



SEAMEO SEARCA

ANNUAL REPORT
FY 2021/2022



Southeast Asian Regional Center for Graduate Study and Research in Agriculture

www.searca.org



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). Founded on 27 November 1966, SEARCA is mandated to strengthen institutional capacities in agricultural and rural development in Southeast Asia through its core programs on education and collective learning, research and thought leadership, and emerging innovation for growth. It serves the 11 SEAMEO member countries, namely, Brunei Darussalam, Cambodia, Indonesia, Lao People's Democratic Republic, Malaysia, Myanmar, the Philippines, Singapore, Thailand, Timor-Leste, and Vietnam. SEARCA is hosted by the Government of the Philippines on the campus of the University of the Philippines Los Baños (UPLB) in Laguna, Philippines. It is supported by donations from SEAMEO members and associate member states, other governments, and various international donor agencies.

SEAMEO SEARCA Annual Report FY 2021/2022

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**SEAMEO SEARCA
ANNUAL REPORT
FY 2021/2022**

OUR STRATEGIC VISION

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

OUR MISSION

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



TABLE OF CONTENTS

Message from the Director	v
Executive Summary	vii
SEAMEO SEARCA Annual Report FY 2021/2022	1
Transformational Tracks	2
Future Outlook	35
Annexes	37

MESSAGE FROM THE DIRECTOR



Imagine a thriving landscape where farmers wield cutting-edge tools, empowered by innovative solutions and supported by sound policies. That is the vision that drives us at SEARCA under the banner of “Accelerating Transformation Through Agricultural Innovation” (ATTAIN) since 2020 until 2025.

As we flip the calendar to a new fiscal year, I am delighted to report that the second year of implementing ATTAIN has been a resounding success! Through the tireless efforts of our staff and the invaluable support of our partners, both established and new, we witnessed our seeds of innovation steadily blossom into tangible results.

Our interventions spanned a wide range of areas, including development and deployment of innovative agricultural technologies, promotion of climate-resilient practices, and creation of enabling policy environments through research activities plus a suite of grant programs to promote agricultural innovation. In all of these, we endeavored to implement initiatives that directly benefit farming communities. We are particularly excited about the potential of digital agriculture solutions, and actively engaged in projects that connect farmers with these cutting-edge advancements.

A cornerstone of SEARCA’s approach is nurturing a new wave of passionate and skilled agricultural professionals and leaders through scholarship programs, trainings, workshops, and other capacity-building activities. We also reached out to the youth to draw them into agriculture through engaging activities like robotics competitions and video contests.

Promoting healthy dietary choices and ensuring access to nutritious food creates a domino effect of positive outcomes. Individuals benefit from improved health, society experiences lower healthcare costs and increased productivity, and the environment thrives with sustainable practices. SEARCA’s work in this area included research on consumer preferences and value chain analysis, as well as initiatives that support the establishment of sustainable school gardens.

This Annual Report delves deeper into the specific achievements and outcomes of SEARCA’s work in FY 2021/2022. I invite you to explore the following pages and discover how SEARCA is contributing to a BETTER, BIGGER, SMARTER future for Southeast Asia.

Glenn B. Gregorio
Director, SEARCA



Tran Ngoc Anh

EXECUTIVE SUMMARY

In the second year of its 11th Five-Year Plan, SEARCA continued to promote ways to accelerate, sustain, and scale a growth cycle that begins with providing opportunities for farmers to increase production and earn more income with innovative technologies, approaches, and markets. With **Accelerating Transformation Through Agricultural Innovation (ATTAIN)** as its overarching theme, SEARCA's strategic intent is articulated through its core programs on **Education and Collective Learning, Research and Thought Leadership,** and **Emerging Innovation for Growth.** The Center focused on seven priority areas to contribute to the United Nations Sustainable Development Goals (SDGs).

To realize its mission to **elevate the quality of life of agricultural families through sustainable and resilient livelihoods and access to modern networks and innovative markets,** SEARCA is working on achieving five outcomes.

ATTAIN Outcome 1: Stakeholders embodying mindset transitions

SEARCA provided **scholarships and training** to upskill leaders, researchers, educators, change agents, and farmers. All the new scholarship grants were jointly funded by SEARCA and partner universities, government research institutions, and German and French development organizations.

SEARCA also offered **institutional development assistance** to higher education institutions, which it sees as drivers of innovation. The Center assisted in developing an **Internal Quality Assurance System** for the **Royal University of Agriculture (RUA)** under the Cambodian government's Higher Education Improvement Project. SEARCA is also implementing the "**Leveling-Up Philippine Higher Education Institutions in Agriculture, Fisheries, and Natural Resources (LevelUPHEI AFAR)**" project funded by the Commission on Higher Education (CHED), Philippines to benefit members of the **State Universities and Colleges-Association of Colleges of Agriculture in the Philippines, Inc. (SUC-ACAP, Inc.)** through short-term trainings and other learning events. Moreover, SEARCA donated 4,030 books to 25 universities in Lao PDR, Myanmar, and the Philippines during the fiscal year.

To improve quality of teaching and learning and to **promote internationalization of higher education**, SEARCA actively participated in multi-country higher education networks. As secretariat of the SEARCA-established **Southeast Asian University Consortium for Graduate Education in Agriculture and Natural Resources (UC)**, the Center managed 44 student and faculty travel grants and seed fund for collaborative research grants. It also co-organized four UC knowledge events. Moreover, SEARCA administered joint scholarships with **Agrinatura**, the European alliance for agricultural knowledge and development.

SEARCA also **encouraged young people to get involved in agriculture** through activities that encourage sharing, learning, and designing innovations. These activities include the, **Innovation Olympics 2.0** focused on developing precision agriculture solutions, **agri-robotics ideation** session for kids with LEGO Education partners, "Youth in Sustainable Food Consumption and Waste Management" video contest, and Training on Digital Storytelling for Agricultural Extension and Marketing.

EXECUTIVE SUMMARY

ATTAIN Outcome 2: Enabling policies and regulatory frameworks supporting ARD

Laws and regulations that influence farm operations and access to financial services and markets are also critical to agricultural transformation. SEARCA thus conducted researches for 1) **program development** at the national and regional levels and to influence policy, 2) **support ASEAN**, 3) **create digital platforms for research**, and 4) **scale out to amplify action researches**.

Among the **Research for Development (R4D) projects** implemented by SEARCA were those funded by the Food and Agriculture Organization of the United Nations (FAO); Deutsche Gesellschaft for Internationale Zusammenarbeit (GIZ) GmbH; CropLife Asia; National Economic and Development Authority (NEDA) and Department of Agriculture, Philippines, to name a few. Two projects conducted in support to ASEAN were **Enhancing Food Supply Chain Resilience and Food Security in ASEAN Using Digital Technologies Agricultural Transformation** in partnership with the Economic Research Institute for ASEAN and East Asia (ERIA) and the **Market Integration in the ASEAN Region: Responding to Food Security and Inclusiveness (ATMI-ASEAN)** funded by the International Fund for Agricultural Development and co-implemented with the International Food Policy Research Institute (IFPRI). SEARCA also collaborated with the University of Southern Queensland (USQ) in developing the **AgPractices&Domains tool** that will provide integrated pest and disease management options in rice-based cropping systems. At the same time, SEARCA continued to develop the **Agriculture, Forestry, and Natural Resources (AFNR) Knowledge Platform** to support research activities in the region.

Among SEARCA's scaling out activities to amplify action researches were rescoping and revalidation of the **School-plus-Home Gardens with Biodiversity Enhancement Enterprise (SHGBEE)** in Busuanga, Palawan, Philippines and Trainers' **Training in Integrating the SHGBEE in the Establishment of Agricultural Technology Parks (ATPs) and Mini-ATPs in Cambodia**.

SEARCA leveraged research to contribute to creating an enabling environment comprising policies and support systems that empower farmers at various points in the value chain. These research projects included **formulating the National Agriculture and Fisheries Modernization**

and Industrialization Plan (NAFMIP) 2020-2025 for the Philippines, promoting climate-smart land use through ASEAN policy documents, developing a jurisdictional-level platform for the management of forest and landscape climate finance investments, and formulating the Seed Industry Development Program of the Philippines.

ATTAIN Outcome 3: Wider access to innovative products and services and business models for increased productivity and income

SEARCA supported the development of new and more effective agtech solutions, including digital agriculture, and linked farmers to these cutting-edge technologies to improve farm operations and income. SEARCA initiatives that championed digital agriculture include: **Pilot Digital Agriculture Platform in the Philippines**, **SEARCA Hub for Agricultural and Rural Innovation for the Next Generation (SHARING)**, **Southeast Asian Platform to ATTAIN Agri 4.0 Collaboration and Empowerment (SPACE)**, and a project to improve farmers access to agricultural technology, products, and services through digitization and consolidation of local agri-supply stores.

The Center undertook projects that introduced climate-resilient agricultural technologies for farming communities. These include the **Technology Adoption for People-Centered Innovation and Livelihood Integration (PILI) Project**, the Jollibee Group Foundation-funded **Project SAYA: Strengthening Yield of *Allium cepa* L. (Onion) in the Philippines**, and **Ronnie Baugh Tractor Local Fabrication**.

SEARCA also supported the development of emerging innovation models and technologies to improve productivity at various points in the value chain. This was carried out mostly through the **SEARCA Grants for Research towards Agricultural Innovative Solutions (GRAINS)** that funded startups and similar ventures.

ATTAIN Outcome 4: Increased level of investment in the ARD sector

SEARCA stepped up its investments in agriculture and food systems through **various capacity building, research, and innovation grants** awarded to potential drivers of ARD. Through a number of collaborative projects, SEARCA also **invested in commodities and initiatives that have the potential to catalyze additional financing from other sources**. The Center led the development of regional road maps on selected commodities that are

EXECUTIVE SUMMARY

investment opportunities. It also worked with FAO to develop a pioneering jurisdictional-level platform for forest management and climate finance. Moreover, SEARCA funded the crafting of the Seed Industry Development Program of the Philippines and collaborated with the Philippine government in formulating the National Agriculture and Fisheries Modernization and Industrialization Plan (NAFMIP) 2020-2025 for the Philippines which will guide sector-wide growth and galvanize sector-wide public and private investments.

ATTAIN Outcome 5: Food and nutrition security ensuring well-being in an evolving lifestyle

SEARCA **prioritized actions that promote food and nutrition security** with particular **emphasis on food consumption** and the **impact of changing food preferences** for a healthy diet. **Consumer preferences and commodity consumption patterns determined by the ATMI-ASEAN value chain studies** focused on pork-based processed products in the Philippines, maize in Cambodia and Lao PDR, pulses in Myanmar, and swine in Vietnam. Furthermore, the SEARCA-supported **School-plus-Home Gardens served as supplementary sources of nutritious food** during the pandemic. SEARCA also held a **regional competition showcasing youth actions for sustainable food consumption**.

SOLID RESOURCE BASE

Because all these development solutions rely on collaboration, SEARCA puts a **premium on working in partnerships and sharing of knowledge and expertise** through publications and various conferences, workshops, and knowledge events.

In Fiscal Year 2021/2022, SEARCA maintained its strong financial position with **judicious fiscal management** and **robust cash flows**. The Center's investment decisions were guided by its Governing Board-approved investment policy.

All of this work rendered by SEARCA for Southeast Asia was carried out by **a lean but excellent staff backed up by consultants and Senior Fellows**.





INTRODUCTION

The agricultural landscape in Southeast Asia faces a multifaceted array of challenges that present a complex and uncertain future. The region grapples with unpredictable weather patterns and environmental shifts that impact crop yields and farming practices. Recent upheavals caused by the COVID-19 pandemic have further exacerbated existing vulnerabilities and disrupted labor availability, trade routes, and market stability. In this dynamic context, the region's agriculture sector must adapt and innovate to find sustainable solutions.

SEARCA's 11th Five-Year Plan (2020-2025), focused on Accelerating Transformation Through Agricultural Innovation (ATTAIN), offers ways forward.

SEARCA's mission is to elevate the quality of life of agricultural families through sustainable livelihoods and access to modern networks and innovative markets. The strategic plan focuses on seven priority areas that support the United Nations Sustainable Development Goals (SDGs). SEARCA, thus, committed to contribute to five SDGs that directly align with its mission, with much emphasis on partnerships, and touches on three other SDGs.

SEAMEO SEARCA ANNUAL REPORT FY 2021/2022

To fulfill its mandate of empowering institutions working in ARD along its priority areas, SEARCA actively fosters new agents of change and thought leaders who will transform the landscape of agricultural and rural development. Through Education and Collective Learning (ECL), SEARCA is connecting students, professionals, scientists, executives, teachers, and farmers to SEARCA's partner universities and research institutions to pursue graduate studies and professional learning in fields significant to the SDGs. At the same time, SEARCA is developing and managing graduate scholarship projects to support Southeast Asians pursuing advanced degrees in ARD along SEARCA's priority areas. The Center continues to provide institutional development assistance to universities that are strategically located in growth areas to boost economic development in the region. Training for development addresses relevant and urgent needs of SEARCA's stakeholders through technical training, practical courses, learning events, forums, roundtable discussions, and conferences that will facilitate the wide sharing of best practices, innovative technologies, and progressive mindsets.

Through Research and Thought Leadership (RTL), SEARCA undertakes policy analyses, research for development, and facilitate knowledge platforms. By aligning its services with the Sustainable Development Goals (SDGs), SEARCA strives to create a cascading impact that empowers farmers

and fosters transformative change in ARD through meaningful research and innovation. SEARCA also assists lawmakers, state leaders, technocrats, and farmer leaders in crafting and implementing thought leadership strategies. The Center provides services in terms of policy research, formulation, and evaluation relevant to member states and leaders at the local, national, and regional levels. Through its knowledge platforms, SEARCA provides accurate and timely sharing of information and technologies.

SEARCA envisions to be a gateway to the future of agricultural development through Emerging Innovation for Growth (EIG), which is articulated through open innovation and agri-incubation; knowledge and technology transfer; and project development, monitoring, and evaluation. SEARCA partners with startups, universities, research institutions, small and medium enterprises, as well as corporations in serving as an agri-technology business incubator that provides supportive environment for starting enterprises. SEARCA also intends to establish intellectual property policy for its role in licensing and transfer of technologies developed by universities to industry players to create products for the marketplace. Moreover, the Center continues to capitalize on its institutional and technical expertise and solid track record in project development and management to embark on bigger programs with relevant partners.

Aligned with the ATTAIN Strategic Implementation Map, these initiatives were implemented in during the year under review to contribute to achieving the five ATTAIN Outcomes for ARD:

- Stakeholders embodying mindset transitions,
- Enabling policies and regulatory frameworks supporting agricultural and rural development (ARD),
- Wider access to innovative products and services and business models for increased productivity and income,
- Increased level of investment in the ARD sector, and
- Food and nutrition security ensuring well-being in an evolving lifestyle.

TRANSFORMATIONAL TRACKS

ATTAIN OUTCOME 1

STAKEHOLDERS EMBODYING MINDSET TRANSITIONS

Capacity building in ARD has always been a centerpiece of SEARCA's strategic agenda. This is well-articulated in its 11th FYP, which is intent on developing agriculture leaders and professionals who exemplify mindset transitions. The beneficiaries of SEARCA's capacity-building interventions included educators, researchers, higher education administrators, national and local government executives and technical experts working in ARD, farmers and farmer groups, and the youth.

In FY 2021/2022, SEARCA cultivated mindset transitions primarily through its ECL program, which is articulated through Graduate Scholarship and Institutional Development (GSID), including efforts to build excellence in higher education, and Training for Development (T4D). These programs were complemented by initiatives to increase and enhance youth engagement in ARD.

Graduate Scholarships

SEARCA began awarding graduate scholarships in Academic Year 1967/1968 and has since supported **1,892 master's and PhD scholarships** to Southeast Asians, **618** of which were awarded under joint scholarship projects (**Annex 1**).

SEARCA's special focus on partnerships in its 11th FYP is evident in the current mold of its new graduate scholarships, which are mostly joint undertakings with funding agencies and partner universities. In FY 2021/2022, SEARCA managed 13 joint scholarship programs and two fully SEARCA-funded scholarship programs. SEARCA's partners in its 13 graduate scholarships are Agropolis Fondation of France, Bulacan State University (BuLSU), Center of Excellence on Sustainable Agricultural Intensification and Nutrition (CE SAIN) in Cambodia, German Academic Exchange Service (DAAD), Malaysian Agricultural Research and Development Institute (MARDI), Nagoya University, Philippine Carabao Center (PCC), National Taiwan University (NTU), Sejong University, Tokyo University of Agriculture (NODAI), Universiti Putra Malaysia (UPM), and Universiti Sains Malaysia (USM). Some of them are in a tripartite partnership for joint scholarships, namely, Agropolis-UPM-SEARCA and USM-CE SAIN-SEARCA (**Annex 2**).

Altogether, these **13 cost-effective joint scholarship programs awarded 31 new scholarships** with external funding of USD 524,367.46 and PHP 702,956 for FY 2021/2022. In addition, there were **49 ongoing project scholars**, including eight who completed their studies during the fiscal year. (**Annex 3**) Seven of the joint scholarships were for dual degree programs (**Annex 4**).

Part of assuring the quality of SEARCA scholarship projects is the timely submission of required academic reports. In FY 2021/2022, SEARCA submitted the DAAD



Thirty-eight SEARCA scholars who completed their studies in AY 2020-2021 take their oath as members of the Regional SEARCA Alumni Association (RSAA) during the Testimonial Program held on 12 August 2021 via Zoom.

monitoring reports, the 10th PCC progress report, and reports to nine Ministries of Education/Commission on Higher Education. SEARCA also received the MS FSCC Evaluation Results as a response to the submitted final report.

In addition, SEARCA awarded **eight new full master’s and PhD scholarships** and continued to manage 74 ongoing full graduate scholarships awarded in previous years, 16 of which were completed in FY 2021/2022 (**Annex 5**). SEARCA also continued to manage 28 PhD research scholarships, 11 of which were completed during the fiscal year (**Annex 6**). These full graduate scholarships and PhD research scholarships were fully funded by the Center.

Meanwhile, the onset of the pandemic and the subsequent new normal led to a rethinking of the scholarship application and management process. During the fiscal year, **a more user-friendly scholarship online platform was launched** to assist prospective candidates when applying for scholarship. Previous face-to-face scholarship interviews were conducted online at the onset of the pandemic until the evaluation of academic year (AY) 2022-2023 scholarship applicants.

Meanwhile, among the 138 ongoing SEARCA scholars during the fiscal year, 87 were from the youth sector. The Center thus implemented a Graduate on Time (GOT) program composed of academic and extracurricular learning events that served as tools to aid SEARCA scholars in completing their academic requirements on time and support their social well-being. The GOT program included a suite of training courses on basic English, scientific writing and presentation, and quantitative and qualitative research designs and data analysis, as well as the GSID Conversations. The

TRANSFORMATIONAL TRACKS

latter gave scholars an avenue to discuss with experts from various fields in ARD and to share experiences and insights on translating knowledge and skills into meaningful contributions to society. Topics covered in the GSID Conversations included sustainable and healthy food consumption and navigating delays and disruptions during postgraduate studies.



Mr. Amar Maruf, an Indonesian, won the Magda Staudinger Prize Award for his scientific achievement in the field of Biodiversity and Climate Change. Mr. Amar is a SEARCA Full PhD scholar studying Community Development at Universiti Putra Malaysia. PHOTO (c) HNEE, Florian Reischauer

SEARCA likewise continued to support the participation of its scholars as paper presenters in international conferences, publication of their articles in scientific journals, and attendance to learning and knowledge events in line with SEARCA's priority areas and in leveraging technology and information in agriculture **(Annex 7)**.

Most notably, Mr. Amar Maruf from Indonesia received the Magda Staudinger Prize Award from the German UNESCO Commission for his scientific achievement

in the field of Biodiversity and Climate Change as shared during his paper presentation on "Exploring the Potential Role of Patron-Client Relationship on Social Resilience to Climate Change Impacts and Risks among Small Scale Sama Bajau Fishermen in Wakatobi National Park, Indonesia." SEARCA also kept its scholars informed through the GSID newsletter.

Upon their graduation, SEARCA scholars join the ranks of SEARCA alumni and become part of the strong and valuable network of ARD leaders and professionals in Southeast Asia. The SEARCA alumni network is dependable ally of the Center in the work for agricultural innovation and sustainable development carried out through conferences, seminars, and collaborative research projects that bring together experts in the region.

The Regional SEARCA Alumni Association (RSAA) have co-organized international conferences with the Center and the alumni SEARCA alumni also been tapped to serve as resource persons in the SEARCA webinars.

During its 55th Anniversary celebration in November 2021, SEARCA hosted the Alumni Forum on Transformational Leadership held via Zoom and livestreamed on Facebook where selected alumni shared their experiences and reflections on what it takes to be a transformational leader. The panelists include SEARCA alumni holding positions of influence from Maejo University, Thailand; Ministry of Agriculture, Forestry and Fisheries, Cambodia; and Conservation International, Timor-Leste. The powerful



SEARCA alumni (clockwise from top, right) Dr. Weerapon Thongma of Thailand, Dr. Asikin Yoeu of Cambodia, and Mr. Natalino Babo Martins of Timor-Leste served as panelists in the Alumni Forum on Transformational Leadership held on 25 November 2021 and moderated by Dr. Serlie Barroga-Jamias (top, left), also a SEARCA alumna. The panelists discussed their experiences and reflections on what it takes to be a transformational leader.

testimonies of the alumni showcased their journeys as transformational leaders. They credited factors such as education, supportive work environments, inclusive government policies, appreciation for young leaders, dedication, and a commitment to serving the country. The panelists emphasized the importance of vision, often rooted in humble beginnings. A defining moment in their journeys was SEARCA providing the opportunity to realize their visions through scholarships, which significantly contributed to their current success.

Institutional Development

In FY 2021/2022, SEARCA continued providing Institutional Development Assistance (IDA) to higher education institutions (HEIs), which are drivers of innovation in agriculture and related fields. Through its IDA initiatives, SEARCA assisted strategic HEIs with core competencies in agriculture-related disciplines to become catalysts of development in their countries.

In Cambodia, SEARCA assisted in developing an Internal Quality Assurance (IQA) System for the Royal University of Agriculture (RUA) under their government's Higher Education Improvement Project. The IQA System being developed is expected to ensure the university's quality of education and serve as a tool for efficient and effective management of assets and talents of the university.

In the Philippines, SEARCA continued to implement the "Leveling-Up Philippine Higher Education Institutions in Agriculture, Fisheries, and Natural Resources (LevelUPHEI AFAR)" project funded by the Commission on Higher Education (CHED), Philippines to benefit members of the State Universities and Colleges-Association of Colleges of Agriculture in the Philippines, Inc. (SUC-ACAP, Inc.). The project opened the opportunity to the 74 SUC-ACAP members to link with global higher education networks, particularly the SEARCA-established Southeast Asian University Consortium for Graduate Education in Agriculture and Natural Resources (UC), through training programs, summer schools, forums, cross-visits, and faculty and student mobilities. In FY 2021/2022, six faculty members and staff of SUC-ACAP members participated in mobility activities and attended training programs in UC partner universities in Thailand and Malaysia.

Building Excellence in Higher Education

To improve quality of teaching and learning and to promote internationalization of higher education, SEARCA actively participated in multi-country higher education networks. The UC, which SEARCA launched

TRANSFORMATIONAL TRACKS

in 1989, is one of the largest regional higher education networks of the Center. In 2021, three more universities joined the UC, namely, Central Luzon State University (CLSU) and Visayas State University (VSU) in the Philippines, and Maejo University in Thailand. As UC Secretariat, SEARCA facilitated 33 UC grants for student thesis, eight of which were completed, and 15 seed fund grants for collaborative research, two of which were completed during the fiscal year. SEARCA also managed nine ongoing student and faculty travel grants. **(Annex 8)**

In addition, SEARCA was at the helm of various regional-focused events and ATTAIN-aligned projects. These include the 3rd UC Faculty Forum themed “Agricultural Science for a Better World” convened in January 2022 by Tokyo NODAI and SEARCA; the 34th UC Executive Board Meeting held in December 2021 via Zoom; and the 7th UC Graduate Forum (UCGF) on “Agricultural Adaptation Strategies for Coping with Climate Change” hosted by NTU via Google Meet in December 2021.

Academic excellence and innovation in agriculture among higher education faculty in Southeast Asia are prized, encouraged, and recognized by the Center.

Three outstanding academics from Indonesia and Malaysia who are experts in agricultural technology and innovation conducted their public lectures for the **SEARCA Regional Professorial Chair** in FY 2021/2022. In addition, SEARCA awarded the SEARCA Regional Professorial Chair to four academics from Malaysia, the Philippines, and Thailand. SEARCA also published two monographs under the SEARCA Professorial Chair Lecture Series by two grantees awarded in previous years. The new titles are “Rapid DNA-Based Analytical Techniques to Verify the Authenticity of Halal Food” and “Harnessing GIS and Remote Sensing Technologies toward Improved Water Governance and Agricultural Policy.”

Training for Development

Short-term training is SEARCA’s fast lane to creating agents of change and thought leaders who will transform the landscape of ARD in Southeast Asia. In FY 2021/2022, the Center’s Training for Development (T4D) activities consisted of **SEARCA Online Learning and Virtual Engagement (SOLVE)** webinars; customized training for higher education institutions; technical training for targeted stakeholders, many of



During his SOLVE webinar, Prof. Dr. Shahrim explained each ingredient of Asam Rebus Keladi with Fish (Sour and Spicy Yam Stew with Fish) and encouraged the audience to know the source of the food they consume and to patronize smallhold farmers, fisherfolks, and other producers.

which were part of ongoing SEARCA projects. Due to the persisting pandemic, these learning events were held virtually.

In FY 2021/2022, SEARCA conducted **11 SOLVE webinars** via Zoom and livestreamed on SEARCA's Facebook page (**Annex 9**). The SOLVE webinars informed the Center's stakeholders and the general public of specific concrete and practical actions being implemented on the ground that can serve as options in dealing with current and future challenges in ARD. In particular, the webinar topics articulated pressing concerns in the seven priority areas of SEARCA under its 11th FYP:

- Agribusiness Models for Increased Productivity and Income: increasing competitive advantage through Agriculture 4.0 and solutions to barriers in agricultural enterprises and innovations;
- Sustainable Farming Systems and Natural Resources Management: transforming food systems post COVID-19 and public info-sufficiency on genome-edited crops;
- Food and Nutrition Security: improved nutrition among schoolchildren and adolescents;
- Transformational Leadership: redefining effective leadership in ARD for the future;
- Gender and Youth Engagement in ARD: youth inclusion and innovation towards closing gaps in agri-food systems, gender and youth inclusion in

ARD processes, and engendering agribusiness industries in Southeast Asia;

- Enhanced ARD towards Climate Resilience: community adaptation responses to climate change; and
- Eco-Health/One Health Applications to ARD: One Health applications to solve community health issues.

These webinars featured speakers who are experts and well-respected in their respective fields. Altogether, the 11 webinars had a total of 3,262 attendees (1,066 in Zoom and 2,196 in Facebook Live) from Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, the Philippines, Thailand, Timor-Leste, Vietnam, Australia, Bangladesh, Japan, Taiwan, and the United States.

Meanwhile, SEARCA also implemented training programs as well as learning events under collaborative



A total of 33 administrators, middle and senior managers, and academic leaders hailing from 17 universities across the Philippines completed the Leadership Development Program for Higher Education Institutions (LDP-HEIs) in the Philippines

TRANSFORMATIONAL TRACKS

arrangements. During the fiscal year, 25 training courses were conducted by SEARCA. Of this number, five were tailored to faculty and staff of public and private HEIs offering agriculture programs that are SUC-ACAP members under the LevelUPHEI AFAR project. These customized SEARCA training courses were on leadership development for Philippine HEIs (LDP-HEIs), research designs and methods for Philippines HEIs (Research4HEIs), strategic communication planning (StratCom4HEIs), scientific writing and presentation for HEIs (SciWriting4HEIs), and developing fundable research project proposals for transformational ARD for HEIs (FundableProp4HEIs). Twenty other SEARCA learning events conducted in FY 2021/2022 consisted of forums, webinars, seminars, ideation sessions,

an agri-boot camp, and GSID Conversations. Among the topics discussed in these learning events were climate adaptation for resilience, agricultural science, environmental sustainability, how to set up startups, and digital technology. **(Annex 10).**

Youth Engagement in Agriculture

SEARCA also **encouraged young people to get involved in agriculture** through activities that encourage sharing, learning, and designing innovations to enhance youth engagement in ARD. Foremost of these activities were those under the Young Forces for Agricultural Innovation (#Y4AGRI), SEARCA's banner youth program. #Y4AGRI activities are facilitated



SEARCA featured experts, advocates, and youth partners on food and agriculture at the 2021 Pista ng Pagkain at Kabataang Pinoy or “Pistang PagKaPinoy” on 23 October 2021 via Zoom and Facebook Live.

through the SEARCA Youth Ambassadors Platform (SAYAP) composed of youth representatives from all Center departments and units.

The first major #Y4AGRI event was Pista ng Pagkain at Kabataang Pinoy (Festival of Food and Filipino Youth) or “Pistang PagKaPinoy.” Held to celebrate the World Food Day, the virtual youth festival featured concepts, stories, and lessons on food and its intersections with business, nutrition, arts, gender, culture, and tourism. The event featured experts, advocates, and youth partners in food and agriculture. Attendance to the event peaked at 711 individuals and 4,142 people were reached through Zoom and Facebook Live. The event also expanded the #Y4AGRI network with three youth partners, namely, Agriculture Students Association of the Philippines (ASAP), Kids Who Farm (KWF), and Young Professionals for Agricultural Development (YPARD).

Moreover, the #Y4AGRI Facebook Page was launched in August 2021 to serve as a platform for youth awareness and engagement in ARD. Relevant posts, stories, and multimedia content of the page reached 557,094 Facebook users during the fiscal year. The second installment of the Youth COVIdeo Contest was also implemented with the theme focused on youth involvement in sustainable food consumption and waste management. It garnered 82 entries that involved 435 youth from Indonesia, Malaysia, Myanmar, the Philippines, Thailand, Timor-Leste who shared their creative stories and solutions to food sustainability issues.

#Y4AGRI also continually supported youth and youth-serving organizations through sponsorships or technical assistance on initiatives that aligned with the Center’s thrust for youth engagement in ARD. These include the collaboration with the Oscar M. Lopez Center for the development and publication of the farming community chapter of an activity book on climate change for high school students. Moreover, 28 young farmers, researchers, and development practitioners involved in research, teaching, and extension projects in agriculture participated in the #Y4AGRI Training on Digital Storytelling for Young Agrinnovators, which aimed to equip them with skills in digital storytelling as an approach to agricultural extension and marketing. SAYAP members also led the conduct of four sessions of SEARCArunungan para sa SEARCAbataan (SEARCA Wisdom for SEARCA Young Ones), an in-house activity that facilitated knowledge exchanges with senior SEARCA staff/alumni on topics that are important for the professional and personal development of young SEARCA staff.

Furthermore, SEARCA provided PHP 1.36M funding and technical support to the Innovation Olympics (IO) 2.0, a nationwide search for innovative solutions in precision agriculture for small-scale vegetable farming developed by young Filipinos. After having gone through hackathons and mentoring, the IO 2.0 finalists demonstrated that leveraging technology and combining it with agricultural skills can provide greater results and improvement in the farming industry. Despite the pandemic, the IO 2.0 projects demonstrated an optimistic outlook for the Philippine agriculture

sector. After the competition, SEARCA also provided research grants to IO 2.0 grand prize winner Team Automated Irrigation and Nutrient Management System (AIRIN) for the enhancement of prototype and assessment of product marketability of AIRIN and IO 2.0 finalist Team ARCHIE for its Agri Robot for Crop Health in Insect Control.

Also conducted during the year were two ideation sessions on LEGO® education robotics for smart agriculture for youth in Los Baños. Dubbed “Brewing Education and Creativity AGRI 4.0,” the ideation sessions included training in the basics of building, programming, and operating LEGO® as well as a demo of the proper usage of the accompanying software. The sessions also introduced the participants to the Snapmaker and DOBOT robotic arm, both of which are housed in the SEARCA Hub for Agriculture and Rural Innovation for the Next Generation (SHARING) Café.



The SEARCAns who joined the ideation session brought the robotic Lego set (EV3Lab) that they built and programmed themselves to the SHARING Open Learning Space to race their cool robots with the SEARCA Director watching with the crowd.

ATTAIN OUTCOME 2

ENABLING POLICIES AND REGULATORY FRAMEWORKS SUPPORTING ARD

In FY 2021/2022, SEARCA carried out 19 regional and national projects that can significantly contribute to transformational change in ARD. Of these projects, 10 were in support of policy and program advisory and nine were research for development projects. To help create an enabling environment for agricultural innovation, SEARCA also supported the development of knowledge platforms and partnered for science communication campaigns. **(Annex 11)**

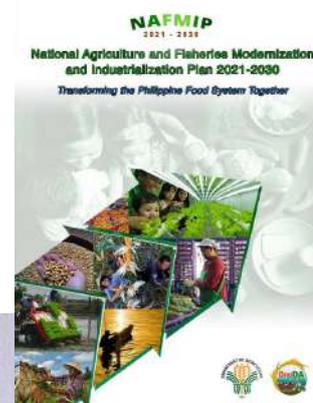
Policy and Program Advisory

SEARCA conducted 10 projects designed to influence policy reform through technical and evidence-based research during the fiscal year. Five of the projects were focused on the Philippines and the rest were regional in scope, covering several countries in Southeast Asia.

The Philippine National Economic and Development Authority (NEDA)-funded **International Benchmarking Study of the Philippine Livestock, Dairy, and Poultry Industries** covering the Philippines, Vietnam, and China aimed to determine comparative advantages of the Philippines and other Asian countries in terms of costs, production management, and marketing practices. The study also identified and analyze key enabling policies

that would strengthen the livestock, dairy, and poultry subsectors. SEARCA led the international component of the study, while the local component was led by Philippine Institute for Development Studies (PIDS).

The Asian Development Bank (ADB) commissioned SEARCA to formulate the **National Agriculture and Fishery Modernization and Industrialization Plan (NAFMIP) 2021-2030**, the 10-year directional plan of the Department of Agriculture (DA), Philippines. SEARCA conducted a series of consultations and validation workshops with different stakeholder groups to design NAFMIP 2021-2030 as a trans-administration plan with actionable strategies that transcend political changes and devolution. Crafted by SEARCA in partnership with SyCip



National Agriculture and Fisheries Modernization and Industrialization Plan 2021-2030
Transforming the Philippine Food System Together



Philippine Agriculture Secretary William D. Dar (second from left) led the ceremonial NAFMIP public launch and turnover to agri-fishery stakeholders as well as signing the pledge of commitment to support the NAFMIP implementation held on 16 May 2022 at the DA-Agricultural Training Institute in Quezon City, Philippines. (Photo by Dr. Marites Tiongco)

TRANSFORMATIONAL TRACKS

Gorres Velayo & Co. (SGV), the plan was publicly launched in May 2022 in rites presided by the Philippine Agriculture Secretary.

SEARCA also funded a project focused on **Formulating the Seed Industry Development Program (SIDP) of the Philippines**, a collaborative project with the National Seed Industry Council (NSIC) to create a framework for the country's seed industry that is responsive to agricultural needs in the next five years.

Another completed ADB-funded project conducted in collaboration with SGV was the **Analysis of Fruit and Vegetable Chains in the Philippines**. It focused on onion, tomato, and mango with special emphasis on postharvest losses quantified along the value chain of the three commodities. Key recommendations to reduce postharvest losses include investing in cold storage and packing facilities, providing delivery vehicles to facilitate transport of goods, developing online trading/digital marketing in partnership with the private sector, increasing access to credit and

insurance, and strengthening extension services at the grassroots level.

