



AUN/SEED-Net



Overview of AUN/SEED-Net

Naoki Umemiya, Ph.D.
Director, Technical and Higher Education team,
Human Development Department,
Japan International Cooperation Agency (JICA)

AUN/SEED-Net

**ASEAN University Network /
South East Asia Engineering Education Development Network**



The Network consists of 26 leading institutions from 10 ASEAN countries with the support of 14 leading Japanese Universities.



AUN/SEED-Net is mainly supported by the Japanese Government through JICA.

<Planning at the Governmental Level>

1997 **ASEAN-Japan Summit Meeting**

1999 **ASEAN+ 3 Summit Meeting**

<Project Period>

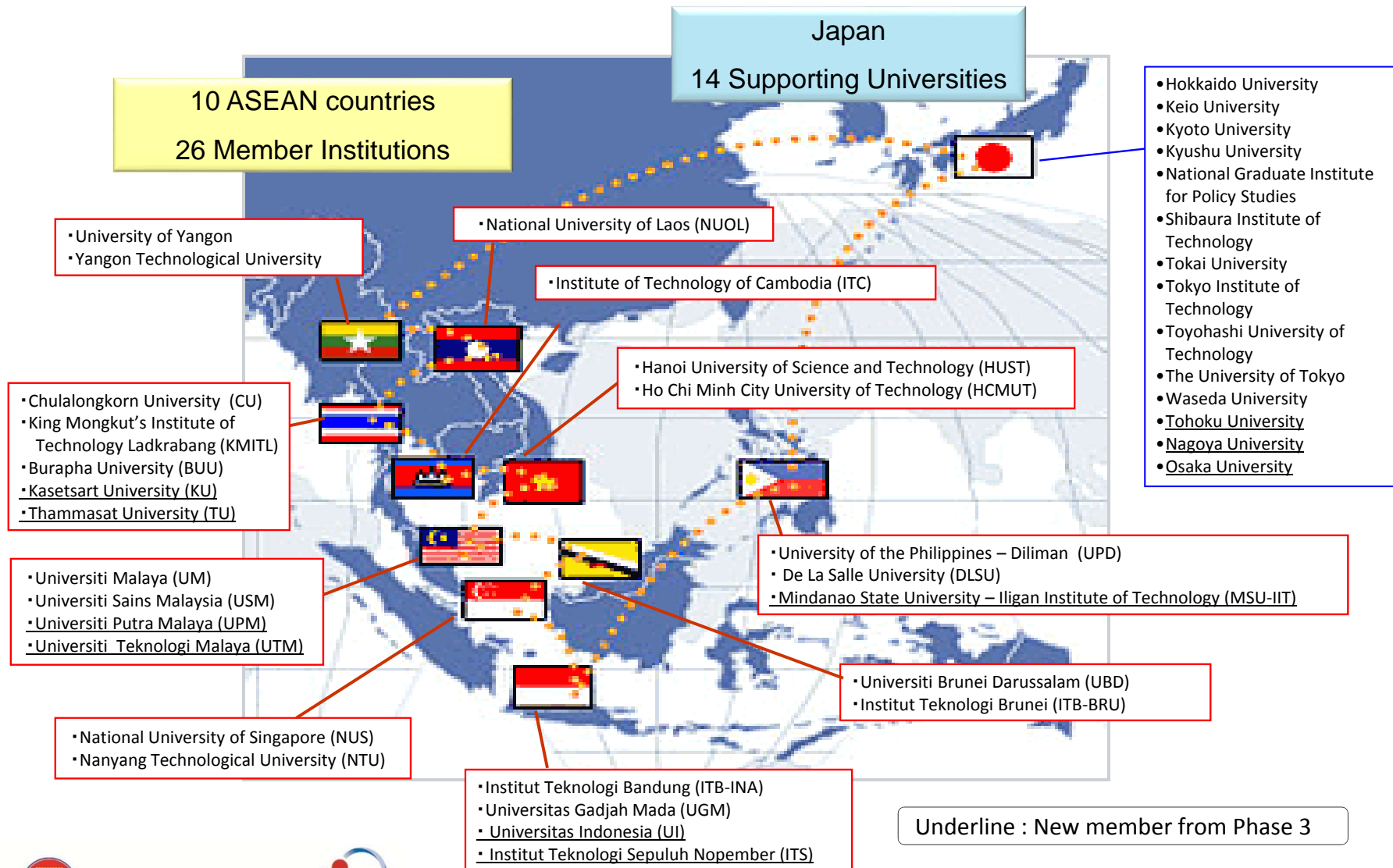
Preparatory Stage : April. 2001 - Mar. 2003

Phase 1 : Mar. 2003 - Mar. 2008

Phase 2 : Mar. 2008 - Mar. 2013

Phase 3 : Mar. 2013 - Mar. 2018

Region-Wide Engineering Network among 40 top-level universities in ASEAN and Japan



Outline of AUN/SEED-Net Project

Project Purpose & 4 Main Objectives

Capacity Development of academic staff of Member Universities
 Scholarship and Research programs for faculty staff

Academic networking among Member Universities in ASEAN and Japan
 Other academic activities among universities in ASEAN and Japan (e.g. organizing conferences, publicizing an academic journal, exchange of faculty staff, etc.)



