

SUSTAINABLE DEVELOPMENT GOALS REPORT

Suan Sunandha Rajabhat University Year 2022 - 2023



"Suan Sunandha Rajabhat University University of Sustainability"



A MESSAGE FROM THE PRESIDENT OF SUAN SUNANDHA RAJABHAT UNIVERSITY

Suan Sunandha Rajabhat University operates under the mission of the Rajabhat University Act BE 2547, Section 7, which identifies the university as a higher education institution to engage in local development by strengthening the intellectual capacity of the region, restoring learning, promoting local wisdom, creating knowledge of people for sustainable development, and collaborating in the management, conservation and utilization of natural and environmental resource suitably and sustainably. In addition, the aims of a higher educational institution also cover providing education, promoting academics and advanced professions, conducting instruction, research and academic services for society, improving, transmitting and developing technology, preserving arts and cultures as well as producing instructors and arousing the instructor's academic status.





The operation of the university has been in effect since 2019. The paradigm has undergone modifications to align with the goals of sustainable development: The Sustainable Development Goals (SDGs) are congruent with the historical context of Thailand and serve the requirements of the present generation, incorporating the concept of 'no one left behind'. In accordance with the target group for sustainable development, which comprises (1) human development, the attainment of sustainable development in five dimensions (5P) is pursued. (2) Earth (3) Economy and Wealth (4) Peace and Justice (5) Partnership: All departments collaborate to foster sustainable development in accordance with the university's vision and strategy. Presented below.

Vision : A leader in producing professionals for sustainable society development

Strategies :

1. To produce well-rounded graduate in certain field; to develop manpower skills to professional level; and to enhance those with ethics and morality

To elevate instruction management system; to create learning innovation; and to raise management process to global standard
 To conduct research and create innovation, creative works at

national and international levels for the sustainable usage

4. To establish networks, and expand academic services to drive the national strategies

Suan Sunandha Rajabhat University is determined to achieve the 17 Sustainable Development Goals (SDGs) proposed by the United Nations by depending on the policy and management, the research and innovation, the teaching and learning, the contribution to Thai and global societies as well as the community access and participation that Suan Sunandha Rajabhat University initiates under the framework of global impact indicators of the Times Higher Education Global Impact Rankings since 2021.



This is the second year of implementing the United Nations Sustainable Development Goals (SDGs) Framework, which aims to eradicate poverty, preserve the environment, and encourage all citizens to live in peace and prosperity. Furthermore, the implementation of the six objectives that the institution supports and encourages are as follows:

SDG 3: Good Health and Well-being, ensuring optimal health through the dissemination of university health knowledge is pivotal in fostering the overall well-being of individuals, households, and communities residing within the university's designated service area.

SDG 4: Quality Education, driving to produce quality educational personnel for society. To ensure that everyone has comprehensive and equitable quality education. and support opportunities for university personnel and outsiders for lifelong learning.

SDG 8: Decent Work and Economic Growth promoting sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

SDG 9: Industry, Innovation and Infrastructure building resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

SDG12: Responsible Consumption and Productionensuring sustainable consumption and production patterns and environmentally friendly

SDG 17: Partnerships for the Goals strengthening the means of implementation and revitalize the global partnership for sustainable development

Accordingly, this sustainable report is a compilation of projects based on the 17 Sustainable Development Goals (SDGs) of the United Nations that Suan Sunandha Rajabhat University has emphasized through the integration of teaching, research and academic services of academic and academic support departments within the university during 2021-2022.

> Associate Professor Dr. Chutikarn Sriviboon President of Suan Sunandha Rajabhat University



Contents

A Message from the President of Suan Sunandha Rajabhat University 1			
Suan Sunandha Rajabhat University of Sustainable Development	5		
Chapter 1 General Background	8		
Information about Suan Sunandha Rajabhat University	9		
Chapter 2 Suan Sunandha Rajabhat University and Sustainable Development Goals	18		
SDG 1: Ending poverty	19		
SDG 2: Ending hunger and achieve food security	24		
SDG 3: Promoting well-being for all	29		
SDG 4: Promoting quality learning opportunities	36		
SDG 5: Achieving gender equality	42		
SDG 6: Ensuring sustainable water management	46		
SDG 7: Ensuring access to sustainable energy	52		
SDG 8: Promoting sustainable economic growth	55		
SDG 9: Promoting sustainable industrialization and fostering innovation	59		
SDG 10: Reducing social inequality	63		
SDG 11: Ensuring city and community management	68		
SDG 12: Ensuring responsibilities on sustainable consumption and production	72		
SDG 13: Resolving climate change	76		
SDG 14: Conserving and using the marine resources sustainably	82		
SDG 15: Restoring terrestrial ecosystems sustainably	86		
SDG 16: Being effective university, promoting peaceful societies and providing access to justice for all	92		
SDG 17: Creating participation for future goal development	96		
Contributors	105		



SUAN SUNANDHA RAJABHAT UNIVERSITY UNIVERSITY OF SUSTAINABILITY



Suan Sunandha Rajabhat University has the vision to mobilize the university according to the 15-year strategic plan (2017-2030) to cope with changes in the educational situation that has constantly changed in the national and international contexts. In addition, the mission of higher education institutions plays an important role in driving national development in multiple dimensions. Therefore, in the pursuit of sustainable development, the university uses the quadruple helix model to build a network of harmonious relationships interrelated in 4 parts of teaching and learning, research and innovation. consisting determining policies and practices within the university's boundaries, and building relationships with all levels of networks from communities, countries and overseas so that the university can be aware of and keep up with the current situation as well as follow the rapid changes in the world.

The university operations focus on developing research and innovation for the community and society to achieve sustainable development goals in all dimensions. The university has established a framework for research and innovation as well as academic services by developing the university strategic framework depending on the four national research strategies comprising of developing the Thai economy through the value-creating economy, enhancing society and environment, upgrading science and technology development and research and innovation advancement, and developing human resources and science, research and innovation institutions.

Since 2021, the university has emphasized participating in contributing the national and international sustainable development, which is defined as a strategy related to the second strategy of the university involving sustainable development in promoting and supporting the creation of national and international research and innovation for quality of life as well as sustainable economy and society. The objectives cover implementing research and innovation from university researchers to solve problems and respond to community needs and establishing educational centers and academic services in mobilizing research and innovation to generate commercial value for the community, community enterprise schools, and new entrepreneurs until the community has sustainable self-reliance.



Suan Sunandha Rajabhat University Committed to achieving sustainable development goals In all dimensions, all 17 goals of the United Nations (SDGs) by 2030, with the hope that they can help solve the problem of poverty. Eliminate hunger, access to public health, gender inequality and access to education and employment, global warming, and peace that the world is facing. and promote the concept of *"Leave no one behind"* under the framework of global impact indicators in the Times Higher Education Impact Rankings

Regarding the sustainability of teaching and learning to generate graduates, Suan Sunandha Rajabhat University is one of the nation's higher education institutions and a component of the social system, with the primary goal of fostering students' potential to have excellent Furthermore, as the university strives to be a university with worldwide quality standards, the quality must satisfy the demands of national growth. The university's mission statement is that it is "a leader in creating professionals for sustainable social development." As a result, it is established that university graduates must be morally and professionally equipped to function in society, compete globally, and help the world reach the Sustainable Development Goals.



CHAPTER 1

GENERAL BACKGROUND



Information about Suan Sunandha Rajabhat University



The Historical Background of Suan Sunandha Rajabhat University

Suan Sunandha Rajabhat University was first part of Suan Sunandha Palace, which was built on royal grounds and serves as a place of rest for His Majesty King Chulalongkorn (King Rama V). At His Majesty's royal demand, various flowers were provided, and Suan Sunandha Park—named after Indra God's garden in the paradise —was established. and the title of Queen Sunandha Kumareerattana.

Later in the reign of King Rama VI, 32 buildings were built for being the residence of the royal consorts and concubines of King Rama V. H.H. Princess Saisavali Bhiromya, Princess Suddhasininart, founded a lady school "Nibhakarn" in the royal garden aiming to train the royal etiquette and manner for the royal young ladies as well as the ladies from noble families.

In 1923, the regime of Thailand was changed, which greatly impacted feudalism. Many royal members and courtiers who resided in Suan Sunandha felt insecure about the situation; consequently, they left the place. The beauty and splendid of Suan Sunandha, including Nibhakarn School, no longer existed. It was until the reign of King Rama VIII that the once-decayed Suan Sunandha was revived. The cabinet had made a consensus to use Suan Sunandha space to contribute to education by transforming the royal inner court into a national educational institution entitled "Sunandha Wittayalai School" that started in 1937 and has been developed and upgraded to Suan Sunandha Rajabhat University until today.





The Emblem of Suan Sunandha Rajabhat University

The university's current emblem derives from the royal seal of His Majesty King Bhumibol Adulyadej The Great, the reign of King Rama IX, in which the image of the Atthathit Uthumphon Ratcha-ad Royal Throne consisting of the surrounding discus (Chakra) with the Thai numeral 9. A radiance is shining all around the Chakra, and a seven-tiered umbrella is above the Chakra. The royal throne, topped by a seven-tiered umbrella, represents the royal power in the land. There are Thai characters of "มหาวิทยาลัยราชภัฏสวนสุนันทา" on the upper emblem of the outer circumference and English characters of "SUAN SUNANDHA RAJABHAT UNIVERSITY" on the lower emblem.

The Colors of the University

refers to the color of the monarchy

refers to the color of the birthday of His Majesty King Chulalongkorn

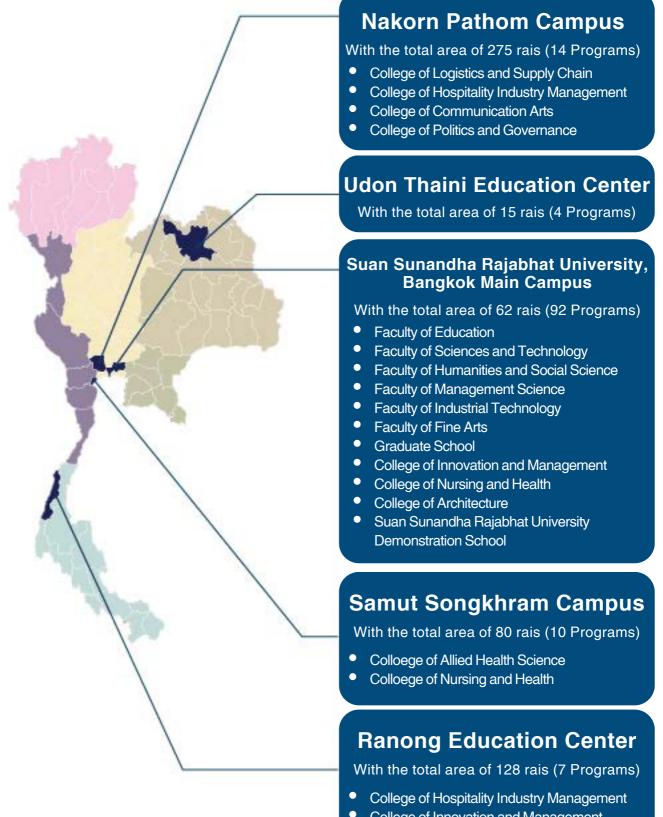
The Symbolic Flower of the University



The symbolic flower of the university is "Kaew Chao Jom" or Guaiacum officinale. It is a flowering plant that His Majesty King Chulalongkorn planted in the Sunandha Garden. The spicy was taken during the King's traveling to Chava (Indonesia). The flower is like a glass flower with purple and blue petals, yellow stamens and glass-like leaves rounded together. The first Kaew Chao Chom tree was planted on a mound in front of Building 11. Currently, the plant is about 15 meters tall.