There is a need to demonstrate profitable business models for forest restoration that target environmental and social benefits to engage the private sector as investors, service providers or implementers beyond their corporate social responsibility (CSR) advocacy. The Food and Agriculture Organization of the United Nations (FAO) thus tapped SEARCA for a project called **Developing an Operational Example of Jurisdictional-level Platform for the Management and Monitoring of Forest and Landscape Climate Finance Investments** in Palawan, Philippines. The project analyzed multi-stakeholders and the layers of government to provide sufficient information to the private sector on how their investment will be managed and monitored to align corporate governance to that of forest conservation vis-à-vis climate change mitigation initiatives. The output of the project is expected to demonstrate how entire jurisdictions is the optimal scale of crediting for emissions reduction from the forest sector to

achieve the objective of Reducing Emissions from Deforestation and Forest Degradation (REDD+). Specifically, the project assessed the viability of Palawan to follow a Jurisdictional Sustainability Approach and identified potential financing sources.

FY 2021/2022 was the final year of the five-year **Agricultural Transformation and Market**



SEARCA joined the Asia-Pacific Climate Week 2021 by hosting a side event on Jurisdictional Sustainability Approach and its Potential for Climate Finance on 7 July 2021.

Integration in the ASEAN Region: Responding to Food Security and Inclusiveness Concerns (ATMI-ASEAN) project funded by the International Fund for Agricultural Development (IFAD). Co-implemented by the International Food Policy Research Institute (IFPRI)-South Asia and SEARCA, the ATMI-ASEAN project focused on Cambodia, Lao PDR, Myanmar, the Philippines, and Vietnam to help them develop policies and programs that will support the smallholder farm sector to adjust to changes in sub-regional agricultural and food markets. The priority commodities identified by the target ASEAN Member States (AMS) were maize for Cambodia and Lao PDR, pulses for Myanmar, processed pork for the Philippines, and pig for Vietnam. SEARCA led the regional value chain assessment conducted in coordination with the ASEAN Secretariat as well as the national-level agricultural value chain studies, commodity roadmaps, and policy strategies in the five target AMS. These SEARCA outputs were presented at the ATMI-ASEAN's 2nd High-Level Policy Forum themed "Transforming Food Systems in the ASEAN Region Post COVID-19" held in Vietnam in June 2022. The project will end in August 2022.

Meanwhile, SEARCA completed the project titled **Enhancing Food Supply Chain Resilience and Food Security in ASEAN with Utilization of Digital Technologies** that was implemented in collaboration with the ASEAN Secretariat and funded by the Economic Research Institute for ASEAN and East Asia (ERIA). The project consolidated information on the status of digital technologies that have the potential to increase farm productivity and improve the resiliency of the supply value chain. Through macro data analysis, the project estimated the overall impact of COVID-19 on agricultural production and food value chain resilience in ASEAN. It also assessed the actual status of the application of digital technology in the food and agriculture sector. The project produced draft guidelines on the utilization of digital technologies for the ASEAN food and agriculture sector.

SEARCA's work on the Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ)-funded project **Promoting Climate-smart Land Use (CSLU) through ASEAN Policy Documents and Regional Events** was completed during the fiscal year. The



Leadership facilitators, organizers, and participants pose for a group photo to officially launch the ASEAN Climate Leadership Programme (ACLP) on 18-19 August 2021 via the SEARCA Online Learning and Virtual Engagement (SOLVE) platform.

TRANSFORMATIONAL TRACKS

project produced the **ASEAN Guidelines on Climate Smart Agriculture (Volume 3)** and strengthened the coordination role of ASEAN to contribute to international and national climate-policy processes for climate-smart land use in agriculture and forestry.

Also completed was the IFAD-funded **Rural Regional Transformation: Pathways, Policy Sequencing, and Development Outcomes in China, the Philippines, and Vietnam**, a collaborative project that conducted cross-country analysis of different stages of rural development and transformation in the Philippines, Vietnam, and China. It also involved evidence-based policy formulation and planning. SEARCA produced three technical papers that discussed typologies of rural transformation in the Philippines; impacts of institution, policy, and investment (IPI) on rural transformation in the Philippines; and impacts of major rural regional transformation drivers (i.e., IPIs) on rural development outcomes.

The **Implications of ASEAN Economic Community (AEC) and Trade and Investments on Regional Food Security** project was funded by SEARCA and the UC with Universitas Gadjah Mada (UGM). Now completed, the project analyzed the potential impacts of AEC on existing trade agreements, flow of investments, and related commitments among AMS and across existing ASEAN Free Trade Agreements (FTAs) as well as their implications on food security in the region.

Research for Development

In its 11th FYP, SEARCA's intent to realize development gains from the outputs of its research is underscored in its Research for Development (R4D) initiatives. The goal of R4D is to go beyond generating data and publications from research to seeking outcomes on the ground. In FY 2021/2022, nine SEARCA research projects fall within this category.

During the fiscal year, two fully SEARCA-funded action research focused on specific commodities were undertaken to result in resilient production systems and strengthened market linkages of farmers and farmer groups in Philippine provinces that are known to be the largest producers of calamansi and coconut. The **Establishment and Monitoring of Techno-Demo-Learning Site for Calamansi Research in Mindoro State University (MinSU)** in Oriental Mindoro began on the heels of past SEARCA calamansi projects in the province as an effort to promote the sustainability of project gains made possible by the close collaboration of the Victoria Kalamansi Farmers Federation (VKFF), the Oriental Mindoro provincial government, municipal government of Victoria, MinSU, and SEARCA. Meanwhile, the Center trained stakeholders and collaborators on how to conduct face-to-face surveys of coconut industry stakeholders for the baseline study that will serve as inputs to the **Project Development on Coconut Industry Growth Areas in the Province of Quezon** being conducted by SEARCA. The Provincial Government of Quezon worked closely with SEARCA in the scoping activities and baseline study.

SEARCA also conducted **Project SAYA: Strengthening Yield of *Allium cepa* L. (Onion) in the Philippines**, which was funded by Jollibee Group Foundation. The project collected farm-level data on environmental conditions, farm practices, and innovations or technologies used to determine the current productivity and efficiency levels of local yellow onion production in the country. SEARCA tapped agricultural engineering, horticulture, agricultural marketing, agronomy, and management experts from UPLB, Ilocos Sur Polytechnic State College (ISPSC), and MinSU as well as selected farmer groups and cooperatives in conducting a suitability analysis to strengthen and expand the local supply systems in the Philippines. The project benefitted 65 onion farming families in Ilocos Sur and Occidental Mindoro. The findings were used to develop a set of recommendations to improve efficiency across the onion supply chain, reduce postharvest losses, and increase yield.

In FY 2021/2022, SEARCA continued to implement scaling-up activities to amplify its action research called Participatory Action Research on School and Community-Based Food and Nutrition Program for Literacy, Poverty Reduction and Sustainable Development,” also known as “School-Plus-Home Gardens Project (S+HGP),” in Laguna, Philippines. Scaling up activities during the fiscal year included



Dr. Pedcris Orencio and Deputy Director Joselito Florendo of SEARCA joined Dr. Lyda Hok of CE SAIN as speakers in the final session of the Trainers’ Training for Integrating the School-plus-Home Gardens cum Biodiversity Enhancement Enterprise (SHGBEE) in the Establishment of Agricultural Technology Parks (ATPs) and Mini-ATPs in Cambodia held on 2 March 2022 via Zoom.

rescoping and revalidation of the **School-plus-Home Gardens with Biodiversity Enhancement Enterprise (SHGBEE)** in Busuanga, Palawan, Philippines and the **Trainers’ Training in Integrating the SHGBEE in the Establishment of Agricultural Technology Parks (ATPs) and Mini-ATPs in Cambodia**. The 10-part training in Cambodia was conducted from November 2021 to March 2022 via Zoom by SEARCA and CE SAIN in partnership with Kansas State University and UPLB. The training boosted the capacities of teachers from five high schools and representatives of local government offices in establishing and implementing the S+HGP model in ATPs and mini-ATPs in Cambodia.

FAO also commissioned SEARCA to document and analyze case studies about policies, strategies, initiatives, and programs that have successfully supported family farming as well as identify policy intervention issues that need to be addressed to

TRANSFORMATIONAL TRACKS

improve future actions. SEARCA implemented these under **A Series of Activities under the Framework of the UN Decade of Family Farming** funded by FAO. Cambodia, Indonesia, Lao PDR, the Philippines, Thailand, and Vietnam were identified for the case studies. To support the documentation of some case studies and incorporate the viewpoint from farmers organizations, SEARCA collaborated with the Asian Partnership for the Development of Human Resources in Rural Asia (AsiaDHRRA).

During the year, SEARCA also began implementing two FAO Regional Office for Asia and the Pacific (RAP)-funded projects. **Documenting Linkages between Farmers and the Tourism Industry in Asia and the Pacific** covers Lao PDR, the Philippines, Thailand, Fiji, India, and Sri Lanka. The project aims to contribute to research on agri-food tourism in Asia and the Pacific with a regional survey on linkages between the tourism industry and local smallholder farmers and six detailed case studies. On the other hand, the project called **Identify Opportunities and Developing a Guiding Framework to Address Human-Development-Peace (HDP) Nexus in Hand-in-Hand Initiative in Asia and the Pacific** is analyzing cases of potential resource-based conflicts and uncertainties in selected Asia-Pacific Hand-in-Hand (HiHi) countries, namely, Cambodia, Lao PDR, and the Philippines. The project will also identify opportunities for the HiHi to address the uncertainties, prevent conflicts, and contribute to sustainable peace by identifying investment priorities and their implementation to address the HDP nexus.

The project will develop a guiding framework with successful approaches and practices that are applicable to the HiHi target countries.

IFAD likewise tapped SEARCA to provide technical assistance through **Data Collection Services in Cordillera Administrative Region of Luzon, Philippines for the Impact Assessment of the Second Cordillera Highland Agricultural Resources Management Project (CHARMP2)**. Now completed, the project gathered high-quality quantitative data on approximately 2,068 households and 94 barangays or villages for the impact assessment of CHARMP2, a DA project that sought to increase income of farming households and improve food security and watershed conservation practices in the upland areas of the Cordillera Administrative Region.

Development of Knowledge Platforms

SEARCA completed the conduct of the project called **AgPractices & Domains Platform** in partnership with UPLB and with funding from the University of Southern Queensland (USQ), Australia. The project demonstrated the potential of data and modeling platforms to build the capacity of agriculture researchers in using data from different sources and to access modeling and data analytic tools. Specifically, the AgPractices & Domains Platform was intended to enhance the capacity of agriculture researchers in Myanmar and the Philippines in using data from different sources to target integrated pest and disease management options.

Recognizing the importance of having access to credible, science-based sources of information that will fuel future research and knowledge-sharing activities, SEARCA is setting up the **Agriculture, Forestry, and Natural Resources (AFNR) Knowledge Platform**. A series of consultative workshops with internal and external stakeholders was organized to determine the platform's niche in Southeast Asia and to develop its operational framework. Research, policy, and practice were identified as the main components of the platform. Knowledge products from existing SEARCA programs and initiatives will serve as inputs to the operations manual.

Continuing the momentum and successes of previous and current information, education, and communication (IEC) advocacies on biotech crops in the Philippines, SEARCA teamed up with the DA-Biotechnology Program Office, International Service for the Acquisition of Agri-biotech Applications (ISAAA), and UPLB College of Development Communication for the **Know The Science (KTS) project**, which will run from March 2022 to February 2023. SEARCA is overseeing the implementation of the KTS social media campaign, the development of policy briefs, as well as the translation of IEC materials into several local



SEARCA teamed up with the USDA Foreign Agricultural Service, United States Embassy Manila, and the International Service for the Acquisition of Agri-biotech Applications (ISAAA) for a virtual webinar for law practitioners titled "Genome-edited Crops: Progress, Potential, and Policies" held on 10 August 2021. The learning event was organized in collaboration with the Philippine Judicial Academy (PHILJA) and the Philippine Association of Law Schools (PALS).

languages (i.e., Filipino, Iloko, Bisaya, and Bicol). The project is expected to increase the awareness and interest of the public on modern biotechnology. It also employs IEC strategies tailored to policymakers, the media, and the youth.

In addition, SEARCA and CropLife Asia partnered for **Farmer Talk: Development of IEC Materials Highlighting Biotech Contributions to Farmers' Success**, an initiative that communicated the impacts and contributions of biotech crops through flyers and videos that highlighted the impacts of biotechnology through the success stories of farmers in the Philippines, Indonesia, and Vietnam who had first-hand experience on the benefits of using biotech crops.

TRANSFORMATIONAL TRACKS

ATTAIN OUTCOME 3

WIDER ACCESS TO INNOVATIVE PRODUCTS AND SERVICES AND BUSINESS MODELS FOR INCREASED PRODUCTIVITY AND INCOME

SEARCA supported the development of new and more effective agtech solutions, including digital agriculture, and linked farmers to these cutting-edge technologies to improve farm operations and income. These were articulated through its core program on Emerging Innovation for Growth (EIG) focused on open innovation and agri-incubation; technology transfer; and project development, monitoring, and evaluation.

Open Innovation and Agri-incubation

In FY 2021/2022, the Center began working on the prototype of the **Southeast Asia Platform to ATTAIN Agri 4.0 Collaboration and Empowerment (SPACE)**, a web-based technology platform that will support the open innovation activities and foster collaborative actions between and among SEARCA's network of partners to bolster academe-industry-government partnership. SPACE is intended to be an integrative mechanism to bring together the essential roles of knowledge generation, commercialization, and funding for the formation of collaborative projects. The platform allows various innovation actors to share complementary resources by matching them with their needs and what each actor can offer.

During the year, the **Pilot Digital Agriculture Platform in the Philippines** that APPGeese, Inc., a Philippines-based startup company, and SEARCA assisted farmer-beneficiaries in gaining access to financial institutions to receive payments via digital wallet system. The platform also provided continuous free access to the digital Agriculture Exchange (AgriEX) website, application, and infrastructure to farmer-beneficiaries and SEARCA. By yearend, the installation of cloudpost infrastructure and IT system in pilot locations in Laguna, Philippines was still ongoing.

Preparations to fully open the **SEARCA Hub for Agricultural and Rural Innovation for the Next Generation (SHARING)** to the public were completed in FY 2021/2022. SHARING is an interactive learning center showcasing Agriculture 4.0 tools and educational robotics. Interactivity tools; content; displays; QR codes; and Agrinnoquest, a gamified digital tour for navigation of SHARING, were pre-tested



The SEARCA Hub for Agriculture and Rural Innovation for the Next Generation (SHARING) includes an AgrinnoQuest digital self-tour, objective displays with informative QR codes, on-demand videos, interactive projectors and computer tablets, 3D printer and pens, and agriculture-inspired art installations.

and fine-tuned to optimize the immersive learning experience of visitors, particularly the youth. SHARING was also expanded to offer a “play-to-learn” venue called SHARING Café, which is equipped with STEAM learning modules on robotics and computer coding by LEGO® Education and MS Microsoft® Minecraft Education Edition for K-12 students in the beginner, intermediate, and advanced levels. Selected SEARCA staff completed a training series to build capacities on demonstrating the use of equipment and designing educational tours or learning programs for partners and visitors.

Furthermore, SEARCA provided massive support for the development of emerging innovation models and technologies to improve productivity at various points in the value chain. This was carried out mostly through the SEARCA **Grants for Research towards Agricultural Innovative Solutions (GRAINS)**, which funded startups and similar ventures. In FY 2021/2022, the GRAINS were awarded to the following initiatives:

- Improving Farmers Access to Agricultural Technology, Products and Services through Digitization and Consolidation of Local Agri-supply Stores;
- Establishment of a Pilot Plant as Manufacturing Facility for Hormogro® Nonencapsulated Plant Growth Regulators for High-value Crops Production
- Development of Chitosan-based Bioplastic from Shrimp Waste as Potential Industrial Packaging Material;
- Construction of a Spin-off Pilot Plant for the Manufacture of Fruitect
- Commercial Seed Production and Farming System

- Integration of Three Elite Traditional Rice Varieties;
- Bioconversion of Household, Agri-byproducts, and Other Organic Wastes into Insect-based Animal Feed and Organic Compost using Black Soldier Fly, *H. illucens*;
- ARCHIE, Agri Robot for Crop Health in Insect Control; and
- Enhancement of Prototype and Assessment of Product Marketability of AIRIN, an automated irrigation and nutrient management system.

Meanwhile, SEARCA provided seed fund for the establishment of the Halal Science and Technology (S&T) Knowledge Center for Southeast Asia in the Philippines. Work on this in FY 2021/2022 focused on conceptualizing the “Halal Industry and One Health (H2O) Ecosystem” as an emerging innovation for growth and development. To be hosted by the UPLB School of Environmental Science and Management (SESAM), the Halal S&T knowledge center is expected to be a virtual one-stop, open-access regional hub for country-to-country and cross-country government-academe-industry exchanges of knowledge and resources related to the growing Halal and One Health global ecosystems.

GRAINS also provided **Pilot Incubation Support for Agrifood-based Startups of the Laguna State Polytechnic University (LSPU)**, which comprised support for 12 LSPU startup incubatees with requirements towards commercialization, such as shelf-life testing, packaging, and trademark registration of agri-food products in compliance with labelling regulations and Food and Drug Administration (FDA)

TRANSFORMATIONAL TRACKS

registration. Mushroom-preneur incubatees were also supported to increase their production capacities.

Four other GRAINS-funded ventures were completed in FY 2021/2022. The project **Assessing the Efficiency and Prospects of the Tunnel Vent Technology for the Poultry Industries in Mindanao, Philippines (Phase 1)** reported on the financial and economic efficiency of tunnel vent technology as well as its technical and environmental performance in the swine and poultry sectors, including the knowledge, perception, and attitude of the community. It also provided a synthesis of the prospects and policy needs and direction on tunnel vent technology utilization in the Philippines to allow maximization and cost-savings. On the other hand, the **SICAT: Support for Innovative and Commercially Viable Agricultural Technology** used the SEARCA grant to organize an AgriboostCamp, a capacity building of startups that culminated in a pitching competition focusing on agriculture solutions; an Agri-Action Virtual Conference that highlighted the efforts of government, enablers, and successful startups shaping the agriculture ecosystem in the region; and a Co-incubation Program that is offered as a core service of the Batangas State University Center for Technopreneurship and Innovation (BatStateU CTI) as a technology business incubator. With shared resources from BatStateU CTI and SEARCA, an incubatee was provided the opportunity to further develop, prevent failures, fail faster, thus, move forward quickly. The university spinoff project iSTACK, was identified as the incubatee recipient of mentorship support for the development of a mobile application of agricultural services designed as a channel between farmers and buyers of fresh produce.

With GRAINS support, the project **Waste to Food: Valorization of Shrimp Head Wastes** developed a technology that uses shrimp head wastes in shrimp crackers. The product was tested for nutritional contents, physicochemical and microbiological properties to determine if it is safe and acceptable for human consumption. Financial viability was established to custom-fit the volume of shrimp head waste used for mall-scale enterprising. GRAINS also provided **Pilot Support for Market Analysis and Competitiveness of Tarlac Agricultural University (TAU) Agri-based Products**. TAU produced a marketing report tracing potential markets, players, and strategies to expand commercialization of SMART-grown vegetables and engineered bamboo products of TAU.

Technology Transfer

In FY 2021/2022, SEARCA supported and undertook projects that introduced climate-resilient agricultural technologies for farming communities in the Philippines.

Also supported by a GRAINS, the **Technology Adoption for People-Centered Innovation and Livelihood Integration (PILI) Project** intends to help restart the livelihood of entrepreneurs and farmers in Bicol, Philippines who were affected by typhoons and the pandemic. The project is setting up a processing facility for pili nuts that is expected to generate at least 20% additional income for 500 farmers and 1,300 women entrepreneurs. SEARCA is supporting the technology adoption component of the PILI road to recovery project. Toward this end, 250 farmers and 10 key staff were trained on agro-enterprise development, production, and consolidation management during

the year. Technology research was conducted to understand and address market quality requirements on fresh pili drupes, pili pulp oil, and dehydrated or roasted nuts. The project also conducted laboratory product tests and analyses as well as production trials for both wet and dry process of extracting pili pulp oil.

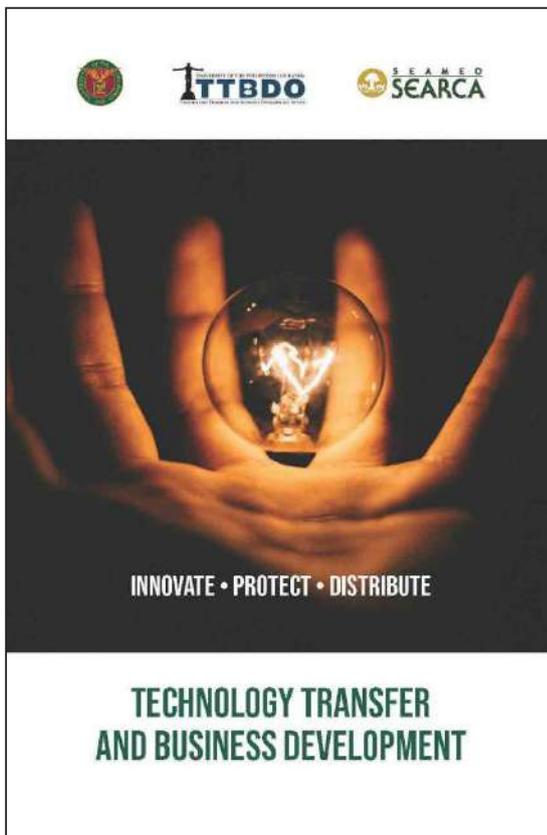
SEARCA engaged industry stakeholders in agri-machinery manufacturing through its initiative called **Agri-Mechanization through Tractor Development**, which is in partnership with Kansas State University and UPLB. The initiative seeks to promote and create awareness of the Open Systems and Sustainable Agri-Machinery Assembly and Manufacturing (OSSAAM) primarily through co-development and scaling-out of

an innovative tractor suitable for sustainable farming. One industry partner, RU Foundry and Machine Shop in Bacolod City, Philippines has already manufactured the first Philippine-made four-wheel tractor prototype based on the Ronnie Baugh Tractor and they are currently working on introducing it to the market. SEARCA has also reached out to agri-machinery manufacturers in Isabela and Davao City, Philippines to join the initiative.

Moreover, the **SEARCA-UPLB Technology Transfer and Business Development Manual** was drafted during the year and is expected to be published in November 2022.

Project Development, Monitoring, and Evaluation

In the second year of its 11th FYP, SEARCA collaborated with HEIs on various agricultural innovation projects to link innovation and technologies to farming communities and markets. SEARCA also partnered with key institutions and engaged with farmers and students to develop and promote next-step agri-technologies. Its solid track record in project development and management enabled SEARCA to embark on projects that contribute to modernizing agriculture through innovation. The externally funded projects implemented by SEARCA in FY 2021/2022 were on value chain analysis, improvement of crop production, policy and roadmap formulation, and impact assessment. These projects involved the academe, industry, and government (AIG) as well as other development organizations.



TRANSFORMATIONAL TRACKS

ATTAIN OUTCOME 4

INCREASED LEVEL OF INVESTMENT IN THE ARD SECTOR

In FY 2021/2022, SEARCA stepped up its investments in the ARD sector through **various capacity building, research, and innovation grants** awarded to potential drivers of development (**Annex 12**).

SEARCA funding for capacity development to advance agricultural innovation consisted of support for 153 new and ongoing scholarships, regional professorial chair grants, travel grants, scholars' training and academic enrichment programs, and youth engagement efforts.

Investment in research was provided through travel grants and Seed Fund for Research and Training (SFRT). **Nine SEARCA Travel Grants** were awarded to Southeast Asians, five of whom participated in an Asian course on agri-biotechnology and the rest presented findings of their research in international conferences and scientific meetings. The travel grants were intended to support researchers who need the opportunity to present new evidence-based knowledge to wider audiences. SEARCA

also continued to **oversee 25 Seed Fund for Research and Training (SFRT) grants awarded in previous years** to researchers and scientists who can make significant contributions to the development of the region but lack the funds to carry out their projects. The grants were for projects related to youth in agriculture, free trade, biodiversity, climate financing and resilience, fisheries governance, organic agriculture, value chains of important commodities, natural resource management and economic valuation of ecosystems services, agribusiness development, renewable energy, marine aquaculture, pest control management, and food production.

In addition, SEARCA and the International Foundation for Science (IFS) teamed up for a **Mentorship Program on Advanced Grants for Accelerating Transformation through Agricultural Research**. Focused on initiatives that contribute to solutions or provide evidence in support of food security policy and programming during the global pandemic and economic and social

IFS INTERNATIONAL FOUNDATION FOR SCIENCE

SEAMEO SEARCA

IFS-SEARCA MENTORSHIP PROGRAM FOR ADVANCED GRANTS

AWARDING CEREMONY & INCEPTION MEETING

29 October 2021, 2:00 P.M. (GMT+8) / 8:00 A.M. (GMT+2)

JOIN US VIA:

Zoom: <https://bit.ly/lifsearcagrants> | Facebook: <https://fb.com/seameo.searca>

crisis, the program **supported 10 Southeast Asians from Indonesia, the Philippines, and Vietnam** who qualified for the competitive grants. The grants enabled promising researchers and scientists to strengthen their research skills as well as develop a wider suite of skills, including networking; collaborative research; creating web presence, media pieces, and conference presentations; and influencing and science leadership. All the grantees are expected to complete their research in 2023.

During the fiscal year, the SEARCA GRAINS aggressively offered short-term starter funds for transformative innovations for sustainable agriculture and rural development across Southeast Asia. Designed to support institutions working on technologies and systems that can uplift farming-related enterprises and commercial activities along the value chain into viable agribusiness models, the **GRAINS awarded to startups and technology prototypes in FY 2021/2022 amounted to a total of PHP 5.8M.**

Through a number of collaborative projects, SEARCA also **invested in commodities and initiatives that have the potential to catalyze additional financing from other sources.** The Center led the development of regional road maps on selected commodities that are

investment opportunities. SEARCA also worked with FAO to develop a pioneering jurisdictional-level platform for forest management and climate finance. Moreover, SEARCA collaborated with the Philippine government in **formulating the NAFMIP** which will guide sector-wide growth and galvanize sector-wide public and private investments. In addition, SEARCA invested Php 750,000 in the **formulation of the Seed Industry Development Program (SIDP) of the Philippines** to support the DA-Bureau of Plant Industry (BPI). During the year, stakeholder and expert consultations were conducted along with the preparation of the SIDP Framework.

TRANSFORMATIONAL TRACKS

ATTAIN OUTCOME 5

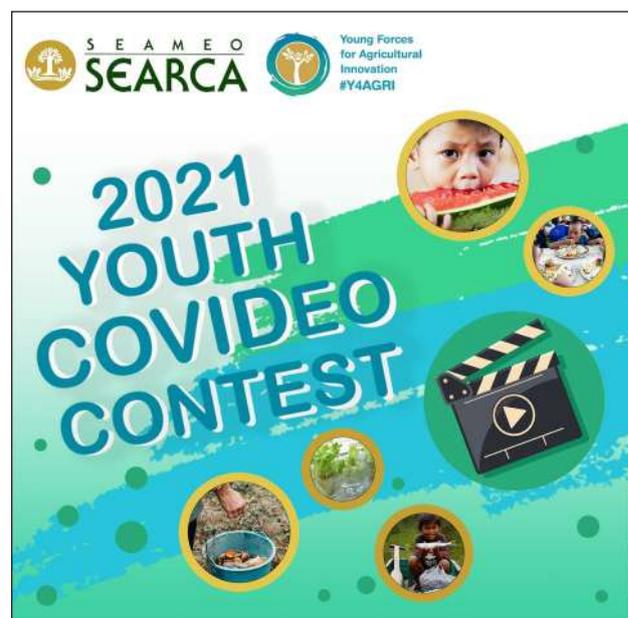
FOOD AND NUTRITION SECURITY ENSURING WELL-BEING IN AN EVOLVING LIFESTYLE

SEARCA prioritized actions that promote food and nutrition security with particular emphasis on food consumption and the impact of changing food preferences for a healthy diet during the fiscal year. Consumer preferences and commodity consumption patterns determined by the ATMI-ASEAN value chain studies focused on pork-based processed products in the Philippines, maize in Cambodia and Lao PDR, pulses in Myanmar, and swine in Vietnam.

Furthermore, the SEARCA-supported **School-plus-Home Gardens (S+HGP)** served as supplementary sources of nutritious food during the pandemic. Cognizant of the critical value of proper nutrition and healthy diets ingrained from a young age through school-based nutrition programs such as school gardening, SEARCA scaled up the S+HGP to other parts of the Philippines and in Cambodia.

SEARCA also held a **Southeast Asian competition showcasing youth actions for sustainable food consumption** that engaged 435 youth six Southeast Asian countries to participate and share their creative stories and solutions to food sustainability issues.

Transforming mindsets on food consumption is indeed an important aspect of food and nutrition security. Toward this end, SEARCA embarked on communication campaigns with its partners in the **Know The Science (KTS) project** and **Farmer Talk: Development of IEC Materials Highlighting Biotech Contributions to Farmers' Success** to increase awareness about modern agri-biotechnology and the positive impacts of biotech crops.



PARTNERSHIPS AND KNOWLEDGE SHARING FOR ATTAIN

Because all development solutions rely on collaboration and there is much opportunity to broaden its reach and impact, SEARCA placed a **premium on working in partnerships** and **sharing of knowledge and expertise**. In FY 2021/2022, the Center continued to cultivate partnerships for ATTAIN; communicate its current work and the outcomes of its programs to ARD stakeholders and the public; expand the development of its knowledge products and channels; and hold conferences, workshops, roundtable discussions, and technical meetings.

Partnerships

With Partnerships for the Goals as one of its Sustainable Development (SDG) commitments, SEARCA further strengthened its network and linkages in fulfilling its aspirations for its 11th Five-Year Plan. In the second year of ATTAIN, the Center revived partnerships and

formed closer relationships with its current and new partners, which centered on inclusive and collaborative undertakings in promoting agricultural innovation. Altogether, in FY 2021/2022, SEARCA **signed 51 new agreements** (37 local and 14 international/regional) **with 40 institutional partners** (13 academe, 3 industry, 10 government, and 14 local/international civil society organizations) (**Annex 13**). Through its Partnerships Unit (PU), SEARCA sealed nine new Memorandum of Understanding (MOUs) for institutional cooperation in the areas of education, research, and training. These include agreements with HEIs such as Can Tho University and Universiti Teknologi MARA (UiTM) that expressed interest to collaborate on programs under the Education and Collective Learning Department (ECLD). PU also assisted the Research and Thought Leadership Department (RTLTD) in cultivating institutional relations with the International Service for the Acquisition of Agri-biotech Applications (ISAAA) as one of the



The ceremonial signing of the agreement for the project “Leveling Up Philippine Higher Education Institutions in Agriculture, Fisheries, and Natural Resources (LevelUPHEI AFAR)” held online on 10 August 2021 was attended by principal signatories and witnesses from IPB University, Universitas Gadjah Mada, Kasetsart University, Universiti Putra Malaysia, University of the Philippines Los Baños, Universitas Brawijaya, National Taiwan University, SEARCA, and the State Universities and Colleges - Association of Colleges of Agriculture in the Philippines (SUC-ACAP).

TRANSFORMATIONAL TRACKS

Center's long-standing partners. ISAAA partnered with SEARCA for a webinar titled SOLVE Public Info-sufficiency on Genome-edited Crops. Moreover, PU also actively engaged the Emerging Innovation and Growth Department (EIGD) in partnership-building, such as the one with the Pilipinas Shell Foundation, Inc. (PSFI), with which SEARCA co-organized the Agri-Innovation Forum on Transforming Agri-Food Systems Through Agri-Innovation (AgInFo). These partnerships are highly valued by SEARCA as they serve as the building blocks in attaining its vision of becoming the leading enabler and champion of excellence in ARD in Southeast Asia.

Meanwhile, SEARCA has **integrated a Community Relations Program into its overall operational strategy**. In FY 2021/2022, community relations activities included the virtual info-demo session and distribution of hydroponics kits to 20 students and educators in partnership with Gawad Laguna, Inc. and NIU Greens. SEARCA also forged a partnership with the Rotary Club Los Baños Makiling, LATCH Los Baños, and the Municipal Government of Los Baños for the PaManna Feeding Program, a three-month feeding



Fresh harvests from the Center's edible landscaping were included in the vegetables shared by the SEARCA staff at the monthly community pantry to provide in-kind support to agency personnel.

initiative that enhanced the nutritional status of 135 undernourished children ages six months to five years old and 56 pregnant and lactating mothers from the 14 barangays of Los Baños, Laguna, Philippines. Aside from these outreach activities, SEARCA also distributed 300 healthful food packs and health kits to Los Baños medical frontliners and elders, with PSFI and Gardenia Bakery, Inc. as co-sponsors. Furthermore, SEARCA provided economic support to its agency personnel on "no work, no pay" basis by holding seven community pantries that offered them fresh vegetables and other ingredients to offset their food expenses. Plans are afoot

to step up the Center's community relations initiatives towards making them bigger and more sustainable to leave a lasting impact on beneficiaries and a distinct stamp of the SEARCA brand.



NIU Greens Hydroponics business proprietors Floracoelli Masajo-Hernandez (left) virtually discussed the basics of soil-less farming while Engr. Albretch Hernandez (right) showcased a ready-to-harvest lettuce crop transplanted in a seedling plug from the hydroponics set-up during the virtual info-demo session on hydroponics.

While it is best known for projecting a positive image of SEARCA and publicizing its work, **public relations**

(PR) is meant to help create, build, and strengthen relationships. The Center's PR activities and outputs in FY 2021/2022 had therefore complemented its efforts in partnerships building. During the year, the Center received wide coverage in mass media with **282 articles published by newspapers and online news sites (Annex 14)**, which contributed to increased visibility of the Center in the public eye. Keen to reach more people in the Southeast Asian region, during the year **31 articles were translated to Khmer, Bahasa Indonesia, Malay, Myanmar, Thai, and Vietnamese** and sent to media contacts and news channels using these languages in attempts to widen coverage of SEARCA's development work. Meanwhile, **complementing media relations in the mold of SEARCA's PR strategy is corporate communication.** During the year, SEARCA produced a suite of corporate publications, namely, the SEARCA Diary published quarterly, an annual report, the SEARCA Weekly Calendar, monthly e-news bulletins, audiovisual presentations, and various speeches, talking points, and presentations. Likewise produced were booklets that detail the contributions and engagements of SEARCA in each of the 11 SEAMEO Member Countries as well as SEARCA's involvement with five of the eight SEAMEO Associate Member Countries, namely, Australia, Canada, France, Germany, and the Netherlands. Moreover, partnership briefs were created to showcase past and current collaborative work of

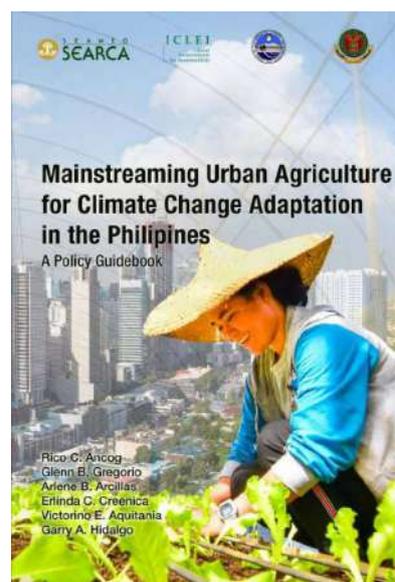
SEARCA with specific institutions or organizations. SEARCA's PR team worked closely with the Center's webmaster and social media team in sustaining the stream of fresh content for the Center's owned media, which include the SEARCA website and social media channels. Toward this end, a total of 146 web news articles were published by contributors from across the Center during the year. These PR efforts were intended to make SEARCA's work and relevance better known to its stakeholders and enhance its reputation as a credible media source and a reliable partner in development.

