SWEET TASTE OF SUCCESS

This year has been a great year for SEARCA. We continue to move forward, forging partnerships and strengthening ties with other countries. A lot has been accomplished and new opportunities are being seized...
Move with us as we charge to the future with great hope and enthusiasm for a productive Southeast Asia.

How Safe is Our Food?

4TH POLICY ROUNDTABLE FOCUSES ON FOOD SAFETY AND SPS-RELATED ISSUES

SEARCA, in collaboration with Lao PDR’s Ministry of Agriculture and Forestry (MAFF), organized the Fourth Policy Roundtable on Building Capacities for Agricultural Competitiveness of Transition Countries in Southeast Asia on 23-24 August 2007 at the Luang Prabang Province, Lao PDR.

The Fourth Roundtable discussed “Food Safety: Emerging Issues and Challenges in Sanitary and Phytosanitary Measures.” It specifically aimed to: (1) finalize the draft country proposals for national capacity-building programs on agricultural restructuring for improved competitiveness and greater regional integration of Cambodia, Lao PDR, Myanmar, and Vietnam (CLMV) economies, with a view to identifying priority components and topics, both

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common and country-specific, for coordinating program design and implementation; (2) establish a concrete implementation plan for a training program on identified priority topics, including a timetable and modality for mobilizing resources for the activity; and (3) explore possible partnerships between and among SEARCA, CLMV Governments, and organizations from East Asian countries to actively collaborate in capacity-building in these transition countries.

The resource persons included Dr. Nina Gloriari Barzaga, Director of Southeast Asian Ministers of Education Organization and Dean of the College of Public Health in UP Manila, and Dr. Ma. Concepcion Lizada, Professor at the College of Home Economics in UP Diliman. Dr. Barzaga presented an overview of the current issues and concerns related to Sanitary and Phytosanitary (SPS) compliance faced by transition governments. She said the CLMV countries need to deal with the following pressing issues: (1) the incidence of new potential food-borne risks, (2) technological advances in the production of genetically modified crops/food, (3) the notion of precautionary principle (i.e., taking protective action before complete scientific proof of risk), and (4) regulatory concerns on bioterroristic contamination of food, and narrow access of developing countries to compliance resources (e.g., scientific and technical expertise, information, and financial support).

Meanwhile, Dr. Lizada focused on the importance of risk analysis so that CLMV countries may address food safety concerns and at the same time comply with the SPS Agreement. She said risk analysis is a tool for securing information and evidence that can serve as basis for decision-making and achieving food safety-related public health outcomes. She presented the three components of risk analysis: risk assessment (i.e., estimation of risks to human health and safety), risk management (i.e., identification and implementation of appropriate measures to control or mitigate the risks), and risk communication (i.e., communication of food-borne risks and control measures to be applied to all stakeholders).

Presentations on food-safety issues were followed by an overview of the FAO-Technical Cooperation Program (TCP) on Policy and Planning Capacity Development being implemented by the FAO Lao PDR Office with the MAFF as its counterpart. The FAO-TCP facility supports small-scale projects that are of limited duration, addresses urgent technical assistance with tangible and immediate results, and fills a critical gap or serves as a catalyst. Ms. Rebecca Host-Madsen of FAO shared that the TCP will provide the six counterpart staff members from MAFF a hands-on experience on data collection, analysis, and preparation of issue papers, briefs and reports. The TCP is expected to strengthen strategy and policy formulation, planning, monitoring, and implementation capacity of MAFF and establish a policy unit.

A major output of the series is the development of a proposal for Technical Cooperation among Development Countries by each CLMV country in order to strengthen its human resource capacities for agricultural competitiveness. The country proposals should be streamlined into specific priority capacity-building needs. The government priority programs should be high-impact but can be implemented at a lower cost. Suggested topics for proposal development are: food safety (bio-safety), policy and governance, biofuels and its implications on food/agricultural production, and climate change among others. Capacity-building modalities include short-term training and graduate education.

The Fifth Policy Roundtable was agreed to be hosted by Vietnam in 2008.

The United Nations Food and Agriculture Organization Regional Office for Asia and the Pacific (FAO-RAO) and SEARCA started this policy roundtable series in 2004 as a joint initiative. SEARCA has since then carried out the series of policy roundtables in collaboration with institutions from various partner countries. The series aims at capacity-building of CLMV countries by providing a venue for policymakers and rural development practitioners to exchange and discuss synergistic strategies and policy instruments to combat poverty and food insecurity vis-à-vis the challenges of globalization facing the agriculture and rural sectors of CLMV. (JSCSugui)
**Country Proposals from the Fourth CLMV Roundtable**

**CAMBODIA** identified food safety, marketing, agriculture extension in relation to food safety and production chain, and community development to enhance business and marketing skills of cooperatives as areas of immediate concern for capacity-building. For food safety, the following training needs were raised: laboratory techniques, surveillance tests for risk analysis, risk assessment at cross-border, food safety risk management (e.g., standardization, regulation, and drafting of law); and input material management.

**LAO PDR** identified technical knowledge on certification for exporting products and animal health risk assessment for trade as its immediate needs. Agricultural crop science, veterinary science, and plant protection-related discipline should be the focus of scholarships in order to reinforce the capacity on certification. To lower the dropout rates of graduate scholars from Lao PDR and other CLMV countries, bridging program and preparatory courses should be intensified and identified within the country even before the scholars embark on their graduate programs.

**VIETNAM** enumerated the following areas for proposal development: food safety biosafety), cross-border issues, biofuels, risk assessment / management, postharvest technology, and agro-forestry management.

**MYANMAR** listed the following as its three priority topics: food-safety and risk analysis, supply-chain management, and biofuels.

**Zeroing in on High Priority Issues**

This year’s Southeast Asian Ministers of Education Organization (SEAMEO) Center Directors’ Meeting (CDM) featured eight thematic discussions on quality assurance in higher education, education for sustainable development, capacity-building for excellence in school leadership, and information and communication technologies (ICTs) in education, among others.

The CDM took place on 4-5 July 2007 at Century Park Hotel, Bangkok, Thailand, and was capped on 6 July by a visit to the Centre for Sathyai Sai Education in Lopburi Province showcasing educational innovations in Thailand.

