

External Evaluation Report
of
Kyoto University Global COE program
“Global Center for Education and Research on
Human Security Engineering for Asian Megacities”

December 21th, 2012

The external evaluation committee of Kyoto University Global COE program
“Global Center for Education and Research on
Human Security Engineering for Asian Megacities”

Preface

Kyoto University has launched the five-year Global Center Of Excellence (GCOE) Program entitled “Global Center for Education and Research on Human Security Engineering for Asian Megacities”, which is financially supported by Ministry of Education, Culture, Sports, Science and technology (Monbukagaku-syo), since 2008 fiscal year.

The purpose of this GCOE program is to establish “Human Security Engineering” and to provide education for next-generation researchers and high-level practitioners for human security in Asian countries. The GCOE programs organized by Monbukagaku-sho were originally aimed at the globalization of research and educational activities of universities in Japan. Reflecting the main concept, this Kyoto University GCOE-HSE program has tried to organize seven overseas bases and establish the new disciplines of “Human Security Engineering” in the existing fields such as civil engineering, sanitary engineering, resources engineering, architectural engineering and so on. This is a very challenging trial, which has not been seen in the other GCOE programs.

At the end of this GCOE program in fiscal year 2012, the external evaluation committee, which consists of 9 members including the chairperson and vice-chairperson, evaluated the comprehensive activities of this GCOE program with respect to “organization”, “education”, “research”, and “Impacts and Future Plans”. This external evaluation report is a summary of the external evaluation meeting, held on December 2nd, 2012. We hope that this external evaluation report contribute to reviewing of whole activities of this Global COE and directing continuous collaborative framework of research and education in near future.

Harushige Kusumi

Chair of the external evaluation committee of Kyoto University Global COE program
“Global Center for Education and Research on Human Security Engineering for Asian Megacities”

The external evaluation committee members of Kyoto University Global COE program “Global Center for Education and Research on Human Security Engineering for Asian Megacities”

The members list (9 members including the chairperson and the vice-chair person)

Name	Nation	Position	Specialties
Harushige Kusumi*	Japan	President, Professor, Faculty of Environmental and Urban Engineering, Kansai University	Geotechnical Engineering Geo-environmental Engineering
Noppadol Phien-wej**	Thailand	Associate Professor, Geotechnical and Earth Resources Engineering, Asian Institute of Technology	Geotechnical and Earth Resources Engineering Geosystem Exploration and Petroleum Geo-engineering
Hu Hong-Ying	China	Professor, School of Environment, Tsinghua University, Beijing, China	Environmental Biology
Le Van An	Vietnam	Vice Rector, Associate Professor, HUE University of Agriculture and Forestry	Agriculture and Forestry Community Development
Huynh Trung Hai	Vietnam	Dean, School for Environmental Science and Technology, Associate Professor, Hanoi University of Science and Technology	Environmental Technology Environmental Engineering
Bernard Tan Tiong Gie	Singapore	Director, Centre for Maritime Studies, Professor, National University of Singapore	Computational Science Maritime Policy
Wawan Gunawan A. Kadir	Indonesia	Vice Rector for Research and Innovation, Professor, Institut Teknologi Bandung	Geophysical Engineering
Vaidya Chetan Kumar Vamanrao	India	Director, Professor, School of Planning and Architecture	Urban Planning Community Management
Dato Mohd Jamil Maah	Malaysia	Former Deputy Vice Chancellor, Professor, Department of Chemistry, Faculty of Science, University of Malaya	Environmental Chemistry

*chairperson **vice-chairperson

Summary of the external evaluation

1. **The meeting of the external evaluation** was conducted on December 2nd, 2012. On that day, Kyoto University Global COE program “Global Center for Education and Research on Human Security Engineering for Asian Megacities” organized the comprehensive symposium entitled “GCOE HSE Symposium on Human Security Engineering 2012”, in which the foreign partners from the related organizations were invited to attend the symposium. After the symposium, the evaluation meeting was held to evaluate and discuss the whole activities of Kyoto University Global COE HSE program.

2. **The external evaluation committee members** included 9 members from 8 countries; Japan, China, Vietnam, Singapore, Thailand, Indonesia, India, and Malaysia (See the members list in detail). The members were selected from not only the ones of partnership-universities with Kyoto University Global COE HSE program but also the ones of the other Asian universities, who has much knowledge and experiences in this field.

3. **The objective** of the external evaluation is to evaluate the activities of Kyoto University Global COE program with respect to “Organization”, “Education”, “Research” and “Impacts and Future Plans”.

