



## FRANCE AND SEARCA

SEARCA's headquarters was constructed with funding from the International Development Research Centre (IDRC) of Canada and the Government of the Philippines.



Established in 1966, the Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA) is one of the 26 specialist institutions of the Southeast Asian Ministers of Education Organization (SEAMEO), a treaty organization that promotes regional cooperation in education, science, and culture.

The SEAMEO member countries are Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, the Philippines, Singapore, Thailand, Timor-Leste, and Vietnam. The associate member countries of SEAMEO are Australia, Canada, France, Germany, Morocco, the Netherlands, New Zealand, Spain, and the United Kingdom.

SEARCA's objectives are to:

1. Provide high-quality graduate education and training in agriculture;
2. Promote, undertake, and coordinate research addressing the development needs and problems in agriculture of the region; and
3. Disseminate the findings of agricultural research and experimentation.

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#### **SEAMEO SEARCA**

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## Our Vision

A leading enabler and champion of excellence in agriculture and rural development in Southeast Asia

## Our Mission

To elevate the quality of life of agricultural families through sustainable livelihoods and access to modern networks and innovative markets



## Our Strategic Objectives

- Access new and innovative financial services
- Adopt new, sustainable, and resilient production technologies and systems
- Integrate with modern postharvest and logistics system
- Gain access to and operate in modern networks and markets





supports the  
**UN Sustainable Development Goals**



## Our Strategic Intent

SEARCA, in the next five years, commits to BETTER, BIGGER, and SMARTER outcomes and impact on the agriculture industry and its stakeholders, most especially the larger proportion of resource-poor farmers, by delivering better services through more context-relevant and valuable services to even more beneficiaries in more effective and efficient ways.

Alongside other global, regional, and national organizations, SEARCA aligns its direction towards contributing to the achievement of the United Nations (UN) Sustainable Development Goals (SDGs) that address global challenges to achieve a better and more sustainable future for all. SEARCA commits to contribute and allocate resources for the achievement of five SDGs which directly align with its mandate and focus, with an emphasis on creating partnerships (SDG17). Moreover, SEARCA also touches three other SDGs as it tries to achieve the five.

## EDUCATION AND COLLECTIVE LEARNING



SEARCA's core program on Education and Collective Learning (ECL) leads the development of a new breed of agriculture leaders and professionals through its scholarships and other graduate study programs. ECL also leads the technical and professional trainings, and coordinates roundtable discussions, conferences, fora, and all other SEARCA learning events.

### ■ GRADUATE SCHOLARSHIPS

#### **Joint Scholarships with Agropolis Fondation (AF)**

SEARCA signed a Memorandum of Understanding (MOU) with Agropolis Fondation (AF) and Universiti Putra Malaysia (UPM) on 28 May 2018 at the AF Headquarters in Montpellier, France.

The MOU intends to establish a framework for common action in promoting scientific cooperation to be implemented through research projects and PhD fellowships. For the long run, the partnership aims to contribute in building stronger institutional collaboration and network of scientists, researchers and professors between France and Southeast Asian countries.

The Thematic Areas covered by the MOU include:

- Preparing the crops of tomorrow;
- Reinforcing the sustainability of food and agriculture systems, including agro-ecological transition;
- Designing and optimizing integrated approaches towards bioeconomy and product quality;
- Agriculture and climate change linkage (mitigation and adaptation);
- Developing integrated approaches in agriculture, value chains, management of territories, and public policies.

PhD students from Malaysia and Indonesia, co-funded by AF, SEARCA, and UPM, successfully completed their degrees at UPM.

In 2021, AF and SEARCA inked another agreement, which offers a co-funded doctoral fellowship under the call for "Innovative Co-Learning for Agriculture-Based Solutions." The program aims to support innovative, cross-sectoral, and interdisciplinary learning projects that promote agro-ecological transition through innovative approaches, tools, teams, and networks. AF and SEARCA co-funded PhD students from Southeast Asia enrolled in SEARCA's study posts. In addition to UPM, the study posts include Institut Pertanian Bogor (IPB), Universitas Gadjah Mada (UGM), Universitas Brawijaya (UB) in Indonesia; Kasetsart University (KU) in Thailand; and University of the Philippines Los Baños (UPLB). The thematic coverage of the 2nd agreement covers the three crosscutting axes of the Fondation to address the various themes identified under each of them and which are fully aligned with Sustainable Development Goals (SDGs), particularly SDGs 12, 13 and 15.

