CAMBODIA
AND SEARCA
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. Cambodia joined SEAMEO in 1971.

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.

SEAMEO SEARCA
College, Los Baños, Laguna 4031, PHILIPPINES
Tel: (63-49) 536-2290, (63-49) 554-9331 to 9336, (63-2) 8657-1300 to 1302
Fax: +63 49 536-7097
E-mail: post@searca.org
Website: www.searca.org
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
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.
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 of SEARCA's main objectives is to produce high-quality 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 of scholarships that enable Southeast Asians working in agriculture and rural development to pursue their master’s or PhD studies.

Full Master’s and PhD Scholarships

So far, SEARCA has awarded full master’s and PhD scholarships to 95 Cambodians (70 MS, 25 PhD). Of these, 19 were supported by the German Academic Exchange Service (DAAD) and 11 were funded by the International Development Research Centre (IDRC) of Canada and administered by SEARCA under the Graduate Scholarship for Upland Agriculture and Food Security project. Meanwhile, four scholars are supported under the SEARCA-Nagoya University Scholarship Project. Of the Cambodian scholars, 76 had completed their study programs (62 master’s, 15 PhD).
PhD Research Scholarship
SEARCA’s PhD Research Scholarship provides financial support to qualified PhD students whose dissertation research are relevant to the priority thrusts of SEARCA. In 2008, Dr. Dok Doma of the Ministry of Rural Development received a PhD research scholarship for his study titled “Socio-ecological Contribution in Marine Fisheries: An Evaluation of Sre Ambil Coastal Lagoon Fisheries, Cambodia.” He earned his PhD in Aquaculture and Aquatic Resources Management from the Asian Institute of Technology in Bangkok, Thailand.

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 Cambodian has been awarded to pursue MS 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.

IDRC-SEARCA Scholarship Project
Cambodia is one of the four countries covered by the IDRC-SEARCA Graduate Scholarship for Upland Agriculture and Food Security. All of the 11 Cambodian scholars awarded through the project had completed their master’s program at the University of the Philippines Los Baños (UPLB).

NU-SEARCA Joint Research Scholarship in Agriculture
SEARCA and Nagoya University (NU) have embarked on a Joint PhD Research Scholarship project to contribute to the development of high-quality agricultural human resources in Cambodia by enabling at least four PhD candidates from the Ministry of Agriculture, Forestry and Fisheries (MAFF) to pursue the NU Transnational PhD Program at the NU Satellite Campus in the Royal University of Agriculture. There were four scholars under the project. The NU-SEARCA scholars were selected from among mid- and senior-level executives in MAFF who are engaged in framing policies or are researchers or technical staff involved in activities related to agriculture and veterinary science.
UPM-SEARCA Joint Scholarship
SEARCA and UPM initiated a joint graduate scholarship program in 2012. Ms. Bunnet Nha was awarded to pursue her PhD in Animal Science at UPM under this program.

Tokyo NODAI-SEARCA Scholarship for Dissertation Doctorate Program
The Tokyo University of Agriculture (Tokyo NODAI) and SEARCA provided a three-year scholarship to Mr. Ou Ratanak of the Ministry of Environment to conduct his dissertation titled “Estimating impacts of Ecotourism and NTFP’s on Livelihoods and Biodiversity Conservation in Cambodia.” He obtained his Dissertation Doctorate in Agricultural Engineering at Tokyo NODAI in September 2014.

Asian-European MS in Food Science
Three Cambodian scholars completed a 19-month course titled Asian European Master’s Degree of Science in Food Science and Technology (specialized in agro-food industries). The course was implemented by SEARCA in 2001-2002 with three other partners from France, Malaysia, and Thailand. The scholars had to complete nine consecutive modules of coursework in nine months and 10 months of thesis work with an appointed supervisor either in Southeast Asia or Europe. The degree was granted by the National Food Science Engineering Institute (ENSIA) of France.

