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A CONCERTED EFFORT

Poor communities in developing countries enjoy few benefits of modern food science, including food quality and safety—one of the four pillars of food security. Efforts to improve their food safety systems require institutional support from research, development, and government agencies.



Photo by: Al Benavente

Food safety specialists call for stronger capacity building, communication on risk-based food control in SE Asia

Valuable recommendations on capacity building and developing appropriate risk communication systems were put forward by a seminar-workshop on *Risk-based Food Control Programs in Southeast Asia* held on 17-19 May 2011 at SEARCA. Participants included 15 senior and middle-level food safety specialists from government, industry, and academe in Cambodia, Indonesia, Lao PDR, the Philippines, and Vietnam. The meeting was a joint activity of SEARCA and the Food Security Center, a global project initiated by the University of Hohenheim, Germany.

The seminar-workshop viewed food safety in the context of the 1996 Rome Declaration on Food Security and emphasized both public health and trade. It enhanced the participants' understanding of the framework of risk analysis, and its components of risk assessment, risk management, and risk communication, providing the opportunity to discuss the role of sound science in food safety at length. The workshop gave the participants updates on the status of food control systems in the region, serving as a platform for the exchange of information and

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Filipino participants read materials for the workshop on devising a roadmap to a risk-based food control system.

experiences on the design and implementation of risk-based farm-to-fork food safety systems.

Overall, the seminar-workshop provided the participants guidance in advancing risk-based food control systems in their respective countries, giving appropriate consideration of the specific role of government, industry (including primary producers), consumers, and academe. Harmonization of food control systems in ASEAN would be possible only if the individual countries' systems are science-based.



Dr. Ma. Concepcion C. Lizada, Professor Emeritus in Food Science at the University of the Philippines Diliman and former delegate and executive member of the Codex Alimentarius Meetings, sums up discussions during the seminar-workshop.

Specifically, the seminar-workshop raised the following recommendations:

- Strengthen the role of academe in science-based food safety systems through

appropriately designed curricular, research, and extension programs;

- Establish an ASEAN Risk-based Clearinghouse to help accelerate the development of the established ASEAN Rapid Alert System on Food and Feeds (ARASFF) and to manage the dissemination of food safety-related information to all stakeholders, particularly to consumers;
- For SEARCA, in particular, to consider the development and implementation of a special one-month diploma course for SEAMEO member countries to update university-based food technologists on food safety risk analysis;
- Offer focused workshops on microbial and chemical risk assessment, risk communication guidelines, laboratory methods for microbial and chemical contaminants analysis, and tools for economic analysis of risk-based food safety systems;
- Facilitate an experts' exchange among ASEAN countries networking for effective risk communication in the region; and
- Survey regional and international food safety networks found online and explore mechanisms to ensure efficient utilization and participation in these networks, one of which is ASEAN-based.

Participants also proposed action plans to address the gaps in food safety systems. Dr. Ma. Concepcion C. Lizada, Professor Emeritus in Food Science at the University of the Philippines Diliman and former delegate and executive member of the Codex Alimentarius Meetings, led the eminent resource persons of the seminar-workshop.

In November 2010, SEARCA and FSC also jointly conducted a *Roundtable on Achieving Greater Food Security in Asia through Improved Information Network* to identify key recommendations and research that will further strengthen the region's food security information system.

The FSC is part of the German Academic Exchange Service (DAAD) program "Exceed"

and is supported by both DAAD and the German Federal Ministry for Economic Cooperation and Development (BMZ). Started in July 2009 with SEARCA serving as its Southeast Asian coordinator, the FSC aims to make effective and innovative scientific contributions in research, teaching, and policy advice to eradicate hunger and achieve food security in collaboration with higher education institutions in Africa, Asia, and Latin America, as well as national and international development and research organizations. Its activities deal with issues on sustainable food availability, food access, food use, and food utilization. (JLBCarigma)

35 Southeast Asians awarded SEARCA graduate scholarships

SEARCA has awarded graduate scholarships to 35 nationals of Southeast Asian countries. They are from Cambodia (2), Indonesia (2), Lao PDR (2), Myanmar (10), the Philippines (4), Thailand (8), Timor-Leste (5), and Vietnam (2).

Twenty-one of them are enrolled in master's programs, while 14 are pursuing their PhD programs.

Of the 35 new scholars, 20 are studying at the University of the Philippines Los Baños (UPLB), one at UP Visayas, 12 at Universiti Putra Malaysia (UPM), one at Kasetsart University (KU) in Thailand, and one at Universitas Gadjah Mada (UGM) in Indonesia.

Seven of the new scholars are funded by the German Academic Exchange Service (DAAD) and the rest by SEARCA. The new scholars, their institutional affiliation, study post, and degree program are:

Cambodia

- Ms. Hor Rathna, Royal University of Agriculture (UPLB/MS, food science)
- Mr. Kong Vannak, Mean Chey University (UPLB/PhD, food science and technology)

Indonesia

- Mr. David Kuntel, Ministry of Agriculture, Fisheries, and Forestry (UPV/MA, marine)
- Ms. Renny Eka Putri, Andalas University (UPM/PhD, agricultural engineering)

Lao PDR

- Mr. Keosangkhom Phommaseng, Department of Environment, Water Resources and Environment Administration (UPLB/MS, environmental science)

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Web: www.searca.org/web/newsletter
 E-mail: post@agri.searca.org
 Mail: SEARCA, College, Laguna 4031 Philippines
 Tel: +63 49 536 2365 to 67 loc. 419
 Fax: +63 49 536 7097

Production Team

Editor: Leah Lyn D. Domingo
 Editorial Advisers: Gil C. Saguiguit, Jr.
 Adoracion T. Robles
 Graphic Designer: Edwin Robert A. Cortes

SEARCA Director conferred France's "Knight of the Order of Agricultural Merit"



Dr. Gil C. Saguiguit, Jr. (second from left), SEARCA Director, proudly wears his newly pinned *Chevalier de l'Ordre du Merite Agricole* (Knight of the Order of Agricultural Merit) medal presented to him by His Excellency Thierry Borja de Mozota (leftmost), Ambassador of France to the Philippines, on 15 June 2011 at the Residence of France in Makati City, Philippines. Also in the photo are Mr. Christian Merer (rightmost), Counsellor for Cooperation and Cultural Affairs, and Ms. Julie Blazy, Attaché for Science and Research Cooperation, both of the Embassy of France to the Philippines.

The French Government conferred on Dr. Gil C. Saguiguit, Jr., SEARCA Director, the rank of *Chevalier de l'Ordre du Mérite Agricole* (Knight of the Order of Agricultural Merit) in recognition of his commitment to the development of strong research cooperation, in agriculture, between France and the Philippines. The distinction was bestowed on him through a decree of the Minister of Agriculture, Food, Fisheries, Rural Affairs and Regional Development of the Republic of France signed by Minister Bruno Le Maire on 31 January 2011.

In behalf of his government, His Excellency Thierry Borja de Mozota, Ambassador of France to the Philippines, presented the medal of the Order to Dr. Saguiguit on 15 June 2011 at the Residence of France in Makati City, Philippines.

Others who have received this prestigious award include former President Jacques Chirac of France; Dr. John Brian Morrissey, co-founder of the Canadian Food Inspection Agency; and Patricia Gastaud-Gallagher, Director of *l'Academie du Vin*.

A former French government scholar, Dr. Saguiguit has promoted the establishment and strengthening of collaborations between SEARCA and French national and international institutions, which have resulted in several research and education collaborative projects for the benefit of Southeast Asia. He was instrumental in establishing links and partnerships with such French institutions as the Ministry of Foreign Affairs, *Centre de Coopération Internationale en Recherche Agronomique pour le Développement* (CIRAD), *Ecole Nationale Supérieure des Industries Agricoles et Alimentaires* (ENSIA), *Agropolis International*, and *Centre National d'Etudes Agronomiques des Régions Chaudes* (CNEARC now known as *Centre International d'études Supérieures en Sciences Agronomiques or SupAgro*).

"That it is for my efforts to promote a field around which my professional life has been built and bestowed by the same country that supported my graduate education, makes this recognition all the more meaningful and important to me," said Dr.

Saguiguit in his acceptance remarks. He added that he will continue to contribute as best as he can to strengthening development cooperation between France and the rest of Southeast Asia, particularly in the field of agricultural research and development.

Currently, under Dr. Saguiguit's leadership, SEARCA collaborates with SupAgro as a gateway to European consortia such as *Erasmus Mundus* and the European Alliance on Agricultural Knowledge for Development (AGRINATURA). The focus of these collaborations is graduate scholarships and student exchanges. Recently, SEARCA and CIRAD also agreed to put in place institutional hosting agreements for graduate sandwich programs, including the conduct of graduate research. An ongoing food security program funded by the European Union is being implemented by SEARCA in six provinces of the Philippines with strong CIRAD technical assistance. Dr Saguiguit serves as the Project Director.

Dr. Saguiguit obtained his doctorate in Rural Economics from Université de Montpellier. He holds the distinction of being the first Filipino to complete the program at this university.

Dr. Saguiguit's award is made more personally meaningful because about three decades earlier his late father, Gil F. Saguiguit, Sr., was similarly conferred the title *Chevalier dans l'Ordre des Palmes Académiques* for his contributions to the promotion of French culture through academic and scientific cooperation. Dr. Saguiguit, Sr., a renowned professor of agricultural education and institution builder, is one of the founding fathers of SEARCA.

