Theme: Promoting knowledge sharing and learning

Submitted by: Kyoto University Graduate School of Global Environmental Studies

Asian University Network of Environment and Disaster Management (AUEDM)

Background

Disaster impacts are increasing, and disasters are becoming increasingly complex, which includes so many different dimensions. Traditional disaster risk reduction (DRR) approach is under pressure. We need to be more proactive in DRR. We all can see that the number of catastrophic disasters and their consequences have been increasing it spite of the advanced technologies.

In the 2006 Sidr Cyclone, Bangladesh, the death tolls were less than expected. It is argued that it is because of the advancement of the early warning systems in Bangladesh during the last three decades. However, the number of people were killed by the cyclone was as high as 4,000. In the case of the 2007 Nargis Cyclone, Myanmar, they got the early warning information three days in advance. However, the information could not be sent to needed people, we could not evacuate people out of the cyclone areas. In case of 2009 August Typhoon in Taiwan, more than 500 people were killed when the whole village was buried under the debris. These examples show that we need not only the educational product in DRR but also the implementation. How we can outreach the educational product to actual implementation, which is very important in DRR. Therefore the synergy between research, education and implementation are very important.

Hence, an informal and formal network to share the educational product, experiences and actual implementation can strengthen this synergy. In the education sector, the field-based campus is very important. Therefore, we need to go beyond the traditional educational institutions to work with local NGOs, local government, and international organizations. It is important to customize education product, and link to its implementation process.

Outcome and Good Practice

Education is considered as one of the key mainstreaming tools for any subject. There have been several attempts to mainstream risk reduction in development practices. However, the real mainstreaming starts from formal educational institutions, including schools, colleges and universities. The mode and method of education should be one of the important issues to make positive impacts. Disaster risk reduction being a multi-disciplinary subject needs a combination of theory and practice. Possibly, more emphasis should be given to the field practice and learning from the experiences. Thus, the academic and formal education should go beyond the traditional boundaries of the school and/or university compound, and communicate more with the communities, and learn from their experiences.

To enhance the above-mentioned objectives of the HFA and DESD, and to contribute to higher education and research process, Kyoto University in partnership with 16 other universities and organizations from 15 Asian countries has formed the Asian University Network for Environment and Disaster Management (AUEDM). The objectives of the network were:

- To share and work together (bilaterally or multilaterally) in promoting environment and disaster management in higher education (focusing on, but not restricted to, post-graduate education)
- To seek possibilities of mutual collaboration on field-based action research
- To broaden the scope of education and learning in the environment and disaster management field through collaboration with other stakeholders like NGOs and local governments

