



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 Canada, France, Germany, Morocco, the Netherlands, New Zealand, Spain, and the United Kingdom. Malaysia is one of the founding member countries of SEAMEO, which was established in 1965.

#### 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
- Disseminate the findings of agricultural research and experimentation.

#### **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 and resilient 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 toward 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 SCHOLARSHIP AND INSTITUTIONAL DEVELOPMENT

#### **▶ GRADUATE SCHOLARSHIP PROGRAM**

One  $\circ f$ SFARCA's main objectives is to produce highquality human resources in agriculture for the SEAMEO region in order to strengthen their institutions that would propel regional development. One of the major undertakings under this program is the provision scholarships of that enable Southeast Asians working in agriculture and rural development to pursue their master's or PhD studies. SEARCA



scholars are envisaged to assume leadership roles in their respective countries and influence the directions of agricultural and rural development in Southeast Asia.

#### Full Master's and PhD Scholarships

So far, SEARCA has awarded 97 full graduate scholarships (61 MS, 36 PhD) to Malaysians who pursued their studies at Universiti Putra Malaysia (UPM) and the University of the Philippines Los Baños (UPLB). In addition to the full graduate scholarships, SEARCA also awarded PhD research scholarships to four Malaysians. Of the 87 scholarships awarded, 65 (52 MS, 19 PhD) had been completed.



### **UPM-SEARCA Scholarship**

SEARCA and UPM initiated a joint graduate scholarship program in 2012. Since then, 15 Southeast Asians received UPM-SEARCA scholarships: 1 Bruneian, 1 Cambodian, 5 Indonesians, 2 Malaysians, 3 Filipino, 2 Thais, and 1 Vietnamese.

## Agropolis-UPM-SEARCA Scholarship

In May 2018, SEARCA, Agropolis Fondation of France, and UPM signed a formal agreement to offer PhD Fellowships to Southeast Asian students who will



conduct their research under the joint supervision of scientists, researchers, or professors from their respective home university and from any of the 41 higher education institutions and research units that are part of the foundation's scientific network, including University of Montpellier, Montpellier SupAgro, the French Agricultural Research Centre for International Development (CIRAD), and French National Institute for Agricultural Research (INRA).

Two Malaysians have been awarded the Agropolis-UPM-SEARCA scholarship to pursue their PhD at UPM. Ms. Julia Ng Su Chen of the World Wildlife Foundation is pursuing her PhD in bioresource management, while Mr. Yao Tze Leong of the Malaysia's Forest Research Institute is pursuing his PhD in forest management and ecosystem sciences.

### **MARDI-SEARCA Joint Graduate Scholarship**

In 2020, SEARCA inked an agreement with the Malaysian Agricultural Research and Development Institute (MARDI), which aims to strengthen MARDI's pool of professionals for research and development by providing graduate study scholarship grants to qualified MARDI officers.

Prospective graduates are expected to contribute to MARDI's main objective of generating and promoting new, appropriate, and efficient technologies toward the advancement of the food, agriculture, and food and agro-based industries. Eight scholars (5 MS, 3 PhD) have been awarded under this joint scholarship

## Joint Scholarship under Memorandum of Agreement with Center of Excellence for Sustainable Agricultural Intensification and Nutrition (CE SAIN) of the Royal University of Agriculture (RUA) and Universiti Sains Malaysia (USM)

Under this agreement for the project "Development of Innovative and Sustainable Aquafeed Using Local Agro-Residual Resources," one RUA constituent was awarded a scholarship to pursue MS in Aquatic Biology at USM effective second semester AY 2021-2022. This is in response to the need of Cambodia for an aquatic science expert. The scholar is expected to contribute to CESAIN's project funded by the Feed the Future Innovation Lab for Fish and enhance the capacity of RUA's Faculty of Fisheries.

## **Malaysian Alumni Association**

As a testimony that the SEARCA graduate scholarship program is a key factor in human resource development in Malaysia, a number of these scholars are now occupying key positions of responsibility in government and other sectors of the country.

In February 1993, these graduate alumni formed the Malaysian SEARCA Fellows Association (MASFA) and actively participated in capacity building activities, including the following:

- 1st RSFA Regional Conference on Food Security and Climate Change jointly organized by SEARCA and National University of Laos and held on 4-5 Dec 2013
- SEARCA-DAAD Alumni Associations Regional Consultative Workshop organized by SEARCA and held on 28-29 May 2013
- Seminar on Information Technology organized by UPM and held on 18 Jul 1997
- Symposium on Retooling Agriculture Faculties for the 21st Century organized by SEARCA and held in Nov 1996
- · Seminar on People-based Sustainable Agricultural Development for a Global World Tomorrow organized by the Indonesian SEARCA Fellows and held on 30-31 Oct 1993

#### Outstanding SEARCA Scholarship Alumni (OSSA)

On the occasion of its 50th anniversary, SEARCA honored 11 Southeast Asians with the OSSA Award, among them a Malaysian. It was the first time that SEARCA conferred such accolade on its alumni who have championed ARD and distinguished themselves in creating positive impact through their work

Prof. Dr. Mahiran Basri of UPM, Malaysia's premier green chemist, was recognized for her study on the successful nano-delivery of agrochemical actives to lessen pollution in the environment and her work on transdermal delivery of drugs, which helped young and old people effectively absorb medicines applied through the skin. She also pioneered the work on using palm oil and derivatives as feedstock for synthesis of new compounds. She was named the Top Research Scientist of Malaysia for publishing more than 300 papers. Aside from her awards, which also include the ISESCO Science Prize in Chemistry, Archer Daniels Midland Award, Tan Sri Datuk Ong Kee Hui Award, Ram Bais Biotechnology Award, and UPM Best Researcher Award, Dr. Basri also registered patents in Southeast Asian countries and in the United States.

#### ► REGIONAL SEARCA ALUMNI ASSOCIATION (RSAA)

SEARCA, in partnership with the Regional SEARCA Alumni Association (RSAA), organized the Scholars' Conference 2023 on "Advancing Agricultural Research for Improved Food Security." Twenty-eight scholars presented their research across six parallel sessions from 14-15 March 2023, via the SOLVE Platform. The two-day conference is the Center's way to support their academic achievements and recognize their capacity to produce quality research that has a great impact on agriculture and rural development.

One Malaysian SEARCA Alumna served as Parallel speaker: PARALLEL SESSION ON AQUATIC SCIENCE

Dr. Izzati Adilah Binti Azmir

Senior Lecturer University Technology MARA Shah Alam, Selangor, Malaysia

The 2nd conference was held on 25-26 April 2024 with the theme "Cultivating Tomorrow: SEARCA's Insights for Agriculture's Future" attended by 58 scholars and alumni combined.

