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Photo by Raniel Jose Castañeda

BREAKING OUT

Enabling smallholder farmers to participate in the market paves a way out of subsistence agriculture and rural poverty.

Farmer-to-market links key to shift from subsistence to commercial farming

A significant number of Filipino farmers are still categorized as poor because they are engaged in subsistence production of traditional and low-value crops such as rice, corn, and coconut, which are planted in 79 percent of the country's arable land. To boost income from these crops, there is a need to transform rice, corn, and coconut subsistence farms into viable commercial farms.

Toward this end, a 16-month project titled *Linking Farmers to the Market: Towards Transforming Subsistence Farms to Commercial Farms* is implemented by SEARCA in collaboration with the Department of Agricultural and Applied Economics (DAAE) of the University of the Philippines Los Baños (UPLB).

Funded by the Philippine Department of Agriculture-Bureau of Agricultural Research (DA-BAR), the project will identify the current state of market linkage as well as the constraints that complicate said linkage.

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Myanmar fetes SEARCA for support to agri sector

NAY PYI TAW, Myanmar—SEARCA has been recognized by the Republic of the Union of Myanmar for its significant contribution and continuous support to the country's agriculture sector through human resource development.

Dr. Gil C. Saguiguit, Jr., SEARCA Director, accepted the award presented by His Excellency President Thein Sein of Myanmar, during the country's commemoration of World Food Day on 16 October 2015 at Yezin Agricultural University (YAU). In attendance were officials and staff from various Myanmar's ministries, diplomats, and representatives from United Nations agencies, other international organizations, and the private sector. With Dr. Saguiguit was Ms. Adoracion T. Robles, Unit Head for Management Services and Executive Coordinator, Office of the Director.

Other organizations given this accolade were the Food and Agriculture Organization of the United Nations (FAO), Asian Development Bank (ADB), Korea International Cooperation Agency (KOICA), International Rice Research Institute (IRRI), and ASEAN Plus 3 (Japan, China and Korea).

All told, SEARCA awarded 80 master's and PhD scholarships to Myanmar nationals to date, 27 of whom are ongoing scholars while 53 had completed their graduate programs. Moreover, 167 Myanmar had participated in 33 international, regional, and national training, seminars, and other learning events conducted by SEARCA.

Myanmar also participated in the seven Policy Roundtables for policymakers and rural development practitioners organized by SEARCA from 2004 to 2011 and hosted three of said high-level meetings.

At present, two Myanmar researchers are implementing research projects funded by SEARCA under its Seed Fund for Research and Training (SFRT). The other four Myanmar SFRT grantees had completed their projects, while two others availed of SEARCA travel grants to



President Thein Sein of Myanmar (front, second from right) presents the plaque of recognition to Dr. Gil C. Saguiguit, Jr. (leftmost), SEARCA Director, at Myanmar's World Food Day celebration held on 16 October 2015 at YAU.

present the result of their research in scientific conferences. Myanmar is also covered by four ongoing SEARCA-implemented research projects in Southeast Asia.

YAU is one of the first three beneficiaries of SEARCA's Institutional Development Assistance (IDA) Program, which develops strategic universities in Southeast Asia that

have the potential to contribute to the country's development. Dr. Saguiguit said SEARCA is assisting YAU so it can effectively support the agricultural development agenda of MOAI. SEARCA supported and facilitated an institutional review to improve YAU's curriculum and course offerings. Its continuing support to YAU includes PhD scholarships awarded to two YAU faculty members. (LLDDomingo)

THE SEARCA DIARY

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Farmer-to-market links/ from page 1

The project will characterize and establish the typology of rice, corn, and coconut farmers and farm households, and the ideal farm-to-market linkage in the country. It will assess the existing marketing systems associated with these three types of farms, and determine the key constraints that hinder subsistence farms from becoming market-oriented. Benchmarking of the best practices in farm-to-market linkage will include the evaluation of some projects under the DA-

BAR's National Technology Commercialization Program (NTCP). The project will document examples and case studies of best practices identified.

Dr. Prudenciano U. Gordoncillo, Professor at the DAAE under the UPLB College of Economics and Management (CEM), leads the project which began in October 2015. On 11 November 2015, he presented the project inception report to DA-

IFS, SEARCA offer joint research grants

The International Foundation for Science (IFS) and SEARCA have partnered in piloting the *Collaborative Research Grants* in Southeast Asia given their common mission to develop young researchers who have the potential to become their country's leading scientists. The aim is to strengthen research capacity in food security and environmental sustainability toward inclusive and sustainable agricultural and rural development (ISARD) in the region. Research grants will be awarded on merit to small teams of young scientists and researchers from Cambodia, Lao PDR, Myanmar, the Philippines, Timor-Leste, and Vietnam.

The theme of the grants program is *Climate Change Adaptation and Mitigation for Agricultural and Rural Development*. It covers following research areas, which are also in line with SEARCA's Umbrella Program on Climate Change Adaptation and Mitigation for Southeast Asia (CCHAM):

- Assessing climate change impacts and risks for policy, plans, and investments
- Advancing low-carbon agriculture and rural development
- Enhancing pro-active adaptation to climate change, vulnerability, and extremes
- Enabling policies and governance for climate-resilient agriculture and rural communities

Though this collaborative research approach was twice piloted by IFS in sub-Saharan areas, it is considered the first of its kind in Southeast Asia. Researchers who have expressed interest will be invited to join an online collaborative environment wherein they will form teams and craft proposals for funding. IFS provides a digital platform called PODIO and will administer the online application and review processes. SEARCA will take the lead in organizing the capacity building workshop for participants who will pass the pre-screening. IFS and SEARCA will provide assistance through team grants and mentoring. (SCSimondac)

UPLB honors SEARCA for partnership in R&D

The University of the Philippines Los Baños (UPLB), SEARCA's host institution led by Chancellor Fernando C. Sanchez Jr., formally recognized the Center as its partner in the work towards attaining national development goals, for continuously collaborating and sharing resources with the university, and for supporting its endeavors to attain its goals and aspirations towards making inclusive growth possible in the Philippines.

UPLB feted SEARCA and other partners in research and development at a thanksgiving dinner held on 21 October 2015 at Luxent Hotel in Quezon City, Philippines. Dr. Gil C. Saguiguit, Jr., SEARCA Director, accepted the award on behalf of the Center. Photo shows Dr. Saguiguit (center) holding the plaque of recognition presented by Chancellor Sanchez (left) with UPLB Vice Chancellor for Research, Development and Extension Rex B. Demafelis (right).



Photo by Lawrence N. Garcia/UPLB-OVCRE

UP President Alfredo E. Pascual graced the event and reiterated the importance of UPLB's partners in R&D and called for their continued support. For his part, Chancellor Sanchez thanked UPLB's

partners for their "trust, confidence, and faith" in the university's capacity and expertise to develop new and innovative technologies that benefit the Filipino nation.

Since its establishment, SEARCA has complemented and collaborated with UPLB in programs of research, technical services, and capacity building activities. (LLDDomingo)

BAR officials, namely: Mr. Joel H. Lales and Mr. Jude Ray P. Laguna, Head and Executive Assistant, respectively, of the Planning and Program Development Division and Ms. Virginia L. Agcopra and Engr. Roberto Villa, Technical Advisers.

In view of the goal and nature of the project, DA-BAR stressed the importance of anchoring

the sampling frame on poverty incidence. To be certain that the target respondents of the project are poor farmers of rice, corn, and coconut, the top producing areas of such crops and areas with the highest cases of poverty incidence would be determined. Furthermore, in line with the project objectives, the DA-BAR programs on Community-based Participatory Action Research (CPAR) and NTCP will be assessed.