Addressing common regional issues
 Research conducted which addresses common issues in the region

Linkage between universities and industry
 Strengthen the linkage between industrial sectors and Member Universities

Network of 40 leading engineering institutions

ASEAN
 26 Member Institutions



Japan
 14 Supporting Universities

The project will contribute to the integration of ASEAN (People to People Connectivity)

10 Engineering Fields and Hosting Structure

Senior ASEAN (Singapore, Brunei, Thailand, Indonesia, Philippines) :Mainly hosting
 Junior ASEAN (Cambodia, Laos, Myanmar, Vietnam): Mainly sending

Field	ASEAN (Host)	Japan (Support)
Chemical Eng. (ChE)	<u>DLSU</u> , UGM, UM	<u>Tokyo Institute of Technology</u> Kyoto University The University of Tokyo
Civil Eng. (CE)	<u>CU</u> , UM, UTM, TU	<u>Hokkaido University</u> Tokyo Institute of Technology
Computer and Information Eng. (CIE)	<u>KMITL</u> , UGM	<u>Tokai University</u> Hokkaido University Toyohashi University of Technology
Electrical and Electronics Eng. (EEE)	<u>CU</u> , UM, UP, ITS	<u>Tokyo Institute of Technology</u> Keio university
Geological and Geo-Resource Eng. (GeoE)	<u>UGM</u> , CU, USM	<u>Kyushu University</u> Hokkaido University

*underline : Main coordinator or supporter

10 Engineering Fields and Hosting Structure

Field	ASEAN (Host)	Japan (Support)
Materials Eng. (MatE)	<u>USM</u> , UGM, UM	<u>Toyohashi University of Technology</u> Kyoto University Tokyo Institute of Technology
Mechanical & Manufacturing Eng. (ME/ManuE)	<u>ITB(INA)</u> , UM, DLSU, UPM	<u>Keio University</u> Toyohashi University of Technology Tokai University
Energy Eng. (EneE)	<u>ITB(INA)</u> , USM, KMITL	<u>Kyoto University</u> Kyushu University
Environmental Eng. (EnvE)	<u>UP</u> , CU, <u>ITB(INA)</u> , KU	<u>The University of Tokyo</u> Kyoto University
Natural Disaster (ND)	<u>UGM</u> , <u>ITB(INA)</u> , CU	<u>Kyoto University</u> Tokyo Institute of Technology Kyushu University

