents | | 1 (Japan) |

WP4 will survey our outputs during Sep. 2015-March 2017.

We need such statistics for reporting to JST



JASTIP-WP4 Symposium: past, present and future

Project term : Sep. 2015 – Sep. 2020

| FY | Period | Location | Participants | countries | presentations |
|-----------|-------------------------|-----------------|--------------|-----------|---------------|
| 2015 | March 24-26, 2016 | KU (Kyoto, Uji) | | | |
| 2016 | March 22-23, 2017 | KU (Uji) | | | |
| 2017 | ??? | ??? | | | |
| 2018 | ??? | ??? | | | |
| 2019 | ??? | ??? | | | |
| 2020 ? | ??? Before September | ??? | | | |

JST recommends us organize JASTIP symposia overseas (in ASEAN countries).

2nd JASTIP WP4 Symposium (March 22-23, 2017) #1

| Day 1: Wednesday, March 22, 2017 | | | |
|--|--|--------------------------------------|------------|
| Session 1 Moderator: Shigenobu Tanaka (Kyoto Univ.) | | | |
| 10:00-10:20 | Welcome Remarks and Review of 2016 WP4 Activities | Kaoru Takara | Kyoto U. |
| 10:20-10:40 | Keynote (1): Water-related disaster in the Philippines: Issues and Policies | Guillermo Tabios III | UP |
| 10:40-11:00 | Keynote (2): Meteorological and Landuse Influences on the 2014 Flood in Malaysia | Zulkifili Yusop | UTM |
| | Coffee/Tea Break | | |
| Session 2 Moderator: Shohei Matsuura (MJIIT/UTM) | | | |
| 11:20-11:40 | Activities in Vietnam | Tetsuya Sumi, Yasuhiro Takemon | Kyoto U. |
| 11:40-12:00 | Joint Collaboration in Research and Educational Exchange Between Thuyloi & Kyoto Universities | Pham Van Song | Thuyloi U. |
| 12:00-12:20 | Collaborative Research between TLU and DPRI to Support Dam Safety in Vietnam | Pham Hong Nga | Thuyloi U. |
| | Lunch | | |
| Session 3 Moderator: Mohd Remy Rozainy bin Mohd Arif Zainol (USM) | | | |
| 13:30-13:50 | Activities in the Philippines | Kazuyoshi Nishijima | Kyoto U. |
| 13:50-14:00 | Architecture and engineering for sustainable resilient vernacular constructions in the Philippines | Meonada Jose Mari Echevarria | UP |
| 14:00-14:20 | Activities in Indonesia | Ignasius Sutapa | LIPI |
| 14:20-14:40 | Earthquake Risk reduction strategy in Indonesia after the 2004 Tsunami Disasters | Irwan Meilano | ITB |
| 14:40-15:00 | Collaborative Researches and Activities on Water-related Disasters in ASEAN Countries | Anawat Suppasri, Fumihiko Imamura | Tohoku U. |
| 15:00-15:20 | ICT Use in Disaster Evacuation of ASEAN Citizens [JASTIP-Net Project] | Natt Leelawat | Tohoku U. |
| 15:20-15:30 | Group Photo | | |
| | Coffee/Tea Break | | |

2nd JASTIP WP4 Symposium (March 22-23, 2017) #2

| Session 4 Moderator: Gerard Thomas Joson (Univ. of the Philippines) | | | |
|---|--|---------------------------------|------------|
| 15:50-16:10 | Activities in Malaysia | Ismail Abustan | USM |
| 16:10-16:30 | From MJIT: Education and Research | Masafumi Goto | MJIT/UTM |
| 16:30-16:50 | Assessing Water Quality in the Langat River Basin During Disaster Period Using Integrated Remote Sensing and Modeling Methodologies [JASTIP-Net Project] | Muhamad Ali bin Muhammad Yuzir | MJIT/UTM |
| 16:50-17:10 | Identifying the Meteorologically Homogeneous Zones within ASEAN (Malaysia-Indonesia) and Its Application for Extreme Rainfall Analysis and Climate Change [JASTIP-Net Project] | Nor Eliza binti Alias | UTM |
| 17:10-17:30 | Cooperation between MJIT and Japanese Universities | Jun Asanuma | U. Tsukuba |
| 17:30-17:50 | Discussions on Possible Future Research Plan (1) | Moderated by Kaoru Takara | |
| Day 2: Thursday, March 23, 2017 | | | |
| Session 5 Moderator: Khamarrul Azahari Bin Razak (MJIT/UTM) | | | |
| 9:30-9:50 | Activities in Thailand | Tetsuo Tobita | Kansai U. |
| 9:50-10:10 | Basin-wide flood hazard mapping in Sumatra, Indonesia | APIP | LIPI |
| 10:10-10:30 | SATREPS in Vietnam | Pham Van Tien | Kyoto U. |
| | Coffee/Tea Break | | |
| Session 6 Moderator: Takahiro Sayama (Kyoto Univ.) | | | |
| 10:50-11:10 | Development of Hydroinformatics Platform for Hydrohazard Resilient Asia [JASTIP-Net Project] | Kenichiro Kobayashi | Kobe U. |
| 11:10-11:30 | Pre-Disaster Recovery Planning in ASEAN [JASTIP-Net Project] | Kensuke Otsuyama, Norio Maki | Kyoto U. |
| 11:30-11:50 | Discussions on Possible Future Research Plan (2) | Moderated by Kaoru Takara | |
| 11:50-12:00 | Conclusions | | |

- Future research activities
- Common issues
- Assembling JASTIP-WP4 research outputs
- Mapping of JASTIP-WP4 research sites (and what)
- JASTIP-Net projects (and how/what)
- Location of 3rd WP4 Symposium
- Possible locations of 4th and 5th WP4 Symposia