In the end, the research will provide evidence-based policy recommendations that will set the stage for upscaling best practices on farm-to-market linkage and lay the foundation for the transformation of subsistence farms into commercial farms with higher value products. (ACPastolero)

SEARCA presents ASEAN agri innovation system overview

SEOUL, South Korea—SEARCA presented the preliminary results of the review of the agricultural innovation system (AIS) of ASEAN Member States (AMS) during the *OECD-ASEAN Regional Conference on Agricultural Policies to Promote Food Security and Agro-Forestry Productivity* hosted here by the Ministry of Agriculture, Food and Rural Affairs.

The Organisation for Economic Co-operation and Development (OECD) commissioned SEARCA to undertake the study using the OECD analytical framework on AIS, which covers governance of AIS, investing in innovation, facilitating knowledge flows, and strengthening cross-country supply of agricultural innovation at the ASEAN/regional level. The AIS study is part of a bigger initiative of OECD with ASEAN titled *Building Food Security and Managing Risk: A Focus on Southeast Asia*, which aims to identify policy issues and recommendations that could

influence innovation, productivity growth, and sustainability in the region's agri-food sector.

Held on 12-13 October 2015, the conference was attended by high officials involved in crafting and implementing policies related to food security and agricultural productivity from seven AMS and representatives from the ASEAN Secretariat; OECD and its member countries (Japan, Australia, New Zealand, South Korea); Food and Agriculture Organization of the United Nations (FAO); Asian Development Bank (ADB); and SEARCA.

Dr. Bessie M. Burgos and Mr. Bernie S. Justimbaste, SEARCA's Program Head for R&D and Consultant on National Innovation System, respectively, presented the overview of the AIS in the AMS. They also discussed information availability and gaps in relation to the elements of the AIS framework, and enjoined the AMS senior officials to participate in the survey to address the information gaps, capture their perspectives, and draw upon their opinions as inputs to final overview report.

The conference had four sessions: an overview of OECD-ASEAN cooperation and engagement,

the outlook for agricultural commodities and trade in Southeast Asia, managing risks to food security with the use of risk-based framework for analyzing food security policies, and sustainable agro-forestry productivity growth.

The common themes that resonated with the AMS in terms of areas that need policy actions and interventions were as follows:

- Use of value chain framework to ensure that agricultural products meet the standards and requirements of consumers and export markets
- A sound marketing system, including market institutions and information system
- Investments in total factor productivity, including innovations
- Agribusiness development
- Public-private sector partnerships
- Climate-smart agriculture
- Institutional reforms to ensure alignment/convergence of efforts among various agencies relevant to food security
- Increasing income opportunities (farm, on-farm, and off-farm) for small-farmer households (BMBurgos)

SEARCA Governing Board convenes in Phl

STA. ROSA CITY, Philippines—The 63rd *SEARCA Governing Board (GB) Meeting* was held here on 10-11 November 2015. The SEARCA GB is composed of representatives of the 11 member countries of the Southeast Asian Ministers of Education Organization (SEAMEO).

The GB reviewed the Center's operations and accomplishments vis-à-vis its strategic plan, which is focused on inclusive and sustainable

agricultural and rural development (ISARD) in Southeast Asia through its core programs of graduate education and institutional development, research and development, and knowledge management. A salary adjustment for all SEARCA staff members was approved by the Board. It also directed improvements in administrative processes to ensure efficiency and cost-effectiveness of the Center's programs and services.

Atty. Alberto T. Muyot, Undersecretary for Legal and Legislative Affairs of the Philippine Department of Education (DepEd), was present during the opening program where he affirmed the DepEd's support to SEARCA as its focal agency. In commending SEARCA for its accomplishments, the education official said the Center carries the Philippines' goodwill and support to other governments in Southeast Asia, particularly in promoting ISARD. (EGPandanan)



The 63rd SEARCA GBM was attended by (from left) Dr. Luis Rey I. Velasco, Professor at the University of the Philippines Los Baños (UPLB), representing Dr. Fernando C. Sanchez, Jr., UPLB Chancellor; Dr. Haji Mohd Zamri Bin Haji Sabli, Acting Assistant Director of the Institute of Brunei Technical Education, Brunei Darussalam; Dr. Bounheuang Ninchaleune, Dean of Agriculture, Savannakhet University, Lao PDR; Dr. Tran Van Dien, Rector of the College of Agriculture and Forestry, Thai Nguyen University, Vietnam; Dr. Acacio Cardoso Amaral, Dean of Agriculture Faculty, National University of Timor-Leste; Dr. Gil C. Saguiguit, Jr., SEARCA Director; Atty. Alberto T. Muyot, DepEd Undersecretary, Philippines; Dr. Tinsiri Sirbodhi, Deputy Director for Administration and Communication of SEAMES; Dr. Virginia R. Cardenas, SEARCA Deputy Director for Administration; Dr. Ngo Bunthan, Rector of the Royal University of Agriculture (RUA), Cambodia; and Associate Professor Dr. Komsan Amnueysit, Vice President of Rajamangala University of Technology (RMUT) Lanna, representing Dr. Numyoot Songthaniapitak, Chairman of RMUT Network.

SEARCA charts directions of Phl carabao industry

MUÑOZ, Philippines—SEARCA presented the key results of its value chain analysis of carabao milk and meat products in Luzon, Philippines at the *First National Carabao Conference* held here on 3-4 December 2015. Dr. Flordeliza A. Lantican led the study commissioned by the Philippine Carabao Center (PCC).

At the conference attended by more than 300 key players in the carabao industry, Dr. Lantican explained the value chain maps of the carabao products focusing on the roles and linkages of various actors and enablers. She also discussed the key constraints and opportunities for improving the specific value chains.

SEARCA also presented proposals for upgrading strategies and interventions as well as policy recommendations that will enhance the capability of the industry to increase healthy and productive cross-bred carabao population and produce quality and safe carabao-based milk and meat products responsive to the growing domestic demand. Dr. Bessie M. Burgos, SEARCA Program Head for Research and Development, was on hand to moderate the open forum for SEARCA's session.

To strengthen the entire value chain of the carabao industry, PCC executives, specialists, and scientists identified specific projects to intensify increase in productivity and reproductive efficiency of carabao for meat and milk; improve quality of raw carabao milk; improve milk handling, assembly, and distribution of live animals; foster an enabling environment for community-based enterprises on carabao meat and milk; and processing and marketing.

The value chain analysis conducted by SEARCA was among four PCC-funded initiatives whose outputs were presented at an integration workshop held on 5-7 October 2015 in Makati City. The other PCC initiatives were studies on carabao slaughter ban and on ruminant and dairy industry situation in the Philippines, and a SEARCA-implemented technical assistance on knowledge management (KM) led by Dr. Serafin D. Talisayon.

Dr. Talisayon and his team of experts also recommended a number of indicative projects for internal and external KM at PCC, which will be integrated in the six bundles of projects drawn up by the PCC team. (Reports from MCMolina, BMBurgos, MCHCadiz, SGLQuiñones, NMLandicho)

SEARCA organizes PCC overseas missions

PCC strengthened ties with livestock and dairy development agencies in Vietnam and India under an *Overseas Comparative Study Mission Toward Inclusive, Sustainable, and Competitive Livestock and Dairy Development* organized by SEARCA.

Six PCC officials visited eight institutions and processings plants in India from 26 October to 2 November 2015, while the study mission in Vietnam was undertaken by seven other PCC officials on 8-13 November 2015 who visited seven agencies under the Ministry of Agriculture and Rural Development (MARD) and the private firm that developed Vietnam's fresh milk industry. Ms. Nova A. Ramos, SEARCA Program Specialist, Knowledge Management Department-Training Unit, coordinated the missions and accompanied

the participants on their travels. The visits were jointly organized by SEARCA and the International Livestock Research Institute (ILRI) regional office in India and ILRI country office in Vietnam.