*underline : Main coordinator or supporter

Programs and Activities

Graduate Degree Programs

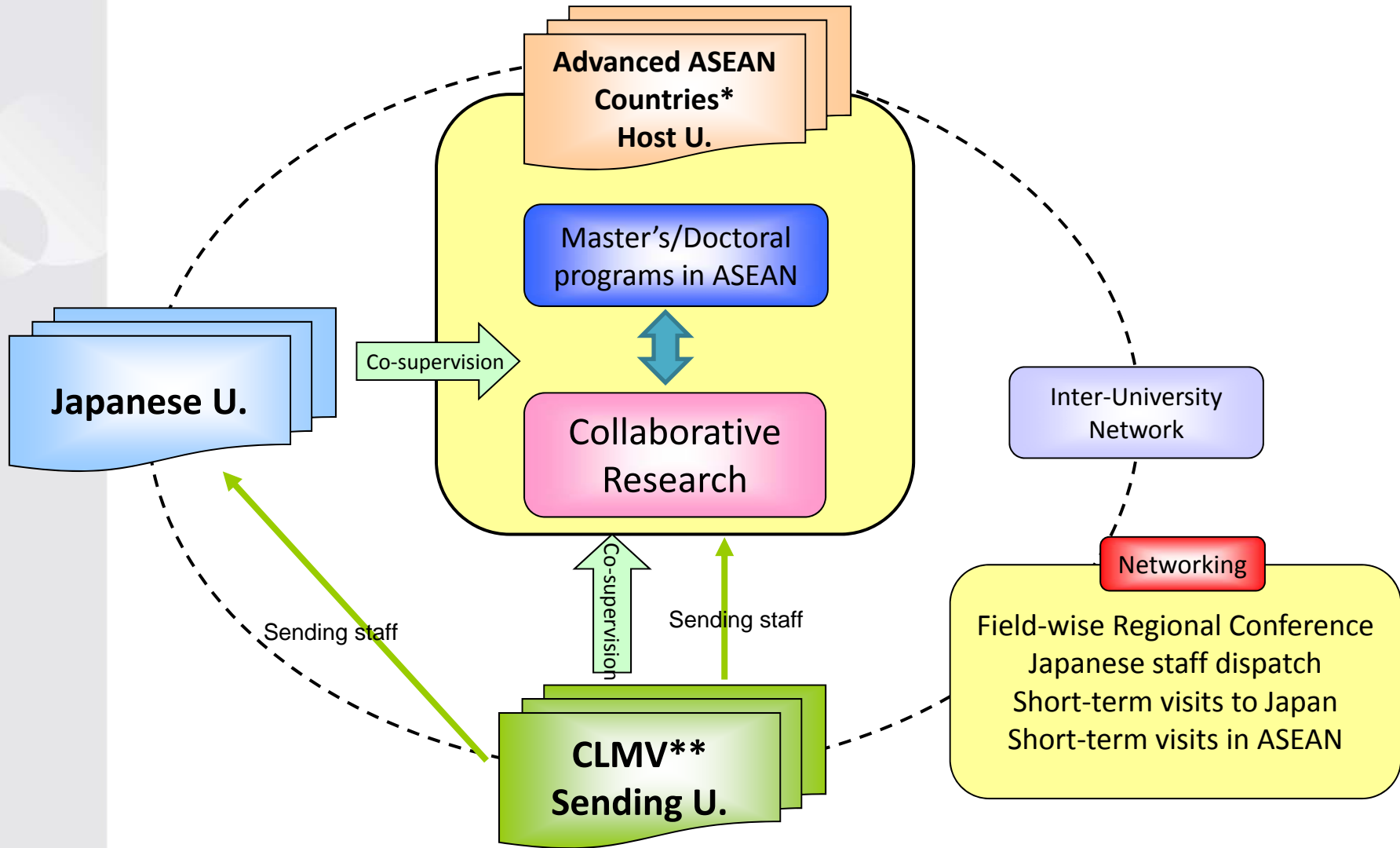
Research Programs

Mobility and Networking

University-Industry Collaboration

Framework of AUN/SEED-Net

Master's/Doctoral Programs + Collaborative Research + Networking



* Advanced ASEAN countries: Indonesia, Malaysia, Philippines, Singapore & Thailand

** CLMV: Cambodia, Laos, Myanmar & Vietnam

1. Graduate Degree Programs (1) : General Concept

Graduate Degree Programs are offered to young academic staffs or prospective staffs of Member Institutions to develop capacity of the faculty staffs.