Axis 1: Agriculture and climate change: adaptation and mitigation

Axis 2: Conservation and sustainable use of biodiversity

Axis 3: Responsible production and consumption

### AF-SEARCA and AF-UPM-SEARCA Joint Scholarship

Name	Country/ Home Institution	Study Post/Degree Program/Research Title
Mr. Junaidi (completed)	Indonesia/Indonesian Rubber Research Institute	UGM and University of Montpellier/ PhD, biological sciences/ Biochemical, near-infra red spectroscopy analysis of reactive oxygen species-scavenging systems in latex of <i>Hevea brasiliensis</i>
Ms. Julia Ng Su Chen (completed)	Malaysia/WWF	UPM and AgroParisTech University/ PhD, bioresource management/ Advancing on the conceptualization of a theory of change for landscape approaches to biodiversity conservation, the case of Sabah in Malaysia
Mr. Yao Tze Leong (completed)	Malaysia/Forest Research Institute	UPM and University of Montpellier/ PhD, forest management and ecosystem sciences/ Ensuring the future of perennial crops in Southeast Asia in a context of global change: Case of <i>Garcinia</i> fruit tree species
Mr. Nguyen Van Hieu (completed)	Vietnam/Cuu Long Delta Rice Research Institute	UPLB and University of Montpellier/PhD, Plant Breeding/ Integration of genetic resources from gene bank into breeding program and optimization of their use for genetic improvement: A case study on rice
Mr. Chaisiri Kitpaosong (completed)	Thailand	KU and University of Montpellier/ PhD, biotechnology/ Furanic acid F2 (FuFA-F2) from <i>Hevea brasiliensis</i> latex: Toward a transition to an ecologically responsible production of bioactive molecules in a society that sustainably manages its natural resources
Ms. Marich Nur Maqsalina	Indonesia	IPB University and University of Montpellier/ PhD, entomology/ IPM of Coffee Berry borer based on dispersion capacity in North Sumatra, Indonesia
Ms. Rosawadee Sukkum	Thailand	L'Institut Agro Montpellier, France/ Doctorat en Sciences Économiques /Environmental values and economic development: The conditions for the extension of sustainability certification among oil palm smallholders in Thailand
Ms. Indah Waty Bong	Indonesia	UGM and University of Montpellier/ PhD Geography and PhD in Environment, Territories, and Societies at University of Montpellier/Geography/ Local natural resource management and autonomous conservation practices in Indonesia

All scholars spent 18 months of their PhD studies at their Southeast Asian home university and 18 months at a French university, then earned a Dual PhD at the end of their program.

### **Asian-European Master of Science Degree in Food Science and Technology**

In 2002-2003, SEARCA and the Government of France through the European Union (EU)-funded Asia Link Programme conducted an international master's program on food science and technology. Eleven Southeast Asians received full scholarships from the Regional French Cooperation in Asia (through French Embassies and French private companies), which enabled them to participate in the study program and obtain their MS degree in agro-food industries. Their degrees were granted by Ecole National Supérieure des Industries Agricoles et Alimentaires - Section Industries Agro-Alimentaires Régions Chaudes (ENSIA SIARC) based in Montpellier, France.

### **Graduate Study Sandwich Program**

In 2006, SEARCA first collaborated with Centre de Coopération Internationale en Recherche Agronomique pour le Développement or the French Agricultural Research Centre for International Development (CIRAD) to host under a sandwich program arrangement a Vietnamese PhD student in food science and technology at the University of the Philippines Los Baños (UPLB). Ms. Pham Huu Yen Phuong, a SEARCA scholar, conducted her dissertation research titled "Evaluation of the Distribution of

Chemical Constituents and Parameters for Near Infrared Spectra of Total Soluble Solids and Dry Matter Content for Dragon Fruit (*Hylocereus undatus*) as an Index of Maturity."

From October to December 2012, CIRAD again hosted under a sandwich program arrangement two Filipino UPLB graduate students who were supported by Filipino-French Scientific Cooperation Programme (FFSC) of the French Embassy and SEARCA. Mr. Bryan Rey Oliveros (MS, microbiology) studied the "Use of Aqueous Ozone as Wash-water Additive for Sanitizing Organic Produce," while Ms. Ana Liza Lopez (PhD, plant pathology) trained on the molecular techniques needed for studying the genetic structure of the fungi *Magnaporthe oryzae*, both under the supervision of French scientists.

There were also SEARCA scholars who spent mobilities in L'Institut Agro Montpellier (former Montpellier SupAgro) under its Dual Degree program with KU, Thailand and received two degrees, one from L'Institut Agro Montpellier and one from KU. The scholars were funded by L'Institut Agro project under the ERASMUS+ program.

The SEARCA scholars who completed one year at Montpellier SupAgro under the Dual Degree program are the following:



Mr. Bayu Rizky Pratama already received his Dual Degree from MSA and KU.