4. **The procedure** of the external evaluation was as follows:
 0. To attend the comprehensive symposium “GCOE HSE Symposium on Human Security Engineering 2012”
 1. To fill in the external evaluation sheet based on the symposium and the materials
 2. To summarize external evaluation and discussions
 3. To make the external evaluation report on the basis of the submitted external evaluation sheets
 4. To disclose the external evaluation report

5. **The result of the external evaluation** is summarized as follows:

Evaluation Items	Evaluation				
	A. Excellence (Score: 4)	B. Good (Score: 3)	C. Fair (Score: 2)	D. Poor (Score: 1)	Average Score (Max: 4, Min:1)
1. Organization					
i. Are “Human Security Engineering” and its framework shown clearly?	7	2			3.78
ii. Was the management system of “Human Security Engineering” education and research center managed properly?	6	3			3.67
iii. Has this Global COE program accomplished the initial plan?	7	2			3.78
2. Education					
iv. Does this education program have a clear and distinctive education objectives and features?	6	2	1		3.56
v. Does this education program obtain a sufficient number of students compared with the planned target?	7	2			3.78
vi. Does this GCOE program give the students and young researchers opportunities to conduct international activities?	8	1			3.89
3. Research					
vii. Did program members conduct international research activities and obtain proper achievements?	6	3			3.67
viii. Did the program enforce the on-site research activities using overseas bases?	7	2			3.78
ix. Did this program promote international collaborative research activities?	7	2			3.78
4. Impacts and Future Plans					
x. Did this program have impacts inside and outside of Kyoto University?	6	1	2		3.44
xi. After the end of the project, does this education system have a prospect to sustain the activity?	4	4	1		3.33
xii. After the end of the project, do overseas bases continue the activities?	4	4	1		3.33

6. **The overall evaluation** of the program is “excellent”, however, some comments were expressed. The item by item evaluations were as follows:

Organization:

The program set its goal to solve problems in the mega cities to achieve urban human security, and was well designed and organized to develop a network in which Kyoto University is a center to manage research and education activities. The overseas base played a very important role in education and joint researches. The initial plan was completely accomplished.

It was an excellent program to handle future problems that many major cities would have to face in future. Collaboration involving many countries outside Japan was highly appreciated. Knowledge and experiences could be shared and passed to the younger generation.

This program should be continued and the overseas base should have much more support from not only Kyoto University but also the local university of the overseas bases. Kyoto University and the other universities need to keep expand their partnership and understandings in order to go further.

Education:

The output of this program was excellent especially in education.

A number of students have an opportunity to get training on the Human Security Engineering education program. In the future, these students, with knowledge obtained from this program, from different countries, will contribute significantly to the development at each country and make/create a network so that the knowledge of this program will be continued to share among the countries.

But the number of HSE students from Japan is a little bit less. In this sense, the initiative of Japan with the knowledge of HSE in future might be viewed as one of the problems. In addition, the graduates from this GCOE-HSE program just started their works/tasks at their respective countries/institutions. They should be supported at the early stage: thus the existence of this program should be maintained.

Research:

It is highly evaluated that a lot of joint researches were conducted under the umbrella of this program. The basic concept of “Human Security Engineering” is agreeable among Asian countries, but the integration of researches seems not sufficient.

Impacts and Future Plans:

Some spin-off projects such as KU-ITB pilot project about CCS in Indonesia and Re-inventing

Japanese University Project “Consortium for International Human Resource Development for Disaster-Resilient Countries” has started. These projects can be regarded as one of the impacts of the GCOE HSE projects.

However, the impact seems sufficient in foreign countries, especially Asian countries, but seems not sufficient in Japan. The rules of the overseas base are not clear in future. In addition the activities of this GCOE-HSE project were fully funded by the government and it will be difficult to sustain the program without funding.

The GCOE-HSE program is only the first step in HSE education and research. KU and partnership universities should try to find some way to keep the overseas bases actively. For future collaboration and development of HSE activities, our recommendation is summarized as below:

1. To organize annually international conference on HSE, which involves researchers and graduates from GCOE-HSE education program
2. To report the success of this program to the governments/administrators of the participating countries.
3. To disseminate results of the GCOE/HSE, text books can be free download from the internet.
4. To find other funds from international organizations, which help to sustain the activities initiated under HSE program.

Harushige Kusumi and Noppadol Phien-wej

On behalf of the external evaluation committee of Kyoto University Global COE program
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