Dr. Arsenio M. Balisacan, Director, and Dr. Maria Celeste H. Cadiz, Training Manager, represented SEARCA in the CDM, along with 64 delegates from 15 SEAMEO centers from all over the region. Dr. Edilberto C. de Jesus, SEAMEO Secretariat Director, chaired the meeting.

Compared with previous CDMs, the 2007 CDM tackled the greatest number of thematic discussions, aimed at enabling SEAMEO to zero in on the most crosscutting and highest priority issues it may raise with its member countries’ High Officials’ Meeting tentatively set on 20-21 November 2007.

In its paper on quality assurance, the Regional Center for Higher Education and Development (RIHED) vouched for a regional quality assurance (QA) system for selected disciplines offered by higher education institutions in Southeast Asia (SEA). Selected SEAMEO centers may take the lead in developing such QA systems for the respective disciplines they nurture (e.g., SEARCA for agriculture and natural resource management). RIHED reviewed the development of an existing regional QA system for Europe and noted that various SEA countries already have national QA systems in varying setups.

Meanwhile, the presentation of the Regional Center for Tropical Biology (BIOTROP) on education for sustainable development explained how the United Nations University – Institute of Advanced Studies (UNU-IAS) based in Yokohama, Japan coordinates a worldwide network of regional centers of expertise (RCEs). RCEs are networks of existing formal, nonformal, and informal organizations for mobilizing and delivering education for sustainable development (EfSD) to local and regional communities. Four issues and concerns emphasized by EfSD include biodiversity conservation, global warming, water supply, and food security. RCEs generally oversee the following EfSD components: 1) advocacy and dissemination of EfSD and DESD principles; 2) promotion of regional/local approaches through the RCEs; 3) strengthening of EfSD activities of higher education institutions; 4) development of online learning for EfSD; and 5) training of teachers and trainers on EfSD. Aside from RCE Bogor hosted by BIOTROP, the meeting also mentioned three other RCEs in Jordan, Barcelona, and Cebu.

The Regional Center for Educational Innovation and Technology (INNOTECH) also presented its program on educational leadership dubbed eXCELS or Excellence in School Leadership Flexible Learning Solution. The eXCELS program features 13 competencies in educational management and leadership offered in 150 interactive and self-instructional printed modules complemented by an online learning platform. The mixed learning modality incorporates the four “A’s” in adult learning, namely: activity, analysis, abstraction, and application. Offered for school heads and decision-makers, eXCELS allows enrollees to earn credits towards an appropriate postgraduate degree. The program informs SEARCA’s ongoing efforts toward offering an enhanced version of its Advanced Higher Education Administrators Development (AHEAD) course.
Finally, the Regional Center for Vocational Education and Training (VOCTECH) proposed regional initiatives toward an ICT center, an EduNet system, an online journal system, and a knowledge and management network system for SEAMEO. The ICT center can serve as an avenue for the conduct of ICT-related courses, such as in educational technology, e-learning content development, planning and management of ICTs in organizations, among others. On the other hand, an EduNet system will concern itself with all SEAMEO Centers’ use of e-learning platforms to support education. The online journal system can serve as a hub that can archive all journals in the 11 SEAMEO member countries. Finally, a knowledge and management network system for SEAMEO is proposed to serve as a knowledge repository for the region while nurturing knowledge generation, sharing, and utilization.

The other thematic discussions during the SEAMEO CDM 2007 focused on the quality of science and mathematics education, language in education, development of a regional identity for Southeast Asia, and teacher education and training. (MCHCadiz)

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**Policy Brief**

**GRAFTING KNOWLEDGE MANAGEMENT IN THE SMALL GRANTS PROGRAM FOR TROPICAL FOREST PROGRAM**

Graft and you gain plants that are sturdier and healthier. Graft KM in your system and you gain better and quicker ways of doing things.

Grafting Knowledge Management (KM) in Small Grants Program to Promote Tropical Forests (SGP PTF) became the focus of discussion during the recently concluded roundtable discussion of donors, planners, and implementers of the SGP PTF last 30 August to 01 September 2006.

Sponsored by European Community (EC), United Nations Development Programme (UNDP) and SEARCA, the roundtable event emphasized on the role of KM in sustaining forest communities and their related practices.

What has KM got to do with making communities and trees flourish in a healthy coexistence?

**THE CASE OF THAILAND**

*In-paeng, Sakon Nakhon Province.* Rachanee Akraraj, Wacharaporn Kudwongkaen, and Serm U-domna, three strong advocates of In-paeng Forest Network, all agree that conserving the environment by bringing the forest to one’s own backyard is a key to a self-reliant community. Networking has been essential to knowledge sharing in the communities served by In-paeng.

Serm U-domna told his story that many years ago, he ventured on cassava and rice, which he said, not only depleted the soils, but also put him in “heavy debt. So I began to think about what I should do to get myself out of debt. I then started planting rattan and other forest trees, from these, I raised seedlings and sold them to interested friends and neighbors. I also grew mushrooms and fruit trees.”

Adding her side, Rachanee Akraraj, lady leader of the community-based forest conservation
movement, recalled that “In the beginning, the people around them just laughed at us. They asked, how would we survive because profit from trees did not come as fast as that from cash crops?”

Today, the picture is different. “Many have followed my work, and we have expanded our tree planting to forest products processing,” says Serm Udomna.

*Life University—Learning Institute for Everyone.* Akaraj’s and U-domna’s forested areas serve as a showcase for locals (students and farmers) and tourists to learn and experience the role and benefits of forests to the total environment. The EC-funded project covering the Inpaeng Sustainable Community Forest Study and Rehabilitation Project is well received by the Thai government and representatives of the project are regularly invited to local assemblies where forest conservation and related issues are discussed.

The University at the In-paeng Forest Network—Unbounded by walls, the forest classroom becomes a learning avenue for farmers, students, tourists, and others who want to understand the interconnection between forests and a self-reliant community.