The study missions enabled key PCC staff to identify specific overseas public and private sector program concepts and strategies needed to strengthen the "i-REB" (Intensified Rural Enterprise Build-Up) framework and its operationalization; and forge stronger partnership with international R&D institutions. PCC was able to sign agreement with Vietnam National University of Agriculture (VNUA) to collaborate on research and capacity building activities. (Reports from NARamos)



Dr. Arnel del Barrio (left of the flag), PCC Acting Executive Director, and Dr. Nguyen Thi Lan (right of the flag), VNUA Acting President, exchange signed copies of a memorandum of understanding for possible collaborative activities between their institutions.

KM audit at PCC stations conducted

SEARCA conducted knowledge management (KM) audits at several PCC stations from October to December 2016. Dr. Talisayon conducted the audits at the PCC headquarters in Nueva Ecija and University of the Philippines Los Baños, while Ms. Nancy M. Landicho, Program Specialist at SEARCA's Project Development and Technical Services (PDTs), facilitated those at the PCC stations in Mariano Marcos State University and Ubay Stock Farm in Bohol. With her were Dr. Lope B. Santos III, Program Specialist and Officer

in Charge, and Ms. Sarah Quiñones, Project Associate, both of PDTs.

PCC officials involved in the audits filled out the KM assessment survey and gave a tour of their facilities. They also discussed technical and administrative problems encountered and capacity building needs. Those based at the stock farm said they need laboratory equipment and research and training in biotechnology. (Reports from SGLQuiñones)



Officials and staff of PCC and SEARCA at Ubay Stock Farm during the KM audit on 26 November 2015 at the Ubay Stock Farm in, Bohol, Philippines.

Diminishing resources, land ownership among major forest issues

SIEM REAP, Cambodia—A project funded by the ASEAN Social Forestry Network Strategic Response Fund (ASRF) administered by SEARCA found that the major issues confronting the Sra village in Ruel commune, Pouk District in this town are dwindling confusion over forest land ownership and resource base due to the absence of sustainable harvesting practices of non-timber forest products (NTFPs).

These were findings of one of the two projects monitored and evaluated by the ASRF Project Management Office (PMO) staff during their visit to Phnom Penh and Siem Reap on 19-21 November 2015. The PMO staff met with Mr. Long Ratanakoma, Deputy Director of Department of Forest and Community Forestry (DFCF), and Ms. Chan Sophoan, Program Director of Banteay Srei.



The ASRF team interacts with Sra villagers in Siem Reap, Cambodia.

IMPROVING ACCESS TO AND USE OF NTFPS

Banteay Srei, a nongovernmental organization working with Cambodian women and rural communities, implemented the project involving the Sra village. The project aimed to assess trends of access and use of NTFPs by communities in Siem Reap to identify options to improve their livelihood.

Observations, recommendations, and administrative steps in closing the project were discussed after the interactions with Sra villagers along with the Banteay Srei community organizers. In line with the recommendations, the Cambodians plan to pursue opportunities for communities to be educated on sustainable harvesting of NTFPs, forest rehabilitation, and mapping of target community forest areas.

The ASRF team thus recommended that the ties between the government and Banteay Srei be

strengthened so that they can be mutually guided in their efforts to rehabilitate the forest, address the issue of land ownership, and increase the income of villagers.

STRENGTHENING COMMUNITY FORESTS

On the other hand, the ASRF-funded project implemented by DFCF aimed to strengthen the cooperation between the government and civil society organizations in implementing the Community Forestry Program at the subnational level. DFCF is under the Forestry Administration of the Ministry of Agriculture, Forestry and Fisheries (MAFF).

As a result of the project, officials at the subnational level highly acknowledged the value of community forests in people's lives and the environment. Moreover, the project's accomplishments complement those of the Banteay Srei project because the Provincial

Community Forestry Program Coordinating Committee (PCFP-CC) and the Community Forestry Network (CFN), which the project intended to strengthen, had been officially recognized and have conducted regular meetings.

The ASRF team thus recommends that the budget needed by the PCFP-CC and CFN be integrated in the Commune Investment Fund of the Forestry Administration to sustain the community forestry program at the subnational level. The project's accomplishments is anticipated to catalyze more actions toward achieving the government's target of two million hectares under community forestry by 2029.

Monitoring and evaluation (M&E) visits enable the PMO staff to meet the project implementers and interact with stakeholders at the project site. Lessons gained from such learning exchange activities are relevant inputs to the assessment of the ASRF Pilot Phase. (Report from MAABatas)

Project beneficiaries learn how to adapt to El Niño

VICTORIA, Philippines—SEARCA conducted a seminar on climate change adaptation and mitigation for this Oriental Mindoro town's upland and lowland farmers as well as leaders of farmer organizations, associations, and cooperatives. Municipal agricultural technologists were also present.

Titled *What to Expect in and How to Cope with the El Niño Phenomenon* and conducted on 9 December 2015, the seminar topics included sustainable, organic, and ecological agriculture and drought.

The seminar was given to prospective beneficiaries of a project on revitalizing the

calamansi industry in Victoria under the auspices of SEARCA's *Piloting and Upscaling Effective Models of Inclusive and Sustainable Agriculture and Rural Development (ISARD) Program*. Carried out as part of the project's capacity building component, the seminar aimed to explain coping mechanisms that will help lessen the negative impacts of El Niño on the livelihood of farmers in the coming months.

Engr. Marisa J. Sobremisana of the University of the Philippines Los Baños-School of Environmental Science and Management served as technical expert with Mr. Henry M. Custodio, SEARCA Program Specialist for Research and Development, as facilitator.



Mr. Henry C. Custodio of SEARCA gives an overview of the seminar.

The farmers related their personal experiences with the El Niño phenomenon and clarified traditional agriculture myths and indigenous knowledge on various weather disturbances vis-à-vis farming and the agro-ecological landscape environment. (Report from AMReglos/HMCustodio)

Sustainable diets for food, nutrition security pushed

LOS BAÑOS, Philippines—University of the Philippines Los Baños (UPLB) Chancellor Fernando C. Sanchez, Jr. urged regional food and nutrition experts to work together to develop an agenda toward achieving sustainable diets for millions of people in Southeast Asia who are still undernourished. He issued the call at the *Southeast Asian Conference on Ecnutrition: From Concepts to Practice in Achieving Sustainable Diets (SEAConE)* hosted by SEARCA on 12-13 November 2015.

The conference was organized by the Institute of Human Nutrition and Food of the UPLB College of Human Ecology in cooperation with the Food Security Center (FSC) of the University of Hohenheim, Germany through SEARCA, with sponsorships from private firms and individuals.

“Ecnutrition looks into the broad spectrum of factors affecting food and nutrition, including the interrelationship of human health, agriculture, environment, and economic development,” Dr. Gil C. Saguiguit, Jr., SEARCA Director, said in his welcome message.

With a fresh look at how people interact with the environment, SEAConE sought to address gaps in understanding econutrition and its role in food and nutrition security; build on evidences from the region; and develop an agenda aimed at achieving sustainable diets.

In his keynote address, Dr. Sanchez acknowledged the strides made in halving the number of undernourished people since the 1990s, but noted that “one out of nine people in the world today

remains undernourished. Moreover, 66.6 percent of the world’s hungriest people live in Asia, with Southeast Asia most afflicted with malnutrition—281 million people to be exact.”

Experts from Monash University in Australia, UPLB and Aurora State College of Technology (ASCOT) in the Philippines, and Columbia University in the United States talked about translating econutrition knowledge to action, and how to achieve the Sustainable Development Goals (SDGs).

Dr. Sanchez and Dr. Saguiguit both said the conference gives emphasis to building agro-ecosystem resilience. The speakers from the International Institute for Rural Reconstruction (IIRR), Philippine Department of Agriculture (DA), and UPLB talked about ways to build up said resilience through geographic information systems (GIS), enhancing food production, and implementing early warning systems.