Name	Home Institution	Degree Program/Thesis Title
Mr. Bayu Rizky Pratama	Cerdas Bersama Foundation/ Indonesia	MS, agricultural and resource economics/ Development of Seaweed Industry Using One Village One Product (OVOP) Approach as A Local Growth Development Concept for Enhancing the Society's Wealth of Brebes District
Mr. Nguyen Tuan Tran Ngoc	Hue University/ Vietnam	MS, agricultural and resource economics/ Rice Farmer's Vulnerability and Adaptation Method to Climate Variability in Coastal Area of Thua Thien Hue Province, Vietnam
Mr. Sar Veng	Provincial Department of Agriculture/ Cambodia	MS, tropical agriculture/ Assessment of Soil Quality of Different Agricultural Practices in Rain-fed Lowland Rice in Cambodia using Biofuctool Approach
Mr. Arjay Gerance	National Economic and Development Authority - Regional Office MIMAROPA, Philippines	MS, Applied economics for agriculture and environment/ Assessment of the Socio-Economic Outcomes from Postharvest Systems Improvement in Selected Tomato Supply Chains: Evidence from Laguna and Nueva Vizcaya, Philippines
Mr. M Royan	The Ministry of Rural, Development of Disadvantaged Region and Transmigration/ Indonesia	MS, Applied economics for agriculture and environment/ The Economic Effects of Implementing the Rural Funds on the Development of the Rural Agro Edu-tourism

## ■ SUMMER PROGRAMS

### **Summer Course on Sustainability Assessment in Agriculture Production and Food Processing**

L'Institut Agro of France and KU jointly organized the summer course held in Krabi, Thailand on 15-25 May 2022. The participants were from Indonesian, Malaysian, and Philippine universities. Their participation was supported by the SEARCA-implemented **Leveling-Up Philippine Higher Education Institutions in Agriculture, Fisheries, and Natural Resources (LevelUPHEIAFAR)** project funded by the Commission on Higher Education (CHED), Philippines. The summer course aimed to enable the participants to understand the concept of sustainable production and apply methods and tools for sustainability assessment of agricultural systems in practice through case studies in oil palm plantation, with Roundtable on Sustainable Palm Oil (RSPO) farmer groups and innovating producers in the South of Thailand.

### **6th UC Summer School on Diversification of Crops, Mixed Cropping, and Risk Management in Smallholder Agriculture in the Context of Climate Change**

L'Institut Agro in France and UB jointly organized the summer school held on 13-27 November 2022 in Malang and Banyuwangi Regency, Indonesia. The summer school is a

postgraduate course designed to enhance the understanding of students and other professionals in rural studies, agriculture, and natural resource management of the importance of the interdisciplinary approach in tackling the issue of food and nutrition security in Southeast Asia for sustainable development. Thirty-three participants from the members of the SEARCA-established Southeast Asian University Consortium for Graduate Education in Agriculture and Natural Resources (UC) and from L'Institut Agro in France joined the summer school.



The participants developed a co-learning approach with the local farmers and stakeholders in the villages. Investigation tools used during the program were participatory interviews, focus group discussions, and direct measurements of the economic and agronomic performance of the local farms.

### **7th UC Summer School on Sustainability of Agricultural Systems in Difficult Environments**

UC held its 7th UC Summer School from 24 July to 4 August 2023 at KU, Thailand, in partnership with France's TALENT Programme on Sustainable Land Management of the French Agricultural Research Centre for International Development (CIRAD).

With the theme "Sustainability of Agricultural Systems in Difficult Environments," the program engaged 51 participants from UC member universities and partners across Southeast Asia, Japan, and Taiwan. Participants explored real-world solutions to the challenges of farming under marginal conditions through fieldwork, participatory assessments, and expert-led discussions.

The partnership with TALENT and CIRAD in conducting the UC Summer School supports the consortium's goal of equipping future leaders with interdisciplinary skills, regional perspectives, and a commitment to sustainable agriculture.

### **Summer School on Dynamics of Change in Smallholders' Rubber Plantations - Enhancing Farming Systems Evaluation to Assess Sustainability**

The FORSEA Project and TALENT organized a summer school, to be offered by Prince of Songkla University in Thailand and RUA in Cambodia, in a blended mode. The program will run from 30 April 2025 to 31 May 2025. Two participants from the Philippines and Vietnam will be supported by SEARCA under its Mobility Grant Program. The summer school is open to professionals and students in agriculture, natural resource management, landscape management, agribusiness, rural development, sufficiency agriculture, or agricultural extension. The course addresses the challenge of sustainability assessment in agricultural systems in Southeast Asia, focusing on small-scale farming based on rubber, orchards, or forestry. It will review tools for a participatory assessment of these systems in response to market demands, declining labor availability, societal needs, environmental challenges from climate change, and limited access to land and water resources.

## ■ MASTER OF SCIENCE IN FOOD SECURITY AND CLIMATE CHANGE

MS FSCC is a joint degree funded by the European Commission's ERASMUS + Capacity Building for Higher Education program from 2016-2019. The project is led by KU with SEARCA serving as the Project Secretariat.

Co-funded by the  
Creative Europe Programme  
of the European Union



Launched in November 2016, the MS FSCC is offered by the five member universities of UC. It also involves six other partners from Southeast Asia and five partners from Europe, namely, Montpellier SupAgro (MSA); the Agricultural, Veterinary and Forestry Institute of France (IAVFF – Agreenium); and AGRINATURA – the European Alliance on Agricultural Knowledge for Development, all in France, as well as the University of Göttingen in Germany and University of Natural Resources and Applied Life Sciences, Vienna (BOKU) in Austria. MSA has recently merged with two other institutes in France and they are now known as L'Institut Agro.