**POLICY DIRECTIONS**

*At the community/national levels.* Ensuring continuous creation, capture, and sharing of knowledge assets (e.g. good forest management best practices/lessons learned useful for policy making at the local and national governance, local PTF networks formed, methods of sharing, etc.) in all PTF-assisted communities in eight countries would ensure sustainability and spread of thickly forested watershed areas, ownership and food sufficiency among forest dwellers.

*At the regional level.* Captured and shared impacts of small grant projects in terms of overall forest/watershed restoration and poverty reduction among forest dwellers through KM initiatives can be used as objective evidence for regional efforts to continue advocating for community initiatives in forestry. The harvest for PTF is plentiful, but policies in the areas of capacity and capability development are wanting in Southeast Asia and South Asia. These policies when put in place will surely increase the depth of a community’s commitment to plant trees in a lifetime.

(LOMalicsi)

1 SGPPTF, short for Small Grants Programme for Operations to Promote Tropical Forests in South and Southeast Asia, is a project funded by EC and implemented by UNDP. A five-year endeavor, it is implemented by 8 countries of Southeast Asia (6) and South Asia (2). SEARCA is the executing agency.

2 The objectives of the roundtable included creating awareness on KM approaches with the participants, assessing the 8-country KM activities, agreeing on KM strategies, roles, responsibilities, timelines, and technical assistance needs.

What’s the Real Score?

**WORKSHOP ON PHILIPPINE POLICY ENVIRONMENT HELD**

SEARCA and Center for International Economics (CIE), an Australia-based research think tank, jointly organized a workshop titled *Rural Development Initiatives and the Philippine Policy Environment: What is the Real Score?* on 1 June 2007 at the Peninsula Manila, Philippines. The workshop was the culminating activity under the Philippine Policy Linkage Scoping Study funded by the Australian Center for International Agricultural Research (ACIAR).

The Policy Scoping Study was commissioned by ACIAR to assess the policy and institutional environment affecting the uptake of development projects on agriculture, forestry, and fisheries in the Philippines. Specifically, the study intends to: (1) design and carry out projects that will produce information or technologies with good uptake in the existing institutional, policy, and physical environments, and (2) design and conduct projects aimed at modifying the institutional and policy environment in order to empower farmer demand for productivity enhancing technologies, thereby facilitating the adoption of new ideas and the relatively large body of productivity enhancing techniques and material already in existence.

Dr. Arsenio M. Balisacan, SEARCA Director, and Dr. Sandy Cuthbertson, CIE Senior Consultant presented the research framework and final results of the study. Dr. Balisacan underscored the role of agriculture in providing employment to about 37 percent of the labor force, vis-à-vis the fact that the majority of the poor are in agriculture and the sector has posted the highest level of multi-dimensional deprivation.

The agricultural sector has registered a dismal performance manifested by the deceleration of its rate of growth, low agricultural labor productivity, and declining comparative advantage. The weak performance is closely associated with several problems confronting the sector such as low productivity, natural resource degradation, geographic diversity, high unemployment and underemployment, high population growth, poverty incidence, and hunger.

The study noted the following key constraints to overcoming the problems: slow development/adoption of new technology, poor infrastructure, underdeveloped financial markets, weak institutional capacity, and market distortions.

What’s the / to page 6
It also highlighted a variety of ineffective policy reforms that failed to push forward agricultural production including land reform and property rights program, declining budgetary support for agriculture, price subsidies, compensation payment to landowners affected by land reform, access to microfinance, inefficient marketing and distribution system, and weak regulatory framework.

The study emphasized the need for domestic reforms as key to agricultural development. Such reforms include sharpening the response of rural areas to market access opportunities through spatial integration of local economies; sustaining productivity growth and income diversification through research and development, and extension using information and communications technology (ICT), and enhancing governance to reduce the cost of doing business in rural areas.

The workshop discussants were Dr. Cielito Habito, former Socioeconomic Planning Secretary of the Philippines and currently Professor of Economics at the Ateneo de Manila University; Father Francis Lucas, Chair of the Board of Directors, Asian NGO Coalition for Agrarian Reform and Rural Development (ANGOC); and Ms. Dulce Gozon, Chair of the National Onion Growers’ Association, Fruits and Vegetables Committee of the National Agriculture and Fishery Council and National Marketing Umbrella.

The workshop participants were from the various Philippine government offices, the academe, research institutions, and the private sector including nongovernment organizations.

The discussants with SEARCA officials and representatives of partner agencies at the workshop held on 1 June 2007. (MAFAbad / JSCSugui)
An Opportunity to Open Up Avenues for Knowledge Exchange

SEARCA TO CO-HOST 6TH ASAE INTERNATIONAL CONFERENCE IN MANILA

The Asian Society of Agricultural Economists (ASAE) will hold its Sixth International Conference in Manila, Philippines on 28-30 August 2008. The event is jointly organized by the Philippine Agricultural Economics and Development Association, Inc. (PAEDA) and the SEARCA.

Held every three years, the ASAE Conference is participated in by agricultural economists, development practitioners, policymakers, academicians, students, and researchers from all over the world.

Dr. Arsenio M. Balisacan, SEARCA Director, who is also ASAE vice president and 2008 Conference Chair, sees the said event as an opportunity to open up avenues for knowledge exchange in topics relevant to SEARCA’s thrusts.

Around 300 participants from all over the world are expected to attend the conference whose theme is “Asian Economic Renaissance: What’s in it for agriculture?” The conference will feature plenary sessions on supply and demand outlook for Asian food and agriculture, regional trading arrangements and cooperation, biosafety, biotechnology, climate change, supermarkets and global value chains, ICT and agricultural support services, markets and states, and agrarian systems. (LGSoliven)

The following deadlines have been set:

1 March 2008 - submission of paper/poster abstract
31 May 2008 - notification of paper acceptance
15 July 2008 - submission of the full paper/poster

Pre-conference tour options will also be offered to provide participants the opportunity to experience and learn more about the Philippines.

