

UC Executive Board concludes meeting

BANGKOK, Thailand – The Executive Board of the Southeast Asian University Consortium for Graduate Education in Agriculture and Natural Resources (University Consortium) met on 19–20 November 2013 in Bangkok, Thailand. Kasetsart University (KU) hosted the 26th Executive Board Meeting, where 20 representatives from the Institut Pertanian Bogor (IPB) and Universitas Gadjah Mada (UGM) in Indonesia, Universiti Putra Malaysia (UPM), University of the Philippines Los Baños (UPLB), Tokyo University of Agriculture (TUA), and SEARCA attended.

During the opening ceremonies, the signing of the memorandum of understanding on implementation of double and joint degree programs was



Front row (L-R) Dr. Editha C. Cedicol (SEARCA), Dr. Sri Raharjo (UGM), Dr. Herry Suhardiyanto (IPB), Dr. Poonpipope Kasemsap (KU), Dr. Rex Victor O. Cruz (UPLB), Dr. Hironobu Shiwachi (TUA), Dr. Bujang Kim Huat (UPM). Back row (L-R) Dr. Tanaboon Sajjaanantakul, Dr. John Floros (Kansas State University), Dr. Bessie M. Burgos (SEARCA), Dr. Jose V. Camacho, Jr. (UPLB), Dr. Masyhuri (UGM), Dr. Edy Hartulistiyoso (IPB), Dr. Uthairat Na-Nakhon (KU), Dr. Oscar B. Zamora (UPLB), Dr. Junichi Nakagawa (TUA), Mr. Saiful Azlin B. Maskan (UPM), Dr. Somsakdi Tabtimthong (KU), Dr. Thongchai Suwonsichon (KU)

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forged by the members (see related story). The MOU shall serve as the reference for all future agreements between and among members willing to offer joint and/or double degree programs in agriculture, natural resources, and related sciences.

Following the signing of the MOU was a lecture from Dr. John Floros, Dean of the College of Agriculture and director of K-State Research and Extension at Kansas State University on the topic “Academic Leadership.” In his lecture, Dr. Floros emphasized that training the next leader to succeed you a leader’s responsibility. He said that in accepting the challenge to become a leader, one should be ready to become a role model and must be willing to embrace change.

During the meeting, the revised UC membership guidelines with the addition of affiliate member as a new membership category was approved. The proposal from UPLB for an International Master’s

Program in Biodiversity and Conservation was presented and mechanics of the joint program will be further discussed by the three participating universities, namely UPLB, IPB, and UPM.

Other activities approved for implementation in 2014 are student and faculty grants, ongoing project scholarships with TUA and UPM, information dissemination, as well as the creation of the UC website, and the Joint Certification Course towards a Master’s Study Program in Sustainable Food Systems.

Dr. Poonpipope Kasemsap, Vice President for International Affairs chaired the meeting.

Meanwhile, Dr. Paul Teng, Dean of the Office of Graduate Studies and Professional Learning, National Institute of Education of the Nanyang Technological University,

UC members ink accord on joint degree programs



Through double or joint degree programs, students have an opportunity to learn in a more diverse background, improve communication skills, and appreciate different cultures.

BANGKOK, Thailand – Leading agricultural universities in Asia signed a Memorandum of Understanding (MOU) that will serve as basis for future collaborations on joint and double degree programs in agriculture, natural resources, and related sciences. The milestone signing took place at the Kasetsart University on 19 November 2013.

Signatories of the MOU were Dr. Herry Suhardiyanto, Rector, Institut Pertanian Bogor (IPB); Dr. Rex Victor O. Cruz, Chancellor, University of the Philippines Los Baños (UPLB); Dr. Vudtechai Kapilakanchana,

President, Kasetsart University (KU); Prof. Dr. Ir. Sri Raharjo, Deputy for Research, Universitas Gadjah Mada (UGM); Mohd Fauzi Hj Ramlan, Vice Chancellor, Universiti Putra Malaysia (UPM); Katsumi Takano, President, Tokyo University of Agriculture (TUA); and Dr. Gil C. Saguiguit, Jr., Director, SEARCA. Representatives from the aforementioned universities likewise served as witnesses during the signing of the MOU.