#### PLENARY SPEAKER

## Ts. Jason Choy Min Sheng

Senior Assistant Director Industry and Community Collaboration Division Department of Polytechnic and Community College Education Ministry of Higher Education, Malaysia

#### **► UNIVERSITY CONSORTIUM**

UPM is one of the founding members of the Southeast Asian University Consortium for Graduate Education in Agriculture and Natural Resources (UC) initiated by SEARCA in 1989. The other founding members are Institut Pertanian Bogor (IPB) and Universitas Gadjah Mada (UGM) in Indonesia, Kasetsart University (KU), and University of the Philippines Los Baños (UPLB).

UPM has been instrumental in the increase in collaborative activities and projects of the UC. Notably, it was UPM that proposed the conduct of a UC Graduate Forum as a venue for students

from the UC to present their research results and develop a network for collaboration. UPM hosted the inaugural conduct of the forum in 2015 with the theme "Life Science, Food Science and Agriculture." Since then, the UC Graduate Forum has become an annual event that UC students look forward to. Its success has even spurred the institution of the UC Faculty Forum which was initially conducted in 2019. UPM also greatly contributed to the development of a joint curriculum for the Master of Science in Food Security and Climate Change (MS FSCC) project funded by the European Commission's ERASMUS + Capacity Building for Higher Education from 2016 to 2019. Under the project, the university hosted the 2018 UC Summer School with the theme "Oil Palm-Cattle Integration: A Transition towards Sustainability in Food Security and Climate Change"

As part of the MS FSCC project, the University Consortium partnered with eight (8) non-UC member universities in Southeast Asia, one of which was Nilai University, to build the capacity of its students, staff, and faculty to help address the imposing challenges of climate change and food security in their country and the region.

So far, at least 130 Malaysians have participated in UC activities:

- 35 graduate exchange students
- 33 thesis grantees
- 36 exchange faculties
- · 3 research fellows
- 7 professorial chair holders
- 14 seed fund for collaborative research grantees
- 1 young researcher grantee

UPM hosted the 6th UC Faculty Forum with the theme "Resilience and Adaptation Towards Innovation in Climate Crisis" on 28-29 August 2024.

#### **GSID Conversations**

The GSID Conversations is an avenue for scholars to discuss with experts from different fields regarding complementary topics in agriculture and rural development. The activity also shares the experience and insights of experts on translating knowledge and skills into meaningful contributions to society.



As part of its 55th Anniversary activities, SEARCA invited Prof. Dr. Shahrim Karim, Professor of Malaysia Heritage Food and Culture, Department of Food Service Management, Faculty of Food Science and Technology, UPM, to discuss sustainable and healthy food consumption during the 2nd GSID Conversations on 22 October 2022 via the SOLVE Platform.

For the 3rd GSID Conversations, Dr. Ng Siew Imm, Associate Professor at the School of Business and Economics and Associate Editor of the International Journal of Economics and Management, UPM, shared about Navigating Delays and Disruptions during Postgraduate Studies on 27 May 2022 via the SOLVE Platform.

The 4th GSID Conversations on 16 December 2022 was organized for scholars to talk about mental health problems and its prevention. Prof. Dr. Firdaus Mukhtar, Professor of Clinical Psychology and Deputy Dean for Admission, Institutional Relations & Financial Aid Unit at the School of Graduate Studies, Universiti Putra Malaysia, and the President of the Asian Cognitive Behavior Therapies Association, served as guest speaker for the event. She provided her expert advice on mental health, the symptoms for self-monitoring, and the basis if and when it is time to seek help.

### **Outstanding PhD SEARCA Scholar and Special Citation Awards**

SEARCA awarded Outstanding MS and PhD SEARCA Scholars for FY 2021/2022. The PhD awardee is from Malaysia, Dr. Tuan Syaripah Najihah Tuan Mohd Razali, PhD in Agricultural Technology, Universiti Malaysia (UPM). The awardee was evaluated according to: academic (a) grade point average; (b) duration of studies in the degree program; (c) papers presented in conferences: international



(left) Dr. Shahidah MD Nor, Special Citation for Academic Achievement awardee and (right) Dr. Tuan Syaripah Najihah Tuan Mohd Razali, Outstanding PhD SEARCA Scholar FY2021-2022

(d) publications in scientific journals; (e) academic awards or recognitions received and; (f) other curricular activities or engagements.

For the first time, SEARCA awarded a Special Citation to a scholar for her significant academic achievements. The awardee is Dr. Shahidah MD Nor who obtained a general point average of a perfect 4.0 at UPM; published seven papers as lead author in refereed journals; and presented four others in scientific forums during her incumbency as a SEARCA scholar. She also presented at the ATMI-ASEAN High Level Policy Forum and was chosen as a Chrysalis Award finalist, meant to contribute to Malaysia's Science, Technology, Innovation, and

Economic ecosystem.

#### ▶ SEARCA GOLD MEDAL FOR ACADEMIC EXCELLENCE

In academic year 1977-1978, SEARCA began giving the SEARCA Gold Medal for Academic Excellence to deserving agriculture students in response to a proposal by UPM (then called Universiti Pertanian Malaysia). Initially, the gold medal was given as an award of distinction to UPM's best student in agribusiness.

From 1977 to 1993, 11 medals were given to outstanding UPM agribusiness students. From 1995 to 1999, SEARCA extended the award's coverage to UPM's best students in sustainable upland agriculture. Two students were awarded in the area of sustainable upland agriculture and two in agribusiness. Starting in July 2004, the award was reoriented to include the best students in natural resource management and rural growth promotion. Two students were awarded in these areas of specialization. Altogether, 17 SEARCA gold medals have been awarded.

#### ▶ REGIONAL PROFESSORIAL CHAIR GRANTS

Since 1974, SEARCA provides professorial chair grants to highly competent faculty and research staff of universities in Southeast Asia. Initially, the grant was offered only to faculty and research staff of UPLB but it was later on expanded to include other universities in the region starting 2012. Since academic year 2011-2012, the SEARCA Regional Professorial Chair Grant has recognized the contribution of institutions and individuals in the fields of agriculture and related sciences, thereby contributing to ARD in Southeast Asia through instruction, research, innovation, and extension work. Thirteen professors from UPM and one from Universiti Malaysia Terengganu have since been awarded the SEARCA Regional Professorial Chair Grant.