The ASAE Executive Council members are:
Dr. Jamalludin Bin Sulaiman (Malaysia) – President,
Dr. Yang Boo Choe (Korea) – President-elect,
Dr. Arsenio Balisacan (Philippines) – Vice President,
Dr. Ki Whan Chung (Korea) – Secretary General,
Dr. Bustanul Arifin (Indonesia) – Executive Member,
Dr. Mohammad Hossein Karim Koshteh (Iran) – Executive Member,
Dr. Shabd Swaroop Acharya (India) – Executive Member,
Dr. Yoshinori Morooka (Japan) – Executive Member, and
Dr. Yujiro Hayami (Japan) – Immediate Past President.

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Sixth ASAE International Conference
The Asian Economic Renaissance: What’s in it for Agriculture?

28-30 AUGUST 2008 • MANILA, PHILIPPINES

Call for Papers / Posters

The Asian Society of Agricultural Economists (ASAE) invites agricultural economists and other development practitioners, policymakers, academicians, researchers, and students to participate in the Sixth ASAE International Conference to be held in Manila, Philippines on 28-30 August 2008.

This event is co-organized by the Philippine Agricultural Economics and Development Association, Inc. (PAEDA) and the Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA).

The Conference Program Committee is calling for papers that address various agricultural development issues of relevance especially to developing countries in Asia to be presented at the plenary and parallel sessions. Potential sub-themes include:

* Pathways out of Rural Poverty
* Food Supply and Demand Outlook in Rapidly Growing Asian Economies
* Regional Trading Arrangements in Rapidly Rising Asia
* Agricultural Biotechnology in Transition and Developing Countries of Asia
* Asian Agriculture’s Responses to Climate Change
* Global Food Chains and Asian Agriculture
* Animal and Plant Epidemics in the Integration of Asian Economies
* Information & Communication Technologies (ICT) and the Organization of Agriculture in Rapidly Growing Asia
* Structural Changes and Issues in Asian Agriculture from Regional and Global Perspectives
* Future of Agrarian Systems in Asia

Deadlines

Submission of paper/poster abstract: 1 March 2008
Call for proposals for mini symposium: 1 March 2008
Notification of paper acceptance: 31 May 2008
Submission of full paper/poster: 15 July 2008

Tentative program (including pre-conference tours) can be downloaded at the conference website: www.6thasae.searca.org
The governing Board (GB) of SEARCA held its annual meeting on 5-7 September 2007 in Khon Kaen, a city an hour’s flight southeast of Bangkok known for its exquisite silk cloths and dinosaur museum-park.

The meeting, SEARCA’s 53rd since the Center was conceived in November 1966, was attended by the representatives of the SEAMEO member/associate member-countries, the SEAMEO Secretariat (based in Bangkok), and SEARCA. It was hosted by the Office of the Vocational Education Commission, in cooperation with Khon Kaen University and Khon Kaen University College.

The GB approved the Center’s reports on its programs and finances, commending the Center’s officials led by Dr. Arsenio M. Balisacan, Director, and staff for a slew of activities conducted from 1 July 2006 to 30 June 2007, the fiscal year under review. The Board advised the Center to exert more efforts at regionalizing the Center’s activities and reach, further sharpening the focus of its activities along its priority themes, and strengthening SEARCA’s brand as an institutional capacity-builder, as well as to have a more international staffing profile.

SEARCA is the center of excellence for agriculture of the Southeast Asian Minister of Education Organization (SEAMEO), a treaty organization dedicated to promoting regional cooperation in education, science, and culture. Particularly, SEARCA is mandated to strengthen institutional capacities in agricultural and rural development in Southeast Asia through graduate education, short-term training, research, and knowledge exchange.

Since 2004, the Center has been guided by two priority themes: agricultural competitiveness and natural resource management. These themes have been based on the understanding that agricultural and rural development is key to achieving inclusive growth among developing countries.

The meeting was chaired by Dr. Dang Kim Vui, Rector of Thai Nguyen University of Agriculture and Forestry in Vietnam and country representative to the SEARCA GB. The term of the Board’s chairmanship is for two years. Dr. Vui’s term as GB Chair will end in September 2008. The Board elected the representative of Thailand, Mr. Veerasak Wongsombut, Secretary-General, Vocational Education Commission, Ministry of Education, as the next Board Chair.

Moreover, the Board approved SEARCA’s proposal to establish and implement the Dioscoro L. Umali Achievement Award for Agricultural Development. The award is named after SEARCA’s first director who had been a prime mover of agricultural and rural development in Southeast Asia.
Asia in his time and whose quest for scholarship and excellence in agriculture fueled his vision for a progressive Southeast Asia.

The award intends to put agriculture in high profile by recognizing exemplary individuals who have advanced agricultural development in Southeast Asia. It is expected to be given annually, and comes with a cash prize of US$10,000.

The GB also confirmed the 17 memoranda of understanding and agreement entered into by SEARCA in FY 2006/2007.

Regarding the Center’s finances, the Board unanimously expressed its great appreciation to the Government of the Philippines for the substantial increase in its financial support commitment to SEARCA in calendar year 2007.

In support of its expectations on the performance of SEARCA’s programs, the Board approved the Center’s proposed budget of US$5,127,107 for FY 2008/2009, as well as the proposal to increase the annual value of SEARCA’s full graduate scholarship grant from US$8,400 to US$10,080, effective FY 2008/2009.

One significant policy action by the Board is its approval of the proposed amendments in the recruitment procedure of the SEARCA officials (i.e., director and deputy directors). The amended procedures are expected to result in the following:

(a) improved dissemination of information on a vacant position, giving interested parties and qualified individuals equal opportunity to compete for it, thereby ensuring a good and wide pool of qualified candidates;
(b) transparent and standardized procedure for the recruitment of the deputy directors that gives the director more participation and accountability in the selection of his/her deputies.

The next (54th) GB Meeting is planned to be held in Vietnam, subject to the Government of Vietnam’s confirmation to serve as its host.

(LLTallafer)
The use of crude oil from *Jathropa curcas*, an inedible tropical plant, as substitute for bunker fuel shows great potential for the Philippines.

This was foremost of the research findings of Mr. Rex B. Demafelis, Chair and Assistant Professor, Department of Chemical Engineering, College of Engineering and Agro-industrial Technology (CEAT), University of the Philippines Los Baños (UPLB). Mr. Demafelis, who holds a SEARCA Professorial Chair, disclosed the results of his study titled “Potential of Biodiesel Production from *Jathropa curcas* in the Philippines” in a lecture at the CEAT Hall on 29 June 2007.