With the said MOU signed, two or more University Consortium (UC) members that decide to offer dual or joint degree programs in the future are

expected to forge separate memoranda of agreements (MOA), which will spell out the details of the joint undertaking.

Through double or joint degree programs, students have an opportunity to learn in a more diverse background, improve communication skills, and appreciate different cultures. These programs when carried out effectively provides strong international perspective, which particularly is very advantageous in an increasing global economy. (Jesselle S Laranas)

University Consortium GRANTS

For guidelines, application procedures and requirements, please visit

<http://www.uc.searca.org>



FACULTY GRANTS

Faculty Travel Grant for Research

Conduct research in another participating UC member.

Faculty Travel Grant for Conference/Seminar

Participate and present a paper in a conference/seminar organized by another participating UC member.

Visiting Professor Program for Teaching Purposes

Teach a graduate course in his/her field of discipline at another participating UC member.

STUDENT GRANTS

Thesis Grant

Assists the UC graduate student to develop and finish his/her thesis.

Student Travel Grant for Research

Travel for a semester in another participating UC university to conduct his/her research or a portion of it.

Student Travel Grant for Credit Program

Spend a semester in another participating UC university to take courses for credit to his/her program.

UC members, from p. 1

Singapore and SEARCA Senior Fellow also attended the meeting to present the proposed Umbrella Program on Food Security.

The 27th UC Executive Board meeting will be held on the third week of November 2014 at the IPB, Indonesia back-to-back with a UC.

The annual meeting served as a platform to review the accomplishments of various member universities, as well as discuss various projects for implementation between and among UC members.

The UC was established in September 1989 through SEARCA's initiative as a response to the growing demand for graduate education across agricultural disciplines and related fields. UC's Executive Board is the policy-making body of the consortium. It is responsible for setting directions, developing new policies and programs, and generating resources to support and promote UC activities, which focus on promoting education and research collaboration among the UC members.

(Jesselle S. Laranas and Editha C. Cedicol)

IPB hosts Indonesia-Malaysia scientific forum on food sovereignty

BOGOR, Indonesia – Bogor Agricultural University (IPB) hosted the Ikatan Profesor Indonesia-Malaysia (IPIMA) 2013 or Forum IPIMA 2013 on 18-20 November 2013 at the IPB International Convention Center, Bogor, Indonesia. Indonesia's Vice Minister of Education and Culture, Prof. Dr. Musliar Kasim officially opened the three-day event with the theme "*Pertanian dan Kedaulatan Pangan di Indonesia dan Malaysia*," or Agriculture and Food Sovereignty in Indonesia and Malaysia.

According to Prof. Dr. Rudy Purwanto, Secretary of IPB's Council of Deans, "*We organized this forum of the Indonesian-Malaysian Professors Association (IPIMA) recognizing that Indonesia and Malaysia face similar problems in the agriculture sector.*"

On the other hand, Dr. Herry Suhardiyanto, Rector of IPB, in his welcome speech expected the forum to contribute in developing the agriculture sector and food sovereignty of both countries.

In one of the paper presentations, Vice Rector of Resources and Strategic

Studies of IPB, Prof. Dr. Hermanto Siregar emphasized the importance of Indonesia and Malaysia's cooperation in strengthening each country's efforts towards food security. According to him, because achieving food sovereignty is influenced by the internal situation of each country, joint initiatives towards food security is a better start-off point for cooperation.

Prof. Hermanto suggested that Indonesia and Malaysia may develop the bilateral cooperation in the form of Closer Economic Relations (CER) which will include commodity trading and agri-food production. The same sentiment was expressed by Universiti Putra Malaysia's Vice Chancellor, Prof. Datuk Dr. Mohd Fauzi Ramlan.

Towards the end of the event, IPIMA delegates also agreed to embark on exchanges of Indonesian and Malaysian scientists, lecturers, researchers, and university students in the future.

"There will be a joint conference and collaboration in research on certain issues, such as climate change, technology innovation, and social and economic issues," Purwanto disclosed.