#### ► INSTITUTIONAL DEVELOPMENT

Through SEARCA's Personnel Exchange Program, Dr. Khew King Ling, Professor and Plant Pathologist at Universiti Sains Malaysia visited UPLB, SEARCA's host institution, to explore collaborative research opportunities between Malaysia and the Philippines. During his monthlong stint at UPLB, Dr. Khew was able to share his teaching and research experienced to UPLB's Department of Plant Pathology.

SEARCA also collaborated with Universiti Malaysia Sarawak on a three-year project to develop and implement a Master of Science related to Integrated Management of Natural Resources and Agricultural Development (INRAD) that was launched at SEARCA in November 2006. Funded by the Asia Link Program of the European Union, the project aimed to develop the human resource capacities of the Royal University of Agriculture (RUA) in Cambodia and Universitas Lampung (UNILA) in Indonesia. Aside from Universiti Malaysia Sarawak, KU also provided technical assistance to RUA and UNILA. In 1996, SEARCA assisted UPM's Institute of Consultancy in setting up the University Business Center.

Under the SEARCA-led project on Leveling-Up Philippine Higher Education Institutions in Agriculture, Fisheries, and Natural Resources (LevelUPHEI AFAR), UPM hosted various benchmarking activities and organized the UPM-SEARCA International Research Knowledge on Halal Industry Program for members of the State Universities and Colleges - Association of Colleges of Agriculture in the Philippines (SUC-ACAP). Select senior faculty members were also given the opportunity to stay for one month to conduct research and curriculum development.

### ■ TRAINING FOR DEVELOPMENT

Short-term training is SEARCA's fast lane to building the capacities in the agriculture and rural development sector of SEAMEO member countries. Training activities are geared toward developing the technical and managerial competencies of university faculty members, researchers, agricultural and environmental leaders, and development practitioners in Southeast Asia.

Since SEARCA began this capacity building service in 1970, 945 Malaysians had participated in 209 international, regional, in-country SEARCA training courses, faculty seminars, and learning forums on various topics, including:

- · Agricultural Research Management
- Case Writing in Agribusiness and Related Projects
- Training Methodology and Techniques
- Social Laboratory and Technology Transfer Management
- · Teaching Personnel in Higher Education in Agriculture
- Information Systems for Subnational Development Planning
- · Development Strategies and Planning for Farmers' Communities (DSPFC)
- On-Farm Trials for Technology Verification (OFTTV)
- Data Management for Rural Development (DMRD)
- · Strategies for Rural Development
- Research Management Enhancement Course (RMEC)
- · Sustainable Agriculture for the Uplands
- Climate Change Adaptation and Mitigation
- Leadership Excellence in Academe Program for Southeast Asia (LEAP SEA)
- · Natural Resource Management

Twenty-three of these learning events were conducted in Malaysia, as follows:

- Seminar-workshop on Rural Credit and Savings, Jan 1971
- Workshop cum Training on Farmers' Association Agribusiness Management, Jun 1973
- Agricultural Research Management International Conference-Workshop, 28 Nov-2 Dec 1977
- Course for Grain Drying Technicians, 10-20 Apr 1978
- Malaysian Agricultural Research Management Training and Case Writing Workshop, 25-30
   Jun 1979
- Third Regional Seminar on Management of Farmers' Associations, 9 Jun-3 Jul 1980
- Workshop on Small Business Development, 22-27 Sep 1980
- AGROVOC Training Seminar, 1-5 Jun 1981
- SEARCA-UPM Workshop in Research Management for the Development of Farmers, 14-16
   Sep 1981
- Specialized Course on the Operation of Modern Rice Processing Facilities, Feb 1982
- In-country Training cum Workshop on Development Strategies and Planning for Farmers' Communities (DSPFC), 10-21 Jan 1983

- 15th Regional Training Program on DSPFC, 9 Nov-18 Dec 1987
- 19th Regional Training Program on DSPFC, 5 Sep-14 Oct 1988
- 23rd Regional Training Program on DSPFC, 10 Jul-18 Aug 1989
- Fifth Research Management Enhancement Course, 1-26 Aug 1994
- Regional Event on Understanding the Fundamentals of Halal towards Food Security in the ASEAN Region, 8-11 Apr 2019



Participants from three different SEAMEO Centers in Malaysia pose for a group photo during the 2nd SEAMEO Knowledge Management Learning and Sharing Forum held at SEARCA in August 2023.

# RESEARCH AND THOUGHT LEADERSHIP



One of SEARCA's main objectives is to conduct and coordinate appropriate and relevant research that promotes accelerating transformation through agricultural innovation (ATTAIN). Central to the Center's resolve to be strategically visible and more relevant for all stakeholders and strategic agricultural and rural ecologies, SEARCA's core program on Research and Thought Leadership undertakes policy analyses, research for development, and facilitate knowledge platforms.

#### ▶ PAST RESEARCH PROJECTS AND POLICY STUDIES

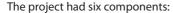
SEARCA has worked with various development organizations and research institutions in the implementation of the following completed research and policy studies in the ASEAN region, including Malaysia:

# Implications of ASEAN Economic Community (AEC) and Trade and Investments on Regional Food Security

SEARCA partnered with the Universitas Gadjah Mada (UGM) of Indonesia to implement this project which was identified by the SEARCA-initiated Southeast Asian University Consortium for Graduate Education in Agriculture and Natural Resources (UC) as one of the six priority research and development areas for collaborative undertaking under SEARCA's Umbrella Program on Food and Nutrition Security for Southeast Asia (FANSSEA). The project analyzed the potential impacts of AEC on existing trade agreements, flow of investments, and related commitments among ASEAN member countries, including Malaysia, and across existing ASEAN Free Trade Agreements (FTAs), and its implications on food security in the region.

### Safeguarding and Sustaining the Integrity of Halal Food

The project intended to generate high impact researches in the areas of alternative ingredients. authentication techniques, consumer acceptance, and perception as well as the effect of halal slaughtering system on animal welfare and meat quality. The project also aimed to contribute in providing a well-trained human capital in the halal food processing industry and a comprehensive database of halal food products and traceability system.



- · Comparative study on the consumers' acceptance and economic impact of verified and certified halal food in ASFAN countries
- Development of authentication analytical tools for halal food product verification
- Development of alternative ingredients and products for halal food processing application





- Welfare and meat quality of livestock slaughtered according to halal method using restraining mechanism and different knife sharpness
- Development of database and halal traceability system for halal food products
- Halal awareness and halal compliance training in food processing for ASEAN countries

Universiti Putra Malaysia (UPM) led the project, which is a UC initiative. Tokyo University of Agriculture (Tokyo NODAI) and UPLB are also involved as project partner institutions.