*Jathropa curcas*, an erstwhile insignificant tropical plant that thrives in marginal soil unsuitable for food crops, has captured the world’s attention as a source of biofuel. It is unique in that oil from its seed can be used as biodiesel for any diesel engine without modification.

**CRUDE oIl SuBSTITuTE FoR BuNKER FuEl**

Mr. Demafelis showed that the physical and chemical characteristics of the crude *Jathropa* oil are comparable with those of bunker fuel. Hence, its use on power-generating units and slow-moving vehicles may be more economically viable than the transesterified crude *Jathropa* oil. This finding is supported by research commissioned by the Philippine Forest Corporation (PFC), a government firm tasked to use *Jathropa* in agroforestation and countryside development programs.

However, in the recently passed Biofuels Act of 2006 or Republic Act 9367, a Philippine law that mandates the use of biofuels, only esterified oils are allowed for commercial use. Therefore, for economic benefits to be realized, Mr. Demafelis recommends that an appropriate legislative support or enabling law must be passed for the use of crude oil.

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**SEARCA ADSS Seminars**

The *SEARCA Agriculture and Development Seminar Series (ADSS)* is a weekly scientific and policy forum, and a venue for a dynamic discussion of scientific findings, research results and perspectives within the purview of agriculture and development. It is open to the public.

The following were the seminars held from July to September 2007:

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<tr>
<th>DATE</th>
<th>TOPIC</th>
<th>SPEAKER</th>
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<tr>
<td>10 Jul</td>
<td>Special Seminar: The Philippines’ Quest for Sustainable Development: Challenges and Opportunities</td>
<td>Dr. Percy E. Sajise, Director, International Plant Genetic Resources Institute</td>
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<td>10 Jul</td>
<td>From Trees to Farms: Exploring Payments for Agrobiodiversity</td>
<td>Dr. Asa Jose U. Sajise, Professorial Lecturer, College of Economics and Management, University of the Philippines Los Baños (UPLB)</td>
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<tr>
<td>17 Jul</td>
<td>Community-Based Natural Resource Management: A Re-Analysis of Community Relationships in Four Domains</td>
<td>Dr. Corazon B. Lamug, Professor, College of Arts and Sciences, UPLB</td>
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<td>7 Aug</td>
<td>The Philippine Economy and the Appreciating Peso: Good News and Bad News</td>
<td>Dr. Cielito F. Habito, Professor of Economics, Ateneo Center for Economic Research and Development, Ateneo de Manila University</td>
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<tr>
<td>14 Aug</td>
<td>Agriculture: A Means to an End, Not an End in Itself</td>
<td>Dr. Liborio S. Cabanilla, Dean, College of Economics and Management, UPLB</td>
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<td>21 Aug</td>
<td>Culture, Food and Forests: An Anthropological Perspective on Food Security Among the Ata Manobo</td>
<td>Dr. Daylinda B. Cabanilla, Associate Professor, Department of Social Forestry and Forest Governance, UPLB</td>
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<td>28 Aug</td>
<td>From the Megalopolis-Centered System to the Rural-Urban Balanced System for the Sustainability of Developing Economies</td>
<td>Dr. Yuijiro Hayami, The Foundation for Advanced Studies in International Development, GRIPS/ FASID Joint Graduate Program, Japan</td>
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<tr>
<td>4 Sep</td>
<td>Robust Determinants of Income Growth in the Philippines</td>
<td>Mr. Dennis S. Mapa, Professor, School of Statistics, UP Diliman (UPD)</td>
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<tr>
<td>11 Sep</td>
<td>Convergence in Agriculture of Some Asian Countries</td>
<td>Dr. Erniel B. Barrios, Associate Professor, School of Statistics, UPD</td>
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<tr>
<td>14 Sep</td>
<td>Special Seminar: Regulation of Plant Biotechnology</td>
<td>Dr. Eufemio T. Rasco, Professor, College of Mathematics, University of the Philippines Mindanao</td>
</tr>
<tr>
<td>18 Sep</td>
<td>ICT for Sustainable Agriculture: The Case of K-AGRINET as Knowledge Management and Strategic Communication</td>
<td>Dr. Elena E. Pernia, Dean, College of Mass Communication, UPD</td>
</tr>
<tr>
<td>25 Sep</td>
<td>Otolith Research: A Key to Understanding the Impacts of Climate Change on Fisheries</td>
<td>Dr. Rommel H. Maneeja, Fellow, Erasmus Mundus Joint Master in Water and Coastal Management</td>
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Mr. Demafelis likewise asserts that it is imperative to remove the methyl laurate parameter criteria on the proposed Philippine National Standards for generic biodiesel because this will exclude Jathropa biodiesel and will deprive Filipino consumers of price benefits. He pointed out that among the potential feedstock for biodiesel production, only coconut oil contains lauric acid, a source of methyl laurate.

“Methyl laurate is not even included in the American, European, or any other biodiesel standards in the world,” said Mr. Demafelis.

ECONOMIC BENEFITS FROM BY-PRODUCTS OF JATHROPA BIODIESEL

As in other feedstock used to produce biodiesel, Jathropa generates water and by-products such as Jathropa cake and crude glycerol, which contain impurities. Hence, these have to be further processed to realize higher market value.

Since about 8-9 percent glycerine is generated per liter of biodiesel produced, Mr. Demafelis reckons that conversion of glycerol into high-value raw material and creating subsequent market will help the viability of the Jathropa biodiesel industry in the Philippines. He therefore recommends that a national market be established for the use of Jathropa cake as organic fertilizer.

In addition, wastewater from washing steps of batch village-scale biodiesel production is highly organic and may be used for biogas production or land application similar to distillery slops. To increase the economic viability of Jathropa biodiesel, especially village-scale production systems, Mr. Demafelis suggests that scientific guidelines on land application on the reuse of wastewater as liquid fertilizer be established.