Prof. Dr. Musliar Kasim, Deputy Minister for Education, Ministry of Education and Culture, Indonesia opens the IPIMA 2013 at the IPB International Convention Center on 18 November 2013

SEARCA concludes month-long summer school on food security



LOS BAÑOS, Philippines – A month-long summer school on “Sustainable Agricultural and Rural Development for Food Security” was recently concluded at SEARCA in College, Los Baños, Laguna, Philippines from 1 to 30 November 2013. The Summer School is one of the activities under the Food Security Center (FSC), which is one of the excellence centers for exchange and development cooperation at the University of Hohenheim, Germany under the EXCEED program. The FSC’s mission is to provide innovative and effective scientific contributions to reduce hunger and achieve food security. FSC is being supported by the German Academic Exchange Service (DAAD) with funds from the Federal Ministry of Economic Cooperation and Development (BMZ) of Germany. This year, FSC collaborated with SEARCA, its network strategic partner in Southeast Asia, to implement this activity.

For the entire month of November, SEARCA served as home to thirteen scholars from Asia, Africa, and Latin America who have been chosen by FSC and SEARCA for the summer school. The program offered a combination of class lectures led by esteemed professors and resource persons, educational field trips, group work, and field practice.

On 4-8 November 2013, Dr. Cecilio R. Arboleda from the Philippines served as lecturer on Sustainable Agriculture and Food Production Systems, with 2012 Ramon Magsaysay Awardee, Dr. Romulo G.

Davide as guest lecturer, who shared his experience in spearheading the Farmer-Scientist Training Program (FSTP) in Cebu, Philippines. The lectures were complemented by a field visit, facilitated by Dr. Blesilda Calub of the Farming Systems and Soil Resources Institute (FSSRI), University of the Philippines Los Baños (UPLB), to the Tayabas Integrated Farming and Research Center in Quezon Province where the class observed on-the-ground sustainable agriculture through organic farming in the area.

Dr. Laban MacOpiyo from Nairobi, Kenya talked about Population, Food, and Governance Issues on 11-15 November 2013. His lectures were supplemented by a trip to Barangay Kaybagal South, Tagaytay City, which has been recognized by the National Nutrition Council of the Philippines to have innovative and effective nutrition programs, particularly for women and children in the village.

Dr. Friederike Annette Bellin-Sesay from Germany discussed the concept of nutrition security in the Food and Nutrition Quality and Safety module from 18 to 22 November 2013. The class headed-off to the Food and Nutrition Research Institute, an organization under the Department of Science and Technology (DOST).

On the last week of the summer class, Dr. Luis Felipe Arauz from Costa Rica

served as an online lecturer for the topic Climate Change Adaptation for Rural Development and Food Security. The lecture was supplemented by a trip to the municipality of Mabitac, Laguna which showcased a program on disaster risk and reduction management, including other eco-friendly initiatives like the fabrication of hollow blocks with shredded plastic as one of its raw materials.

During the last day, Dr. Percy E. Sajise, SEARCA Senior Fellow, Adjunct Professor at the UPLB-SESAM, and Honorary Research Fellow at Bioversity International integrated the four modules.

During the closing ceremony, Dr. Editha C. Cedicol, SEARCA Program Head of Graduate Scholarship said that holding the FSC Summer School for the first time was a challenge that SEARCA was willing to take. Despite a number of roadblocks, the month-long activity was successfully steered by the management team. Moreover, Dr. Gil C. Saguiguit, Jr., SEARCA Director said in his speech delivered by Dr. Cedicol, that the success of the summer school also serves as an important input to the Center’s efforts towards inclusive and sustainable agricultural and rural development (ISARD) in Southeast Asia.

Apart from what has been learned from classroom lectures, discussions and study tours, the summer school was also an opportunity for the group to appreciate and share the different cultures, establish networks and collaborations, thus, making the summer program a rewarding and life-changing experience altogether.

As Jorge Tortos Barquero, a scholar from Costa Rica, affirmed, *“We have gained new friends between and among us scholars and organizers of the Summer School, as well.”*



FSC SUMMER SCHOOL PHOTOS



Dr. Arboleda serves as lecturer during Module 1



2012 Ramon Magsaysay Awardee, Dr. Romulo G. Davide shares his Farmer-Scientist Training Program experience



Dr. MacOpiyo lectures on Population, Food, and Governance Issues in Module 2



Dr. Bellin-Sesay from Germany discusses the concept of nutrition security in Module 3



Study tour at the Barangay Nutrition Center of Kaybagal South, Tagaytay City



Visit to the Tayabas Integrated Farming and Research Center in Quezon Province



Tour of the DOST-FNRI Facilities at Taguig City, Manila



Briefing about the disaster risk reduction management program in Mabitac, Laguna



Visit to the Makiling Botanical Garden at UPLB

The forest that weathers climate change

As global temperatures rise, some scientists believe that the key to helping plants and animals survive is locked in their genetic code.