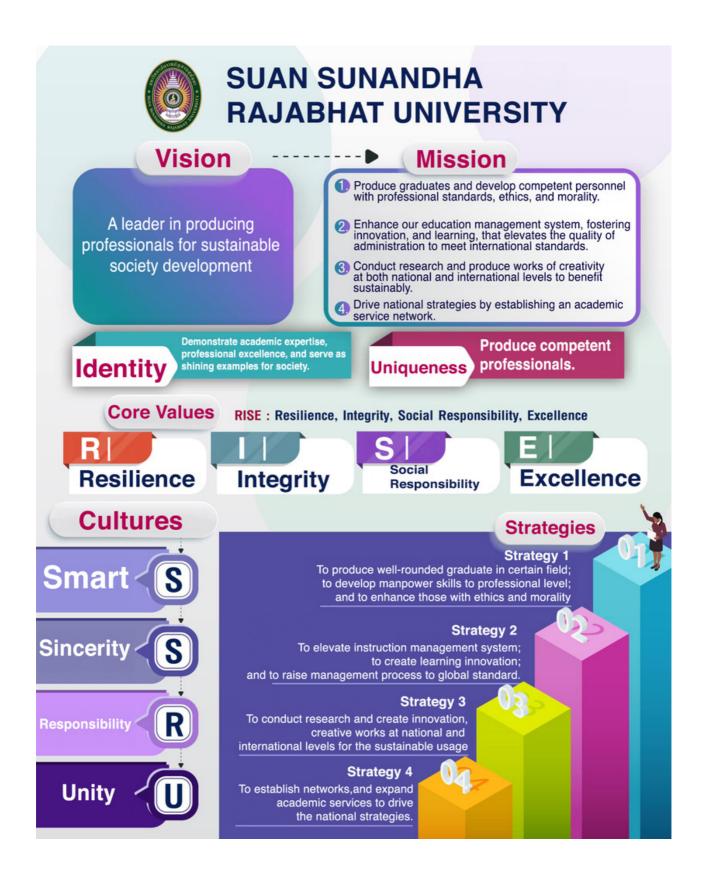
Suan Sunandha Rajabhat University Campuses and Education Centers



- College of Innovation and Management
- College of Logistics and Supply Chain
- College of Politics and Governance



Vision of Suan Sunandha Rajabhat University





Framework for operations focused on achieving sustainable local development

	Suan Sunandha Rajabh	at University : A leade	Suan Sunandha Rajabhat University : A leader in producing professionals for sustainable society development	for sustainable society o	levelopment 🔶	Γ
Goal	Demonstrate academic expertise, professional e	Jemonstrate academic expertise, prof	∎ ×	ellence, and serve as shining examples for society.		Create cooperation
Impact	 Research and Academic Services to Industry 	Research and Academic Services to Community Development	ices Research and Academic Services at to Policy	Bestanch and Academic Services to Education Development	amic Services velopment	Industrial sector Private sector
Vision of research and academic services	Reinventing researchers into professionals with specialized (5) I	sionals with specialized expertis (5) Develop	Reinventing researchers into professionals with specialized expertise on the basis of spatial development, according to the royal policy of His Majesty King Rama X (5) Development of Professionals and Specialists	ccording to the royal policy of His Majesty King Rama X	dajesty King Rama X	Government sector Community Small and medium sized
Strategy of Thailand Science, Research, and Innovation (TSRI)	Strategy 1 Strategy 2 Developing Thailand's economy through value creation and creative economy well-being Increases in societal and well-being		Strategy 3 Benvironmental Pioneering advancements in science, technology, research, and innovation.		Strategy 4 Manpower and institutional development in science, research, and innovation	enterprises (SME) International
University service areas	Bangkok	Nakhonpathom Province	Samutsongkhram Province	Udontani Province	Ranong Province	
Issues related to scientific research and academic services	Humanities and Social Sciences	Science and Technology	Health Science	Education	Cross-disciplinary integration	
Development of fundamental sciences	Reinventing researchers into professionals with specialized expertise		Extend the results and expand the work by incorporating ties between research, teaching, and academic services	Innovative commercial utilization research and solutions to the challenge of community and societal poverty	zation research and of community and erty	
SUSTAINABLE GOALS DEVELOPMENT GOALS	1 Non- 2 Non- 3 Non- 4 Non- 1 Non- 1 Non- 1 Non- 1 Non- 1 Non- 1 Non- 1 Non- 1 Non-	5 BERN Constant	B BERREAU B BERREAU	2 Reveal 2 Reve	11 Antenna Martinen M	1



The President and Administrative Board



Associate Professor Dr. Chutikarn Sriviboon

President of Rajabhat Suan Sunandha University



Associate Professor Dr. Komsan Sommanawat Vice President for Administration



Associate Professor Dr. Nantiya Noichan Vice President for Academic Affairs



Associate Professor Dr. Witthaya Mekhum Vice President for Planning and Quality Assurance



Associate Professor Dr. Bundit Pungnirund Vice President for Research and Development



Associate Professor Dr. Jetsarid Angsukanjanakul Vice President for Student Affairs



Associate Professor Dr.Kanpetch Saranontawat Vice President of Nakhon Pathom Campus



Associate Professor Dr. Pimphon Thongmuang Vice President of Samut Songkhram Campus

The Administration Structure of Suan Sunandha Rajabhat University

Suan Sunandha Rajabhat University Council				
Suan Sunandha Rajabhat University				
Academic Council Faculty and Personnel Senate				
Committee for Promoting University Activities Aduit, Regulation and Following-up Committee				
	Internal Audit Unit			
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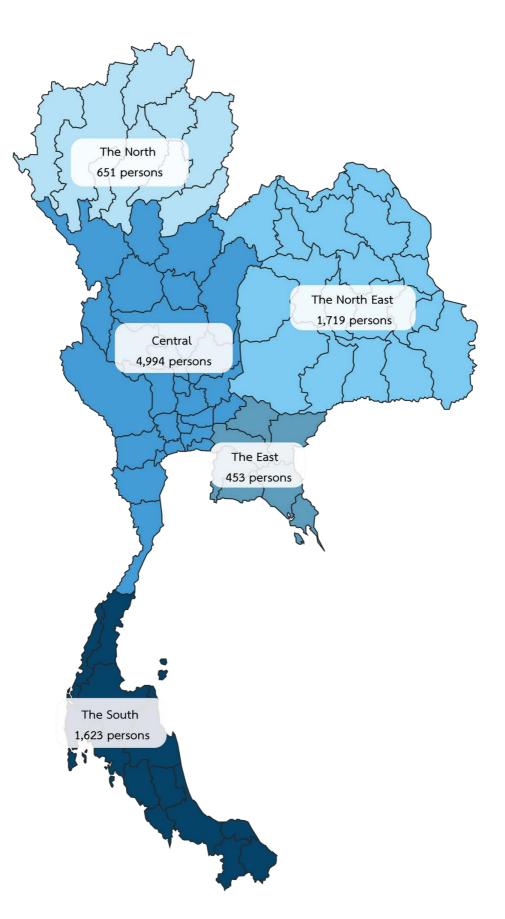


Information about students and staff of Suan Sunandha Rajabhat University

Number	r of students Academic year 2022	
	Number of students Number of students starting degree Number of first-generation students starting a degree	23,842 7,744 116
Number	of graduates Academic year 2022	
	Number of graduates Number of graduates who gained a qualification that entitled them to teach at primary school level	7,031 955
	Number of graduates in health professions	170
Numbe	r of employees Financial year 202	22
•	Number of employees Number of employees on contracts of over 24 months	1,828 1,555
	Number of academic staffs Number of academic staffs by subject area: STEM 	832 168
	 Number of academic staffs by subject area: Nursing Science and Applied Thai Traditional Medicine 	101
	 Number of academic staff by subject area: Arts & Humanities / Social sciences 	547



Domicile information for students applying to study in the academic year 2022





CHAPTER 2

SUAN SUNANDHA RAJABHAT UNIVERSITY AND SUSTAINABLE DEVELOPMENT GOALS



NO POVERTY



The Project of Improving the Quality of Life and Enhancing the Foundational Economy under the Strategy of Rajabhat University for Local Development

Suan Sunandha Rajabhat University organized the Project of Improving the Quality of Life and Enhancing the Foundational Economy under the Strategy of Rajabhat University for Local Development to encourage and support people in the community to have the potential to promote selfreliance for themselves and the community sustainably. According to the implementation of the fiscal year 2023, it is the 5th year that the project has been implemented continuously and sustainably in 5 service areas, including 1) Dusit District in Bangkok, 2) Nakhon Pathom Province,

3) Samut Songkhram Province, 4) Udon Thani Province and 5) Ranong Province by collaborating 16 faculties and colleges of the university in participating in local development integrating knowledge from teaching and learning, research, innovation and creativity from the context of the community, in the areas of natural resources, culture, and BCG economy according to



the niche guru knowledge of each organization. As a result, there were 43 community products and services as well as the problems and needs of 120 households in the areas were accomplished.

In addition, the university is committed to develop the community continuously and sustainably by further enhancing the community's products and services to be a primary career and increse income, such as the Project of Step towards a Better Life, in collaboration with the College of Architecture and Wat Sawatwareesimaram Community, Thanon Nakhon Chai Si Subdistrict, Dusit District, Bangkok.



This initiative aims to consistently develop the households that participate in the project by focusing on increasing their income. The approach emphasizes generating more income from primary occupations and increasing skills in existing trades. It integrates the principles of community-based design in developing products for households by starting with the production of Borneol essential oil, which is a further developed product from the original products from designing prototypes that represents the community using Sesbania Grandiflora and Cannonball flower, creating branding inspired by temple architecture, producing packaging with a label for the bottle and a box as the souvenir set, and developing product variations by using hotpressed and cold-pressed production.