Academic Bridging Program
This program provides assistance to nationals of Cambodia, Lao PDR, Myanmar, Timor-Leste, and Vietnam to strengthen their academic preparation and qualification to pursue graduate studies in agriculture and related fields. Aside from enabling scholars under this Program to enroll in undergraduate technical courses to enhance knowledge of their areas of specialization, the Program also supports English language proficiency training.

In support of this program, the UPLB Graduate School has offered a non-degree program specially designed to suit the academic background and specialization of each qualified candidate. Nine Cambodians received this scholarship, one of whom was able to gain admission to the MS in Horticulture program at UPLB.

Emerging Leaders in Transition Economies (ELITE) Awardee
Dr. Seng Mom, a SEARCA alumna and Vice Rector of Royal University of Agriculture (RUA), Cambodia, received this special citation on the occasion of SEARCA’s 50th Anniversary in November 2016 for actively contributing to the rebuilding of her nation through her transformative leadership.

Dr. Seng completed her MS in Tropical Forestry at Georg-August University of Göttingen in Germany under the SEARCA-Centre for Tropical and Subtropical Agriculture and Forestry (CeTSAF) scholarship in 2001.

Master of Science in Food Security and Climate Change (MS FSCC)
RUA and University of Battambang (UBB) were among the partners in the recently concluded MSFSCC project funded by ERASMUS+. Initiated by the Southeast Asian University Consortium
for Graduate Education in Agriculture and Natural Resources (UC), the project was led by Kasetsart University and conducted from 2016-2019. Aside from the UC members, RUA, and UBB, other partners included Chiang Mai University and Prince of Songkla University (Thailand), Central Luzon State University (Philippines), Nilai University (Malaysia), Montpellier SupAgro (France), Gottingen University (Germany), BOKU (Austria), and the network partners: Agreenium, Agrinatura, and SEARCA.

A total of 15 Cambodian students participated in various MS FSCC activities such as summer schools, trainings and one-semester mobilities. Three students from UBB were also awarded one-semester mobilities in Europe. Five lecturers also participated in trainings conducted for the project.

**Special Graduate Seminar**
The special graduate seminar is held once every semester and highlights outstanding research by a SEARCA scholar. Hosting the seminar is the Center’s way to support the scholars’ academic milestones and to recognize their capacity to produce quality research that has a great impact on agriculture and rural development.


**INSTITUTIONAL DEVELOPMENT**

Cambodia was one of the first beneficiaries of SEARCA’s Institutional Development Assistance (IDA) Program, which provided support to develop centers of excellence in agricultural education in SEAMEO member countries. SEARCA selects strategic universities that have the potential to contribute to the country’s development.

SEARCA has helped RUA in developing its curriculum, particularly in integrating business course to its agricultural economics program and continues to assist RUA in the development of its curriculum to align it with the current global trends. The IDA program also enables RUA faculty members and staff to benefit from SEARCA’s graduate scholarship and short-term training programs, all of which aim to build the capacities of the university’s workforce. SEARCA also helped RUA to look for donors and partners who can support the development plans of the university, which envisions the university to be responsive to the development needs of Cambodia.

**Graduate Scholarships**
Two new and ongoing IDA-SEARCA Scholars:
- Mr. Lyda Hok, PhD Agricultural Science, Kasetsart University
- Mr. Sokom Kong, PhD Sciences and Innovation for Animal Health, Kasetsart University

Two courses were conducted under IDA-RUA:
- Short Training Course on Water Resources Management for Smallholder Farmers, 5-9 October 2015
- English Enhancement Course, 4-8 June 2018
In September 2020, SEARCA and RUA signed a memorandum of agreement to implement the ‘Teaching-Learning and Research Capacity-building’ of the Higher Education Improvement Project (HEIP) approved by the Royal Government of Cambodia with the Ministry of Education, Youth and Sports (MOEYS) as the executing agency of the HEIP. Together, SEARCA and RUA will carry out the activities delineated in HEIP for promoting STEM and agricultural education and research at targeted higher education institutions and to start activities to strengthen higher education teaching-learning and research capacity in RUA.