## Postharvest System Improvement – Best Practices in Fresh and Dried Chili in Southeast Asia: Quality and Safety Aspect, Kasetsart University

From July 2015 to February 2016, the project was conducted with Kasetsart University (KU) as lead in collaboration with the members of the UC, specifically University of the Philippines Los Baños (UPLB), Universitas Gadjah Mada (UGM), IPB, and Universiti Putra Malaysia (UPM) with country focus on Indonesia, Malaysia, the Philippines, and Thailand. The outputs of the study include:

- Supply chain of fresh chili varies in each country and comprise of pool traders, distributors, wholesalers, retail traders and household:
- · Middle-large scale chili farms showed a good adherence to good agricultural practices (GAP) while small scale chili condiment producer revealed noncompliance with all aspects of good manufacturing practice (GMP); and
- · GAP guidelines for both fresh and processed chili production need to be disseminated more extensively to small farms and industries in Southeast Asia.

# ASEAN Working Group on Social Forestry Strategic Response Fund (ASRF) under ASFCC Phases 2 & 3

Malaysia was one of the countries covered by the ASEAN Working Group on Social Forestry Strategic Response Fund (ASRF), which SEARCA implemented as the supporting partner of the ASEAN-Swiss Partnership on Social Forestry and Climate Change (ASFCC). The ASRF is a flexible funding mechanism that aimed to enable the ASEAN Member States Focal Points to quickly respond to emerging issues and challenges



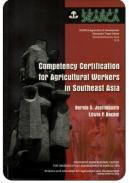
and articulate policy recommendations and directions on social forestry as it relates to climate change, food security, and poverty alleviation.

Under the two phases of ASRF, grants were awarded to three projects in Malaysia from 2014 to 2020:

- Development of a National Roadmap on Social Forestry in Malaysia
- Technical Study Tour on Social Forestry
- Conservation and Consumption Goods & Nature-Based Recreation: A Community-Based Ecotourism Project in Malaysia

## **Competency Certification for Agricultural Workers in Southeast Asia**

SEARCA had been enjoined by the Southeast Asian Ministers of Education Organization (SEAMEO) in 2017 to conduct a study on competency standards for agricultural workers in Southeast Asia as a step forward in mapping national competency standards among the Southeast Asian countries. SEAMEO promotes technical and vocational education and training (TVET) as one of its seven education priorities. Hence, the collaborative study has been instrumental to the formulation of regional and national qualification reference frameworks and assurance framework, which was recognized to be essential in the harmonization and internationalization of TVET in Southeast Asia.



The results of the project were presented and validated in a regional workshop convened in May 2018 in the Philippines and jointly hosted by SEARCA and the Philippine Technical Education and Skills Development Authority (TESDA). It was participated in by representatives of TVET institutions from Brunei Darussalam, Indonesia, Lao PDR, Malaysia, Philippines, Thailand, Timor-Leste, and Vietnam; SEAMEO Secretariat; SEAMEO Regional Center for Vocational and Technical Education and Training (VOCTECH); SEARCA; the International Labour Organization (ILO); and private sector organizations involved in skills development of agricultural workers. It crafted a four-point recommendation that was subsequently presented and elevated for consideration in the 4th HOM on SEA-TVET held in September 2018.

The four-point recommendation focused on the following:

- Encourage TVET institutions to increasingly assume proactive and transforming roles in assessing, validating, and certifying skills and experience gained through non-formal and informal modes within a lifelong learning framework;
- Strengthen and expand competency certification systems to cover recognition of nonformal and informal learning;
- Encourage TVET institutions to pursue partnerships and alliances with a broader range of stakeholders; and
- Promote support from regional TVET networks and international cooperation.

## Review and Assessment of the Agricultural Innovation Systems (AIS) in ASEAN

The Organisation for Economic Co-Operation and Development (OECD) collaborated with SEARCA for the conduct of this scoping study whose results were the basis for the policy dialogue between the OECD and ASEAN countries, including Malaysia, to secure food security in a long-term perspective.

Implemented from July 2015 to June 2016, the study aimed to identify the policy issues to improve agricultural productivity growth and sustainability in ASEAN region. Specifically, it aimed to provide an overview of agricultural innovation system in ASEAN countries, highlighting the need to evolve agricultural innovation system to generate innovative solutions for long-term food security concerns.

# Food Reserves: A Comparative Study on Food Reserve Management and Policies in Southeast Asia

Malaysia was among the countries covered by this project, which was a collaboration between SEARCA and the members of the UC. The project was under the auspices of SEARCA's Umbrella Program on Food and Nutrition Security for Southeast Asia 2014-2019.

#### The project aimed to:

- Define and understand the importance of keeping food stocks and reserves, and the rationale behind countries' decision to stockpile.
- Identify commodities that countries stockpile and the modalities and mechanisms of food stockpiling that have been adopted, including physical, virtual, trade, national, and regional mechanisms.
- Examine the implications of a changing regional trade regime on a country's foodstocks, as well as the impact of individual countries' food reserves on a regional stockpiling mechanism such as the ASEAN Plus Three Emergency Rice Reserve (APTERR).
- Explore the feasibility of establishing other types of regional stockpiles beyond reserves.

In addition to the survey in the 11 Southeast Asian countries, SEARCA organized a workshop involving all countries to determine the role of food reserve management and policies in the region and identify implications of a changing regional trade regime, like the ASEAN Economic Community 2015 (AEC 2015), on a country's food stocks. Countries stockpile food, particularly rice, in different modalities and adopt a mix of trade instruments. Thus, SEARCA chose rice as a starting point to study food reserve management processes and policies in Southeast Asia.

### Umbrella Program on Climate Change Adaptation and Mitigation in Southeast Asia

From 2015 to 2020, this program was jointly implemented by SEARCA and the UC with the CGIAR Research Program on Climate Change, Agriculture and Food Security–Southeast Asia (CCAFS SEA) and the International Center for Tropical Agriculture (CIAT). It covered Malaysia and the 10 other Southeast Asian countries.

#### **Umbrella Program on Food and Nutrition Security for Southeast Asia**

The Umbrella Program on Food and Nutrition Security for Southeast Asia was envisaged to serve as a platform for collaborative research on food security among the UC members and partner universities/institutions from the SEAMEO member countries. It aimed to align the program of work on food security of SEARCA and the UC to the development needs in the region and to support ongoing ASEAN-level programs on improving food security. The priority areas for collaboration were addressed through three integrated components: research and development, capacity building through graduate education and training, and knowledge management.