The MS FSCC aims to develop professionals who will address the challenges of food security in the context of the ASEAN integrated market. The developed joint degree program was based on the model of Erasmus Mundus Joint Master Degrees in Europe. The MS FSCC involves a compulsory mobility of students within the UC. Each MS FSCC student was enrolled in two universities and was under the joint supervision of professors from these universities. The ERASMUS+ funding also provided excellent students to go on mobility to the EU partners, and for EU students to go on mobility to the UC member universities. The students also attended summer schools that served as enhancement courses for the MS FSCC.

Participating institutions planning to offer the MS FSCC include UPM; UGM, IPB, and UB in Indonesia; KU in Thailand; and UPLB. These HEIs have been working together within the UC, with SEARCA serving as Secretariat.

Other Southeast Asian partners of the project that participated in the activities include Central Luzon State University (CLSU), which became a regular UC member in 2023. Non-UC members involved are Chiang Mai University and Prince of Songkla University in Thailand, Nilai University in Malaysia, and the University of Battambang (UB) and RUA in Cambodia.

### **MS FSCC Mobilities**

The following MS FSCC scholars spent one semester up to one year at MSA under ERASMUS+ funding:

Name	Home University	Year
Ms. Kok Siew Lee	Universiti Putra Malaysia	2018
Ms. Nur Hafizah Mustaffer	Universiti Putra Malaysia	2018
Ms. Nur Khalida Binti Mohd Baseri	Universiti Putra Malaysia	2018
Mr. Meechart Nuttavat	Kasetsart University	2019
Mr. David John F. Rodriguez	University of the Philippines Los Baños	2018
Ms. Ciara Sophia L. Roxas	University of the Philippines Los Baños	2018
Mr. Ariyanto Kurnia Bagus	Institut Pertanian Bogor	2018
Ms. Sireirath Sok	University of Battambang	2019
Ms. Mat Sulaiman Nur Nadzirah	Universiti Putra Malaysia	2018
Mr. Zamir Hadi Bin Ismail Mohamad	Universiti Putra Malaysia	2019
Ms. Tanaporn Chalearmsrimuang	Kasetsart University	2018
Ms. Nordin Nurliyana	Universiti Putra Malaysia	2019
Ms. Gesang Pratyadhiraksana	Universitas Gadjah Mada	2019
Mr. Zulhijariyanto Ryan	Institut Pertanian Bogor	2019
Ms. Henzel Abellanosa Pateno	Kasetsart University	2019
Mr. Hung Huy Do	Kasetsart University	2019
Mr. Pariyachet Luksanasophon	Kasetsart University	2019
Ms. Rosawadee Sukkum	Kasetsart University	2019
Ms. Tansinee Somngamsup	Kasetsart University	2019

In 2017, the project piloted the offering of a double/dual degree in MS FSCC. The students participated in exchanges in Southeast Asia and in Europe, summer schools, and joint research. The Summer School is an intensive course on Sustainability Assessment in Agricultural Production and Food Processing and is required in MS FSCC. It combines theory, case studies, group discussions, and fieldwork.



Participants of the 2017 MS FSCC Summer School in Yogyakarta, Indonesia with the theme: Integrated Forestry Farming System: A Transition to Food Security in a Changing Climate hosted by Universitas Gadjah Mada.

One of the dual/double MS FSCC graduates, Mr. Ariyanto Kurnia Bagus, received three MS degrees from IPB, KU, and MSA in France.

In March 2021, the European Commission's Education, Audiovisual and Culture Executive Agency (EACEA) completed its evaluation of the MS FSCC and marked its implementation as "Good". The MS FSCC is undergoing institution among partner universities despite the restrictions brought by the pandemic.

EACEA noted that the project team "demonstrated to be committed in developing a new joint Master programme." The evaluation also recognized that "the consortium has fulfilled its objectives and delivered most of its expected results as outlined in the grant agreement while most of the results and outputs are of good quality."

## ■ AGREENIUM-SEARCA COLLABORATION

SEARCA signed a Memorandum of Understanding (MOU) for Institutional Cooperation with Agreenium, the French national consortium for agricultural research and education, on 25 February 2013 in Paris, France. Agreenium is envisaged to be the gateway for Southeast Asian nationals to build their capacities in France in specialized academic and research fields. On the other hand, SEARCA is expected to draw in its various networks, particularly its partner Higher Education Institutions (HEIs) to participate in or benefit from capacity building and research and development activities of the two parties.

Modalities under the five-year agreement also include sharing of experts and resources and joint efforts to secure major funding from donor and development organizations.

Agreenium comprises CIRAD; MSA the French National Institute for Agricultural Research (INRA); Paris Institute of Technology for Life, Food, and Environmental Sciences (AgroParisTech); Institute for Higher Education in Agricultural, Agrifood, Horticultural, and Landscape Sciences (Agrocampus Ouest); National Polytechnic Institute of Toulouse (INPT); National Institute for Higher Education in Agricultural Sciences, Food, and the Environment (AgroSup Dijon); and Bordeaux-Aquitaine Institute of Agricultural Sciences (Bordeaux Sciences Agro).