Moreover, SEARCA and CE SAIN-RUA entered into a joint scholarship agreement effective January 2022 with the objective of contributing to the institutional capacity and human resources development of selected staff of RUA in Cambodia. The RUA staff are pursuing PhD graduate studies at Kasetsart University (KU) in Thailand with research topics focusing on agricultural extension models, agricultural research commercialization and the bridging of agriculture internship to employment competencies. The areas of expertise will significantly contribute to RUA’s 10-year Strategy 2021-2030 to develop human resources in agricultural education and communication. To date, three RUA staff have been awarded.

In 2000, SEARCA launched two projects:
• Sharing Resources in Higher Agricultural Education (SHARE), which sought to develop relations between members of the UC and develop universities in Cambodia, Lao PDR, Myanmar, and Vietnam
• Regional Volunteer Experts for Agricultural Modernization (REVEAM), which enabled SEARCA to conduct a Consultation Meeting cum Workshop on Agricultural Education, Research and Rural Development of Cambodia and a series of training on planning and proposal writing for the RUA in 2003 and 2004.

**TRAINING FOR DEVELOPMENT**

Since SEARCA began its capacity building service in 1970, 967 Cambodians have participated in 201 international, regional, and in-country trainings, seminars, and learning events. Thirteen of these learning events were conducted in Cambodia:

• Training-Workshop on Developing an IQA System for RUA (22-25 May 2023)
• Seminar-Workshop on Developing an IQA Manual for RUA (24-28 October 2022)
• Workshop on Developing Communication Skills for Higher Education Institutions in Cambodia (2-6 May 2017)
• Workshop on Developing Fundable Research Project Proposals for Agricultural and Rural Development (28 Feb-4 Mar 2017)
• Leadership Excellence in Academe Program for Cambodia (29 February-4 March 2016)
• Sixth Executive Forum on Leadership Excellence in Academe Program for Southeast Asia (LEAP SEA) (26-30 Jan 2015)
• IFS-SEARCA Grant Proposal Writing Workshop (27 April-1 May 2009)
• Training cum Workshop on Operational Planning (Jan 2004) Screenshot during the 3rd online workshop for RUA on 1 December 2020.
• Training cum Workshop on Strategic Planning (8-12 Dec 2003)
• Training Course on Strategies and Technologies in Sustainable Agriculture (9-11 Sep 2002)
• AHEAD Training Course with the Ministry of Agriculture, Forestry and Fisheries (2-6 Sep 2002)

**Institutional Cooperation in Training for Development**

Owing to the restrictions brought by the COVID-19 pandemic, Cambodian participants attended 13 learning events in 2020 and 2021 that were offered through online mode.

In 2020, SEARCA embarked on a series of workshops under the Development for an Internal Quality Assurance (IQA) System for the Royal University of Agriculture (RUA). This is part of a World Bank-funded Higher Education Institutions Capacity Improvement Project (HEICP) project for Cambodia. The SEARCA-RUA project aims to establish a broad-based technical cooperation for the development of an IQA standards and mentoring program for RUA. To date, SEARCA implemented 12 online workshops on IQA manual development, preparation and development of self-assessment reports for RUA’s Faculty of Agro-industry and Faculty of Veterinary Medicine, and finalization of standards, indicators and sources of evidences. The IQA manual for RUA is now being finalized.
In 2016, SEARCA together with RUA, embarked on co-organizing and implementing three learning events that were funded by the Ministry of Education, Youth, and Sports (MoEYS) under the Higher Education Quality and Capacity Improvement Project (HEQCIP). A total of 137 faculty and staff from the various higher education institutions in Cambodia participated in training programs on leadership in the academe, developing fundable research project proposals, and developing communication skills.

In January 2015, SEARCA and the University of Battambang (UBB) signed an agreement to cooperate in the conduct of the Sixth Executive Forum on Leadership Excellence in Academe Program for Southeast Asia (LEAP SEA). The two institutions jointly funded the five-day learning event, which had 20 participants from six countries.