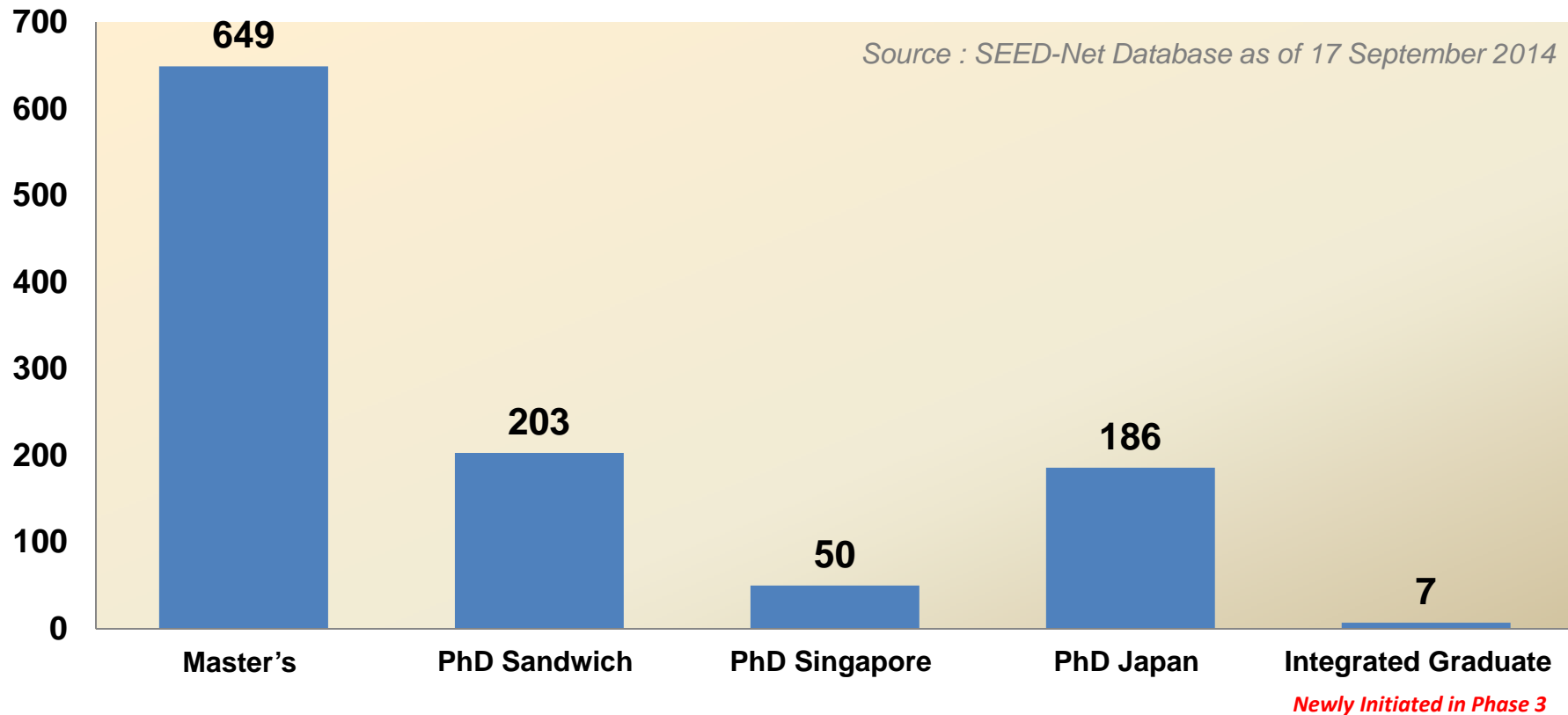
Program (Total Quota)	Scholarship Duration	Features
Master's (Quota: 50)	2 years	<ul style="list-style-type: none"> • 2-year Master's Degree Program at Host Institution in ASEAN • Collaborative Research Program, will be provided as Thesis research budget.
Ph.D. Sandwich Program (Quota: 20)	3 years	<ul style="list-style-type: none"> • Joint supervision between ASEAN Host Institution & Japanese Supporting University through Collaborative Research Program • Maximum 8 months of research period in Japan
Ph.D. Program in Japan (Quota: 20)	3 years	<ul style="list-style-type: none"> • Ph.D. Program at Japanese Supporting University
Ph.D. Program in Singapore 10 for NTU; 10 for NUS (Quota: 20)	4 years	<ul style="list-style-type: none"> • Direct Ph.D. Program at Nanyang Technological University (NTU) or National University of Singapore (NUS) • Bachelor degree holders can apply for this program
Integrated Graduate Program* <i>Newly initiated in Phase 3</i> (Quota: 10)	4 years	<ul style="list-style-type: none"> • Direct Ph.D. Program at Host Institution in ASEAN • Bachelor degree holders can apply for this program • Joint supervision between Host Institution & Japanese Supporting University through Collaborative Research Program • Maximum 10 months of research period in Japan

Remark : Actual quota is due to the budget situation in every Japanese Fiscal Year.