Knowledge Creation and Sharing

In FY 2021/2022, SEARCA continued to assert its leadership in knowledge creation of ARD content. This has been done through the production and sharing of publications and other knowledge products through



New books published in FY 2021/2022.



TRANSFORMATIONAL TRACKS

SEARCA websites and social media as well as storing of knowledge through the Center's library and archives system.

SEARCA **produced 39 scholarly and technical publications (Annex 15)** categorized as books, guidebooks, monographs (serial and non-serial), **Asian Journal of Agriculture and Development (AJAD)** articles and full issues, discussion papers, proceedings, and policy briefs/notes. These were **shared primarily through online distribution** (free download) on the SEARCA and AJAD websites and external indexing partners, complemented by a robust social media promotion.

SEARCA staff, scholars, and alumni also contributed to the body of knowledge through their publications and paper presentations in various knowledge events. **(Annex 16)**

A milestone for the Center's internationally peer-reviewed journal is the **launch of the ScholarOne manuscript and review system for AJAD**. With an average 350 annual submissions to AJAD and over 400 reviewers engaged, subscribing to Clarivate's ScholarOne facilitated a more efficient submission and review process. SEARCA has also **activated iThenticate plagiarism checker** through its subscription for digital object identifier (DOI) to ensure the originality and proper referencing of AJAD submissions and other major publication types. The year also saw the **release of the first three issues of the SABRAO Journal of Breeding and Genetics** with SEARCA as co-publisher.

In FY 2021/2022, online SEARCA **publications had 6,342 downloads by 3,973 people in 109 countries**. At an average production cost of USD6 per publication, **SEARCA publications downloaded for free during the fiscal year has an estimated value of USD 28,000**. The most downloaded publications were books and monographs (42%); followed by policy briefs/notes (23%); and articles published in AJAD (20%). The downtrend in the journal article downloads may be attributed to the implementation of a more restrictive download form, which was intended for data privacy considerations. Nonetheless, journal articles and other select publications have been continually indexed with external bibliographic partners such as the Web of Science, EBSCO, and ASEAN Citation Index.

The **SEARCA website** (www.searca.org) continued to be the Center's primary online channel and **received 160,470 visits** (+7% compared to previous year), as well as a 93 percent "yes" response to the online survey/question "Was our website helpful?" The SEARCA website remained dynamic with 560 total website requests/uploads fulfilled, with 62 percent comprising press releases and news articles documenting the Center's activities and events. A **website search engine optimization (SEO) audit/benchmark** was also commissioned to help identify and prioritize areas for improvement.

The Center continued to experience significant gains in its social media presence. Its **official Facebook Page** (<http://facebook.com/seameo.searca>) **reached over 1,690,190 people** with an average of 172, 447 engagements (e.g., likes, comments, shares, etc.) or

14,371 monthly. It had over 45,237 Likes and 50,893 Followers (+23% and +22%, respectively, compared to previous year) where the latter are composed of 57 percent women and 43 percent men. The youth ratio (18-34 years old) for women is 25-34 (22%), 18-24 (12%), and 13-17 (1%) while for men is: 25-34 (18%), 18-24 (9%), and 13-17 (1%). The top three SEAMEO member countries where SEARCA's Facebook Page has proven most popular are the Philippines, Myanmar, and Indonesia. A total of **627 Facebook posts were published** with 92 percent originating from the Center's core programs and their activities and initiatives.

Meanwhile, the **YouTube channel** (<https://www.youtube.com/c/seameosearca>), SEARCA's third official social media channel, recorded over 94,995 total views and **reached 1,286 subscribers** (+14% compared to previous year). The **SEARCA LinkedIn page** (<https://www.linkedin.com/company/searca>) has **grown to 956 followers** (+60% compared to previous year).

The SEARCA library, with a collection of 15,000 agriculture and development-related references, **continued providing library services** even when it was physically closed during the pandemic. Needed references were made available to SEARCA scholars and staff through special arrangements, considering restrictions in entering the library. Furthermore, **127 new publications, scholars' dissertations, weblinks, and abstracts were processed** and added to the Center's online knowledge collections and its website.

The Center's **archives also remained operational during the pandemic** and fulfilled 168 requests from

the different SEARCA units and departments. A low-resolution version of the Center's photo contest submissions from 2017 to 2021 was also made available to staff for their official use in presentations and other collaterals. The digitization of the Center's vital records was outsourced during the year for efficient information processing, storage, access, and dissemination. A total of **3,717 documents were digitized**, including personnel and scholars' records, project reports, publications, and contracts.

SEARCA's **15th Annual Photo Contest** with the theme "One Health is Wealth: Healthy Agriculture and Sustainable Food Systems Amidst COVID-19" was successfully completed during the competition's milestone year. With 100 percent participation of all 11 SEAMEO Member Countries, **1,513 entries were received and beefed up SEARCA's knowledge resources**. In addition to the staple awards, namely, first, second, and third prizes; the SEARCA Director's Choice and Philippine Department of Education Secretary's Choice; and People's Choice Award via Facebook votation, two special awards tagged "Best Youth Photographer," one who used a camera and another who used a mobile phone, were added to mark the milestone year and highlight youth engagement in agriculture. The eight winning photos were entries of photographers from Myanmar, the Philippines, and Vietnam.

Knowledge sharing was also carried out by SEARCA through the 62 conferences, workshops, roundtables, technical meetings (Annex 17) and 25 knowledge events (Annex 18) it conducted in FY

TRANSFORMATIONAL TRACKS

2021/2022. A number of these were jointly organized with regional and international organizations, academic institutions, and national and local entities. Many of the conferences, workshops, roundtables, and technical meetings were convened as part of projects being implemented by the Center, while most of the knowledge events conducted formed part of SEARCA's

Training for Development (T4D) initiatives. Notably, the **knowledge events centered on capacitating ARD stakeholders** that included academics, researchers, policymakers and advisers, agricultural professionals, program implementers and planners, government executives and staff, farmers, and the youth.

ORGANIZATIONAL EXCELLENCE AND SOLID RESOURCE BASE

SEARCA's resource units and support services continued to ably support the Center's technical programs and activities towards achieving its goal in its 11th FYP. The Center enhanced operational efficiency and cost-effectiveness of its support services through renovation and improvement of physical facilities, enhancement of information systems, continuous improvement and review of internal administrative processes and procedures, and improvement of fiscal and human resources management. All of these aided the programs and activities of the Center towards the achievement of its goals.

The Center invested in **upgrading its physical facilities** in FY 2021/2022. To adapt to the pandemic and remote work setup, the Center **bolstered its digital capabilities** by improving its network infrastructure through a new structured cabling system, upgraded network appliances, and reconfigured network security policies. The network infrastructure upgrade further enhanced the users' network collaboration. Moreover, the Center increased its Internet bandwidth

in the main office from 130 Mbps to 300 Mbps. This **network reconfiguration facilitated faster online collaboration, communication, and delivery of other essential online services** of the Center. SEARCA is also committed to providing its clients and users with the best and most up-to-date information technology-based systems, infrastructure, resources, and devices. Towards this end, new mobile workstations, IT devices, and peripherals were provided to support the remote work setup of staff members.

In terms of enhancing its information systems, the Center further **leveraged cloud computing technologies as part of the Center's business continuity plan**, which includes Microsoft Office 365, cloud servers, and online backup tools. These provided easy and fast access to relevant information that helped the Center to continuously operate business even during complex work arrangements or community lockdowns. With the shift from physical reporting to remote work, Zoom video conferencing became a critical component in the successful implementation of remote hosting of online

seminars and training. The Center reacted quickly at the start of the pandemic, working with its vendors to acquire the necessary additional Zoom licenses to meet its growing needs. On the other hand, to comply with government-issued orders of restricted mobility, the Center also **improved its Human Resources Information System (HRIS)** to include an enhanced onsite reporting reservation system that kept track of the health status and attendance of those who were physically reporting to the office. This new feature fast-tracked the Center's contact tracing process. The attendance monitoring system was also developed to ensure a contactless attendance monitoring process when the Center returned to physical reporting in March 2022. Several other information systems were updated to address and realign with the demand of the changing environment.

Other **physical upgrades included renovations of office, conference, and housing facilities.** Along with repainting and repairs at the main office building, SEARCA's conference facilities were also improved by obtaining a state-of-the-art sound system and resanding of floor areas. Moreover, nine housing building units were renovated and restored, including a modernized and retrofitted elevated water storage tank and acquisition of new furniture and a new power generator set.

During the fiscal year, various **guidelines and Center policies were developed to enhance operational efficiency and maximize the cost-effectiveness of administrative processes.** These policies include procedures related to health protocols, talent

engagement, and modification in the compensation and benefits of staff and contracted service personnel. Guidelines issued in FY 2021/2022 included policies on staff promotion, modified salary structure and adjustment for regular staff and contracted personnel, protocols and guidelines related to COVID-19, and the guidelines for hosting online events under the SOLVE platform. In addition, an internal customer feedback mechanism was instituted to assess customers' satisfaction with the resource units' rendered services throughout the fiscal year. The customers' feedback gave the resource units valuable insights and input on how they can provide better support services. As part of the Center's commitment to its stakeholders to protect the right to privacy and exercise good governance, during the fiscal year, **SEARCA's Data Privacy Statement was crafted and made public** through its website in compliance with the Data Privacy Act of 2012.

The Center sustained a solid financial position by using the right mix of investment instruments. SEARCA **generated a significant portion of its operating funds from external sources** even as it **secured continued financial support from its host government**, the Philippines, which accounted for almost half of its total budgetary requirements to support its programs and activities. At the end of FY 2021/2022, the Center still had a **solid and diversified investment and cash portfolio of USD 36M.** The Center has earned interest from these investments amounting to USD 1.14M, and such earnings supplemented the Center's operating funds. In January 2022, the Center **started to implement the new Investment Policy**, which

TRANSFORMATIONAL TRACKS

aligns the Center's investment strategies with the current trend in investment management and risk analysis. This policy aims to improve and maximize the earning capability of the investment portfolio at minimal risk, including a new asset allocation rate that would guide investment managers and ineligible instruments such as derivatives, privately placed debt, and cryptocurrencies.

In carrying out its work, SEARCA prides itself on its **68 excellent core staff, 32 contracted service and project staff, and 214 consultants and technical service providers**. The Center also **encouraged and supported its personnel's professional and personal development** with 98 staff having attended training courses, conferences, seminars, workshops, and orientations or went on exposure trips in FY 2021/2022 (**Annex 19**). Furthermore, as the health and safety of staff members are crucial to the Center, it **facilitated the vaccination of all staff and their immediate dependents** against COVID-19. As of June 2022, 100% of staff members have received at least one dose of booster shot. Health kits were also provided to staff members, including medical-grade face masks, alcohol, fruit juices, and vitamins. In addition, staff members were offered daily shuttling service to ensure minimal exposure to public commuters.

With the **reappointment of the SEARCA Director to a second three-year term**, the Center leadership remained steady and strong. Having been **appointed as a UN Food Systems Champion**, the Director was able to give SEARCA more opportunities to work with

like-minded organizations and individuals towards the same goal of contributing to the SDGs and food security. During the year, he led SEARCA in contributing to substantive discussion, generating ideas, and taking action to strengthen food systems through independent dialogues and projects that benefit vulnerable groups like malnourished children and indigent pregnant mothers. Moreover, being recognized by the Philippine Department of Agriculture as one of the **2021 Filipino Faces of Biotechnology**, the SEARCA Director was able to advance Center's advocacy of promoting the benefits of biotechnology in agriculture, the environment, education, and policy to the public.

Also providing expert guidance and technical advice to the Center's core programs are **SEARCA Senior Fellows (Annex 20)**. These fellows also provided essential linkages to potential donors and partners for the Center. Furthermore, **SEARCA's Governing Board provided substantial inputs and guidance on various operational and program-related activities of the Center to improve its business processes and the impact of its core programs** in the region.



FUTURE OUTLOOK

Southeast Asia has the potential to be a global agricultural powerhouse. Fertile lands and a growing population create immense opportunity. However, the coming years will be crucial in overcoming challenges to ensure sustainable and productive agriculture. SEARCA, through its innovative programs, is uniquely positioned to address these hurdles.

Programs like ATTAIN will be instrumental. By developing climate-resistant crops, improving irrigation techniques, and promoting disaster preparedness, SEARCA helps farmers mitigate the effects of climate change. Additionally, by fostering partnerships across the agricultural value chain, ATTAIN creates a more robust system that can withstand market fluctuations and disruptions.

SEARCA recognizes the potential of emerging innovations to revolutionize agriculture. Through programs like SEARCA Grants for Research towards Agricultural Innovative Solutions (GRAINS), SEARCA actively supports the development and scaling-up of promising new technologies and business models.

This fosters an environment where startups can thrive, bridging the gap between ideas and real-world applications.

Empowering the next generation of agricultural leaders is critical. SEARCA's scholarship, training, and youth programs equip young people with the knowledge and skills to become innovators and drive future advancements in the sector.

SEARCA's strength lies in its collaborative approach. By working closely with governments, research institutions, and farmer organizations, SEARCA leverages existing resources and expertise. This collaborative approach ensures the long-term sustainability of its initiatives and maximizes impact across the region.

Through strategic use of its programs and a continued focus on collaboration, SEARCA has the potential to transform Southeast Asian agriculture. The future holds the promise of a thriving agricultural sector that is not only productive but also sustainable and resilient.

Annexes

Annex 1.	Number of SEARCA Graduate Scholarships (Full and PhD Research), FY 2021/2022	38
Annex 2.	SEARCA Capacity Building Projects, FY 2021/2022	38
Annex 3.	SEARCA Project Scholars, FY 2021/2022	39
Annex 4.	Dual Degree Programs, FY 2021/2022	44
Annex 5.	SEARCA Full Master's and PhD Scholars, FY 2021/2022	45
Annex 6.	SEARCA PhD Research Scholars, FY 2021/2022	50
Annex 7.	Conferences, Seminars, Workshops, and Training Courses Attended by SEARCA Scholars, FY 2021/2022	52
Annex 8.	University Consortium Grants	53
Annex 9.	SEARCA Online Learning and Virtual Engagement (SOLVE) Webinar Series, FY 2021/2022	57
Annex 10.	SEARCA Learning Events, FY 2021/2022	59
Annex 11.	SEARCA Research and Innovation Projects, FY 2021/2022	64
Annex 12.	SEARCA Grants, FY 2021/2022	65
Annex 13.	List of Formal Agreements with Collaborating Institutions, FY 2021/2022	72
Annex 14.	Published SEARCA Press Releases, FY 2021/2022	76
Annex 15.	SEARCA Publications, FY 2021/2022	80
Annex 16.	Publications and Papers Presented by SEARCA Staff, Scholars, Alumni, and Professorial Chair Grantees, FY 2021/2022	82
Annex 17.	SEARCA Conferences, Roundtables, Workshops, and Meetings, FY 2021/2022	84
Annex 18.	SEARCA Knowledge Events, FY 2021/2022	89

Annex 1. Number of SEARCA Graduate Scholarships (Full and PhD Research), FY 2021/2022

Country	FY2021/2022						As of 30 June 2022						Total
	Awarded			Ongoing			Completed			Others			
	MS	PhD	PhD Res	MS	PhD	PhD Res	MS	PhD	PhD Res	MS	PhD	PhD Res	
SEARCA Regular Scholarships													
Brunei Darussalam	0	0	0	0	0	0	0	1	0	0	0	0	1
Cambodia	1	0	0	1	1	0	33	5	1	5	3	0	50
Indonesia	0	0	0	3	12	5	145	78	14	12	10	0	279
Lao PDR	0	2	0	0	3	0	35	4	1	2	1	0	48
Malaysia	0	0	0	0	6	3	45	8	1	3	4	0	70
Myanmar	0	0	0	1	2	0	28	32	1	1	0	0	65
Philippines	0	4	0	3	6	6	140	124	54	14	10	2	363
Singapore	0	0	0	0	0	0	4	0	0	0	0	0	4
Thailand	0	0	0	1	5	1	104	119	5	3	9	0	247
Timor-Leste	0	1	0	3	4	0	23	10	0	2	1	0	44
Vietnam	0	0	0	0	6	2	46	32	4	8	5	0	103
Sub-Total	1	7	0	12	45	17	603	413	81	50	43	2	1274
Project Scholarships													
Brunei Darussalam	0	0	0	0	0	0	1	0	0	0	0	0	1
Cambodia	1	3	0	0	0	0	29	9	0	0	1	0	43
Indonesia	4	3	0	2	10	0	37	45	0	1	0	0	102
Lao PDR	0	1	0	0	0	0	31	0	0	0	0	0	32
Malaysia	2	2	0	2	7	0	7	2	0	0	1	0	23
Myanmar	0	3	0	0	0	0	24	12	0	0	0	0	39
Philippines	7	2	0	2	9	0	65	47	0	0	3	0	135
Singapore	0	0	0	0	0	0	0	0	0	0	0	0	0
Thailand	0	2	0	0	1	0	63	59	0	0	0	0	125
Timor-Leste	0	0	0	0	0	0	19	2	0	4	0	0	25
Vietnam	1	0	0	2	6	0	40	15	0	0	0	0	64
Others	0	0	0	0	0	0	28	1	0	0	0	0	29
Sub-total	15	16	0	8	33	0	344	192	0	5	5	0	618
Grand Total	16	23	0	20	78	17	947	605	81	55	48	2	1892

Annex 2. SEARCA Capacity Building Projects, FY 2021/2022

Title of Project	Duration	Location of Implementation	Partner/s
Joint Scholarships (13)			
In-Country/In-Region Scholarship Programme I	AY 2018-2019 to AY- 2020-2021	Philippines, Indonesia, Thailand, Malaysia	German Academic Exchange Service (DAAD)
In-Country/In-Region Scholarship Programme II	AY 2021-2022 to AY 2023-2024	Philippines, Malaysia, and Thailand	DAAD
Agropolis Fondation (AF) -SEARCA Joint Scholarship	AY 2021-2022 to AY 2026-2027	Philippines and France	AF
Joint Bulacan State University (BuSU) - SEARCA PhD Scholarship Program	AY 2020-2021 to AY 2023-2024	Philippines	BuSU
Development of Innovative and Sustainable Aquafeed Using Local Agro-Residual Resources	AY 2021-2022 to AY 2022-2023	Philippines and Malaysia	Universiti Sains Malaysia (USM) and Center of Excellence on Sustainable Agricultural Intensification and Nutrition (CE SAIN)
MARDI-SEARCA Joint Graduate Scholarship	AY 2020-2023 to AY 2024-2025	Philippines and Malaysia	Malaysian Agricultural Research and Development Institute (MARDI)

Title of Project	Duration	Location of Implementation	Partner/s
NTU-SEARCA Joint Scholarship	AY 2020-2021 to AY 2022-2023	Philippines and Taiwan	National Taiwan University (NTU) Global Agriculture Technology and Genomic Science
NU-SEARCA Joint PhD Scholarship in the Fields of Agriculture and International Development for Philippine Nationals	AY 2020-2021 to AY 2022-2023	Philippines and Japan	Nagoya University (NU), Japan
Tokyo NODAI-SEARCA Scholarship for Dissertation Doctorate Program	AY 2020-2021 to AY 2022-2023	Philippines and Japan	Tokyo University of Agriculture (Tokyo NODAI), Japan
International Service Provider for Local and International Graduate Scholarship Programs in Livestock Research and Biotechnology for the Philippine Carabao Center	June 2014 - December 2023	Philippines	Philippine Carabao Center
SU-SEARCA Joint Graduate Scholarship in the Fields of Agricultural Biotechnology, Aquaculture, Food Science and International Development for Southeast Asian Countries	AY 2020-2021 to AY 2023-2024	Philippines and South Korea	Sejong University (SU), South Korea
UPM-SEARCA Joint Graduate Scholarship	AY 2020-2021 to AY 2024-2025	Philippines and Malaysia	Universiti Putra Malaysia (UPM)
CE SAIN-SEARCA Joint Graduate Scholarship	January 2022 - December 2024	Philippines and Thailand	Center of Excellence on Sustainable Agricultural Intensification and Nutrition (CE SAIN)
Institutional Development Assistance (3)			
Leveling Up Philippine Higher Education Institutions in Agriculture, Fisheries, and Natural Resources (LevelUPHEI AFAR)	November 2020 - October 2022	Philippines and SEA	Commission on Higher Education (CHED) under the International Continuing Professional Education (ICPE) Program
Teaching-Learning and Research Capacity-building of the Higher Education Improvement Project	2020-2022	Philippines and Cambodia	Royal University of Agriculture (RUA), Cambodia
Development of an Internal Quality Assurance System (IQA) for the Royal University of Agriculture (RUA)	2020-2024	Virtual and RUA, Phnom Penh, Cambodia	RUA

Annex 3. SEARCA Project Scholars, FY 2021/2022

Name	Country	Study Post	Degree	Field of Study	Title of Thesis or Dissertation	Date Awarded
Chaisiri Kitpaosong (M)	Thailand	KU	PhD	Biotechnology	Furanic acid F2 (FuFA-F2) from <i>Hevea brasiliensis</i> Latex: Toward a transition to an ecologically responsible production of bioactive molecules in a society that sustainably manages its natural resources	1 January 2022
Marich Nur Maqsalina (F)	Indonesia	IPB	PhD	Entomology	Integrated Pest Management Strategy Against Coffee Berry Borers Based on their Dispersion Capacity in North Sumatra, Indonesia	15 January 2022
Nguyen Van Hieu (M)	Vietnam	UPLB	PhD	Plant Breeding	Integration of Genetic Resources from Gene Bank into Breeding Program and Optimization of Their Use for Genetic Improvement: A Case study on rice	1 January 2020
Junaidi (M)	Indonesia	UGM	PhD	Biological Sciences	Biochemical, Near-infra Red Spectroscopy Analysis of Reactive Oxygen Species-scavenging Systems in Latex of <i>Hevea brasiliensis</i>	17 January 2019
Julia Ng Su Chen (F)	Malaysia	UPM	PhD	Bioresource Management	Advancing on the Conceptualization of a Theory of Change for Landscape Approaches to Biodiversity Conservation, The Case of Sabah in Malaysia	1 September 2019

Name	Country	Study Post	Degree	Field of Study	Title of Thesis or Dissertation	Date Awarded
Yao Tze Leong (M)	Malaysia	UPM	PhD	Forest Management and Ecosystem Sciences	Ensuring the Future of Perennial Crops in Southeast Asia in a Context of Global Change: Case of <i>Garcinia</i> fruit tree species	1 September 2019
June-June P. Santos (M)	Philippines	DLSU	PhD	Civil Engineering	Improvement of Buckling Resistance of Steel Reinforcement	1 March 2021
Punlork Men (M)	Cambodia	KU	PhD	Agricultural Science	Innovative Mechanisms to Engage Private Sector in an Agricultural Extension Model in the Transfer and Adoption of Conservation Agriculture Production Systems	1 January 2022
Vandy Hok (M)	Cambodia	KU	PhD	Agricultural Science	Identification of Limiting Factors in Partnership for Agricultural Research Commercialization in Cambodia	1 January 2022
Hagi Sujateruna (M)	Indonesia	KU	Master's	Tropical Agriculture	Storage and Artificial Ripening of Lady Finger Banana by Temperature Phasing Method	1 August 2021
M. Royan(M)	Indonesia	KU	Master's	Applied Economics for Agriculture and Environment	The Economic Effects of Implementing the Rural Funds on the Development of the Rural Agro Edu-tourism	1 August 2021
Akhmad Zamroni (M)	Indonesia	UPLB	PhD	Environmental Science	Anthropogenic and Geological Factors Influencing Morphological Changes in the Progo River and Its Impacts on the Farmers' Livelihood in Daerah Istimewa Yogyakarta Province, Indonesia	1 September 2021
Imas M. Devangsari (F)	Indonesia	UPLB	PhD	Environmental Science	Active Fe-Al and Humus Complexation under Different Land-Management on Andisols in Central Java, Indonesia	1 September 2021
Phouthasone Khouangvichit (M)	Lao PDR	UPLB	PhD	Environmental Science	Assessment of Climate Change Impacts on Bueng Eor Marsh Communities in Xayboulou District, Savannakhet Province, Lao PDR	1 September 2021
Chan Myae Lwin (F)	Myanmar	KU	PhD	Agricultural and Resource Economics	Analyzing Food and Nutrition Security Status of Different Ethnic Rural Households of Myanmar	1 August 2021
Thaw Tar Tin Shwe Oo (F)	Myanmar	UPLB	PhD	Plant Breeding	Molecular Genetics of Submergence Tolerance in Rice (<i>Oryza sativa</i> L.) by Using Myanmar Rice Landraces	1 September 2021
Ngwe Sin Moe Satt (F)	Myanmar	UPLB	PhD	Plant Breeding	Screening of Myanmar Local Rice Accessions for Heat Tolerance, Mapping of QTLs (Quantitative Trait Loci) and Detecting DNA Markers Linked to Those QTLs at Flowering Stage	1 September 2021
Arjay A. Gerance (M)	Philippines	KU	Master's	Applied Economics for Agriculture and Environment	Assessment of the Socio-Economic Outcomes from Postharvest Systems Improvement in Selected Tomato Supply Chains: Evidence from Laguna and Nueva Vizcaya, Philippines	1 August 2021
Gladys C. Dinglasan (F)	Philippines	UPLB	Master's	Agronomy	Adlai as an Alternative for Rice; Characterization of Its Quality and Palatability as Source of Calorie	1 September 2021
Monique V. Corpuz (F)	Philippines	UPLB	Master's	Agronomy	Corn-based System for Conservation Agriculture Practices in Rainfed Lowland	1 September 2021
Julie Zarene A. de Guzman (F)	Philippines	UPLB	Master's	Environmental Science	Filipino Women's Environmental Work in Urban Organic Waste and Resource Management	1 September 2021
Lawrence Yves C. Uy (M)	Philippines	UPLB	PhD	Genetics	Identification and Validation of Mutated Genes in <i>Setaria viridis</i> Photosynthesis mutants	1 September 2021

Name	Country	Study Post	Degree	Field of Study	Title of Thesis or Dissertation	Date Awarded
Arunee Suwannam (F)	Thailand	KU	PhD	Tropical Agriculture	Detection of Plant-parasitic Nematodes in Thai Agricultural Exports Using Loop-mediated Isothermal Amplification (LAMP) Assay	1 August 2021
Ayu Septi Anggraeni (F)	Indonesia	IPB	PhD	Nutrition and Feed Science	In Vitro and in Sacco Assessment of Fermentation Characteristic and Ruminant Microbiota in Beef Cattle Fed with Diets Containing Black Soldier Fly Larva (<i>Hermetia illucens</i>) as Methane Reduction Agent	1 September 2020
Muhammad Chrisna Satriagasa (M)	Indonesia	KU	PhD	Forestry	The Role of Ecosystem-based Disaster Risk Reduction (eco-DRR) in Watershed Scale to Reduce the Impact of Climate Change Effect on Food Security in Tropical Countries	1 January 2021
Cipto Nugroho (M)	Indonesia	UPLB	PhD	Plant Pathology	Epidemiology of the Rice Blast in Rice-maize Intercropping System in Indonesia	1 August 2019
Chindy Ulina Zanetta (F)	Indonesia	UPM	PhD	Plant Science	Agro-morphological Response and Molecular Characterization of Heat Stress Tolerance in Pea (<i>Pisum sativum</i> L.)	1 August 2019
Gita Addelia Nevara (F)	Indonesia	UPM	PhD	Food Science	Resistant Starch Properties of Cooked Rice Affected by Kenaf Seed Addition and Its Impact on Blood Glucose Level	1 October 2019
Vina Eka Aristya (F)	Indonesia	UGM	PhD	Agricultural Sciences	The Effectiveness of Rice Participatory Varietal Selection in Central Java	1 August 2018
Antun Puspanti (F)	Indonesia	UGM	PhD	Forestry	Model Rehabilitation of Degraded Land Towards Ecosystem Restoration in Paliyan Wildlife Reserve, Gunung Kidul, Yogyakarta Province	1 August 2017
M Murughan Manikam (M)	Malaysia	UPM	PhD	Forest Management and Ecosystems Sciences	A Study on the Impact of Global Sustainability and Legality Policies on Forest and Timber Industry in Malaysia	1 February 2020
Mohd Azlin bin Mohd Nor (M)	Malaysia	UPM	PhD	Biocomposite Technology and Design	Mechanical Properties of Wooden Kenaf/Polyester Reinforced PLA Hybrid Composites	1 August 2019
Nursabrina binti Munawar (F)	Malaysia	UPM	PhD	Food Technology	Improvement of Herbal Tea Production: Nutritional, Quality, and Safety	1 September 2019
Nor Akhlisah binti Zulkipli (F)	Malaysia	UPM	PhD	Environmental Engineering	Synthesis of Ethyl Levulinate by Oil Palm Empty Fruit Bunch	1 February 2019
Shampazuraini binti Samsuri (F)	Malaysia	UPM	PhD	Plant Science	Enhanced Intercropping Productivity of Sweet Corn-Okra in Young Rubber Plantation	1 September 2018
Shemaiah Gail P. Placencia (F)	Philippines	UPLB	Master's	Agricultural Economics	Exploring Pathways Towards Sustainable Cacao Production in Davao Region, Philippines	1 September 2020
Anne Gellie P. Pablo (F)	Philippines	KU	PhD	Food Science	Impact of Calcium-alginate Microencapsulation to Stability of Vitamin C and Phenolics in Indian Gooseberry Juice	1 January 2021
Marla V. Reloso (F)	Philippines	UPLB	PhD	Agricultural Economics	Supply and Value Chain Analysis of the "Queen" Pineapple Industry in Camarines Norte	1 August 2018
Zyra May H. Centino (F)	Philippines	UPLB	PhD	Agricultural Economics	Economic Analysis of the Demand for Crop Insurance as a Climate Risk Management Strategy among Vegetable Farmers in Leyte, Philippines	1 August 2018
Edchelle S. Flores (F)	Philippines	UPLB	Master's	Extension Education	Individual and Community-based Adaptation of the Residents of Umingan, Alimodian, Iloilo, Philippines to a Series of Rainfall-induced Landslides	1 August 2018

Name	Country	Study Post	Degree	Field of Study	Title of Thesis or Dissertation	Date Awarded
Romiel John P. Basan (M)	Philippines	UPLB	PhD	Agricultural Economics	Economic and Spatio-Temporal Analysis of Food and Nutrition Security in Mindanao	1 January 2019
Mai Thanh Huong (F)	Vietnam	UPLB	PhD	Agricultural Economics	Value Chain Analysis of Geographic Indications Coffee Buon Ma Thuot in Dak Lak Province of Vietnam	1 August 2019
Mai Chiem Tuyen (M)	Vietnam	KU	PhD	Agriculture and Resource Economics	Rice Contract Farming in Vietnam: Farmers' Perception and Preferences	1 August 2018
Mai Tien Huy (M)	Vietnam	UPLB	PhD	Agricultural Economics	Value Chain Analysis of Cassava in Central Highlands of Vietnam	1 August 2018
Phan Xuan Tan (M)	Vietnam	UPLB	PhD	Agricultural Economics	Linkages in Production and Distribution of Dairy Farming: A case study in the North of Vietnam	1 August 2018
Nguyen Linh Trung (M)	Vietnam	UPLB	Master's	Agricultural Economics	Technical Efficiency and Profitability of VietGAP Adoption of Tomato Farming in Hung Yen Province, Vietnam	1 August 2017
Nguyen Tuan Tran Ngoc (M)	Vietnam	KU	Master's	Agricultural and Resource Economics	Rice Farmer's Vulnerability and Adaptation Method to Climate Variability in Coastal Area of Thua Thien Hue Province, Vietnam	1 August 2017
Tuan Syaripah Najihah Tuan Mohd Razali (F)	Malaysia	UPM	PhD	Agricultural Technology	Growth, Carbon Assimilation and Biochemical Changes of Oil Palm Seedlings (<i>Elaeis guineensis</i> Jacq.) in Climate Change Factors with Potassium Fertilisation	1 September 2018 to July 2021
Nguyen Thi Thuy (F)	Vietnam	KU	Master's	Veterinary Parasitology	Detection of Toxoplasma Gondii in Free-Grazing Ducks from Slaughterhouse in Nakhon Pathom Province, Thailand	1 August 2019 to January 2022
Pengly Koun (M)	Cambodia	KU	Master's	Agricultural Resources	Temporal Variation of Soil Organic Carbon Fractions Under Short-term Conservation Agriculture Cropping Systems	1 August 2019 to January 2022
Shahidah MD Nor (F)	Malaysia	UPM	PhD	Horticulture	Growth and Maturation Processes of Purple Passion Fruit (<i>Passiflora edulis</i> Sims) Through Physical and Metabolomics Approaches	1 September 2019 to April 2022
Augusto Barros (M)	Timor-Leste	UPLB	PhD	Animal Science	Effect on Component or Total Mixed Ration (TMR) Feeding Systems on the Growth Performance, Rumen Fluid Characteristics and Nutrient Digestibility in Dairy Cattle	1 August 2018 - June 2022
Salehudin bin Md Radzuan (M)	Malaysia	KU	Master's	Tropical Agriculture	Relationship of Silicon Based Salt with Banana Vascular Bundles Morphology and <i>Fusarium oxysporum</i> f. sp. cubense Infection	1 August 2021
Mohd Zaffrie bin Mat Amin (M)	Malaysia	UPM	PhD	Agricultural Business	Forecasting Agricultural Sector Modeling for Food Sector Supply and Demand	1 October 2021
Mohd Solihen bin Jamal (M)	Malaysia	UPLB	Master's	Plant Breeding	Improvement of Blast Resistant in Malaysian Rice Cultivars Through Doubled Haploid Breeding Approach	1 September 2020
Mohd Faiz bin Musa (M)	Malaysia	UPLB	Master's	Extension Education	Technology Efficiency to MARDI Techno Agropreneur	1 January 2021
Darwin M. Landicho (M)	Philippines	NU	PhD	Bioagricultural Sciences	Detection, Quantification, and Genomic Analysis of Candidatus Phytoplasma Causing Cassava Witches' Broom (CWB) Disease in the Philippines	1 September 2021
Maria Cristina F. Campita (F)	Philippines	NU	PhD	Bioagricultural Sciences	Agricultural Marketing Analysis of Queen Pineapple in the Philippines Towards Effective Value Chain Management	1 March 2021