In addition, SEARCA, in partnership with IAVFF – Agreenium, conducted a workshop to develop collaborative projects to provide institutional assistance to the Center's partner universities under its Institutional Development Assistance (IDA) Program, namely:

Savannakhet University (SKU) in Lao PDR; RUA in Cambodia; Yezin Agricultural University (YAU) in Myanmar; and the National University of Timor Lorosa'e in Timor-Leste. The workshop aimed to identify the specific areas where IDA will focus in each university, the gaps in the universities capacities, and formulate strategies to address these gaps.



Dr. Alain Rival (center), CIRAD Resident Director for Southeast Asia Island Countries, with participants of the workshop.

The IDA Program seeks to develop young and strategic agricultural universities that have the potential to contribute to their respective country's development. SEARCA assistance to the universities include curriculum development, institutional review and strategic planning, and capacity of faculty and staff through provision of scholarships and non-degree trainings.

## ■ PROPOSAL ON CARBON FARMING FOR ACTIONABLE RESILIENCE AND ENVIRONMENTAL SUSTAINABILITY (CARES) PROJECT

The Carbon Farming for Actionable Resilience and Environmental Sustainability (CARES) project, submitted by the University of the Philippines System (UPS) under the ERASMUS+ Capacity Building for Higher Education program, brings together European and Southeast Asian institutions to co-develop online, stackable micro-credential courses on carbon farming. These flexible, short-term courses are designed to equip students, professionals, and lifelong learners with practical skills in sustainable agriculture—without the need to pursue full degree programs.

France's l'Institut national d'enseignement supérieur pour l'agriculture, l'alimentation et l'environnement (INESAAE) plays a central role by co-leading the project's Summer School component alongside KU. In addition, CIRAD joins the consortium as an Associate Member, bringing its network of experts based in Cambodia, Lao PDR, and Vietnam to support the delivery of the Summer Schools and contribute localized insights to enhance regional applicability.

## ■ SHORT-TERM TRAINING

### **Back-to back discussions on climate action in agriculture**

The Embassy of France to the Philippines and Micronesia supported the conduct of back-to-back learning sessions involving members of the academe, the industry, government, international development organizations, and farming and fishing communities.

*11 April 2024*

The first activity was organized in collaboration with the Philippines Partnership for Sustainable Agriculture and PLDT and Smart Communications as a learning alliance initiative. During the knowledge exchange, experts from the World Food Programme, DOST-PAGASA, and the Oscar M. Lopez Center, and AniHan Technologies, Inc. presented current research initiatives on climate action in the Philippines as well as different apps and technologies for climate action.

*15-16 May 2024*

Recognizing the importance of building the capacities at the grassroots level, SEARCA, in partnership with the Local Government of Bacacay, Albay in the Philippines, DA-AMIA, DA-PhilRice, and the Diocese of Legazpi, organized a two-day climate change summit that was attended by farmers and fisherfolk, the municipal agriculture office, the municipal council (Sangguniang Bayan), the municipal disaster risk reduction and management office, members of the academe, youth groups, students, religious organizations, NGOs, and civil society organizations. The first day were a series of presentations to discuss what climate change is and how it affects the agriculture and fishing sector, the data maps and forecast systems developed by AMIA, and local climate-ready varieties that can be planted to ensure local food and nutrition security amidst climate change. There were resource persons from Bicol

University, DA-AMIA Project, and the UPLB Institute of Plant Breeding. The second day was a workshop to determine concrete action points that can be adapted by the local community as part of their local climate change action plan.

### **LevelUPHEI AFAR grantee from VSU conducts seminar series on sustainable agricultural production, assessment, and agri-food systems**

*18 April 2023*

Ms. Crislin Cruz, a grantee-participant of LevelUPHEI AFAR project from Visayas State University (VSU), organized a seminar series on sustainable agriculture, featuring Dr. Christophe Lesueur, Manager of the Institute for Higher Education in Tropical and Sub-tropical Agri-food Sciences of Agro Montpellier Institute in France, as a guest speaker. Dr. Lesueur highlighted France's sustainable agriculture practices and impact assessment approaches, emphasizing education and technical assistance for farmers. He discussed France's participatory approach, which involved schools and education systems providing support and showcasing scientific innovations. This illustrated France's significant contribution to sustainable agriculture globally. The seminar, part of the LevelUPHEI AFAR project by SEARCA and UC, funded by the Philippine Commission on Higher Education (CHED), underscored France's role in promoting sustainable agricultural practices and enhancing higher education institutions' competitiveness in the Philippines.

### **Training on GAMA-AFTER Modeling for Universities**

From 22 March to 7 May 2021, SEARCA conducted the **Online Training-Workshop on Modeling for Higher Education Institutions (HEIs) on the Application of Geographic Information Systems (GIS) and Agent Based Modeling Approach: Agri-Forestry Technology for Ensuring Agricultural Resilience (GAMA-AFTER)** in partnership with the French Embassy in Manila and the French National Research Institute for Sustainable Development (IRD).

