Improving Education and Research Activity among Engineering Universities and Developing Industry in the ASEAN Region

- The aim of AUN/SEED-Net project through promotion of U-I Collaboration -

12th ICCEED Open Forum

14 November 2013

JICA Chubu International Center

Presented by AUN/SEED-Net Secretariat
Who we are?

1. AUN/SEED-Net

Technical Cooperation Project
by Japan International Cooperation Agency (JICA)

ASEAN University Network / Southeast Asia Engineering Education Development Network

Project Purpose: Capacity Development of Member Institutions (MIs) in ASEAN for human resource development platform in engineering to contribute sustainable development in the region.

2. Project Period:

- Preparatory Period: April 2001 – March 2003
- Phase 1: March 2003 – March 2008
- Phase 2: March 2008 – March 2013
- Phase 3: March 2013 – March 2018

12 Years
5 Years
Our Members

10 ASEAN countries:
26 Member Institutions

1. University of Yangon
2. Yangon Technological University

1. Chulalongkorn University
2. King Mongkut’s Institute of Technology Ladkrabang
3. Burapha University
4. Kasetsart University
5. Thammasat University

1. Institute of Technology of Cambodia

1. Universiti Sains Malaysia
2. Universiti Malaya
3. Universiti Putra Malaysia
4. Universiti Teknologi Malaysia

1. National University of Singapore
2. Nanyang Technological University

Japan:
14 Supporting Universities

1. National University of Laos

1. Hanoi University of Science and Technology
2. Ho Chi Minh City University of Technology

1. University of the Philippines - Diliman
2. De La Salle University
3. Mindanao State University - Illigan Institute of Technology

1. Universiti Brunei Darussalam
2. Institut Teknologi Brunei

1. Institute of Technology of Cambodia

Network of 40 Leading Engineering Institutions

- Hokkaido University
- Keio University
- Kyoto University
- Kyushu University
- Nagoya University
- National Graduate Institute for Policy Studies
- Osaka University
- Shibaura Institute of Technology
- Tohoku University
- Tokai University
- Tokyo Institute of Technology
- Toyohashi University of Technology
- University of Tokyo
- Waseda University
## Major Programs of SEED-Net

<table>
<thead>
<tr>
<th>Program</th>
<th>Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Degree Program</strong></td>
<td>Master’ Degree Program / Doctoral Degree Sandwich Program / Doctoral Program in Japan / Doctoral Program in Singapore</td>
</tr>
<tr>
<td><strong>Research Program</strong></td>
<td>Collaborative Research Program with Industry / Collaborative Research Program for Common Regional Issues / Collaborative Research with Alumni / Research Fellowship Program</td>
</tr>
<tr>
<td><strong>Mobility and Networking Program</strong></td>
<td>Japanese Professor Dispatch Program / Regional Conference / ASEAN Engineering Journal / Short-term Research Program in Japan / Short-term Visit Program in ASEAN</td>
</tr>
<tr>
<td><strong>University-Industry Linkage Program</strong></td>
<td>Today’s Presentation</td>
</tr>
</tbody>
</table>
Aim of U-I Collaboration under SEED-Net

1. Objective
   Contribution to advancement of industry through strengthening linkage with MIs

2. Basic Concept of U-I Collaboration under SEED-Net
   (Announced on 1 September 2013)

   (1) Strengthening of Research and Educational Capacity of MIs
   (2) Mutual Development through Collaborative Research
   (3) Country-based Approach to implement U-I Activity in each country → U-I coordinators at each MI
   (4) Opportunities to introduce MIs to industry including Japanese industries
Structure of U-I Activities under SEED-Net

Promotional Activities

Collaborative Research with Industry (CRI)

Contribution to advancement of industry through strengthening linkage with MIs

Capacity Development (Training)

Advisory Committee
1. Promotional Activities (1)

The Directory for Engineering:
- A platform linking companies who are interested to do research with universities.
- Key Information: Research Topic, Academic Staff, Lab Facility

Thai, Indonesian, Malaysian & Philippine editions (Booklet and DVD)

Future: Expansion to other MIs
1. Promotional Activities (2)

University-Industry Collaboration Seminars:
- To promote and strengthen U-I linkage in the ASEAN region
- Speakers from university and industry to share knowledge and experiences on U-I collaboration

Official Supporters in 2013:

[Japan]
- Japanese Mission to ASEAN
- Japanese Chamber of Commerce Bangkok
- Jakarta Japan Club
- JETRO Jakarta Office

[ASEAN]
- Federation of Thai Industries
- Technology Promotion Association (Thailand – Japan)
1. Promotional Activities (3)

Jakarta Seminar
Total 231 participants
106 public audience members

- 68% (76) University
- 32% (30) Industry

Half of them were Japanese companies

Bangkok Seminar
Total 214 participants
142 public audience members

- 41% (59) University
- 59% (83) Industry
SEED-Net considers that such interaction could function as an entry point of further collaboration.

(Daily Jakarta, 19 August 2013)
2. Collaborative Research with Industry (1)

- USD 50,000 / 2 years
- Principle Investigator must be a full-time faculty member of MIs
- Japanese professor from Japanese Supporting University as Co-investigator
- 20% counter-budget from Industry required
- Approx. 8 projects per year (subject to budget)

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of Application Submitted</th>
<th>No. of Project Awarded</th>
<th>Japanese Companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRI 2011</td>
<td>24</td>
<td>12</td>
<td>2</td>
</tr>
<tr>
<td>CRI 2013</td>
<td>22</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>CRI 2015</td>
<td>To be informed in 2014</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2. Collaborative Research with Industry (2)

Nationality of Industrial Partners

- Japan, 5
- ASEAN, 15

Location

- Vietnam, 7
- Indonesia, 5
- Thailand, 4
- Malaysia, 3
- Cambodia, 1

Engineering Field

- Mechanical, 3
- Geo, 3
- Material, 3
- Chemical, 2
- Electrical, 2
- Energy, 1
- IT, 1
- Civil, 3
2. Collaborative Research with Industry (3)

SEED-Net aims for mutual development through collaborative research regardless of whether or not the financial resource is originated by SEED-Net.

(Nikkei, 15 August 2013)
Way Forward

➢ SEED-Net wishes you to positively and innovatively consider research collaboration with MIs to expand your business opportunities in South East Asia for the sustainable development of the region.

➢ SEED-Net aims to contribute such initiative.
Contact Us

AUN/SEED-Net Secretariat
[Address]
JICA Project Office for AUN/SEED-Net
Rm.109-110, , Bldg.2, Faculty of Engineering
Chulalongkorn University, Bangkok 10330, Thailand
[Tel] +66-2-218-6419/20/21
[Fax] +66-2-218-6418
[E-mail] support@aun-seed.net (Japanese available)
[URL] www.seed-net.org
[Facebook] www.facebook.com/aunseednet

Japan International Cooperation Agency (JICA)
Technical and Higher Education Division, Higher Education and Social Security Group
Human Development Department
[Address]
3rd floor, Nibancho Center Building 5-25, Niban-cho, Chiyoda-ku, Tokyo 102-8012, Japan
[Tel] +81-3-5226-8340 [Fax] + 81-3-5226-6341