## **Other Past Research Projects**

SEARCA also implemented a number of research projects with significant outcomes in Malaysia, including the following:

- Comparative Study of Agricultural Efficiency in Southeast Asia
- High-level Agricultural Manpower Requirement of Selected Countries in Asia
- Uniform Regional Tests of Selected Varieties of Crops which are Potential Sources of Protein in Seven Locations in Southeast Asia
- Agricultural Information Bank for Asia (AIBA)
- Action Model for Human Resource Development
- · Research Management Project in Asia
- Planning Methodology for Farmers' Community Development
- Data Management for Rural Development and Food Security
- ASEAN Integrated Pest Management (IPM) Knowledge Network Project
- Sub-Mekong and Malaysian Market Assessment Mission
- Small Grants Programme for Operations to Promote Tropical Forests in South and Southeast Asia (SGP PTF)



#### RESEARCH AND COLLABORATIVE GRANTS

#### Seed Fund for Research and Training (SFRT)

The Southeast Asian region has a number of promising researchers and scientists whose desire to contribute to the region's development through research and knowledge dissemination initiatives is hindered by lack of funds. This situation serves as a barrier to translating promising research and training into scientific outputs that could be applied to promote development.

To address this concern and in line with the Center's thrust of promoting, undertaking and coordinating research programs relevant to the agriculture and rural development needs of the region, SEARCA will make available a pool of funds to be known as the SEARCA Seed Fund for Research and Training (SFRT).

The SFRT is envisaged to provide chosen research and training project proposals with limited start-up funds intended to enhance chances of securing long-term support from donor agencies. A grant of up to USD 15,000 shall be awarded as seed fund for research/training.

To date, a total of five Malaysians received SFRT grants for their research projects.

## **Travel Grants Program**

To reinforce the Center's efforts and resources in accelerating transformation through agricultural innovation (ATTAIN) and become a leading enabler and champion of excellence in agricultural and rural development, SEARCA provides travel grants of up to a maximum of USD 1,200 to each qualified agriculture and agriculture-related professional, social scientist, or graduate student in Southeast Asia.

To date, more than 10 Malaysians have been provided travel grants under the program.

#### IFS-SEARCA Collaborative Research Grants

In 2016, the International Foundation for Science (IFS) and the Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA) implemented grants scheme for collaborative research called the IES-SEARCA Collaborative Research Grants Pilot in Southeast Asia. It was open to the nine Southeast Asian countries of Cambodia. Indonesia, Lao PDR, Malaysia, Mvanmar. the Philippines, Thailand, Timor-Leste, and



Vietnam, and focused on climate change adaptation and mitigation.

As a follow-on collaboration between IFS and SEARCA, in December 2020, the Mentorship Program for Advanced Grants was launched with a Call for Research on Accelerating Transformation through Agricultural Innovation (ATTAIN). Promising scientists will benefit from translating their research and scientific outputs into knowledge that can be applied to promote development, while enhancing their capacities to develop research proposals and conduct research, and also expanding their reach in terms of contributing to the body of knowledge in their research areas. The purpose of the Mentorship Program is to nurture relationships between established scientists and early career researchers (the IFS-SEARCA grantees) that are intended to help the latter to strengthen their research processes, ensure that their projects are of high quality, and produce useful results.

In partnership with SEARCA, IFS supports Southeast Asians who are enrolled in a PhD degree program or have recently completed a master's or PhD degree within the five years from the time of the call, and with limited research start-up funds. This call, however, gives priority in terms of number of slots to its scholarship alumni; faculty and staff of partner universities and universities under its institutional development assistance program; and other regular employees of development organizations, academic institutions and government agencies of Southeast Asian countries, such as Cambodia, Lao PDR, Myanmar, Philippines, Timor-Leste, and Vietnam.

The implementation of the new Advanced Grant scheme continued. Ten successful applicants received an IFS-SEARCA Advanced Grant to conduct their research within one to three years.

# ► AGRICULTURE, FORESTRY, AND NATURAL RESOURCES (AFNR) KNOWLEDGE PLATFORM

For almost six decades, SEARCA has been actively working with different like-minded institutions and networks in conducting research that addresses critical issues related to the region's agricultural and rural development. Capitalizing on this knowledge resource, SEARCA is leading the establishment of the Agriculture, Forestry, and Natural Resources (AFNR) Knowledge Platform.

The knowledge platform primarily aims to facilitate and sustain an ecosystem for knowledgesharing that contributes to agricultural and rural development in the Southeast Asian region and beyond. It also ensures access to an accurate, highly credible, sound, timely, and reliable source of information that will fuel future research activities, capacity-building initiatives, policy development, and technological innovations aimed at accelerating transformation in the region's agricultural sector.

It has three main components: knowledge generation, exchange, and utilization, which support the Community of Practice (CoP). Knowledge generation includes the conceptualization and organization of opportunities for knowledge sharing and learning (conferences, roundtable discussions, webinars, etc). Part of this is facilitating the link with other SEARCA programs and harvesting their knowledge products through the Applied Knowledge Resources Unit (AKRU).

While AKRU works on scholarly publications, AFNR will work on popular formats, addressing the needs of our other stakeholders and providing another entry point/access to other SEARCA resources.

The second part is the knowledge exchange, the actual website itself. In this part, the contributions of the programs will be categorized into these thematic areas. These are loosely based on our ATTAIN Priority Areas (our current five-year plan): Food and Nutrition Security; Sustainable Farming Systems and NRM; Value Addition, E-Commerce, and Industry Development; Policy and Thought Leadership; and Training and Capacity Building. There will also be links to other tools/resources like the SEARCA Library, AgPractices, Access Agriculture videos, etc.

The last part is knowledge utilization, the Community of Practice. One of the significant developments for the knowledge platform this year is its integration into the SEARCA Consortium for Agricultural Development, Research, and Extension (CADRE), where it is envisioned to serve as the Knowledge Management (KM) arm of the Research Consortium.

The knowledge platform will continue to be client-driven as it caters to the information needs of external stakeholders. Its content will also be designed to stir discussions in the CoP. Regular activities (e.g., an online forum on a certain timely/relevant topic) will also be conducted to keep the CoP active and engaging.

As the KM component of CADRE, the AFNR Knowledge Platform aims to broaden the CoP (and Interest) through a culture of knowledge-sharing, exchange, and engagement. Moving forward, the knowledge platform will advocate D4A (Data for All) that supports data inclusivity access through the development and provision of agricultural data and statistics tools.