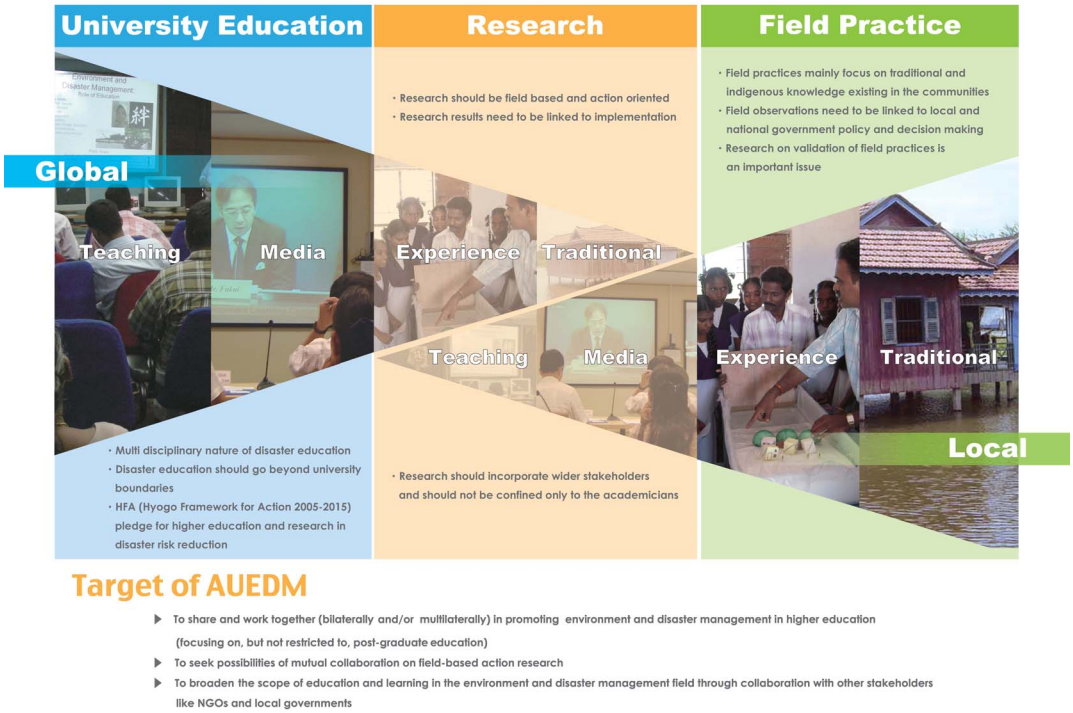


Figure: AUEDM education research synergy model

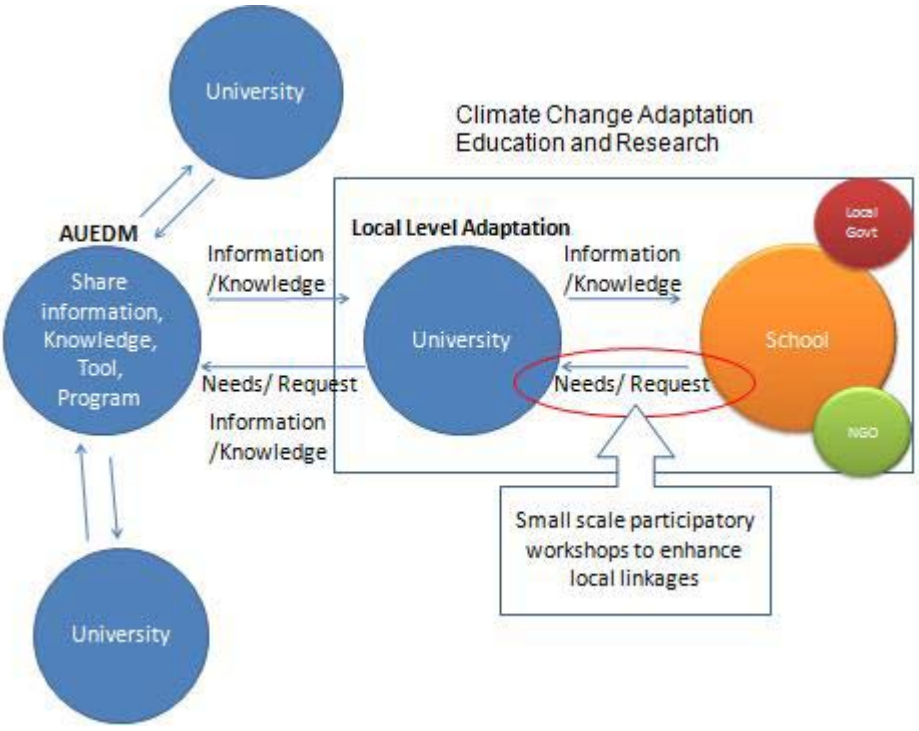
Characteristic features of the network are: Multi-disciplinary approach, field-based action research, and linking academic research to field practice. The specific feature of the AUEDM is close cooperation with the civil society organizations. Non-government organizations (NGOs) have direct field access, and experiences in grass-root project implementation. However, these experiences are not properly reflected in the educational curriculum. Thus, the network aims at bridging academic research, education and field practice. Some of the highlights of the university-NGO cooperation are:

1. Quality of knowledge and information: All participating universities in the targeted countries are esteemed organizations in the field of disaster risk management. Therefore, it brings high quality knowledge and information.
2. Extensive network: The four universities have largest networks in the tsunami affected areas, and thus ensure that the knowledge product will have largest circulation in future.
3. Ensuring sustainability: Through development of the certificate courses and customized courses, young professional development will be ensured, which is linked to the sustainability of the disaster preparedness activities in the targeted countries and communities.

Lessons Learned and Future Perspective

Through the AUEDM, Kyoto University has promoted south-south cooperation in the field of environment and disaster risk reduction. Climate change adaption is considered as the common research theme of the network. A detailed inventory is currently being developed for the disaster risk reduction and climate change adaptation through detailed questionnaire survey among all the participating universities. A guideline and basic principles of higher education in environment and disaster management is being prepared with specific focus on climate change adaptation. Moreover, a text book on "Climate Change Adaptation and Disaster Risk Reduction" is being prepared with the members of AUEDM and other partners, which will be used as reference book for higher education in climate change adaptation.

Figure: **Left:** school teachers in Colombo surveying the coastal areas to understand climate change impacts. **Right:** School teachers in Chennai conducting participatory workshops on the curriculum development on climate change adaptation, **Below:** AUEDM model of future cooperation with local communities on climate change adaptation research.



Apart from the knowledge development and higher education programs, small pilot projects are currently being carried out at local levels with local stakeholders. Special emphasis is given on the education in schools for climate change adaptation. Workshops were conducted with local school teachers, education departments and local NGOs in different countries to understand the relevance of climate change adaptation in the school curriculum. Similar small scale workshops are planned in future in other countries to develop local networks and linkages of university, local governments, schools and NGOs.