The conferment was witnessed by French embassy officials, Philippine government officials, SEARCA staff, as well as Dr. Saguiguit's family and close friends in academe and the scientific community. (LLDDomingo)

SEARCA begins Phase II of FAO-funded study

SEARCA has completed the scoping survey of the two-phased project entitled *Appraisal of Institutional Mandates for Agribusiness Support in Asia*, which is funded by the Food and Agriculture Organization of the United Nations (FAO).

The project will begin its second phase with six country writers engaged to conduct the in-depth case appraisals of organizational units established within Ministries of Agriculture of the Philippines, Bangladesh, Indonesia, Malaysia, Nepal, and Vietnam.

These countries were selected based on the scoping survey results carried out in Phase I, which involved 22 Asian countries. The survey gathered data on existing organizational structures with mandate related to agribusiness, including agribusiness strategies, policies, and programs.

Phase II involves a deeper appraisal of organizational units established within the Ministries of Agriculture whose mandate is supportive of agribusiness or agro-industry

development. It will entail in-depth country cases to analyze the innovative organizational structures for agribusiness in terms of their mandates, functions, scope of services, strengths and weaknesses, and institutional comparative advantage.

The purpose of the appraisal is to identify and characterize the organizational models being introduced by the Ministries of Agriculture (MoAs) in Asia, specifically in East, South, and Southeast Asia, to provide services to agribusiness and agro-industries. Results of the appraisal would provide sound basis for improving the FAO technical support and guidance to the Ministries.

LAKECON 2011 pushes integrated lake management



The Honorable Juan Miguel Zubiri, Senator of the Republic of the Philippines, shares what has been done under his watch as Chair of the Senate Committee on Environment and Natural Resources during the LAKECON 2011 held at SEARCA on 27-29 April 2011.

SEARCA and the Philippine Council for Aquatic and Marine Research and Development (PCAMRD) jointly organized the *Second National Congress on Philippine Lakes (LAKECON 2011)*, which was held at SEARCA on 27-29 April 2011. It had the theme "Building on the Pillars on Integrated Lake Basin Management."

Stakeholders, policymakers, and the academe converged at LAKECON 2011 to discuss the Integrated Lake Basin Management (ILBM) as an approach to help the country achieve a common framework for lake management. ILBM integrates six key elements (institutions, policy, stakeholder participation, technology, science, and finances) that are fundamental in sustaining lakes and the resources they provide.

In his welcome remarks, Dr. Gil Saguiguit, Jr., SEARCA Director, emphasized the need to

strengthen partnerships and linkages among key stakeholders in the management of the country's lakes to address common concerns.

Dr. Luis Rey I. Velasco, Chancellor of the University of the Philippines Los Baños (UPLB), enjoined participants to develop initiatives that are more responsive to the needs of ordinary people. For his part, Los Baños Mayor Anthony Genuino, represented by Mr. Augusto Sanchez, Public Relations Consultant, Office of the Mayor, Los Baños, emphasized the major role that local governments play in lake management.

Experiences in the management of Laguna de Bay, the biggest lake in the Philippines, were shared by Mr. Rod Cabrera, General Manager of the Laguna Lake Development Authority. He talked about the growth of populations and industries around the lake, the denuded watershed, degraded water

quality, and lack of political will among implementers of policies for the protection of the lake.

In his keynote speech, Philippine Senator Juan Miguel Zubiri shared what has been done under his watch as Chair of the Senate Committee on Environment and Natural Resources. Two of the proposed measures that he is pushing for are Ecosystem Management Bill and the National Land Use Bill. He said both bills will adopt the ecosystem approach, specifically the basin-wide management of lake resources, but the latter will delineate the zones devoted to agriculture, industrial, and residential uses.

The three-day lake congress also featured technical presentations and workshop sessions. These provided scientific and technical bases in addition to lessons and success stories in designing lake basin management programs.

Other collaborators of LAKECON 2011 are the Department of Agriculture through the Bureau of Fisheries and Aquatic Resources and National Fisheries and Development Institute; DENR through the Environmental Management Bureau, Ecosystems Research and Development Bureau, and Philippine Areas and Wildlife Bureau; Phivolcs; LLDA; and the Southeast Asian Fisheries Development Center (SEAFDEC).

LAKECON 2011 takes off from the gains of the First National Congress on Philippine Lakes (LAKECON 2003) held almost eight years ago, for which SEARCA served as Secretariat. SEARCA's hosting of LakeCon 2011 forms part of this regional center's advocacy for natural resource management, which include biodiversity and sustainable coastal resource management. (LLDDomingo)

SEARCA, DA-BAR staff participate in food security symposium

Selected staff of SEARCA and the Department of Agriculture-Bureau of Agricultural Research (DA-BAR), Philippines attended the *Crops for the Future-Beyond Food Security Symposium* held on 27 June-1 July 2011 in Kuala Lumpur, Malaysia.

Their participation in the symposium is part of the project entitled *Capacity Building and Comparative Study on Technology Management in Southeast Asia* funded by the DA-BAR and implemented by SEARCA.

The symposium focused on the potential role of underutilized plant species in contributing to global food security and nutrition, to provide buffer against the consequences of climate change, and to increase agricultural

biodiversity. The symposium provided a venue for meeting potential partners for research and development of underutilized plant species.

Yang Amat Berhormat Dato' Sri Haji Mohd. Najid Bin Tun Haju Abdul Razak, Prime Minister of Malaysia, welcomed the participants and officially launched the Crops for the Future Research Center. The Prime Minister said the purpose for establishing the Research Center, co-financed by the University of Nottingham Malaysia Campus and the Government of Malaysia, is "to increase the value of the now underutilized crops to a commercial food, and other biomaterials."

The symposium was jointly organized by the International Society for Horticultural Science, University of Nottingham Malaysia Campus, Crops for the Future Research Center, Bioersivity International, the Malaysian Agricultural Research and Development Institute, Boustead Holdings Berhad, Food and Agriculture Organization of the United Nations, Kirkhouse Trust, British Council and Forum for Agricultural Research in Africa. (SGLQuinones)

25 Southeast Asians join training in vulnerability and socioeconomic analysis

SEARCA conducted the *International Training Course on Vulnerability and Socio-Economic Analysis* on 4-8 April 2011 as an activity of a project, entitled *Building Capacity to Adapt to Climate Change for Selected Southeast Asia Countries: Vulnerability Assessment and Economic Analysis of Adaptation*. The project is jointly implemented by SEARCA and Hue College of Economics, Vietnam, and the Royal University of Phnom Penh, Cambodia.

Funded by the Economy and Environment Program for Southeast Asia (EEPSEA) of the

International Development Research Center (IRDC), the project aims to build capacity for research, planning, and action with respect to climate change and the economics of adaptation in Cambodia, the Philippines, and Vietnam.

Twenty-five participants from the three countries took part in workshops and exercises that addressed their needs in vulnerability assessment index generation and mapping, and designing research instruments. During the five-day training, they learned how to conduct social and economic vulnerability assessment research

using geographic information system (GIS) as well as integrated, participatory, and gender-sensitive assessment of climate change-related vulnerability.

In his welcome remarks, Dr. Gil C. Saguiguit, Jr., SEARCA Director, said “we expect that these added skills will help us accomplish what we have set out to do through the project. We also hope that the outputs will provide us with bases to develop an integrated action for climate change adaptation for vulnerable communities.”

Experts from the University of the Philippines Los Baños (UPLB) who were tapped to give lectures and facilitate workshops included Dr. Maria Victoria O. Espaldon, Dean, School of Environmental Science and Management; Dr. Gloria Luz M. Nelson, Professor, Department of Social Sciences; Mr. Jaderick P. Pabico, Associate Professor, and Mr. Arian J. Jacildo, Assistant Professor, both of the Institute of Computer Science; Dr. Juan M. Pulhin, Professor, Department of Social Forestry and Forest Governance; and Dr. Nathaniel Bantayan, Associate Professor, Institute of Renewable Natural Resources. (JLBCarigma)



Dr. Mercedita A. Sombilla (fourth from right, front row), SEARCA Manager for Research and Development, poses with the participants of the International Training Course on Vulnerability and Socio-Economic Analysis held on 4-8 April 2011 for a souvenir photo.

SEARCA supports training in management of agriculturally important microbial resources

Six researchers from Cambodia, Indonesia, Lao PDR, Myanmar, and the Philippines received funding support from SEARCA for their participation in the *Training Course on the Long-term Preservation and Management of Microbial Resources with Agricultural Importance* held on 23-27 May 2011 at the Sirindhorn Science Home, Thailand Science Park, Pathumthani, Thailand.

The course sought to enhance the capacities of Southeast Asian researchers involved in culture collection management in the member countries of the Asian Consortium for the Conservation and Sustainable Use of Microbial Resources (ACM). Participants were trained in the proper handling, long-term preservation, and quality control of microorganisms to maintain high-quality inoculants which will help ensure their effectiveness in the field. The course was also meant to increase awareness and

appreciation on the benefits of high-quality microbe-based biotechnology products.

Training researchers in developing cutting-edge agri-biotechnology that will help improve agricultural productivity is in line with SEARCA's thematic focus on agricultural competitiveness.

The course covered legal management of microbial resources, information management and database design, modern techniques for taxonomy, DNA barcoding, and preservation and management of microbial resources, among others.