In response to the COVID-19 situation, the project adapted its products to cater to the current needs, including the creation of hand sanitizers in the form of AROMA oil. Furthermore, this project provides support for sales channels and community data management. It helps enhance business operations and data management, public relations, and marketing of the products. In the 2023 fiscal year, the project disseminates knowledge and introduces the BCG Economy Model related to the use of vacant spaces in the community for urban agriculture, knowledge transfer from knowledgeble people, and making biological fertilizer from community waste and food waste management.



This process transforms the waste materials in the community into value-added products, reducing waste accumulation, enhancing resource utilization, and increasing community income. This is in alignment with the bio-circular green economy system, which promotes the sustainable use of local resources, creating added value from waste materials and increasing community income.

















Z Z ERO HUNGER





Increasing Value of Health-Oriented Food and Beverage Products from Golden Banana Flour to Enhance the Foundational Economy

This project is an on-site initiative collaborating with the Golden Banana Community Enterprise in Ban Khok Subdistrict, Sang Khom District Udon Thani Province to addresses the proplems and needs for processing low-grade golden bananas, typically meant for export, into innovative products through the scientific and specialized expertise of university researchers. The objectives of this project are as follows:

1)To produce raw and ripe golden banana flour.

2)To test the chemical and physical properties and analyze the biological activities of extracts from raw and ripe golden banana flour.



1)To develop prototypes of healthoriented food and beverage products using golden banana flour.

The project resulted in valuable knowledge related to the nutritional value, chemical and physical properties of golden banana flour, and prototypes of health-oriented food and beverage products processed from golden banana flour. The prototypes of health-oriented food and beverage products have had the following outcomes:

1) The development of healthoriented food and beverage products emphasizing nutritional value and antioxidant properties, reducing the risk of Non-Communicable Diseases (NCDs) for consumers.





1)The Golden Banana Community Enterprise in Ban Khok Subdistrict, Sang Khom District Udon Thani Province can utilize this new knowledge to further develop food and beverage products processed from golden banana flour to add value to lower-grade bananas by enhancing their nutritional content, increasing income, improving the quality of life for the community members, and ensuring occupational sustainability. These products can be developed in various formats and provide sustainable benefits without negative environmental impacts.



Conneting to the Sustainable Dvelopment

This project created opportunities for accessing safe and nutritional food from high-quality golden banana flour, developed through research. It entails food security in 4 aspects including 1) ensuring an adequate food supply, 2) enhancing access to food sources. 3) facilitating the consumption of nutritious and nutritionally appropriate food, and 4) having stability in food quantity, food access, and nutritional conditions for the population. By enhancing the quality of lower-grade bananas using the development of healthoriented food and beverage products intended for commercial distribution can address the issue of bananas falling below market standards, promote skills and careers that increase income and self-reliance for community members, improve the quality of life in both health and economy as well as expand the application of knowledge and technological expertise in product development to other areas sustainably.



Suan Sunandha Launched Food Valley: Sustainable Food and Agriculture Safety

The Institute of Research and Development, Suan Sunandha Rajabhat University, as a Food the development of the functional food and food safety by cooperate with other universities under the project of "The Development of the Functional Food Research and Food Safety Management Model of Suan Sunandha Rajabhat University" launched the node on April 7, 2023, at the Faculty of Management Sciences, the Hall of Building 57, Suan Sunandha Rajabhat University. Ms. Kulwara Chotipansopon, the Deputy Director of the Agricultural **Research Development Agency** (Public Organization) (ARDA) was later revealed as the event's chairperson.



Assistant Professor Morakot Worachairungreung, the Vice Director of Research and Publication Valley node in the Central Region for Subdivision, Suan Sunandha Rajabhat University, said that nowadays, we have less time to prepare food for each meal, particularly in urban communities. In addition, modern technology is used to produce a diversity of foods to satisfy the requirements of consumers, as well as to increase the shelf life. Nonetheless, as technology advances rapidly, new problems are emerging, such as food insecurity and contamination, which have varying impacts on the health of consumers, spanning from minor illnesses to fatalities. Therefore, eating nutritious food will make the body grow, help repair damaged parts and help strengthen the body's immune system. As food safety and value-added operations require cooperation from relevant sectors, including entrepreneurs, responsible government agencies, and consumers, all of whom must be aware of their rights, responsibilities and duties.



The Institute of Research and Development, Suan Sunandha Rajabhat University, emphasizes participating as a center in developing "Food for Safety and Value for Citizens" under 6G including Global Safety, Good Ingredient, Grow Organic, Go Innovation, Good Taste, and Go Circular Eco by cooperating with Agricultural Research Development Agency or ARDA in the first phase of operations of the Development of the Functional Food Research and Food Safety Management Model to enhance and sustain functional food and food safety.





Assistant Professor Morakot continued that "ARDA partners with Suan Sunandha Rajabhat University as a result of the fact that citizens have limited food options. The Institute of Research and Development received budget support in developing research related to food safety and functional food in an urban context. There are 3 sub-projects in this context, comprising the Spirulina Project, Protein Hydrolyzate from Tofu Project and the Parasite-free Crab Project. All 3 projects can achieve the objectives of the project in increasing food options for urban people, especially Bangkok citizens, to provide safe, goodtasting and nutritious food."



GOOD HEALTH AND WELL-BEING





Suan Sunandha Rajabhat University in Collaboration with Kanchanabaramee Foundation Udon Thani Provincial Public Health Conducting a Mobile Mammogram Breast Cancer Screening Project for At-Risk and Underprivileged Women in Honor of the 70th Anniversary of His Majesty the King

On November 17, 2022 Associate Professor Dr. Chutikan Sriwiboon, President of Suan Sunandha Rajabhat University welcomed the administration team, Head of Udon Thani Provincial Government. In this regard, the university also appreciated for being allowed to take part in organizing a breast cancer screening program using a mobile mammogram (Mammogram) for atrisk and underprivileged women in honor of the 70th anniversary of His Majesty the King, with Mr. Nitiphat Leelalertleaw, Vice Governor of Udon Thani, presiding over the opening of the project. Mr. Somyod Deerudsamee, President of Kanchanabaramee Foundation stated the objectives of the project together with the head of government officers, government organizations, private sectors, and general public participating in the ceremony.

Dr. Taweerat Srikulwong, Deputy Chief of the Public Health Officer in Udon Thani, stated that according to data from the World Health Organization, in the year 2020, there were 2.3 million new cases of breast cancer diagnosed worldwide, resulting in 685,000 deaths. In Thailand, breast cancer is the most prevailing cancer among women, with an average of 22,000 new cases and over 8,000 deaths per year, meaning that a death from breast cancer occurs every hour. The exact cause of breast cancer remains unspecified, but it is frequently related to hormone levels, age, and a family record of breast cancer.





The most effective way to prevent breast cancer is early detection, by two methods: Manual breast examination of abnormal lumps and mammography using X-ray machines. Detecting abnormalities at an early stage can reduce the risk of metastatic cancer, which helps decrease the severity of breast cancer.

The Kanchanabaramee Foundation, in collaboration with the Udon Thani Provincial Public Health Office, recognizes the significance of early detection and screening for breast cancer patients. They, therefore, have conducted the "Breast Cancer Screening Project by Mobile X-ray Machine (Mammogram) for At-Risk and Underprivileged Women Marking the 70th Anniversary of His Majesty the King." The project's objective is to honor His Majesty the King's devotion and encourage all women, especially those at risk for breast cancer, to receive early detection through breast self-examinations and mammography using X-ray machines.

The activity, scheduled from November, 17 to November 30, 2022, totaling 10 days, covered 5 Districts areas of Udon Thani. This activity has been supported by healthcare teams including doctors, nurses, and medical personnel from Udon Thani Hospital, Udon Thani Cancer Hospital, Health Center 8, the Muang Udon Thani Public Health, and sub-district health promotion hospitals in the Muang District, at the Multifunctional Hall. Suan Sunandha Rajabhat University Udon Thani, Provincial Education Center.















The Research and Development Institute in Collaboration with the Samut Songkhram Campus, the Institute for the Promotion and Development of Senior Social Health, and the College of Allied Health Sciences at Suan Sunandha Rajabhat University Improving the Quality of Life for Low-ilcome Households in the Samut Songkhram Province Area Complying with Rajabhat University's Local Development Strategy.

In the fiscal year 2023, several university departments including the Research and Development Institute, in collaboration with the Samut Songkhram Campus, the Institute for the Promotion and Development of Senior Social Health, and the College of Allied Health Sciences, Suan Sunandha Rajabhat University, cooperated in organizing an integrated project to enhance the quality of life for low-income households in the Samut Songkhram province areas. This project complies with the university's local development strategy which seeks to provide community members with basic health knowledge for elderly people in Samut The Songkhram province areas. project featured Dr. Pimporn Thongmueang, the Acting Vice President of the Samut Songkhram Campus of Suan Sunandha Rajabhat University, as a guest lecturer, on the topic of basic healthcare according to traditional Thai medicine, current medical prescriptions, and conducting various body composition analysis, including body fat, bone density, fluid levels, muscle mass, BMI, blood pressure, acupuncture, and herbal poultice as part of the mentioned project.





This activity is considered an improvement in quality of life and wellness in households which complies with the 3rdSustainable Development Goals (SDGs) aspiring to ensure health and well-being for all. The university has provided healthcare stability and integrated healthcare practices for senior individuals, ensuring them the access to healthcare both physically and mentally.









Skills Development Project for Employment Based on the Country's Needs through the GenNX Model

The Institute for the Promotion and **Development of Senior Social** Health of Suan Sunandha Rajabhat University conducted the "Skills Development Project for Employment Based on the Country's Needs through the GenNX Model" in the Samut Songkhram province areas. The project's objective is to produce professional healthcare personnel with proficiency in elderly and palliative care in physical, mental, and social aspects in order to sustainably improve care procedures for the elderly and palliative individuals through implementing skill development from this project.





The Skills Development Project for Employment Based on the Country's Needs through the GenNX Model aims to develop economically vulnerable population to be professional healthcare personnel. The project is obliged to assist these people to steadily earn a living and employed with sustainable income to benefit their families, as well as to increase more educational access for them. Additionally, it enables integration with elderly and palliative healthcare knowledge to facilitate community senior members, ensuring them to approach healthcare in physical, mental, and social dimensions according to the **3rd Sustainable Development** Goals (SDGs) which is aspiring to ensure health and well-being for all.