The UPLB Chancellor also said that another significant problem for farmers and consumers is the huge postharvest losses worldwide. He quoted a report of the Food and Agriculture Organization of the United Nations (FAO) that one-third of the food produced (about 1.3 billion tons/year) “is either lost or wasted along the food chain. Such quantity of nutrient losses negatively impact on nutrition.” The implications of reduced postharvest loss were elaborated by Dr. Ma. Concepcion C. Lizada,

square kilometers. Results of the latest Global Hunger Index and another on increasing food production from grasslands and its implications to food security, ecology, and livestock nutrition set the context of the colloquium. Ecological footprint of grassland-based ruminant systems, sustainable governance of grasslands, and impact of animal-based production systems on human health and nutrition were among the topics tackled in the presentations. There were also panel discussions on African grasslands and grasslands as “a secret resource for a hungry world.”

Husband and wife Dr. Fred Rattunde and Dr. Eva Weltzien were conferred the Justus von Liebig Award for World Nutrition 2015 for their outstanding achievements in agricultural and nutritional sciences that contributed to improving world nutrition. Both International Crops



SAGUIGUIT



SANCHEZ

UP Professor Emeritus and SEARCA Senior Fellow.

On a different note, Dr. Sanchez said agriculture is a very hazardous industry that exposes agricultural workers to risks such as work-related injuries, lung disease, skin diseases, and cancer in their day-to-day affairs. Promoting safe and sustainable agricultural workplaces was discussed by Dr. Matthew Morell, Deputy Director General for Research at the International Rice Research Institute (IRRI).

The session on socioeconomic dimension of econutrition tackled societal behavioral change for food and nutrition security in the presentation of an expert from University of Georgia and the role of corporate social responsibility in the food system among many firms, particularly the case of Jollibee as discussed by Ms. Ma. Gisela H. Tiongson, Executive Director of Philippines-based Jollibee Group Foundation.

A panel discussion on promoting sustainable diets in the 21st century moderated by Dr. Maria Cristeta N. Cuaresma, SEARCA Program Head for Graduate Education and Institutional Development, and the four technical sessions provided inputs to an action plan and agenda for econutrition in Southeast Asia. (LLDDomingo)

SEARCA joins World Food Day colloquium

STUTTGART, Germany—Ms. Carmen Nyhria G. Rogel, Program Specialist for Research and Development, represented SEARCA at the *World Food Day (WFD) Colloquium* convened by FSC and Institute of Animal Production in the Tropics and Subtropics. The theme of the colloquium held on 16 October 2015 was “Grasslands – secret resource for a hungry world?” The SEARCA delegation supported by FSC also included Dr. Leonardo M. Florece, a grasslands expert and Professor at the University of the Philippines Los Baños-School of Environmental Science and Management.

Grasslands are the world’s largest terrestrial ecosystem, covering an area of 52.5 million



Ms. Carmen Nyhria G. Rogel of SEARCA at UHOH in Stuttgart, Germany.

Research Institute for the Semi-Arid Tropics (ICRISAT) scientists since 1997, they worked on sorghum to improve its nutritional qualities for animal fodder and human consumption as well as its resistance to drought, diseases, and pests. (Report from CNGRogel)

Snapshots



1



2

SEARCA FROZEN CHRISTMAS PARTY



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Clockwise from top left corner: (1) SEARCA Director Gil C. Saguiguit, Jr. gives his Yuletide message; (2) SEARCA staff in personally jazzed up sweaters and other winter wear filled the ballroom of Acacia Hotel in Alabang, Muntinlupa City; (3) Retirees Ms. Estelita Lanzanas (center) and Mr. Nicolas Sapin (right) with Dr. Saguiguit who presented each of them with a plaque of recognition for their long and faithful service to SEARCA for 33 and 39 years, respectively; (4) SEARCA Deputy Director Virginia R. Cardenas gives her farewell message after completing her term (2012-2015); (5) Christmas 2015 SEARCA family portrait; (6) Ms. Marites Suarez (right) and Mr. Eugene Boone strike a pose together to show off their winning costumes after being hailed the Best Dressed pair; (7) Ms. Lovely Urriza (left) and Mr. Elmer Pandanan were spirited emcees who kept the merrymaking going.



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Taiwan agri council, SEARCA discuss cooperation

Discussions between officials of the Taiwan Council of Agriculture (COA) and SEARCA bared prospects for collaboration in graduate scholarship, particularly internship of SEARCA scholars in Taiwan; research on agriculture and climate change, among other areas of interest; and knowledge management, including training activities and exchange of publications.

These were tackled during the visit to SEARCA of Taiwan Minister Bao-ji Chen of the COA of the Republic of China on 3 December 2015. COA is the authority on agriculture, forestry, fishery, animal husbandry, and food affairs in Taiwan.

At the outset, the Minister said Taiwan's research institutes are very strong and trainees may come and learn from them. He added that Taiwan is strong on animal biotechnology and aquaculture research. He also recalled that NTU offered a course on agricultural biotechnology for four years and coordinated with SEARCA in inviting training participants. Moreover, NTU hosted a SEARCA scholar who conducted her PhD research for a year under a sandwich program arrangement.

Dr. Gil C. Saguiguit, Jr., SEARCA Director, said Taiwan can tap SEARCA to link the country's agriculture universities to members of the SEARCA-initiated Southeast Asian University Consortium for Graduate Education in Agriculture and Natural Resources (UC), and catalyze



Dr. Gil C. Saguiguit, Jr. (leftmost), SEARCA Director, briefs Dr. Bao-ji Chen (rightmost), Minister of COA, Taiwan, on SEARCA's programs and activities. Also in the photo are COA Deputy Minister James Chih-i Sha (second from right), and Ms. Ming-chuan Chung, Specialist, COA Department of International Affairs.

exchanges between Taiwanese organizations and those in Southeast Asia with COA and SEARCA as focal points.

It was broached that SEARCA can send participants to international events organized by COA and Taiwanese may also be invited to SEARCA conferences and similar forums as resource persons or participants. Alternatively, COA and SEARCA can co-organize knowledge events and jointly develop and implement training programs.

In view of these common areas of interest, Dr. Saguiguit suggested the crafting of a

memorandum of understanding between COA and SEARCA.

Minister Bao-ji Chen was accompanied by Mr. James Chih-i Sha, COA Deputy Minister; Ms. Ming-chuan Chung, Specialist, COA Department of International Affairs; Dr. Chih-wei Tung, Assistant Professor at the Department of Agronomy, National Taiwan University (NTU); Mr. Eric Chen, First Secretary, Embassy of Taiwan in the Philippines; and Mr. Ronald G. Mangubat, Information Officer, Food and Fertilizer Technology Center (FFTC). (LLDDomingo)

UNESCO science bureau director visits SEARCA

SEARCA's programs and activities—particularly the upscaling of effective models of inclusive and sustainable agricultural and rural development (ISARD) in Southeast Asia—converge with programs of the United Nations Organization for Education, Science, and Culture (UNESCO) in the Asia-Pacific region.

This was noted by Dr. Shahbaz Khan, Director of the UNESCO Regional Science Bureau for Asia and the Pacific, during his visit to SEARCA on 7 October 2015.

Dr. Olivia Castillo of the UN Secretary General's Advisory Board (UNSGAB) on Water and Sanitation and Mr. Hussein Macarambom, Project Liaison Officer, UNESCO Office-Manila, accompanied Dr. Khan, who is also Representative to the UNESCO Cluster Offices - Brunei Darussalam, Indonesia, Malaysia, the Philippines, and Timor-Leste.



(From left) Dr. Shahbaz Khan, Mr. Hussein Macarambom, and Dr. Olivia Castillo visited SEARCA to discuss possible collaboration on common points of interest between the Center and the UNESCO Regional Science Bureau.