Participants learned different techniques and approaches through hands-on sessions such as DNA sequence data processing and interpretation, demonstration and practice on liquid drying and cryo-preservation techniques, and information management.

Proper preservation of microbial inoculants, which are used as various fertilizers and biological control agents, is crucial to maintain their viability and desired characteristics. Microorganisms are valued resources that greatly help various processes, including agricultural production. In fact, microbial biofertilizers and biological control agents used against pest and diseases are available in some countries.

This training course was organized by the National Center for Genetic Engineering and Biotechnology (BIOTEC), National Science and Technology Development Agency (NSTDA), Ministry of Science and Technology (MOST) in cooperation with the Korea Research Institute of Bioscience and Biotechnology (KRIBB), National Institute of Molecular Biology and Biotechnology (BIOTECH), NITE Biological Resource Center (NBRC), World Data Centre for Microorganisms (WDCM), ACM, and SEARCA. (JAPanopio/SMMercado)

Philippine gov't agencies participate in RTD on assessing smuggling of agricultural goods

SEARCA has been commissioned by the Department of Agriculture-Bureau of Agricultural Research (DA-BAR), Philippines to conduct a research entitled *An Assessment of Smuggling of Selected Agricultural Commodities in the Philippines*.

The general objective of the study is to examine the dynamics of smuggling of agricultural products in the country with the end view of drawing policy implications and recommendations to mitigate the problems brought about by this illegal practice.

The first Round Table Discussion (RTD) of said project was conducted on 31 May 2011 at the Dome Café in Makati City, Philippines. Participants of

the RTD were from the Bureau of Plant Industry, National Meat Inspection Service, National Veterinary Quarantine Services, and the private sector.

The narrative experiences of the participants would be of help to the study team in their analysis of the current condition of agricultural products being smuggled in the country. Moreover, the study team focused their inquiries on efficiency and effectiveness of existing government policies, rules and regulations in tracking smuggled goods entering the country.

The study team will also conduct RTDs in some of the major ports in the country, particularly in La Union, Cebu, and Zamboanga. (SGLQuinones)



Representatives of key Philippine government agencies participate in the round table discussion on assessing smuggling of agricultural goods. They are (from left) Mr. Sid Callangan of the National Meat Inspection Service, Mr. Jesus Bajacan of the Bureau of Plant Industry, and Dr. Enrico Capulong and Dr. Florence Silvano of the National Veterinary Quarantine Services. Dr. Jose Molina (not in photo), a private veterinary practitioner, also joined the meeting.



Members of the study team present at the RTD were (from left) Dr. Cesar Quicoy, Assistant Team Leader; Dr. Prudencio U. Gordoncillo, Team Leader; Ms. Julieta delos Reyes, Field Coordinator; and Dr. Arvin Vista, Database Administrator.

Filipino small-scale banana producers urged to grow organic

With the changing and globalized agri-food system, Filipino small-scale banana farmers would need to continually innovate in their production approaches in order to stay alive in the competitive banana industry.

This could mean going organic in their production in order to achieve increased market value of their produce. Organically grown bananas are 35 percent more expensive than the traditionally grown ones.

The call for innovation was issued by Dr. Larry N. Digal, a value chain expert, in a lecture titled *Development Options in Enhancing the Performance of the Philippine Cavendish Banana Chain* delivered on 24 May 2011 at the SEARCA Agriculture and Development Seminar Series (ADSS).

The recent years have seen big changes occurring in the agri-food system, including the banana industry, which begs the question, "Will the vulnerable yet numerous small-scale producers of Cavendish banana be 'in or out' in the industry?"

The changes and trends, said Dr. Digal, include the expanding high-value markets (e.g., export and modern retail, fast food chains); food processing becoming concentrated, vertical integration and contractual agreements; fragmenting farms in developing countries; and weakening institutions (e.g., governance, infrastructure, labor).

Southern Mindanao (Region XI), Davao in particular, is the country's main producer of Cavendish banana. The industry employs numerous poor locals and has contributed much to the region's gross domestic product (GDP). However, recently there has been a rise in the region's poverty incidence, which has alarmed the industry and other concerned sectors. This has been attributed to the decline in Cavendish banana production owing to the fragmentation of land and banning of aerial spraying, among many other factors. Moreover, the small-scale producers lack the capacity to meet the high standards required by the market.

Dr. Digal offered four options to address the situation: improve the price of bananas, improve productivity, reduce cost of production and



Dr. Larry N. Digal, Professor and Director of the Office of Research, University of the Philippines Mindanao, shares development options to enhance the competitiveness of the country's Cavendish banana industry.

marketing, and address policy issues and institutional issues.

The improvement of price entails that farmers need to aim for higher quality produce (e.g., organically grown bananas) so that its market value would increase.

To improve production, individual farming system is encouraged for higher income. Income per hectare in a cooperative farming system is smaller because farmers would still need to pay certain cooperative fees.

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SEARCA partners with host province in environmental programs

SEARCA signed a Memorandum of Understanding (MOU) with the Provincial Government of Laguna to formalize a collaboration in environmental programs that have bearing on the province's "Save Laguna Lake" initiative and how to cope with the effects of climate change.

The MOU was signed on 6 June 2011 at the Provincial Capitol in Sta. Cruz, Laguna, Philippines. Signatories were Dr. Gil C. Saguiguit, Jr., SEARCA Director, and Hon. George "ER" Ejercito Estregan, Governor of Laguna.

Dr. Saguiguit said the partnership ties in nicely with SEARCA's focus on promoting local-level adaptation and interventions to counteract the effects of climate change.

Through the instigation of SEARCA, 12 Laguna municipalities are being assisted through a project funded by the Economy and Environment Program for Southeast Asia (EEPSEA) of the Canadian International Development Research Centre (IDRC).

The project, entitled *Building Capacity to Adapt to Climate Change for Selected Southeast Asia Countries: Vulnerability Assessment and Economic Analysis of Adaptation*, seeks to measure and produce maps of the municipalities' vulnerability to climate change, as well as analyze their social vulnerability; identify and conduct economic analysis of locally appropriate adaptation options; and formulate policy recommendations to enhance local capacity to adapt to climate change.



Dr. Gil C. Saguiguit, Jr. (second from right), SEARCA Director, presents a miniature of the SEARCA Growth Monument to Hon. George Ejercito Estregan (rightmost), Governor of Laguna, Philippines, after signing a memorandum of understanding between SEARCA and the Provincial Government of Laguna to collaborate on environmental programs. Others in the photo are Dr. Francisco F. Peñaiba (third from right), SEARCA Deputy Director for Administration; Dr. Mercedesita A. Sombilla (leftmost), SEARCA Manager for Research and Development; and Atty. Leonardo M. Ragaza, Jr. (second from left), Laguna Provincial Administrator.

As an initial activity of the three-year project, SEARCA implemented a training course on vulnerability assessment and socioeconomic analysis for municipal planning officers and other key officials in May 2011. The participants learned how to use tools for conducting climate change vulnerability assessment and identifying appropriate adaptation methods. Results of the project will help these municipalities, and the province as a whole, build into their development plans viable strategies to minimize risks and to adapt to the effects of climate change. (LLDDomingo)

Philippine Climate Change Commissioner visits SEARCA



Dr. Saguiguit (left) receives Mr. Naderev M. Saño, Commissioner, Philippine Commission on Climate Change, during his visit to SEARCA on 19 April 2011.

Dr. Gil C. Saguiguit, Jr., SEARCA Director, met with Commissioner Naderev M. Saño of the Philippine Climate Change Commission to discuss how the Center can be of assistance to the Commission during the latter's visit to SEARCA on 19 April 2011.

During the meeting, Dr. Saguiguit gave Commissioner Saño a briefing on SEARCA and its programs. Commissioner Saño was also apprised of SEARCA's current initiatives on climate change mitigation and adaptation. These include the Center's Knowledge Center on Climate Change Adaptation or KC3, the *European Union - Focused-Food Production Assistance to Vulnerable Sectors (EU-FPAVAS)* project, and the project on *Building*

Capacity to Adapt to Climate Change for Selected Southeast Asia Countries: Vulnerability Assessment and Economic Analysis of Adaptation led by the Economy and Environment Program for Southeast Asia (EEPSEA).

Commissioner Saño commended SEARCA for its work with the LGUs of the six provinces covered by the EU-FPAVAS project in assessing the risk and vulnerabilities in their areas and in coming up with their action plans in adapting to climate change. He said the six provinces assisted by SEARCA are now well ahead of the rest of the country and could thus provide mentoring to the other provinces that are yet to craft their climate change action plans in compliance with Philippine law (Climate Change Act of 2009).

Dr. Saguiguit said the approach used by the EU-FPAVAS project could serve as a model for the risk and vulnerability assessment and action planning for climate change adaptation when the national framework strategy on climate change is cascaded down to the local level.

"I can only be glad to hear these information because it gives us (in the Climate Change Commission) comfort to know that there is something already happening on the ground," Commissioner Saño said.

Knowledge management was initially identified as an area in which SEARCA and the Climate Change Commission could explore possible collaboration.