Name	Country	Study Post	Degree	Field of Study	Title of Thesis or Dissertation	Date Awarded
Thelma A. Saludes (F)	Philippines	NU	PhD	Bioagricultural Sciences	Analysis of Socioeconomic Dimensions Influencing the Carabao Development Program Implementation in Southern Luzon	1 August 2019 - September 2021
John Louie P. Baligad (M)	Philippines	NTU	Master's	Global ATGS	Molecular Determination of Antimicrobial Resistance in <i>Escherichia coli</i> Isolated from Dairy Farm in the Philippines and Taiwan	1 September 2021
Miguelito F. Isip (M)	Philippines	NTU	Master's	Global ATGS	Development of Strategies for Precision Disease Management of High-value Crops Using Multi-spectral Data from UAV Imagery	1 September 2021
Yulita Dwiningsih (F)	Indonesia	NTU	Master's	Global ATGS	The Application of Pathogens Tolerance of Plants Through Genetic Improvement	1 September 2021
Muhammad Yusril Hardiansyah B. (M)	Indonesia	NTU	Master's	Global ATGS	Analysis of the Seeds Quality Improvement of MCC 01 Cocoa Variety and Local Variety of Gantarangkeke (GTB) South Sulawesi, Indonesia Through Fermentation Using <i>Lactobacillus</i> sp., <i>Pichia kudriavzevii</i> , and <i>Acetobacter xylinum</i>	1 September 2021
Ngoc Hai Trieu Phong (F)	Vietnam	NTU	Master's	Global ATGS	Genetic Analysis of Salinity Tolerance in a Rice Backcross Population at Seedling Stage	1 September 2021
Felix Subakti (M)	Indonesia	NTU	Master's	Global ATGS	Software-based Process Simulation and Feasibility Assessment of a Black Soldier Fly Larvae Fatty Acid Extraction and Fractionation Plant	1 September 2020
Aisyah Fitri Rohani (F)	Indonesia	NTU	Master's	Global ATGS	Detection of Quantitative Trait Loci Associated with Rice Seedling Fe Tolerance	1 September 2020
Ma. Theresa R. Sawit (F)	Philippines	UPLB	PhD	Development Studies	Establishing a Business Hub Model: A Framework for Sustainable and Inclusive Dairy Industry Development	1 September 2020
Jesus Rommel V. Herrera (M)	Philippines	University of New England	PhD	Animal Breeding and Genetics	The Use of Genomic Data in a Dairy Buffalo Breeding Program	1 June 2015
Zadieshar G. Sanchez (M)	Philippines	UPLB	Master's	Agricultural Economics	Total Factor Productivity in Dairy Buffalo Milk Production in Nueva Ecija, Philippines	1 August 2018 to February 2022
Laarni M. Parungao (F)	Philippines	UPLB	Master's	Food Science	Determination of the Preferred Processing Parameters and Attributes of Carabeef Meat Floss and Its Promotion through Packaging Design	1 August 2017 to June 2022
Ian Paul D. Navea (M)	Philippines	SU	Master's	Integrative Biological Sciences and Industry	Fine-mapping and Isolation of Gene(s) for Panicle Length in Rice Grown Under Low Phosphorus (P) and Mild-drought Conditions	1 August 2021
Lilian P. Villamor (F)	Philippines	NODAI	PhD	Bioscience	Research on the Insecticide Resistance of Indoxicarb, Fipronil, and Imidacloprid of Jassid (<i>Amrasca devastans</i>) on Cotton	1 September 2018
Bunnet Nha (F)	Cambodia	UPM	PhD	Animal Science	Effect of Rapidly Degradation Dry Matter from Concentrate and Forage to Concentrate Ration in Dairy Cattle Diets on Lactation Performance, VFA and Methane Production	1 October 2021
Yap Sing Yee (F)	Malaysia	UPM	Master's	Aquaculture	Next-generation Sequencing (NGS) for Determination of <i>Vibrio</i> spp. from Cultured Marine Fish Species in Malaysia	1 March 2022

Name	Country	Study Post	Degree	Field of Study	Title of Thesis or Dissertation	Date Awarded
Siti Sarah binti Jumali (F)	Malaysia	UPM	PhD	Biochemistry	Post-infection Protein Cyclization of Bacteria Leaf Pathogen (<i>Xanthomonas oryzae</i>) in Rice (<i>Oryza sativa</i>)	1 March 2022
Rahmah Nur Lailatul (F)	Indonesia	UPM	PhD	Food Engineering	Subcritical Water Extraction Process of Tannin from Areca Cathecu and Its Application in Agro-industry	1 October 2020
Shanti Dwita Lestari (F)	Indonesia	UPM	PhD	Food Science and Technology	The Contribution of Raw Material in Some Quality Profiles of Salt-fermented and Salt-carbohydrate-fermented Fish	1 October 2020
Truong Hong Vo Tuan Kiet (M)	Vietnam	UPM	PhD	Agricultural Policy	Regional Economic Integration: Policy scenarios for sustainable development strategy of mango value-chain in Mekong Delta towards domestic and international markets	1 September 2018
Arissara Sopawong (F)	Thailand	UPM	PhD	Biodiversity and Conservation of Natural Resources	Establishment of Biogreen Floating Aquaculture System for Improvement of Water Quality and Fish Production	1 September 2017
Kroesna Mon (F)	Cambodia	Universiti Sains Malaysia	Master's	Aquatic Biology	The Efficiency of Different Levels of Locally Produced Alternative Protein Sources and Food Additive for Fishmeal Replacement in Aqua-feed for Freshwater Clarias Culture	1 October 2021

Annex 4. Dual Degree Programs, FY 2021/2022

Name	Country	Host Institution	Degree	Field of Study	Title of Thesis or Dissertation	Date Awarded	Funding Source
Chaisiri Kitpaosong (M)	Thailand	University of Montpellier, France	PhD	Biotechnology	Furanic acid F2 (FuFA-F2) from <i>Hevea brasiliensis</i> Latex: Toward a transition to an ecologically responsible production of bioactive molecules in a society that sustainably manages its natural resources	1 January 2022	AF
Marich Nur Maqsalina (F)	Indonesia	University of Montpellier, France	PhD	Entomology	Integrated Pest Management Strategy Against Coffee Berry Borers Based on Their Dispersion Capacity in North Sumatra, Indonesia	15 January 2022	AF
Nguyen Van Hieu (M)	Vietnam	University of Montpellier, France	PhD	Plant Breeding	Integration of Genetic Resources from Gene Bank into Breeding Program and Optimization of Their Use for Genetic Improvement: A case study on rice	1 January 2020	AF
Junaidi (M)	Indonesia	CIRAD-Montpellier	PhD	Biological Sciences	Biochemical, Near-infra Red Spectroscopy Analysis of Reactive Oxygen Species-scavenging Systems in Latex of <i>Hevea brasiliensis</i>	17 January 2019	AF
Julia Ng Su Chen (F)	Malaysia	CIRAD-Montpellier	PhD	Bioresource Management	Advancing on the Conceptualization of a Theory of Change for Landscape Approaches to Biodiversity Conservation, The Case of Sabah in Malaysia	1 September 2019	AF-UPM
Yao Tze Leong (M)	Malaysia	Centre IRD de Montpellier, France	PhD	Forest Management and Ecosystem Sciences	Ensuring the Future of Perennial Crops in Southeast Asia in a Context of Global Change: Case of <i>Garcinia</i> fruit tree species	1 September 2019	AF-UPM

Name	Country	Host Institution	Degree	Field of Study	Title of Thesis or Dissertation	Date Awarded	Funding Source
Nur Hidayahanum Hamid (F)	Malaysia	Kasetsart University	PhD	Veterinary Medicine	Assessment of Bacteriocin-producing Lactic Acid Bacteria from Vegetables Waste for Growth Promotion and Protection Against Aquatic Pathogens in Juvenile African Catfish (<i>Clarias gariepinus</i>)	1 August 2017	SEARCA

*M - male, F - female

**The scholars in this table are cross-listed in the table on SEARCA Project Scholars

Annex 5. SEARCA Full Master's and PhD Scholars, FY 2021/2022

Name	Country	Study Post	Degree	Field of Study	Title of Thesis or Dissertation	Date Awarded
Anthony E. Amores (M)	Philippines	UPLB	PhD	Environmental Science	(<i>Carbon Sequestration</i>)	1 September 2021
Bounyore Koulavong (M)	Lao PDR	UPLB	PhD	Forestry	Socioeconomic Impacts of Global Change on the Forestry Sector	1 September 2021
Cheav Chhuon (M)	Cambodia	UPLB	Master's	Veterinary Medicine	Prevalence of Brucellosis in Swine from Slaughterhouses of Phnom Penh, Cambodia Using Elisa Kit	1 September 2021
Delfim Da Costa (M)	Timor-Leste	UPLB	PhD	Environmental Science	Land Use and Watershed Risk Analysis of Talao-Loes Watershed; Linking the Farming Existence Practices to the Sustainability of the Resources	1 September 2021
Jemer A. Alimbon (M)	Philippines	UPLB	PhD	Environmental Science	Perceptions, Utilization, and Management of Mangroves in Davao Gulf, Mindanao, Philippines	1 September 2021
Joseph R. Pentason (M)	Philippines	UPLB	PhD	Environmental Science	(<i>Blue Carbon in Mangroves</i>)	1 September 2021
Karyn Christlene A. Vitor (F)	Philippines	UPLB	PhD	Environmental Science	Urban Biodiversity in Relation to Land Use and Land Cover Change	1 September 2021
Saiphou Lormaisim (M)	Lao PDR	UPLB	PhD	Animal Science	Effect of Organic Pig Production on Growth Performance and Carcass in Nongphue Campus Savannakhet Province, Lao PDR	1 September 2021
Agostinha Soares Amaral (F)	Timor-Leste	UPLB	Master's	Animal Science	Development of Cassava Based Feeding System in Native Pigs	1 August 2019
Amar Maruf (M)	Indonesia	UPM	PhD	Community Development	Exploring the Potential Role of Patron-Client Relationship on Social Resilience to Climate Change Impacts and Risks among Small Scale Sama Bajau Fishermen in Wakatobi National Park, Indonesia	1 September 2019
Andi Nur Cahyo (M)	Indonesia	UGM	PhD	Agronomy	Identification of Physiological Traits Associated with Drought Tolerance in Rubber (<i>Hevea brasiliensis</i> Mull. Arg.)	1 September 2018
Bhakti Etza Setiani (F)	Indonesia	UB	PhD	Food Science	Biogenic Amines Evaluation and the Application of Isolated Indigenous Lactic Acid Bacteria to Reduce Biogenic Amines Content in the Fermentation Process of Soy Sauce	1 August 2020
Candle Sidthisone (M)	Lao PDR	UPLB	PhD	Community Development	Analysis of Trade Liberalization in Agricultural Sector and Its Impacts on Poverty Reduction and Wages in Agricultural Sector in the Lao PDR: An empirical study	1 August 2019

*M - male, F - female

Name	Country	Study Post	Degree	Field of Study	Title of Thesis or Dissertation	Date Awarded
Carlos Amaral (M)	Timor-Leste	UPLB	Master's	Agricultural Economics	Profit Efficiency of Rice Farming and Its Determinants Among Farmers in Bobonaro District, Timor-Leste	1 August 2014
Chanoknan Srilapat (F)	Thailand	UPM	PhD	Agribusiness	Development and Management of Supply Chain for Hang-rice Production in Sakon Nakhon Province, Northeast Thailand	1 September 2018
Dian Agustina Abidinsyah (F)	Indonesia	UPM	PhD	Animal Nutrition	Cajanus Cajan (Red Gram) Leaves as Concentrate Replacement for Goat	1 September 2018
Dian Kusumaningrum (F)	Indonesia	IPB	PhD	Statistics and Data Science	Development of Predictive Analytics for Crop Insurance Policy in Indonesia	1 August 2020
Dian Ridwan Nurdiana (M)	Indonesia	UPLB	PhD	Botany	Physiological performances of <i>Mangifera odorata</i> Griff (Anacardiaceae) Both Ex Situ and In Situ Conservation Sites in the Philippines	1 August 2019
Erise Anggraini (F)	Indonesia	UPM	PhD	Entomology	Biological Control of Oil Palm Insect Pest Using Entomopathogenic Virus	1 September 2019
Fadhliani (F)	Indonesia	UPM	PhD	Water Resources Engineering	Modeling Land Use Change Impacts on Water Resources Adopting a Flexible Semi Distributed Model	1 September 2016
Heri Kurnianto (M)	Indonesia	UPM	Master's	Epidemiology and Public Health	Prevalence and Risk Factors of Fasciolosis in Dairy Cattle in Boyolali, Central Java, Indonesia	1 September 2019
Hernawan Yuli Rahmadi (M)	Indonesia	IPB	PhD	Plant Breeding and Biotechnology	Breeding for Moderate Tolerance Oil Palm Planting Material Using Conventional Breeding and Molecular Assisted Approaches	1 September 2018
Hnin Su San (F)	Myanmar	UPLB	Master's	Agricultural Economics	Supply Chain Analysis of Grape Production in Yamethin Township, Myanmar	1 August 2019
Hoang Le Huong (F)	Vietnam	UPLB	PhD	Forestry	Study of Climate Change Impacts on Drought and Adaptation Strategies in Binh Thuan Province, Vietnam	1 August 2019
Jan Danica S. Asma (F)	Philippines	UPLB	PhD	Development Studies	Adoption of Standards for Improved production and marketability of Duck Egg Products	1 August 2019
Joana Paula Gerabella Da Costa Moniz (F)	Timor-Leste	IPB	Master's	Animal Science Production and Technology	Quality of Physikokima, Organoleptics, and Microbiology of Se'i Meat (Meat Smoke) in Cold Temperature Storage	1 August 2019
Judith O. Jimena (F)	Philippines	UPLB	PhD	Extension Education	Resilience is the New Green: An Evaluation of Climate Adaptability Techniques and Strategies of Disaster- Prone Areas in the Bicol Region	1 August 2019
Karen S. Bautista (F)	Philippines	UPLB	PhD	Agronomy	Spatial Variations in Soil Properties, Soil Productivity and Crop Yield in Selected Corn Producing Provinces in Cagayan Valley Region	1 August 2019
Kietnapa Wongchanta (F)	Thailand	UPLB	Master's	Extension Education	Aromatic Coconut Supply Chain Management: Case Study on Coconut Big Farm in Banphaeo District, Samut Sakhon Province, Thailand	1 August 2017
Komsan Tantichukiad (M)	Thailand	UPM	PhD	Mechanical Engineering	Performance Investigation of Combined Delta-Blade Shaped Darrieus with Savonius Hydrokinetic Rotors and its Implementation in Agricultural Rural Areas	1 March 2018

Name	Country	Study Post	Degree	Field of Study	Title of Thesis or Dissertation	Date Awarded
Krisdakorn Wongwai (M)	Thailand	UPM	PhD	Agribusiness	Small Farmers' Motivation to Participate in Contract Farming with Sugarcane Loading Station in Thailand	1 February 2016
Luis Manuel Branco (M)	Timor-Leste	IPB	PhD	Seed Science and Technology	Agro-morphological Evaluation and Seed Production Input Factor and Detection of the Mechanism of After Ripening Landrace Local Rice Seed	1 September 2016
Manuel Da Costa (M)	Timor-Leste	IPB	PhD	Veterinary Public Health	Food Safety Chicken Meat Sold Timor-Leste with Improvement in Knowledge and Practice of Vendors Program	1 August 2019
Maria Cristina P. Pammit (F)	Philippines	UPLB	Master's	Agricultural Economics	Farmers to Markets Link Through Growers Organization: Onion Supply Chain Rdesign for Ilocos Norte, Philippines	1 August 2019
Medino Gedeun N. Yebron, Jr. (M)	Philippines	UPLB	PhD	Animal Science	Breeding of Paraoakan Native Chicken for Sustainable Development	1 August 2019
Michael Noel R. Bonghanoy (M)	Philippines	UPLB	Master's	Development Communication	Exploring the Communicative Ecology of a Lumad (Indigenous) Community in Mindanao: Towards Improving Agricultural Communication Practices	1 August 2020
Michelle B. Gatab-Laruan (F)	Philippines	UPLB	PhD	Development Communication	Towards a Sustainable Organic Agriculture: Program development in the promotion of organic agriculture from the farmers' experiences in Benguet, Philippines	1 August 2020
Muhammad Syukril (M)	Indonesia	UGM	PhD	Environmental Sciences	Sustainable Development and Spatial Knowledge Management for Agriculture in Mining Province	1 August 2018
Myint Myat Moe (F)	Myanmar	KU	PhD	Agricultural and Resource Economics	Environmental Efficiency and Farmers' Preferences on Sustainable Agricultural Practices of Rice Production in Bago Region, Myanmar	1 August 2019
Natalino De Araujo (M)	Timor-Leste	UPLB	PhD	Forestry	Carbon Stock Estimation of <i>Coffea arabica</i> L. Agroforestry Farms in Ermera District, Timor-Leste	1 August 2017
Natcha Leevisitattana (F)	Thailand	UPM	PhD	Environmental Policy and Governance	Decision-making and Agricultural Public Policy for Carbon Credit Supporting	1 September 2011
Nget Raby (M)	Cambodia	UPLB	PhD	Agronomy	Growth, Yield and Grain Quality of Selected Soybean Genotypes Applied with Different Nitrogen and Phosphorous Fertilizer Treatments	1 August 2019
Nguyen Nam Giang (M)	Vietnam	UPLB	PhD	Agricultural Economics	The Sustainable Development of Edible Mushroom Production in the Red River Delta, Vietnam	1 August 2019
Nguyen Tien Phong (M)	Vietnam	UPLB	PhD	Forestry	Researching on Ecological and Regenerative Fundamentals of some Indigenous Trees in Cuc Phuong National Park to Propose some Appropriate Solutions in Recovering the Poor Forests in Vietnam	1 August 2019
Nguyen Xuan Diep (M)	Vietnam	UPLB	PhD	Agricultural Economics	Willingness to Pay for Water Quality Improvement in Handicraft Villages of Hungyen Province	1 August 2019
Nina Farhana Mohd Jamaludin (F)	Malaysia	UPM	PhD	Chemical Engineering	Enhancement of Biohydrogen Production from Palm Oil Mill Effluent (Pome) Utilizing Immobilize Cell Induced by Magnetite Nanoparticle Via Thermophilic Anaerobic Digestion	1 October 2020

Name	Country	Study Post	Degree	Field of Study	Title of Thesis or Dissertation	Date Awarded
Noor Azrimi Umor (M)	Malaysia	UPM	PhD	Microbiology	Towards the Optimization of Droplet Size for Aerial Chemical Spraying using Unmanned Aerial Vehicle (UAV)	1 September 2018
Phoukeo Saokhamkeo (M)	Lao PDR	KU	PhD	Agricultural Research and Development	Socio-economic Analysis Under Commercial Rice Farming Approach in Vientiane Capital, Middle Laos	1 August 2015
Rambo Mao (M)	Cambodia	KU	Master's	Tropical Agriculture	Agronomic Characteristics of Maize Grown in Paddy Soil, Along with Soil Chemical Properties and Soil Bacterial Numbers in the Root Zone	1 August 2019
Rattiporn Arphavasin (F)	Thailand	UPLB	Master's	Extension Education	Factors Involved with Adoption of Good Agricultural Practices of Coconut Growers in Samutsakhon Province, Thailand	1 August 2017
Rini Widyastuti (F)	Indonesia	IPB	PhD	Veterinary Medicine	Bovine Embryos Developmental Fertilized by a Single Injection of Pasundan Bull Sperm Incubated in Extreme pH Media	1 August 2020
Rohasmizah Hashim (F)	Malaysia	UPM	PhD	Agronomy	Development of Pectin-based Edible Coating Enriched with Virgin Coconut Oil (VCO) and Its Potential to Inhibit <i>Fusarium oxysporum</i> on Tomato Fruit (<i>Solanum lycopersicum</i>)	1 September 2019
Sarini Ahmad Wakid	Malaysia	UPM	PhD	Biodiversity and Conservation of Natural Resources	Effect of Heavy Metal on the Expression and Properties of Glutathione Stransferase in <i>Geloina expansa</i> Mousson, 1849	1 October 2020
Septina Asih Widuri (F)	Indonesia	IPB	Master's	Plant Biology	Secretory Structure Characterization and Secondary Metabolites Profiling of Akar Kuning (<i>Fibraurea tinctoria</i> Lour.)	1 September 2018
Sheera Mae N. Diango (F)	Philippines	UPLB	Master's	Agricultural Economics	Value Chain Analysis of Rice in Some Selected Areas in Mindanao, Visayas, and Luzon	1 August 2019
Shirly C. Serrano (F)	Philippines	KU	PhD	Environmental Science	Climate Change Vulnerability Assessment of the Coastal Ecosystems and Communities in Zambales, Philippines	1 August 2019
Simao Margono Belo (M)	Timor-Leste	UPLB	PhD	Community Development	Household and Community Benefits from Commercial Seed Production of Maize of Timor-Leste	1 August 2019
Siti Amni binti Ismail (F)	Malaysia	UPM	PhD	Agricultural Mechanization and Automation	Towards the Optimization of Droplet Size for Aerial Chemical Spraying using Unmanned Aerial Vehicle (UAV)	1 September 2017
Siti Norazura Binti Jamal (F)	Malaysia	UPM	PhD	Plant Biotechnology	Characterization of Bioactive Compounds with Antimicrobial Properties Isolated from Mangrove Molluscs Against Plant Pathogen	1 October 2020
Syamsu Eka Rinaldi (M)	Indonesia	IPB	Master's	Natural and Environmental Resource Management	Potential Forestry Partnerships for Forest Conservation and Community Welfare: The case in Khdtk Samboja, East Kalimantan	1 September 2018
Tran Thanh Liem (M)	Vietnam	UPLB	PhD	Agricultural Economics	Acacia Hybrids Supply Chain for Productive Afforestation in the Northern of Vietnam	1 August 2019
Trang Thi My Duyen (F)	Vietnam	KU	PhD	Agricultural and Resource Economics	Assessment of Adaptive Capacity to Salinity Intrusion of Rice Farmers and Local Government in the Mekong Delta, Vietnam	1 August 2019

Name	Country	Study Post	Degree	Field of Study	Title of Thesis or Dissertation	Date Awarded
Viengvilaiphone Botthoulath (F)	Lao PDR	UPLB	PhD	Molecular Biology and Biotechnology	Isolation, Identification, Probiotic Evaluation of Lactic Acid Bacteria and Their Use as Starter Culture for Lao Traditional Bamboo Shoot Fermentation (Nor mai som)	1 August 2019
Ye Tun (M)	Myanmar	UPLB	PhD	Agricultural Economics	Impact of Farmland Registration and Certification on Farm-Households in the Central Dry Zone of Myanmar	1 August 2017
Yuli Haryani (F)	Indonesia	UPM	PhD	Food Biology	Application of CRISPR/Cas9 Mediated Genome Editing for Improvement of Nisin Production in Mono- and Co-culture of <i>Lactococcus lactis</i> and <i>Lactobacillus casei</i>	1 September 2019
Fitriana Nasution (F)	Indonesia	KU	PhD	Tropical Agriculture	Study of <i>Muntingia calabura</i> L. as an Alternative Fruit for Consumption	1 September 2018
Issaree Supnui (F)	Thailand	UPLB	PhD	Extension Education	Engaged Scholarship and Lifelong Learning Through An Educational Farm in Nakhon Pathom Province, Thailand	1 August 2019
Jurhamid C. Imlan (M)	Philippines	UPM	PhD	Animal Production	Meat Quality Attributes and Physiological, Metabolic and Electroencephalographic Responses to Slaughter Position and Knife Sharpness in Cattle	1 September 2014
Justine Louise R. Repalam (F)	Philippines	UPLB	Master's	Environmental Science	Phytoremediation Potential of <i>Dendrocalamus asper</i> in the Rehabilitation of a Mined-out site in Carrascal, Surigao del Sur	1 August 2018
Khin Pyone Nwe (F)	Myanmar	UPLB	PhD	Social Science	Effect of Enriched Biochars on Soil Chemical Properties, Soil Microbial Activity and Corn Productivity	1 August 2018
Ma. Genesis C. Reyes (F)	Philippines	UPLB	Master's	Rural Sociology	Examining the Socio-Ecological Resilience of Family Farmers as Shaped by Digital Agriculture: A Case of Rice Farmers in Luzon, Philippines	1 August 2019
Maria Evic C. Panganiban (F)	Philippines	UPLB	Master's	Agricultural Engineering	Technical and Policy Assessment of the Solar-Powered Irrigation System (Spis): A case study in Ilocos Region	1 August 2018
Nelson Aniceto da Costa (M)	Timor-Leste	UPLB	Master's	Animal Science	Native Pig Production and Community Development in Selected Villages in Baucau Municipality, Timor-Leste	1 August 2019
Nguyen Thanh Trung (M)	Vietnam	KU	PhD	Tropical Agriculture	Cassava-Cowpea Intercropping in Upland Northern Vietnam: Nodulation and Mycorrhization, Cassava and Cowpea Yields, and Control of Soil Erosion	1 August 2016
Nguyen Thi Quynh	Vietnam	UPLB	PhD	Agronomy	Characterization of Rice Growing Area and Suitability of Rice Cultivation Using GIS in Thai Nguyen Province, Viet Nam	1 August 2019
Pok Wudtisawad	Thailand	KU	PhD	Agricultural and Resource Economics	The Model of Participative Management in Bamboo at Non Province, Thailand	1 June 2011
Praianut Noitubtim (M)	Thailand	UPLB	PhD	Entomology	Efficacy of Entomopathogenic Nematodes Against the Coconut Rhinoceros Beetle Larva, <i>Oryctes rhinoceros</i> MacLeay (Coleoptera: Scarabaeidae) in Nakhon Si Thammarat Province, Thailand	1 August 2018

Name	Country	Study Post	Degree	Field of Study	Title of Thesis or Dissertation	Date Awarded
Sar Veng (M)	Cambodia	KU	Master's	Tropical Agriculture	Assessment of Soil Quality of Different Agricultural Practices in Rain-fed Lowland Rice in Cambodia using Biofuctool Approach	1 August 2017
Thant Mon Paing (F)	Myanmar	UPLB	Master's	Animal Science	Nutritive Value of Whole Plant Corn Silage of Different Particle Sizes, Silage Densities and With or Without Inoculant	1 August 2019
Xisto Martins (M)	Timor-Leste	UPLB	PhD	Forestry	Assessing the Efficiency, Impacts and Cultural Appropriateness of a Community-based Natural Resource Management Project in Three Selected Villages of Timor-Leste	1 August 2018
Zaw Win Kyaw (M)	Myanmar	UPLB	Master's	Extension Education	Extension Strategies Toward Sound Governance of Land Use Rights Registration Program in Pinyinana Township, Naypyitaw, Myanmar	1 August 2018
Bathsheba P. Aparilla (F)	Philippines	UPLB	Master's	Soil Science	The State of Soil Moisture and Soil Temperature Regimes in Major Lowland Soils in the Philippines	1 June 2010

Annex 6. SEARCA PhD Research Scholars, FY 2021/2022

Name	Country	Study Post	Field of Study	Title of Thesis or Dissertation	Date Awarded
Haerold Dean Z. Layaoen (M)	Philippines	RMIT University, Melbourne, Australia	Supply Chain and Logistics	The Greenness of Logistics Practices: A study of the antecedents and the triple bottom line outcomes	November 2019
Kamla Zyra G. Lavadia (F)	Philippines	UPLB	Development Communication	Communication Initiatives and Socio-cultural Construction of Disaster Risk Among Stakeholders in a Coastal Community in Infanta, Quezon, Philippines	November 2019
Bui Quang Van (M)	Vietnam	Vietnam National University of Agriculture	Economics Development	Analysis of Smallholders beef Cattle Value Chain in Dien Bien province, Vietnam	November 2019
Mohamad Arif (M)	Indonesia	IPB	Seed Science and Technology	Effects of Seed Physiological Maturity, Method of Dormancy Breaking, Storage Environment Factor, and Invigoration on Viability of Oil Palm (<i>Elaeis guineensis</i> L. Jacq) Seeds	February 2020
Agustine Restiyana (F)	Indonesia	UGM	Animal Science	Strategy of Ongole Grade Cattle Business Development in Central Java, Indonesia	February 2020
Yayat Nurhidayat (M)	Indonesia	UPM	Chemical Engineering	Surface Functionalized-Oil Palm Empty Fruit Bunches (OPEFB) Derived Nanocrystal Cellulose (NCC) Membrane: Fabrication and performance evaluation for wastewater treatment	February 2020
Bogarth Kalikitnggamu Watuwaya (M)	Indonesia	Hasanuddin University, Makassar, Indonesia	Animal Science	Spatial Analysis of Grazing Land for the Development of <i>Leucaena leucocephala</i> cv. Tarramba as Beef Cattle Feed in East Sumba Regency, East Nusa Tenggara Province, Indonesia	February 2020
Melanie Henson Narciso (F)	Philippines	University of Georgia, Athens, USA	Cultural Anthropology	Persistence of Pampango Rice-Based Fermentation Traditions in the Context of the Changing Rice Landscape in the Philippines	February 2020

Name	Country	Study Post	Field of Study	Title of Thesis or Dissertation	Date Awarded
Risa Nursanty (F)	Indonesia	UPM	Food Science	Antibacterial Activity, Phytochemistry, and Toxicity Analyses of <i>Aleuritus moluccana</i> . L and its Application in Food System	February 2020
Banjie G. Sarmiento (F)	Philippines	UPLB	Environmental Science	Climate-Resilience of Coconut-based Agroecosystems in Luzon, Philippines	June 2020
Khairun Najihah Sabri (F)	Malaysia	UPM	Food Service Management	Development of a Mindset Model for Food-based Social Entrepreneurs: Towards sustainable local food security and social well-being	June 2020
Nguyen Quang Minh (M)	Vietnam	University of Rotterdam, Netherlands	Climate change mitigation policy and environmental justice	Mekong Delta Before the Flood: Climate change, hydro-politics and the Vietnamese approach to climate resilient development	January 2019
Eduardo F. Roquino (M)	Philippines	UPLB	Environmental Science	Is the Rain Mountain Running Out of Water? A Hydrosocial Analysis of Water Scarcity and Water Security in Mt. Banahaw	June 2019
Nurazwin Zulkifli (F)	Malaysia	UPM	Agriculture Process Engineering	Simulation Modelling in Mechanical Responses in Papaya	June 2019
Emmy Farha binti Alias (F)	Malaysia	University of Bergen, Norway	System Dynamics	Adoption and Diffusion of Sustainable Paddy Production System in Malaysia	June 2017
Mitchiko A. Lopez (F)	Philippines	UPLB	Development Studies	Mainstreaming Gender in Cocoa Agricultural Value Chain in Davao City, Southern Philippines	June 2017
Sarayut Trirat (M)	Thailand	CLSU	Plant Breeding	Genetic Potential of Selected Aromatic Rice Varieties as Combiners, Restorers, and Maintainers for Hybrid Development	November 2011
Hadi Suprpto (M)	Indonesia	UB	Agroindustrial Technology	Optimization of Smoked Method Using Artificial Neural Network and Response Surface Methodology Model to Improve Protein Quality of Smoked Fish	January 2016
Rakhmad Perkasa Harahap (M)	Indonesia	IPB	Animal Nutrition and Feed Science	Utilization Chitin and Chitosan from Shrimp as Feed Additive to Reduce Methane Emission and Improve Silage Quality	November 2019
Cho Cho Aung (F)	Myanmar	Yezin Agricultural University, Myanmar	Agronomy	Screening of Anaerobic Germination Tolerance Rice (<i>Oryza sativa</i> L.) Genotypes and Effect of Seed Priming for Seedling Establishment	November 2019
Rufo Gil Z. Albor (M)	Philippines	UPLB	Extension Education	Local Government Extension Programs and Resilience Building among Selected Farmer Households in Laguna, Philippines	June 2018
Kieu Thi Huyen (F)	Vietnam	Hue University of Agriculture and Forestry, Vietnam	Aquaculture	Research on Characteristics of Distribution, Morphology, and Genetic Diversity of Eel in Thua Thien Hue	June 2018
Nasrudin Abdulkadir Buisan (M)	Philippines	Mindanao State University-Iligan Institute of Technology, Philippines	Sustainable Economic Development	The Marshland Farming System and Its Implications to Sustain Livelihoods and the Environment in Marshland Local Communities: The case of Ligawasan Marsh, Maguindanao	November 2019

Name	Country	Study Post	Field of Study	Title of Thesis or Dissertation	Date Awarded
Darlene P. Lovina (F)	Philippines	UPLB	Environmental Science	Assessment of Resilience in Tropical Ecosystems Using Socio-ecological approach: A case in Mount Makiling Forest Reserve, Laguna, Philippines	June 2020
Shahida MD Nor (F)	Malaysia	UPM	Horticulture	Quantification of Macronutrients and Phytochemicals in Passion Fruit Cultivated in Malaysia	June 2019
Ginas Aurea Anduyan Villagonzalo (F)	Philippines	UPLB	Animal Science	Occurrence of Aflatoxin M1, Heavy Metals, and Pesticide Residues in Cow's Raw Milk in Region IV-A, Philippines	February 2020
Le Ngoc Danh (M)	Vietnam	Can Tho University, Vietnam	Agricultural Economy	Economic Analysis of Supply Chain of Mud Crab in the Mekong Delta, Vietnam	January 2019
Racquel D. Santiago-Arenas (F)	Philippines	UPLB	Agricultural Systems and Engineering	Effect of Nitrogen and Crop Management Strategies on Rice Under Water-saving Cultivation Techniques	June 2019

*M - male, F - female

Annex 7. Conferences, Seminars, Workshops, and Training Courses Attended by SEARCA Scholars, FY 2021/2022

Name of Participant	Title of Activity	Venue	Date	Nature of Participation
Amar Maruf	Exploring the Potential Role of Patron-Client Relationship on Social Resilience to Climate Change Impacts and Risks among Small Scale Sama Bajau Fishermen in Wakatobi National Park, Indonesia	Research and Science in, for, and with UNESCO Biosphere Reserves Conference in the Schorfheide-Chorin Biosphere Reserve, Germany	16-20 May 2022	Presenter
Delfim da Costa	Short Online Course on Ecosystems Valuation	Online	22-24 June 2022	Participant
Gita Addelia Nevara	Valorization of Kenaf Seed and Its By-products as Dietary Fibre Sources	Third International Sustainable Agricultural Intensification and Nutrition Conference, Siem Reap, Cambodia	27 June - 1 July 2022	Presenter
Nget Raby	Growth, Yield, Grain Quality and Biological Nitrogen Fixation of Soybean Applied with Different Nitrogen and Phosphorous Fertilizer Sources	Third International Sustainable Agricultural Intensification and Nutrition Conference, Siem Reap, Cambodia	27 June - 1 July 2022	Presenter
Noor Azrimi Umor	Recycling the Oil Palm Empty Fruit Bunch Fiber (EFB) Based Spent Mushroom Compost for Extended Cultivation of <i>Volvariella volvacea</i> (Bull.) Singer	Third International Sustainable Agricultural Intensification and Nutrition Conference, Siem Reap, Cambodia	27 June - 1 July 2022	Presenter
Philip Donald C. Sanchez	Characterization and Evaluation of Guso Seaweeds (<i>Eucheuma cottonii</i>) as Potential Material for the Development of Edible and Biodegradable Drinking Straw	Third International Sustainable Agricultural Intensification and Nutrition Conference, Siem Reap, Cambodia	27 June - 1 July 2022	Presenter
Sambo Pheap	Impacts of Short-term Conservation Agriculture on soil functions in the Upland of Cambodia	Third International Sustainable Agricultural Intensification and Nutrition Conference, Siem Reap, Cambodia	27 June - 1 July 2022	Presenter
Raquel D. Santiago-Arenas	Efficient Nitrogen, Crop and Water Management for Rice Productivity in the Tropics	Third International Sustainable Agricultural Intensification and Nutrition Conference, Siem Reap, Cambodia	27 June - 1 July 2022	Presenter

Name of Participant	Title of Activity	Venue	Date	Nature of Participation
Pengly Koun	Early Effects of Conservation Agriculture on Soil Organic Carbon Fractions. A case study in Battambang, Cambodia	Third International Sustainable Agricultural Intensification and Nutrition Conference, Siem Reap, Cambodia	27 June - 1 July 2022	Presenter
Sar Veng	Driving on a Bumpy Road: initiating a transition towards agroecology practices in rain-fed lowlands of Cambodia	Third International Sustainable Agricultural Intensification and Nutrition Conference, Siem Reap, Cambodia	27 June - 1 July 2022	Presenter
Yayat Nurhidayat	Preparation of Oil Palm Empty Fruit Bunch-derived Cellulose as a Carboxyl Platform for Metal Cations and Dye Removal from Aquatic Media	IWA World Water Congress and Exhibition, Copenhagen, Denmark	11-15 September 2022	Presenter