At the briefing on SEARCA's current priorities and programs led by Dr. Gil C. Saguiguit, Jr., SEARCA Director, they identified training courses and

conferences on common areas of interest as a possible areas of cooperation. (EGPandanan)

CCA training, study mission capacitate key Phl agri staff

Various key staff of the Philippine Department of Agriculture (DA) joined a training and a study mission under the auspices of the DA Adaptation and Mitigation Initiative in Agriculture (AMIA), which is jointly implemented by SEARCA and the UPLB Foundation, Inc. (UPLBFI).

SEARCA and UPLBFI were commissioned by DA to strengthen its capacity in providing highly responsive and climate resilient agriculture and fishery services through AMIA Project 1. Started in April 2015, the project covers the following:

- Review and reformulation of policies and guidelines related to research and development, agricultural extension and regulations, and Disaster Risk and Reduction Management (DRRM)
- Review and reformulation of planning, monitoring, and evaluation system including a review of the Yolanda Strategic Plan
- Establishment of Integrated Climate Change Geographic Information System (ICCGIS)
- Initial management and technical capacity building
- Requisite project management

CCA assessment simulation

Two batches of representatives from various DA offices tried their hands at applying systematic climate change adaptation assessment to actual development projects in the *Training-Workshop on Integrating Climate Change Adaptation into Policies, Plans and Investments*, which was tailored for the DA AMIA Project 1.

The second of three training-workshop offerings this year was conducted on 20-23 October 2015 with 14 participants, while the third was held on 3-6 November 2015 with 23 participants. All trainees were from the DA central office, regional field offices, and attached agencies and corporations as well as the DA AMIA team.

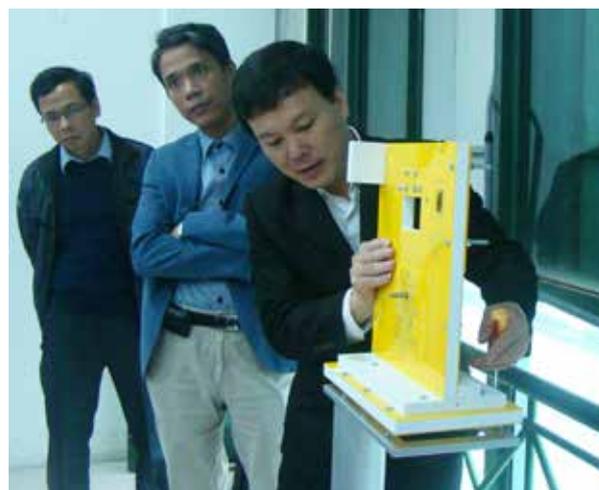
The training-workshop was offered to several batches of selected DA staff to enhance the capacity, awareness, and understanding of DA offices on how to effectively and systematically integrate adaptation considerations into development policies, action plans, and programs and project interventions in the agriculture sector at the national, regional, sectoral, and project levels. Participants also had exercises in applying the systematic planning steps to selected cases in agriculture towards developing flagship CCA initiatives. They also applied the systematic adaptation assessment to four real-life development projects.

The learning event adopted training modules developed and widely-tested by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH based on the principles laid out in the Organisation for Economic Co-operation and Development (OECD) Policy Guidance on Integrating Climate Change Adaptation into Development Cooperation. SEARCA adopted four of the 10 core modules and applied the Harvard Case Method.

Study mission to Vietnam

In a visit to northern Vietnam from 30 November to 4 December 2015, 14 DA officials and staff observed how climate-smart agriculture (CSA) technologies and practices are integrated into farmers' overall management strategy to enhance their adaptive capacity and build resilience in the face of climate change. With the DA contingent was the mayor of Miag-ao, Iloilo, Philippines.

Also an activity under DA AMIA Project 1, the study mission aimed to enhance the managerial



Mr. Dang Duy Hien (second from right), BHH-IMC Director, demonstrates the Automated Water Level Monitoring System.

and technical capacity of key DA officials and staff involved in AMIA. At the same time, the study mission was organized as part of the Overseas Study Mission on Climate Change Adaptation and Mitigation (CCAM) Initiatives in Agriculture in Vietnam in collaboration with the Hanoi-based International Center for Tropical Agriculture (CIAT) Regional Office for Asia.

The group visited CIAT's project sites where CSA practices and technologies are being tested and validated. Various science-based information and tools, policies, and mechanisms for upscaling and outscaling of the technologies were discussed during the field visits.

A team of CIAT researchers composed of Ms. Nora Rebecca Guerten, Mr. Louis Parker, Dr. Bui Le Vinh, and Dr. Kris Wyckhuys presented their respective ongoing and completed research as well as science-based technologies and decision support tools along CIAT's priority theme on integrated farming systems and resilient agricultural landscapes.

Mid-term review

SEARCA and UPLBFI took stock of the progress of DA AMIA Project 1 in a mid-term review held on 16-17 November 2015. Presided by Dr. Casiano S. Abrigo, Jr., UPLBFI Executive Director and AMIA Co-Project Director, the review provided a venue for integration, complementation, and coherence of all project components. Dr. Gil C. Saguiguit, Jr., SEARCA Director who also serves as AMIA Co-Project Director, was represented by Dr. Lope B. Santos III, Program Specialist and Officer in Charge of the SEARCA Project Development and Technical Services (PDTs).

Expected to wrap up in April 2016, the project was deemed on track in terms of target deliverables of various components. (Reports from KAGimutao/RBBantayan/CRCBuendia/GMCLagrimas)



Participants apply the systematic adaptation assessment methodology on a hypothetical case.

SEARCA inputs in initiative to help Filipino smallholders

MANILA, Philippines—SEARCA joined working group discussions at the general meeting of the Philippines Partnership for Sustainable Agriculture (PPSA) organized by Grow Asia in cooperation with the Philippine Department of Agriculture (DA).

The DA launched PPSA in April 2015 to establish multi-stakeholder partnerships with business, civil society, farmers, and others focused on developing inclusive and sustainable crop value chains. It aims to increase smallholder farmer productivity, profitability, and environmental sustainability by enabling access to knowledge, information, technology, finance, and markets.

Held on 10 November 2015, the PPSA general meeting brought together various stakeholders to develop working groups on five priority crops, namely: cassava, coconut, coffee, corn, and fisheries, and the cross-cutting themes of agri-finance and mobile technology, farmer capacity building, and logistics. The priority crops were identified based on the priorities of the Philippine government and interest of business companies.

Ms. Carmen Nyhria G. Rogel, SEARCA Program Specialist for Research and Development, participated in the working group discussion on farmer capacity building while Ms. Zeyna Balangue, Research Assistant at the SEARCA-implemented project titled *Linking Farmers to*



Participants to the Philippines Partnership for Sustainable Agriculture General Meeting, DA-ATI, 10 November 2015

the Market: Towards Transforming Subsistence Farms to Commercial Farms, joined the working group on coconut. Dr. Nerlita M. Manalili, SEARCA consultant in the Grow Asia-funded scoping study on inclusive agribusiness in Southeast Asia, took part in and presented the outputs of the working group discussion on farmers' access to finance.

DA Secretary Proceso Alcala commented on the presentations and called for quick action to improve the lives of smallholder farmers.

Dr. Bessie M. Burgos, SEARCA Program Head for Research and Development, had presented an overview of the academe's involvement in inclusive agricultural growth prior to the general meeting. Her presentation helped in identifying potential partners in promoting academic programs aligned with inclusive growth (i.e., entrepreneurship and inclusive agribusiness) through enhancement in curriculum and facilities,



PROCESO J. ALCALA

learning resources development, training courses, and research and development, thus expanding extension services among state universities and colleges. (Report from CNGRogel/ZEBalangue)

Best minds working on ARD book

Nine renowned individuals in their respective fields of expertise are working on a landmark book on agricultural and rural development (ARD) in Southeast Asia that focuses on inclusive growth, sustainability, institutions and governance, and regional/sub-regional integration in the region.