1. Graduate Degree Programs (2)- Progress

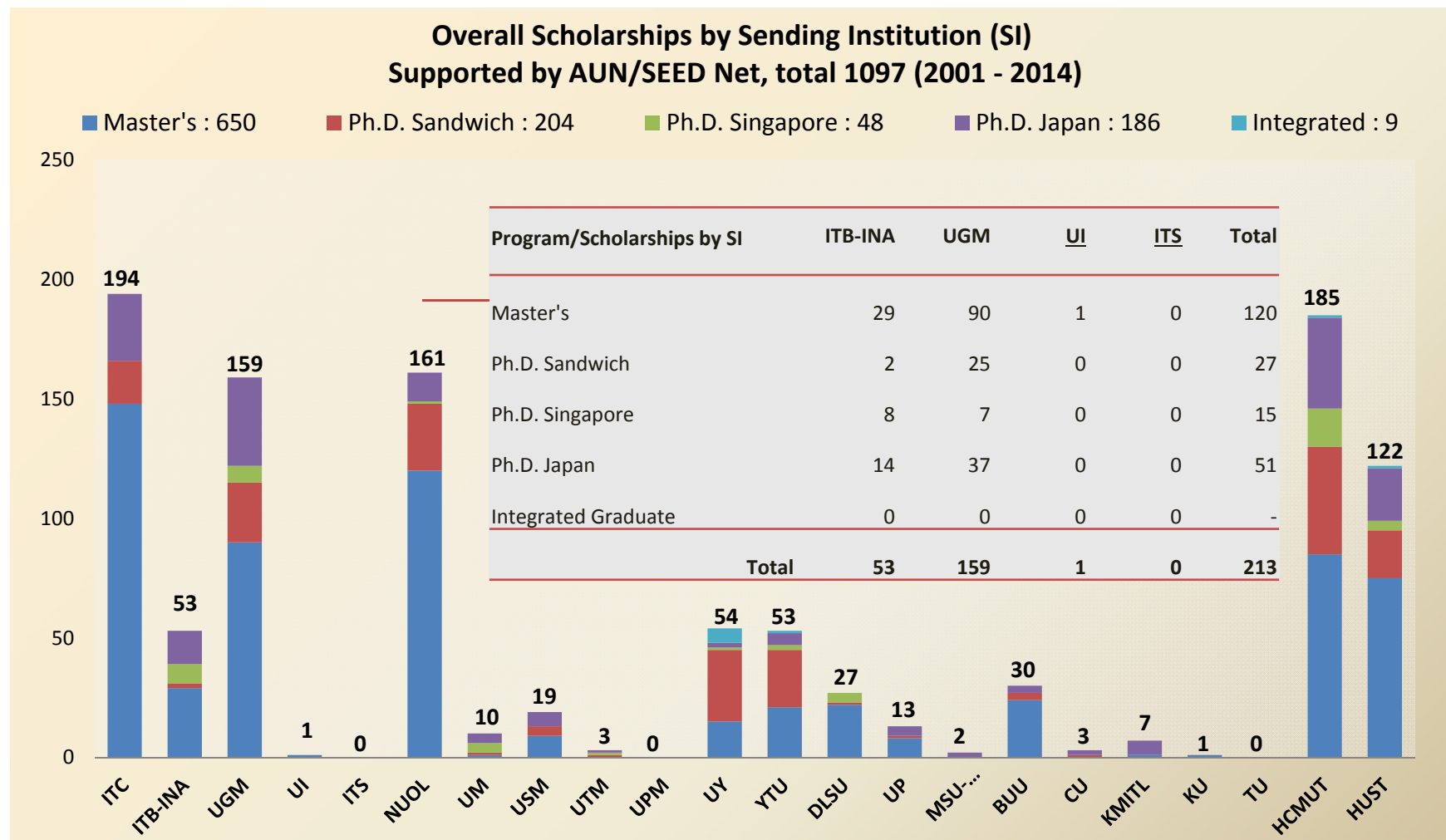
Overall Scholarships Supported by AUN/SEED-Net

Total **1,095** (JFY 2001 - 2014)



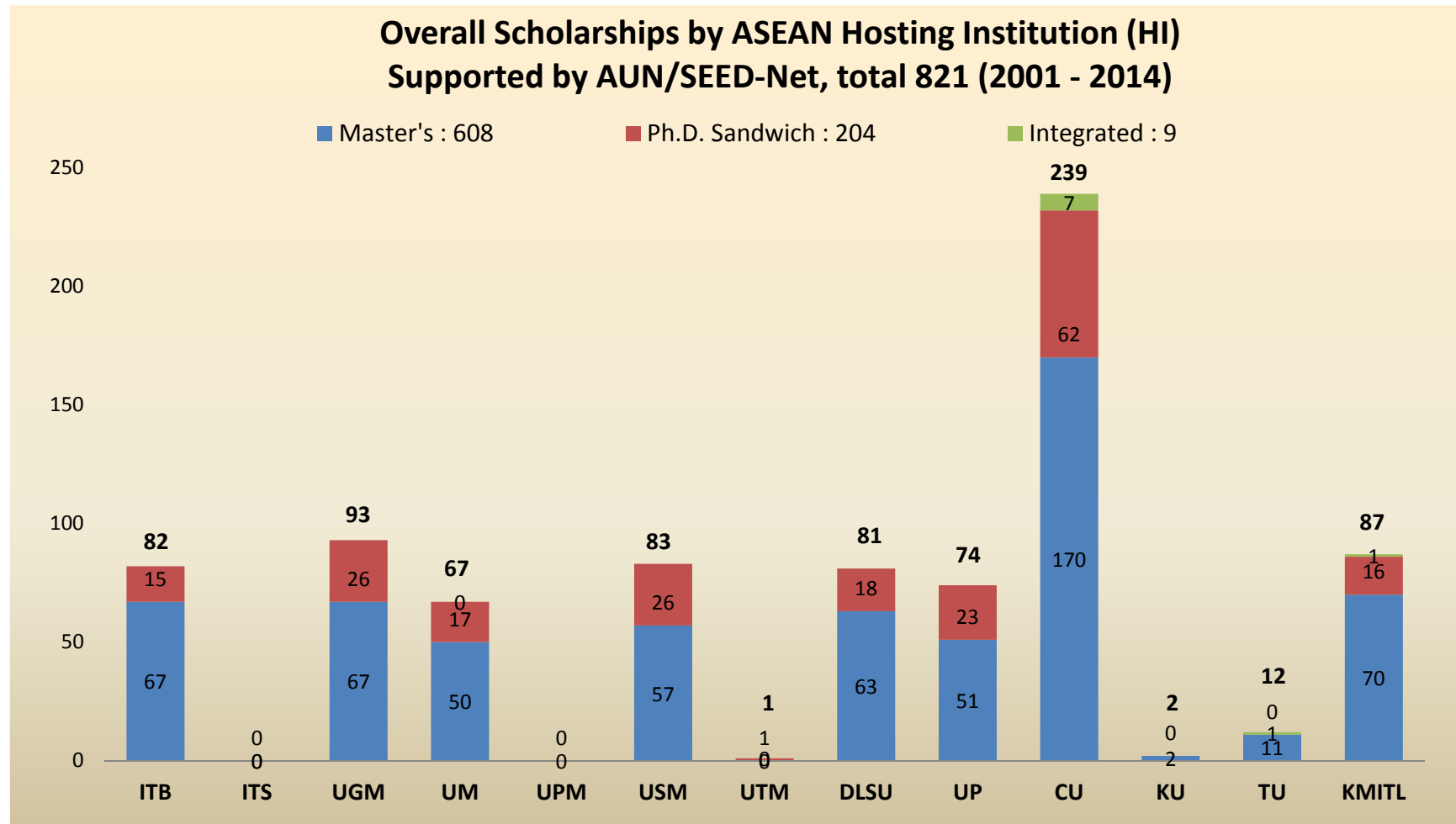
Remark : For Master's Degree Program, the overall support includes scholarships of Master's Degree Program supported by NTU (17) and NUS (25) in Singapore, total 42 scholarships during preparatory stage & Phase 1.