Genes determine everything from how an organism looks to how it responds to heat and cold. Studying the function and relationships of genes – an area of research called genomics – may reveal which individuals in a species are best able to cope with a changing environment.

“[We can] look at the entire DNA information collectively and use the information to identify the superior individuals,” said Prof. Yousry El-Kassaby, head of UBC’s Department of Forest Resources Management.

This strategy could be especially important for plants, since they cannot simply pick up and move when the conditions around them become too challenging.

Adapt or die

El-Kassaby has developed a new plant-breeding project that could give trees a helping hand in the adaptation race.

“Trees, in their present location, are here because they’re adapted to this location,” El-Kassaby said.

“When the climate changes, this area is expected to be warmer, thus not suitable anymore. The tree that is more flexible, more resilient, the greater the chances it will survive. If not, it’s going to die.”

Some tree species are expanding their ranges further north, El-Kassaby points out. But he thinks that process is too slow.

“There is a mismatch between the migration through pollen and seed and the speed of climate change,” he said.



“The migration of plants is not fast enough.”

El-Kassaby’s idea is to study the DNA of trees at the northern edge of their ranges and pinpoint the individuals with genes that make them best suited to that new environment.

Trees existing at the species’ northern ranges are exposed to an onslaught of extreme environmental conditions and ones that survive and thrive have proven their resilience. Breeders can then select those trees and plant their offspring along that front edge of the population.

There are a number of genetic qualities that make a tree more resilient to climate change, says El-Kassaby.

“You want to make sure these trees in the forest are not vulnerable to insects or disease, grow fast and are adapted to extreme environmental conditions like cold temperature and drought,” he said.

Identifying superior trees

So how can breeders figure out which trees have the genetic qualities to help them cope with climate change?

El-Kassaby’s program starts by finding the healthiest, strongest trees at the very edge of the species range. However, a tree that looks healthy does not necessarily have good genes. Individuals that happen to be growing on a fertile patch of soil may grow better than trees that are genetically stronger, but are growing on rocky ground with little sunlight.

This is where El-Kassaby’s idea comes into play. Once these trees are identified, they are DNA fingerprinted for tens or even

hundreds of thousands of DNA markers known as Single Nucleotide Polymorphism (SNPs). The information is then used to compare the selected trees and identify the best ones for use as parents for seed production. The seeds are then planted back in the natural forest to grow into adapted seedlings.

The project is innovative because it allows breeders to settle on the best trees very quickly, says El-Kassaby.

Traditional breeding programs require a complicated scheme for crossing different trees so that breeders can track the parents of each seedling. This process is cumbersome and can take years. But when it comes to dealing with climate change, time is of the essence. El-Kassaby says his program is efficient and allows breeders to test thousands of trees at their natural setting and at once.

Scientists are just starting to use genetic information to fight the threat of climate change in forests, says El-Kassaby. But he thinks the potential is enormous.

“The major challenge is our lack of understanding of the massive genomic information we are generating,” he said. *“We are at the start of a long and difficult road.”*

Source UBC News | 23 December 2013

Genomics is behind an innovative new method for breeding trees that can adapt to our changing world

The University Consortium

The Southeast Asian University Consortium for Graduate Education in Agriculture and Natural Resources is a network of higher education institutions launched on 19 September 1989 by SEARCA.

The idea of having such a network was formed in August 1988 when SEARCA convened a meeting of deans of five leading agricultural graduate schools in the region. The deans noted a rising demand for graduate education across all agricultural disciplines and related fields, strong agricultural and demographic pressures, and tremendous growth in education, and agreed to the idea of establishing a University Consortium.