Annex 8. University Consortium Grants, FY 2021/2022

Name	Country/Host Institution	Degree Program Field of Study	Thesis/Project Title or Purpose of Travel and Host Institution	Date Awarded
UC Student Thesis Grant				
New (6)				
Nurliyana binti Nordin (F)	Malaysia/UPM	MS Food Security and Climate Change	Effects of Different Types and Concentrations of Wastewater on Seed Germination and Seedling Performance of Two Rice (<i>Oryza sativa</i> L.) Varieties	3 August 2021
Alexandra Quek (F)	Malaysia/UPM	PhD Organic Chemistry	Characterization of Enzyme Inhibitors from <i>Melicope glabra</i> and <i>Melicope latifolia</i> (Rutaceae): In vitro, In silico, and in Vivo Approaches for Type 2 Diabetes Therapy	8 October 2021
Maimunah binti Mohd Ali (F)	Malaysia/UPM	PhD Agricultural Process Engineering	Artificial Intelligence System for Pineapple Quality Evaluation using Infrared Thermal Imaging	25 October 2021
Shinta Diah Puspaningtyas (F)	Indonesia/UB	MS Agro-Industrial Technology	Strategy Analysis for Overcoming Barriers of Integration Halal Assurance System (HAS) and Quality Management System (AMS)	10 December 2021
Novita Ainur Rohma (F)	Indonesia/UB	MS Agro-Industrial Technology	Comparison of Chemical and Biological Pre-treatment of Oil Palm Empty Fruit Bunches Towards Biogas and Bioethanol Production	10 December 2021
Christine Jamie Anak Vincent Eddy (F)	Malaysia/UPM	PhD Food Engineering	Enhancing Separation and Recovery of Palm Mesocarp and Nuts Using the Batch Drupe Dehusker Machine	21 February 2022
Ongoing (9)				
Farahana Nabilah binti Zainal A'bidin (F)	Malaysia/UPM	MS Agricultural Process Engineering	Development and Performance Evaluation of a Banana Peeling Machine for Use in Small Scale Industry	8 October 2020
Hapsah (F)	Indonesia/UB	MS Plant Breeding and Biotechnology	Secondary Metabolites Induction of Stevioside and Rebaudioside in <i>Stevia rebaudiana</i> Bertoni Using In Vitro Media Modification	1 October 2019
Pern Yu Cong (M)	Malaysia/UPM	MS Forestry	Cross-species Amplification of Aquilaria Microsatellites Across Thirteen Endangered Agarwood-producing Species of the Tribe Aquilariaceae from the Indomalaysia Region	1 October 2019
Siti Shazana binti Mohd Ali Raini (F)	Malaysia/UPM	PhD Soil Science	Application of Basalt in Combination with Biochar to Alleviate Soil Acidity A1 and Fe Toxicity for Growing Rice on an Acid Sulfate Soil	1 October 2019
Nicci Rosietess E. Madarcos (F)	Philippines/UPLB	MS Botany/Phycology	Taxonomic Assessment of Macroalgae from the Intertidals of Selected Islands in Antique, Philippines using Integrative Approach	24 February 2020

Name	Country/Host Institution	Degree Program Field of Study	Thesis/Project Title or Purpose of Travel and Host Institution	Date Awarded
Siti Aisyah Ruslan (F)	Malaysia/UPM	MS Agricultural Technology	Development of Geospatial Model for Elucidation of Metisa Plana Landscape Ecology in Malaysia's Microclimate and Prediction of Its Prevalence	15 October 2018
Mardhati Hazirah Hassan (F)	Malaysia/UPM	MS Land Resource Management	Selected Coated Urea Assessment on Nitrogen-use Efficiency (NUE) and Growth of Oil Palm Seedlings	15 October 2018
Sesmita Sari (F)	Indonesia/UB	MS Agro-Industrial Technology	Analysis of Consumer Preference and Factor that Influence Marketing Mix Using Structural Equation Model (SEM)-Case Study: Meatball at Malang City	4 November 2019
Stashia Eleaness Rosland Abel (F)	Malaysia/UPM	PhD Process Food Engineering	Formulation of Fiber Drink from Gum Arabic Powder	15 January 2020
Completed (1)				
Arjay I. Lamis (M)	Philippines/UPLB	MS Animal Science	Effects of Commercial Feed Containing Cadmium on Haematology, Plasma Metallothionein, Gastrointestinal Tract of Philippine Native Pigs (<i>Sus scrofa</i> L.) and the Potential Mitigation by <i>Trichanthera (Trichanthera gigantea</i> (Humb. & Bonpl.) Nees)	17 December 2018
UC Student Grant for Research Activities				
New (7)				
Lau Su Ee (F)	Malaysia/UPM	PhD Plant Biotechnology	Drought Stress Induces Morpho-Physiological, Biochemical, Transcriptome and Proteome Changes in Banana	22 April 2022
Richelle Marie Legaspi (F)	Philippines/UPLB	MS Environmental Science	Economic Valuation of Improved Water Yield for Irrigation through Catchment Management in Sta. Cruz River Watershed, Laguna, Philippines	28 June 2022
Roanne R. Gardoce (F)	Philippines/UPLB	PhD Plant Breeding	Breeding Fusarium Wilt-Resistant Bananas Through Genomics	22 April 2022
Salim Mohamed Suliman Edris M)	Sudan/IPB	MS Natural Resources and Environmental Management	A Dynamic Model to Uphold Rice Self-sufficiency Efforts, Case study; Karawang Regency, West Java Province	20 August 2021
Muhammad Zalkifal (M)	Pakistan/IPB	MS Microbiology	Production, Purification, and Characterization of Laccase from <i>Trametes Polyzona h18</i> for Polyaromatic Hydrocarbons Degradation	8 October 2021
Siti Aishah binti Baharuddin (F)	Malaysia/UPM	PhD Food Engineering	Development of Hydrocolloid Based Nutraceutical using <i>Pluchea indica</i> (L.) Leaves Extract	25 October 2021
Nor Atikah Husna Ahmad Nasir (F)	Malaysia/UPM	PhD Halal Product Development	Development of Gummy Candy from <i>Caulerpa lentillifera</i> Supplemented with <i>Lactobacillus acidophilus</i>	24 February 2022
Ongoing (3)				
Elemosho Ridwan (M)	Nigeria/IPB	MS Biotechnology	Extracellular Overexpression of T1.2 Lipase in <i>Bacillus subtilis</i> for Biodiesel Production	30 September 2020
Nurul Ain Hamdan (F)	Malaysia/UPM	PhD Sustainable Natural Resource Management	Protected Area Resilient to Climate Change in Gunung Mulu National Park, a Totally Protected Area (TPA) in Sarawak	8 October 2020
Abdul Malik bin Abdul Razak (M)	Malaysia/UPM	MS Microbial Biotechnology	Characterization of Carotenoids from <i>Pantoea ananatis</i> and Its Potential as Biological Control Agent Against <i>Burkholderia glumae</i>	11 June 2021
Completed (7)				
Christian Jay P. Watson (M)	Philippines/UPLB	MS Soil Science	Physico-chemical Characterization, Geomorphology, and Land Suitability Assessment of Growing Areas for the Major Crops in Ilocos Norte, Philippines	20 August 2021

Name	Country/Host Institution	Degree Program Field of Study	Thesis/Project Title or Purpose of Travel and Host Institution	Date Awarded
Rut Listyadi (F)	Indonesia/IPB	MS Animal Husbandry Production and Technology Studi	Potential Health Benefits of Century Eggs Based on Its Characteristics	21 July 2021
Nurul Izzah binti Khalid (F)	Malaysia/UPM	PhD Food Engineering	Cleaning Program Development for An SME Frozen Meat Industry with Electrolyzed Water as an Alternative Cleaning Medium	27 September 2021
Rukundo Jean D'Amour (F)	Rwanda/IPB	MS Seed Science and Technology	Development of Rapid Vigor Test Using Urine Sugar Analysis Paper for Soybean (<i>Glycine max L.</i>) Seed	24 February 2022
Courage Yaw Kraah (M)	Ghana/IPB	MS Post Harvest Technology	Evaluating the Effectiveness of Liquid Smoke in Controlling Storage Pest (<i>Araecerus fasciculatus</i>) of Cocoa Beans	16 October 2020
Nur Hafizah binti Mustaffer (F)	Malaysia/UPM	MS Food Security and Climate Change	Physiochemical Characteristics, Microbiological Analysis and Biological Activities of Fermented Kepayang (<i>Pangium edule</i> Reinw.) Seeds	20 February 2020
Afdi Pratama (M)	Indonesia/IPB	MS Animal Production Science and Technology	Methane and Carbon Dioxide Production in Dairy Cattle Feces Given Different Forage Treatments	10 December 2020
UC Student Travel Grant				
New (5)				
Billy Akhbar Nugraha (M)	Indonesia/UB-Tokyo NODAI		Travel Grant for Research to Tokyo University of Agriculture (Tokyo-NODAI), Japan	21 April 2022
			16 September to 16 November 2022	
Muhammad Zalkifal (M)	Indonesia/IPB University		CORFU 2022 9th International Conference on Sustainable Solid Waste Management	21 April 2022
			Presented paper titled "Enhancing Laccase Activity towards Phenanthrene Degradation: A systematic analysis using Phellinus Noxius BRB 11 Laccases with three synthetic mediators"	
			12-19 June 2022, Athens, Greece	
Danniary Ismail Faronny (M)	Indonesia/UB		Sustainability Assessment in Agricultural Production and Food Processing Workshop	28 April 2022
			15-25 May 2022, Krabi&Surat Thani, Thailand	
Nur Amelia Syakira binti Abdul Aziz (F)	Malaysia/UPM		Sustainability Assessment in Agricultural Production and Food Processing Workshop	28 April 2022
			15-25 May 2022, Krabi&Surat Thani, Thailand	
Nur Syamimi binti Yaakub (F)	Malaysia/UPM		Sustainability Assessment in Agricultural Production and Food Processing Workshop	28 April 2022
			15-25 May 2022, Krabi&Surat Thani, Thailand	
Others				
Katanyutita Damchuay (F)	Thailand/KU	PhD Genetics	Travel grant for research in Tokyo NODAI	1 September 2019
UC Faculty Travel Grant				
New (2)				
Ahmad Faizal Abdull Razis (M)	Malaysia/UPM	Food Safety Toxicology	Travel grant for conference/3rd International Seminar on Smart Molecule of Natural Resources (ISSMART) - Asian Federation of Biotechnology (AFOB) 2021 (online)	25-26 August 2021

Name	Country/Host Institution	Degree Program Field of Study	Thesis/Project Title or Purpose of Travel and Host Institution	Date Awarded
Agham C. Cuevas (M)	Philippines/ UPLB		Travel grant for conference/Dialogue on Innovative Higher Education Strategies (DIES) International Deans' Course Southeast Asia 2022/2023	Held in three parts from 26 June 2022 to 11 February 2023
Ongoing (1)				
Leong Sui Sien (F)	Malaysia/UPM	Molecular Biology (Biotechnology)	Travel grant for research/UPLB	27 April 2020 - 6 May 2020
UC Seed Fund for Collaborative Research				
New (8)				
Norhashila Hashim (F)	UPM-UB	Agricultural Process Engineering	Development and Application of Stingless Bee Honey as Bio-based Active Film Packaging for Food and Nutrition Security Strategy	1 November 2021 - 30 October 2022
Aduwati Sali (F)	UPM-IPB	Mobile and Satellite Communications	NAPD: Networked ASEAN Peatland Data	1 March 2022 - 28 February 2023
Shahrul Razid Sarbini (M)	UPM-UGM-UPLB	Food Biotechnology	Prebiotic Assessment of Midin (<i>Stenochlaena palustris</i>), An Indigenous and Mucilaginous Edible Fern	1 March 2022 - 30 April 2023
Maria Victoria O. Espaldon (F)	UPLB-UGM	Geography	Comparative Study of Climate Change Adaptation in the Philippines and Indonesia	1 April 2022
Beata Ratnawati (F)	IPB-UB and Sumbawa University of Technology	Solid Waste; Waste and Water Treatment	Comparative of Greenhouse Gases Effects from Agricultural Activities in Bogor and Sumbawa	1 April 2022
Alifdalino Sulaiman (M)	UPM-KU	Chemical and Materials Engineering (Food Engineering)	Effect of Nanoemulsion Droplet Size on Foaming Structure and Foaming Properties of Dairy Milk	1 May 2022
Jittakon Ramanpong (M)	NTU-KU	Natural Resource Conservation; Park Management	Restorative Effects of Viewing Different Stand Density: An evidence from virtual reality plantation forest	1 May 2022
Muhammad Hazwan Hamzah (M)	UPM-UB	Agricultural Process Engineering	Quality Assessment of Oil Extracted from Dabai (<i>Canarium odontophyllum</i>), The Exotic Fruit of Borneo Through Ohmic Heated Hydro Distillation	1 May 2022
Ongoing (5)				
Latifah Abd Manaf (F)	UPM-UGM	Solid Waste, conservation of biology and ecology	The Application of Multi Criteria Decision Making in Selecting the Best Food Waste Management Method	1 June 2021
Muhammad Heikal bin Ismail (M)	UPM-UGM	Food and Agricultural Waste Conservation and Management	Investigating the Effect of Food and Agricultural Waste on the Quality of Biogas and Bio-fertilizer	1 January 2020
Ahmad Faizal Abdull Razis (M)	UPM-UB	Food Safety Toxicology	Authenticating Chicken Breeds Based on Fatty Acid Profiles, Bioactive Components and Whole Genome Sequencing	1 July 2020
Siti Mazlina binti Mustapa Kamal (F)	UPM-UB	Food Process Engineering	Evaluation of Antioxidant Activity of Phenolic Compounds Extracts from Piper Betel Leaves Using Pressurized Hot Water (PHW) Treatment	1 July 2020
Mami Irie (F)	NODAI-UPM	Environmental Science	Food Waste Analysis by Using Fourth Industrial Revolution Tools	1 November 2020
Completed (2)				
Arini Wahyu Utami (F)	UGM-UPM	Agricultural Socioeconomics	Feasibility Study on Developing Community-based Bioenergy Production from Cocoa Processing Waste	22 October 2020
Rozita Omar (F)	UPM-UGM	Microwave Applied Technology	Modified Chitosan as a Smart Biomaterial Produced from Crab Shell Waste Via Combined Microwave-assisted and Subcritical Liquid (MWSL) Technique	1 October 2020

*M - male, F - female

Annex 9. SEARCA Online Learning and Virtual Engagement (SOLVE) Webinar Series, FY 2021/2022

Date	Topic	Speaker/s	No. of Virtual Attendees
28 July 2021	33rd SOLVE Webinar: SOLVE Challenges to Sustainable Pathways towards Improved Nutrition: Making the Case for Schoolchildren and Adolescents		252
	The Engagement of High School Students in School Garden-based Activities of Agricultural Technology Parks in Cambodia	Dr. Lyda Hok, Director, Center of Excellence on Sustainable Agricultural Intensification and Nutrition (CE SAIN), Cambodia	Zoom: 103 Facebook: 149
	Optimizing School-based Nutrition Education amid COVID-19 Pandemic	Prof. Dr. Muchtaruddin Mansyur, Director, SEAMEO Regional Center for Food and Nutrition (RECFON), Indonesia	Cambodia, Japan, Indonesia, Myanmar, Taiwan, Philippines
	Sustainable Pathways for Garden-based Nutrition Enhancement in Schools	Dr. Julian Gonsalves, Senior Advisor at the International Institute of Rural Reconstruction (IIRR), Silang, Cavite, Philippines	
11 August 2021	34th SOLVE Webinar: SOLVE Gaps in the Agri-Food System: Promoting Youth Inclusion and Innovation		434
	Halal Certification and Food Service Industry	Dr. Wannasiri Wannasupchue, SEARCA Scholar 2016 and Lecturer, Food and Service Department, Udon Thani Rajabhat University, Thailand	Zoom: 143 Facebook: 291
	Youth in Agri: Industry Perspective	Ms. Louise Emmanuelle Mabulo, Founder, The Cacao Project, Philippines	Cambodia, Indonesia, Myanmar, Philippines, Thailand, US, Vietnam
	Role of youth in agriculture and food systems	Mr. Jim Leandro Cano, Global Focal Person, Young Professionals for Agricultural Development (YPARD) and Chair, Youth Alliance for Zero Hunger	
8 September 2021	35th SOLVE Webinar: SOLVE Public Info-sufficiency on Genome-edited Crops		491
	Genome-edited Crops: From the global perspective	Dr. Carl Ramage, Managing Director, Rautaki Solutions, Inc. and Chair, Institutional Biosafety Committee of La Trobe University, Australia	Zoom: 169 Facebook: 322
	Gene-editing in the Philippines: Opportunities and Constraints	Dr. Saturnina Halos, President, Biotechnology Coalition of the Philippines	Australia, Indonesia, Japan, Malaysia, Myanmar, Thailand, Timor-Leste, US, and Vietnam
20 October 2021	36th SOLVE Webinar: SOLVE Inadequacy of Effective Community Adaptation Responses to Climate Change		483
	Unpacking Climate Adaptation Finance at the Local Level: The Case of the People's Survival Fund in the Philippines	Mr. Rhomir S. Yanquiling, Visiting Research Fellow, International Climate Change Center and Development based in Dhaka, Bangladesh	Facebook: 389 Zoom attendees: 94
	Freshening the Coastal Zones in the Mekong Delta: State-society contestations in navigating rural livelihood pathways	Mr. Tran Van Hieu, Lecturer, Faculty of Agriculture and Natural Resources, An Giang University, An Giang Province, Vietnam	Bangladesh, Indonesia, Thailand, Timor-Leste, Vietnam
24 November 2021	37th SOLVE Webinar: SOLVE Leadership Challenges: Redefining Effective Leaders for Tomorrow		385
	Leadership Challenges in Higher Education	Dr. Emerlinda R. Roman, Professor Emeritus and Former President, University of the Philippines	Facebook: 298 Zoom attendees: 87
	Providing Leadership for the Implementation of the Innovation of Biofortification.	Dr. Howarth Bouis, Emeritus Fellow, International Food Policy Research Institute and Founding Director, HarvestPlus, Inc.	Myanmar, Philippines, Thailand, Indonesia, US
	Scaling Up Leadership for Better Tomorrow	Dr. Tin Htut, Retired Permanent Secretary, Myanmar's Ministry of Agriculture, Livestock and Irrigation	
26 January 2022	38th SOLVE Webinar: SOLVE Agri-value Chain Challenges: Increasing Competitive Advantage through Agri 4.0		254
	Value Chain Approach to Identifying Improvement/Upgrading Opportunities in the Processed Calamansi Industry in Oriental Mindoro, Philippines	Dr. Matilde Maunahan, University Researcher and Extension Coordinator, Postharvest Horticulture and Training Research Center, UPLB	Facebook: 181 Zoom attendees: 73
	The Rural Agro-enterprise Partnership for Inclusive Development (RAPID) Project	Ms. Mysol Booc-Carcueva, National Value Chain Officer, RAPID Growth Project, Department of Trade and Industry, Philippines	Myanmar, Thailand, Indonesia, and the United States, Philippines

Date	Topic	Speaker/s	No. of Virtual Attendees
9 March 2022	39th SOLVE Webinar: SOLVE Community Health Issues through One Health Applications		307
	Moving Forward from COVID-19 pandemic	Dr. Jomar F. Rabajante Professor, Institute of Mathematical Science and Physics, UPLB and Dean, UPLB Graduate School	Facebook: 218 Zoom attendees: 89
	One Health in Action: Communication and other disciplines in engaging communities to address zoonotic diseases	Dr. Elaine DC. Llarena Chair, Department of Science Communication, College of Development Communication, UPLB	Indonesia, Vietnam, Myanmar, Philippines
30 March 2022	40th SOLVE Webinar: SOLVE Women Disempowerment: Engendering Agribusiness Industries in Southeast Asia		239
	Empowering Indonesia Women Agripreneurs	Ms. Diah Yusuf Chairwoman, Womenpreneurs Indonesia Networks (WIN)	Facebook: 63 Zoom attendees: 176
	Partnering with Government Agencies and Opportunities for Women	Ms. Cherry Lyn Salvador-Mendoza Founder, Moolk Farm, New Zealand of Tanay-Agritourism 2021	US, Indonesia, Thailand, Philippines
	Proud Products of the Philippines for the Benefit of Coconut Farmers	Ms. Ma. Frances Rubio Chief Executive Officer, MFR Good and Proud LLC	
5 May 2022	41st Webinar: SOLVE Barriers to Agricultural Enterprises and Innovations		130
	AgriBoost: Butuan City's Agri-Innovation Entry to 2021 Bloomberg Global Mayors Challenge	Ms. Joie Cruz Founder, Limitless Lab	Facebook: 88 Zoom: 42
	Our Vision for Tomorrow	Ms. Iloisa Romaraog-Diga Co-founder, Session Groceries 2021 Ten Outstanding Young Men Awardee	Philippines, Thailand, Vietnam, and the United States.
	Designing Innovation Success and the SEARCA Agri-Innovator Program	Mr. Carlo P. Valencia Founder, Startup PH Training; Consultant, SEARCA Agri-innovator Program	
25 May 2022	42nd Webinar: SOLVE Challenges in Gender and Youth Inclusion in ARD Processes		117
	The Power of Youth for Food Systems Transformation	Dr. Khin Mar Cho Country Representative for Myanmar International Agriculture, Food Systems and Nutrition Specialist, Cornell University	Facebook: 92 Zoom: 25
	Youth as Climate-smart Agriculture Infomediaries: The PhilRice's Infomediary Campaign	Dr. Jaime Manalo IV Head, Socioeconomics Division, and Co-lead, Policy Research and Advocacy Program, Philippine Rice Research Institute	Philippines, Indonesia, Thailand, US, Vietnam.
29 June 2022	43rd Webinar: SOLVE Food and Nutrition Insecurity: Transforming Food Systems Post COVID-19		170
	Nutrition Practices During COVID-19 Pandemic	Dr. Luh Ade Ari Wiradnyani Community Development and Partnership Unit Manager SEAMEO RECFON	Facebook: 105 Zoom: 65
	Cooking, Cuisine, and COVID: Changing Patterns on Food and Nutrition as a Result of the COVID-19 Pandemic	Mr. Josef Adriel De Guzman Assistant Professor of Anthropology Department of Social Sciences University of the Philippines Los Baños	Philippines, Myanmar, Malaysia, Lao PDR, Cambodia, Vietnam, USA

Annex 10. SEARCA Learning Events, FY 2021/2022

Title	Venue and Date	No. of Participants	Participant's Country	Activity Partner/s	Main Speaker or Presenter
Regional (11)					
Central Luzon State University (CLSU)-SEARCA-University Consortium (UC) International Summer Short-term Course 2021	Google Meet 19-29 July 2021	398	Philippines Indonesia Malaysia Myanmar Thailand Cambodia Vietnam Nepal Nigeria Afghanistan Brebres Fiji India Luxembourg Somalia Sri Lanka Sierra Leone Gambia	CLSU and UC	Dr. Maria Cristeta Cuaresma Program Head, SEARCA Assoc. Prof. Dr. Yuzine Esa Department of Aquaculture, Faculty of Agriculture Universiti Putra Malaysia Dr. Ir. Hamim M.Si Department of Biology, Faculty of Mathematics and Natural Sciences IPB University
7th UC Graduate Forum: Agricultural Adaptation Strategies for Coping with Climate Change	Google Meet 2-3 December 2021	39	Indonesia Malaysia Philippines Thailand Japan Taiwan	National Taiwan University and UC	
3rd UC Faculty Forum: Agricultural Science for a Better World	Zoom 19-20 January 2022	23	Indonesia Malaysia Philippines Thailand Japan Taiwan	Tokyo University of Agriculture (Tokyo NODAI) and UC	
Webinar on Low Emission and Resilient Pathways in Livestock Systems: Towards sustainable climate-smart animal agriculture, eco-health, and food security	Zoom 31 August 2021	80	Philippines	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)	Dr. Rommel Sulabo Dr. Nathan Borgford-Parnell
Agricultural Transformation and Market Integration in the ASEAN region (ATMI-ASEAN) 2nd Training-Workshop on National Roadmap Development	MS Teams 3-5 November 2022	25	Cambodia Lao PDR Vietnam Indonesia India Philippines	IFPRI	Dr. Roehlano Briones
4th Asian Short Course on Agribiotechnology, Biosafety Regulation, and Communication (ASCA)	Zoom 3-26 November 2021	24	Brazil China Democratic Republic of Congo Ghana India Philippines Malaysia Thailand Vietnam	ISAAA MABIC US Soybean Export Council US Grains Council Outreach Network for Gene Drive Research Murdoch University	Dr. Gabriel O. Romero Dr. Maria Genaleen Q. Diaz Dr. Martin Lema Dr. Reynante Ordonio Dr. Lourdes Taylo Dr. Nurmalasari Darsono Dr. Glenn B. Gregorio Dr. David Heron Dr. Ibon Cancio Dr. Fabio Niespolo Mr. Duke Hipp Dr. Mahaletchumy Arujanan Mr. Eric John Azucena Ms. Kristine Grace Tome Ms. Clement Dionglay Prof. Michael Jones
Basic English Training for New SEARCA Scholars	Zoom and Google Classroom 19 July 2021 - 9 August 2021	20	Cambodia Indonesia Malaysia Myanmar Lao PDR Thailand Timor-Leste Vietnam	UPLB Office of the Vice Chancellor for Research and Extension UPLB College of Arts and Sciences (CAS)-Language Instruction Towards Excellence (LITE) Program	Dr. Mabini Dizon Asst. Prof. Elizabeth Krueger Asst.Prof. Jerard Ancel Eusebio

Title	Venue and Date	No. of Participants	Participant's Country	Activity Partner/s	Main Speaker or Presenter
Special Graduate Seminar on Study on Macro and Microplastics Debris in Indonesian Waters	Zoom and Facebook Live 24 September 2021	1,003 Facebook: 975 Zoom: 28	Cambodia Indonesia Malaysia Philippines Timor-Leste		Dr. Muhammad Reza Cordova Researcher, Research Center for Oceanography Indonesian Institute of Sciences, Indonesia
Online Training on Scientific Writing and Presentation	Zoom 10-27 January 2022	27	Cambodia Indonesia Malaysia Philippines Timor-Leste Vietnam	UPLB College of Development Communication	UPLB College of Development Communication: Asst. Prof. Avril Adrienne Madrid Asst. Prof. Aldo Lim Dr. Edmund Centeno Dr. Pamela Custodio Dr. Serlie Jamias UPLB School of Environmental Science and Management: Dr. Rico C. Ancog, Dean SEARCA: Mr. Glenn N. Baticados, Program Head, EIGD Dr. Romeo V. Labios, Operations Consultant for Partnerships SEARCA Alumnus: Dr. Venn Vutey Vice Dean of Research RUA
Online Training-Workshop on Quantitative and Qualitative Research Designs and Data Analysis	Zoom 11-26 January 2022	11	Cambodia Lao PDR Indonesia Malaysia Myanmar Philippines Timor-Leste Vietnam	UPLB College of Development Communication	Asst. Prof. Rosa Pilipinas Francisco Dr. Liza Comia Asst. Prof. Ronald Roldan Jr. Asst. Prof. Ramoncito Cambel Asst. Prof. Jared Jorim Mendoza Asst. Prof. Maurice Borromeo Asst. Prof. Rocky Marcelino Asst. Prof. Mark Jay Dating Dr. Nina Castillo Dr. Fernando Paragas Asst. Prof. John Mervin Embate Dr. Jaime Manalo
Navigating Delays and Disruptions during Postgraduate Studies	Zoom 27 May 2022	25	Cambodia Lao PDR Malaysia Myanmar Philippines Thailand Vietnam		Dr. Ng Siew Imm Universiti Putra Malaysia
National (14)					
SEARCA innovEIGHTs Ideation Session: 3D Printing Technology	Hybrid 28 March 2022	55	Philippines	Puzzlebox 3D Solutions Inc. University of the Philippines Open University (UPOU)	Julius Banquisio Paul Soriano Trainers, Puzzlebox 3D Solutions Inc. Luisa Gelisan Head, Media Center UPOU
Innovations and Startups: Tech Transfer and Business Development 101	Zoom 25 November 2021	37	Philippines	UPLB-TTBDO	Engr. Aldrex Aviso Ms. Jalyza Maye Jalbuena

Title	Venue and Date	No. of Participants	Participant's Country	Activity Partner/s	Main Speaker or Presenter
Agri-Boost Camp	Zoom 20 August and 9, 10, & 18 September 2021	46	Philippines	Batangas State University Center for Technopreneurship and Innovation	
How to Set-up Your Own Startup	Zoom and Facebook Live 13 August 2021	2,600 views in Facebook Live	Philippines	UPLB-TTBDO	Various experts from the industry and academe
Online Training on Technical Writing and Publication	Virtual 8-9 and 15-16 July 2021	21	Philippines	UPLB-TTBDO	Asst. Prof. Avril Adrienne Madrid
Leveling-Up Philippine Higher Education Institutions in Agriculture, Fisheries, and Natural Resources (LevelUPHEI AFAR) Project Short-term Training Program: 2nd Leadership Development Program for Higher Education Institutions (LDP HEIs) in the Philippines	Virtual 4 October - 29 November 2021	33	Philippines	The HEAD Foundation (THF), Singapore Commission on Higher Education (CHED), Philippines State Universities and Colleges - Association of Colleges of Agriculture in the Philippines, Inc. (SUC ACAP)	Core Faculty: Dr. Natarajan Varapasad Program Director, LDP HEIs Dr. Calvin Chan Director, Office of Graduate Studies, Singapore University of Social Sciences (SUSS) Dr. Rebekah Lim Director, Teaching and Learning Center, SUSS Keynote Speakers: Dr. Glenn B. Gregorio Director, SEARCA Dr. Fay Lea Patria M. Lauraya President, University of Nueva Caceres Ms. Cathlea M. Barote Chief People Officer, East-West Seed International Ltd. Prof. Lim Cher Ping Chair Professor, Learning Technologies and Innovation; Associate Dean (International Engagement), Faculty of Education and Human Development, The Education University of Hong Kong Prof. Hyo-Jeong So Professor, Department of Educational Technology, EWha Womans University Atty. Danilo L. Concepcion President, University of the Philippines
Center of Excellence on Sustainable Agricultural Intensification and Nutrition (CE-SAIN) Trainers' Training for Integrating the School-plus-Home Gardens Cum Biodiversity Enhancement Enterprise in Agriculture Technology Parks or ATPs and Mini-ATPs in Cambodia	Virtual 1 December 2021 - 23 February 2022	31	Cambodia	CE SAIN RUA Kansas State University	Dr. Manuel R. Reyes Research Professor and Agroecological Engineer Kansas State University, USA; Sustainable Intensification Innovation Lab (SIIL) Coordinator, Center of Excellence on Sustainable Agricultural Intensification and Nutrition (CE SAIN), Cambodia Dr. Blesilda M. Calub University Researcher IV College of Agriculture and Food Science (CAFS) UPLB

Title	Venue and Date	No. of Participants	Participant's Country	Activity Partner/s	Main Speaker or Presenter
					<p>Dr. Leila S. Africa Professor, Nutrition Programs and Policies Division, Institute of Human Nutrition and Food, College of Human Ecology, UPLB</p> <p>Dr. Leticia E. Afuang Professor, Animal Biology Division, Institute of Biological Sciences, College of Arts and Sciences, UPLB</p> <p>Mr. Bryan V. Apacionado Asst. Prof., Institute of Crop Science, College of Agriculture and Food Science, UPLB</p> <p>Ms. Leticia D. Germina Principal, Banca-banca Integrated National High School, Victoria, Laguna, Philippines</p> <p>Asst. Prof. Bates M. Bathan Department of Agricultural and Applied Economics, CEM, UPLB</p> <p>Mr. Lamberto C. Perolina Education Program Supervisor - Edukasyong Pantahanan at Pangkabuhayan (EPP)/ Technology and Livelihood Education (TLE) Department of Education (DepEd) - Schools Division Office (SDO) of Laguna</p>
Online Training on Research Designs and Methods for Higher Education Institutions (HEIs) in the Philippines (Research4HEIs)	Virtual 14 February - 11 March 2022	17	Philippines	CHED SUC-ACAP	<p>Dr. Maria Ana T. Quimbo Professor and UP Scientist II, Institute for Governance and Rural Development, College of Public Affairs and Development, UPLB</p> <p>Institute of Statistics, College of Arts and Sciences, UPLB: Dr. Lara Paul Ebal Asst. Prof. Ronald Roldan Jr. Asst. Prof. Rocky Marcelino Asst. Prof. Mark Jay Dating Dr. Joyce DL. Grajo Asst. Prof. Maurice Borromeo Asst. Prof. Edrun Gayosa Asst. Prof. Angelyn Mananghaya Dr. Liza N. Comia Asst. Prof. Mara Sherlin Talento</p> <p>Department of Social Sciences, College of Arts and Sciences, UPLB: Assoc. Prof. Girlie Nora Abrigo Dr. Augustus Añonuevo Dr. Mark Oliver Llangco</p>

Title	Venue and Date	No. of Participants	Participant's Country	Activity Partner/s	Main Speaker or Presenter
Online Strategic Communication Planning Workshop: Enhancing Communication Skills for Higher Education Institutions in the Philippines (StratCom4HEIs)	Virtual 1 February - 17 March 2022	20	Philippines	CHED SUC-ACAP	College of Development Communication, UPLB: Dr. Edmund Centeno Dr. Benjamina Paula Flor Asst. Prof. Aletheia Araneta Assoc. Prof. Rhodora Custodio Asst. Prof. Hermilea Marie Castillo Dr. Elaine Llarena Asst. Prof. Lynette Carpio-Serrano University Extension Assoc. Renz Frances Manrique Asst. Prof. Kabzeel Sheba Catapang
Online Training on Scientific Writing and Presentation for Higher Education Institutions in the Philippines (SciWriting4HEIs)	Virtual 19 April - 17 May 2022	28	Philippines	CHED SUC-ACAP	UPLB College of Development Communication: Asst. Prof. Avril Adrienne Madrid Dr. Pamela Custodio Dr. Elaine Llarena Asst. Prof. Aldo Gavril Lim Dr. Serlie Jamias Dr. Edmund Centeno
Online Training-Workshop on Developing Fundable Research Project Proposals for Transformational Agricultural and Rural Development for Higher Education Institutions (FundableProp4HEIs)	Virtual 18-29 April 2022	32	Philippines	CHED SUC-ACAP	Dr. Paul Teng SEARCA Senior Fellow and Managing Director and Dean, NIE International Pte Ltd National Institute of Education, Singapore Dr. Glenn B. Gregorio Director, SEARCA College of Public Affairs and Governance, University of the Philippines Los Banos: Dr. Maria Kristina Alinsunurin Dr. Miriam Caryl Carada Dr. Rhea Gumasing Prof. Nelson Querijero Prof. Wilfredo Carada
Training on Digital Storytelling for Young Agrinnovators	Zoom 21-22 April and 17 May 2022	28	Philippines		Ms. Yvette Tan Agriculture Editor, Manila Bulletin, and Editor-in-Chief, Agriculture Magazine Mr. Jayson Berto Senior Science Research Specialist, Philippine Rice Research Institute (PhilRice), Senior Science Research Specialist, Philippine Rice Research Institute (PhilRice)
AgriBiotalk Webinar	Zoom 27 November 2021	131	Philippines	UP Genetic Researchers and Agricultural Innovators Society (UP GRAINS) IRRI PhilRice	Dr. Glenn B. Gregorio Ms. Niña Alyssa M. Barroga Ms. Allison D. Alcantara Dr. Amelia Henry Dr. Ronan G. Zagado
Field Supervisors and Enumerators' Training	The Orchard Hotel Baguio City 25 October 2021	35	Philippines	N/A	Dr. Walfredo Rola Asst. Prof. Roselle Collado Dr. Filma Calalo