SEARCA also signed in 2004 a Memorandum of Agreement with Cambodia’s Ministry of Agriculture, Forestry and Fisheries (MAFF), in relation to the Overseas Study Program on Inland Fishery Management to the Philippines for the Cambodia MAFF Staff and with Centre d’Etude et de Développement Agricole Cambodgien (CEDAC) in 1999 for a training workshop on farmer participatory extension.
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 Cambodia:

A Series Activities in the Framework of the UN Decade of Family Farming
SEARCA documented and systematically analyzed policies, strategies, initiatives, and programs successfully supporting family farming in selected Southeast Asian countries under Activity 2 of this Food and Agriculture Organization of the United Nations (FAO)-funded project. A case study on Cambodia’s contract-based organic rice production was one of the six country-level case studies conducted. To support the documentation of some case studies and to get the viewpoint from farmers’ organizations, SEARCA collaborated with the Asian Partnership for the Development of Human Resources in Rural Areas (AsiaDHRRA).

Agricultural Transformation and Market Integration in the ASEAN Region: Responding to Food Security and Inclusiveness Concerns (ATMI-ASEAN)
Cambodia was one of the five ASEAN Member States (AMS) covered by this International Fund for Agricultural Development (IFAD)-funded project, which was co-implemented by
the International Food Policy Research Institute (IFPRI) and SEARCA. The overall goal of the ATMIASEAN project was to strengthen the institutional capacity of the AMS to develop and implement policies and sub-regional programs in support of integration of smallholders in sub-regional agricultural and food markets. This was done through three main components and broad activities (1) Policy studies and expert workshops; (2) High-level policy forums and roundtables; and (3) Technical assistance for planning and policy development.

The Ministry of Agriculture, Forestry, and Fisheries’ General Directorate of Agriculture (MAFFGDA) served as the project’s focal agency in Cambodia. MAFF-GDA led the conduct of the policy study as well as other national-level activities in Cambodia to strengthen the competitiveness of small-scale rural producers and support their inclusion in regional agrifood markets. These include capacity building for evidence-based decision making, policy formulation, and monitoring and evaluation, among others. MAFF-GDA conducted the Value Chain Analysis of Maize in Cambodia under the ATMI-ASEAN project which paved the way for the development of the Maize Industry Roadmap of Cambodia. Moreover, Cambodia also provided inputs to the Maize-Meat Regional Value Chain Assessment that was endorsed to the ASEAN Ministers on Agriculture and Forestry (AMAF).

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 Cambodia, and across existing ASEAN Free Trade Agreements (FTAs), and its implications on food security in the region.

ASEAN Working Group on Social Forestry Strategic Response Fund (ASRF) under ASFCC Phases 2 & 3
Cambodia 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 five projects in Cambodia from 2014 to 2020:
• Strengthening the Community Forestry (CF) Program Coordination Committee at Subnational to Enhance CF Development in Cambodia
• Resource Trends Assessment and Feasibility Study on Sustainable Harvesting, Rehabilitation and Marketing on Non-Timber Forest Products in Siem Reap
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 Cambodia, 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**

Cambodia 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 food stocks, 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 eight of the 11 Southeast Asian countries, SEARCA organized a workshop 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 Cambodia 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 the following research projects with significant outcomes in Cambodia:

• ASEAN Network on Promoting Climate Resilience of Rice and Other Crops (Dec 2013 - Jan 2015)
• Strengthening ASEAN Mechanisms for Reducing Emissions from Deforestation and Forest Degradation (REDD Plus) (Mar 2012 - Dec 2013)
• Biofuel Study on the Expansion of Subregional Cooperation in Agriculture in the Greater Mekong Subregion (GMS) (2009)
• Small Grants Programme for Operations to Promote Tropical Forest (SGPPTF) in South and Southeast Asia funded by the United Nations Development Programme (2001-2007)

▶ 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 two Cambodians received SFRT grants, both of whom had completed 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.