VISION OF THE BIOFUELS ACT OF 2006

The Philippine Biofuels Act of 2006 aims to reduce dependence on imported oil, mitigate toxic and greenhouse gas emissions, generate jobs, and increase income. Its mandate to use a percentage of biodiesel blend starting 2007 is expected to displace millions of liters of petrodiesel, saving the Philippines millions of dollars in foreign exchange reserve.

Mr. Demafelis says the presence of more oxygen and absence of minimal sulfur content in biodiesel against petrodiesel explains the environmental benefits of biodiesel use.

It is envisioned that the Jathropa biodiesel production, from processing to transportation, will create new jobs across the country. The Philippine National Oil Company-Alternative Fuel Corporation is the focal agency for the Philippine government’s biofuel program, while the PFC spearheads the country’s agroforestation and countryside development programs, including the use of Jathropa. (LLDDomingo)

REFINEMENT OF PROPOSED NATIONAL STANDARDS

Mr. Demafelis likewise asserts that it is imperative to remove the methyl laurate parameter criteria on the proposed Philippine National Standards for generic biodiesel because this will exclude Jathropa biodiesel and will deprive Filipino consumers of price benefits. He pointed out that among the potential feedstock for biodiesel production, only coconut oil contains lauric acid, a source of methyl laurate.

“Methyl laurate is not even included in the American, European, or any other biodiesel standards in the world,” said Mr. Demafelis.

ECONOMIC BENEFITS FROM BY-PRODUCTS OF JATHROPA BIODIESEL

As in other feedstock used to produce biodiesel, Jathropa generates water and by-products such as Jathropa cake and crude glycerol, which contain impurities. Hence, these have to be further processed to realize higher market value.

Since about 8-9 percent glycerine is generated per liter of biodiesel produced, Mr. Demafelis reckons that conversion of glycerol into high-value raw material and creating subsequent market will help the viability of the Jathropa biodiesel industry in the Philippines. He therefore recommends that a national market be established for the use of Jathropa cake as organic fertilizer.

In addition, wastewater from washing steps of batch village-scale biodiesel production is highly organic and may be used for biogas production or land application similar to distillery slops. To increase the economic viability of Jathropa biodiesel, especially village-scale production systems, Mr. Demafelis suggests that scientific guidelines on land application on the reuse of wastewater as liquid fertilizer be established.

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Flying High

FOUR SOUTHEAST ASIANS GIVEN SEARCA TRAVEL GRANTS

SEARCA awarded travel grants to an Indonesian, two Filipinos, and a Malaysian who presented papers in international conferences on topics along the Center’s twin thrusts of natural resource management and agricultural competitiveness for the period of July-September 2007.

The grantees are:

- Dr. Jose M. Yorobe, Jr., Associate Professor, Department of Agricultural Economics, College of Economics and Management, University of the Philippines Los Baños (UPLB), who presented his paper titled “Farm Level Impacts of Bt Corn Adoption in a Developing Country: Evidence from the Philippines” at the Annual Meeting of the American Agricultural Economics Association on 29 Jul - 1 Aug 2007 in Portland, Oregon, USA.
- Dr. Christian Joseph R. Cumagun, Associate Professor, Crop Protection Cluster, College of Agriculture, UPLB, who presented his paper titled “Aggressiveness, Mating Type Assessment and Fumonisin Production of Fusarium verticillioides and F. fujikuroi Isolates in the Philippines” at the Third Asian Conference on Plant Pathology held on 20-23 Aug 2007 in Yogyakarta, Indonesia;
- Dr. Endah Sulistyawati, Assistant Professor, School of Life Sciences and Technology, Institut Teknologi Bandung, Indonesia, who presented her paper titled “Simulation Study for Assessing the Carbon Sequestration Potential of Different Tree Species for Reforestation” at the Global Economic Modeling Network (ECOMOD) 2007 Second Regional Conference held on 28-30 Aug 2007 in Pulau Pinang, Malaysia; and
- Dr. Adeline Ting Su Yien, of the Faculty of Engineering and Science, Universiti Tunku, Adul Rahman Setapak Campus, Malaysia, who presented her paper titled “Field Evaluation on the Efficacy of uPM3P and uPM39B3 for the Control of Fusarium Wilt in Pisang Berangan” at the ISHS/ProMusa Symposium: Recent Advances in Banana Crop Protection for Sustainable Production and Improved Livelihoods held on 10-14 Sept 2007 in White River, South Africa.

SEARCA provides limited travel support to qualified applicants who will present scientific/policy papers in international or local scientific as part of its capacity-building mandate. The topic of the paper must be along the thrusts of SEARCA and has regional relevance. Southeast Asian nationals working in a development-oriented institution or graduate students of reputable universities in Southeast Asia are eligible to apply.

Since the grant’s launch in July 2006, SEARCA has awarded 15 travel grants to four Indonesians, ten Filipinos, and one Malaysian. (LLDDomingo)
Two studies were conducted to determine the effect of full fat copra supplementation on its nutrient digestibility and on the lactational performance of buffaloes. In Study 1, nine buffaloes were distributed to three dietary treatments following a completely randomized design: Treatment 1 (napier and concentrate), Treatment 2 (napier and concentrate with 7.5% full fat copra) and Treatment 3 (napier and concentrate with 15% full fat copra). The analyzed proximate composition of full fat copra on dry matter basis was as follows: 7.1% crude protein, 5.27% crude fiber, 70.8% crude fat, 1.73% ash and 15.1% nitrogen free extract. The inclusion of full fat copra in the diets did not significantly affect the coefficients of digestibility (DM, protein and energy), digestible protein and digestible energy of the dietary treatments. The metabolizable energy on dry matter basis of full fat copra obtained by difference method was 2972 kcal/kg and 2948 kcal/kg for treatments 2 and 3, respectively.

In Study 2, six lactating buffaloes were distributed to three dietary treatments in a latin square design. The animals were fed napier grass soilage and brewer’s spent grain, distributed to three dietary treatments with different levels of full fat copra in the concentrate mixture: Treatment 1 (napier grass and concentrate), Treatment 2 (napier grass and concentrate with 7.5% full fat copra) and Treatment 3 (napier grass and concentrate with 15% full fat copra). Inclusion of full fat copra in the concentrate mixture did not affect live weight gain, milk production and milk composition of the lactating buffaloes. The average daily dry matter intake was higher (P<0.05) when buffaloes were fed napier grass and concentrate with 7.5% full fat copra (15.6 kg) than when they were fed with napier and concentrate (15.3 kg) or napier grass and concentrate with 15% full fat copra (14.4 kg).