Annex 11. SEARCA Research and Innovation Projects, FY 2021/2022

Title of Project	Duration	Project Location	Partner/s
Research for Development (9)			
Trainers' Training for Integrating the School-plus-Home Gardens cum Biodiversity Enhancement Enterprise in the Establishment of ATPs and Mini-ATPs in Cambodia	1 December 2021 - 2 March 2022	Philippines and Cambodia	Center for Excellence in Sustainable Agricultural Intensification and Nutrition (CE SAIN), Royal University of Agriculture, Cambodia; Kansas State University; University of the Philippines Los Banos
A Series of Activities under the Framework of the UN Decade of Family Farming	November 2021 - December 2022	Cambodia, Indonesia, Philippines	Food and Agriculture Organization of the United Nations-Regional Office for Asia & the Pacific (FAO RAP)
Project Development on Coconut Industry Growth Areas in the Province of Quezon	1 July 2020 - 30 September 2021	Philippines	Provincial Government of Quezon
Establishment and monitoring of techno-demo- learning site for calamansi research in MinSU	24 May 2021 - 24 January 2022	Philippines	Mindoro State University (MinSU)
Data Collection Services in Cordillera Administrative Region of Luzon, Philippines for the Impact Assessment of the Second Cordillera Highland Agricultural Resource Management Project (CHARMP2)	August 2021 - March 2022	Philippines	International Fund for Agricultural Development (IFAD)
Project SAYA: Strengthening Yield of <i>Allium cepa</i> L (Onion) in the Philippines	April 2021 - March 2022	Philippines	Jollibee Group Foundation (JGF)
School-plus-Home Gardens with Biodiversity Enhancement Enterprise (SGHBEE) in Busuanga, Palawan		Philippines	Kansas State University; University of the Philippines Los Banos; Pilipinas Shell Foundation, Inc.
Identify Opportunities and Developing a Guiding Framework to address Humanitarian-Development-Peace (HDP) Nexus in Hand-in-Hand Initiative in Asia and the Pacific	14 December 2021 - 30 November 2022	Asia-Pacific	FAO RAP
Documenting Linkages between Farmers and the Tourism Industry in Asia and the Pacific	22 October 2021 - 30 September 2022	Philippines, Lao PDR, Thailand, Sri Lanka, Fiji, India	FAO RAP
Program and Policy Advisory (10)			
Promoting Climate-smart Land Use Through ASEAN Policy Documents and Regional Events	10 May 2021 - 30 November 2021	ASEAN	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)
Agricultural Transformation and Market Integration in the ASEAN Region: Responding to Food Security and Inclusiveness	15 February 2017 - 30 September 2022	Cambodia, Lao PDR, Myanmar, Vietnam, Philippines	International Food Policy Research Institute (IFPRI)
Rural Regional Transformation: Pathways, Policy Sequencing, and Development Outcomes in China, the Philippines, and Vietnam	15 September 2017 - 31 March 2021	China, Philippines, Vietnam	Institute of Geographic Sciences and Natural Resources Research (IGSNRR), Chinese Academy of Sciences
International Benchmarking Study of the Philippine Livestock, Dairy, and Poultry Industries	30 July 2021 - 31 October 2021	China, Thailand, Vietnam, Philippines	National Economic and Development Authority (NEDA)
Implications of ASEAN Economic Community (AEC) and Trade and Investments on Regional Food Security	9 June 2020 - 15 April 2022	ASEAN	Universitas Gadjah Mada (UGM)
Enhancing Food Supply Chain Resilience and Food Security in ASEAN with Utilization of Digital Technologies	16 November 2020 - 31 October 2021	ASEAN	Economic Research Institute for ASEAN and East Asia (ERIA); ASEAN Secretariat; Nanyang Technological University; International Food Policy Research Institute (IFPRI); University of Tokyo; University of Wisconsin; University of Technology, Wien, Austria

Title of Project	Duration	Project Location	Partner/s
Formulation of the National Agriculture and Fisheries Modernization and Industrialization Plan (NAFMIP) 2020-2025	September 2020- May 2022	Philippines	Asian Development Bank (ADB)
TA-9689 REG: Analysis of Fruit and Vegetable Value Chains in the Philippines	June 2020- March 2022	Philippines	ADB
FAO - Developing an Operational Example of a Jurisdictional-level Platform for Palawan, Philippines for the Management and Monitoring of Forest and Landscape Climate Finance Investments	February 2021- October 2021	Philippines	FAO
Formulating the Seed Industry Development (SIDP) of the Philippines		Philippines	DA-Bureau of Plant Industry DA-National Seed Industry Council
Development of Knowledge Platforms (3)			
Farmer Talk: Development of Information, Education, and Communication Materials Highlighting Biotech Contributions to Farmers' Success	15 December 2021 - 31 October 2022	Philippines, Indonesia, and Vietnam	CropLife Asia (CLA)
AgPractices&Domain Platforms Development of Knowledge Platforms	1 October 2020 - 31 October 2021	Myanmar, Philippines	University of Southern Queensland; University of the Philippines Los Baños
Know The Science: Strengthening Biotech Links (KTS Project)	March 2022 - February 2023	Philippines	International Service for the Acquisition of Agri-biotech Applications (ISAAA)
Innovation (1)			
Development of Pilot Digital Agriculture Platform in the Philippines Project	September 2020 - August 2022	Philippines	APPGeese, Inc.

Annex 12. SEARCA Grants, FY 2021/2022

Grantee's Name/ Institution's Representative	Institution / Position	Country	Field of Study and Title of Project / Research / Paper / Conference	Date of Award	Date Completed	Amount of Grant
Grants for Research towards Agricultural Innovative Solutions (GRAINS)						
New (9)						
Dr. Lilia M. Fernando	MakilingTek, Inc./ Director	Philippines	Establishment of a Pilot Plant as Manufacturing facility for Hormogroee @ Nonencapsulated Plat Growth Regulators for High Value Crops Production	15 Feb 2022	31 Oct 2022	PHP 500,000
Ms. Julieane Camile Lacsina	Zion Agricultural Ventures, Inc. (GOEden)/ President and CEO	Philippines	Improving Farmers Access to Agricultural Technology, Products and Services through digitization and consolidation of local Agri-supply stores	1 Feb 2022	15 Oct 2022	PHP 750,000
Fr. Narciso A. Cellan Jr.	University of San Carlos/ President	Philippines	Development of chitosan-based bioplastic from shrimp waste as potential industrial packaging material	1 Feb 2022	30 Sep 2022	PHP 750,000
Dr. Veronica C. Sabularse	HS InnoTe / Director	Philippines	Construction of a Spin-off Pilot Plant for the Manufacture of Fruitect	11 Mar 2022	30 Nov 2022	PHP 500,000
Fr. Jose Victor E. Lobrigo	Socioeconomic Development Program Multipurpose Cooperative (SEDP MPC)/ OIC, Executive Director	Philippines	Technology Adoption for People-Centered Innovation and Livelihood Integration (PILI) Project	21 Mar 2022	21 Sep 2022	PHP 750,000

Grantee's Name/ Institution's Representative	Institution / Position	Country	Field of Study and Title of Project / Research / Paper / Conference	Date of Award	Date Completed	Amount of Grant
Dr. Reynaldo M. Lantin	Malvar Organic Farmers Agriculture Cooperative/ Chairperson	Philippines	Commercial Seed Production and Farming System Integration of Three Elite Traditional Rice Varieties	1 May 2022	30 Apr 2023	PHP 750,000
Joseph Mario M. Navasero	-	Philippines	Bioconversion of Household, Agri-byproducts, and other Organic wastes into Insect-based Animal Feed and Organic Compost using Black Soldier Fly, <i>H. illucens</i> .	15 Jun 2022	15 Dec 2022	PHP 350,000
Carol Bernadette R. Domalsin	-	Philippines	ARCHIE, Agri Robot for Crop Health in Insect Control	15 Jun 2022	30 May 2023	PHP 350,000
Myka M. Fragata	-	Philippines	Enhancement of Prototype and Assessment of Product Marketability of AIRIN (an automated irrigation and nutrient management system) for small-scale farmers	15 Jun 2022	30 May 2023	
Ongoing (2)						
George Y. Culaste	Bureau of Plant Industry - National Seed Industry Council/ Executive Director	Philippines	Formulating the Seed Industry Development Program (SIDP) of the Philippines	1 Sep 2021	30 Sep 2022	PHP 750,000
Dr. Jose V. Camacho, Jr.	University of the Philippines (UPLB)/ Chancellor	Philippines	Conceptualizing Halal Industry and One Health (H2O) Ecosystem as an Emerging Innovation for Growth and Development: Establishment of the Halal Science and Technology (S&T) Knowledge Center for Southeast Asia in the Philippines (Phase 1)	1 Jan 2021	31 Dec 2022	PHP 720,000
Completed (6)						
Dr. Jesus Antonio G. Derije	Central Mindanao University (CMU)/ President	Philippines	Assessing the Efficiency and Prospects of the Tunnel Vent Technology for the Poultry Industries in Mindanao, Philippines-Phase 1	1 Jan 2021	30 Apr 2022	PHP 720,000
Dr. Mario R. Briones	Laguna State Polytechnic University/ University President	Philippines	Pilot Incubation Support for Agrifood-based Startups of the Laguna State Polytechnic University	12 Mar 2021	31 Jul 2021	PHP 500,000
Dr. Tirso A. Ronquillo	Batangas State University/ University President	Philippines	SICAT: Support for Innovative and Commercially Viable Agricultural Technology	12 Mar 2021	2 Dec 2021	PHP 500,000
Dr. Jose V. Camacho, Jr.	UPLB/ Chancellor	Philippines	SEARCA-UPLB Technology Transfer and Business Development Manual and Capacity Building Project	1 May 2021	30 Nov 2021	PHP 720,000
Dr. Rosein A. Ancheta, Jr.	Cebu Technological University/ President	Philippines	Waste to Food: Valorization of SHRIMP Head Wastes	12 Mar 2021	31 Dec 2021	PHP 720,000
Dr. Max P. Guillermo	Tarlac Agricultural University/ President	Philippines	Pilot Support for Market Analysis and Competitiveness of TAU Agri-based Products	12 Mar 2021	31 Dec 2021	PHP 500,000

Grantee's Name/ Institution's Representative	Institution / Position	Country	Field of Study and Title of Project / Research / Paper / Conference	Date of Award	Date Completed	Amount of Grant
SEARCA Regional Professorial Chair (SRPC)						
New (4)						
Siti Khairunniza Bejo	Universiti Putra Malaysia	Malaysia	Imaging Technology and Remote Sensing/ Plant Disease Sensing Using Hyperspectral Imaging and Machine Learning Techniques: A case study in <i>Ganoderma boninense</i> infection	AY 2022- 2023		
Helmi Zulhaidi Mohd Shafri	Universiti Putra Malaysia	Malaysia	Remote Sensing and Geomatics Engineering/ Development of Oil Palm Yield Prediction Model Using Advanced Geospatial and Machine Learning Techniques	AY 2022- 2023		
Sirikachorn Tangkawattana	Khon Kaen University	Thailand	Pathology/ Zoonotic Disease; From Liver Fluke Control to Community's Supplemental Income/Agricultural Benefits	AY 2022- 2023		
Renato G. Reyes	Central Luzon State University	Philippines	Mycology/ Recent Advances on the Domestication and Mushrooms in the Philippines for the Biofunctional Food Industry	AY 2022- 2023		
Completed (3)						
Khaswar Syamsu	IPB University	Indonesia	Agricultural Technology and Innovation/Increased Bioethanol Production Directly from Sweet Sorghum Bagasse Using Mold and Yeast Presented on 6 July 2021	AY 2021- 2022	27 July 2021	USD 5,000
Mohamed Thariq Bin Haji Hameed Sultan	Universiti Putra Malaysia	Malaysia	Agricultural Technology and Innovation/ Putra Unmanned Aerial Vehicle: From Agricultural Biomass To A Biocomposite Flying Drone Presented on 10 December 2021	AY 2021- 2022	10 December 2021	USD 5,000
Zool Hilmi Ismail	Universiti Teknologi Malaysia	Malaysia	Agricultural Technology and Innovation/ AI Data Driven High Throughput for Paddy Field Phenotyping System Presented on 4 August 2021	AY 2021- 2022	21 March 2022	USD 5,000
SEARCA Travel Grants Program (STGP)						
Jermaine Marie Ann O. Fabella	Department of Agriculture - Biotechnology Program/ Science Research Assistant	Philippines	4th Asian Short Course on Agribiotechnology, Biosafety Regulation, and Communication (ASCA) 23-26 November 2021, Zoom			USD 135
Miki Angela T. Kurahashi	Central Bicol State University of Agriculture/ Science Research Specialist I	Philippines	4th Asian Short Course on Agribiotechnology, Biosafety Regulation, and Communication (ASCA) 23-26 November 2021, Zoom			USD 135
Paula Blanca G. Aquino	Central Luzon State University/ Assistant Professor IV	Philippines	4th Asian Short Course on Agribiotechnology, Biosafety Regulation, and Communication (ASCA) 23-26 November 2021, Zoom			USD 135

Grantee's Name/ Institution's Representative	Institution / Position	Country	Field of Study and Title of Project / Research / Paper / Conference	Date of Award	Date Completed	Amount of Grant
Jayson R. Pucot	Davao Del Sur State College/ College Instructor	Philippines	4th Asian Short Course on Agribiotechnology, Biosafety Regulation, and Communication (ASCA) 23-26 November 2021, Zoom			USD 135
Jeffrey P. Romero	University of Santo Tomas/ MS Student	Philippines	4th Asian Short Course on Agribiotechnology, Biosafety Regulation, and Communication (ASCA) 3-26 November 2021, Zoom			USD 135
Nur Aini Mahmudah	State Community College of Putra Sang Fajar Blitar/ Lecturer	Indonesia	Potential of White Leadtree (<i>Leucaena leucocephala</i>) Legume Flour as Functional Food with Umami Taste/ 3rd International Sustainable Agricultural Intensification and Nutrition Conference (SAIN 3), 27-28 June 2022, Siem Reap, Cambodia			USD 1,047
Chrysl Avegeil N. Vallejo	Central Luzon State University/ Associate Professor I	Philippines	Making Technologies Work in Rural Communities: The case of flatbed dryer appropriation among rice farmers in Sto. Domingo, Nueva Ecija, Philippines/ 3rd International Sustainable Agricultural Intensification and Nutrition Conference (SAIN 3), 27- 28 June 2022, Siem Reap, Cambodia			USD 1,200
Samrith Leang	National University of Battambang/ Lecturer	Cambodia	Effect of Tillage, Cassava Starch Manufacturing Wastes and Chemical Fertilizer on Cassava, Huay Bong 80 Variety, Grown in a Degraded Soil, Northeast, Thailand/ 3rd International Sustainable Agricultural Intensification and Nutrition Conference (SAIN 3), 27-28 June 2022, Siem Reap, Cambodia			USD 800
Buncha Chinnasri	Kasetsart University/ Associate Professor	Thailand	Management of Rice Root Nematodes (<i>Hirschmanniella mucronata</i>) in Lowland Rice Fields of Cambodia by Conservation Agriculture/ 3rd International Sustainable Agricultural Intensification and Nutrition Conference (SAIN 3), 27-28 June 2022, Siem Reap, Cambodia			USD 1,050
Seed Fund for Research and Training (SFRT)						
Ongoing (23)						
Mr. Ly Quoc Dang	Mekong Youth Network	Vietnam	Youth, agriculture/ Mekong Youth and Sustainable Agriculture Interactions	1 Apr 2020		USD 15,000
Dr. Noris Mohd Norowi	Universiti Putra Malaysia	Malaysia	Youth, education/ Bridging the Urban-Rural Divide on Knowledge Dissemination and Learning Process of Secondary School	16 Apr 2020		USD 12,230
Mr. Paul Neilmer M. Feliciano	University of the Philippines	Philippines	Free trade, agriculture/ Do Free Trade Agreements Spur Agricultural Trade and Promote Greater Integration: An Empirical Analysis on ASEAN- China Free Trade Agreement	24 Apr 2020		USD 12,000

Grantee's Name/ Institution's Representative	Institution / Position	Country	Field of Study and Title of Project / Research / Paper / Conference	Date of Award	Date Completed	Amount of Grant
Dr. Gregorio Y. Ardales, Jr	UP Rural High School	Philippines	Youth, agriculture education/ Skill Advancement of Grade 11 Students on Agriculture Through Research and Practical Applications as a Pathway to Food Security and Economic Development	27 Mar 2020		USD 15,000
Dr. Jones T. Napaldet	Benguet State University	Philippines	Biodiversity/ Re-description and Documentation of Floral Diversity in Cordillera Central Range, Northern Philippines amidst Rampant Forest Conversion into Vegetable Farms: An Important Foundation for Biodiversity Conservation	26 Jun 2020		USD 14,700
Mr. Rhomir Samiley Yanquiling	Sustainability and Local Development Center	Philippines	Climate change, finance/ Demystifying Climate Adaptation Finance for the Poor Rural-agricultural Communities and the Vulnerable Sector: The case of the People's Survival Fund in the Philippines	9 Jul 2019		USD 14,835
Mr. Edison Roi Macusi	Davao Oriental State College of Science and Technology	Philippines	Socioeconomic impacts, governance, fisheries/ Biological and Socioeconomic Impacts of the Closure Fishing Ban in Davao Gulf and the Zamboanga Peninsula: Relevance of effort distribution and role of governance	9 Jul 2019		USD 12,200
Dr. Nguyen Van Kien	An Giang University	Vietnam	Organics, social perception/ Social Perception of the Organics Industry in Vietnam	1 Aug 2019		USD 15,000
Dr. Le Thi Thanh Loan	Vietnam National University of Agriculture	Vietnam	Food and nutrition security/ Food and Nutrition Security of Poor Households in Tuong Duong District, Nghe An Province, Vietnam	5 Jul 2019		USD 7,846
Ms. Trang Thi My Duyen	Research Center for Rural Development (RCRD) of An Giang University	Vietnam	Value chain, crop production, food security/ A Study on Value Chain of Palm Sugar Products and Income of Poor Khmer Ethnic Group in Chau Lang Commune, Tri Ton District, An Giang	11 Jun 2018		USD 14,077
Dr. Thong Anh Tran	Research Center for Rural Development, An Giang University	Vietnam	Climate change, salinity/ Freshening Salinity Areas: Implications of Ba Lai irrigation Scheme for Agro-ecosystems and Household Adaptation in Binh Dai district, Ben Tre province	11 Jun 2018		USD 13,500
Dr. I Wayan Budiassa	Faculty of Agriculture Udayana University	Indonesia	Agricultural cooperative, agribusiness/ Developing Agricultural Cooperative Model for Supporting Subak-based Agribusiness Development within the UNESCO World Heritage Site, Bali, Indonesia	11 Jun 2018		USD 12,183
Ms. Nguyen Thi Bich Thuy	Department of Rural Economics, Faculty Extension and Rural Development, of Hue University of Agriculture and Forestry	Vietnam	Climate change, resilience, sustainable agriculture/ Building Sustainable Community-based Disaster Resilience and proposing Effective Agricultural Production for Livelihood Development to Sampan Dwellers in Central Vietnam	11 Jun 2018		USD 14,800

Grantee's Name/ Institution's Representative	Institution / Position	Country	Field of Study and Title of Project / Research / Paper / Conference	Date of Award	Date Completed	Amount of Grant
Ms. Dang Thi Thanh Quynh	Research Center for Rural Development – An Giang University	Vietnam	Ecosystem, forestry, rural community/ Understanding Relationships Between Providing Ecosystem Services of Forest and Rural Livelihoods: A case study in Le Tri Commune, Tri Ton District, An Giang Province, Vietnam	11 Jun 2018		USD 13,095
Dr. Budi Santosa	Center of Food and Feed Sovereignty Tribbuwana Tunggadewi, University Malang	Indonesia	Nucleus estate model, food production/ Home Industry Development for the Production of Modified Tannia Cocoyam Flour as Medium Product in Nucleus Estate Smallholder (NES) Model of Instant Noodle Production	23 Oct 2017		USD 15,000
Dr. Ngo Thi Thanh Truc	Department of Environmental Economics, College of Economics, Can Tho University	Vietnam	Renewable energy, biogas/ Developing sustainable Biogas Solutions from Biomass in the Mekong Delta, Vietnam: Options and barriers for increased usage of biomass among farmers and households to reduce greenhouse gas emissions and lower energy costs	23 Oct 2017		USD 14,971
Rodelio F. Subade	Division of Social Sciences, College of Arts and Sciences, University of the Philippines Visayas (UPV)	Philippines	Economic valuation, ecosystems/ Integrated Economic Valuation for Inclusive Conservation and Sustainability of Coastal Ecosystem Services: A case for Taklong Island National Marine Reserve, Guimaras	4 Feb 2016		PHP 659,890
Nuva Nuva	Department of Resource and Environmental Economics, Faculty of Economics and Management – IPB University	Indonesia	Marine aquaculture, Blue Economy/ Integrating Marine Aquaculture with Seaweed Farming in Supporting Community's Livelihood towards Blue Economy Implementation in Lombok, Indonesia	9 Feb 2016		USD 13,500
Huynh Viet Khai	Can Tho University	Vietnam	Rice production, climate change adaptation/ Climate Change Impact on Rice Production and Adaptation: A Case study of salinity intrusion in coastal areas of the Mekong Delta, Vietnam	9 Feb 2016		USD 13,960
Tri Rini Nuringtyas	Research Center for Biotechnology, Universitas Gadjah Mada	Indonesia	Rice, pigmented rice production/ Development of Pigmented Rice for Rural Community	18 Feb 2016		USD 12,520
Ms. Seinn Seinn Mu	Ministry of Agriculture and Irrigation, Myanmar	Myanmar	Rice production systems/ Impact of Rural Out Migration on the Resilience of Agricultural System of Rice Farmers in Lower Ayeyarwady Delta, Myanmar	18 Feb 2015		USD 13,910
Dr. Reynold D. Tan	College of Management, University of the Philippines Visayas	Philippines	Value chain/ Quality Degradation of Milkfish (<i>Chanos chanos</i>) Along the Food Value Chain: An assessment in municipalities with high incidence of malnutrition in the Province of Iloilo	6 Mar 2015		USD 13,086

Grantee's Name/ Institution's Representative	Institution / Position	Country	Field of Study and Title of Project / Research / Paper / Conference	Date of Award	Date Completed	Amount of Grant
Mr. Dedisio Jose Lay Ximenes	Ministry of Agriculture and Fisheries Rua de Nicolau Lobato, Comoro Dili, Timor-Leste	Timor- Leste	Food production/ Enhancing Food Production, Quality, and Safety through Integrated, Sustainable, and Market-driven Farming Systems	18 Feb 2015		USD 12,884
Completed (2)						
Dr. Long Hoang	Center for Consultancy, Training Cooperation, and Technology Transfer, Da Nang Institute for Socio Economic Development	Vietnam	Value chain, agricultural cooperatives/ Enhancing Linkages of Agricultural Cooperatives in the agricultural Value Chain Towards Promotion of Local Food Movement in Danang, Vietnam	23 Oct 2017		USD 13,836
Fenny Martha Dwivany	Bioscience and Biotechnology Research Center, Institut Teknologi Bandung – School of Life Science and Technology, Institut Teknologi Bandung	Indonesia	Agro-industry, pest control and management/ The Use of Biomaterial Nano-chitosan as Biofungicide Against <i>Phytophthora capsici</i> on Six Chilies Cultivars in West Java Province Indonesia for Sustainable Agro Industry Applications	9 Feb 2016		USD 14,520
IFS-SEARCA Collaborative Research Grants						
Ongoing (10)						
Mr. Huu Tien Nguyen	Institute of Ecology and Biological Resources - Vietnam Academy of Science and Technology	Vietnam	Crop Science/ Study on Damaging Potential and Diversity of Plant-parasitic Nematodes Associated with Vegetables in Vietnam and Develop Biological Control Strategies Using Endophytic Bacteria	5 Oct 2021		USD 14,295
Dr. Magdalena Lenny Situmorang	Institut Teknologi Bandung	Indonesia	Aquatic Resources/ Application of Closed Hybrid Zero Water Discharge–Recirculating Aquaculture System Technology Along with Synbiotic Functional Feed as Alternative to Antibiotics for Disease Biocontrol Strategy in Whiteleg Shrimp <i>Litopenaeus vannamei</i> Culture	10 Mar 2022		USD 20,000
Ms. Mildred Guirindola	Department of Science and Technology	Philippines	Social Science/ Food Environment and Socio- ecological Attributes as Drivers of Food Security Before and During Enhanced and General COVID-19 Quarantines in Cavite, Philippines	5 Oct 2021		USD 7,090.00
Dr. Oanh Nguyen Cong	Vietnam National University of Agriculture	Vietnam	Animal Production/Potential for Using Some Indigenous Medicinal Plants as Feed Additives Relating to Animal Health, Growth Performance and Meat Quality of Pigs in Northern Vietnam	5 Oct 2021		USD 20,000
Dr. Thi Lam Bui	Vietnam National University of Agriculture	Vietnam	Social Science/Moving Toward a Healthier Diet: Consumer intention to eat more vegetables and less meat in Vietnam	5 Oct 2021		USD 12,796

Grantee's Name/ Institution's Representative	Institution / Position	Country	Field of Study and Title of Project / Research / Paper / Conference	Date of Award	Date Completed	Amount of Grant
Dr. Thien Nguyen	Duy Tan University	Vietnam	Food Science/ Experimental and Computational NMR in Detection, Structure Elucidation, and Kinetic Analysis of Lipid Oxidation Products in Fried Foods in Vietnam	17 Dec 2021		USD 17,982
Mr. Thanh Dien Le	Van Lang University	Vietnam	Food Science/ Isolation and Characterization of Bacteriophages for Biocontrol of Multidrug-resistant <i>Campylobacter jejuni</i> in Broilers	25 May 2022		USD 19,000
Dr. Nguyen Thi Tam Thu	Institute of New Technology	Vietnam	Natural Products/ Production and Characterization of Polyhydroxyalkanoate (PHA) by Halophilic Microorganisms Isolated from Truong Sa Sea in Vietnam	6 Jun 2022		USD 15,000
Dr. Tran Nguyen Duy Khoa	Can Tho University	Vietnam	Coastal Aquaculture/ Application of Light-emitting Diodes (LEDs) in Larviculture of Mud Crab (<i>Scylla paramamosain</i>)	20 May 2022		USD 20,000
Dr. Quoc An Trieu	Nguyen Tat Thanh University	Vietnam	Environmental and Food Engineering/ Recovery of Phosphate from Eutrophic Water Bodies by Nano- biocomposite Adsorbents: Application as smart fertilizers	25 May 2022		USD 18,595

Annex 13. List of Formal Agreements with Collaborating Institutions, FY 2021/2022

Institution/Organization	Purpose of Agreement	Amount Involved		Duration
		From Partner	From SEARCA	
International/Regional Partners (14)				
International Service for the Acquisition of Agri-biotech Applications	LOA on SEARCA Online Learning Virtual Event (SOLVE) Webinar: SOLVE the Publics Info-sufficiency on Genome-edited Crops	USD 1,150	-	21 July 2021 - 30 September 2021
Society for the Advancement of Breeding Research	MOA on SABRAO Journal Publication and Membership Administration	(SABRAO funds from membership dues collected and other sources shall cover all publication- related costs)	(Any deficit will be covered by SEARCA up to the amount corresponding to SABRAO's funds)	15 September 2021 - 14 September 2022
University of Southern Queensland	Research Collaboration Agreement on AgPractices & Domains platform	AUD 46,970	-	1 October 2020 - 31 October 2021
Food and Agriculture Organization of the United Nations (FAO)	LOA on Documenting linkages between farmers and the tourism industry in Asia and the Pacific	USD 35,000	-	5 November 2021 - 31 March 2022
FAO	LOA on A Series of Activities in the Framework of the UN Decade of Family Farming	USD 65,000	-	11/03/21 12/01/22
Asian Farmers' Association for Sustainable Rural Development	LOA on Regional Virtual Consultation on "Engaging with Academia and Research Institutions (ARIs) to Support Family Farmers and Food System Transformation during and post COVID-19 Pandemic in Asia"	-	USD 5,000 (project fund from FAO's "A Series of Activities in the Framework of the UN Decade of Family Farming)	15 November 2021 - 30 March 2022

Institution/Organization	Purpose of Agreement	Amount Involved		Duration
		From Partner	From SEARCA	
CropLife Asia	LOA on FarmerTalk: Development of IEC Materials Highlighting Biotech Contributions to farmer Success	USD 3,850	-	28 December 2021 - 31 March 2022
International Fund for Agricultural Development	Institutional Contract on the Appointment of SEARCA as Provider of Services for data Collection in the Philippines as Part of the Impact Assessment (IA) of the Second Cordillera Highland Agricultural Resource Management Project (CHARMP II)	USD 183,222	-	August 2021 - March 2022
The Head Foundation	LOA on the 2nd Leadership Development Program for Higher Education Institutions (LDP-HEIs) in the Philippines	USD 10,700	PHP 500,200 and USD 9,500	17 September 2021 - 31 May 2022
Food and Agriculture Organization of the United Nations	LOA to Identify Opportunities and Developing a Guiding Framework to Address Humanitarian-Development-Peace (HDP) Nexus in Hand-in-Hand Initiative in Asia and the Pacific	USD 20,000	-	14 December 2021 - 30 June 2022
Asian Partnership for the Development of Human Resources in Rural Areas	LOA on A Series of Activities in the Framework of the UN Decade of Family Farming (Activity 2)	-	USD12,000	3 March 2022 - 31 December 2022
ISEAS-Yusof Ishak Institute	LOA to co-publish a work entitled "Pro-Poor Development Policies: Lessons from the Philippines and East Asia" edited by Hal Hill, Majah-Leah V. Ravago and James A. Roumasset	-	USD3,500	12 May 2022
Climate Science Ltd (ClimateScience)	MOU on Institutional cooperation in Education, Research, and Training	-	-	27 September 2021 - 26 September 2026
International Service for the Acquisition of Agri-biotech Applications	LOA on Know The Science: Strengthening Biotech Links (KTS Project)	PHP 511,165	PHP 150,679	18 March 2022 - 28 February 2023 0
National Partners (37)				
Sriwijaya University	MOA to Co-manage the Sriwijaya Conference on Sustainable Agriculture, Farming System, and Environment (SAC-SAFSE) 2021	-	-	28 June 2021 - 29 September 2021
National Economic Development Authority	Contract Agreement on International Benchmarking Study of the Philippine Livestock, Dairy and Poultry Industries	PHP 1,844,285	-	30 July 2021 - 31 October 2021
UP Open University and UP Open University Foundation, Inc.	MOA on E-Learning for Champions to Scale Up School-plus Home Gardens	PHP 30,130	PHP 272,130	1 November 2021 - 30 June 2022
Center of Excellence on Sustainable Agricultural Intensification and Nutrition	LOA on Trainers' Training for Integrating the School-plus-Home-Gardens in the Establishment of ATPs and Mini ATPs in Cambodia	USD 7,650.	USD 7,624	4 October 2021 - 15 February 2022
Department of Economics, College of Economics and Management, University of the Philippines Los Baños	LOA/ Internship Agreement for Students under the Department of Economics, UPLB	-	-	5 July 2021 - 25 August 2021
Pamantasan ng Lungsod ng Maynila	MOA on Practicum for BS Biology students	-	-	12 July 2021 - 31 August 2021
Mindoro State University	LOA on Project SAYA: Strengthening Agricultural Yield of <i>Allium cepa</i> L. (Onion) in the Philippines	-	PHP 113,100	September 2021 - 31 December 2021
Ilocos Sur Polytechnic State College	LOA on Project SAYA: Strengthening Agricultural Yield of <i>Allium cepa</i> L. (Onion) in the Philippines	-	PHP 127,240	September 2021 - 31 December 2021

Institution/Organization	Purpose of Agreement	Amount Involved		Duration
		From Partner	From SEARCA	
National Seed Industry Council	MOA on Formulating the Seed Industry Development Program (SIDP) of the Philippines	-	PHP 750,000	1 September 2021 - 28 February 2022
University of the Philippines Los Baños	MOA on 3rd Global Agribusiness Management and Entrepreneurship (GAME 2021) Conference	-	PHP 30,000 (plus in-kind contribution)	18 November 2021 - 30 March 2022
Center of Excellence on Sustainable Agricultural Intensification and Nutrition, Royal University of Agriculture	MOA on CESAIN-SEARCA Joint Graduate Scholarship	USD 112,200	USD 23,400	1 January 2022 - 31 December 2024
Department of Agriculture	MOA on Agricultural Transformation and Market Integration in the ASEAN Region: Responding to Food Security and Inclusiveness Concerns (ATMI-ASEAN)	-	-	31 January 2022 - 31 March 2022
University of San Carlos	MOA on the Development of chitosan-based bioplastic from shrimp waste as potential industrial packaging material	-	PHP 750,000	11 December 2021 - 31 July 2022
Ministry of Agriculture, Forestry and Fisheries of Cambodia	MOA on Agricultural Transformation and Market Integration in the ASEAN Region: Responding to Food Security and Inclusiveness Concerns (ATMI-ASEAN)	-	USD 29,730	6 January 2022 - 31 March 2022
Zion Agricultural Ventures, Inc.	MOA on Improving Farmers' Access to Agricultural Technology, Products and Services through Digitization and Consolidation of Local Agri-supply Stores	-	PHP 750,000	1 February 2022 - 31 May 2022
University of the Philippines Los Baños, Department of Agricultural and Applied Economics	LOA on SEARCA-UPLBDAAE Student Internship Program for Midyear 2022	-	-	3 March 2022 - August 2022
Sycip, Gorres, Velayo & Co.	MOA on ADB TA-9689 REG: Analysis of Fruit and Vegetable Value Chains in the Philippines (52239-001)	-	USD 3,896	1 June 2020 - 8 March 2021
HS InnoTech, Inc.	MOA on the Construction of a Spin-off Pilot Plant for the Manufacture of Fruitect	-	PHP 500,000	11 March 2022 - 30 June 2022
Rotary Club of Los Baños (RCLB) Makiling and Lactation, Attachment, Training, Counseling, Help Los Baños	LOA on the PaManna Feeding Program	PHP 297,000.00 (RCLB)	PHP 297,000.00	1 March 2022 - 31 July 2022
Socio-Economic Development Program Multipurpose Cooperative	MOA on Technology Adoption for People-Centered Innovation and Livelihood Integration (PILI) Project	-	PHP 750,000	21 March 2022 - 21 September 2022
Pilipinas Shell Foundation, Inc.	LOA on Agri-Innovations Virtual Forum: Transforming Agri-Food Systems Through Agri-Innovations	In-kind contribution with cost equivalent of PHP 100,000	In-kind contribution with cost equivalent of PHP 158,000	11 April 2022 - 31 May 2022
Malvar Organic Farmers Agriculture Cooperative	MOA on Commercial Seed Production and Farming System Integration of Three Elite Traditional Rice Varieties	-	PHP 750,000	1 May 2022 - 30 April 2023
Mindoro State University	LOA on Development of Calamansi Technoguide and Automated Sorting Machine to Improve the Calamansi Industry of Oriental Mindoro	-	-	Until 30 June 2023