During his visit, Commissioner Saño also delivered a seminar entitled *The Philippine Climate Change Program: Updates and the Potential Role of the Academic and R&D Sector* at SEARCA's Agriculture and Development Seminar Series. (LLDDomingo)

Agri entrepreneur proffers roadmap to agricultural productivity

Policy formulation, product and market development, and a global approach are the critical elements of a roadmap to agricultural productivity proposed by Mr. Jose C. Reaño, President of Broadchem Corporation, in a seminar he delivered at the Department of Agriculture (DA) Lecture Forum Series held on 25 May 2011 at the DA Office in Quezon City, Philippines.

Entitled *Agricultural Entrepreneurship: A Pathway to Progress*, Mr. Reaño's lecture was the sixth in the lecture series, which is part of the *Umbrella Capacity Development Program on Strategic Management and Policy for Agriculture Professionals and Executives*, a collaborative project being implemented by SEARCA and DA.

Drawing from lessons of a viable community livelihood program — the Barangay Atisan Model, Mr. Reaño told the DA officers and staff present at his lecture that there is a need to formulate policy that is incentive-driven, provides technical support, fosters obligation and accountability of agencies, and is open to amending outdated laws.

He shared that when the economic and environmental program in Barangay Atisan, San Pablo City, Laguna, Philippines began in 2004, it was faced with the following challenges: (1) unpredictable and low prices of products, (2) lack of capital, (3) lack of knowledge on plants that can be profitable, (4) dependence on a single source of income, and (5) management of the source of income.

Nevertheless, the program was able to bring about livelihood activities that were not only sources of substantial income for community members but also environmentally sound. It has educated the community on the benefits of keeping and planting endemic trees and plants. Farmers were encouraged to plant profitable trees intercropped with cash crops, which helped stop soil erosion. Products were diversified as people produced fruit wines, juices, and preserves. The water supply was augmented through a water conservation initiative carried out by the program.

Bee-keeping and organic farming were also introduced as options to earn additional income. Mr. Reaño, whose company is a distributor of natural and organic-based feed additives and vaccines, said these are areas in which the Philippines may have an advantage and should thus be further explored.

Citing the success of Barangay Atisan, Mr. Reaño said agricultural entrepreneurship can change how available resources are used while creating opportunities and solutions. He stressed the need to develop various products from a single crop and to intensify the use of all by-products.

Mr. Reaño is optimistic that the program's success in Barangay Atisan can be replicated in other communities in the country, hence his call for policies in favor of supporting farmers.

He said a global approach in raising agricultural productivity will give the Philippines an edge as it competes with other countries. This necessitates the creation of standards for all products, finding niche markets for key endemic products, and focusing on product strength.

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Snapshots



Officials of SEARCA and the Department of Agriculture (DA), Philippines were among the participants in the Asia-Europe Meeting (ASEM) High Level Conference on Food Security held in Chiang Mai, Thailand on 9-11 May 2011. The ASEM is composed of 46 countries (27 European Union; 10 ASEAN; 6 Northeast and South Asia; and 3 new members: Russia, Australia, and New Zealand) and the European Commission and ASEAN Secretariat. The meeting provided a platform for ASEM members to take stock of the current food security situation and initiatives as well as discuss and recommend mechanisms and activities for ASEM future cooperation toward achieving food security. Photo shows Dr. Gil C. Saguiguit, Jr. (rightmost), Director, and Dr. Bessie M. Burgos (third from right), Manager for Project Development and Management, both of SEARCA; and the DA delegation (from left): Mr. Nelson Lopez, Inland and Aquaculture Division Chief, DA-Bureau of Fisheries and Aquatic Resources; Dr. Maria Concepcion Lizada, Professor Emeritus in Food Science and Nutrition, University of the Philippines Diliman; Dr. Romeo S. Recide, DA Assistant Secretary for Policy and Planning; and Ms. Ana G. Abejuela, DA International Cooperation Specialist.



Dr. Roy Mugiira (fourth from left), Acting Chief Executive Officer of Kenya's National Biosafety Authority (NBA), shared the status of the country's regulatory system in his seminar on "Biosafety in Kenya" on 19 May 2011 at SEARCA. The special seminar was co-organized by SEARCA's Biotechnology Information Center and the Program for Biosafety System Southeast Asia. He was part of a group on a study visit to the Philippines to learn about the country's biosafety framework. Others in the group were (left to right) Dr. Karen Hokanson (Program for Biosafety Systems), Ms. Cecilia Nzau (Kenyan National Biosafety Authority or NBA Board Member), Prof. Moses Limo (NBA Board Member), Mr. Otula Owuor (NBA Board Member), Prof. Miriam Kinyua (NBA Board Chair), and Dr. Reynaldo Eborra (Program for Biosafety Systems Southeast Asia Regional Coordinator and UPLB-BIOTECH Director). Dr. Saguiguit (third from right) met with the Kenyan delegates during their visit to SEARCA.



Members of the Brgy. Marikit Fishermen's Association kiss their healthy catch during the Bangus Harvest Festival in Tabtaban Lake, Paluan, Occidental Mindoro, Philippines on 3 June 2011 at the height of the fish kill in Taal Lake, which reached over 500 metric tons of bangus and tilapia. The harvest was from the European Union (EU)-funded Focused-Food Production Assistance to Vulnerable Sectors (FPAVAS) Freshwater Bangus in Cages Project. EU-FPAVAS is a food security program being implemented by SEARCA in six provinces in the Philippines, namely: Camarines Norte, Camarines Sur, Occidental Mindoro, Oriental Mindoro, Misamis Occidental, and Misamis Oriental. Freshwater fish cage projects such as this are implemented under the coastal and inland waters component of the EU-FPAVAS project.

SEARCA participates in EXPERTS Consortium meeting



Dr. Uwe Muuss, Project Executive Officer of EXPERTS, welcomes the participants to the meeting.

SEARCA participated in the EXPERTS Selection and Planning Meeting of EXPERTS Consortium held in Kathmandu University, Nepal on 13-15 April 2011. EXPERTS is short for Exchange by Promoting Quality Education, Research, and Training in South and Southeast Asia. The meeting was organized by the University of Goettingen, Germany.

Dr. Editha C. Cedicol, SEARCA Manager for Graduate Scholarship, represented the Center in the meeting. SEARCA is one of the Associate Partners of the EXPERTS Consortium.

At the meeting, 26 Consortium representatives decided on the final list of 126 scholarship grantees for the Erasmus Mundus 2 program from a total of 940 applicants.

At the opening program, Dr. Uwe Muuss, Project Executive Officer of EXPERTS, expressed appreciation to Dr. Bhadraman Tuladhar of Kathmandu University for the excellent preparation and arrangements. He said the meeting would also discuss preparations for the submission of the EXPERTS proposal for EU funding.

EXPERTS, is a European Union (EU)-funded project that aims to enhance the capacity for international cooperation among its participating countries in South and Southeast Asia (SSEA)

and to exchange knowledge and ideas among the Asian and European partners. The project places emphasis on research and cooperation, establishing collaborative framework for human resource development through training and upgrading the skills of junior faculty staff, undergraduates, postgraduates and postdoctoral researchers by specified learning objectives in the field of engineering and technology, agricultural sciences, environmental studies, business management, and social sciences. The implementation of individual mobility programs, with special emphasis on research initiatives, will provide students from SSEA regions with mobility for a broader choice of opportunities for study experience in EU institutions. (ECCedicol)



Dr. Editha C. Cedicol (fourth from left, seated) and other participants of the EXPERTS Consortium meeting pose for a souvenir photo.

ISAAA-SEARCA research on print media reportage of agri-biotech bags award

Mass media plays a key role in influencing the public's perception and understanding of the merits and risks of new technologies. As such, this is a challenge for science communicators who must make technical information easily understood by the public.

A research paper by SEARCA and International Service for the Acquisition of Agri-biotech Applications (ISAAA) researchers, entitled *Print Media Reportage of Agricultural Biotechnology in the Philippines: A Decade's (1999-2009) Analysis of News Coverage and Framing*, won Best Paper (Technology Extension, Dissemination, and Education category) at the *Federation of Crop Science Societies in the Philippines (FCSSP) Scientific Conference* held in Legazpi City, Philippines on 9-14 May 2011.

Authors of the winning paper are Dr. Mariechel Navarro, Manager, Global Knowledge Center on Crop Biotechnology of ISAAA; Ms. Donna Bae Malayang, Research Assistant, and Mr. Noel Amano, Jr., former Program Associate, both of ISAAA; and Ms. Jenny A. Panopio, Special Projects Coordinator and Network Administrator of SEARCA's Biotechnology Information Center.

SEARCA has been proactively communicating science-based biotechnology information to the public since 2000 through its Biotechnology Information Center, a collaborative project with ISAAA.

The paper presents the results of a study that used three major newspapers which reported agri-biotech stories from 1999 to 2009. The study found that of the 1,436 articles published, the most number of articles (212) came out in 2001, which was prior to the approval of Bt corn. When the technology was approved the following year, 170 articles were published.

According to Dr. Navarro, the media wields great influence on the public's understanding and attitude toward biotechnology, particularly agricultural biotechnology and genetically modified foods. The study revealed that writers used different styles used to frame the agri-biotech stories, most of which were written to elicit the public's accountability on biotechnology and governance issues.

The study also showed that while about a third (35%) of the writers obtained their information from resource persons working in government, the science community and civil society were also sources of information. According to Dr. Navarro, the current trend shows a more open relationship between writers and scientists, thus the knowledge divide between these two important stakeholders in science communication has been bridged.