Economic evaluation of the diets revealed that the cost per kilogram of concentrate mixture increased with the inclusion of full fat copra. This was attributed to the price per kilogram of full fat copra, which was higher than the main ingredients of the basal diet, namely: yellow corn, rice bran D2 and copra meal.

GENETIC DIVERSITY ASSESSMENT OF MYANMAR RICE (ORYZA SATIVA L.) VARIETIES USING MORPHOLOGICAL CHARACTERS AND SSR MARKERS

This study was conducted to assess the genetic diversity of Myanmar rice varieties using morphological characters and SSR markers. Genetic diversity of the Myanmar rice varieties was analyzed using Shannon Weaver diversity index ($H'$). The mean ($H'$) of quantitative traits, qualitative traits, and both of these traits were 0.71, 0.52, and 0.57, respectively. It indicated that a moderate level of diversity exists for morphological characters in Myanmar rice varieties. Cluster analysis for quantitative traits, qualitative traits and their combination generated two groups where most of the accessions belong to group I.

SSR analysis revealed high variation among the Myanmar rice varieties using 34 SSR primers. A total of 202 alleles were identified. The dendrogram generated two clusters where japonica, javanica and high quality aromatic rice varieties belong to cluster I and typical indica varieties belong to cluster II.

RM1 locus showed 12 alleles and had polymorphic information content (PIC) of 0.89. Average allele per locus for Myanmar rice varieties was 5.79 and average PIC was 0.70. Of the SSR markers tested, RM1 showed the highest gene diversity among the Myanmar rice varieties studied.

According to cluster analysis and principal coordinate analysis, SSR characterization had a more similar grouping to that of isozyme classification as compared to morphological characterization.

INSTITUTIONAL TRANSFORMATION OF AGRICULTURAL COOPERATIVES IN AN AGRO-INDUSTRIALIZING COMMUNITY IN HANOI, VIETNAM

The study analyzed the nature of institutional transformations (ITs) of agricultural cooperatives (ACs) in response to agricultural industrialization (AI) and their contributions to...
Forty Philippine secondary schools participated in a Biotechnology Quiz Contest for High Schools in Southern Luzon sponsored by SEARCA’s Biotechnology Information Center (SEARCA BIC) on 22 September 2007. It was held at SEARCA’s Umali Auditorium.

The Laguna College, teamed by John Raphael Alicando, Zarina Alimagno, and Princess Rozem Yambao, bested five other competing schools during the final round and emerged as the champion. Both teams from Cavite Institute garnered the 2nd and 3rd place, respectively. Another team from Laguna College bagged the 4th place while the Lipa City Science High School team got the 5th place. The other finalists were from the University of the Philippines Rural High School, Sta. Rosa Science & Technology High School, and Malabag National High School.

Laguna College and Cavite Institute will represent the Southern Luzon region at the National Biotechnology Quiz Contest to be held in February 2008 in Metro Manila.

The contest was organized by the Philippine Society for Microbiology, Inc. (PSM) in collaboration with the National Institute of Molecular Biology & Biotechnology, University of the Philippines Diliman (NIMBB-UP Diliman), Philippine Molecular Biology & Biotechnology Society (UP-MBBS), Biotechnology Coalition of the Philippines (BCP), SEARCA BIC, and the International Service for the Acquisition of Agri-biotech Applications (ISAAA).

The board of judges was composed of: Dr. Cynthia Hedreyda, Director, NIMBB-UP Diliman; Dr. Ernelea Cao, Director of Natural Sciences Research Institute, UP Diliman; Dr. Rosario Monsalud, President, PSM; Dr. Antonio Laurena, Head, Biochemistry Laboratory of the Institute of Plant Breeding, University of the Philippine Los Baños (UPLB); and Dr. Vermando Aquino, Associate Professor, NIMBB-UP Diliman. (RBLapitan)
Dr. Kyle Jensen (right), Director of Information and Analysis of the Public Intellectual Property Resource for Agriculture (PIPRA), met with Dr. Arsenio M. Balisacan on 31 July 2007 to understand the Center’s interests in intellectual property in agriculture. PIPRA is an organization committed to strategically managing intellectual property (IP), on behalf of its member institutions, to enable the broadest commercial and humanitarian applications of existing and emerging agricultural technologies.

The Officers of the Executive Board of the Asian Association of Agricultural Colleges and Universities (AAACU) paid a courtesy call on SEARCA on 23 August 2007. They were received by Dr. Gil C. Saguiguit, Jr., Deputy Director for Administration (leftmost). AAACU, established in 1972, presently has 46 regular and 4 affiliate members representing 17 countries.

Mr. Numchai Thanupon (second row, right), SEARCA fellow and Vice President for Academic Affairs of Maejo University in Chiangmai, Thailand, visited the Center on 28 August 2007 with some of his staff, to discuss avenues for collaboration. Also in photo are Dr. Editha Cedicol, Manager of SEARCA’s Graduate Scholarship Department (first row, center) and Mr. Vicente C. Evan, Head of SEARCA’s Facilities Management Unit (first row, leftmost).

SEARCA participates in the Bañamos Festival Parade on 17 September 2007. Bañamos Festival celebrates the founding day of Los Baños, the community’s immense scientific talents, great natural wonders and local products, and the commemoration of a colorful history and culture.

Ms. Lucy Cassels, Programme Manager for Asia Regional Trade and Private Sector of the New Zealand Agency for International Development (NZAID), visited SEARCA on 21 September 2007. Dr. Gil Saguiguit, Jr., Deputy Director for Administration, and the Center’s program managers, briefed her on SEARCA’s programs and activities. She also imparted common themes of interest of SEARCA and NZAID, among which is capacity-building for CLMV countries.