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 a grants scheme for collaborative research called the IFS-SEARCA Collaborative Research Grants Pilot in Southeast Asia. It was open to the nine Southeast Asian countries of Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, 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 (10) successful applicants received an IFS-SEARCA Advanced Grant to conduct their research within one to three years.

► POLICY ROUNDTABLES AND CONFERENCES

Conferences and Technical Meetings
Cambodian nationals also participated in various fora toward the development of R&D projects/activities under research initiatives conducted and managed by SEARCA. These include the following:

- Regional Policy Forum - From Farms to Schools: Toward Sustainable and Inclusive School-Based Food and Nutrition Programs in SEA (24-25 April 2023, Alabang, Muntinlupa City and via Zoom)
- First International Conference on School-plus-Home Gardens cum Biodiversity Enhancement Enterprise (SHGBEE1) (8-12 November 2022, Coron, Palawan, Philippines)
- Regional Training Workshop on Halal Slaughtering and Certification (23-25 August 2022, Putrajaya, Malaysia)
- Integrative Forum on Food and Nutrition Security for Southeast Asia (30 Sep 2019, Bogor, Indonesia)
- Regional Event on Understanding the Fundamentals of Halal towards Food Security in the ASEAN Region (8-11 Apr 2019; Putrajaya, Malaysia)
- ASEAN Multisectoral Workshop on Mainstreaming Biodiversity in Food and Agriculture (4-6 Dec 2018, Bangkok, Thailand)
- 4th High Officials Meeting on SEA-TVET (4-5 Sep 2018, Manila, Philippines)
- International Conference on School Gardens: Leveraging the Multi-functionality of School Gardens (16-18 Apr 2018, SEARCA, Philippines)
• Forum on Promoting Sustainable Agriculture in the Mekong Sub-Region towards Food Security (6-7 Nov 2017, An Giang, Vietnam)
• Regional Workshop on Mainstreaming Biodiversity in Agriculture for Sustainable Development and Food Security in Southeast Asia (12-14 Sep 2017, Chiang Mai, Thailand)
• Regional Forum on Farms, Food, and Futures: Towards Inclusive and Sustainable Agricultural and Rural Development (7 December 2016, SEARCA, Philippines)
• Policy Roundtable on Ensuring Food Security through Improving the Agricultural Insurance Program to Enhance Resilience to Climate Change (29-30 Jul 2015, Manila, Philippines)
• Regional Consultation Workshop towards an Umbrella Program on Climate Change Adaptation and Mitigation in Southeast Asia for an Inclusive and Sustainable Agricultural and Rural Development (12-14 May 2015, Hanoi, Vietnam)
• Second International Conference on Agricultural and Rural Development in Southeast Asia: Strengthening Resilience, Equity and Integration in ASEAN Food and Agriculture Systems (12-13 Nov 2014, Manila, Philippines)
• Project Inception Workshop on the Impacts of El Niño Southern Oscillation (ENSO) Events on Cereal Production, Area, and Yield in Asia (8-10 Mar 2010, SEARCA, Philippines)
• Measures of Hope and Promises Delivered: An International Conference on Socioeconomic and Environmental Impact Assessment of Biotech Crops (29-30 Sep 2009, Bangkok, Thailand)
• International Conference-Workshop on Biodiversity and Climate Change in Southeast Asia: Adaptation and Mitigation (19-20 Feb 2008, Manila, Philippines)
• International Conference on Sustainability Science for Watershed Landscapes (13-14 Nov 2007, Honolulu, Hawaii, USA)
• International Conference on Fisheries and Poverty – towards Poverty Reduction through Sustainable Fisheries: Emerging Policy and Governance Issues in Southeast Asia (10-11 Apr 2007, Makati, Philippines)
• Pathways to Agricultural and Rural Development: Intellectual Property Rights and Implications (30-31 May 2006, Makati, Philippines)
• Conference Workshop – Toward a Regional Cooperation on Biodiversity Research for Development (28-29 Nov 2005, Manila, Philippines)