This study provided an appreciation into the role of mass media in developing countries in increasing awareness and public understanding of biotechnology. (LLDDomingo)

38 SEARCA scholars complete graduate programs

Thirty-eight new scholars under the Center's regular graduate scholarship (29) and PhD research scholarship (9) programs have obtained their MS (14) and PhD (24) degrees in school year 2010/2011.

The new graduates are nationals of Cambodia (4), Indonesia (7), Myanmar (5), Philippines (15), Thailand (1), Timor-Leste (3), and Vietnam (3).

Of the 38 new SEARCA graduate alumni, two completed their programs at Institut Pertanian Bogor (IPB) and one at Universitas Gadjah Mada, both in Indonesia; one at Universiti Putra Malaysia (UPM); one at Asian Institute of Technology (AIT), Thailand; one at University of Melbourne (UM), Australia; one at National Central University (NCU), Taiwan; one at University of the Philippines Diliman (UPD); and 30 at UP Los Baños (UPLB).

The new SEARCA alumni, the title of their thesis/dissertation, their study post, and degree program are as follows:

CAMBODIA



- Mr. Heak Pring, "Environmental Management of the Stung Treng Ramsar Wetland Site in Samaki Sangkat and O'svay Commune, Stung Treng Town, Cambodia" (UPLB/MS, environmental science)



- Mr. Nguon Samnang, "Isolation and Identification of Lactic Acid Bacteria from Fermenting Bignay (*Antidesme bunius* L.) Spreng and Mango (*Mangifera indica* L.) Wines" (UPLB/MS, food science)



- Mr. Venn Vutey, "Dietary Exposure Assessment of Antibiotic Residues in Pork Consumed in the Philippines" (UPLB/MS, public health)



- Mr. Dok Doma, "Social-Ecological Contribution in Marine Fisheries: An Evaluation of Sre Ambil Coastal Lagoon Fisheries, Cambodia" (AIT/PhD, aquaculture and aquatic resources management)

INDONESIA



- Ms. Bhakti Etza Setiani, "Comparative Evaluation of Various Methods for the Detection of *Listeria monocytogenes* (Murray et al) in Selected Raw and Processed



- Meat Products" (PhD/MS, food science)
- Ms. Angelita Puji Lestari, "Genotype Environment Interaction of Yield Components, Yield, and Aroma in Aromatic New Plant Type (NPT) Promising Rice Lines" (IPB/MS, plant breeding)



- Mr. Panji Deoranto, "Spatial Integration and Price Transmission of Chicken Markets in Central Java, Indonesia" (UPLB/PhD, agricultural economics)



- Ms. RR Devita Anggraeni, "Influence of Pesticides and Cadmium in Feed on Reproductive and Physiologic Response of Female Philippine Mallard (*Anas platyrhynchos* L.) from 16 to 47 Weeks of Age" (UPLB/PhD, animal science)



- Mr. Yayan Sanjaya, "Selection, Characterization, and Infectivity of Entomopathogenic Fungi Against Spidermite (*Tetranychus kanzawai* (Kishida) (*Tetranychidae acarina*)" (UPLB/PhD, entomology)



- Ms. PK Dewi Hayati, "Genetic Studies of Acid Soil Tolerance in Maize (*Zea mays* L.)" (UPM/PhD, genetics and plant breeding)



- Ms. Astrid Dewi Meillasari-Sugiana, "Community Dynamics in the Governance of Indonesia's Coastal Resource" (UM/PhD, natural resource management)

MYANMAR



- Ms. Khin San Nwe, "Agro-Physiological Adaptation and Nitrogen Fixation of Soybean *Glycine max* L. Varieties to Three Flooding Regimes and Growth Stages" (UPLB/PhD, agronomy)



- Mr. Myo Kyaw Thu, "Physio-morphological and Agronomic Responses of Cotton (*Gossypium hirsutum* L.) to Fertilizer Management and Water" (UPLB/PhD, agronomy)



- Ms. Yi Yi Soe, "Physiological and Biochemical Bases of Sprout Inhibition in Stored Onion (*Allium cepa* L. cv.) Red Creole Bulbs by Pre-Or Postharvest Application



of Ethylene," (UPLB/PhD, horticulture)

- Ms. Aye Aye Myint, "Geographic Variation and Host Utilization Pattern of *Bactrocera philippinensis* Drew and Hancock and *B. occipitalis* (Bezzi) (Diptera: Tephritidae) in Selected Areas of the Philippines" (UPLB/PhD, entomology)



- Ms. Nyo Mar Htwe, "Genetic Variability for Grain Yield and Some Grain Quality Characters and Genetic Correlation among These Traits in White and Yellow Maize (*Zea mays* L.) Populations" (UPLB/PhD, plant breeding)

PHILIPPINES



- Mr. Andres M. Tuates, Jr., "Quality Analysis of Brown Rice Using Computer Vision System Stress at Different Reproductive Growth Stages" (UPLB/MS, agricultural engineering)



- Ms. Aisa O. Manlosa, "Environmental Benefits and Costs of Conserving Layawan Watershed for Sustainable Domestic Water Supply in Oroquieta City, Philippines" (UPLB/MS, environmental science)



- Mr. Kenneth A. Laruan, "Climate Change Impacts and Adaptations among the Inigenous Highland Farming Communities of the Ambuklao Watershed, Benguet, Philippines" (UPLB/MS, forestry)



- Mr. Reynald M. Quilang, "Effect of Endomycorrhizal Inoculation on the Growth and Survival of *Jatropha curcas* L., *Acacia mangium* Willd, and *Casuarina equisetifolia* in the Abandoned Nickel-Mined Sites in Southern Palawan, Philippines" (UPLB/MS, forestry)



- Ms. Gay Therese M. Bucol, "Supplementary Light for Wet-Season Production of Lettuce (*Lactuca sativa* Linn.) under Protective Cultivation" (UPLB/MS, horticulture)



- Ms. Lucille T. Miguez, "Histological and Morphological Characterization of 'Cardaba' and 'Cavendish' Roots of Bananas (*Musa paradisiaca* L.) Infected with *Ralstonia solanacearum* (F.F.

Smith) Yabuuchi et al 'Race 2'" (UPLB/MS, plant pathology)



- Ms. Raquel M. Balanay, "Price Volatility and Supply Response of Poultry in the Philippines: An Autoregressive Conditional Heteroscedastic (Arch) Approach" (UPLB/PhD, agricultural economics)
- Mr. Violeto N. Coronacion, "Mainstreaming Climate Change Adaptation in the Bachelor of Science in Agriculture Curricular Program in Selected Commissions on Higher Education (CHED) Centers of Excellence in Agriculture" (UPLB/PhD, agricultural education)



- Ms. Analinda M. Fajardo, "Reproductive Biology of *Coffea liberica* W. Bull ex Hiern" (UPLB/PhD, botany)



- Ms. Michelle Grace V. Paraso, "Estrogenic Disruption in Male Common Carp (*Cyprinus carpio* Linnaeus) Introduced to the East and West Sites of Laguna de Bay" (UPLB/PhD, environmental science)



- Ms. Beatriz C. Jadina, "GIS-Aided Biophysical Characteristics of a Landscape in Relation to Landslide Occurrences" (UPLB/PhD, soil science)



- Mr. Joselito I. Rosario, "Process-based Yield Modelling for the Natural Stands of Kawayan Tinik (*Bambusa blumeana* J.A. and J.H. Schultes) in Ilocos Norte" (UPLB/PhD, forest resources management)



- Mr. Stephen Rey P. Ligasan, "Vulnerability, Coping Mechanisms, and Disaster Risk Management as Factors Influencing the Effects of Flood Risks to Households in Selected Rice Farming Communities of Pototan, Province of Iloilo, Philippines" (UPLB/PhD, community development)



- Ms. Van Leeah B. Alibo, "Carbon Storage and the Role in Climate Change Mitigation of the Caimpugan Peatland in Agusan Marsh, Philippines" (UPLB/PhD, environmental science)



- Ms. Sol D. Rama, "Collaboration and Community Sustainability Indicators: The Case of Mining Operations in Palawan" (UPD/PhD, public administration)

THAILAND



- Wilaiwun Intarachaimas, "Correlates of Agriculture Students' Creativity in Yala Rajabhat University in Thailand, Analysis of Teaching Styles, Learning Styles, and Technology Integration" (UPLB/PhD, agricultural education)

TIMOR-LESTE



- Mr. Afonso Alves D.J. Candido, "People's Perception on the Readiness and Capacity Building Requirements for Municipal Autonomy in Babonaro, Timor-Leste" (UPLB/Master of Public Affairs, local governance and development)



- Mr. Raimundo Mau, "Ecosystem and Community Based Model for Zonation in Nino Konis Santana National Park, Timor-Leste" (IPB/MS, information technology for natural resources management)



- Mr. Mateus Da Cruz de Carvalho, "Growth and Carcass Production of Ongole Grade Cattle and Simmental Ongole Crossbred Cattle Growing in a Feedlot System" (UGM/MS, livestock science)

VIETNAM



- Mr. Tran Duc Tri, "Value Chain Analysis of Fresh Potato in Bac Giang Province, Vietnam" (UPLB/MS, agricultural economics)



- Ms. Ngo Thi Thanh Truc, "Comparative Assessment of Using Rice Straw for Rapid Straw for Rapid Composting and Straw Mushroom Production in Mitigating Greenhouse Gas Emissions in Mekong Delta, Vietnam and Central Luzon, Philippines" (UPLB/PhD, environmental science)



- Mr. Nguyen Thanh Son, "Application of Remote Sensing and GIS for Sustainable Land Use Management and Agricultural Drought Monitoring in the Mekong Delta" (NCU/PhD, geoinformation engineering)

Of the 38 scholars who graduated, four were supported by the German Academic Exchange Service (DAAD) and the rest by SEARCA. (LLDDomingo)

Cambodian gets TUA-SEARCA dissertation doctorate scholarship

The second Tokyo University of Agriculture (TUA)-SEARCA Scholarship for Doctoral Dissertation was awarded to Mr. Ou Ratanak, Deputy Director, Department of International Convention and Biodiversity, Ministry of Environment, Cambodia.