GAMA is an open-source platform developed by an international consortium of research teams under the IRD/Sorbonne Université International Research Unit UMMISCO (Unité de Modélisation Mathématique et Informatique de Systèmes Complexes). GAMA integrates a dedicated modeling language and provides a simulation development environment that allow modelers to build spatially explicit, multi-agent simulations that can be used for a wide array of applications, including land-use planning and management, agriculture and forestry, ecology, traffic engineering, public health, and disaster risk management.



Her Excellency Michèle Boccoz delivered her message during the opening program of the GAMA-AFTER webinar. She notes that nature-based solutions referring to the sustainable management and use of nature for tackling socioenvironmental challenges could be one of the innovative approaches to tackle both climate change and biodiversity conservation through a common response.

The participants were 22 faculty members from the following Philippine HEIs: Benguet State University (BSU), Bicol University (BU), Cagayan State University (CSU), Central Bicol State University of Agriculture (CBSUA), Dr. Emilio B. Espinosa, Sr. Memorial State College of



The participants together with the resource persons and organizers of the Training-Workshop on Modeling Using GAMA hosted by SEARCA in February 2020.

Agriculture and Technology (DEBESMSCAT), Isabela State University (ISU), and Visayas State University (VSU).

The learning event is the outcome of the **Training-Workshop on Modeling Using GAMA** jointly organized by the Embassy of France in the Philippines, SEARCA, and University of the Philippines Los Baños (UPLB) in February 2020 to develop in-depth expertise in the use of GAMA for modeling and its applications in forestry, environment, agriculture, and land management. The 2020 learning event had 23 participants.

### **Philippine-French Forum on Agriculture**

SEARCA was one of the partners of the French Embassy in the Philippines and the Department of Agriculture, Philippines in organizing the Forum held on 26 September 2017 in Manila. The Forum was an initiative of the French Embassy in the Philippines and the Department of Agriculture in celebration of the 70th anniversary of the establishment of diplomatic ties between France and the Philippines.

Themed “How the agricultural sector addresses the challenges of food security and farmers’ well-being amidst climate change,” the Forum featured four parallel sessions. SEARCA facilitated Session 3: Market Integration of Smallholder Farmers as it aligns with its focus on inclusiveness toward uplifting the plight of smallholder farmers.

### **ICT-ASIA 2015**

SEARCA was tapped by the French government to host and co-organize the ICT-Asia 2015 conference on 25-26 May 2015. An initiative of the French government, ICT-Asia 2015 aimed to strengthen the network of scientists in ICT research fields that will facilitate further cooperation through trilateral research teams.

### Other Past Learning Events

In 1997, SEARCA partnered with Centre National d'Etudes Agronomiques des Regions Chaudes (CNEARC) in the conduct of a regional **In-Service Training Program on Agricultural Extension**. The course resulted in the formation of the Southeast Asian Network on Agricultural Extension (SEANAE) whose activities included information exchange, training, and setting up of an accompanying research program. Other collaborators and sponsors in the conduct of the training course were the French Ministry of Foreign Affairs and Ministry of Agriculture and Fishery as well as Agropolis. An offshoot of the course was the conduct of a **National Training Course on Agricultural Extension for the Philippines** in 1999, which was also done in collaboration with CNEARC as well as with UPLB and the Philippine Department of Agriculture (DA).

Through CIRAD, France has likewise sponsored the participation of several SEARCA staff members in seminars/workshops and short-term training programs. On the other hand, one French national participated in the **First SEARCA Regional In-Service Training Seminar for Teaching Personnel in Higher Education in Agriculture**.

In April 2010, CIRAD hosted the study visit of three officials from SEARCA and the Philippine DA-Bureau of Agricultural Research, enabling them to interact and discuss with CIRAD scientists and researchers on climate change-related projects. The visit was part of the SEARCA-DA-BAR project titled **Capacity Building on Responding to Climate Change through Research and Development in Agriculture**.

On the other hand, eight French nationals participated in five learning events of SEARCA in the past years. These events were on fertilizer pricing policies and subsidies (1983); launching workshop of the **Integrated Management of Natural Resources and Agricultural Development (INRAD)** project (2007); executive forum on natural resources knowledge management in Southeast Asia (2007); regional knowledge sharing on climate change (2015); and ICT-Asia 2015.



The visiting SEARCA-DA-BAR team (three from rightmost) with CIRAD scientists.

### ■ SUSTAINABILITY OF AGRICULTURAL LANDSCAPES IN SOUTHEAST ASIA (SALSA)

A new partnership platform called **Sustainability of Agricultural Landscapes in Southeast Asia or SALSA**, initiated by CIRAD, was officially launched on 14 October 2024 in the Philippines.

SALSA is one of the five development platforms in partnership for research and training established by CIRAD in Asia.