# **EMERGING INNOVATION FOR GROWTH**



SEARCA's core program on Emerging Innovation for Growth (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:

- · Project Development, Monitoring, and Evaluation
- · Knowledge and Technology Transfer
- · Open Innovation and Agri-Incubation

#### ▶ PROJECT DEVELOPMENT, MONITORING AND EVALUATION

Objective: Implement value-driven programs, projects, activities upholding SEARCA brand

EIGD prioritizes innovative programs, projects, and training initiatives, emphasizing diversity across various fields with a regional and subregional focus on agricultural and rural development (ARD) in collaboration with various organizations with same visions in mind.

#### **SEARCA-initiated projects**

Aligned with its commitment to fostering innovative agricultural solutions, SEARCA undertakes projects that aim to enhance agricultural knowledge and practices while safeguarding the environment.

#### SEARCA Platform for Attaining Agri 4.0 Collaboration and Engagement (SPACE)

SPACE is a virtual community designed to foster collaboration and innovation among experts from academia, industry, government, and local communities. The platform connects professionals through an interactive database and open calls for collaboration, creating limitless opportunities for cooperative ventures in agricultural technology and sustainable development.

In a recent outreach initiative, 60 emails were sent to a carefully curated list of experts, inviting them to join SPACE's growing pool of professionals. Over 25 experts, representing a diverse range of fields, have already expressed interest in joining this dynamic network. By becoming part of SPACE, these experts are contributing to a vibrant ecosystem of knowledge exchange and partnerships that seek to revolutionize agriculture across Southeast Asia.

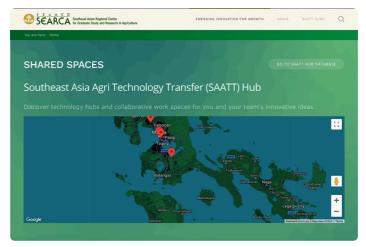


The SPACE platform is now accessible via https://space.searca.org/

With the participation of leading researchers, technology innovators, policymakers, and community leaders, the platform offers a unique space where cutting-edge ideas and practices can be shared to accelerate the adoption of Agri 4.0 solutions. Through its expert pool, SPACE facilitates collaborations that address key challenges in agriculture, from increasing productivity and food security to implementing sustainable practices and advanced technologies.

### Southeast Asia Agri-Technology Transfer (SAATT)

The creation and development of the Southeast Asian Agri-Tech Transfer (SAATT) Hub website hosted by SEARCA shall establish SEARCA as a champion and enabler in the agri-tech transfer landscape. The SAATT Hub shall be SEARCA's contribution to the aggressive brokerage of already existing or upcoming innovations in agriculture by serving as the virtual central hub where agri-based and agri-related technology transfer institutions and stakeholders from the academe, industry, and government could promote and showcase innovative products and agri-technologies. The SAATT Hub shall also serve as a platform for agricultural cooperatives, farmers, and farming families in the region to gain access to SEARCA's IP and tech transfer assets, modern agri-technologies, and disruptive solutions to transform mindsets and agricultural systems ushering Agri 4.0. After its integration at the SEARCA website in June 2024, more than 25 of the invited experts confirmed their participation and interest in the SPACE platform. With this, 12 institutions across Southeast Asia also agreed to be part of SEARCA's network of Tech Hubs under SAATT



SAATT webpage available at https://saatt.searca.org/

#### ► KNOWLEDGE AND TECHNOLOGY TRANSFER

**Objective:** Enhance Partnership and leadership in priority areas and emerging concerns

### Farm-level technology transfer: Automated Calamansi Sorter (ACS)

Under EIGD's Knowledge and Tech Transfer initiative is the facilitation of the adoption and transfer of emerging and innovative agri-tech innovations and linkages. SEARCA promotes the adoption of innovative agri-tech solutions at the farm level to enhance agricultural productivity and sustainability. Through partnerships with academic and research institutions, SEARCA facilitates the development and dissemination of technologies that address specific challenges faced by farmers. This initiative focuses on practical solutions that improve efficiency and profitability at the farm level, ensuring that innovations are accessible and beneficial to smallholder farmers across the region.

#### **Digital Agriculture Platform**

SEARCA is modernizing agriculture through digital platforms that connect farmers directly with markets, ensuring fair trade and improved livelihoods. These platforms leverage technology to streamline the supply chain from farm to fork, benefiting both farmers and consumers. In an increasingly digital world, SEARCA's Digital Agriculture Platform bridges the gap between farmers and markets, enabling smallholder farmers to thrive in a competitive landscape. By integrating technology into traditional farming practices, SEARCA is helping to secure a sustainable and profitable future for agriculture in the region.

## Agri-robotics activities

SEARCA is dedicated to bringing about agricultural transformation through the adoption of a new concept of agriculture, Agri 4.0, redefined by modern technologies, processes, and dynamics. Moreover, SEARCA is committed to the development of the next generation of agriculture leaders and professionals.

#### Development and Piloting of Agri-Robotics Module

Envisioning to accelerate transformation to Agriculture 4.0 by nurturing innovations, SEARCA invests in empowering and equipping the youth and by developing and making innovative programs available and accessible to spark their interest in agriculture through new and creative approaches to complex problems in food production. One way of doing this is by building the capacities of school teachers and equipping them with resources that they can use to integrate Agriculture 4.0 in their lessons under the K-12 curriculum.

#### Agri-mechanization through Tractor Development

SEARCA is advancing agricultural mechanization by promoting open systems manufacturing, which allows for the customization and scaling of farming equipment to meet the specific needs of smallholder farmers. This initiative focuses on developing and deploying innovative, locally adaptable machinery to enhance agricultural productivity.

Empowering farmers with the right tools is essential for sustainable agricultural growth. Through its agri-mechanization initiative, SEARCA is collaborating with global and local partners to bring innovative, open-source machinery to the fields, tailored to the unique needs of smallholder farmers in the region.

#### **▶ OPEN INNOVATION AND AGRI-INCUBATION**

## **Grants for Research Towards Agricultural Innovative Solutions (GRAINS)**

GRAINS is a SEARCA program started in 2020 supporting agri-entrepreneurial minds by providing short-term starter funds to innovative agricultural concepts, prototypes, and ventures, supporting sustainable agriculture and rural development across Southeast Asia. By 2023, GRAINS supported 25 total projects hailing from Indonesia, Philippines, Malaysia, Thailand, and Myanmar.