Effective 1 June 2011, Mr. Ratanak's scholarship to pursue his PhD in environmental economics is tenable at TUA for a period of three years. His dissertation doctorate program requires him to stay at TUA for one month every year for three years to undertake consultations with his Academic Adviser at TUA.

The topic of Mr. Ratanak's doctoral dissertation is "Estimating Impacts of Ecotourism and NTFP's on Livelihoods and Biodiversity Conservation in Cambodia.

The TUA-SEARCA Doctoral Dissertation Scholarship is offered for three years, starting school year 2010/2011. One slot is available for each school year. (LLDDomingo)

Academic bridging scholarship awarded to Cambodian

Ms. Sat Kunthea, Research Assistant, Department of Agriculture, Kandal Province is the lone recipient of the SEARCA Academic Bridging Program scholarship. She will pursue a non-degree program in Horticulture at UPLB.

The Academic Bridging Program provides assistance to best qualified scholarship candidates from the transition economies of Cambodia, Lao PDR, Myanmar, Vietnam, and Timor-Leste in upgrading the BS degree of agriculture graduates to enable them to qualify for admission to the graduate school of reputable universities in Southeast Asia and even outside the region.

Scholars under this program take up technical courses that would enhance their knowledge in their respective areas of specialization. They may also undertake specialized training courses to improve English language proficiency and other technical skills. (LLDDomingo)

Alumni News

ABANTO GETS SEARCA GRANT TO ATTEND BEAHR'S ENVIRONMENTAL LEADERSHIP PROGRAM



Dr. Rusty G. Abanto, Assistant Professor of Camarines Norte State College (CNSC) in Camarines Norte, Philippines, was recently chosen to participate in the Beahrs Environmental Leadership Program (ELP) at the University of California (UC), Berkeley, USA.

The Beahrs ELP is a three-week intensive summer course, which seeks to broaden knowledge and strengthen leadership skills of mid-level development and environment professionals in addressing complex environmental issues to reduce poverty and social conflict. Organized by UC Berkeley's Center for Sustainable Resource Development, this year's ELP will be on 24 June – 16 July 2011.

Dr. Abanto is the second recipient of the Special SEARCA-Beahrs ELP Training Scholarship in Environmental Leadership for Southeast Asia, a joint program begun in 2010 by SEARCA and the Beahrs ELP. The first recipient is Dr. Nguyen Viet Dang, Lecturer and Researcher, Faculty of Economics and Rural Development, Hanoi University of Agriculture, Vietnam. Dr. Dang is also a SEARCA graduate alumnus (PhD, agricultural economics, University of the Philippines Los Baños, 2009).

The SEARCA-Beahrs ELP Training Scholarship intends to equip its grantees to play strategic roles toward instituting sustainable environmental policy and leading cross-sectoral environmental initiatives in their respective countries.

"I hope that my participation in the program will help me understand more the complexities of the environment toward identifying solutions that will lead to sustainable environmental management," said Dr. Abanto. "It is also my wish that the program will enhance my capacity as a leader so that I can apply and translate into concrete actions the leadership skills and knowledge I will

gain in my own country, particularly in my own institution – the Camarines Norte State College," Dr. Abanto added.

Dr. Abanto completed his PhD in environmental science in 2010 from UPLB under a scholarship supported by the German Academic Exchange Service (DAAD) and SEARCA. An outstanding graduate student of UPLB, he received the university's academic achievement award during his graduation. He currently chairs CNSC's Environmental Management Department. He had served also as Director for Planning of CNSC, during which he played a vital role (as a member of the technical working group of the provincial government of Camarines Norte) in crafting the Environmental Code and Provincial Physical Framework Plan. He has also been providing technical assistance to local government units, particularly in environmental management, preparation of land-use plans, and in implementing an effective ecological waste management plan.

The Special SEARCA-Beahrs ELP scholarship is an annual grant open to qualified nationals of SEAMEO member countries who are involved in sustainable agriculture, rural development or natural resource management; and affiliated with the government, a nongovernment organization or a policy-oriented academic institution that addresses environmental management/sustainable agriculture. (MTBFerino)

2 CAMBODIAN SEARCA ALUMNI RECEIVE ERASMUS MUNDUS SCHOLARSHIP GRANTS



Mr. Nguon Samnang

The European Commission (EC), through the Erasmus Mundus EURASIA 2 Project, has recently awarded scholarship grants to four lecturers and researchers of Royal University of Agriculture (RUA) in Phnom Penh, Cambodia. Two of the scholarship grantees are SEARCA alumni: Ms. Yoeu Asikin, Lecturer, Faculty of Agricultural Economics and Rural Development, and Mr. Nguon Samnang, Assistant Dean and Lecturer, Faculty of Agro-Industry. Both completed their master's degrees in agricultural economics and food science, respectively, from the University

of the Philippines Los Baños (UPLB) in 2010, with funding support from SEARCA's Graduate Scholarship Program.

They will start their doctoral studies in July 2011. Ms. Asikin will study agricultural economics in Montpellier SupAgro, an international center of higher education in agricultural sciences in France. On the other hand, Mr. Samnang will study food science at Czech University of Life Sciences in Prague, Czech Republic.

Ms. Asikin and Mr. Samnang expressed their sincere appreciation to SEARCA for jumpstarting their academic training and professional careers. "I would like to convey my sincere thanks to SEARCA and UPLB for granting and leading me to another step in my academic program and career," wrote Ms. Asikin. "We are grateful to SEARCA for ... (its) support to our university," added Mr. Samnang.

The two other Erasmus Mundus scholarship recipients are Mr. Chankakada Chhoeum and Mr. Kimchhin Sok. Both will undertake master's programs.



Ms. Yoeu Asikin

Launched in 2004, Erasmus Mundus is a mobility program aimed at enhancing quality in higher education through scholarships and academic cooperation between Europe and other countries. It also supports the establishment of cooperation partnerships between European higher education institutions from targeted Third Countries with the objective of organizing and implementing structured individual mobility arrangements between the European and Third Country partners.

SEARCA is involved as associate partner in several undertakings supported by Erasmus Mundus, such as the Exchange by Promoting Quality Education, Research, and Training in South and Southeast Asia (EXPERTS) project, European Alliance on Agricultural Knowledge for Development (AGRINATURA), and Innovative Skills for Agriculture and Rural Trainers through Transnational Exchanges (AGRI-TRAIN). (MTBFerino)

French officials explore prospective collaborations with SEARCA

Three officials of *Centre de Cooperation Internationale en Recherche Agronomique pour le Developpement* (CIRAD) and an official of the French Embassy in Manila visited SEARCA on 18 May 2011 to discuss possible continuing and future collaborative activities between CIRAD and SEARCA.

The CIRAD officials are Dr. Robert Habib, Head of the Performance of Tropical Production and Processing Systems (PERSYST) Scientific Department; Dr. Gilles Saint-Martin, Regional Director for South-East Insular Asia; and Dr. Pierre Morissens, Consultant and Co-Project Director of the European Union – Focused-Food Production Assistance to Vulnerable Sectors (EU-FPAVAS) project jointly implemented by CIRAD and SEARCA. They were joined by Ms. Julie Blazy, Attaché for Science and Research Cooperation for Development of the French Embassy in the Philippines.

Dr. Gil C. Saguiguit, Jr., SEARCA Director, received the visitors together with the Deputy Director for Administration, managers of SEARCA's core programs or their representative, and the head of the Knowledge Resources Unit. He also led the briefing on SEARCA's programs and activities and the discussion on possible areas of collaboration between CIRAD and SEARCA.

Dr. Habib said CIRAD has a program wherein its researchers directly supervise PhD students who are conducting their research. Dr. Editha C. Cedicol, Manager for Graduate Scholarship, said SEARCA already had one such collaboration with CIRAD for the hosting of a Vietnamese SEARCA scholar who conducted her PhD dissertation research in Montpellier, France. Setting up similar sandwich program arrangements was thus identified as one area of collaboration.

