Enhancing Fisheries HRD in Asia through Educational Cooperation in Fisheries Science: A Case of the Hokkaido University, Japan

Nualanong Tongdee and Junichiro Okamoto

okkaido University (HU) of Japan is reaching out to many countries in the globe to promote human resource development (HRD) through its programs in education, research and social development. Established in 1876, HU has its main campuses in Sapporo and Hakodate, Hokkaido, Japan. In its effort to promote HRD through internationalization, HU is engaged in four major activities, namely: (1) exchange programs with universities worldwide; (2) campaign for the increase in the number of international students; (3) strengthening of its overseas networks; and (4) promotion of international cooperation. Thus far, HU has established partnership with more than 40 universities in 16 countries worldwide. HU also launched the "Hokkaido University Initiative for Sustainable Development (HUISD)", laying the foundation for HU's internationalization policy to be fulfilled in the next five years. Under this project, HU aims to: make the rest of the world aware of its internationally competitive education and research program; promote high affinity with international communities; and contribute to enhancement of international academic communities through international cooperation. HU is now intensifying efforts to expand its present partners especially with institutions and universities in the ASEAN region.

The fisheries schools of HU are located in Hakodate, Hokkaido, Japan, where efforts are being intensified to invite more foreign students to study at HU especially those coming from the ASEAN countries. As part of HU's effort to promote international cooperation through HRD, its Faculty of Fisheries Science has conducted exchange



programs with universities in South Korea and the USA in the early 2000s. From 1985 to 2007, the Hakodate Campus has entered into exchange agreements with 16 agencies (2 in the USA; 1 each in Malaysia, Canada, Russia, Chile, Australia, Indonesia; 4 in South Korea; 3 in China); as well as with 2 institutions in Thailand: SEAFDEC and the Faculty of Fisheries of Kasetsart University (**Box 1**).

HU Fisheries HRD Program

Specifically for the promotion of fisheries HRD in the Southeast Asian region, SEAFDEC and HU's Faculty of Fisheries Sciences (FFS) signed a Memorandum of Agreement in February 2006 to endeavor on HRD cooperation in fisheries research, training and other activities of mutual interest. The cooperation covers: joint research and education/training; visit or exchange of researchers and students for study, research, education and training in areas of common concern that are mutually agreed upon; and participation of researchers/students in conferences and meetings on matters of mutual interest.

The provisions of the Agreement's exchange of researchers between SEAFDEC and HU was initialized in 2006 when an Intern from Hokkaido University attended the shortterm training course in Fishing Technology for University Students at the SEAFDEC Training Department in Samut Prakan, Thailand. A meeting between SEAFDEC and HU convened in March 2007 in Bangkok, Thailand initiated the identification of fisheries R&D collaboration specifically focusing on HRD for the ASEAN Member Countries as well as the SEAFDEC Secretariat and Departments.

International Workshop on Educational Cooperation in Fisheries Science in Asia

It was under such arrangement that two senior staff of SEAFDEC attended the International Workshop on Educational Cooperation in Fisheries Science in Asia which was organized by the FFS of Hokkaido University at its Hakodate Campus, Hokkaido, Japan from 17 to 19 March 2008. Attended by resource persons and representatives from universities, research institutes and regional/international organizations in Asia, the Workshop



Box 1: International Exchange Programs at Hakodate Campus of Hokkaido University			
Country	University	College/Department	Year
Exchange between Universities			
South Korea	Pukyong National University		2000
USA	University of Hawaii		2003
Joint Research Memoranda based on Inter-University Agreements			
USA	University of Alaska, Fairbanks	School of Fisheries and Ocean Resources	1998
USA	University of Maryland	Center of Marine Biotechnology	1989
Malaysia	University Putra (Pertanian) Malaysia	Department of Oceanography	1990
Canada	University of British Columbia	Faculty of Science	1990
Russia	Research Academy of Science-Far Eastern Branch	Institute of Marine Biology	1992
China	Dalian Fisheries University		2000
South Korea	Cheju National University	College of Ocean Scienxce	2002
South Korea	Gyeongsang National University	College of Marine Science	2003
South Korea	Yosu National University (Chonnam National University)	College of Fisheries and Ocean Sciences	2004 (2007)
China	Shanghai Fisheries University		2005
Australia	Queensland University	Faculty of Health Sciences	2005
South Korea	Kursan National University	College of Ocean Science and Technology	2005
Indonesia	Udayara University		2005
China	Ocean University of China		2005
Thailand	Southeast Asian Fisheries Development Center		2006
Thailand	Kasetsart University	Faculty of Fisheries	2007

generally aimed to share experiences and establish network of cooperation for the improvement of fisheries science education in Asia through the Special Lectures, a Student Session and Four Plenary Sessions (Box 2).

Way Forward

As enhanced education and cooperation in fisheries science are necessary for conserving the aquatic environments and sustaining aquatic resources for guaranteeing a safe food supply and developing local/national economies, the Workshop was envisaged to: explore the challenges for national higher education systems in fisheries science in Asia in a global environment; update the status of higher fisheries education in the region; and discuss ways and means to improve the education system, the internationalization of education, the programs to foster young scientists as well as improve international cooperation in fishery science education. It is expected that in the near future, the network on educational exchange in the field of fisheries among the countries participating in the Workshop, would be strengthened through partnership and cooperation in fisheries education. For more information, about the programs of Hokkaido University please refer to http://www.fish.hokudai.ac.jp/21coe/index.htm



About the Authors

Ms. Nualanong Tongdee is a Senior Information Officer of SEAFDEC based at the SEAFDEC Secretariat in Bangkok, Thailand, and is a member of the Production Team for Fish for the People.

