Japan-ASEAN Science, Technology and Innovation Platform (JASTIP)
Report of JASTIP-Net Activity

Date: 3/12/2017

<table>
<tr><td rowspan="5">1. Research partner</td><td colspan="3">Affiliated Organization</td></tr>
<tr><td>Name</td><td colspan="2">Nor Eliza Alias</td></tr>
<tr><td>Affiliation</td><td colspan="2">Universiti Teknologi Malaysia</td></tr>
<tr><td>Position</td><td>Senior Lecterur</td><td></td></tr>
<tr><td>Address</td><td colspan="2">Faculty of Civil Engineering, Universiti Teknologi Malaysia, 81310, Johor Bahru, Johor, Malaysia</td></tr>
<tr><td>2. Collaborative research</td><td>Collaborative research theme</td><td colspan="2">Headquarters
☐ To Develop Operational Linkages and Human Resources among Academic Sector, Government Agencies, and Private Sectors in ASEAN countries and Japan.
☐ To Introduce Various STI Collaborations for Effectively and Efficiently into the Society based on the three joint laboratories' activities.

Energy & Environment Joint Lab
☐ Studies on Rural/Community Renewable Energy.
☐ Development of Renewable Energy Technology adapted to the ASEAN region.
☐ Studies on Energy Policy/Security in the ASEAN region.

Bioresources & Biodiversity Lab
☐ Studies on Biodiversity in the ASEAN Region Contributing to the</td></tr>
</table>

		Improvement of Identification, Collection and/or Information. ☐ Sustainable Utilization of Bioresources for Biorefinery, Bioremediation, Wood Construction, Food or Medicine. ☐ Plant Improvement for Agroforestry Systems and Carbon Sequestration Contributing to the Mitigation of and/or Adaptation to Climate Change. **Disaster Prevention Joint Lab** ☐ Innovative Ideas on Disaster Prevention, Mitigation and Recovery Technologies and Policies Peculiar to Each ASEAN Country. ☐ How to Cope with Trans-Boundary Disasters in the ASEAN Region Such as Tsunami, Flood, Drought and Haze. ☑ Understanding and Quantitative Evaluation of Disaster Risks Peculiar to ASEAN Countries.
	Collaborative research title	"Identifying the meteorologically Homogeneous Zones within ASEAN (Malaysia-Indonesia) and its application for Extreme Rainfall Analysis and Climate Change"
	Host core-researcher	Prof. Kaoru Takara, Prof. Eichi Nakakita,

3. Members

Name	Prof. Dr. Zulkifli bin Yusop		
Affiliation	Resource sustainability research alliance	Position	Dean of research alliance, Univesiti Teknologi Malaysia (UTM)
Name	Assoc. Prof Dr. Fadhilah binti Yusof		
Affiliation	Department of Mathematics, Faculty of Science, Universiti Teknologi Malaysia	Position	Director, Climate Change Research Group, UTM
Name	Dr. Norazlina Ismail		
Affiliation	Department of Mathematics, Faculty of Science, Universiti Teknologi Malaysia	Position	Senior Lecturer
Name	Dr. Apip		
Affiliation	Indonesian Institute of Sciences - LIPI & APCE-UNESCO	Position	Senior Researcher (surface hydrological modeling) and Excecutive Secretary of APCE
Name	Trinah Wati		
Affiliation	Indonesian Agency for Meteorology Climatology and Geophysics	Position	Researcher (Climatology)
Name	Unggul Handoko		

Affiliation	Indonesian Institute of Sciences - LIPI	Position	Researcher (Hydrometeorology)

4. Report of activities

Please describe 1) research activities and major findings and 2) their academic and social implications toward achieving the SDGs within 2 pages. You can include tables, figures and photos if necessary.

JASTIP-NET REPORT (SEPT 2016 – MARCH 2017)

In order to initiate collaboration between Universiti Teknologi Malaysia (represented by Department of Hydraulic and Hydrology, and Climate Change Research Group) with LIPI (represented by Research Centre for Limnology) and Asia Pacific Centre for Ecohydrology (APCE), we organized a meeting to LIPI Bogor, Indonesia on 31 January 2017 to 2 February 2017. The meeting includes presentation from both parties. This is to share expertise related to extreme rainfall analysis. Representative from the Indonesian Agency for Meteorology Climatology and Geophysics also presented. The meeting was held successfully whereby we discuss on how data may be shared and what we may do for the current project and future project. However, MOU between our departments should be available in order for the Indonesia Meteorological Agency to share their rainfall data and to be it free of charge. Rainfall data is the main component of this JASTIP research project. Unfortunately an approval of MOU for UTM takes a lot of time. However in order to proceed with the project, we focus on establishing methodology to determine the exreme rainfall homogeneous region for Malaysia. Once the Indonesia data are available, we will proceed using similar method. It would be interesting to observe how much difference of the region will be developed. One master student graduated from this project. With this report, pictures of the JASTIP collaboration trip to Bogor Indonesia and paper submitted and accepted by Journal of Far East Journal of Mathematical Sciences is included. We have also visited DPRI,Kyoto University to collect the GCM data under the supervision of Prof. Eiichi Nakakita on March 2017.

Future Plan for JASTIP-NET 2017

Complete the Indonesia data and conduct research using GCM data

Group Photo with Dr. Ignasius D.A Sutapa Executive Director of Asia Pasific Center for Eco-hydrology, Indonesia (second from left), Prof Zulkifli Yusop Dean of Resource Sustainability Research Alliance of Universiti Teknologi Malaysia.

Presentation by Miss Trinah (Indonesian Agency for Meteorology Climatology and Geophysics)

Presentation describing JASTIP and the collaboration Project.

MOU meeting

Extraction of Japanese Global Climate Model (MRI-AGCM – SOUSEI PROGRAM) data extraction in Nakakita's Lab with help og Miss Osakada in early March 2017.

5. List of publications

1) Sahrin, S., Ismail, N, Alias, N.E, Regional Frequency Analysis on Peninsular Malaysia Using L-Moments, Far East Journal of Mathematical Sciences. (Accepted for publishing)

6. List of oral presentations

1) Nor Eliza Alias, Sharainie Shahrin, Identifying meteorologically Homogeneous Zones within ASEAN (Malaysia-Indonesia) and its application for Extreme Rainfall Analysis and Climate Change. JASTIP-WP4 Symposium, Kyoto, 22-23 March 2017.

ATTACHMENT:

1) Accepted paper for publishing in the Far East Journal of Mathematical Sciences (FJMS)
2) Presentation Slide of JASTIP-WP4 Symposium, Kyoto, 22-23 March 2017, Uji-Kyoto, Japan.