1. Graduate Degree Programs (3) Sending



Remark : For Master's Degree Program, this statistical display includes scholarships of Master's Degree Program supported by NTU (17) and NUS (25) in Singapore, total 42 scholarships during Preparatory Stage & Phase 1

1. Graduate Degree Programs (4) Hosting



Remark : This statistical display does not include scholarships of Master's support during preparatory stage & Phase 1 by NTU (17) and NUS (25), total 42, Ph.D. Japan, total 186, and Ph.D. Singapore, total 48.

2. Research Programs (1) - Outline

Collaborative Research Program for Alumni (CRA)

- Objective: To sustain academic network in the region
- Target: AUN/SEED-Net doctoral alumni who are faculty staff of Member Institutions (age under 40)
- Ceiling amount: US\$25,000
- 2 Japanese professor dispatches from Japanese Supporting Universities

Collaborative Research with Industry (CRI)

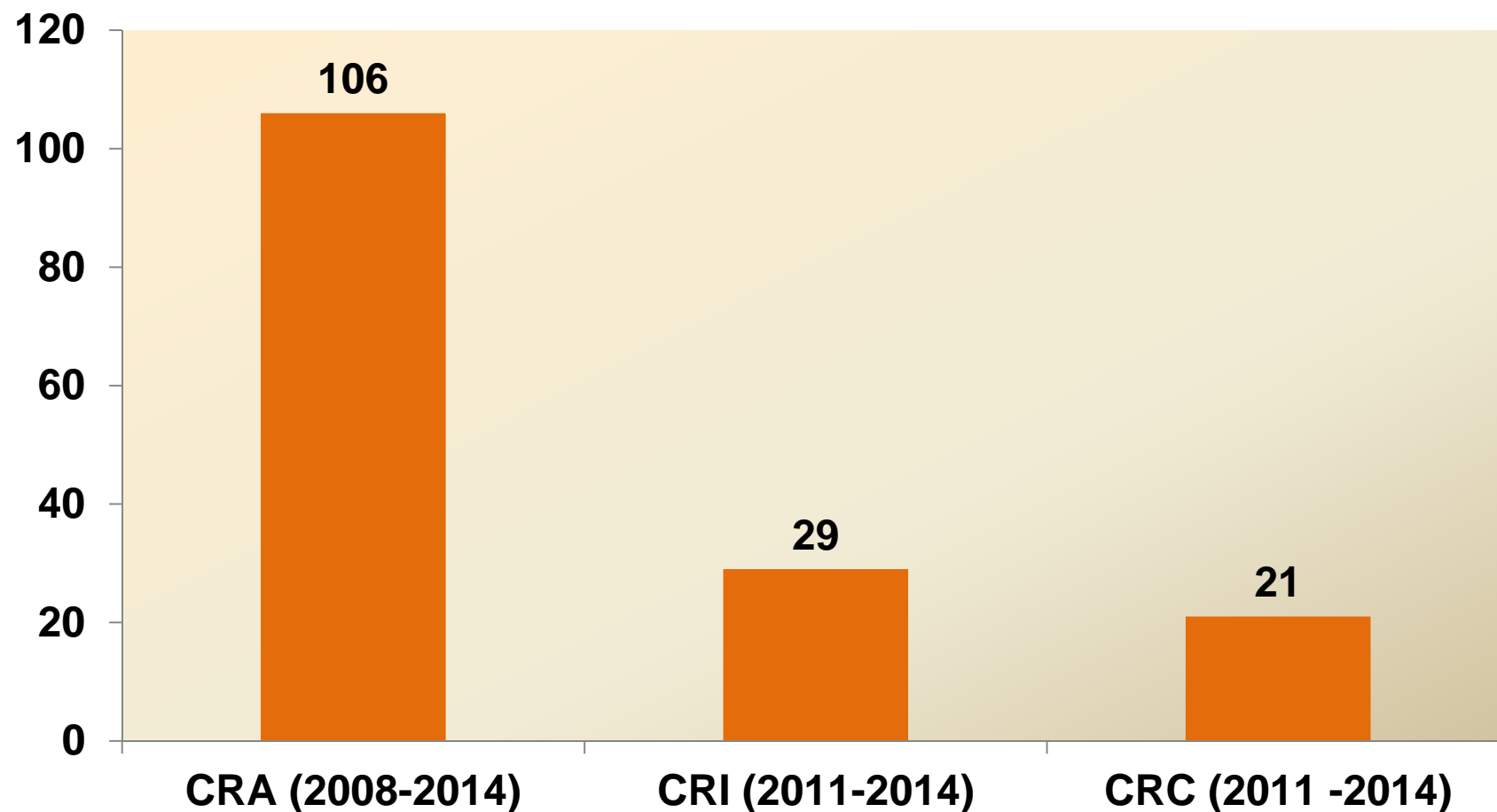
- Objective: To strengthen collaboration with Industry
- Target: Faculty staff of Member Institutions
- Ceiling amount: US\$50,000
- 4 Japanese professor dispatches from Japanese Supporting Universities
- Counter-budget of 20% (in cash only) from industry