The book will encapsulate the new knowledge and perspectives and significant insights drawn from the *2nd International Conference on Agricultural and Rural Development in Southeast Asia (ARD2014)* that SEARCA convened in November 2014, which was attended by more than 400 participants from 20 countries. As such, SEARCA envisages the book to be a valuable resource for leaders and policymakers in the region.

The authors of the ARD book enlisted by SEARCA are Dr. Cielito F. Habito, Professor of

Economics, Ateneo de Manila University; Dr. Percy E. Sajise, Honorary Research Fellow, Bioversity International; Dr. Doris Capistrano, Regional Advisor to ASEAN-Swiss Partnership on Social Forestry and Climate Change; Dr. Nipon Poapongsakorn, Acting Program Director of Thailand Development Research Institute Foundation; Dr. Larry Wong, Program Director of Technology, Innovation, Environment and Sustainability, Institute of Strategic and International Studies, Malaysia; Dr. Lourdes S. Adriano, Former Lead Agriculture Specialist of Asian Development Bank; Dr. Jonna P. Estudillo, Professor at National Graduate Institute for Policy Studies, Japan; Dr. Keiji Otsuka, Professor of Development Economics, National Graduate Institute for Policy Studies, Tokyo, Japan; and Dr. Tey Yeong Sheng, Senior Research

Officer, Agricultural and Food Policy Studies Institute, Universiti Putra Malaysia.

Seven of the nine authors joined a workshop held on 1 December 2015 to discuss their drafts, present their ideas, give comments, and share materials. They also firmed up the plans and time table.

The summary report on ARD2014 was released in November 2015. Highlighting resilience, equity, and integration as main drivers of ARD in the region, the report contains speeches, presentations, and syntheses by distinguished leaders and experts during the plenary and parallel sessions. The report also captured details of the forum discussions with nongovernmental organizations and partners from the private sector. (Reports from MJQPangilinan)

UC strengthens higher education internationalization initiatives

BOGOR, Indonesia—The SEARCA-initiated Southeast Asian University Consortium for Graduate Education in Agriculture and Natural Resources (UC) resolved to strengthen its members' initiatives in internationalizing graduate education through student and faculty mobilities, collaborative research, and joint and dual degree programs.

"In this era, the consortium can help strengthen the move of higher education towards internationalization," said Prof. Dr. Anas Miftah Fauzi, Vice Rector for Research and Collaboration, Institut Pertanian Bogor (IPB), during the opening of the 28th UC Executive Board Meeting hosted by IPB on 20-21 November 2015.

The meeting had 21 delegates representing six UC members and SEARCA as the consortium secretariat. The UC members represented were UPM; Kasetsart University (KU), Thailand; IPB and Universitas Gadjah Mada (UGM), both in Indonesia; University of the Philippines Los Baños (UPLB); and Tokyo University of Agriculture (Tokyo NODAI), Japan.



Signatories and representatives of UC member institutions, SEARCA, and AGRINATURA each hold a copy of the agreement signed. In the photo are (from left) Dr. Bujang Kim Huat, Dean of UPM School of Graduate Studies; Dr. Fernando C. Sanchez, Jr., UPLB Chancellor; Dr. Jamhari, Dean of UGM Faculty of Agriculture; Prof. Dr. Anas Miftah Fauzi, IPB Vice Rector for Research and Collaboration; Dr. Didier Pillot, Vice President of AGRINATURA; Dr. Gil C. Saguiguit, Jr., SEARCA Director; Dr. Poonpipope Kasemsap, KU Vice President for International Affairs; and Dr. Keiko T. Natsuaki, Tokyo NODAI Vice President.

The UC also signed an agreement with AGRINATURA, a European consortium of research institutions and universities. It is anticipated that the accord will pave the way for collaborative activities, particularly on joint and dual/double degrees, summer schools, and other mobilities.

Dr. Anas also stressed that the ASEAN Economic Community is a good venue to extend cooperation among higher education institutions in the region. (JSLaranas)

GIS for climate change course conducted

On the heels of Typhoon Koppu, a short course on *Geographic Information System (GIS) Applications for Understanding the Effects of Climate Change to Agriculture* was organized by SEARCA with funding from the Food Security Center of the University of Hohenheim, Germany.

As strategic partner of FSC, SEARCA has been conducting a series of FSC-supported short courses. Held on 19-20 October 2015, the latest and fourth in the series had 13 participants from state universities and international organizations. Ms. Colleen Curran, Project Officer at the Philippine Disaster Recovery Foundation, served as the main resource person.

At the opening of the course, Dr. Gil C. Saguiguit, Jr, SEARCA Director, cited the damage to agriculture caused by extreme weather events and climate change and the huge challenge they pose to food security. The training, he said, will enhance the participants' research, extension projects, and study programs to benefit more people in their communities.

Participants learned the fundamentals of the GIS application and status of GIS or geospatial data in the Philippines. They were taught how to use QGIS, an open-source GIS application that provides data viewing, editing, and analysis,



Ms. Colleen Curran, Project Officer at PDRF, talks about the status of geospatial data in the Philippines.

through hands-on exercises on mapmaking, data management, creation of data from Google Earth, importing KML files to QGIS geo-referencing, building rasters from point data, projecting climate grids using raster calculator, and uploading and revising global positioning system (GPS) data. They also practiced collecting soil samples, tracking GPS points, and determining GPS coordinates during trips to the Philippine Rice Research Institute-Los Baños station and two private rice farms in Victoria, Laguna. (Report from JSLaranas)

SEARCA scholars top English language course

Two SEARCA scholars topped the intensive English language course conducted by the University of the Philippines Los Baños-College of Arts and Sciences under its Language Instruction Towards Excellence (LITE) Program.

Mr. Sokom Kong, a lecturer at Cambodia's Royal University of Agriculture who is pursuing MS in Veterinary Medicine, received the award for Overall Best Academic Performance.



SOKOM KONG

He also bagged Best in Reading and Best in Grammar and Academic Writing. The Best in Speech award went to Ms. Ana Maria D.C.G. Noronha of the National University of Timor-Leste who is pursuing MS in Animal Science.

"This is by far the most enjoyable course I have attended. And I have to thank SEARCA for giving me this scholarship not just for graduate study, but also to improve my English," Mr. Kong said during the closing program on 23 November 2015. (JSLaranas)

Alumni Notes

TIMORESE ALUMNI ORGANIZE FOOD SECURITY, CLIMATE CHANGE CONFAB

DILI, Timor-Leste—Less than a year after constituting the SEARCA Alumni Association of Timor-Leste (SAAT), Timorese alumni led the conduct of the *2nd Regional SEARCA Fellows Association Conference on Food Security, Poverty Reduction and Climate Change Adaptation* held on 8-9 October 2015 at Hotel Timor.

Timor-Leste Agriculture and Forestry Minister Estanislau Alexio da Silva keynoted the conference, which was attended by more than 120 participants from Timor-Leste and other countries. The guests included newly appointed Philippine Ambassador to Timor-Leste Evelyn Austria-Garcia and Malaysian Ambassador Tajul Mohammad.

Minister da Silva, who also served as Prime Minister when Timor-Leste gained independence in 2002, called for a more integrated approach in agriculture. He said the issue of food security must be taken beyond lip service. He enjoined



SEARCA alumnus Dedisio Ximenes, a Timorese, leads a focus group discussion during the conference.

government officials and nongovernmental organizations to give all stakeholders the same opportunity to acquire education, food, and health. He stressed that promoting young agriculturists to attract the youth to engage in agriculture is among the Ministry's priorities.

Meanwhile, Dr. Acacio Cardoso Amaral, Dean, Faculty of Agriculture, Universidadé Nacional Timor Lorosaé and Country Representative of Timor-Leste to the SEARCA Governing Board, underscored the constructive partnership between SEARCA and the Timorese government. He noted that many of the SEARCA scholars who

had graduated now hold important positions in government and are key to developing the food security framework of the country.