Mr. Junichiro Okamoto once served as the Deputy Secretary-General of SEAFDEC based in Bangkok, Thailand from 2002-2005. After SEAFDEC, Mr. Okamoto serves as Professor of the Faculty of Fisheries Science, Hokkaido University, Hakodate, Japan.



Box 2. International Workshop on Educational Cooperation in Fisheries Science in Asia

SPECIAL LECTURE 1: Needs and Possibility of Mutual Accreditation of Academic Degree in Fisheries Sciences among Asian Countries (Prof. Hisashi Kurokura, Graduate School of Agricultural and Life Sciences, University of Tokyo, Japan) Information on the Japan Accreditation Board for Engineering Education (JABEE) was presented, and being signatory to the Washington Accord, engineers qualified for the standards set by JABEE could practice their professions in Japan or in countries that are also signatories to the Washington Accord. The standardization and accreditation undertaken by JABEE could be used as model for the accreditation of the fisheries professions.

SPECIAL LECTURE 2: International Cooperation in University Education in Japan (Ms. Helga Tabuchi, Ministry of Education, Culture, Sports, Science and Technology, Japan)

Information on higher education in Japan including number of higher education institutions, students, and entry rate to higher education, and information on the International Cooperation of University Education in Japan were presented. Also presented was the University Reforms that includes quality assurance system and third party evaluation system as well as the Center of Excellence (COE) Programs to enhance competitiveness and cooperation with industries.

Plenary Session 1: Present Status of the Higher Education in Fisheries Sciences in Asian Universities

Recent Innovation and Reorganization of Fisheries Education at Hokkaido University (Prof. Katsutoshi Arai, Faculty of Fisheries Sciences, Hokkaido University, Japan)

Higher Education in Fisheries Science of Korea (Dr. Ju-Hee Lee, Pukyong National University, Busan, South Korea) Present Status of Higher Education in Fisheries Science and Related Areas in Thailand (Dr. Kangwan Juntarashote, Kasetsart University, Bangkok, Thailand)

Today and Tomorrow - Education in Fisheries Science in SFU (Prof. Min Jiang, College of Life Science and Technology, Shanghai Fisheries University (SFU), China)

Plenary Session 2: Recent Progress in International Cooperation in Fishery-Science Education in Asia

International Cooperation for Fisheries Sciences Education in Thailand and Faculty of Fisheries, Kasetsart University (Dr. Suriyan Tunkijanukij, Kasetsart University, Bangkok, Thailand)

Introduction on the National University Regional Innovation (NURI) Program in Korean University (Prof. Chun-Woo Lee, Pukyong National University, Busan, South Korea)

Brain Korea 21 (BK21) and NURI Programs in College of Ocean Sciences (COS) in Cheju National University (Dr. Byung-Gul Lee, Cheju National University, Jeju, South Korea)

International Exchange Program and Cooperative Relationship in Fisheries Science Education in Ocean University of China (Dr. Xiumei Zhang, Ocean University of China, Qingdao, China)

Plenary Session 3: Obstacles in International Educational Cooperation in Fisheries Sciences in Asia The Language of Science (Dr. John Bower, Hokkaido University, Hakodate, Japan)

Construction of New College English Teaching Mode in Strengthening Listening and Speaking Abilities Based on Multi-media (Prof. Yanling Guo, Dalian Fisheries University, Dalian, China)

Support and Statistics for Organizations of Women in Science and Technology in Korea (Dr. Deuk-Hee Jin, Kangnung National University, Kangnung, South Korea)

Fostering Program for Young Scientists and Female Scientists: Attempting Gender Equality in Science and Academia (Dr. Sanae Ariga, Graduate School of Agriculture/Life Science, Hokkaido University, Sapporo, Japan)

Plenary Session 4: International Cooperation for Fostering

Current Research Progress on Marine Bioscience at the Eco Marine Bio Research Center (EMBC) (Prof. Myung-Joo Oh, Chonnam National University, Yosu, South Korea)

The Progress of Post-Graduate Education in Chinese Academy of Fishery Sciences (Prof. Xiao-qin Zhang, Chinese Academy of Fishery Sciences, Beijing, China)

Partnership in Higher Education Innovation for Fisheries in Southeast Asia: Challenges, Directions and Opportunities (Ms. Pouchamarn Wongsanga, Southeast Asian Fisheries Development Center, Bangkok, Thailand)

Student Session

Education and Research at Universiti Kebangsaan Malaysia (Dr. Muzzneena Ahmad Mustapha and Tukimat Lihan, Hokkaido University) Information on the Universiti Kebangsaan Malaysia (UKM) including its efforts to improve its research capability in order to contribute to teaching and enhance the competitiveness of UKM in obtaining research grants from various sources, were presented. Fisheries Education in the Faculty of Fisheries, Bangladesh Agricultural University, Bangladesh (Mr. Mohammed Matiur Rahman, Hokkaido University)

Information on the fisheries education in the Faculty of Fisheries, Bangladesh Agricultural University including its leading role in the development and management of the fisheries sector of Bangladesh was presented.