This ambitious collective project aims to provide a better understanding of the landscape mosaic in the Southeast Asian island countries (Malaysia, Indonesia, Philippines), a region that still boasts a wealth of biodiversity. The SALSA platform associates five partners are: UPLB, UPM, Institut Pertanian Stiper (INSTIPER) in Indonesia, CIRAD, and SEARCA.



### ■ FRANCE-SEARCA FORUM ON REDUCING DISASTER RISK AND AGRICULTURAL RESILIENCY

The Embassy of France in the Philippines and SEARCA convened more than 50 experts in a Forum on Reducing Disaster Risk towards a Resilient Agriculture Sector who were moved to sign a commitment statement to push for promoting cost-effective measures, policies and regulations, and transferable solutions to address economic, social, and political barriers towards resilient agricultural and rural communities.



Held in August 2019 at SEARCA, the forum gathered members of the academe, farmer group leaders, municipal and provincial agriculturists, disaster risk reduction (DRR) and management practitioners, national and local government officials, experts from international development agencies, and representatives from nongovernmental organizations (NGOs) and the private sector.

Philippines-France cooperation in research was encouraged by the participation of CIRAD, Research Institution for Development (IRD), and GECCO Ingénierie.

The forum focused on capturing the bigger picture of vulnerability that the agricultural sector faces as it critically looked into the robustness of current policies, adaptive capacity of institutions as well as actions and mechanisms that are crucial to reducing risks and shocks from natural disasters.

Mr. Jean-Jacques Forte, Cultural and Cooperation Counselor of the Embassy of France in the Philippines, expressed the France-Philippines common agenda of developing viable disaster risk reduction and management mechanism in the agricultural sector.



A total of 16 papers were presented in five sessions. Each session was capped by panel discussions, which further identified pragmatic and strategic areas for cooperation between and among the panelists and the participants. Topics discussed revolved on the responsiveness of DRR programs and challenges in its implementation at the local level; opportunities that development organizations can offer to agriculture and rural communities towards building resilience; innovative practices and programs to ensure sustainability of interventions; and existing modalities and mechanisms for support and assistance to target beneficiaries and communities in the agriculture sector.

NGO representatives and farmer group leaders shared their experiences on the ground as they narrated the realities of some agricultural communities in the country.

Several workshop sessions were conducted, wherein each group outlined and presented their analysis on the existing risks and current strategies in place, gaps between available resources and needs, capacity building resources or support systems, and the facilitating and limiting factors towards improving action agenda for achieving sustainability of disaster-resilient agricultural sector.



Dr. Glenn Gregorio, Former SEARCA Center Director



The participants made personal pledges in a unified commitment to heed the call to action to build and sustain disaster resilience in agricultural communities in the Philippines.

## ■ GREASE NETWORK AND SEARCA

In partnership with CIRAD, SEARCA had envisioned to take an active leadership on operationalizing One Health/EcoHealth approaches in Southeast Asia, particularly applied in the livestock sector.



SEARCA thus supported the participation of Dr. Rico C. Ancog

Dr. Rico C. Ancog (leftmost) with other participants of the CIRAD-hosted "France Excellence Summer on OneHealth Approach to Fight Antimicrobial Resistance."

in the *France Excellence Summer on OneHealth Approach to Fight Antimicrobial Resistance* held at the CIRAD headquarters in Montpellier, France, in July 2018. Dr. Ancog was then an assistant professor at the UPLB School of Environmental Science and Management (SESAM), and UPLB's focal person for CIRAD's GREASE Research Network for emerging risks in Southeast Asia. Dr. Ancog is the Former Dean of UPLB-SESAM and now serves as Special Assistant to SEARCA Center Director. He was awarded the travel grant in 2018 due to the significance of One Health/EcoHealth and its huge potentials in providing a holistic understanding of the environmental challenges besetting the livestock sector of Southeast Asia.

For years, SEARCA has been interested in providing policy analyses on the socioeconomic and environmental factors critical to ensuring sustainable livestock-based farm management. Additionally, the growing concerns on anti-microbial resistance in the aquaculture and terrestrial food animal production further strengthened the interest in utilizing multi- and interdisciplinary approaches and tools to systematically contain potentially large-scale epizootics, prevent spillover of zoonotic bacteria into the food chain, and ultimately to ensure sustainable livestock production. Likewise, findings of recent studies point to the growing significant public health implications of anti-microbial resistance (AMR) in Southeast Asia, which warrant immediate attention.

At present, One Health/EcoHealth is one of the priority areas of SEARCA under its 11<sup>th</sup> Five-Year Plan focused on Accelerating Transformation Through Agricultural Innovation (ATTAIN).

## ■ FRENCH PARTICIPATION IN ARD2014

Dr. Alain Rival, CIRAD Resident Regional Director for Southeast Asia Island Countries, spoke on "EU-Southeast Asia S&T Collaboration for Food Security: CIRAD Experience" during the Parallel Session on S&T Collaboration for Food Security and Food Safety at the the SEARCA-organized **2nd International Conference on Agricultural and Rural Development in Southeast Asia (ARD2014): Strengthening Resilience, Equity and Integration in ASEAN Food and Agriculture Systems** on 12-13 November 2014 in Makati Shangri-La, Manila, Philippines.