The conference was sponsored by the Ministry of Agriculture and Forestry of Timor-Leste and SEARCA. It was also supported by 21 international organizations, including the Food and Agriculture Organization of the United Nations (FAO), European Union (EU), United States Agency for International Development (USAID), and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH. (JSLaranas)

Thesis Abstracts

MINERALIZATION RATES OF ORGANIC MATERIALS AND EFFECT ON SOIL CHEMICAL PROPERTIES AND GROWTH OF CORN (*Zea mays* L.)



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Mineralization of nutrients from organic materials is vital for optimum plant growth and development. Various methods have been used to evaluate the mineralization rate of different organic materials and substrates. Of these, carbon dioxide evolution is a reliable method to estimate mineralization rate. Four different substrates were utilized for the research: dry chicken manure (CM), Azolla (AZ), coconut coir dust (CCD), and *Gliricidia sepium* leaves (GS). The effect of the combination of these organic materials with additional nutrients sources (Simple Nutrient Addition Program [SNAP] solution for the incubation study and recommended rate [RR] for pot experiment) on their rates of mineralization were determined, as well as corn growth.

The results of the incubation showed significant differences in the amounts of CO₂ evolved from the substrates. The evolution of CO₂ from the

substrates was stimulated by SNAP solution. Among all treatments, GS + SNAP yielded the highest result while CCD gave the lowest amount which was almost as low as the control. Over eight weeks of incubation, nitrogen mineralized to about fifty percent (50%) during the first week in all treatments. By the end of the incubation period, GS + SNAP produced the highest amount of mineralized nitrogen (9.40 mg kg⁻¹ soil) while CCD had lowest N mineralized (8.03 mg kg⁻¹) compared to other treatments with organic materials and SNAP. Results of soil analysis indicated that GS + RR (90-30-30) produced more nutrients in the soil compared to the rest of the treatments, as well as other organic materials with RR.

Gliricidia sepium with recommended fertilizer rate had the highest nitrogen at both 48 and 90 DAS (1.17 g, 1.23 g) followed by AZ + RR (0.77 g, 0.90 g) and other organic materials with RR. Moreover, GS + RR produced 150.68 g of biomass, followed by CCD + RR (140.13 g), CM + RR (132.84 g) and AZ + RR (132.25 g), respectively. Using soil organic materials such as *Gliricidia sepium* leaves would quickly provide the soil with more mineralized nutrients which are available for plant growth and development, resulting in better biomass production of corn plants. It is a good practice to use pure organic materials, especially *Gliricidia sepium* for small-scale or household use. For larger production, the combination of organic materials and manufactured fertilizers would help to maintain

soil organic matter and obtain good crop production.

FARM-LEVEL ECONOMIC IMPACT OF ECOLOGICALLY-BASED RODENT MANAGEMENT IN AN INTENSIVE IRRIGATED RICE SYSTEM: THE CASE STUDY OF RICE FARMING IN THE MEKONG RIVER DELTA, VIETNAM



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Vietnamese
Straight PhD in Agricultural Economics
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Los Baños

Using panel data from 221 sample rice farmers in An Giang Province, Mekong River Delta, Vietnam, a comparison of means (t-test) and regression-based strategies along with propensity score matching (PSM) method were employed to assess the impact of ecologically-based rodent management (EBRM) technology and its components on rice yield and net income of the rice farmer-beneficiaries of this technology. Among the estimation methods used, fixed effects with the PSM method were found to be the most appropriate approach to evaluate the farm-level economic impact of the EBRM technology. In addition, the study also determined the effects of the EBRM technology and its components on

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SEARCA promotes TVET in agriculture, school gardening

JAKARTA, Indonesia—SEARCA stood out at a consultation-workshop on the seven priorities of the Southeast Asian Ministers of Education Organization (SEAMEO) with the Indonesian Ministry of Education and Culture (MOEC) for its inputs in addressing gaps in technical and vocational education and training (TVET) in agriculture and in advancing food and nutrition programs through community- and school-based gardening.

Held on 16-17 November 2015, the meeting gathered most of the 21 SEAMEO centers to discuss how they can assist MOEC along the new SEAMEO education agenda that focus on the following themes:

- Achieving universal early childhood care and education
- Addressing barriers to inclusion
- Resiliency in the face of emergencies
- Promoting TVET
- Revitalizing teacher education

[SEARCA promotes/ to page 15](#)

SEAMEO trains constituents on dev't evaluation

BANGKOK, Thailand—Five SEARCA staff participated in the *Development Evaluation Training-Workshop* conducted by the SEAMEO Regional Tropical Medicine and Public Health (TROPMED) Network from 30 November to 4 December 2015 at Centara Watergate Pavilion Hotel.

Organized under the SEAMEO Mentoring Program, the learning event provided 37 program and administrative staff of 20 SEAMEO centers with working knowledge on the basic principles, standards, and concepts in development evaluation and training impact evaluation.

SEARCA's delegation included Ms. Adoracion T. Robles, Unit Head for Management Services and Executive Coordinator, Office of the Director; Ms. Julita G. Ventenilla, Unit Head for Internal Audit; Ms. Eidelmine Elizabeth F. Genosa, Human Resource Specialist and Officer in Charge, Human Resource Management Unit (HRMU); Ms. Mary Ann R. Martinez, Budget and Management Specialist, Management Services Unit (MSU); and Mr. Elmer G. Pandanan, Communications Assistant, Office of the Director. They participated in the training-workshop under the SEARCA Staff Development Program. (EGPandanan)



The training participants from the 20 SEAMEO regional centers, including SEARCA, together with the resource persons, namely: Dr. Ophelia Mendoza (seated, third from right), Adjunct Professor, Department of Epidemiology and Biostatistics, University of the Philippines-College of Public Health, and Prof. Dr. Sandra B. Tempongko (seated, third from left), Deputy Coordinator, TROPMED Network.

SEARCA joins 38th SEAMEO HOM



Dr. Gil C. Saguiguit, Jr. (standing, fifth from left), SEARCA Director, led the SEARCA delegation to the *38th High Officials Meeting* of the Southeast Asian Ministers of Education Organization (SEAMEO) held from 30 November to 1

December 2015 in Bangkok, Thailand. He was accompanied by Ms. Adoracion T. Robles, Unit Head for Management Services and Executive Coordinator, Office of the Director (OD), and Ms. Julita G. Ventenilla, Unit Head for Internal Audit.

With Dr. Saguiguit in the photo are vice ministers, permanent secretaries, and high-level education officials from SEAMEO member countries and SEAMEO Secretariat (SEAMES) officials who attended the meeting.

Local gov't units craft climate change action plan

CALAMBA CITY, Philippines—SEARCA and the Philippine Climate Change Commission (CCC) facilitated the *Local Climate Change Action Planning Workshop* of the municipality of Rodriguez, Rizal Province held here on 22-23 October 2015. The planning workshop aimed to prepare the municipality's Local Climate Change Action Plan (LCCAP) in accordance with the Memorandum Circular of the Department of Interior and Local Government (DILG) for all provinces/cities/municipalities to formulate and implement the LCCAP.

The workshop participants identified the hazards in key areas of agriculture, health, forest, water, public infrastructure, and solid waste management. They also proposed 36 priority measures to address flooding, landslide, erosion, and drought.