Collaborative Research Program for Common Regional Issues (CRC)

- Objective: To address common regional issues
- Target: Faculty staff of Member Institutions
- Ceiling amount: US\$50,000
- 4 Japanese professor dispatches from Japanese Supporting Universities
- Must involve at least 2 Member Institutions and 1 Japanese Supporting Universities

2. Research Programs (2) : Progress

Overall number, total **156** Projects
Awarded by AUN/SEED-Net



3. Mobility & Networking

Mobility Program within ASEAN Region and Japan

- Japanese Professor Dispatch Program (JPDP)
- Short-Term Research Program in Japan (SRJP)
- Short-Term Visit Program in ASEAN (SVAS)

International Academic Conference

- 10 conferences per year by engineering fields
- Number of supported : 79 conferences
- Participants (JFY2013):

Member Univ.	JP Prof.	PhD JP Student	Industry	Non-Member Univ.	Total
753	50	8	38	271	1,120

ASEAN Engineering Journal

8 issues per year (17 published with 118 papers)

International Academic Conference on Natural Disaster by AUN/SEED-Net

	Theme	Dates	Host	Remark
1	Robust and Resilient Society Against Natural Hazards & Environmental Disasters	Aug 24-26, 2010	Kyoto University, Japan	Co-sponsored by Kyoto U GCOE-ARS Program
2	Building Disaster Resilience in ASEAN Region	Jan 22-23, 2014	Universitas Gadjah Mada, Indonesia	
3	Natural Disaster	Sep 29-30, 2014	University of Yangon, Myanmar	back to back with the 7 th AUN/SEED-Net Geological Engineering Conference
4	Building Resilient Communities	Sep 25-26, 2015	De La Salle University, the Philippines	

International Academic Conference on Natural Disaster by AUN/SEED-Net

	Theme	Dates	Host	Remark
5	Towards Durable Disaster Preparedness and Sustainable Recovery	Sep 6-7, 2016	MJIT, Universiti Teknologi Malaysia, Malaysia	<ul style="list-style-type: none">- Co-supported by JASTIP.- To be held With presence of Prof. Takara as keynote speaker.- Back to back with Malaysia-Japan Joint International Conference, etc.

Now calling for abstracts: <http://mjiit.utm.my/rcnd2016/>

4. University – Industry Collaboration

Promotional Activities

- (1) **Laboratory Directory** of Member Institutions (5 Editions = Thailand, Indonesia, Malaysia, Philippines, Lao PDR) with Hard copy & DVD
 - ~ Tool to Introduce Member Institutions to Industry for future potential collaboration
 - ~ Expansion to other countries

(2) **University – Industry Collaboration Seminar**

- JFY 2013: Bangkok (21 Jun), Jakarta (18 Sep)
 - JFY 2014: Malaysia (18 Sep)
- To share knowledge and experiences on U-I collaboration

Capacity Development (Training)

(1) **U-I Linkage Promotion Training**

Enhancing their knowledge on how to make and promote a linkage with industry

(2) **Management of Technology (MOT) Training**

Fostering young academic staff at MIs to become highly-qualified researchers contributing to industry with knowledge of MOT