QUALITY EDUCATION





Project to Improve the Quality of Education in Small-Sized Schools under the Jurisdiction of the Office of the Basic Education Commission (OBEC), the Border Patrol Police Schools, and Funded Schools

The Faculty of Education at Suan Sunandha Rajabhat University has implemented an education quality improvement project as part of the local development strategy. In the past year, 2 parts were conducted:

1.Capacity-building training for teachers instructing students in grades 1-3. This training focuses on creating knowledge and understanding of innovative teaching materials for mathematics and the Thai language that are suitable for students in grades 1-3 in small-sized schools within the network.

2. Training to develop reading, writing, and analytical skills for students in grades 1-3 within small-sized schools to enhance students' educational performance.

The activities have successfully achieved objectives including (1) to enhance the quality of education in schools participating in the project according to their specific needs, and (2) to develop and promote knowledge, understanding, and teaching skills among teachers. These operations have the potential to expand to a wider target group of small-sized schools under the OBEC, BPP schools, and other schools in a total of 20 schools within the 4 provinces including Ranong, Samut Songkhram, Udon Thani, and Bangkok.

The Outcomes of the Project

According to the results from the project implementation, 2 sets of educational innovation media were developed as follows:

1.Educational innovation media set Thai language course (reading and writing skills)



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The media set "Spelling Boards" for Prathomsuksa 1



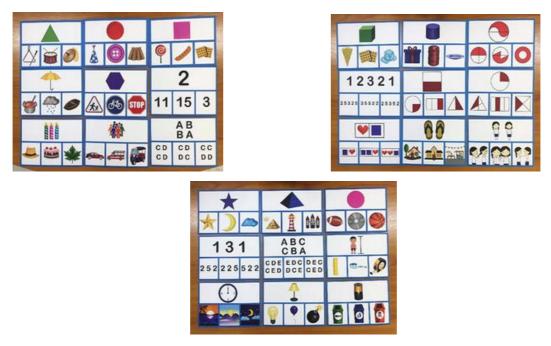
The media set "Reading, Writing, and Vowel Changes" for Prathomsuksa 2





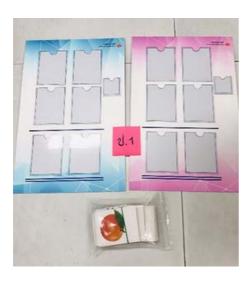
The media set "Bingo Spelling and Reading" for Prathomsuksa 3

2. The educational innovation media set for the subject of mathematics (analytical thinking skills)



The "Connectivity Card" for Prathomsuksa 1 - 3









The "Spatial Relationship Card" for Prathomsuksa 1 - 3



The "Numerical Sensation Board" for Prathomsuksa 1 - 3

Outcomes and Impacts of the Project

After implementing the educational innovation media with the target student group, the project has yielded the following outcomes and impacts as follows:



1.Students at Prathomsuksa 1-3 have developed reading, writing, and analytical thinking skills, meeting the assessment criteria.

2. Teachers have improved their competencies in learner-centered teaching and are capable of creating innovations to enhance student learning.

3.Schools have established guidelines for developing both students and teachers to enhance the quality of education.

Connecting to Sustainable Development Goal 4: Quality Education (SDG 4)

1.Building a collaborative network between universities, educational district offices, schools, school administrators, and teachers to develop the quality of education, particularly in reading and writing skills, and to instill moral values.

2.Establishing a community network to exchange and share knowledge from both within and outside the university to further develop regular teachers' competencies in teaching, learning management, and teaching innovations, ultimately benefiting the students

3.Developing the educational quality of teachers and students in smallsized schools located in remote areas, ensuring active participation in various activities and promoting critical thinking, analysis, and problemsolving skills, specifically related to reading and writing.

4. Promoting good teaching practices, innovative teaching techniques, and enhancing students' moral values through reading and writing skills development.



Images of the Project

1.Demonstrating the use of innovative media for teachers





2. Applying innovative educational media to students in Prathomsuksa 1 - 3











GENDER EQUALITY





The Dusit District Office, in collaboration with Suan Sunandha Rajabhat University, Opened an Old Palace to Welcome LGBTQ+ Couples and officially Registered "Life Partners" in Support of Equal Marriage rights on Valentine's Day

On February 14, 2023, Suan Sunandha Rajabhat University and the Dusit District Office collaborated to open the Sai Suddha Nobhadol Building Museum located within the university for couples of all genders to participate in a registration ceremony to celebrate their love, coinciding with Valentine's Day. The event was named "Padiwarada...with Everlasting Love," Reminding of Love at Suan Sunandha Royal Park, with Ms. Rujira Arin, Director of Dusit District, responsible for receiving registrations.

The event provided an opportunity for couples of different genders who wished to start a life together to register their marriage directly with the registrar, and this registration has immediate legal implications. For couples of diverse sexual orientations and genders, they could also "register their partnerships," even though it may not yet have legal implications. This registration serves the purpose of gathering statistics on the intentions of LGBTQ+ couples residing in the nearby area, with the aim of supporting future legal developments toward marriage equality. Additionally, it acts as a driving force for promoting equality and fostering good relationships within the family institution. The act of registering their partnerships signifies that those who chose to do so are content to see at least a place and a variety of people willing to accept them. However, there remains one more important goal: achieving legal recognition of these partnerships.



Source: PrachachatTurakij. 2023 (https://www.prachachat.net/d-life/news-1203572)



Source: ThairathOnline.2023 (https://www.thairath.co.th/news/politic/2629451)



The LGBTQIA+ Group at Suan Sunandha Rajabhat University Received a Grant from Grand Hyatt to Support Gender Diversity 2023

On September 23, 2023, the Scholarship Subdivision, Student **Development Division, Suan** Sunandha Rajabhat University, awarded GRAND HYATT scholarships of the year 2023 to students, including Mr. Woraprat Keeratiwitthayaporn from the Faculty of Fine and Applied Arts (Fashion Design program), Mr. Chaiwat Charoonrat from the Faculty of Humanities and Social Sciences (English program), Mr. Chokchai Phasuk from the Faculty of Business Administration (International Business program), Mr. Watcharawut Tangrod from the Faculty of Fine and Applied Arts (Thai Dance program), and Mr. Pipattanaphong Theerakit from the Faculty of Business Administration (Marketing program) at the Conference Room, 6th floor, Somdej Uppatham Building Family Planning Association of Thailand under the Royal Patronage of Her **Royal Highness Princess** Srinagarindra Boromarajonani.

This scholarship program supports gender diversity and equality in the workplace and society, offering educational opportunities to youth with diverse gender identities in the LGBTQIA+ and ethnic communities. The program was organized by Erawan Hotel Co., Ltd. in collaboration with the Planned Parenthood Association of Thailand under the Patronage of Her Royal Highness the Princess Mother (PPAT).





The Creative Media Club, Suan Sunandha Rajabhat University, Organized the "SSRU QUEEN 2023" Competition under the Theme of "Right and Equality"

On January 21, 2023, the Creative Media Club, Suan Sunandha Rajabhat University, organized the "SSRU QUEEN 2023" competition under the theme of "Right and Equality," marking the 6th year of this alternative-gender beauty pageant held at Sunanthanusorn Auditorium, Suan Sunandha Rajabhat University. This year, there were 51 applicants who are LGBTQIA+ students studying at Suan Sunandha Rajabhat University.

This event aligns with Sustainable Development Goal 5: gender equality promoting gender equality and inclusivity by providing a platform for transgender individuals to express themselves and challenge stereotypes and biases.



The "SSRU QUEEN 2023" competition fosters a greater understanding of gender diversity, contributing to the overall goal of gender equality and ending discrimination, and understanding of gender diversity through project operations.







CLEAN WATER AND SANITATION





Innovative Monitoring the Changes in Water Quality of the Mae Klong River Based on a New Normal Collaborative Network to Promote the Sustainability of the Ecosystem and Wellness in Samut Songkhram Area

This innovation is an outcome of a research project with the aim of strengthening the capacity of areas that require monitoring changes in water quality from efficient water management. It is applied in agricultural, local fishing, and salt farming areas in Samut Songkhram Province through the development of innovative monitoring, alerting, and forecasting water quality that affect the occupational wellness of the communities, the improvement of network building for monitoring water quality changes based on local cooperation, and learning sources about monitoring changes in water quality and assessing suitability for water management in order to reduce the impact on occupational areas which results in the following:

1. Innovative monitoring the changes in water quality based on collaborative learning of water quality monitoring technology and indices that influence agricultural and fishing business in the areas encountering annual water quality challenges.

2. Modeling for forecasting the changes in water quality and their impact on agricultural and environmental systems from water quality change by deep learning techniques.

3. A network for monitoring changes in water quality according to local collaboration, and learning sources on monitoring water quality and assessing suitability for water management to lower the impact on agricultural areas and preserve the environment.





These productions have an impact on the communities and networks in the agricultural, local fishing, and salt farming areas of the three subdistricts in Samut Songkhram Province as follows:

1.They provide knowledge, monitoring guidelines, and way of living based on natural resources that have monitoring systems and the ability of rapid response to the situation.

2.They provide livable communities with secure livelihood in the areas frequently facing changes in water quality. They also assist in restoring coastal ecosystem with complete database management and community alerting system that is easily accessible.

3.Samut Songkhram Province has constructed a model for monitoring and handling issues from changes in water quality by using deep learning techniques on a mobile application and QR Code Database for agricultural, fishing, consuming, and ecosystem in Mae Klong River. This action has been done according to a new normal collaborative network aiming to promote sustainable ecosystem and wellbeing in Samut Songkhram area in order to create a collaborative policy of water resource improvement in other provincial projects.

4. They create income for agricultural families, fishers, leaders, Department of District Agriculture and Fisheries, and people living nearby Mae Klong River in Samut Songkhram Province, who apply water for the purposes of agriculture, fishery, consuming, and ecosystem by reducing damage and promptly fixing problems arising from changes in water quality which have effects both on main and sideline occupations.





Innovative Monitoring and Controlling Water Quality Sediment and Contaminant for High-Quality Salt Production in Samut Songkhram Province

This innovation is a result of a research project with the purpose of analyzing the degrees of contaminants in the raw water sources used for natural sea salt production, building strategies for adjusting the water conditions suitable for salt production, enhancing water quality inspection techniques, and monitoring changes in water quality appropriately. These are in integration with the local knowledge of salt farmers, carrying out in the Bang Kaeo Subdistrict, Mueang District, Samut Songkhram Province, as a model to achieve the following outcomes:

1.Information regarding water quality in the main canals used for sea salt production.

2.Innovative sea salt production integrating with online water inspection technology that is approachable for sea farmers to benefit from the information of water quality used for producing high-quality salt.

3.A network of users of data regarding innovative water quality from a research project aiming to improve guidelines of high-quality salt production.