The objectives of the Consortium are:

1. To provide highly trained personnel in agriculture and natural resources for national development of Southeast Asian countries.
2. To promote mutually beneficial cooperation among agricultural universities in the region.
3. To utilize more fully and efficiently the scarce resources and expertise available in each country in the region for top-quality graduate education and research.
4. To stimulate freer sharing and exchange of information, facilities, and expertise among agricultural universities in the region.

SEARCA has served as the Consortium's Secretariat since 1989. Its founding members are Universitas Gadjah Mada (UGM) and Institut Pertanian Bogor (IPB), both in Indonesia; Universiti Putra Malaysia (UPM) in Malaysia; University of the Philippines Los Baños (UPLB) in the Philippines; and Kasetsart University (KU) in Thailand. Four associate members joined the network, namely: University of British Columbia (UBC) in Canada, University of Queensland (UQ) in Australia, Georg-August University of Göttingen (GAUG) in Germany, and Tokyo University of Agriculture (TUA) in Japan.

The vision of the University Consortium is to be a leader in implementing collaborative strategies for excellent graduate education and cutting-edge research in agriculture, environment, and natural resources for the benefit of Southeast Asia.

The Consortium has five program components, namely: student exchanges, faculty visits, research fellowships, professorial chairs, and thesis grants.

University Consortium is the quarterly newsletter of the Southeast Asian University Consortium for Graduate Education in Agriculture and Natural Resources (UC). It can be downloaded from the UC website at <http://www.uc.searca.org>

Editor and Layout Design: Jesselle S. Laranas
Advisers: Gil C. Saguiguit, Jr.
Editha C. Cedicol

University Consortium accepts contributed articles on activities related to the Consortium programs. Send contributions to: The Editor, University Consortium, SEARCA, College, Los Baños 4031 Laguna, Philippines; Telefax: (63-49) 536 7164; Email: jsl@agri.searca.org, gsd@agri.searca.org

UC Contact Persons

(as of 30 December 2013)

Indonesia

UNIVERSITAS GADJAH MADA

Dr. Masyhuri

Director, Center for World Trade Studies
Office of International Affairs
Universitas Gadjah Mada
Jl. Flora, Bulaksumur 55281
Yogyakarta, Indonesia
Tel: 62-274-555676
Fax: 62-274-516656
E-mail: mmasyhuri@hotmail.com or
dr_masyhuri@yahoo.com

INSTITUT PERTANIAN BOGOR

Dr. Edy Hartulistiyoso

Director, Directorate of Collaboration
and International Programs
Institut Pertanian Bogor
Gedung Rektorat, Lt. 2
Kampus IPB Darmaga
Bogor, Indonesia
Tel: (62-251) 622-638
Fax: (62-251) 622-638
E-mail: internas@indo.net.id

Malaysia

UNIVERSITI PUTRA MALAYSIA

Dr. Bujang Kim Huat

Dean, School of Graduate Studies
Universiti Putra Malaysia
4th Floor, Administration Building
UPM 43400 Serdang, Selangor, Malaysia
Tel: (60-3) 89466043
Fax: (60-3) 89432509
Email: bujang@eng.upm.edu.my

Philippines

UNIVERSITY OF THE PHILIPPINES LOS BAÑOS

Dr. Jose V. Camacho, Jr.

Dean, Graduate School
University of the Philippines Los Baños
4031 College, Laguna, Philippines
Tel: (63-49) 536-3414; 536-2310
Fax: (63-49) 536-2310
Email: anjoecon@yahoo.com

Thailand

KASETSART UNIVERSITY

Dr. Somsakdi Tabtimthong

Director, International Affairs Division
Kasetsart University
50 Phaholyothin Road
Chatuchak, Bangkok 10900, Thailand
Tel: (66-2) 942 8171
Fax: (66-2) 942 8170
E-mail: fro@nontri.ku.ac.th
(Foreign Relations Office)

Canada

UNIVERSITY OF BRITISH COLUMBIA

Dr. Mahesh Upadhyaya

Associate Dean, Graduate Studies
Faculty of Land and Food Systems
University of British Columbia
270-2357 Main Mall
Vancouver, B. C. V6T 1Z2, Canada
Tel: (1-604) 822-6139
Fax: (1-604) 822-4400
E-mail: upadh@interchange.ubc.ca