In 2023, GRAINS supported the development and upscaling of Intelligent Fish-Feeder Based on Biomass Information Using an Integrated Computer-Vision YOLOv9 Model and IoT System. The project, granted to the University of Putra Malaysia (UPM), intended to develop an automated and more efficient feeding of fish by small-scale aquaculture farmers in Port Dickson, Negeri Sembilan. Over 60 aquaculture farmers will cooperate to promote the awareness and adoption of the intelligent feeder.

#### Open innovation and knowledge exchange

By facilitating two open innovation and knowledge exchanges in 2023, EIGD institutionalized partnership and collaboration among parties towards a synergistic innovation ecosystem and knowledge exchange and strengthened innovative and entrepreneurial mindsets.

The <u>Southeast Asia Agri-Innovation Forum</u> was a hybrid online and offsite event that showcased multi-country projects from new grantees funded by GRAINS. Chosen from hundreds of applications, these projects aim to tackle critical challenges faced by farming communities and drive agricultural transformation across Southeast Asia. Grantees from Indonesia, Malaysia, Myanmar, the Philippines, and Thailand presented their project concepts, inviting feedback and insights from our panel of experts.

AgriTech Field Day. Farmers' Exchange Program with GRAINS startup grantees. The onsite event, organized by SEARCA in collaboration with the Center of Excellence on Sustainable Agricultural Intensification and Nutrition (CE SAIN) in Cambodia, brought together farmer leaders and agritech startups in Cambodia and Europe. Startups supported by Impact Hub Phnom Penh, namely ADSA, DamDoh App, and Chalatex, and other innovators such as S.E.C. Solar Energy and SpaceCrop Technologies – Hungary, explored potential synergies within the Southeast Asian and European innovation ecosystem. The event provided a chance to share technologies and innovations, including demonstrations at the CESAIN Agricultural Technology Park, for the benefit of farmers and rural communities.

Modern Agri-Education at Learning Hubs. To facilitate the exchange and dissemination of modern agricultural knowledge among youth, the SEARCA Hub for Agricultural and Rural Innovation for the Next Generation (SHARING) webpage was launched in 2023. The SHARING website features information about the onsite SHARING museum and the SHARING Café, which can host activities such as ideation sessions, hands-on learning, and internship programs focused on agrobotics.



SEARCA Center Director Glenn B. Gregorio toured the visitors from Kaoshiung Medical University to the SHARING Museum.

These modernized learning approach and learning events focused on skill development and capacity building for the youth by providing and equipping the participants with practical knowledge and skills in technologies and innovation in agriculture. Such activities also exposed the youth to career opportunities and income-generating activities in agricultural technology, further igniting their interest in the critical fields of food security.

Through these learning events, SEARCA strengthened its impact on stakeholders and further contributed to the advancement of sustainable agriculture and rural development.

#### Agripreneurship and startup acceleration

To foster the growth of startups in the agriculture sector, we launched acceleration projects in collaboration with industry partners and business incubators, starting with the Philippines and Cambodia. Our goal is to mentor agriculture-focused startups throughout the region, helping them advance to the next stage of growth and ultimately benefiting farmers and farming communities across Southeast Asia.

#### **Unveiled Impact Stories of Innovation**

To continue disseminating stories of agri-innovation from projects funded by SEARCA GRAINS, three new video packages were created to inspire the adoption of best practices and to draw lessons toward successful project implementation. A total of seven stories are accessible through SEARCA website (<a href="https://www.searca.org/grains#stories">www.searca.org/grains#stories</a>) and social media platforms such as YouTube.

Among these stories is the Bioplastic Shifts Agrowaste into Sustainable Solution that presents scientists at the University of San Carlos (USC) using discarded shrimp shells to create bioplastic, a biodegradable and low-carbon alternative to combat plastic pollution. This enables redirection of agro-industrial waste from landfills to a circular economy. The story was also repackaged by SEARCA and USC Cebu into a one-minute 'Science in Shorts' entry titled "Unusually sustainable - bioplastics from shrimp shells plus mango waste!" The video premiered at the Curious2024 - Future Insight conference in Mainz, Germany, and garnered the "Top 10 Nature Awards" out of 250 videos submitted by researchers across the world.

## YOUTH FORCES FOR AGRICULTURAL INNOVATION (#Y4AGRI)

The Young Forces for Agricultural Innovation (#Y4AGRI) is SEARCA's banner youth engagement initiative. Guided by the principle of "by the youth, for the youth, and with the once youth," the program aims to nurture young people as partners and leaders for agricultural innovation.

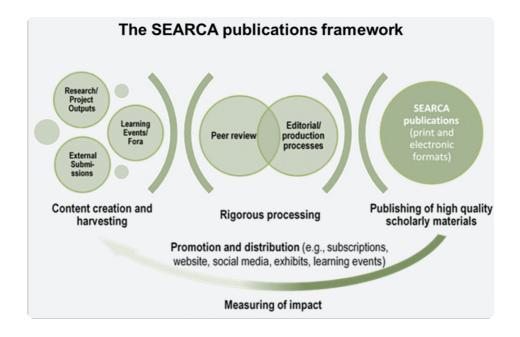
It also aims to step up efforts in promoting agriculture among Southeast Asian youth and showcase it as a viable career opportunity. Among the initiatives to support this mission is the Sowing Seeds: Cultivating Youth's Future in Agriculture, an orientation program for senior high school (SHS) students on the different career paths in agriculture, including the option to take up agriculture and related courses in college or explore entrepreneurial opportunities in agribusiness. As of September 2024, four sessions of Sowing Seeds have been successfully conducted in the Malaysia (1), Philippines (2), and Thailand (1).



Another initiative is the Youth in Agri Talk Show, a non-academic and non-conventional approach to learning to promote agriculture and its importance to Southeast Asian youth, particularly those in primary and secondary education. The second episode, titled "Winged Warriors: The Unsung Heroes of Agri-Land" with guest Dr. Nur Azura Adam, SEARCA Deputy Director for Programs, was participated by SMK Seri Jempol in Malaysia, Colegio de San Juan de Letran Calamba in the Philippines, and HFSE International School in Singapore.



# **KNOWLEDGE DISSEMINATION**



#### **▶ PUBLICATION**

SEARCA publication provides one important avenue for knowledge creation in ARD. This ensures that research results, policy discussions, and best practices from the field, among its primordial knowledge sources, are packaged and broadly shared. SEARCA aims to publish high-quality professional, intellectual, and scholarly output in ARD with scholars, researchers, and policymakers as intended readers. A broad spectrum of ARD themes is published through a number of serial and non-serial SEARCA publications that include books, journal articles, monographs, discussion papers, and policy briefs.