On the other hand, possible areas identified for joint research activities included food security monitoring for Southeast Asian countries and fishery-related R&D value chain analysis towards identification of appropriate regulation or policy. Dr. Saint-Martin said CIRAD would also be interested to participate in SEARCA's scientific conferences and policy roundtables. He said CIRAD could also invite SEARCA to participate in European conferences as an institutional partner. (LLDDomingo)



Dr. Gil C. Saguiguit, Jr. (head of the table), SEARCA Director, leads the briefing on SEARCA's programs and activities given to French officials from *Centre de Cooperation Internationale en Recherche Agronomique pour le Developpement* (CIRAD) and the French Embassy in the Philippines. The French officials are Ms. Julie Blazy (second from right), Science and Research Attaché of the French Embassy in Manila; Dr. Pierre Morissens (third from right), Consultant and Co-Project Director of the European Union – Focused-Food Production Assistance to Vulnerable Sectors (EU-FPAVAS) project jointly implemented by CIRAD and SEARCA; Dr. Gilles Saint-Martin (fourth from right), Regional Director for South-East Insular Asia; and Dr. Robert Habib (fifth from right), Head of the PERSYST Scientific Department. Other SEARCA officers present at the meeting are (from left): Dr. Francisco F. Peñalba, Deputy Director for Administration; Dr. Maria Celeste H. Cadiz, Manager for Knowledge Management; Ms. Carmen Nyhria G. Rogel, Project Development Specialist, Research and Development Department; Dr. Editha C. Cedicol, Manager for Graduate Scholarship; Dr. Bessie M. Burgos, Manager for Project Development; and Dr. Mariliza V. Ticsay (rightmost), Head, Knowledge Resources Unit.

35 Southeast Asians/ from page 2

- Mr. Soulivanh Voravong, Ministry of Agriculture and Forestry (*UPLB/MS, environmental science*)

Myanmar

- Ms. Nan Wutyi San, Perennial Crops Enterprise (*UPM/MS, agricultural economics*)
- Ms. Kyi Mon Mon, Yezin Agricultural University (*UPLB/MS, agronomy*)
- Ms. Lwin Mar Oo, Ministry of Agriculture and Irrigation (*UPM/MS, agronomy*)
- Mr. Win Myint Thein, Ministry of Agriculture and Irrigation (*UPLB/MS, entomology*)
- Mr. Htein Linn, Myanma Industrial Crops Development Enterprise (*UPM/MS, soil science*)
- Ms. Yu Yu Yamin, Livestock Breeding and Veterinary Department (*UPM/MS, veterinary medicine*)
- Ms. Wint Wint Aung, Livestock Breeding and Veterinary Department (*UPM/MS, veterinary medicine*)
- Ms. Khin Thida Khaing, University of Veterinary Science (*UPM/PhD, animal science*)
- Ms. Myint Myint Soe, Ministry of Agriculture and Irrigation (*UPLB/PhD, entomology*)
- Ms. Win Su Min, Department of Agricultural Research (*UPM/PhD, horticulture*)
- Mr. Surapong Anuttato, Ministry of Agriculture and Cooperatives (*KU/MS, tropical agriculture*)
- Ms. Areerat Lunpha, Ubon Ratchathani University (*UPLB/PhD, animal science*)
- Ms. Pattaraporn Poommarin, Silpakorn University (*UPLB/PhD, animal science*)
- Ms. Natcha Leevisitpattana, Ministry of Agriculture and Cooperatives (*UPM/PhD, environmental policy and governance*)
- Ms. Anuthida Phaiphon, Ubon Ratchathani Rajabhat University (*UPM/PhD, food science*)
- Ms. Patpen Penjumras, Maejo University-Phrae Campus (*UPM/PhD, food science and technology*)
- Mr. Taweesak Viyachai, Ubon Ratchathani University (*UPM/PhD, horticulture*)

Timor-Leste

- Ms. Monica Rosario Da Costa Moreira, Care International Timor-Leste (*UPLB/MPA, local governance and development*)
- Mr. Luis Tavares, National University of Timor-Leste (*UGM/MS, animal science*)
- Mr. Mario Jose Morais, Ministry of Agriculture and Fisheries (*UPLB/animal science*)
- Ms. Ana Jeannie Magno De Corte-Real Araujo, International Labor Organization (*UPLB/MS, community development*)
- Mr. Ergilio F. Vicente, Centro Juventude Covalima (*UPLB/MS, community development*)

Vietnam

- Mr. Ho Ngoc Ninh, Hanoi University of Agriculture (*UPLB/PhD, agricultural economics*)
- Mr. Mac Nhu Binh, Hue University of Agriculture and Forestry (*UPLB/PhD, environmental science*)

Of these new scholars, 26 began their graduate programs in the first semester of school year 2011/2012, while seven started their MS programs in second semester of school year 2010/2011 and two have deferred their studies. (LLDDomingo)

Philippines

- Ms. Karen Grace P. Jullado, Bureau of Plant Industry (*UPLB/MS, agronomy*)
- Mr. Peter James C. Icalia, Mariano Marcos State University (*UPLB/MS, animal science*)
- Ms. Imma Concepcion G. Gapuz, Don Mariano Marcos Memorial State University (*UPLB/MS, animal science*)
- Ms. Queenie Ann L. Curayag, Central Mindanao University (*UPLB/MS, food science and technology*)

Thailand

- Mr. Stanan Phanapaipong, Department of Agricultural Extension (*UPLB/MS, extension education*)

Indonesian Governing Board Member visits SEARCA

Prof. Dr. Ir. Suryo Hapsoro Tri Utomo, Director, Research and Community Services Development, Directorate General of Higher Education, Ministry of National Education and Indonesia's new representative to SEARCA's Governing Board (GB), visited SEARCA on 12-13 May 2011. He was accompanied by his wife, Mrs. Siti Madichath Issemiarti, and Dr. Bambang Purwantara, Director, SEAMEO Regional Center for Tropical Biology (BIOTROP), an Indonesia-based sister-center of SEARCA.

Prof. Hapsoro was given a detailed briefing on SEARCA's programs and activities in the context of the Center's Ninth Five-Year Plan, which covers the period from July 2009 to June 2014. The briefing was led by Dr. Gil C. Saguiguit, Jr., SEARCA Director, and was attended by SEARCA's Executive Committee, which is composed of all the heads of offices, departments, and units of the Center.

Expressing his support for SEARCA's capacity-building efforts, Prof. Hapsoro emphasized the need for resource-sharing in the Southeast Asian region. He also urged SEARCA to put more effort at promoting the importance of agriculture. He said young people should be encouraged to study and pursue careers in agriculture. He added that this may need enhancing the current agriculture curricula offered in the region so that they become relevant to current times and attractive to students.

SEARCA management also discussed several proposed collaborative projects with the Indonesian officials. These include a Seed Fund for Climate



Prof. Dr. Ir. Suryo Hapsoro Tri Utomo (center), Director, Research and Community Services Development, Directorate General of Higher Education, Ministry of National Education and Indonesia's Representative to SEARCA's Governing Board, his wife Mrs. Siti Madichath Issemiarti (fourth from right), and Dr. Bambang Purwantara (third from left), Director, SEAMEO Regional Center for Tropical Biology (BIOTROP), pose in front of SEARCA's main office with members of SEARCA's Management Committee, namely (from left) : Dr. Maria Celeste H. Cadiz, Manager for Knowledge Management; Dr. Mercedita A. Sombilla, Manager for Research and Development; Dr. Gil C. Saguiguit, Jr., SEARCA Director; Dr. Francisco F. Peñalba, Deputy Director for Administration; Dr. Editha C. Cedicol, Manager for Graduate Scholarship; and Dr. Bessie M. Burgos, Manager for Project Development and Management.

Change Research and Training (SFCRT) in Indonesia; Human Resource Development and Capacity Building toward Agricultural Competitiveness and Natural Resource Management in Indonesia; and Leadership Excellence in Academe Program for Southeast Asia (LEAP SEA). Preliminary discussions were also made on this year's SEARCA Governing Board Meeting, which will be hosted by the Indonesian Government in Bali, Indonesia in October 2011. (LLDDomingo)

Filipino small-scale/ from page 6

Reducing the cost of production and marketing would naturally yield greater profit. However, this may also mean lowering labor cost, whose implications on the poverty incidence in Region XI are yet to be explored. There is also a need to address policy issues, especially some of the provisions of the Comprehensive Agrarian Reform Program (CARP). For instance, farmers' access to credit is hindered by low collateral value due to policy constraints.

Dr. Digal emphasized that the key to competitiveness of the Cavendish banana is innovation. Such competitiveness would be even more likely achieved by making the participation of the small-scale producers profitable and equitable through an integrated package covering the four options

presented. He also underscored the importance of involving the private sector as a prime mover in the integrated development interventions to give the country's Cavendish banana industry a greater edge in the global market.

Dr. Digal is professor and research director at the University of the Philippines Mindanao. He delivered his lecture as a holder of the SEARCA Professorial Chair, a recognition awarded by SEARCA to selected academic staff of the UP System in disciplines under the broad themes of natural resource management and agricultural competitiveness. (LLDDomingo with report from JBCarigma)

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agricultural trade as the purview of the private sector. This was emphasized by Dr. Donato Antiporta of the Asia Pacific Policy Center; Dr. Tirso Paris of the UP Los Baños College of Economics and Management, and Dr. Nobuhiko Fuwa of Chiba University Graduate School of Science and Technology in Japan, who served as the discussants.

They also expressed that there are risks in trade agreements such as discrimination, inequitable trade relations, and possible incoherence of crisscrossing agreements. They concurred with the keynote speaker on the need for continuous monitoring and evaluation of the ACFTA. The discussants also recommended drawing lessons for Southeast Asia from the experiences of other

trade groupings and agreements, such as APEC, South Asia Free Trade Area (SAFTA), and trade agreements with Australia and New Zealand.