All these productions lead to impacts to communities and networks of salt farmers in Samut Songkhram Province as follows:

1.Farmers can use monitoring and inspecting innovations to track changes in water quality that affect the quality of salt in their areas. They also develop methods to produce high-quality salt based on the current water quality and environmental conditions. This leads to the production of sea salt that meets agricultural product standards and creates directions to academic development in producing salt products that meet consumer consumption standards.



2.Sea salt farmers have been improved their livelihood and wellness with the ability to address issues unqualified salt products. This enables more distribution channels for salt in the area. It, therefore, leads to a livable community which offers knowledgeable and skilled workers in a more suitable environment.

3. This improves the economy in the agricultural sector of the salt farmers in the area of Bang Kaeo Subdistrict, Amphawa District, Samut Songkhram Province. Farmers' incomes increase due to the stability in their agricultural occupation.



The collection of water and salt samples in the city canal water area and the sea salt production area near the border between Samut Sakhon Province and Samut Songkhram Province.



The collection of water and salt samples in Bang Bo canal water area in the sea production area of Bang Kaew Subdistrict.





The collection of water and salt samples in Muen Han canal water area in the sea production area of Bang Kaew Subdistrict.



The collection of water and salt samples in Pak Mab canal water area in the sea production area of Bang Kaew Subdistrict.

The procedures of these two projects answer the 6th purpose of sustainable development goals (SDG): Clean water management and sanitation, through offering opportunity in reducing water pollution and wastewater treatmentin order to increase the efficiency of water usage and addressing water scarcity issues, along with managing water resources thoroughly at both national and climate change management levels, which affects the changes in water quality. This can be achieved via technology development, situational evaluation, and monitoring to reduce risks from natural disasters resulting from changes in air quality that impact the changes in water quantity, water pollution problems affecting agricultural and fishing professions.



AFFORDABLE AND CLEAN ENERGY





A Solar Energy Management System in an Oil Palm Plantation

The Faculty of Industrial Technology has implemented a project of the development of an automatic solar energy management system in an oil palm plantation at the Learning Center for Enhancing Agricultural Productivity in Ban Huai Pling, Ratchakrut Subdistrict, Mueang District, Ranong Province, to develop an automatic solar energy management system for irrigating oil palm plantations as a prototype in the service area of the university.

This project involves managing water in an oil palm plantation using an automatic water management system controlled through the Internet of Things (IoT) that utilizes solar energy to produce affordable electricity for controlling irrigation. The outcomes and benefits of this project for the community are as follows:



1. Water savings in oil palm irrigation, as the system controls watering based on soil moisture levels.

2. Reduced labor costs for farmers in daily irrigation activities.

3. Farmers can assess soil nutrient levels (N-P-K) to apply appropriate amounts of fertilizers, reducing fertilizer costs.

4. The system can be applied to control irrigation for various types of crops.

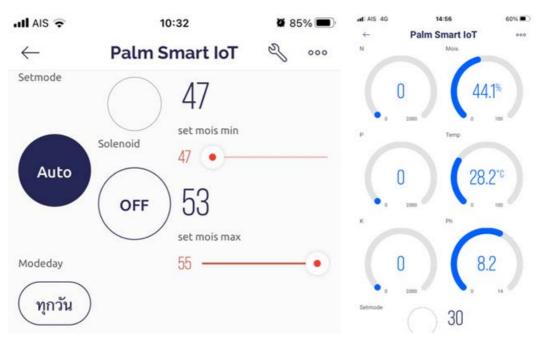


Automatic Watering Controller



Solar Panels for Generating Electricity





Display Showing the Control of an Automatic Water Management System on a Smartphone



Sensors Measure Humidity, Temperature, Fertilizer (N-P-K) In the Soil, and Solenoid Valves to Control Turning the Water on and Off



Sprinklers for Watering Oil Palm Trees and Pepper Planted between Oil Palm Trees



B DECENT WORK AND ECONOMIC GROWTH





Job Fair Recruitment Project Activities 2023

Student Development Division, is a key department responsible for providing skill development services to students. The "SSRU JOBFAIR" Job Fair Recruitment Project one of its important missions, held 12 times each academic year, and continuously conducted. As a primary department responsible for providing career guidance services, to students, alumni, and the general public, Student **Development Division** emphasizes promoting careers for students, alumni, and the general public who are looking for work prospects in the future, giving students the chance to work while they study, allowing them to take part in training programs, and offering career counseling. The main objectives of the project are as follows:



 To promote students' skills and abilities in professional training.
 To enable students to utilize their free time for income generation.

 To help students learn how to work and have job opportunities.
 To support program graduates in obtaining professions and jobs that can provide for themselves and their families.





Thai Namthip Collaborates with Suan Sunandha Rajabhat University, the Number 1 Rajabhat University in Thailand, to Enhance the Potential of Staff and Students in Logistics and Supply Chain Excellence

ThaiNamthip, one of the producers and distributors of beverages under the Coca-Cola business group in Thailand, and a leader in the Thai beverage industry, collaborates with Suan Sunandha Rajabhat University to enhance and develop logistics and supply chain skills for their company's personnel and university students. This is achieved through a knowledge exchange and training program conducted by qualified instructors from both parties. Additionally, the collaboration aims to promote quality personnel and create opportunities for new talent to enter the beverage market, preparing for the expansion of the Thai beverage market.



The cooperation between Thai Namthip and Suan Sunandha Rajabhat University, for 3 years starting from July 2023, aims to enhance and develop logistics and supply chain skills for both the company's personnel and university students. Suan Sunandha Rajabhat University will provide qualified instructors to deliver academic support and services, as well as develop relevant courses in accordance with the company's agreements. Thai Namthip, in return, will support the provision of instructors and practical learning through real-world work experience at the company's facilities, as well as encourage and support staff to pursue further education or training in relevant areas.



Source: ThaiNamthip (https://www.thainamthip.co.th/news/mou-ssru)



INDUSTRY, INNOVATION AND INFRASTRUCTURE





Suan Sunandha Rajabhat University Introduces the "Bella Carino" Brand, a Product from Developing Research on Local Herbs to Skin-Nourishing and Anti-aging Skincare Products

Associate Professor Dr. Luedech Girdwichai, the President of the University Council, presided over the opening ceremony of "Launching Bella Carino Products: Technology Transfer and Research and Innovation for Commercial Utilization Exhibition" organized by Institute of Research and Development to publicize the research and innovation results which were commercialized and expanded to be known to the public. In addition, Associate Professor Dr. Chutikarn Sriviboon, President of Suan Sunandha Rajabhat University, executives, researchers, lecturers from Institute of Research and Development and representatives from community enterprises also attended the ceremony at Cho Kaew Meeting Room, Suan Sunandha Rajabhat University.





Associate Professor Dr. Luedech Girdwichai, the President of the University Council, revealed that this Launching Bella Carino Products: **Technology Transfer and Research** and Innovation for Commercial Utilization Exhibition presented the research results funded by Thailand Science Research and Innovation (TSRI) to develop and promote income to the communities by studying local herbs that have properties of nourishing skin, slowing down aging and reducing wrinkles, and developing quality products that are modern and meet the consumer needs. The products have been applied for patents and petty patents. These products were the first innovation that could be able to create commercial value.



At present, more than 800 research and innovation of the university have been filed for patents or petty patents, and many of them have been awarded international awards. The patented and awarded research and innovation came from the mobilization and cooperation of Institute of Research and Development and researchers from different faculties and colleges. The important thing is that these research and innovations can be commercialized and utilized tangibly in terms of production and distribution. This is an excellent beginning for commercializing research results and innovations, promoting the product's acceptance, and publicizing the university's achievements.

Associate Professor Dr. Chutikarn Sriviboon, President of Suan Sunandha Rajabhat University, said that there were 3 products in this Launching Bella Carino Brand including 1. Mushroom Serum, 2. Bastard-Teak Night Cream, and 3. Grape Seaweed Night Cream developed by Dr. Narin Kakatum, the Lecturer of Applied Thai Traditional Medicine Department, College of Allied Health Sciences, Suan Sunandha Rajabhat University

and his patent/petty patent rights were transferred to the university in order to utilize and publicize to the public more extensively. On this occasion, there was a contract signing ceremony for the transfer of the innovations to entrepreneurs, including Mr. Jakarin Phoprom, the Chairman of Golden Banana Community Enterprise (Golden Banana Paper) and Mrs. Kheaw Joroknok, the Chairman of Enzyme Fermented Herb for Health Agricultural Community Enterprise (Kombucha Product) that could be further developed to create income and strengthen members of community enterprises and communities in the future.

"Suan Sunandha Rajabhat University encourages teachers to love research, develop knowledge for students, create students as professionals, and expand research results to benefit the community in order to further develop local ourcome into products that can create careers.





and income, which leads to the development of a strong community in accordance with Suan Sunandha's goal that our research must no longer remain on a shelf." Associate Professor Dr. Chutikarn Sriviboon said.

Dr. Narin Kakatum also claimed that 3 products under the Bella Carino Brand were conceived from the desire to cultivate local herbs in each area to support farmers and community enterprises in developing identity, adding value to local herbs as well as maximizing waste materials. For example, Mushroom Serum made from 3 kinds of mushroom spore including Abalone, Bhutan and Shiitake from organic farms that were normally left. According to research, it has protein, collagen, antioxidant and antiinflammatory properties that can be developed into a mushroom serum with properties to help protect and nourish the skin. The **Bastard-Teak Night Cream** (derived from Bastard-teak flower extract) is a native plant of Udon Thani province in Thailand. During the months of February and March, the flowers bloom in abundance and fall to the ground unused.

Through research, it was discovered that Bastard-teak flowers have properties that inhibit free radicals and inflammation, as well as reduce dark spots caused by UV radiation and various bacteria. As a result, a night cream product was developed using Bastard-teak flowers to help retain moisture, restore hydration, and reduce wrinkles on the face. Another product is the Grape Seaweed Night Cream (derived from Grape Seaweed extract). Grape Seaweed is commonly consumed fresh and needs to be consumed quickly as it easily spoils, resulting in frequent losses. To minimize losses and maximize the benefits of this ingredient, it was incorporated into a night cream product. This product is rich in minerals and various vitamins, including polyunsaturated fatty acids (PUFA), vitamin B2, vitamin E, and mineral salts. It has properties that inhibit free radicals and improve skin elasticity. This product helps retain moisture, restore hydration, and reduce wrinkles on the face. All products have undergone research and testing without causing any adverse effects on the skin. They have been developed as prototype products ready for market distribution.



Accordingly, commercial research and development efforts focus on transferring technology to community enterprises, enabling them to further develop their own products. The goal is to launch products under the brand "Bella Carino" in May. Initially, they will be available for sale at education centers within the network of Rajabhat University's campuses nationwide, with plans to expand distribution to leading department stores in the future.