Institution/Organization	Purpose of Agreement	Amount Involved		Duration
		From Partner	From SEARCA	
Provincial Government of Oriental Mindoro	LOA on Technical Assistance for the Development of the Calamansi Industry Roadmap in Oriental Mindoro	-	-	Until 30 June 2023
Dr. Nerlita M. Manalili	MOA on Investment in Graduate Education in Food Science and Technology: Foreground for Food Systems Development and Innovations: Case of ASEAN Countries	-	PHP 120,000	16 June 2022 - 22 September 2022
Mr. Joseph Mario M. Navasero	MOA on Bioconversion of Household, Agri-byproducts, and other Organic wastes into Insect-based Animal Feed and Organic Compost using Black Soldier Fly, <i>H. illucens</i>	-	PHP 350,000	15 June 2022 - 15 December 2022
Ms. Myka M. Fragata	MOA on Enhancement of Prototype and Assessment of Product Marketability of AIRIN (an Automated Irrigation and Nutrient Management System) for Small-scale Farmers	-	PHP 350,000	15 June 2022 - 15 June 2023
Engr. Carol Bernadette Domalsin	MOA on ARCHIE, Agri Robot for Crop Health in Insect Control	-	PHP 350,000	15 June 2022 - 15 June 2023
Technical Education and Skills Development Authority	Contract of Service/ Engagement of a Third Party Entity in the Provision of Research Services for the Conduct of Evaluation Study on the Program on Accelerating Farm School Establishment	PHP 2,000,000	-	2 June 2022 - 30 December 2022
Can Tho University (CTU)	MOU on Institutional cooperation in the areas of education, research, and training	-	-	8 December 2021 - 8 November 2026
Department of Science and Technology-Food and Nutrition Research Institute (DOST-FNRI)	MOU on Study on Effects of COVID-19 on Nutrition in the Philippines	-	-	29 September 2021 - 30 September 2022
Universiti Teknologi MARA (UiTM)	MOU on Institutional Cooperation for Academic, Cultural and Scientific Thought, and Academic Exchange	-	-	30 September 2021 - 29 September 2024
Universitas Halu Oleo (UHO)	MOU on Institutional cooperation for Academic, Cultural and Scientific Thought, and Academic Exchange	-	-	29 November 2021 - 28 November 2024
Daluhay Daloy ng Buhay, Inc. (Daluhay)	MOU on Institutional Cooperation in the Areas of Education, Research, and Training	-	-	13 January 2022 - 12 January 2027
Department of Science and Technology - Food and Nutrition Research Institution and Philippine Institute for Development Studies	MOU on Food and Nutrient Intake Responses to Food Prices and Program Interventions: Implications for the COVID-19 Crisis	-	-	30 May 2022 - 31 January 2023
Department of Education	MOU on Institutional Cooperation in the Areas of Education, Research, and Training	-	-	29 June 2022 - 28 June 2027
Center of Excellence on Sustainable Agricultural Intensification and Nutrition, Royal University of Agriculture	LOA on the Third International Sustainable Agricultural Intensification and Nutrition Conference	-	-	3 January 2022 - 7 February 2022

Annex 14. Published SEARCA Press Releases, FY 2021/2022

Date	Publication	Title
2021		
1 Jul	Philippine Information Agency (online)	SEARCA youth camp take stock of agri-food system challenges and best practices
1 Jul	The Manila Times (print & online)	Searca youth camp deals on agri-food system challenges, best practices
2 Jul	Daily Guardian (online)	SEARCA youth camp take stock of agri-food system challenges and best practices
7 Jul	SunStar (print and online)	Filipino early-career researchers hone project development expertise to compete for USD 20,000 grants
7 Jul	Journal Online	Filipino early-career researchers hone project development expertise to compete for USD20,000 grants
8 Jul	The Manila Times (print and online)	Mindoro State U gets demo farm
9 Jul	Philippine Information Agency (online)	Farmer access to affordable, sustainable technologies needed to transform food systems
9 Jul	Journal Online	Farmer access to affordable, sustainable technologies needed to transform food systems
9 Jul	Frontpage PH (online)	Farmer access to affordable, sustainable technologies
12 Jul	Manila Bulletin (print and online)	PH farmers seek affordable technologies
12 Jul	Daily Techno News (online)	PH farmers seek affordable technologies – Manila Bulletin
13 Jul	Journal Online	“Transfarm” to be more resilient to climate change
13 Jul	Metro Sun (online)	Breast milk as first human food seen important in food system
13 Jul	Philippine Information Agency (online)	“Transfarm” to be more resilient to climate change
13 Jul	Frontpage PH	“Transfarm” to be more resilient to climate change
14 Jul	Journal Online	Community-based participatory action research success stories bared
14 Jul	Philippine Morning Post (online)	Mother’s milk: Best for babies
15 Jul	The Manila Times (print & online)	Young Filipino researchers hone expertise to compete for USD20k grants
15 Jul	The Manila Times (print & online)	Technology can change food systems
16 Jul	Daily Guardian (online)	Breastmilk as first human food seen important in food system
17 Jul	Edge Davao (online)	HEALTH Mother’s milk: Best for babies
19 Jul	The Manila Times (print & online)	‘S&T strengthens transfarming vs climate change’
20 Jul	Manila Bulletin	SEARCA backs PH gov’t to stand against IUU fishing at WTO
20 Jul	Tamfitronics (online)	SEARCA backs PH gov’t on stand in opposition to IUU fishing at WTO
20 Jul	Reclaws International (online)	SEARCA Backs PH Gov’t on Stand Against IUU Fishing at WTO
21 Jul	Philippine Morning Post (online)	“Transfarm” to be more resilient to climate change
21 Jul	Journal Online	Journal publishes Asian studies on agri initiatives for food security, sustainability
21 Jul	Frontpage PH (online)	Asian studies on agri initiatives for food security, sustainability
21 Jul	Metro Sun (online)	Journal publishes Asian studies on agri initiatives for food security, sustainability
22 Jul	Daily Guardian (online)	Journal publishes Asian studies on agri initiatives for food security, sustainability
22 Jul	The Manila Times (print & online)	Community-based action breeds success
23 Jul	The Manila Times (print & online)	Searca supports call vs subsidy to vessels, operators engaged in illegal fishing
25 Jul	BusinessMirror (print & online)	‘Transfarm’ to be more resilient to climate change
26 Jul	BusinessWorld (print & online)	Agriculture output growth seen flat over rest of term
29 Jul	The Manila Times (print & online)	4 Filipinos among honorees of Southeast Asian education ministers council
2 Aug	The Manila Times (print & online)	Asian studies on agri initiatives in food security, sustainability out
2 Aug	Manila Bulletin (print & online)	Agri sector likely to surpass 2% growth target
2 Aug	BusinessMirror (print & online)	‘Systemic issues prevent PHL from further expanding agri output’
2 Aug	Radio Philippines Network (online)	‘Systemic issues prevent PHL from further expanding agri output’
6 Aug	The Visayan Daily Star (online)	Growing Agriculture
9 Aug	The Manila Times (print & online)	PH farm sector could see positive 2021 – Searca
9 Aug	The Manila Times (print & online)	PH agriculture in H1 of '21 points to positive growth
18 Aug	Journal Online	SEARCA tapped in international benchmarking of PH livestock, dairy and poultry industries

Date	Publication	Title
18 Aug	DZMJ Online	SEARCA tapped in international benchmarking of PH livestock, dairy and poultry industries
19 Aug	Manila Standard (print & online)	SEARCA tapped in internat'l benchmarking of PH livestock, dairy, poultry industries
19 Aug	Manila Standard (print & online)	Searca join study on agro industries
19 Aug	Philippine Information Agency (online)	SEARCA tapped in international benchmarking of PH livestock, dairy and poultry industries
26 Aug	The Manila Times (print & online)	UPLB-based Searca tapped in international benchmarking of PH livestock, dairy, poultry industries
31 Aug	Manila Bulletin (print & online)	PH taps SEARCA for int'l benchmarking of some farm sub-sectors
9 Sept	BusinessWorld (print & online)	UPLB, SEARCA to establish halal S&T and health knowledge hub
12 Sept	The Manila Times (print & online)	Halal center to be established in UPLB
15 Sept	Journal Online	SEARCA video contest promotes Filipino, other Southeast Asian youth actions in food consumption and waste management
16 Sept	The Manila Times (print & online)	Searca video promotes ASEAN youth actions in food consumption, waste management
16 Sept	Daily Guardian (online)	SEARCA video contest promotes Filipino, other SEA youth actions in food consumption, waste mgt
18 Sept	Diverse Bulletin (online)	Video contest promotes Southeast Asian youth actions in food, waste management
19 Sept	BusinessMirror (print & online)	Video contest promotes Southeast Asian youth actions in food, waste management
22 Sept	Journal Online	Wildlife protection initiative reduced biodiversity threats, study finds
22 Sept	Journal Online	Experts urge public to take part in science-based discussions on agri-biotech products safety
25 Sept	Khmer Times (online)	Video contest to promote Cambodian, Southeast Asian youth action in food consumption, waste management
26 Sept	BusinessMirror (print & online)	Study: Wildlife protection drive reduce biodiversity threats
30 Sept	The Manila Times (print & online)	Science-based solutions pushed
1 Oct	The Manila Times (print & online)	Searca calls for agri reforms to achieve food security
2 Oct	Diverse Bulletin (online)	Public urged: Take part in science-based discussions on biotech products' safety
3 Oct	BusinessMirror (print & online)	Public urged: Take part in science-based discussions on biotech products' safety
6 Oct	Journal Online	SEARCA steps up drive to empower youth for solutions to agri problems
6 Oct	Journal Online	ASEAN nations hone leadership in climate-smart land use
6 Oct	Journal Online	SEARCA Photo Contest to capture interlinked people-animal-environment health
7 Oct	The Manila Times (print & online)	UPLB-based center says wildlife protection initiative reduced biodiversity threats
8 Oct	The Manila Times (print & online)	UK group partners with Searca on youth programs
8 Oct	Manila Standard (print & online)	British org, SEARCA empower youth to solve agri problems
11 Oct	The Manila Times (print & online)	Photo tilt's focus: Animals, environment
12 Oct	Journal Online	Innovation Olympics 2.0 Grand Finals set on October 15
13 Oct	Journal Online	SEARCA takes on SABRAO journal as co-publisher
14 Oct	The Manila Times (print & online)	Agri-tech students vie for Innovation Olympics 2.0 grand prize on Oct 15
16 Oct	Pinay Chicken Heart Daily (online)	Aseans hone leadership in climate-smart land use
17 Oct	BusinessMirror (print & online)	Aseans hone leadership in climate-smart land use
24 Oct	BusinessMirror (print & online)	UPLB names gumamela hybrid after DepEd's Briones
25 Oct	The Manila Times (print & online)	UPLB names new gumamela hybrid after Secretary Briones in Women in Public Service series
26 Oct	Adobo Magazine (online)	Sustainability: NVSU and UM student start-ups tie as Grand Winners in this year's Innovation Olympics 2.0
28 Oct	The Manila Times (print & online)	NVSU, UM tie for 2021 Innovation Olympics grand prize
28 Oct	The Manila Times (print & online)	SEARCA to copublish 'SABRAO' journal

Date	Publication	Title
7 Nov	BusinessMirror (print & online)	Photo contest to capture interlinked people-animal-environment health
8 Nov	BusinessWorld (print & online)	Agricultural output expected to come in flat in third quarter
20 Nov	Journal Online	SEARCA youth festival centers on Filipino food and agriculture
22 Nov	Daily Guardian (online)	Youth festival centers on Filipino food and agriculture
22 Nov	Daily Guardian (online)	SEARCA forum on transformational leadership on Nov. 25
23 Nov	Daily Guardian (online)	SEARCA launches 3 new agriculture, rural dev't books
23 Nov	Journal Online	SEARCA launches 3 new agriculture, rural dev't books
25 Nov	The Manila Times (print & online)	UP-based SEARCA youth festival centers on Filipino food, agriculture
25 Nov	The Manila Times (print & online)	SEARCA launches books on agri, rural development
1 Dec	Noon Break Balita (online)	Laguna youth join SEARCA-hosted hydroponics farming demo
1 Dec	Journal Online	Laguna youth join SEARCA-hosted hydroponics farming demo
2 Dec	The Manila Times (print & online)	Searca conducts hydroponics farming demo for Laguna youth
8 Dec	Journal Online	Farmer involvement, robust info and market systems key to innovative agricultural finance
9 Dec	The Manila Times (print & online)	Innovative finance system needed – SEARCA
9 Dec	The Manila Times (print & online)	SEARCA alumni stories highlight transformational leadership in 55 years
10 Dec	Daily Guardian (online)	Farmer involvement, robust info and market systems key to innovative agricultural finance
12 Dec	BusinessMirror (print & online)	Farmer involvement is key to environment protection, innovative agricultural finance
12 Dec	BusinessMirror (print & online)	Filipino Faces of Biotechnology Awards: 8 PHL biotech experts recognized
12 Dec	BusinessMirror (print & online)	NVSU and UM teams bag top Innovation Olympics 2.0 prize
16 Dec	The Manila Times (print & online)	UPLB grad student among 3 Asian best research presenters
23 Dec	The Manila Times (print & online)	Filipino biotech champions awarded
30 Dec	The Manila Times (print & online)	AJAD papers urge policy support to poor communities anew
2022		
4 Jan	Journal Online	Stronger policy support to agri-biotech needed for progressive, resilient food system
5 Jan	Daily Guardian (online)	Stronger policy support to agri-biotech needed for progressive, resilient food system
6 Jan	The Manila Times (print & online)	Experts seek stronger food policy support
9 Jan	BusinessMirror (print & online)	Stronger policy on agri-biotech pushed for progressive, resilient food system
19 Jan	Journal Online	Regional forum to discuss gender mainstreaming strategies for post-COVID-19 recovery
20 Jan	The Manila Times (print & online)	UPLB, Searca offer customized training for scholars, grantees
20 Jan	Daily Guardian (online)	Regional forum to discuss gender mainstreaming strategies for post-COVID-19 recovery
20 Jan	Noon Break Balita (online)	Regional Forum to Discuss Gender Mainstreaming Strategies for Post-COVID-19 Recovery
1 Feb	Daily Guardian (online)	Filipinos win top prizes in Southeast Asian photo contest
2 Feb	The Manila Times (print & online)	Filipinos top Searca photo contest
2 Feb	Journal Online	Women Strong Network ASEAN kick-off spotlight agribusiness leaders
2 Feb	The Manila Times (print & online)	18 SUCs join Searca communication workshop
3 Feb	GMA Network News (online)	Filipinos bag major awards in Southeast Asian photo competition
6 Feb	BusinessMirror (print & online)	Filipinos win top prizes in Searca photo contest
9 Feb	Journal Online	17 state colleges, universities join SEARCA workshop on strategic communication
9 Feb	The Freeman (online)	Agro-enterprise helps boost farmers' income in provinces
11 Feb	Manila Standard (print & online)	Filipinos win top prizes in SEARCA photo contest
15 Feb	The Manila Times (print & online)	IFAD step ups local farmer support
15 Feb	Good News Pilipinas (print & online)	Filipino images of pandemic home farming dominate SEARCA Awards
17 Feb	The Manila Times (print & online)	Searca taps UPLB faculty for online training on research methods

Date	Publication	Title
19 Feb	BusinessMirror (print & online)	SUCs take part in SEARCA strategic communication workshop
24 Feb	The Manila Times (print & online)	School-plus-home gardens e-training showcases agripreneurship
24 Feb	Business Week Mindanao (online)	17 state colleges, universities join SEARCA workshop on strategic communication
24 Feb	Philippine Muslim Today (online)	23 SUCs get SEARCA training in research design
24 Feb	Journal Online	23 state universities and colleges get SEARCA training in research design
26 Feb	The Manila Times (print & online)	23 schools get SEARCA training
27 Feb	BusinessMirror (print & online)	23 SUCs get Searca training in research design
15 Mar	The Manila Times (print & online)	Searca, DA to develop PH processed pork roadmap
16 Mar	Manila Standard (print & online)	Lack of cold storage bugs onion industry
16 Mar	Journal Online	Postharvest losses in PH onion, tomato and mango value chains bared
17 Mar	The Manila Times (print & online)	National Defense College students, faculty apprised of Searca initiatives for innovative, sustainable agriculture
18 Mar	Fresh Plaza (online)	Southeast Asian Regional Center for Graduate Study and Research in Agriculture study: Lack of cold storage hampers Filipino onion industry
18 Mar	Daily Guardian (online)	Postharvest losses in PH onion, tomato and mango value chains bared
21 Mar	AsiaFruit Magazine	Post-harvest loss costs Philippines
21 Mar	The Manila Times (print & online)	Study bares huge post-harvest losses
21 Mar	POST Online Media (online)	SEARCA completes value chain analysis of the three key agricultural commodities
23 Mar	Journal Online	SEARCA supports feeding program to improve maternal and child nutrition
24 Mar	The Manila Times (print & online)	Youth enticed to farm through hydroponics
24 Mar	Daily Guardian (online)	SEARCA supports feeding program to improve maternal and child nutrition
25 Mar	The Manila Times (print & online)	NGO Kids Who Farm lure youth into agriculture using hydroponics
27 Mar	BusinessMirror (print & online)	Study bares big postharvest losses of PHL's mango, onion, tomato
30 Mar	Journal Online	DepEd apprised of new SEARCA learning spaces for agri innovation
31 Mar	The Manila Times (print & online)	Searca senior fellow presents carbon wise rice concept
6 Apr	Journal Online	Pilipinas Shell Foundation, SEARCA to convene forum on agri-innovation
7 Apr	Daily Guardian (online)	Pilipinas Shell Foundation, SEARCA to convene forum on agri-innovation
20 Apr	Journal Online	SEARCA conducts Lego education robotics for smart agriculture
21 Apr	Noon Break Balita (online)	SEARCA Conducts Lego Education Robotics for Smart Agriculture
23 Apr	Media Automate (online)	Lego schooling robotics held for sensible agriculture
23 Apr	Daily Guardian (online)	SEARCA conducts Lego education robotics for smart agriculture
24 Apr	Pinay Chicken Heart Daily (online)	Lego education robotics held for smart agriculture
24 Apr	Pinoy Feeds (online)	Lego Education Robotics Held for Smart Agriculture
24 Apr	BusinessMirror (print & online)	Lego education robotics held for smart agriculture
28 Apr	The Manila Times (print & online)	Searca holds Lego education robotics for smart agriculture
28 Apr	The Manila Times (print & online)	Seameo head, Briones discuss future of education
4 May	Journal Online	SEARCA trains 24 SUCs in crafting winning research proposals
4 May	Journal Online	Romanian ambassador visits SEARCA, offers to help bridge Southeast Asian and Romanian research and education institutions
5 May	The Manila Times (print & online)	Searca trains 24 SUCs on crafting winning research proposals
6 May	Daily Guardian (online)	24 SUCs trained on crafting winning research proposals
9 May	The Manila Times (print & online)	Romania's ambassador visits agri research center in Laguna
10 May	Obiectiv Jurnalul de Tulcea (online)	Ambasadorul României vizitează Centrul de Cercetri Agricole din Laguna
14 May	Vremea Bucuresti (online)	Romanian Envoy, Searca Eye Research, Education Links
15 May	The Manila Times (print & online)	Vietnam shares intercropping strategy
15 May	BusinessMirror (print & online)	Romanian envoy, Searca eye research, education ties
18 May	Journal Online	Gregorio reappointed as SEARCA Director
19 May	The Manila Times (print & online)	Quezon coconut industry gets boost
21 May	The Post (online)	Gregorio reappointed as SEARCA Director

Date	Publication	Title
24 May	Philippine Morning Post (online)	Gregorio reappointed as SEARCA Director
25 May	Journal Online	Deadline for SEARCA PhD research scholarship applications set on May 31
26 May	The Manila Times (print & online)	Gregorio reappointed as Searca director
26 May	Manila News	Gregorio reappointed as Searca director
27 May	The Manila Times (print & online)	Searca sets deadline for scholarship application
28 May	The Post (online)	SEARCA Set Deadline for Submission of Scholarship Applications
29 May	BusinessMirror (print & online)	Searca PhD research scholarship application deadline on May 31
1 Jun	Bnews / Vietnam News Agency (online)	Giải pháp nào ứng phó các mối quan tâm về an ninh lương thực?
1 Jun	The World & Viet Nam (online)	Vietnam, ASEAN colleagues discuss response to food security concerns
1 Jun	Talk Vietnam (online)	ASEAN countries discuss response to food security concerns
1 Jun	Vietnam Plus (online)	ASEAN countries discuss response to food security concerns
1 Jun	Journal Online	High-level forum takes stock of food systems transformation in ASEAN post-pandemic
2 Jun	Vietnam Agriculture (online)	Efforts to transform agriculture and integrate into the ASEAN market
3 Jun	Daily Guardian (online)	LGUs should mainstream urban agriculture
4 Jun	The Manila Times (print & online)	Asean forum tackles food security plan
5 Jun	BusinessMirror (print & online)	Gregorio reappointed as Searca director
5 Jun	Newsfounded (online)	Gregorio was re-appointed as Director of SEARCA
12 Jun	BusinessMirror (print & online)	Forum takes stock of food systems transformation in Asean post-pandemic
16 Jun	The Manila Times (print & online)	'Make urban agriculture a weapon vs Covid-19'
16 Jun	The Manila Times (print & online)	PH mentors conduct mobility programs in Malaysia, Thailand
16 Jun	The Manila Times (print & online)	Dubai-based scientist visits Searca in UPLB
17 Jun	Manila Bulletin (online)	Invest in post-harvest facilities to improve agri productivity
17 Jun	Balita (online)	Post-harvest facilities para mapataas ang agri productivity
20 Jun	Rajacreator (online)	Youth enticed to farm through hydroponics

Annex 15. SEARCA Publications, FY 2021/2022

Books/Monographs (9)

Custodio, Pamela A., Pedcris M. Orencio, Jose L. Bacusmo, et al. 2021. *The Learning Organization: Group Dynamics, Institutional Linkages toward Technology Adoption, Value-Adding Innovation, and Sustainability*. SEARCA: Los Baños, Laguna, Philippines. <https://www.searca.org/pubs/monographs?pid=503>

Son, Ngo Thanh, Hoang Le Huong, Nguyen Duc Loc, and Vo Trong Hoang. 2021. *Application of Remote Sensing and SWAT Model to Assess Climate and Land Use Changes Impacts on Hydrological Responses and Sediment Yield: The Upper Ma River Basin, Northwestern Vietnam*. SEARCA: Los Baños, Laguna, Philippines. <https://www.searca.org/pubs/monographs?pid=506>

SEARCA (Southeast Asian Regional Center for Graduate Study and Research in Agriculture). 2021. *Championing Inclusive and Sustainable Agricultural and Rural Development in Southeast Asia: SEARCA's 10th Five Year Plan Plus One in Retrospect*. SEARCA: Los Baños, Laguna, Philippines. <https://www.searca.org/pubs/monographs?pid=510>

Alibuyog, Nathaniel. 2021. *Harnessing GIS and Remote Sensing Technologies toward Improved Water Governance and Agricultural Policy*. SEARCA Professorial Chair Lecture Monograph No. 7. SEARCA: Los Baños, Laguna, Philippines. <https://www.searca.org/pubs/monographs?pid=514>

Mustafa, Shuhaimi, and Muhamad Firdaus Syahmi Sam-on. 2022. *Rapid DNA-based Analytical Techniques to Verify the Authenticity of Halal Food*. SEARCA Professorial Chair Lecture Monograph No. 8. SEARCA: Los Baños, Laguna, Philippines. <https://www.searca.org/publications/view.php?id=523>

R.P. Gentallan, M.C.B. Bartolome, E.B.S. Timog, R.D. Cejalvo, C.G.A. Macabecha, R.K.A. Sienes, L.E. Endonela, T.H. Borromeo, N.C. Altoveros, L.E. Sister, HdC. de Chavez. 2022. *Field Guide to the Cultivated Plants of the Philippines (Volume 1: Commonly cultivated species)*. Institute of Crop Science, College of Agriculture and Food Science, University of the Philippines Los Baños and SEARCA: Los Baños, Laguna, Philippines. <https://www.searca.org/pubs/books?pid=529>

Ancog, R.C., G.B. Gregorio, A.B. Arcillas, E.C. Creencia, V.E. Aquitania, and G.A. Hidalgo. 2022. *Mainstreaming Urban Agriculture for Climate Change Adaptation in the Philippines: A Policy Guidebook*. Laguna/Quezon City: SEARCA and ICLEI. <https://www.searca.org/pubs/books?pid=486>

Ceballo, F.A., F.C. Sta. Cruz, M.L.A. Revilloza, A.B. Albaytar, M.J.B. Beltran, J.E. Villa, and E.A. Aguilar. 2022. *Insect Pests and Their Natural Enemies and Diseases of Calamansi in Oriental Mindoro: A Field Identification and Management Guide*. SEARCA: Los Banos; DA-BAR: Quezon City; and UPLB: Los Baños, Philippines. <https://www.searca.org/pubs/books?pid=512>

CropLife Asia & Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA). 2021. Transforming Pathways: Working with Farmers in Agri-Food Systems. Through the Independent Dialogue convened as part of the United Nations Food Systems Summit (UNFSS), 14 June 2021.

Journals (5)

Asian Journal of Agriculture and Development 18(2). <https://doi.org/10.37801/ajad2021.18>

Asian Journal of Agriculture and Development 19(1). <https://doi.org/10.37801/ajad2022.19.1>

SABRAO Journal of Breeding and Genetics 53(4). <https://www.searca.org/pubs/refereed-journal?pid=516>

SABRAO Journal of Breeding and Genetics 54(1). <https://www.searca.org/pubs/refereed-journal?pid=522>

SABRAO Journal of Breeding and Genetics 54(2). <https://www.searca.org/pubs/refereed-journal?pid=535>

Journal Articles (12)

Malayang, Ben III S. 2021. On the Archipelagic Ecology and the Economy of the Philippines. Asian Journal of Agriculture and Development 18(2): 85-100. SEARCA: Los Baños, Laguna, Philippines. <https://doi.org/10.37801/ajad2021.18.2.p1>

Huang, Jikun, Jinxia Wang, Dang K. Khoi, Herb Plunkett, Ying Xu, Christopher Findlay. 2021. Rural Adaptation to Climate Change: New Findings and Existing Knowledge. Asian Journal of Agriculture and Development 18(2): 1-16. SEARCA: Los Baños, Laguna, Philippines. <https://doi.org/10.37801/ajad2021.18.2.1>

Nedumaran, Swamikannu, Ravi Nandi, Jyosthnaa Padmanabhan, Srigriri S. Reddy, Dakshina M. Kadiyala, Shalander Kumar. 2021. Household Vulnerability to Climate Change and Identification of Target Beneficiaries to Implement Household-Specific Adaptation Strategies: A Quantitative Assessment. Asian Journal of Agriculture and Development 18(2): 17-34. SEARCA: Los Baños, Laguna, Philippines. <https://doi.org/10.37801/ajad2021.18.2.p2>

Ilar, Glenn Y., Rowena Baconguis, Virginia Cardenas, Jaine Reyes, Florencia Palis. 2021. Outcomes and Social Effects of a Community-Based Development Project on Selected Rice-Based Farmers in the Philippines. Asian Journal of Agriculture and Development 18(2): 35-54. SEARCA: Los Baños, Laguna, Philippines. <https://doi.org/10.37801/ajad2021.18.2.3>

Nakamura, Ryota and Takumi Kondo. 2021. Assessing the Effects of Access to Safe Drinking Water on Children's Nutritional Status in Indonesia. Asian Journal of Agriculture and Development 18(2): 55-72. SEARCA: Los Baños, Laguna, Philippines. <https://doi.org/10.37801/ajad2021.18.2.4>

Alejos, Shan Faye, Marivic Pajaro, Mark Raquino, Alex Stuart, Paul Watts. 2021. Agricultural Biodiversity and Coastal Food Systems: A Socio-ecological and Trans-ecosystem Case Study in Aurora Province, Philippines. Asian Journal of Agriculture and Development 18(2): 73-84. SEARCA: Los Baños, Laguna, Philippines. <https://doi.org/10.37801/ajad2021.18.2.5>

Wassmann, Reiner, Julian Gonsalves, Peter Sprang, et al. 2022. Climate-Smart Villages in Southeast Asia: The Pivotal Role of Seed Systems in Rice-Based Landscapes. Asian Journal of Agriculture and Development 19(1): 1-24. SEARCA: Los Baños, Laguna, Philippines. <https://doi.org/10.37801/ajad2022.19.1.p2>

Barbon, Wilson John D., Ohnmar Khaing, Phyu Sin Thant, and Julian Gonsalves. 2022. Exploring Pathways for Promoting and Scaling Up Climate-Smart Agriculture in Myanmar. Asian Journal of Agriculture and Development 19(1): 25-42. SEARCA: Los Baños, Laguna, Philippines. <https://doi.org/10.37801/ajad2022.19.1.p1>

Mehar, Mamta, Surendaran Padmaja Subash, and Narayan Prasad. 2022. "Coping with Climatic Stress in Eastern India: Farmer Adoption of Stress-Tolerant Rice Varieties." Asian Journal of Agriculture and Development 19(1): 4-60. SEARCA: Los Baños, Laguna, Philippines. <https://doi.org/10.37801/ajad2022.19.1.3>

Ojo, Kehinde E., John J. VanSickle, and Bhawna Thapa. 2022. Nepal's Sacred Cattle: Profitability Analysis and Policy Implications. Asian Journal of Agriculture and Development 19(1): 61-76. SEARCA: Los Baños, Laguna, Philippines. <https://doi.org/10.37801/ajad2022.19.1.4>

Hemtanon, Wittawat, and Christopher Gan. 2022. Sustainability of Microfinance Institutions in Thailand. Asian Journal of Agriculture and Development 19(1): 77-90. SEARCA: Los Baños, Laguna, Philippines. <https://doi.org/10.37801/ajad2022.19.1.5>

Lim, Tai Wei. 2022. The Ninth Revolution: Transforming Food Systems for Good, a book review. Asian Journal of Agriculture and Development 19(1): 91-94. SEARCA: Los Baños, Laguna, Philippines. <https://doi.org/10.37801/ajad2022.19.1.b1>

Discussion Papers (3)

Nguyen, Van Thai, and Pham Tran Lan Phuong. 2021. Gender Roles and Relationships: Khmer Ethnic Minority Women's Participation in Water Management. SEARCA Discussion Paper Series 2021-1. SEARCA. College: Los Baños, Laguna, Philippines. <https://www.searca.org/pubs/discussion-papers?pid=511>

Abu Samah, Asnarulhadi, Hayrol Azril Mohamed Shaffril, and Jeffrey Lawrence D'Silva. 2021. The Islanders Small-Scale Fishermen Adaptation toward Climate Change Impacts in Malaysia. SEARCA Discussion Paper Series 2021-2. SEARCA. College: Los Baños, Laguna, Philippines. <https://www.searca.org/pubs/discussion-papers?pid=513>

Phong, L.T., T.N. Thuy, P.D. Tien, et al. 2022. Assessment of Traditional Rice-Based Farming Systems for Adaptation to Climate Change in the Mekong Delta. SEARCA Discussion Paper Series 2021-3. SEARCA. College: Los Baños, Laguna, Philippines. <https://www.searca.org/pubs/discussion-papers?pid=518>

Conference/Forum/Workshop Proceedings (4)

Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA). 2022. Proceedings of the Regional Policy Forum on Developing Public Policies for Family Farming: Reaching Out to the Grassroots through Participatory Policy Making. SEARCA Knowledge Exchange series. Proceedings of the forum held on 27 April 2021, livestreamed from SEARCA, Los Baños, Laguna, Philippines. SEARCA: Philippines. <https://www.searca.org/pubs/proceeding-workshop-reports?pid=519>

Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA). 2022. Proceedings of the Webinar on Nature-Based Solutions (NbS): Working with Nature to Help Address Some of Society's Most Pressing Challenges. SEARCA Knowledge Exchange series. Proceedings of the webinar held on 23 November 2021, livestreamed from SEARCA, Los Baños, Laguna, Philippines. SEARCA: Philippines. <https://www.searca.org/pubs/proceeding-workshop-reports?pid=527>

Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA). 2021. Workshop on Modeling Management of Climatic Stress in Rice-based Cropping Systems: Application of the Agpractices&Domains Platform. Proceedings of the workshop held on 7-8 October 2021 via the SOLVE Platform, SEARCA, Los Baños, Laguna, Philippines. SEARCA, Los Baños, Laguna, Philippines. <https://www.searca.org/pubs/proceeding-workshop-reports?pid=530>

FAO & SEARCA. 2022. Proceedings of the Regional Consultation on Engaging with Academia and Research Institutions (ARIs) to Support Family Farmers and Food System Transformation During - and Post COVID-19 Pandemic in Asia. Bangkok, FAO. <https://doi.org/10.4060/cb9425en>

Policy Briefs and Agriculture and Development Notes (6)

Pasiona, S.P., Z.M.C. Estareja, and N.P. Felix. 2021. Local Food for Local Good: Youth Action for Food Security. SEARCA Agriculture and Development Notes 10-1. SEARCA, College, Los Baños, Laguna, Philippines. <https://www.searca.org/pubs/briefs-notes?pid=508>

Mangurai, S.U.N.M., A. Solikhin, E.A. Octaviani, and Anidah. 2022. Upgrading' Indonesia's Digital Agriculture Through Research and Application during the COVID-19 Pandemic. SEARCA Agriculture and Development Notes 11-1. SEARCA: Los Baños, Laguna, Philippines. <https://www.searca.org/pubs/briefs-notes?pid=525>

Samah, A.A., H. A. M. Shaffril, and J.L. D'Silva. 2022. Strengthening the Capability of Malaysia's Small-scale Fishermen to Adapt to Climate Change Impacts. SEARCA Agriculture and Development Notes 11-2. SEARCA: College, Los Baños, Laguna, Philippines. <https://www.searca.org/pubs/briefs-notes?pid=533>

Sumalde, Z.M., P.J.B. Ramirez, and R.M. Dorado. 2021. Strategies for Effective Implementation of CPAR Program. SEARCA-DA-BAR Policy Brief 2021. SEARCA, College, Los Baños, Laguna, Philippines. <https://www.searca.org/pubs/briefs-notes?pid=509>

Thai, N.V. 2022. Water-Gender-Ethnicity Factors Affecting Ethnic Minority Participation and Decision Making in Water Management. SEARCA Policy Brief 2022-1. SEARCA, College, Los Baños, Laguna, Philippines. <https://www.searca.org/pubs/briefs-notes?pid=517>

Dang Minh Man. 2022. Livelihood Vulnerability and Adaptation of Coastal Communities to Saltwater Intrusion and Droughts in the Vietnamese Mekong Delta. SEARCA Policy Brief Series 2022-2. SEARCA: Los Banos, Laguna, Philippines. <https://www.searca.org/pubs/briefs-notes?pid=526>

Reprint (1)

Calub, B.M., L.S. Africa, B.M. Burgos, H.M. Custodio, and M.K.R. Punto. 2019. School-Plus-Home Gardens Guidebook. SEARCA, College, Los Baños, Laguna, Philippines. <https://www.searca.org/pubs/books?pid=441>

Annex 16. Publications and Papers Presented by SEARCA Staff, Scholars, Alumni, and Professorial Chair Grantees, FY 2021/2022

Books/Monographs

SEARCA Staff

Lando, Lily Ann D., Pedcris M. Orencio, Jose R. Medina, Ruth Jazrel M. Bandong, Donna Bae N. Malayang, and Carmen Nyhria C. Rogel. 2021. SEED GUIDEBOOK: Scaling and Expanding for Effective Development the Experiences and Learning from the SEARCA Project Piloting and Upscaling Effective Models of Inclusive and Sustainable Agricultural and Rural Development (ISARD). SEARCA: Los Baños, Laguna, Philippines. <https://www.searca.org/pubs/books?pid=500>

Custodio, Pamela A., Pedcris M. Orencio, Jose L. Bacusmo, et al. 2021. The Learning Organization: Group Dynamics, Institutional Linkages toward Technology Adoption, Value-Adding Innovation, and Sustainability. Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA): Los Baños, Laguna, Philippines. <https://www.searca.org/pubs/monographs?pid=503>

SEARCA Scholars, Alumni, and Professorial Chair Grantees

Mohamed Thariq Bin Haji Hameed 2021. Putra Unmanned Aerial Vehicle : From Agricultural Biomass to a Biocomposite Flying Drone. Universiti Putra Malaysia Press.