Policy Roundtables
Each year from 2004 to 2016, Cambodia was part of SEARCA’s policy roundtable series, joining policymakers and rural development practitioners from Lao PDR, Myanmar, Vietnam, the Philippines, and other Asian countries to exchange and discuss collaborative strategies and policy instruments to address emerging challenges facing the agriculture and rural sectors. All the policy roundtable meetings from 2006 to 2011 were funded by Korea FAO. The third of these roundtable meetings was held in Siem Reap, Cambodia in April 2006. It focused on “Shoring and Sharing Capacities to Improve Agriculture and Competitiveness of Transition Countries in Southeast Asia.” The 10th roundtable meeting was held in Phnom Penh, Cambodia, with the Ministry of Agriculture, Fisheries and Forestry as local partner.
In November 2013, SEARCA provided technical assistance to Cambodia’s Ministry of Rural Development (MRD) in the conduct of a stakeholder consultation workshop in Phnom Penh. Support for the workshop was SEARCA’s initial response to MRD’s request for technical assistance in the crafting of the Rural Entrepreneurship Development Program (REDP) for Cambodia. At the outset, MRD intends to review its current rural enterprises development and management, including policies, regulations, systems, management, financing, partnerships, and institutional mechanisms. Dr. Pheak Sothea, Director of MRD’s Department of Rural Economic Development and a SEARCA alumnus, coordinated with SEARCA for this initiative.

**RESEARCH PUBLICATIONS**

**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. Through 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 towards a resilient Southeast Asian region.
- Have an accompanying monitoring and reporting design for ASEAN Member States, which include Cambodia, 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 Cambodia**
SEARCA published a primer on Cambodia in 2010 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. It shows the institutions, structures, policies, and other areas affecting the sector's performance over the past three decades.

The Cambodia volume mainly focused on crops and livestock and their importance and contribution to the country's economy. The primer authors are Dr. Touch Visalsok, Rector of the University of Battambang (UBB) and Dr. Ker Monthivuth, Acting Director of the Department of Administration, Planning, Accounting and International Cooperation, General Directorate of Agriculture, Ministry of Agriculture, Forestry and Fisheries.

The second edition of the SAADP on Cambodia (2016) focuses on Policy Reforms and Institutional Innovations in Agriculture: Experiences, Impacts and Lessons, which takes off from the results of a regional workshop convened by SEARCA to take stock of the current situation of the agriculture sector in Southeast Asia, review current institutional and policy regimes of countries in the region, and determine how they affected agricultural productivity and competitiveness vis-à-vis government responses.

The second edition is authored by Lonn Pichdara, Research Associate, Cambodia Development Resource Institute; Mey Kalyan, Senior Advisor to the Supreme National Economic Council; and Dr. Touch Visalsok, Undersecretary of State, Ministry of Education, Youth, and Sport, Cambodia.

**Other Publications**
SEARCA has published books, monographs and other publications on various topics related to Cambodia's agriculture. Many of these were outputs from SEARCA's research projects and knowledge events. Recent publications include the following:
- Community-Based Ecotourism: Livelihood cum Adaptation Strategy for Kampong Speu Province, Cambodia
- Accumulation of Arsenic in Fruits and Vegetables Grown in Arsenic-Contaminated Areas in Cambodia
- Minimizing Arsenic in Fruits and Vegetables in Cambodia
- Proceedings: Policy Roundtable on ATMI-ASEAN: The Case of the Maize Industry in Cambodia
Cambodia is also featured along with other countries in 27 other publications published by SEARCA:

- Improving Rice Crop Production in a Changing Climate
- Strengthening the Community Forestry Program Coordination Committee at Sub-National Level to Enhance Community Forestry Development
- Resource Trends Assessment and Feasibility Study on Sustainable Harvesting, Rehabilitation, and Marketing of Non-Timber Forest Products (NTFPs) in Siem Reap
- Capacity Development Needs Assessment in Southeast Asia Toward an Informed Human Development Program in Inclusive and Sustainable Agricultural and Rural Development (ISARD)
- Assessing Impacts of Land Use and Climate Change on Soil and Water Resources in the Srepok Watershed, Central Highland of Vietnam
- The Rice Economy and the Role of Policy in Southeast Asia
- Social Forestry in the ASEAN Region: Gaps and Strategic Interventions
- Where economic giants tread
- Asian Journal of Agriculture and Development (AJAD) Vol. 4 No. 1
- AJAD Vol. 9 No. 1
- AJAD Vol. 10 No. 1
- AJAD Vol. 10 No. 2
- AJAD Vol. 11 No. 2
- AJAD Vol. 15 Issue No. 2
- AJAD Vol. 17 No. 1
- Fish Pond Farming in the Mekong Delta: Policies for Polishing
- Playing the Same Tune: Harmonizing Biotechnology Regulations Across Southeast Asia
- Fishing for Livelihood across Generations, across Asia
- Developing “Climate-ready” Rice to Safeguard Livelihoods in the Fragile Ecosystems
- Improving Sub-national Capacity to Adapt to Climate Change in Agriculture
- A Review of Issues and Challenges in Climate Change and Agriculture in Southeast Asia
- Agro-Industrial Development Regional Workshop
- Workshop on Vulnerability, Impact and Adaptation Assessment for Climate Change:
  - Approaches, Methods, and Tools (Completion Report)
- Operation One ASEAN: Towards Food Security in 2020 (SEARCA-DAAD Alumni Associations Regional Consultative Workshop)
- 2nd IDRC-SEARCA Fellowship Plus Conference-Workshop
- 3rd IDRC-SEARCA Fellowship Plus Conference-Workshop: Conference Report
- Conservation Agriculture: A Biological Engineering Approach to Sustainable Agriculture in Support of Rural Development in Southeast Asia

Meanwhile, seven articles on Cambodia were published in the Asian Journal of Agriculture and Development (AJAD), SEARCA’s international refereed journal. Published twice a year in June and December, AJAD is indexed in the Emerging Sources Citation Index (ESCI) of the Web of Science (WoS), EBSCO Information Services, Research Papers in Economics (RePec), AgEcon Search, Socio-economic Research Portal for the Philippines (SERP-P), CAB Abstracts,
ASEAN Citation Index (ACI), The Essential Electronic Agricultural Library (TEEAL), and Australian Business Deans Council (ABDC).

Moreover, nine Cambodians co-authored in 10 other SEARCA publications, including seven AJAD articles.

**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.

This primarily aims to facilitate and sustain an ecosystem for knowledge sharing 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. 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 the AFNR KP. 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, 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. We envision the contents of the AFNR KP to stir discussions in the COP. Regular activities (example: online forum on a certain timely/relevant topic) will be designed to keep the COP active and engaging.
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:

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

**InnovElGhts**

The InnovElGhts program is envisioned to support, facilitate, and implement co-created and co-piloted agribusiness incubation, information and technology transfer projects, and impact-and action-driven extension and technical assistance engagement for Southeast Asia. The said program envisions to establish and develop the agriculture and rural development sector through:

- Agricultural technology development and technology transfer,
- Adaptation and adoption of village-scale relevant technologies,
- Inclusive rural community development
- Local and immediate agribusiness clustering, and
- Gender inclusive and high impact projects.

The program also intends to achieve a number of goals in support of inclusive agricultural and rural development:

- Strengthen university public agri-research and university-based agribusiness incubators to promote local inclusive innovation ecosystem,
- Provide platform and projects for more effective and efficient prototyping, up-scaling, and commercialization of technologies and delivering impact-driven farming community assistance,
• Provide value-added services and assistance in the promotion of A/F tech-based startups and in the scaling-up of existing agri-technologies and agri-enterprises.
• Advance knowledge, attitude, and skills of farming communities and startups through innovation and entrepreneurial mentoring and trainings, and
• Build a coalition of support services from key government institutions and other relevant stakeholders.