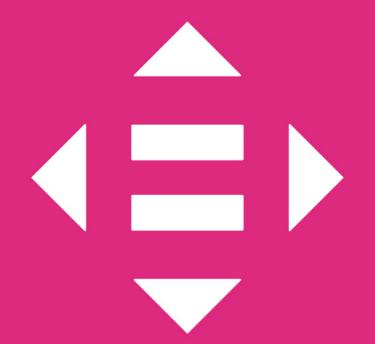








REDUCED INEQUALITIES





Suan Sunandha Rajabhat University Encouraged the Community in Establishing Suan Nok Community Agricultural Education Center of Samut Songkhram Province to Enhance the Quality Standards of Community Products Based on the Leading Academic Service Strategies by Strengthening Their Capabilities.

Mr.Sirisak Sirimankhala, Deputy Governor of Samut Songkhram, presided over the opening ceremony of Suan Nok Community Agricultural Education Center, Bang Yi Rong Subdistrict, Bang Khon Thi District, Samut Songkhram Province, along with Assistant Professor Dr. Phimporn Thongmuang, Director of Samut Songkhram Education Center, Associate Professor Dr. Bundit Phangnirun, the Vice President for Research and Development Subdivision, Associate Professor Dr. Rosjana Chandhasa, the Director of Research and Development Institute, and the executives participating in opening the Education Center Based on the Leading Academic Service Strategies by Strengthening Their Capabilities serving as a convergence point for integrating knowledge from research, academic services, teaching, and local wisdom.

It blended these aspects to create useful knowledge for communities, schools, community enterprises, professional groups, entrepreneurs, and the local area. Additionally, it contributed to the sustainable strengthening of these communities in line with His Majesty's teachings. Furthermore, it helped elevate the community product quality standards through research and academic services to certify the quality of production and various products, become a repository of knowledge of readyto-use innovation that can be further developed to create income and enhance the quality of life for people in the community.





In the dimension of academic services, the Institute of Research and Development, Suan Sunandha Rajabhat University, explained that the Institute of Research and Development at Suan Sunandha Rajabhat University aimed to enhance the quality of life for lowincome households through comprehensive local development. This includes initiatives like the establishment of community education centers to manage community resource sustainably under the Rajabhat Strategy for Local Development. The goals these projects were for communities to effectively utilize their resources to maximize development benefits within the budgets allocated by the government or supporting agencies. These community education centers aimed to serve as prototypes and examples for other communities, showcasing how to efficiently utilize their own resources. These efforts aligned with the Sustainable Development Goals (SDGs), encompassing the social, economic, and environmental dimensions, ultimately leading to sustainable development by integrating



collaboration from all sectors to ensure the highest possible benefits for local communities in the future.

The establishment of the Suan Nok Community Agricultural Education Center, Suan Sunandha Rajabhat University, began with research and innovation projects in collaboration with the existing education center. The Institute of Research and Development at Suan Sunandha Rajabhat University initiated these activities in 2021 by sending researchers into the field to study, collect data, identify issues, and assess local needs to exchange of knowledge between researchers and the community. The education center has been actively engaged in various activities, leveraging the existing knowledge and products within the community enterprise, such as natural tie-dyeing and coconut-based products.



In the knowledge exchange process, Suan Sunandha Rajabhat University sent researchers and students into the field to study, learn, and enhance their knowledge. During these field visits, they encountered the issue of "Bang Chang Chili," a local kitchen garden vegetable with a registered Geographic Indicator (GI) in Samut Songkhram province. However, there was a challenge: the cultivation of Bang Chang Chili was not as extensive as desired in the province. To address this issue, the researchers delved into various related data and initiated a project to promote increased cultivation of Bang Chang Chili. They started with proper cultivation trials to ensure the quality of the chili aligns with the standard characteristics of Bang Chang Chili. Subsequently, they further processed the chili into oil and extracts using scientific, technological, and innovative methods developed by Suan Sunandha Rajabhat University. This new innovation enabled the community enterprise of rural agriculture, particularly those who traditionally produced cosmetics and skincare products,



to utilize these chili-based ingredients in their product manufacturing to generate sustainable income for the community enterprise.

In addition, in the case study of innovation development from social problems was that addressed the issue of managing a large quantity of rose offerings after worship at Chulamanee Temple in Samut Songkhram province. Researchers from the university applied their knowledge to develop a process for making paper from rose stems. They documented and shared their knowledge with the community, involving them in each step of the process. The research eventually led to the production of paper from rose stems, which was then transformed into various products, including "Thao Wessuwan Talisman" and other products sold in Chulamanee Temple.



This initiative not only resolved a local issue but also contributed to community development. It aligned with the concept of a "Zero Waste" circular economy and supported the objectives of the provincial strategy for local development. This successful endeavor became the foundation for the official establishment of the Suan Nok Community Agricultural Education Center, which serves as a central hub for knowledge exchange and learning between researchers and the community. The center aims to gather and disseminate knowledge, allowing individuals to apply it practically to create livelihoods, generate income, and foster sustainable development within the local community. It aligns with the vision of Suan Sunandha Rajabhat University to be a hub for continuous innovation and learning, benefiting communities in various aspects of development in the future.





1 SUSTAINABLE CITIES AND COMMUNITIES





Suan Sunandha Rajabhat University, in Collaboration with the Bangkok Environment and Sanitation Office, Nawamintradhiraj University and the Dusit District Office Tests the Worthiness of Using 100% Electric Garbage Collection Vehicles

Asst. Prof. Dr. Mano Prachayapipat, the Director of the Institute for **Research and Academic Services in** Logistics and Supply Chain, College of Logistics and Supply Chain, Suan Sunandha Rajabhat University, stated that there is a growing trend of transitioning from gasoline vehicles to electric vehicles (EV), especially among leaders in both public and private sectors, who are enthusiastic and prioritize addressing global warming and the issue of fine particulate matter (PM 2.5) pollution. The Bangkok Metropolitan Administration (BMA), under the leadership of Mr. Chatchat Sitthiphan, the Governor of Bangkok, has shown its support for the people of Bangkok to use electric vehicles. They are preparing to establish electric charging stations at various locations, including district offices, hospitals, and public parks, to facilitate the convenience of the public.

Furthermore, there is a strong commitment to replace BMA's fleet of vehicles, including garbage collection trucks, water trucks, and road cleaning vehicles, which will gradually end their lease contracts and transition to electricpowered vehicles in the fiscal year 2024.

Therefore, to ensure confidence in the budget allocation and its benefits to the public, the Institute for Research and Academic Services in Logistics and Supply Chain at Suan Sunandha Rajabhat University, in collaboration with the Bangkok Environment and Sanitation Office, Nawamintradhiraj University, and the Dusit District Office, conducted a project to study and test the feasibility of using 100% electric garbage collection vehicles and greenhouse gas emissions management for electric garbage collection vehicles under the consultation support on standard certification of BSI Group (Thailand) Limited. The results of the testing showed that these vehicles can operate efficiently, drive uphill well, and carry up to 5 tons of garbage in a single trip, leading to time and cost savings.



Additionally, these vehicles do not experience fluid leaks or spillovers, preventing the spread of diseases to the public and significantly reducing noise pollution from the garbage compression process, nearly 100%. Importantly, this initiative leads to more than a 40% reduction in fuel costs and reduces the release of greenhouse gases, which are the main contributors to PM2.5 air pollution, by more than 90%. Furthermore, it has improved the health of garbage collectors and Bangkok residents, as they no longer have to inhale toxic fumes when electric garbage collection vehicles are 100% used.

By actively participating in this project, the project recognizes the importance of sustainable urban and community development. It is dedicated to creating opportunities for access to housing and basic services while elevating communities that are sustainable and safe through collaborative urban and community management planning, transformation, and sustainability.

Source: Matichon Online. 2023 (https://www.matichon.co.th/publicize/news_4186095)



Source: Dusit District Office. 2023 (https://www.facebook.com/dusitdistrict)



Source: Thansettakij. 2023 (https://www.thansettakij.com/business/576321)





Source: Matichon Online. 2023 (https://www.matichon.co.th/publicize/news_4186095)



12 RESPONSIBLE CONSUMPTION AND PRODUCTION





The "Innovation of Rose Upcycling" Helps Reduce Waste and Generate Income Back to the Community

Associate Professor Dr. Rosjana Chandhasa, the Director of **Research and Development Institute** at Suan Sunandha Rajabhat University, revealed that the Institute of Research and Development, Suan Sunandha Rajabhat University, conducted a research project titled "Innovation in Creating Useful Products from Offered Roses." The project was carried out in collaboration with Wat Chulamanee and the local community in the Amphawa District, Samut Songkhram province. Due to the fact that Wat Chulamanee, one of the ancient temples in Amphawa, attracts many worshippers who bring roses as offerings to seek blessings from "Phra Taweesuwan," both local and international tourists with a deep faith come to pay their respects with a significant number of roses. Consequently, the temple has to manage the surplus of offered roses continuously, resulting in increased costs and environmental impacts on the community.

Therefore, the research project addressed the needs of the temple and the community by developing innovative products from the offered roses, adding value and reducing environmental impacts.

Assistant Professor Dr. Phimporn Thongmuang, Vice President for Samut Songkhram Campus, Suan Sunandha Rajabhat University (Director of Samut Songkhram Education Center Suan Sunandha Rajabhat University at that time), stated that the research project on the innovation of creating useful products from offered roses at Wat Chulamanee aimed to transform every part of the roses into valueadded products. This includes both the rose petals and stems.





For rose petals, they can be processed into rose petal paper with beautiful shades of light purple and light pink, used for crafting "Phra Thaweesuwan," a traditional Thai amulet. The remaining waste from the petal-extraction process is dried and ground into rose petal powder, which can be used as an ingredient in various applications such as making auspicious items or mixing it with clay for crafting rose-shaped offerings dedicated to Phra Taweesuwan. Moreover, rose petals can also be utilized to extract rose oil, a key ingredient in cosmetics, perfumes, and lip balms. This rose oil is a unique formula for the Traditional Thai Medicine program at the College of Allied Health Sciences, Suan Sunandha Rajabhat University. As for rose stems, they are dried and provided to the local community's cooperative to be turned into rose stem paper. The university then purchases the rose stem paper from the community cooperative and donates it to Wat Chulamanee for crafting "Phra Taweesuwan." As a result, the project has successfully created various innovative rosebased products, bringing income back to the community while reducing waste.