His Excellency Dr. Armindo Maia (center), Ambassador of Timor-Leste in the Philippines, visited SEARCA on 28 September 2007 to be briefed about SEARCA’s core programs and to consult with Timorese SEARCA scholars enrolled in the University of the Philippines Los Baños. The ambassador also discussed possible areas for joint cooperation between the Center and the government of Timor-Leste.
Dr. Editha C. Cedicol, Manager of SEARCA’s Graduate Scholarship Department, participated in a Study Visit of Malaysian Ministry of Education officials to SEAMEo INNoTECH’s APEX project sites in Leyte Province, Philippines on 0-2 July 2007.

Project APEX, which means “Applied Academics for Excellence” is a 5-year project began in June 2003 by the SEAMEO Regional Center for Educational Innovation and Technology (INNoTECH). It aims to apply the contextual teaching and learning (CTL) strategy in science and mathematics by anchoring it on career cluster adopted by a secondary school. The participating schools served as the nucleus for integrating practical work-based learning with the academic and employability skills. The main purpose of APEX Leyte is to ensure that students are ready to pursue post-secondary education and/or an “enterprise” of choice and eventually become young entrepreneurs that would develop and manage sustainable agri-based enterprises. The group visited three of the nine beneficiary schools, namely: Tanauan National High School; Kananga National High School; and Baybay National High School.

The three secondary schools visited prepared demonstration classes and exhibits as well as an actual market encounter exercise to display the entrepreneurial skills acquired by the students after almost five years of project implementation. Of the three schools, the Kananga National High School was identified as suited for agri-based enterprise activities, thus would need technical assistance in putting up agribusiness, agri-technology, and food processing projects.

The visiting Malaysian education officials were: Datu Haji Yusof bin Harun, Deputy Director General of the Department of Technical Education; Dr. Khair bin Mohamad Yusof, Director of the Institute Aminuddin Baki; Mr. Zainudin bin Abas, Assistant Director of the Academic Management Unit, School Division; Mr. Shazali bin Ahmad, SEAMEO and ASEAN Desk Officer. (EC Cedicol)

Prepared by SEARCA, the Philippine Department of Science and Technology (DOST), and the United Nations Development Programme (UNDP), the SGPPTF is a two-year project that aims to improve the capacity of tropical forest communities to adopt and implement innovative practices and technologies for sustainable management and utilization of their forest resources. The project seeks to promote the participation of forest communities in decision-making processes and to enhance their capacity to contribute to the Sustainable Development Goals (SDGs) and the Global Strategy for Forests and People (GSFP).
Forged Ties. Increased Capacities.

SEARCA-KOREA FAO ASSOCIATION INK ACCORD

Graduate scholarships and related programs are among the collaborative undertakings envisaged in the Memorandum of Understanding (MOU) signed by SEARCA and the Korea FAO Association (KFA) on 10 September 2007 in Jeju, Korea.

Signatories to the covenant are Dr. Arsenio M. Balisacan, SEARCA Director, and Dr. Sang-Mu Lee, Chairman of KFA. The five-year MOU binds SEARCA and KFA to cooperate in programs to benefit developing Southeast Asian countries. Such activities include: graduate scholarships, research, training and visits, study tours, seminars and conferences, and knowledge exchange.

SEARCA and KFA have also agreed to work together in technical assistance and consulting services in agriculture and rural development whenever opportunities arise. The two institutions will also exchange scientific materials, publications, and information.

Dr. Arsenio M. Balisacan (left), SEARCA Director, and Dr. Sang-Mu Lee, Chairman of KFA, shake hands after signing the SEARCA-KFA MOU on 10 September. Looking on is Dr. Donato Antiporta, former Senior Policy Adviser, Policy Assistance Branch, FAO Regional Office for Asia and the Pacific.

For research and policy discussions in the development circle. He discussed fads and fancies in development paradigms, lessons from past policy experiences and controversies, and emerging policies in rural development.

"Agricultural development is no longer enough to get the large number of the poor out of poverty. Developing opportunities for employment and wealth creation in other sectors of the economy have to supplement a development strategy aimed at raising rural incomes through sustained productivity growth in agriculture," Dr. Balisacan underscored.

The APAP Forum was begun in 2002 primarily to foster cooperation on agricultural development issues among Asia-Pacific countries.

Biotechnology on the Menu

SEARCA, NTU SEAL PARTNERSHIP

Following the signing of a memorandum of understanding (MOU) between National Taiwan University (NTU) and SEARCA on 24 January 2007, NTU invited SEARCA to a roundtable meeting with NTU officials on 15 June 2007.

The roundtable meeting served as a venue for discussing biotechnology concerns in animal, fisheries, and plants; agricultural economics; and remote sensing of NTU, SEARCA, and UPLB. NTU also presented its ongoing biotechnology training programs. It likewise organized the SEARCA group’s visits to NTU’s biotechnology laboratories and Center for Biotechnology.

The SEARCA party was composed of Dr. Balisacan; Dr. Luis Rey I. Velasco, Governing Board member of SEARCA and UPLB Chancellor; Dr. Arnulfo Garcia and Dr. Maria Celeste Cadiz, Managers for R&D and Training, respectively; and Ms. Sonny Tababa, Special Project Coordinator/Network Administrator of Biotechnology Information Center.

Taking things on a higher level of cooperation, SEARCA co-organized with NTU the International Training-Workshop on Agricultural Biotechnology to be held on 2-12 September 2007 at the Center for Biotechnology, NTU. The training-workshop aims to strengthen the agricultural biotechnology capacity of countries within the region and pave the way for the enhancement of respective biotechnology industries. The 27 participants were researchers, professors, or research managers from Cambodia, Indonesia, Malaysia, Philippines, Taiwan, Thailand, and Vietnam.

Aside from SEARCA, the other co-organizers are the Food and Fertilizer Technology Center for the Asian and Pacific Region (FFTC) and the Science and Technology Policy Research and Information Center (STPI) of the National Applied Research Laboratories. The training-workshop was also sponsored by the National Science Council (NSC), Executive Yuan; Council of Agriculture (COA), Executive Yuan; and the American Institute in Taiwan (AIT). (SPTababa)