- MOT organized by UTM/MJIIT (Aug 2014)

JICA's Assistance in Higher Education Sector

1. To strengthen leading institutions

- Strengthen leading institution of each country
- Improve higher education sector as a whole (Spill-over effect)
- Develop high-skilled human resources for industry

2. To develop regional academic network Including Japan

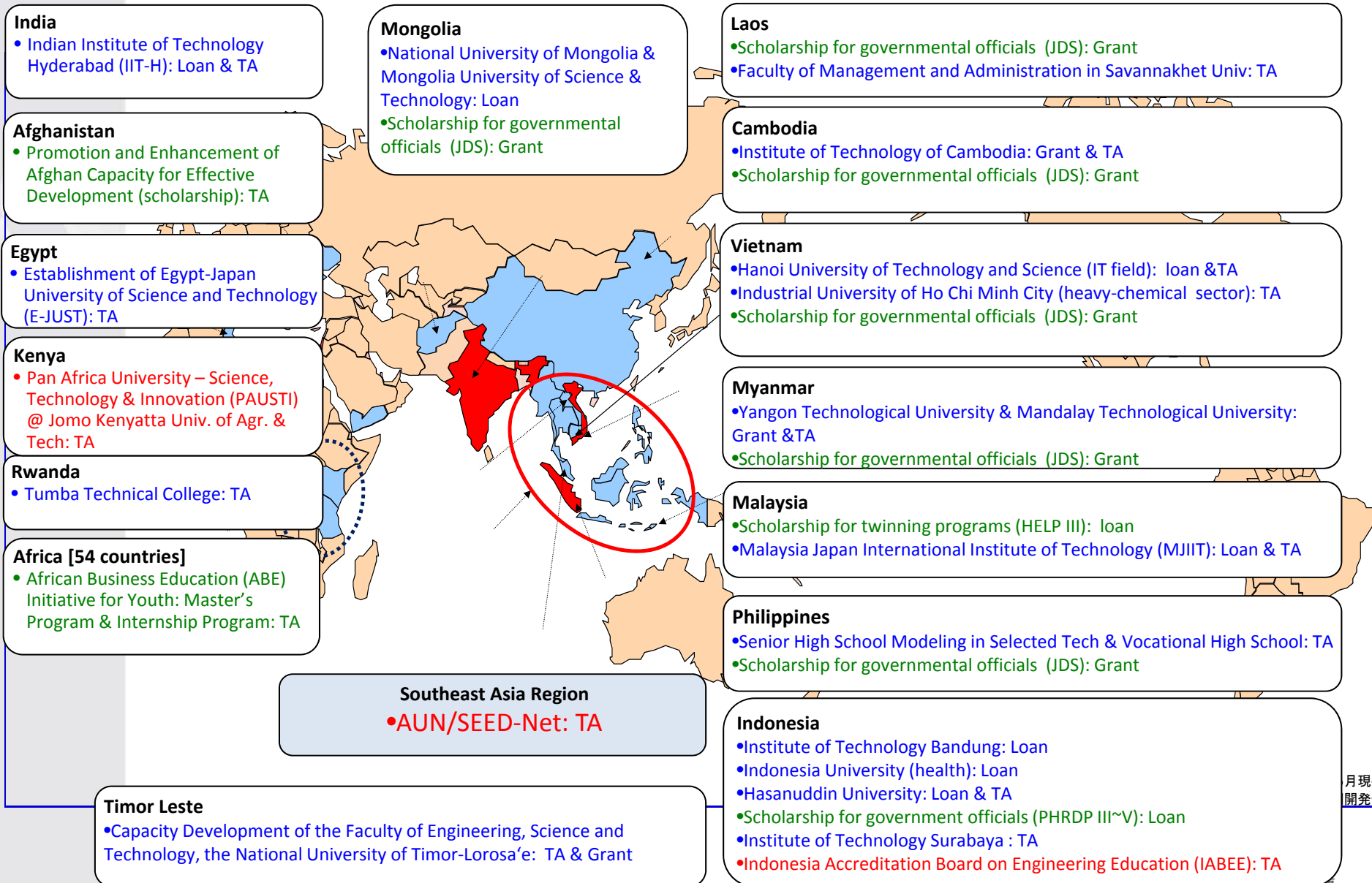
- Strengthen cooperation between partner countries and Japan in science and technology
- Develop academic network between leading universities in partner countries and Japan

3. To support study abroad programs to Japan

- Promote brain circulation between partner countries and Japan
- Establish foundation of lasting academic network between universities of partner countries and Japan

JICA's Profile in Engineering Higher Education

1. Leading Institutions 2. Networking 3. Overseas study in Japan



Thank you.