Bouahom, Bounthong and Dethsackda Manikham. 2021. Agriculture Policy and Institutional Reforms in Lao PDR: Experiences, Impacts, and Lessons. Southeast Asian Agriculture and Development Primer 2nd Edition. SEARCA. College, Los Baños, Laguna, Philippines. <https://www.searca.org/pubs/monographs?pid=501>

Conference/Seminar Papers Presented

SEARCA Staff

Maria Cristeta N. Cuaresma. Presenter. Information Session about SEARCA and the UC. CLSU-SEARCA-UC International Summer Short-term Course 2021 via Google Meet, 19 July 2021.

Maria Cristeta N. Cuaresma. Presenter. Orientation on the UC and SEARCA Grants and Projects for the Faculty of Animal Science, UGM. 52nd Anniversary of the Faculty of Animal Science of Universitas Gadjah Mada via Zoom, 20 August 2021.

Pedcris M. Orencio, Anna Gale C. Vallez, and Ruth Jazrel M. Bandong. Presenter. Determinants of Sustainability: A Case of Piloting ISARD Models in Oriental Mindoro and Leyte, Philippines. Sriwijaya Conference on Sustainable Environment, Agriculture and Farming System (SAC-SAFSE) via Zoom, 29 September 2021. <https://confbrite.net/2021/sacsafse/kfz/abstract.plain/2hvrngnqBL>

SEARCA Scholars, Alumni, and Professorial Chair Grantees

Munifah Siti Amira Yusuf, Norsida Man, Nur Bahiah Mohamed Haris, Ismi Arif Ismail, Amar Maruf. Evaluating urban agriculture program effectiveness using CIPP model: a review. The First International Conference on Assessment and Development of Agricultural Innovation (1st ICADAI 2021), 6-7 July 2021. <https://doi.org/10.1051/e3sconf/202130603007>

Izzati Adilah Binti Azmir. Microsatellite Marker Mining Using PCR-Based Isolation of Microsatellite Arrays (PIMA) Method on Blue-Spotted Mudskipper, *Boleophthalmus boddarti*. Sriwijaya Conference on Sustainable Environment, Agriculture and Farming System (SAC-SAFSE) via Zoom, 29 September 2021.

Nasrudin Abdulkadir Buisan. The Marshland Farming System and Its Implications to Sustain Livelihoods and the Environment in Marshland Local Communities: The Case of Ligawasan Marsh, Maguindanao, Philippines. Joint IUCN-SEARCA Webinar on Nature-based Solutions: Working with nature to help address some of society's most pressing challenges via Zoom, 23 November 2021.

Noor Azrimi Umor. Spent mushroom compost (SMC): from waste material to energy feedstock. International Online Conference on Materials Science and Technology (ICMT 2021), Mahatma Gandhi University, Kottayam, Kerala, India, 12-14 November 2021.

Nur Lailatul Rahmah. Optimization of Antioxidant and Phenolic Compound Extraction from Piper betle L. Leaves Using Pressurized Hot Water. 14th AUN/SEED-Net Regional Conference on Chemical Engineering 2021 (RCChE2021) and the 1st International Conference on Innovation in Chemical Engineering and Technology (ICICET2021), UPM, 30 November - 1 December 2021.

M.N. Shahidah, N.F.M.H. Siti and P. Ding. Effects of temperature and storage duration on keeping quality of Malaysian grown passion fruit (*Passiflora edulis* Sims f. *flavicarpa* Deg.). International Symposium on Horticulture in Europe, 2021. Acta Hort. 1327. ISHS 2021. DOI 10.17660/ActaHortic.2021.1327.73 Proc. IV International Symposium on Horticulture in Europe – SHE2021 Eds.: J.N. Wünsche and A. Milyaev

D. Kusumaningrum, R. Anisa, V.A. Sutomo, and R.I. Suprajatno, A Kurnia. Is Individual Level Area Yield Index a Suitable Alternate Crop Insurance Policy for Indonesia? 10th International Hybrid Conference on Mathematical and Statistical Methods for Actuarial Sciences and Finance, University of Salerno, Italy, 20-22 April 2022.

Journal Articles

SEARCA Scholars, Alumni, and Professorial Chair Grantees

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Md Nor, Shahidah, Phebe Ding, Faridah Abas, and Ahmed Mediani. 2022. 1H NMR Reveals Dynamic Changes of Primary Metabolites in Purple Passion Fruit (*Passiflora edulis* Sims) Juice during Maturation and Ripening. *Agriculture* 12(2): 156. <https://doi.org/10.3390/agriculture12020156>.

Annex 17. SEARCA Conferences, Roundtables, Workshops, and Meetings, FY 2021/2022

Title of Activity	Venue and Date	No. of Participants	Participant's Country	Activity Partner	Main Speaker/s or Presenter/s
National Conferences, Roundtables, Workshops, and Meetings (48)					
First Stakeholder's Consultation on the revised DOST-DA-DENR-DOH-DILG Joint Department Circular	Zoom 8 October 2021	-	Philippines	National Committee on Biosafety of the Philippines (NCBP)	Ms. Malou Agbagala
Stakeholder Consultation on the Rules and Procedure to Evaluate and Determine when PBIs or NBTs are under the JDC No. 1 S. 2016	Zoom 30 September 2021	-	Philippines	Department of Agriculture (DA)	Ms. Malou Agbagala Ms. Amparo Ampil Dr. Saturnina Halos
Planning Workshop on the Project Development on Coconut Industry Growth Areas in the Province of Quezon	Zoom 19 October 2021	29	Philippines	Provincial Government of Quezon University of the Philippines Los Baños (UPLB)	Prof. Mayo Grace C. Amit, Dr. Pedcris M. Orencio
SEARCA-PIDS Kick-off Meeting	1 July 2022	15	Philippines	Philippine Institute for Development Studies (PIDS)	
Internal scoping meeting with SEARCA Departments and Units for the development of the AFNR Knowledge Platform	Zoom 20 July 2021 27 July 2021 29 July 2021 3 August 2021 5 August 2021 10 August 2021	20	Philippines		Dr. Angela Minas Mr. Jerome C. Barradas
OMLC-SEARCA Book Co-production Meeting and Writeshop	Zoom 9, 12, and 16 October 2021	7	Philippines	Oscar M. Lopez Center (OMLC)	Dr. Pedcris M. Orencio Dr. Romeo V. Labios Ms. Marianna Vargas Ms. Perpili Vivienne Tiongson Ms. Katherine Mae Sarmiento
SEARCA Presentation of Draft AFNR KP Operational Framework	Zoom 13 December 2021	11	Philippines		Dr. Angela Minas
Inception Workshop on the Development of the Philippine Processed Pork Roadmap	Zoom 16 February 2022	52	Philippines	National Livestock Program of the Department of Agriculture (DA-NLP)	Dr. Ruth Miclat-Sonaco Ms. Jewel Joanna Cabardo Mr. Cenon Elca
ATMI-ASEAN Philippine Roadmapping Exercise 1st Stakeholders' Consultation Meeting	Zoom 23 February 2022	30	Philippines	DA-NLP	Ms. Jewel Joanna Cabardo Ms. Nohreen Ethel Manipol Ms. Leilani Briosos-Mc Donough
ATMI-ASEAN Philippine Roadmapping Exercise 2nd Stakeholders' Consultation Meeting	Zoom 2 March 2022	26	Philippines	DA-NLP	Ms. Jewel Joanna Cabardo Ms. Nohreen Ethel Manipol Ms. Leilani Briosos-Mc Donough

Title of Activity	Venue and Date	No. of Participants	Participant's Country	Activity Partner	Main Speaker/s or Presenter/s
ATMI-ASEAN Philippine Roadmapping Exercise 3rd Stakeholders' Consultation Meeting	Zoom 9 March 2022	28	Philippines	DA-NLP	Ms. Jewel Joanna Cabardo Ms. Nohreen Ethel Manipol Ms. Leilani Briosos-Mc Donough
ATMI-ASEAN Philippine Roadmapping Exercise 4th Stakeholders' Consultation Meeting	Zoom 16 March 2022	25	Philippines	DA-NLP	Ms. Jewel Joanna Cabardo Ms. Nohreen Ethel Manipol Ms. Leilani Briosos-Mc Donough
ATMI-ASEAN Philippine Roadmapping Exercise 5th Stakeholders' Consultation Meeting	Zoom, 23 March 2022	30	Philippines	DA-NLP	Ms. Jewel Joanna Cabardo Ms. Nohreen Ethel Manipol Ms. Leilani Briosos-Mc Donough
Inception Report Presentation of the ADB TA9681 REG-Southeast Asia Agriculture, Natural Resources and Rural Development Facility-02 Formulation of the National Agriculture and Fisheries Modernization and Industrialization Plan (NAFMIP) 2020-2025	SEARCA and Zoom 2 August 2022	72	Philippines	Asian Development Bank (ADB), Food and Agriculture Organization of the United Nations (FAO), Sycip Gorres Velayo & Co. (SGV)	
FAO Palawan Project: Multi-stakeholder Workshop for Developing the Jurisdictional Sustainability Profile for Palawan	SEARCA and Zoom 5-6 August 2021	59	Philippines	FAO	Dr. Rico C. Ancog
DA Responses- Notes on NAFMIP Consultation with DA Executive Committee	SEARCA and Zoom, 13 August 2021	70	Philippines	ADB FAO SGV	Dr. Cesar Umali, Jr.
Inception Meeting on Formulating the Seed Industry Development Program (SIDP) of the Philippines	SEARCA and Zoom 19 August 2021	14	Philippines	DA-Bureau of Plant Industry (BPI), DA-National Seed Industry Council (NSIC)	Dr. Glenn B. Gregorio Mr. Glenn N. Baticados
Coordination Meeting with Jollibee Group Foundation (JGF)Project SAYA Partners	SEARCA and Zoom 5 October 2021	16	Philippines	JGF, FEP, Mindoro State University (MinSU), Ilocos Sur Polytechnic State College (ISPSC)	Mr. Jan Paolo L. Vicente
Council Special Meeting on the Seed Industry Development Program	SEARCA and Google Meet 8 October 2021	26	Philippines	DA-NSIC	Dr. Glenn B. Gregorio Mr. Glenn N. Baticados
NAFMIP Technical Session on Spatial Framework	Zoom 12 October 2021	42	Philippines	DA-Planning and Programming Division (PPD), FAO	Dr. Cristino Tiburan, Jr. Dr. Patricia J. Sanchez
NAFMIP Technical Session on Investment Programming	Zoom 13 October 2021	40	Philippines	DA-PPD, FAO	Mr. Cesar Umali, Jr.
NAFMIP Technical Session on Commodity-based Planning System	Zoom 13 October 2021	42	Philippines	DA-PPD, FAO	Dr. Eufemio Rasco, Jr. Dr. Cleto Nanola
NAFMIP Technical Session on Commodity-based Technical Discussion	Zoom 20 October 2021	103	Philippines	DA-PPD, FAO	Dr. Eufemio Rasco, Jr. Dr. Cleto Nanola
NAFMIP SPATIAL Planning Framework Technical Discussion	Zoom 22 October 2021	40	Philippines	DA-PPD, FAO	Dr. Cristino Tiburan, Jr. Dr. Patricia Ramirez
Technical meeting with NAFMIP Preparation Team: Strategic Communications	Zoom October 2021	27	Philippines	DA-PPD, FAO	Justine Letargo
Technical meeting with NAFMIP Preparation Team: Spatial Planning Network	Zoom 27 October 2021	25	Philippines	DA-PPD, FAO	Dr. Cristino Tiburan, Jr. Dr. Patricia Ramirez

Title of Activity	Venue and Date	No. of Participants	Participant's Country	Activity Partner	Main Speaker/s or Presenter/s
Technical meeting with NAFMIP Preparation Team: Commodity system based: Planning Approach	Zoom 28 October 2021	28	Philippines	DA-PPD, FAO	Dr. Eufemio Rasco, Jr. Dr. Cleto Nanola
NAFMIP Preparation Team Meeting with PCAF	Zoom 29 October 2021	19	Philippines	DA-PPD, PCAF, FAO	Mr. Cesar Umali, Jr.
NAFMIP Preparation Team Meeting: Monitoring and Evaluation, NAFMIP Results Framework and Performance Indicator Reference	Zoom 29 October 2021	35	Philippines	DA-PPD, FAO	Ms. Brenda Furagganan
Technical meeting with NAFMIP Preparation Team: Governance and Institutional Development	Zoom 3 November 2021	31	Philippines	DA-PPD, FAO	Mr. Nicasio Agustin
Second Round Consultation on Strategic Communication for the NAFMIP 2020-3020	Zoom 5 November 2021	77	Philippines	DA-PPD, FAO	Ms. Justine Letargo
Pilot Cascading of NAFMIP 2020-3020 (Day 1)	Zoom 11 November 2021	240	Philippines	DA-PPD, FAO	NAFMIP Experts
Pilot Cascading of NAFMIP 2020-3020 (Day 2)	Zoom 12 November 2021	286	Philippines	DA-PPD, FAO	NAFMIP Experts
NAFMIP Preparation Team Debriefing	Zoom 15 November 2021	31	Philippines	DA-PPD, FAO	NAFMIP Experts
Preparatory Meeting and Discussion for the Cascading Workshop (Day 1)	Zoom 23 November 2021	29	Philippines	DA-PPD, FAO	Dr. Robert Ranola Dr. Cristino Tiburan
Preparatory Meeting and Discussion for the Cascading Workshop (Day 2)	Zoom 24 November 2021	55	Philippines	DA-PPD, FAO	Dr. Ceasar Coraraton Dr. Eufemio Rasco, Jr. Dr. Cleto Nanola Dr. Maritess Tiongco
Technical meeting on the web-based application of NAFMIP	Zoom 1 December 2021	49	Philippines	DA-PPD, FAO	Mr. Rolly Osayan
Technical meeting on the inclusion of BARMM in the NAFMIP 2020-2030	WebEx 29 December 2021	85	Philippines	DA-PPD, FAO	Mr. Cesar Umali, Jr.
NAFMIP Regional Planning Workshop	WebEx 14-17 February 2022	340	Philippines	DA-PPD, FAO	Mr. Cesar Umali, Jr.
NAFMIP National Planning Workshop	WebEx 28 February - 4 March 2022	154	Philippines	DA-PPD, FAO	Mr. Cesar Umali, Jr.
Multi-sector, Multi-level Consultation on the NAFMIP 2021-2030	WebEx 25 March 2022	363	Philippines	DA-PPD, PCAF, FAO	ASec Agnes Miranda
National Agri-Fishery Council Special Meeting	Zoom 18 April 2022	215	Philippines	DA-PPD, FAO	ASec Agnes Miranda
Special DA-Management Committee Meeting on the NAFMIP 2021-2030 Presentation	WebEx 11 April 2022	150	Philippines	DA-PPD, FAO	ASec Agnes Miranda
Workshop on Designing the NAFMIP M&E System	Zoom 6 January 2022	187	Philippines	DA-PPD, FAO	Ms. Brenda Furagganan
Proposal Writeshop for IDRC-Women Rise	SEARCA and Zoom 13 June 2022	13	Philippines, Canada, US	TROPMED, Wilfrid Laurier University, Michigan State University	

Title of Activity	Venue and Date	No. of Participants	Participant's Country	Activity Partner	Main Speaker/s or Presenter/s
ATMI-ASEAN Philippine Roadmapping Exercise 6th Stakeholders' Consultation Meeting	Zoom 20 April 2022	30	Philippines	DA-NLP	Ms. Jewel Joanna Cabardo Ms. Nohreen Ethel Manipol Ms. Leilani Briosos-Mc Donough
ATMI-ASEAN Stakeholders' Consultation Workshop for the Maize Value Chain in Lao PDR	Xieng Khouang Province, Lao PDR and Zoom 25 May 2022	22	Lao PDR	NAFRI	Dr. Phonevilay Sinavong
A series of workshops for the development of SEARCA Intellectual Property and Knowledge and Technology Transfer (SIPAKTT) Guidelines	Hybrid 24 May - 6 September 2022	7		Alliance of TechTransfer Professionals of the Philippines (AToP)	Atty. Christopher Cruz Prof. Mike Peralta Mr. Peter Immanuel Tenido Ms. Sam Uichico
Regional Conferences, Roundtables, Workshops, and Meetings (14)					
Virtual Regional Consultation on Engaging with Academia and Research Institutions (ARIs) to support Family Farmers and Food System Transformation During and Post COVID-19 Pandemic in Asia	Virtual 8-9 December 2021	212	Australia Austria Bangladesh Bhutan Cambodia Canada Egypt France Georgia India Indonesia Italy Japan Kenya Kyrgyzstan Lao PDR Malaysia Mexico Myanmar Nepal Philippines South Africa South Korea Sri Lanka Switzerland Thailand United Kingdom US Vietnam	Food and Agriculture Organization of the United Nations Regional Office for Asia and the Pacific (FAO RAP) Asian Farmers' Association for Sustainable Rural Development (AFA) UNESCO CIRAD GRET	Ms. Ismahane Elouafi, Chief Scientist, FAO HQ Dr. Md. Baktear Hossain, Director SAARC Agriculture Center Dr. Glenn B. Gregorio, Director, SEARCA Dr. Susan Vize, Regional Adviser for Social and Human Sciences, UNESCO Regional Office for Asia and the Pacific Dr. Hildegard Lingnau, Executive Secretary, Global Forum on Agricultural Research and Innovation Dr. Matthew McCartney, CGIAR Dr. Fergus Sinclair, CIFOR-ICRAF Ms. Ilaria Firmain, Regional Specialist, Asia and the Pacific Division, IFAD Dr. Wayne Nelles, Rural Homestead Farmers and former Visiting Scholar, Chulalongkorn University, Thailand Mr. Pierre Ferrand, Agriculture Officer, Regional Focal Point for Family Farming, Agriculture and Food System Support Group, FAO RAP
UC Workshop on Developing Project Proposal for ERASMUS+ CBHE	Zoom 18 and 31 January 2022	39	Indonesia Malaysia Philippines Thailand	University Consortium (UC)	
1 st Consultation Workshop on ASEAN Guidelines for CSA Practices	MS Teams, 7 July 2021	79	Cambodia Indonesia Malaysia Myanmar Philippines Singapore Thailand Vietnam	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), ASEAN Climate Resilience Network (CRN)	Dr. Romeo V. Labios Dr. Pedcris M. Orencio

Title of Activity	Venue and Date	No. of Participants	Participant's Country	Activity Partner	Main Speaker/s or Presenter/s
2 nd Consultation Workshop on ASEAN Guidelines for CSA Practices	MS Teams, 23 September 2021	53	Brunei, Cambodia, Indonesia, Malaysia, Myanmar, Philippines, Thailand, Vietnam	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), ASEAN Climate Resilience Network (CRN)	Dr. Romeo V. Labios Dr. Pedcris M. Orencio Mr. Elson Ian Nyl E. Galang
Working Group Meeting on the ERIA Study "Enhancing Food Supply Chain Resilience and Food Security in ASEAN with Utilization of Digital Technologies"	Zoom, 16 July 2021	-	-	ERIA ASEAN Secretariat	Dr. Nerlita Manalili
Workshop on Modeling Management of Biotic Stress in Rice-based Cropping Systems: The Application of the AgPractices&Domains Platforms	Zoom 7-8 October 2021	51	Philippines Myanmar	University of Southern Queensland, UPLB, UPLB Foundation Inc., TEIN CC	Dr. Ando M. Radanielson Dr. Adam Sparks Ms. Hannah Jose Dr. Val Randolph M. Madrid
Workshop on ASEAN Guidelines for Agroforestry Development	Zoom 14 October 2021	549	Philippines Indonesia Myanmar Lao PDR Cambodia India Thailand Kenya Malaysia Timor-Leste Singapore Vietnam Australia Germany Cameroon Mexico Pakistan Cote d Ivoire Nepal Uganda Ghana Costa Rica China Morocco Peru Ukraine Bangladesh Canada Italy Egypt US	ASEAN AWG-SF CIFOR	Ms. Hanna Reuter Ms. Delia Catacutan Mr. Simone Vongkhamho Mr. Ronnakorn Triraganon Mr. Jose Romeo Ebron Mr. Dian Sukmajaya Mr. Jerome Cayton S. Barradas
Scoping meeting with SEARCA external stakeholders for the development of the AFNR Knowledge Platform	Zoom 21, 27, and 29 October 2021	21	Philippines Cambodia US Thailand France Australia Singapore		Dr. Angela Minas Mr. Jerome C. Barradas
ATMI-ASEAN Supervision Meeting	Zoom 7 December 2021	15	Italy India Indonesia Philippines	International Fund for Agricultural Development, International Food Policy Research Institute (IFPRI)	Mr. Abdelkarim Sma Ms. Ilaria Carlotta Firmian Dr. Shahidur Rashid Dr. Devesh Roy Dr. Pedcris M. Orencio Mr. Paul Joseph Ramirez
Inception Meeting with National Experts of ATMI-ASEAN Regional Road Mapping Exercise	Zoom 21 February 2022	10	Cambodia Lao PDR Myanmar Vietnam Philippines		Dr. Roehlano Briones
ATMI-ASEAN Consultation Meeting with ASEAN Secretariat	Zoom 28 February 2022	9	Philippines Indonesia	ASEAN Secretariat	Dr. Roehlano Briones

Title of Activity	Venue and Date	No. of Participants	Participant's Country	Activity Partner	Main Speaker/s or Presenter/s
ATMI-ASEAN Regional Value Chain Assessment Country Presentations Meeting	Zoom 28 February 2022	8	Lao PDR Myanmar Philippines Vietnam		Dr. Roehlano Briones Dr. Alay Phonvisay Dr. Dolly Kyaw Mr. Anton Simon Palo Ms. Bui Thi Viet Anh
ATMI-ASEAN Regional Roadmapping Workshop for the Maize-Meat Value Chain Assessment	Zoom 28 March 2022	67	Indonesia India Cambodia Lao PDR Myanmar Malaysia Philippines Thailand Vietnam	ASEAN Secretariat	Dr. Roehlano Briones
Seed Fund for Research and Training (SFRT) Program Year-end Review	Zoom 7 June 2022	18	Indonesia Malaysia Myanmar Philippines Vietnam		

Annex 18. SEARCA Knowledge Events, FY 2021/2022

Title	Venue	No. of Participants	Participant's Country	Activity Partner	Main Speaker or Presenter
Regional (12)					
Sriwijaya Conference on Sustainable Agriculture, Farming System, and Environment	Zoom 29 September 2021	220	Indonesia Malaysia Philippines Thailand Vietnam Afghanistan Bangladesh Germany Japan Sri Lanka	Sriwijaya University	Dr. Glenn B. Gregorio, SEARCA Director Dr. Pedcris M. Orencio, Program Head, SEARCA Anna Gale C. Vallez, Program Specialist, SEARCA Ruth Jazrel M. Bandong, Project Associate, SEARCA Dr. Izzati Adilah binti Azmir, Lecturer, University Technology Mara - Cawangan Negeri Sembilan Branch
Workshop on Modeling Management of Climatic Stress in Rice-based Cropping Systems: The Application of the AgPractices&Domains Platforms	Zoom 7-8 October 2021	60	Philippines Myanmar	University of Southern Queensland UPLB Foundation, Inc. (UPLB-FI) Trans-Eurasia Information Network Cooperation Center (TEIN CC)	Dr. Ando Mariot Radanielson, Senior Research Fellow, Institute for Life Sciences and Environment, University of Southern Queensland (USQ) Dr. Adam Sparks, Senior Scientist and Bioeconomic Modeler and Adjunct Associate Professor, Centre for Crop Health, USQ Ms. Hannah Jose, Agricultural and Biosystems Engineer, UPLB Foundation, Inc. Dr. Val Randolph M. Madrid Associate Professor, Institute of Computer Science, College of Arts and Sciences, UPLB

Title	Venue	No. of Participants	Participant's Country	Activity Partner	Main Speaker or Presenter
Regional Dialogue: Unlocking private sector potential for forest and landscape management and sustainability through Jurisdictional Sustainability Approach	Zoom 11 October 2021	93	Australia Colombia India Indonesia Japan Malaysia Philippines Thailand Timor-Leste	Food and Agriculture Organization of the United Nations (FAO)	Philip Summers International Independent Consultant Imelda Bacudo Independent Consultant FAO Lucio Santos Climate Finance REDD+ Officer, Forestry Department, FAO Subregional Office for Central America Josh Van Vianen Technical Unit Manager Forest Carbon Aditya Rakhman Senior Sourcing Manager -Southeast Asia South Pole Susana Velez Haller Regional Manager, Latin America & the Caribbean Verra Regan Pairojmahakij Senior Program Officer The Center for People and Forests (RECOFTC)
Asia-Pacific Climate Week 2021 Side Event: Advancing Jurisdictional Sustainability Approach and its Potential for Climate Financing in Southeast Asia	Zoom	115	Albania Argentina Armenia Australia Bangladesh Cambodia Canada Fiji Germany India Indonesia Lithuania Malaysia Myanmar Nepal Pakistan Philippines Romania Serbia Singapore Thailand UK	FAO	Dr. Daniel Nepstad President and Executive Director Earth Innovation Institute Dr. Nathaniel C. Bantayan Professor and University Scientist I Institute of Renewable Natural Resources, University of the Philippines Los Baños Mr. Mathieu Van Rijn Forestry Officer Regional Office for Asia-Pacific Food and Agriculture Organization of the United Nations (FAO) Mr. Gabriel Eickhoff Co-Founder & Chief Executive Officer, Lestari Capital PTE LTD
2 nd GIZ-SEARCA ASEAN Climate Leadership Program 2021: Promoting Climate Smart Land Use for Implementing Nationally Determined Contributions	Virtual 18 August - 28 October 2021	21	Brunei Darussalam Cambodia Indonesia Malaysia Myanmar Philippines Thailand Vietnam	Climate-Smart Land Use in ASEAN, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH ASEAN Climate Resilience Network (CRN)	Mr. Andre de Wit Dean of the Leadership Academy Amsterdam, Netherlands Ms. Rejani Kunjappan Senior Program Officer, Training and Learning, The Center for People and Forests (RECOFTC), Thailand

Title	Venue	No. of Participants	Participant's Country	Activity Partner	Main Speaker or Presenter
Graduate Scholarship and Institutional Development (GSID) Conversations: Dish Dialogues: Creating a Sustainable and Healthy Plate	Zoom and Facebook Live 22 October 2021	1,124 Facebook: 1,100 Zoom: 24	Cambodia Indonesia Malaysia Myanmar Philippines Timor-Leste Japan Sri Lanka		Prof. Dr. M. Shahrim Ab Karim Associate Professor of Malaysia's Heritage Food & Food Culture Malaysia's Food Heritage Authority, Department of Food Service Management, Faculty of Food Science and Technology, Universiti Putra Malaysia
International Foundation for Science (IFS) -SEARCA Mentorship Program for Advanced Grants: Virtual Awarding Ceremony and Inception Meeting	Virtual 29 October 2021	8	Indonesia	IFS	Dr. Nighisty Ghezae Director, IFS Prof. Chema Gil Representative from Scientific Advisory Committee (SAC) Mr. William Savage Consultant, IFS Dr. Pedcris Orencio, Program Head for Research and Thought Leadership, SEARCA
SEARCA-CoSAI -IUCN Paying for Nature and Society: Regional Dialogue on Innovative Financial Mechanisms to Promote Equity and Sustainability in Agriculture - Asia	Virtual 16 November 2021	525	Bangladesh France India Indonesia Norway Philippines Singapore Sri Lanka Thailand US	Commission on Sustainable Agriculture Intensification (CoSAI) International Union for the Conservation of Nature (IUCN)	Dr. Ximena Rueda Chair of Working Group 4, CoSAI and Associate Professor, School of Management, Universidad de Los Andes, Colombia Dr. W L Gamine Samarasinghe Additional Secretary (Agriculture Technology), Ministry of Agriculture, Sri Lanka Ms. Irish Baguilat Coordinator for UN Decade of Family Farming and Women Farmers Agenda, Asian Farmers' Association for Sustainable Rural Development (AFA), Philippines Dr. Prasun Kumar Das Secretary General, Asia-Pacific Rural and Agricultural Credit Association, Thailand Ms. Erin Sweeney Lead for Sustainable Investments and Inclusion, Grow Asia, Singapore Mr. Eelko Bronkhorst Chief Executive Officer, Financial Access, The Netherlands
SEARCA-IUCN Nature-based Solutions: Working with nature to help address some of society's most pressing challenges	Virtual 23 November 2021	534	Philippines Thailand USA Vietnam	IUCN	Mr. Raphael Glemet Senior Programme Officer, Water and Wetlands Science and Strategy Group, IUCN Asia Regional Office, Thailand Ms. Maeve Nightingale, Senior Programme Officer, Asia Regional Coastal and Marine Programme, IUCN Asia Regional Office, Thailand

Title	Venue	No. of Participants	Participant's Country	Activity Partner	Main Speaker or Presenter
					Dr. Andrew Wyatt Deputy Head, Indo-Burma Group of IUCN Asia
					Mr. Nasrudin Abdulkadir Buisan Faculty, Cotabato State University, Philippines
Alumni Forum on Transformational Leadership	Virtual 25 November 2021	1,030 FB: 913 Zoom: 117	Brunei Cambodia Indonesia Lao PDR Malaysia Myanmar Philippines Thailand Timor-Leste Vietnam	Regional SEARCA Alumni Association (RSAA)	Dr. Weerapon Thongma President, Maejo University, Thailand Dr. Asikin Yeou Undersecretary of State, Ministry of Agriculture, Forestry and Fisheries, Cambodia Mr. Natalino Babo Martins Deputy Project Manager GEF Project, Conservation International, Timor-Leste
ASEAN Conference on Policy and Governance for Climate-Smart Land Use	Zoom 16-18 November 2021	176		GIZ and ASEAN Climate Resilience Network (CRN)	
Agricultural Transformation and Market Integration in the ASEAN region (ATMI-ASEAN) Regional Forum on Mainstreaming Gender Equality towards an Inclusive and Sustainable Post COVID-19 Regional Recovery	Zoom 21 January 2022	193	Philippines Myanmar Austria India Thailand US Cambodia Indonesia Lao PDR Vietnam Malaysia	International Fund for Agricultural Development (IFAD) Philippines and IFAD Philippines Gender Network (IPGN)	Mr. Steven Jonckheere Dr. Agnes R. Quisumbing Mr. Miguel Rafael V. Musngi Dr. Devesh Roy Dr. Julian F. Gonsalves Atty. Dulce Blanca T. Punzalan
National (13)					
Cascading Workshop in Preparation for the updating of the National Agriculture and Fisheries Modernization and Industrialization Plan (NAFMIP) 2020-2030	Webex 13-14 and 16-17 December 2021	570	Philippines	Department of Agriculture (DA), Planning and Programming Division, FAO and SyCip Gorres Velayo & Co. (SGV)	NAFMIP Experts
Agri-Action Virtual Conference: Leveraging Agricultural Opportunities in Calabarzon Together	Zoom 18 September 2021	289	Philippines	Batangas State University Center for Technopreneurship and Innovation	Dir. Vilma Dimaculangan
Accelerating Agriculture and Rural Development through Technology Transfer	Zoom and Facebook Live 1 July 2021	1,300 reached on Facebook	Philippines	Alliance of Tech Transfer Professionals of the Philippines (ATOP)	Dr. Evangelyn Alocilla Professor, Michigan State University
7th Online Workshop for the Presentation of Standards and Indicators (Program Level) for all RUA Programs	Virtual 29 November 2021	22	Cambodia	Royal University of Agriculture (RUA), Cambodia	Dr. Rhea L. Gumasing Associate Professor, Institute for Governance and Rural Development (IGRD), College of Public Affairs and Development (CPAfD), UPLB
8th Online Workshop for Program Standards and Indicators	Virtual 15 December 2021	29	Cambodia	RUA	Dr. Rhea L. Gumasing Associate Professor, Institute for Governance and Rural Development (IGRD), College of Public Affairs and Development (CPAfD), UPLB

Title	Venue	No. of Participants	Participant's Country	Activity Partner	Main Speaker or Presenter
9th RUA Online Workshop on Standards, Indicators, and Sources of Evidence	Virtual 11 March 2022	33	Cambodia	RUA	Dr. Rhea L. Gumasing Associate Professor, Institute for Governance and Rural Development (IGRD), College of Public Affairs and Development (CPAfD), UPLB
Pista ng Pagkain at Kabataang Pinoy (Pistang PagKaPinoy)	Zoom and Facebook Live 23 October 2021	711 4,142 reached on Facebook	Philippines	Young Professionals for Agricultural Development (YPARD); Agriculture Students Association of the Philippines (ASAP); Kids Who Farm (KWF)	Amy Besa, Owner, Purple Yam Cristina Sison, Co-Project Leader UPRHS Youth Program Raymund Vincent Aaron, Banana Chief, Villa Socorro Farm John Bryan Lawas, University Research Associate, UPLB Edible Landscaping Team Rodmyr Datoon, Assistant Professor, UPLB College of Agriculture and Food Science Melody Melo-Rijk, Project Manager, Sustainable Consumption & Production, WWF-PH
Better Crops with Genome Editing: Applications, Potentials and Policies	Zoom 5 August 2021	60	Philippines	USDA Foreign Agricultural Service, International Service for the Acquisition of Agri-biotech Applications, Philippine House Committee on Science and Technology	Dr. Wayne Parrot Dr. Gabriel Romero
Genome-edited Crops: Progress, Potential and Policies	Zoom 10 August 2021	427	Philippines	USDA Foreign Agricultural Service, International Service for the Acquisition of Agri-biotech Applications, Philippine Judicial Academy, Philippine Association of Law Schools	Atty. Gregory Jaffe Atty. Paz J. Benavidez II Justice Jose Reyes
Biotechnology for Green Recovery Webinar Thematic Session 1: Biotechnology in Achieving a Resilient and Progressive Food System	Zoom 22 November 2021	222	Philippines	Department of Agriculture- Biotech Program Office	Dr. Segfredo R. Serrano Dr. Glenn B. Gregorio Dr. Benigno D. Peczon Dr. Edgardo E. Tulin
National Policy Forum ADB 9689: Analysis of Fruit and Vegetable Value Chains in the Philippines	SEARCA and Zoom 21 February 2022	35	Philippines	Asian Development Bank (ADB)	Dr. Flordeliza Lantican Dr. Marlo Rankin
3rd Global Agribusiness Management and Entrepreneurship (GAME 2021) Conference	SEARCA and Zoom 18-19 November 2021	992	Philippines	UPLB Department of Agribusiness Management and Entrepreneurship (DAME)	Dr. Ray Goldberg



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