The InnovElGhts program is a combination of independent but highly integrated components design to achieve SEARCA ATTAIN in aligned to targeted SDGs and to serve the different levels of beneficiary-stakeholders and Academe-Industry-Government (AIG) partners.

The program is composed of:
1. Innovation Index Studies (InDex) is the research and information arm of the InnovElGhts program.
2. Specialists and Experts for Rural Viable Emerging Solutions (SERVES) is a program that provides co-created and co-piloted farming family and farming community livelihood projects that identify and implement innovative but practical solutions to persistent farming challenges.
3. Emerging Ideas Competition (iDEATES) focuses on engaging the youth, children, and agri-innovators in promoting agri-innovation and scientific farming methods to modernize agriculture and build local rural innovation ecosystems.
4. Building Linkages and Open Collaboration for Knowledge System (BLOCKS) is an innovative and open shared service hub that offers a platform and networks of fabrication centers, design resources, experts, and projects. It is responsible for promoting locally adaptable agri-technologies and practices that can be adopted by small farmers and rural communities.
5. Agriculture 4.0 Livelihood Integration towards Farming Enterprises (A4LIFE) focuses on building local and community-based innovation ecosystem and inclusive agribusiness value chains. It aims to produce a generation of green startups and agripreneurs.
6. SEARCA Hub for Agriculture and Rural Innovations for the Next Generation (SHARING) is a powerful innovation and open collaboration platform and access tool that serves as a gateway for information, programs, resources, and networks in the world where SEARCA operates.
InDex
Innovation Index Study (Innovation Studies and Cases)
Provides access to information, cases and studies on ASEAN ARD, innovations, technology readiness, best practices, and benchmarks to serve as basis for policy making and decision making

SERVES
Specialists and Experts for Rural Viable Emerging Solutions
Provides farming communities with direct advisory services and linkages for innovation

IDEATES
Emerging Ideas Competition
A venue for radical young innovators to turn ideas into winning practical tech solutions

BLOCKS
Prototyping and Technology Adaptation (Shared Service Facility)
A makerspace that promotes scalable and innovative farm practices, models, and techs to increase their adoption and adaptation in communities

M4Life
Agribusiness Incubation and Technology Acceleration
Promotes livelihood integration to enterprise through incubation of green startups; Accelerates technology adoption, adaptation and deployment through access to manufacturing, marketing and other networks.

SHARING
SEARCA Hub for Agricultural and Rural Innovations for the Next Generations
A platform that serves as a tool to accelerate the expansion of a collaborative (open) innovation network for connecting communities and industry partners’ needs with the right research expertise and best funding possibilities.
The Center’s applied knowledge resources contribute to SEARCA’s vision of becoming Southeast Asia’s leading enabler and champion of excellence in ARD, particularly by asserting leadership in knowledge creation in these fields. Apart from the packaging of knowledge through publication, these knowledge products are also shared through its websites and increasingly complemented by social media. SEARCA also maintains a library and an archives system to store generated knowledge.

**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 of 30 June 2023, 23 titles either focused on Cambodia or included it in its country of coverage have been published by SEARCA. These include monographs (3), discussion paper series (1), briefs and notes (4), proceedings (2), and journal articles (13).

► 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 2023, a total of 45,310 publications have been downloaded from searca.org, SEARCA’s official website. Over 23,000 people from 159 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 2023, 202 downloads of SEARCA publications have been made by Cambodians.
The SEARCA library, which houses a collection of over 15,500 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) https://lis.searcaapps.org/lis/ to facilitate faster access and search. The LIS also includes theses and dissertations of SEARCA scholars as well as weblinks 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. As of September 2023, over 6,500 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.
Cambodia is currently represented in the SEARCA Governing Board by Dr. Huon Thavrak, Vice-Rector, Royal University of Agriculture, Cambodia. The SEARCA Governing Board is the highest policymaking body composed of representatives of the 11 SEAMEO member countries.

At present, the SEARCA 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.