SEARCA and CCC shared the outputs of *ADB TA-8111-PH-Climate Resilience and Green Growth in Upper Marikina River Basin Protected Landscape (UMRBPL): Demonstrating the Ecotown Framework* during the workshop. Mr. Alexis Lapis, Overall Ecotown Program Coordinator, discussed the Policy and Institutional Mechanisms: Leveling on roles and responsibilities on climate change adaptation and mitigation, while Dr. Esteban Godilano, GIS Specialist, presented the vulnerability assessment of Rodriguez. Likewise, Dr. Lope B. Santos III, Program Specialist and Officer in Charge of SEARCA's Project Development and Technical Services, discussed the Multi-Criteria Variate Analysis (MCVA) and proposed priority interventions for climate change adaptation and mitigation. Dr. Nicomedes D. Briones, Natural Resources Management Specialist, also shared insights on the accounting and valuation of agriculture, water, and forest

in UMRBPL, particularly in Rodriguez. Ergons Project Management Consultant is a partner of SEARCA in implementing said TA.

The workshop was attended by representatives from various departments of the municipality, Sangguniang Bayan, barangays, and nongovernment and people's organizations.

Once the draft LCCAP is completed, the document will be presented to an expanded multi-stakeholders forum to include private sector and development partners. The LCCAP will be presented to the Sangguniang Bayan and the Municipal Mayor for adoption and mainstreaming to the Municipal Development Plan and Annual Investment Plan.

Ms. Roselia C. Agsalud, Ecotown Coordinator of CCC and Municipal Planning Office of Rodriguez, helped facilitate the workshops.

Native chicken project reviewed

SEARCA convened the team members of the project titled *Production of Organic Feeds for Native Chicken: A Pilot Corn/Sorghum + Cowpea Intercropping Scheme Integrated with Village Feed Milling and Native Chicken Production* on 15 October 2015. Implemented by SEARCA in collaboration with the Misamis Oriental State College of Agriculture and Technology (MOSCAT) and Mariano Marcos State University (MMSU), the project is funded by the Philippine Department of Agriculture-Bureau of Agricultural Research (DA-BAR).

Among those in attendance were MOSCAT President Rosalito Quirino, Ms. Diana Pastor of MMSU, and Ms. Evelyn Juanillo, DA-BAR Executive Assistant. They discussed the project



Participants of the Farmer Cooperators' Day Tour.

activities implemented by MOSCAT in Claveria, Misamis Oriental and MMSU in Batac, Ilocos Norte, and plotted the remaining activities until the end of the project in June 2016. They also joined six farmer cooperators of the project in a day tour at the National Swine and Poultry

Research and Development Center (NSPRDC) in Tiaong, Quezon on 16 October 2015. The tour was organized to expose the cooperators and the MOSCAT and MMSU project team members to the different ways of managing organic farms and native chicken production. (MBAImanza)

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technical, allocative, and economic efficiency of rice farmers in the Mekong River Delta for the period 2006-2009 using stochastic frontier analysis with the PSM method.

Results showed that the adoption of the EBRM technology and its components had a significant and positive impact on rice yield; real net income; and technical, allocative, and economic efficiency. The contributions of the EBRM technology to incremental paddy yield, real net income, technical, allocative and economic efficiency were approximately 0.58-0.60 ton/ha, VND 1.50-1.57 million/ha, 10.5 percent, 0.7 percent, and 10.1 percent, respectively. Moreover, the mean effects of the community action (CA)

component on paddy yield; real net income; and technical, allocative, and economic efficiency of its beneficiaries were approximately 0.43-0.45 ton/ha, VND 1.16-1.19 million/ha, 8.9 percent, 0.5 percent, and 8.9 percent, respectively. The study also found that the community trap barrier system plus community action (CTBS) component had significant contribution to the increases in paddy yield; real net income; and technical, allocative and economic efficiency of the farmer-beneficiaries by approximately 0.70-0.72 ton/ha, VND 1.77-1.80 million/ha, 12.3 percent, 0.7 percent, and 11.7 percent, respectively. These findings implied that the adoption of the EBRM technology and its components may have partly contributed to food security and household income of rice farmers in these communities.

SEARCA promotes/ from page 14

- Harmonizing higher education and research
- Adopting a 21st century curriculum

SEARCA led discussions on promoting TVET and elaborated on the gardening program it is piloting for the Philippine Department of Education. It also presented initiatives related to harmonizing higher education and research and adopting a 21st century curriculum in separate workshops of SEAMEO center directors and managers for research/knowledge management.

Additionally, SEARCA presented at the secretaries' workshop its best practices in providing proactive staffwork in support of the Center Director's initiatives. (Report from MCHCadiz)

ADB-funded climate resilience project wraps up



Dr. Ancha Srinivasan (second row, fourth from left) of ADB, Dr. Virginia R. Cardenas (second row, fifth from right) and Dr. Lope B. Santos III (front row, fourth from left) of SEARCA, and Forester Alexis Lapiz (second row, third from left) of CCC with Project Team Leader Elmer Mercado (second row, second from left), members of the project team, and representatives from partner LGUs at the project wrap-up workshop held on 30 September 2015.

MANILA, Philippines—Several ongoing demonstration projects implemented by local government units (LGUs) in the Upper Marikina River Basin Protected Landscape (UMRBPL) and the Ecotown Climate Resilience and Green Growth Road Map in the UMRBPL were among the critical outputs of a technical assistance granted by the Asian Development Bank (ADB) in response to the need to demonstrate the concept of ecotowns in sync with the National Climate Change Action Plan (2011-2028).

SEARCA was commissioned by ADB to conduct the project in close coordination with the Climate Change Commission (CCC), the project's implementing agency; ERGONS Project Marketing Consultants, an associate in the project; and the participating LGUs of Antipolo City and the Rizal towns of Tanay, San Mateo, Rodriguez, and Baras.

The three-year project, officially known as *ADB TA-8111 PH: Climate Resilience and Green Growth in the Upper Marikina River Basin Protected Landscape (UMRBPL): Demonstrating the Ecotown Framework*, had four components:

- Collection of baseline information and assessment of vulnerability to climate change
- Identification, analysis, and prioritization of locally appropriate adaptation and mitigation measures
- Selection of pilot demonstration areas and implementation of gender-equitable adaptation and mitigation measures
- Development of knowledge products and strengthening of stakeholder capacity

The project's results and impacts and key continuity and sustainability programs were

presented by Mr. Elmer Mercado, Project Team Leader, at the *Wrap-up and Project Review Workshop* held on 29 September 2015. The project's major outputs include baseline information, geographic information system (GIS) maps, and sectoral vulnerability assessments covering agriculture, water, health, forest, and roads and bridges; natural resources accounting and economic valuation; and greenhouse gas (GHG) inventory.

In addition, more than 2,000 stakeholders in the protected landscape benefited from the project's capacity building activities, including training in GIS, natural resource management (NRM) and benefit-cost analysis, adaptive capacity, GHG emissions inventory, and payment for environmental services. The LGUs were kept apprised of the process, methodology, and outputs of the technical assistance.

The project's most tangible outputs are the baseline information and maps on climate change impacts as well as the toolkits and quick guides on conducting GHG inventory, vulnerability assessments, benefit-cost analysis, and GIS for local governance.

"Our hope is that our LGUs will be able to use and maximize the results of this project in updating their respective Comprehensive Land Use Plan and in preparing local climate change action plans," said Dr. Gil C. Saguiguit, Jr., SEARCA Director.

The workshop enabled the project team and the LGUs involved to hammer out key issues and challenges in identifying and implementing

resiliency and adaptation measures at the local level, as well as their recommendations to further improve the resilience and adaptation capability of the LGUs and communities.

Dr. Ancha Srinivasan, Principal Climate Change Specialist at ADB, said green growth and resilience measures piloted by the project included bio-charcoal briquetting for the five municipalities; pioneering species establishment and rehabilitation (PISER) in Tanay, Rodriguez, and Baras; and check dams in San Mateo and Antipolo City.

Forester Alexis Lapiz of CCC thanked the LGUs and all sectors involved in the project for their active participation. He reiterated that climate change is a global phenomenon but for adaptation and mitigation strategies to be properly implemented, preparations must be done at the local level.

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