Phaisankitjaporn, the Assistant Abbot of Wat Chulamanee, stated that before collaborating with Suan Sunandha Rajabhat University, the temple faced issues in dealing with the disposal of rose offerings brought by devotees to pay respect to Phra Taweesuwan. On some days, there were no less than 50,000 to 60,000 roses, and during holidays, the number could rise to as many as 100,000 roses. This required an expenditure of no less than 8,000 baht per day for their disposal. The temple faced these challenges until receiving assistance from the Institute of Research and Development and the Samut Songkhram Provincial Education Center, Suan Sunandha Rajabhat University.



Source: Thairath Online. 2022 (https://www.thairath.co.th/news/local/central/2454760)



They initiated a research project to create rose-based products, not only addressing the issue of managing the growing number of rose offerings but also generating income by renting out these rose-based products. This initiative received significant positive feedback within just a 2-month period. The income generated from this project was used to provide scholarships to more than 100 students in Samut Songkhram Province, with each scholarship amounting to 5,000 baht. In total, this initiative contributed 500,000 baht. Importantly, on July 28, 2022, Wat Chulamanee plans to use the income to grant another 200 scholarships to students as an act of royal benevolence on the occasion of H.M. King Maha Vajiralongkorn's Birthday.





Source: Dailyboomm. 2022. (https://www.dailyboomm.com/20/07/2022/30519/? fbclid=lwAR0JG--XKBN3OL4Qi_syOrDjKGxzL3sspgX7BuUeGmHvnswoefFr2GlgtFM)



CLIMATE ACTION





The Department of Occupational Safety and Health Technology Organizes Activities to Plant Conservation Forests to Help Solve the Problem of Global Warming and Restore Nature and the Environment According to the Royal Initiative

On September 7, 2023, the Department of Occupational Safety and Health Technology participated in environmental conservation efforts by organizing a reforestation activity to address the issue of global warming, restore nature, and protect the environment in line with the Royal Initiative. This initiative, concerned with forest conservation, took place at Khao Yot lang, Nong Nam Daeng Subdistrict, Pak Chong District, Nakhon Ratchasima Province. A total of 500 seedlings from 5 different species, namely Ratchapruek, Kanlapapruek, Chaiyapruek, Lueangpridiyakorn, and Kratinnarong, were planted.





Lecturers From the Faculty of Science and Technology Represented the University to Participate in the Regional Leadership Forum Held in Ho Chi Minh City, Vietnam

Assistant Professor Dr. Ms. Walaiporn Phonphan, the Head of Department of Environmental Science and Technology, Faculty of Science and Technology, and the Representive of Suan Sunandha Rajabhat University, participated in the 2nd Regional Leadership Forum and Workshop in Research Governance on Supporting Sustainable Research Ecosystems in Higher Education Institutions in the GMS and Timor-Leste, hosted by SEAMEO (RIHED). The event aimed to foster international collaboration for addressing climate change as well as sustainable water and agriculture resource management. The event was held during 11 - 13 September 2023 at Ho Chi Minh City, Vietnam.











Researchers from Suan Sunandha Rajabhat University Earned a Gold Medal for Their Work on "Beekeeping Equipment and Honey Extractor" at an International Stage, Contributing to the Sustainable Development Goals (SDGs)

Assistant Professor Dr. Kanyaphat Thanakulwuthiroj from the Faculty of Fine and Applied Arts, Assistant Professor Morakot Worachairungreung from the Faculty of Humanities and Social Sciences, and Ms. Duangjai Limsaksri from the Faculty of Fine and Applied Arts at Suan Sunandha Rajabhat University received gold and special awards for their work on "Beekeeping Equipment and Honey Extractor" at the 2023 Japan Design, Idea, and Invention Expo (JDIE 2023) held in Tokyo, Japan on July 8, 2023.

Assistant Professor Dr. Kanyaphat Thanakulwuthiroj stated that the "Beekeeping Equipment and Honey Extractor" is an innovative beehive design that allows for honey harvesting without the need for smoking or disrupting the bees. The beehive design enables bees to continue their life cycle without the need to build new honeycombs, ensuring continuous honey production. The unique and environmentally-friendly structure of the hive, along with appropriately sized honeycomb frames, makes it easy to extract honey without damaging the bees. The hive also features a queen bee tube for queen bee separation and management.





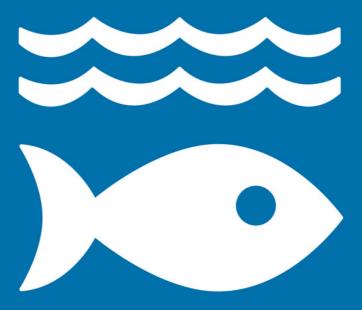
This project is considered an adaptation to address climate change, which should be pursued in conjunction with sustainable natural resource management. It aligns with the Sustainable Development Goals (SDGs), specifically Goal 13, which calls for urgent action to combat climate change and its impacts.







14 LIFE BELOW WATER





The Project of Increasing the Conservation Potential of Local Aquatic Animals, Mackerel, Blue Crab, and Manta Ray Using Mangrove Trees in Samut Songkhram Province

The project of increasing the conservation potential of local aquatic animals, mackerel, blue crab, and manta ray using mangrove trees was conducted under the objective of surveying, creating a geographic code, and establishing a high-quality environmental physical database suitable for the conservation of local aquatic animals, such as mackerel, blue crab, and manta ray. It also assesses the environmental impacts of mangrove forest areas that contribute to the breeding grounds for local aquatic animals like mackerel, blue crab, and manta ray. The research is carried out in the Bang Kaeo Subdistrict, Mueang District, and Phraek Nam Daeng Subdistrict, Amphawa District, Samut Songkhram Province.

The outcomes of the project are as follows:

1. GIS maps and a high-quality physical environmental database suitable for the conservation of local aquatic animals such as mackerel, blue crab, and manta ray.

2. Data on mangrove forest resources and changes in mangrove forest areas using remote sensing data.

3. Guidelines for assessing the environmental impact of mangrove forest areas that contribute to the breeding of local aquatic animals like mackerel, blue crab, and manta ray.

4. A set of educational materials on mangrove forest conservation and coastal environmental systems for the conservation of local aquatic animals.



Map of the area where mackerel, blue crabs, and manta rays are found in Samut Songkhram



All of these outcomes have had an impact on the areas of Bang Kaeo Subdistrict, Mueang District, and Phraek Nam Daeng Subdistrict, Amphawa District, Samut Songkhram Province, as follows:

1. Knowledge and guidelines for monitoring the changes in natural resources of the mangrove forest, which serve as a food source for marine life, have been created.

2. A livable community has been established, creating awareness within the community regarding the changes in the environmental system of the mangrove forest, which affects the livelihoods of local fishermen.





Collection of water quality and plankton samples in the mangrove forest area





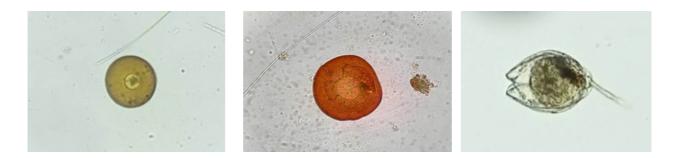


Collection of blue crab and mackerel samples and survey of local fishing groups





Characteristics of phytoplankton found in mangrove forest areas



Characteristics of zooplankton found in mangrove forest areas



Training and preparation of manuals for conservation of natural resources of mangrove forests



LIFE ON LAND





The Volunteer project "TechnoVolunteer": Train Rides, Reforestation, and Seed Shooting Activities.

On May 20, 2023, the Faculty of Industrial Technology organized the "TechnoVolunteer" activity, "Train Rides, Reforestation, and Seed Shooting," in Kanchanaburi Province. The project aimed to raise participants' awareness about the importance of conserving and restoring the nation's forest resources, and to emphasize the importance of conserving plant species through tree planting and reforestation. The activity involved practical learning through planting trees using a seed shooting method.









Suan Sunandha Rajabhat University Collaborated with Biodiversity-based Economy Development Office (BEDO) to Organized a Competition for Presenting Ideas to Develop "Biodiversity Catalog" Biological Data Database System

The Institute of Research and Development, Suan Sunandha Rajabhat University, under the collaboration with Biodiversity-based Economy Development Office (Public Organization) or BEDO organized a competition for presenting ideas to develop the "Biodiversity Catalog," a biological data database system at Chokaew Meeting Room, Suan Sunandha Rajabhat University, and via online platform on September 2023. The event was honored by Dr. Thanit Changthaworn, the BEDO Deputy Director, to give an opening speech.

The presentation of ideas to develop the "Biodiversity Catalog,"

a biological data database system aimed to showcase a diverse range of concepts for designing an economic database based on biological resources within the Biodiversity Catalog of the young generation to enhance the database innovation capabilities of qualified students as well as to encourage access to the database system to increase the value of biological resources, and transfer the use of information to the new generation from the biological database and pass it on to communities and localities. There were 14 participating teams of student representatives from 6 institutions including Suan Sunandha Rajabhat University, Chandrakasem Rajabhat University, Roi Et Rajabhat University, Suranaree University of Technology, King Mongkut's Institute of Technology Ladkrabang, and Phetchaburi Information Campus of Silpakorn University.





In this competition, it is an opportunity for students and the younger generation to present a variety of ideas for developing the "Biodiversity Catalog["] database system. The goal is to showcase diverse concepts for designing an economic database based on biological resources within the Biodiversity Catalog, focusing on innovative technology. The competition aims to nurture and enhance the database innovation capabilities of selected students. Moreover, it encourages database access to increase the value of biological resources and transfer the use of information from the biological database to the new generation communities. There 14 and were participating teams from representatives of six institutions, including Suan Sunandha Rajabhat University, Chandrakasem Rajabhat University, Roi Et Rajabhat University, Suranaree University of Technology, King Mongkut's Institute of Technology Ladkrabang, and Phetchaburi IT Campus of Silpakorn University.





Suan Sunandha Rajabhat University, Participated in Natural Dyeing Using Lychee Leaves at the Suan Nok Agricultural Community Enterprise Learning Center, Bang Yi Rong Subdistrict, Bang Khonthi District, Samut Songkhram Province

The Institute of Research and Development, Suan Sunandha Rajabhat University, conduct a fieldwork to organize the project for developing a sustainable learning center for community resource management under Strategy of Rajabhat University for Local Development by using natural dyeing using lychee leaves at the Suan Nok Agricultural Community Enterprise Learning Center, Bang Yi Rong Subdistrict, Bang Khonthi District, Samut Songkhram Province. The activity was honored by Ms. Buppha Waijaroen, the Chairman of the Agricultural Community Enterprise, to be a guest speaker on natural dyeing using lychee leaves, where the extracted dyes were used to color fabric. It was seen that the proper management of wastewater from the dyeing process was emphasized that the learning center had a wastewater treatment system in place, which allowed treated water to be reused.