SEARCA organized ARD2014 to provide a venue for sharing the wide and diverse knowledge pool on ARD that exists within and beyond the Southeast Asian region. It sought to highlight creative and innovative technological and practical approaches in the various processes of the agricultural system, showcase and derive useful lessons from institutional successes (and failures) in the management of the agricultural system and rural communities, and draw evidence-based policy implications to guide regional, national and sub-national policies and initiatives in the context of intensified regional cooperation and integration.

## ■ INTERNSHIP PROGRAM

SEARCA supported the internship program of ISARA Lyon, a non-profit engineering school that specializes in agriculture, agribusiness, and environment. This program supported two engineering students to take part in a professional work experience at SEARCA from 3 July- 22 September 2023 to provide them with international experience in an environment of increasing global exchanges.

## ■ PAST RESEARCH PROJECTS

France (through CIRAD) and SEARCA collaborated in implementing several research studies from 1979 to 1984. These studies include the following: (1) Analysis and Biological Testing of Amino Acids, (2) Nitrogen Fixation by Legumes and Soil Fertility, and (3) Studies on High Protein and Energy Foods in Southeast Asia. In the course of said collaboration, France provided a bio-assay laboratory, which was donated to UPLB when the SEARCA-CIRAD research studies were completed.

A Program of Cooperation between SEARCA and CIRAD was developed in 1999. Dr. Gil C. Saguiguit, Jr., then SEARCA R&D Manager, Dr. Gilles Mandret, then CIRAD Regional Representative for ASEAN, directly participated in the development of this program.

The bilateral partnership opened opportunities for SEARCA research staff to present the Center's coastal resource management projects in France and for French and Thai experts representing the Network for Tropical Islands in the Mediterranean (RITME Network) to visit SEARCA and Calancan Bay in Marinduque, Philippines. Consequently, a joint collaborative program on island ecosystem and integrated coastal zone management was developed.

Two students from the University of Montpellier—Ms. Celine Austruy and Mr. Koen Reweghs—undertook their internship at SEARCA and conducted studies in the Philippines under the SEARCA-France partnership agreement.



French government representative to SEAMEO and the Cultural Attache of the French Embassy in Manila are briefed on the SEARCA/GERDAT Project on Analysis and Bioassay of Amino Acids/Proteins of Tropical Food Legumes, which was launched in 1978. Equipment shown in the photo were donated by the French government.



Austruy



Reweghs

Ms. Austruy, an economics student, presented her paper titled "Economic Analysis of Fishery Resources in Calancay Bay, Marinduque," while Mr. Reweghs, a mechanical engineering student, presented his paper titled "An Analysis of the Water and Energy Resource Demand and Supply in Calancan Bay, Marinduque."

## EMERGING INNOVATION FOR GROWTH



CIRAD was involved in the **Focused-Food Production Assistance to Vulnerable Sectors (FPAVAS)**, an EU-funded project, which was implemented by SEARCA and completed in October 2011. FPAVAS was one of eight EU projects in the Philippines under the EU Food Facility Program called *Facility for Rapid Response to Soaring Food Prices in Developing Countries*. CIRAD was a partner of SEARCA in the implementation of the project and a CIRAD representative served as the project's Co-Director.

EU-FPAVAS aimed to put in place a food production program for the most vulnerable sectors of six provinces in the country: Camarines Norte, Camarines Sur, Misamis Occidental, Misamis Oriental, Occidental Mindoro, and Oriental Mindoro. The project had benefited more than 22,000 farmers and fisherfolks in the six provinces covered.

The EU-FPAVAS project falls within the purview of SEARCA's core program on Emerging Innovation for Growth (EIG), particularly its Project Development, Monitoring, and Evaluation (PDME) function.

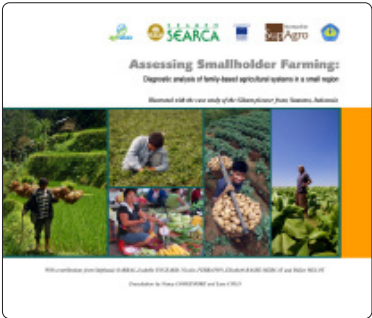
Currently, EIG is focused on providing farmers and farming families wider access to innovative products and services as well as business models for increased productivity and income through:

- Open Innovation and Agri-Incubation,
- Knowledge and Technology Transfer , and
- PDME.



KNOWLEDGE RESOURCE

The handbook was launched at the Paris International Agricultural Fair held on 25 February 2013.



## VISIT OF FRENCH AMBASSADOR TO SEARCA



Her Excellency Michèle Boccoz, F o r m e r Ambassador Extraordinary and Plenipotentiary of the French Republic to the Philippines, and other officials of the French Embassy in the Philippines visited SEARCA on 22 June 2021 and 11 April 2023.

She was briefed on SEARCA's programs, including SEARCA-European initiatives in education, and areas of possible future collaboration.