Representatives from CLMV presented their country reports where they recognized that agriculture plays a great part in their economies although its share in the gross domestic product (GDP) and overall export in the recent years has declined. Rice remain a common potential export, but each country has different export crops. It was expressed that CLMV need capacity building, policies, and programs to equip them for regional trade integration.

Dr. Ito Soichi, Professor, Kyushu University, Japan, and Dr. Hermanto Siregar, Vice Rector, Institut Pertanian Bogor, Indonesia, served as discussants for this section of the roundtable. They highlighted the importance of value adding

through processing of agricultural products to stimulate agri-based economies. They also emphasized looking into cushions against external shocks, the importance of market diversification, and their policies and measures to ensure or enhance competitiveness in agricultural trade.

Research areas identified include the potential for increasing production and value adding, market information, changing demand patterns due to integration, trade facilitation improvement, ways to address financial constraints to promote diversification, and equitable distribution of FTA benefits.

A technical workshop will be organized to build on the gains of the policy roundtable. The expected output is a proposal for research and related activities to address knowledge gaps. (CNGRogel)

New crop biotech book launched in Singapore



Experiences of Asia-Pacific countries in crop biotechnology offer many lessons for better understanding of the importance of science communication for an informed public, science-based decision-making, and more empowered stakeholders.

Communication Challenges and Convergence in Crop Biotechnology, a book co-published by SEARCA and the International Service for the Acquisition of the Agri-Biotech Applications (ISAAA) and SEARCA, tells of initiatives in biotech science communication in

Australia, Bangladesh, China, India, Malaysia, the Philippines, Thailand, and Vietnam. Launched during the Public Forum on Science Communication held on 6 April 2011 in Biopolis, Singapore, the book features country

case studies such as "Drama and Communication Behind Asia's First Commercialized Bt Corn" (Philippines); "Biotech Science Communication: Bridging Science and Society" (India); "Beyond Technology: Popularizing Genetic Modification" (China); and "Understanding the Target Audience for Better Communication" (Australia).

The book, edited by Maricel J. Navarro, Manager of the Global Knowledge Center on Crop Biotechnology, and Randy A. Hautea, Center Director and Global Coordinator, both of ISAAA, also shares about insights on initiating science communication in the Organization of Islamic Conference countries.

The publication of the book aligns with the SEARCA's intent to enlighten the public about biotechnology based on science and objective information, says Dr. Gil C. Saguiguit, Jr., SEARCA Director.

SEARCA has been actively communicating biotechnology to the public since 2000 through its Biotechnology Information Center, a collaborative project with ISAAA. (LLDDomingo)

IFPRI Director General presents actions needed to enhance Asia's food security



Dr. Shenggen Fan says that food security is under stress from a complex web of factors that include population growth and urbanization, land and water constraints, climate change, and high and volatile food prices.

Dr. Shenggen Fan, Director General of the International Food Policy Research Institute (IFPRI) based in Washington, D. C., gave a seminar, entitled *The Changing Roles of Agriculture and Food Sector in Asia*, at SEARCA's

Agriculture and Development Seminar Series on 29 June 2011.

He said he came to SEARCA at a very good time as he had just come from the G20 meeting in France which was participated in by ministers of agriculture from G20 countries and representatives of 10 international organizations. He incorporated his reflections on the meeting in his lecture.

The key messages of Dr. Fan's lecture are: (1) food security in Asia is under stress, with 13 Asian countries having very alarming levels of hunger; (2) agriculture needs to be adapted to dynamic changes and emerging trends; and (3) policies and investments must be redesigned to promote agricultural growth for broader development outcome. He emphasized the proposed action in the G20 declaration "to protect the most vulnerable" through various short-term

measures which nonetheless could lead to long-term productivity and income growth. Through this strategy, he said "the poor could graduate from poverty so that they will not need protection in the future."

Dr. Fan presented several actions that are needed to enhance Asia's food security, to wit: (1) invest in productive social safety nets; (2) support transparent, fair, and open trade; (3) set up regional strategic grain reserves; and (4) prevent biofuel expansion. For the long term, he advocates the promotion of smallholder productivity.

While at SEARCA, Dr. Fan also met with the Center's Department Managers who gave him a briefing on SEARCA's programs and activities. Dr. Fan said IFPRI is working on the same issues and problems that SEARCA is concerned with, including poverty reduction, climate change, and water issues. He also shared the activities undertaken by IFPRI along these common priority areas. (LLDDomingo)

Agri entrepreneur/ from page 8

SEARCA's Umbrella Capacity Development Program (UCDP) for DA is implemented in collaboration with the Ateneo School of Government, University of Asia and the Pacific School of Management, and University of the Philippines School of Economics. It aims to provide DA executives and professionals with a global, 21st century perspective attuned to contemporary challenges in food security and

rural poverty alleviation. It focuses on equipping and reinforcing DA participants with proactive leadership frameworks and mindsets informed by contemporary worldviews and theories, substantiated by real cases and science-based evidence.

The lecture series that began in 2010 is a component of the UCDP executive program,

which also includes three-day learning events and certificate executive courses or study visits to institutions, industries, or private sector initiatives.

The Program also offers graduate scholarships focused on strategic leadership and public management, agricultural business, trade and investment, and development economics and agricultural policy. (LLDDomingo)



Participants of the 9th Policy Roundtable held on 1-2 April 2011 in Gyeongju, South Korea. Among them are Dr. Mercedita A. Sombilla (sixth from right, seated), Manager for Research and Development; Dr. Maria Celeste H. Cadiz (seventh from right, seated), Manager for Knowledge Management; and Ms. Carmen Nyhria G. Rogel (leftmost, seated), all of SEARCA.

9th Policy Roundtable tackles broadening regional trade integration implications on CLMV

More and more countries have banded together into regional trading blocs to integrate their economies, optimize economies of scale in production, pool their resources, increase investment and trade, and improve their bargaining position in relation to the more advanced economies. Moreover, mechanisms for broader regional cooperation, such as the Asia-Pacific Economic Cooperation (APEC) and the Asia-Europe Meeting (ASEM), have been created.

The trade and economic opportunities that have been paved open by the ASEAN-China Free Trade Agreement (ACFTA) and the concomitant challenges were underscored in a policy roundtable participated in by the governments of Cambodia, Lao PDR, Myanmar, and Vietnam (CLMV), all transition economies that need continued and intensive analyses to enable them to benefit fully from liberalized trade and ASEAN integration.

The meeting was the ninth in a series of policy roundtables on building capacities for agricultural competitiveness of transition countries in Southeast Asia that were organized by SEARCA and funded by Korea FAO Association (KFAO). The series examines policy options for averting hunger and poverty in Southeast Asian region.

Regional Trade Integration Expansion and Their Implications in Transition Southeast Asia was the focus of the Ninth Policy Roundtable held on 1-2 April 2011 in Gyeongju, South Korea.

Nine participants from CLMV and eight policy experts from, Indonesia, Japan, the Philippines,

and Thailand, together with representatives of SEARCA and KFAO, participated in the meeting. Their discussion was aimed at: (1) understanding the current state of regional trade integration in the ASEAN; (2) improving awareness of trade-related requirements; (3) comprehending regional trade-related constraints; (4) identifying key research issues in each country regarding trade integration and agriculture; (5) developing an action plan toward strengthening agriculture vis-à-vis regional integration; and (6) exploring possible partnerships between and among SEARCA, CLMV governments, KFAO, and other organizations from East Asian countries to actively collaborate in the capacity building of these transition countries towards adopting effective regional trade facilitation measures.

In his presentation, Dr. Ramon L. Clarete, Professor of Economics, University of the Philippines (UP) Diliman, explained the mechanics and consequences of ACFTA and noted that it has stimulated further intra-ASEAN trade. His five recommendations were: (1) focus on making the treaty more productive, avoiding accelerating or deepening the liberalization process; (2) improve utilization of margins of preferences; (3) facilitate trade to improve utilization; (4) enhance export capacity of ASEAN states; and (5) conduct continuous monitoring and periodic evaluation of the ACFTA.

For his part, Dr. Nipon Poapongsakorn, President, Thailand Development Research Institute, shared lessons from the successful agricultural economy and trade of his country. These included the following: (1) shift from rice-

dominated to diversified production and toward high-value and safe products; (2) shift from small traders and spot markets to vertical integration in some industries, consumer- and supermarket-driven agricultural markets; (3) market resilience due to free competition and little government intervention; and (4) the important role of good macroeconomic policy, infrastructure investment, sustained public expenditure in agricultural research and development, food safety policy and infrastructure, and neutral trade policy. Dr. Nipon advised CLMV to capitalize on China's demand for tropical products including rubber, cassava, pulp, and vegetable oil.

This was supported by the results of a study conducted and presented by Dr. Yang Jun, Associate Professor and Senior Research Staff, Center for Chinese Agricultural Policy, Chinese Academy of Sciences, which indicated prospects for China to step up its importation of land-intensive products, particularly feeds, cotton, edible oils, sugar, and dairy products.

The study also revealed that China increased its exportation of labor and capital-intensive products (e.g., vegetable, fruits, fishery, some livestock products, and processed foods). These projections were attributed to China's high economic growth, the changing food consumption pattern among its population, and the demand for agri-based industrial products. Dr. Nipon noted how the Chinese demand caused price hikes in certain agricultural products in CLMV.

Discussants reiterated the role of governments in providing public goods and creating an enabling environment with minimal intervention on

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