This learning activity provided a hands-on approach to learning and community resource management, aligning with the Sustainable Development Goals (SDGs), particularly SDG 8: Promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all; SDG 12: Ensure sustainable consumption and production patterns; and SDG 15: Protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, halt and reverse land degradation, and halt biodiversity loss.







16 PEACE, JUSTICE AND STRONG INSTITUTIONS



Workshop Project: Human Rights, Social Justice and Governance by the Rule of Law

The Udon Thani Provincial Education Center of Suan Sunandha Rajabhat University organized a workshop project on human rights, social justice and governance by the rule of law for students, university staffs, and the general public in Udon Thani Province. The workshop was honored by Mr. Thaweesak Sarasap, the Director of the Provincial Office of Justice in Udon Thani, to be as a keynote speaker. The objectives of this workshop project encompass 2 main aspects. Firstly, it aims to provide knowledge about human rights from various perspectives, including social justice, governance by the rule of law, and the dynamics of power. Secondly, it seeks to establish a theoretical connection and practical application of human rights in the context of global development in the era of globalization and the New Normal.



In the conclusion, the project hope that participants in this workshop will practically integrate and implement the principles of human rights, social justice, and governance by the rule of law in a way that aligns with globalization trends. This will lead them to sustainable development in the future that contributes to the creation of a society with "Peace, Justice, and Strong Institutions."







'Suan Sunandha' Promotes the Values of 'Students' to Know Morality According to the Principles of Good Governance

The Student Development Division, in collaboration with the Student Activity and Alumni Affairs Section, Suan Sunandha Rajabhat University, organized an online training program titled "Building Armor for Youth, Enriching the Soul" as part of the campaign to promote ethical and moral values based on the principles of Integrity and Transparency Assessment (ITA). In this training, Assistant professor Dr. Jetsarit Angsukanchanakul, the Vice President for Student Affairs presided over the opening ceremony and provided students guidance on participating in the activity.

This activity was held for 4 days, from February 8th to February 11th, 2023, through an online platform to enhance values, provide knowledge, and raise awareness of ethical and moral principles, as well as instill an anti-corruption mindset, in line with the principles of Integrity and Transparency Assessment (ITA) and good governance entailing attitudes and behaviors that resist corruption and misconduct, which are vital for the future careers of Suan Sunandha Rajabhat University students.

In addition, Mr. Kasem Jittivuthinan and Mr. Tinnapop Pattana, the Anti-Corruption Officers, Professional Level, Office of the National Anti-Corruption Commission, was invited to be a speaker on morality and ethics creation as well as guidelines for student participation in combating corruption for students. There were many students interested in this activity

in this activity.



riSource: Kom Chad Luek Online. 2023 (https://www.komchadluek.net/news/education/542563)



Lecturers of Political Science and Governance Organized a Training on the Enforcement of Traffic Laws and Road Safety for Students and General Public in Suphan Buri Province

Lecturers of the College of Politics and Government, Suan Sunandha Rajabhat University, led by Assistant Professor, Police Lieutenant Colonel Dr. Waiphot Kulachai, the Deputy Dean for Research and Academic Services /Project Head, College of Politics and Government, conducted a training to provide knowledge to students and general public about law enforcement and road safety (speeding, drunk driving, helmet usage, running red lights, and seatbelt usage). The objective was to transfer knowledge on traffic law enforcement and road safety and promote the dissemination of this knowledge on a broader scale through networks and other stakeholders. The project of "Knowledge Management and Research Transfer on Law Enforcement and Road Safety (Pilot Project in Suphanburi Province)" received research funding from the National Research Council of Thailand (NRCT) and was held at Wat Khao Phra School in Suphan Buri province on January 11, 2023.

This project is aligned with Sustainable Development Goal 16: Peace, Justice, and Strong Institutions (SDG 16) aiming to provide academic services to the community in the fields of law, human rights, justice, and anti-corruption. This will enable students, university staff, and general public to easily and affordably access the legal processes and legal knowledge, promoting peace, justice, and the fight against corruption.





PARTNERSHIPS FOR THE GOALS





Suan Sunandha MOU with the Thailand Professional Qualifications Institute to Promote and Develop Human Resources through the Professional Qualification System and the E-workforce Ecosystem

Associate Professor Dr. Chutikarn Sriviboon, the President of Suan Sunandha Rajabhat University, and Ms. Chullada Meechul, the Deputy Director of Academic Affairs Acting Director of the Institute of Professional Qualifications, jointly signed a Memorandum of Understanding (MOU) between Suan Sunandha Rajabhat University and the Institute of Professional Qualifications (Public Organization). This signing took place at the University Council Meeting Room, Building 31, 5th Floor, Suan Sunandha Rajabhat University.

This MOU is based on the collaboration between TPQI and SSRU, which aims to work together to promote and develop the workforce, connecting professional qualifications with educational qualifications. They will analyze educational programs to align them with professional standards, leading to the Competency Credit Bank system, fostering and developing learners to acquire professional qualifications. Additionally, they will support the assessment of personal competencies based on professional standards. Furthermore, they aim to promote the use of the Electronic Work Portfolio (E-Portfolio) on a smart platform for managing human resource data and competency development for lifelong learning in Thailand's E-Workforce Ecosystem.





Suan Sunandha Rajabhat University Collaborated the Samut Songkhram Province Network, to Drive a Project of Developing the Province's Capabilities through Science, Research, and Innovation

Suan Sunandha Rajabhat University was assigned by Office of the Permanent Secretary, Ministry of Higher Education, Science, Research and Innovation, to establish CDO of MHESI in Samut Songkhram Province to support the "Thailand Together" policy at the provincial level as part of the agreement for cooperation on "Provincial Development Through Higher Education, Science, Research and Innovation" between Ministry of Higher Education, Science, Research and Innovation and Ministry of Interior in November 21, 2022, to bring the work of Higher Education, Science, Research and Innovation (MHESI) to use in developing the province. Raise the quality of life of people in every area of the country. There are CDO of MHESI operating units in all 76 provinces nationwide. Responsible for coordinating the drive and receiving issues that are urgently needed in the province related to Higher Education, Science, Research and Innovation in supporting the development of the province.





The CDO of MHESI, Samut Songkhram Province, is operating under the One Route Cooperative Platform Restructuring model to bring the activities related to Science, Research, and Innovation into the local context. This is achieved by linking the operations from the ministerial level down to the provincial level through various cooperation mechanisms to streamline the work process, thus enhancing operational efficiency. The objectives of this initiative are as follows:

1. To develop projects in the field of science, research, and innovation for provincial development during the fiscal years 2025 - 2027, aligned with the regional development needs and strategies.

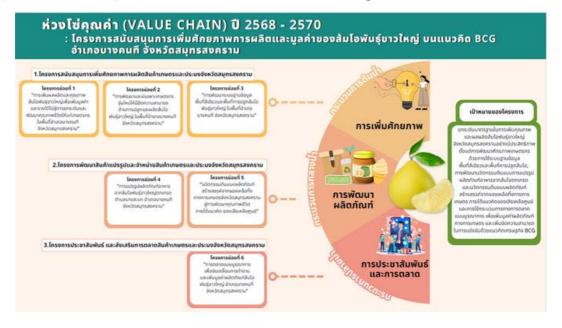
2.To implement science, research, and innovation projects that contribute to provincial development in accordance with the agreement for cooperation on regional development through education, science, research, and innovation.

3.To promote collaborative mechanisms for the transformation of work in the region among educational institutions, government agencies under the ministry, as well as public and private organizations the region.





After conducting on-site activities through Focus Group meetings with various stakeholders, including provincial-level government agencies, public and private organizations, and pomelo farmers growing the large white Kow Yai Pomelo variety, CDO of MHESI, Samut Songkhram Province, has analyzed and summarized the proposal for a regional development project that aligns with the needs of Samut Songkhram Province. The main project is titled "Supporting the Enhancement of Production Potential and Kow Yai Pomelo Value Based on the BCG Concept in Bang Khonthi District, Samut Songkhram Province." It comprises 6 sub-projects as shown in the image.



The project proposal titled "the Project of Supporting the Enhancement of Production Potential and Kow Yai Pomelo Value Based on the BCG Concept in Bang Khonthi District, Samut Songkhram Province" represents an innovative approach to manage surplus agricultural produce. The Kow Yai Pomelo Community Enterprise in Bang Sakae Subdistrict, Bang Khonthi District, Samut Songkhram Province, has effectively addressed waste management challenges, transforming them into valuable raw materials that generate income. This project has increased income for farmers, community members, and improved their quality of life. It has also empowered a new generation of young farmers to replace the aging population and set quality standards for Kow Yai Pomelo products, reducing low-grade quality productivity.











Suan Sunandha Rajabhat University Participated in Mobilizing Social Innovation for Utilization

In the second year of their participation, Suan Sunandha Rajabhat University has joined as a "Social Innovation for Utilization Unit" in collaboration with the National Innovation Agency (NIA). This initiative focuses on social innovation at the regional level, aiming to address societal issues and reduce disparities in underprivileged regions of the country. The "Regional Social Innovation for Utilization Unit" has been established to spread its presence across various regions and provide training and support to empower communities and social entrepreneurs with innovation capabilities. The goal is to develop "Social Innovation" that directly addresses the needs and challenges of society and communities, leading to sustainable and impactful solutions. This year, the university has been working in various target regions, including Loei Province, Nong Khai Province, Bueng Kan Province, Nong Bua Lamphu Province, Udon Thani Province, Sakon Nakhon Province, Nakhon Phanom Province, Khon Kaen Province, Kalasin Province, Mukdahan Province, Roi Et Province, and Maha Sarakham Province. This initiative aligns with the university's development policy, which focuses on applying research processes, from basic research to applied research and policy research, to address social issues and reduce disparities in the northeastern upper region. The emphasis is on creating innovations and inventions.







The Social Innovation for Utilization Unit in the upper northeastern region, operated by Suan Sunandha Rajabhat University, has achieved significant results this year including successfully developing 14 innovative projects dedicated to societal advancement as well as conducting training programs to enhance innovation skills for societal improvement, involving 30 participants. These accomplishments have led to the establishment of Social Innovation Networks.

In the mobilization of social innovation for utilization in the upper northeastern region, the collaborative network and innovation ecosystem between researchers and communities are considered pivotal in enhancing the quality of life for all segments of the population. This encompasses health, education, access to public services, and social welfare. The primary objective is to address issues of poverty, inequality, and social challenges in the less privileged provinces to reduce disparities in these target regions through the "the Project of SIDUP-Isan-South," in order to create balanced, inclusive, and beneficial communities for all sectors.



















105

CONTRIBUTORS

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"SUAN SUNANDHA RAJABHAT UNIVERSITY UNIVERSITY OF SUSTAINABILITY"

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