Germany

GEORG-AUGUST UNIVERSITY OF GÖTTINGEN

Dr. Uwe Muuss

Director, International Office
Georg-August University of Göttingen
Von-Siebold-Strasse 4
37075 Göttingen, Germany
Tel: (49) 551 3913585
Fax: (49) 551 3914254
Email: uwe.muuss@zvw.uni-goettingen.de

Japan

TOKYO UNIVERSITY OF AGRICULTURE

Dr. Hironobu Shiwachi

Professor, Faculty of International Agriculture
and Food Studies
and Director, International Programs
Tokyo University of Agriculture
1-1-1 Sakuragaoka, Setagaya-ku
Tokyo 156-8502, Japan
Tel.: (8-13) 5477 2560
Fax: (8-13) 5477 2635
E-mail: h1shiwac@nodai.ac.jp

Secretariat

SEARCA

Dr. Gil C. Saguiguit, Jr.

Director, SEARCA
Los Baños 4031, Laguna, Philippines
Telefax: (63-49) 536-7097
E-mail: gcs@agri.searca.org

Dr. Editha C. Cedicol

Program Head, Graduate Scholarship Department
SEARCA, Los Baños 4031, Laguna, Philippines
Telefax: (63-49) 536-7164
E-mail: ecc@agri.searca.org

UC members scale to world's top 100 in Agriculture and Forestry

Kasetsart University (KU), Universiti Putra Malaysia (UPM), Institut Pertanian Bogor (IPB), and University of the Philippines (UP) are ranked among the world's top 100 universities in the fields of Agriculture, Forestry, and Education, outdoing more than 2,000 other universities around the globe, according to the latest review by the QS World University Rankings 2013/14.

KU landed the 33rd spot in the field agriculture and forestry while UPM, IPB and UP belonged to the 51-100 bracket. The University of California, Davis, United States of America (USA); Wageningen University, The Netherlands; and Cornell University, USA landed the top three spots in the said category, which ranks universities based on nine indicators, namely: academic reputation, employer reputation, faculty/student ratio, citations per paper, papers per faculty, proportion of international faculty, proportion of international students, proportion of inbound exchange students, and proportion of outbound exchange students.

There are at least two essential factors affecting the great achievement of KU, namely: (1) academic reputation, and (2) employer reputation. Based on KU's newsletter Nonsee, KU views the international reputation and recognition to be derived from the contribution of all faculty members, staff, students, and also alumni who have been working hard for several years. It is also the driving force for KU to work tirelessly as a think-tank of the country, where knowledge has

been accumulated and initiated, while innovation has been disseminated to the people and the society for the betterment of the next generation.

On the other hand, UPM Vice Chancellor, Prof. Datuk Dr. Mohd. Fauzi Ramlan said that UPM's achievements, attributed to the outstanding performance of the Faculty of Agriculture, Faculty of

Dr. Fauzi said UPM has made some improvements in its internationalization activities that include lecturers and students mobility programmes, researches and publications, recognitions and citations in high-impact journals, and book publishing for international markets.

"Emphasis on the quality of academic researches, as well as the number of publications and citations in leading journals and H-index have also increased in recent years. In the area of teaching, the revised curriculum focuses not only on compulsory courses but also elective courses in which to improve graduates' savoir faire," he added.

On the other hand, Dr. Rex Victor O. Cruz, UPLB Chancellor said that under his leadership, the University is intensely pursuing programs and initiatives to regain its premier position as a recognized

educational institution in the region. This includes, among others, upgrading of its facilities, aggressive promotion of its academic and research programs in the international arena, and continuous capacity building of its faculty and staff.

First released in 2004, the QS World University Rankings currently considers over 2,000 institutions, and ranks over 800. The QS World University

Rankings can be viewed at <http://www.topuniversities.com>



Forestry, Faculty of Veterinary Medicine, Faculty of Education and other related institutes, manifest UPM's successful efforts in developing an international reputation for academic standards and quality of graduates.

"The QS rankings of top universities use a variety of performance indicators; academic and employer reputation, faculty to student ratio, citations per faculty, international students, and international faculty. The improved performance not only reflects the growing reputation of the respective faculties and institutes resulting from their researches, publications, as well as their academics network with their counterparts nationally and globally, but also contributes to the latest rankings." Dr. Fauzi affirmed.