Publishing for over half a century now, SEARCA has a publication pipeline of materials primarily sourced from outputs of its staple programs. External contributions are also welcome, notably for the Center's priority thematic content. All materials submitted for publication as books, monographs, or journal articles undergo rigorous peer review and editorial processes to ensure high quality.

Over 500 various publications are curated in SEARCA's knowledge inventory system (mostly those published year 2000 onward). As September 2024, 23 titles either focused on Malaysia







or included it in its country of coverage have been published by SEARCA.

These include monographs (7), discussion paper series (1), briefs and notes (6), proceedings (2), and journal articles (7).

# Agroforestry Status, Trends, and Outlook in Southeast Asia

The World Agroforestry (ICRAF) and SEARCA recognize the momentum brought by the adoption of the ASEAN Guidelines for Agroforestry Development and would like to harness this development by heeding the call of the ASEAN food, agricultural, and forestry (FAF) sector to produce the

first Agroforestry Status, Trends and Outlook for Southeast Asia. The report published in 2021 gathered the relevant perspectives from key stakeholders in the sector to respond to the challenges and ensure resilient interventions in agroforestry. This will further guide development efforts and sustainable policies that can shape leadership roles, produce more responsive institutional arrangements, and enhance governance.





Under the Technical Cooperation Program of the Food Agriculture Organization of the United Nations (FAO) and the ASEAN Secretariat on "Scaling up Agroforestry for food security and environmental benefits in Southeast Asia," the ASEAN Food, Agriculture and Forestry sector is requesting a report that encapsulates the status, trends and outlook of agroforestry in the Southeast Asian region. Such report will:

- Provide information on agroforestry practices, concepts, programs, policies, training, education and research, industry, issues/challenges, impacts and other relevant aspects.
- Draw an outlook of agroforestry into the future toward a resilient Southeast Asian region.
- Have an accompanying monitoring and reporting design for ASEAN Member States, which
  include Malaysia, to report on contributions and progress toward achieving resilience
  through agroforestry in the region.

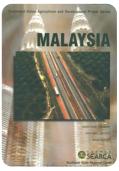
# Farms, Food, & Futures: Toward Inclusive and Sustainable Agricultural and Rural Development in Southeast Asia

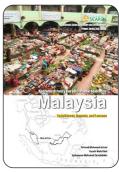
Dubbed as Agriculture and Rural Development (ARD) Book 2016, SEARCA spelled out in this publication the nuances of productivity-enhancing interventions moving forward, carefully drawing from in-depth analyses and syntheses of lessons, experiences, and empirical evidence on Asia's ARD. The book provided an overview of the complex issues and challenges, as well as opportunities arising from the structural transformation and market integration happening in the region. For the ARD Book 2016, SEARCA assembled eminent experts and thought leaders working in ARD in the region, and together authored the book with four cross-cutting and contemporary ARD themes, namely: inclusive growth; sustainability; regional integration; and institutions, governance and transformation.

## Agriculture and Development Primer on Malaysia

SEARCA published a primer on Malaysia in 2005 as part of its Southeast Asian Agriculture and Development Primer (SAADP) Series. Each volume of the series presents the featured Southeast Asian country's state of agriculture in a holistic, yet concise form. The first edition presented the country's state of agriculture and shows the institutions, structures, and policies, and other areas affecting the sector's performance over the past three decades. Its authors are Dr. Zainal Abidin Mohamed, Mr. Amin Mahir Abdullah, and Mr. Ismail Abd Latif, all of the UPM Department of Agribusiness and Information System.

Published in 2014, the second edition of the primer on Malaysia was authored by Dr. Fatimah Mohamed Arshad, Mr. Kusairi Mohd Noh, and Ms. Syahaneem Mohamad Zaibalabidin, all of UPM. This edition presented an analysis of the country's experiences, lessons, and insights on policy reforms and institutional innovations in the agriculture sector. Also discussed in the primer are a number of policy innovations that contributed to Malaysian's agricultural development such as the Economic Transformation Program. The primer also offered policy recommendations to address new and emerging issues on food security, poverty, and environmental sustainability.





#### **▶ PROMOTION AND DISTRIBUTION**

The Center has, in recent years, been investing in ensuring that its publications and other knowledge products maximize their intended use and not gather dust on a shelf. As it were, its momentum for more visibility online has proven more relevant than anticipated during the pandemic that started in 2020. The situation resulted to lessened printing and suspended the traditional distribution of physical copies and face-to-face knowledge exchanges/interactions.



The SEARCA website complemented by its social media presence are the current channels in which the Center's knowledge creations are accessed. Almost all publications are downloadable for free; learning/knowledge events and presentations are also freely accessible. As of 30 June 2024, a total of 53,683 publications have been downloaded from searca.org, SEARCA's official website. Over 28,000 people from 169 countries have downloaded these knowledge materials. The most downloaded types are refereed journal articles, books and monographs, and various briefs and notes. As of June 2024, 615 downloads of SEARCA publications have been made by Malaysians.

#### **► LIBRARY AND ARCHIVES**

The SEARCA library, which houses a collection of over 16,300 agriculture and development-related references, serves primarily SEARCA scholars and staff, but it also accommodates other users. The references are also listed in SEARCA's online library information system (LIS) <a href="https://lis.searcaapps.org/lis/">https://lis.searcaapps.org/lis/</a> to facilitate faster access and search. The LIS also includes theses and dissertations of SEARCA scholars as well as web links to various online resources, such as articles on the latest updates in agriculture and development.

The Center's archives have digitized all vital records for efficient information processing, storage, access, and dissemination. Over



7,400 SEARCA documents have been digitized, including personnel and scholars' records, project reports, publications, financial statements, agreements, directors' exit reports, five-year plans, memorandums, and contracts.

# **MANAGEMENT**

Malaysia is currently represented in the SEARCA Governing Board by YBhg Prof Dr Nazamid bin Saari, Deputy Vice-Chancellor (Research and Innovation), Department of Food Science, Faculty of Food Science and Technology, UPM. The SEARCA Governing Board is the Center's highest policymaking body composed of representatives of the 11 SEAMEO member countries.

At present, the SEARCA Center Director is Dr. Glenn B. Gregorio. The Deputy Director for Programs and the Deputy Director for Administration are Dr. Nur Azura Binti Adam and Assoc. Prof. Joselito G. Florendo, respectively.

