





























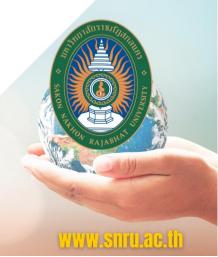






SUSTAINABLE DEVELOPMENT GOALS REPORT

SAKON NAKHON RAJABHAT UNIVERSITY







SDGs

Sakon Nakhon Rajabhat University

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The Sustainable Development Goals (SDGs) of Sakon Nakhon Rajabhat University represent a roadmap for sustainable development. These goals are designed to enhance community resilience and sustainability, with a specific focus on ensuring equal rights and opportunities in education, health, employment, and social equality. Additionally, they underscore the importance of adapting to environmental changes. Through clearly defined objectives and collaborative efforts, the university is committed to instigating positive change in both the local and global communities. This commitment aims to facilitate long-term, sustainable development across all sectors of society and the environment. The university has identified four sustainable development goals that align with its core competencies

and strategic objectives.

Message from the President

The past activities of Sakon Nakhon Rajabhat University related to the Sustainable Development Goals (SDGs) have been focused on creating sustainable development in the areas of the economy, society, and the environment. The university has emphasized the importance of adhering to the SDGs and has provided a comprehensive report on the progress and achievements made in the past year.

In terms of education, the university has been dedicated to developing a curriculum that aligns with the changing society and industry, aiming to equip students with knowledge and skills for the future. In terms of social development, the university has implemented various projects and activities to promote equal opportunities and inclusivity in education, health, employment, and decision-making. These efforts have resulted in the creation of a strong and sustainable community.

Regarding environmental sustainability, the university has prioritized the use of efficient and environmentally friendly energy and has promoted understanding and conservation of the environment in the surrounding areas. Lastly, the university has actively engaged in international and regional cooperation, participating in activities and projects with government and private organizations to foster knowledge and experiences that contribute to sustainable development.

Despite the achievements, there is still room for improvement to meet the evolving needs and changes of society and the environment. The university expresses gratitude to everyone who has supported and contributed to its past endeavors. With determination and dedication to continuing development, it aims to achieve a sustainable and successful future.

Assistant Professor Chakrit Chanchitpreecha

Acting President of Sakon Nakhon Rajabhat University



About Sakon Nakhon Rajabhat University

Sakon Nakhon Rajabhat University is an educational institution dedicated to fostering a sustainable and resilient society by actively pursuing the goals of Sustainable Development (SDGs). The university's mission is to produce graduates who possess the knowledge and understanding required for fostering prosperity within the community and society as a whole. Comprising 6 faculties, the university offers a total of 63 courses specifically designed to equip students with the knowledge and skills necessary to contribute to the SDGs. The educational approach places a strong emphasis on comprehensive and creative learning directly connected to sustainable development. The university's commitment to the SDGs is manifested in the following ways: 1) Sustainable Learning: The university prioritizes high-quality education and knowledge related to the SDGs, preparing students for active participation in sustainable development. 2) Innovation and Research: The university actively promotes research and innovation to address the challenges of sustainable development and meet the evolving needs of the community. 3) Academic Services and Communication: The university provides exceptional academic services and knowledge dissemination to fortify and advance sustainable change. 4) Conservation and Cultural Promotion: The university collaborates closely with the community to preserve local arts and culture, creating value and a sense of identity for the community and society. 5) Sustainable Management: The university's management practices are characterized by ethics, transparency, and sustainability to ensure all aspects of its operations are conducted with integrity.

Sakon Nakhon Rajabhat University aspires to be a leader in the promotion of sustainable development, not only in society but also in the environment. It seeks to inspire other communities and societies to work toward positive and transformative change.



Sakon Nakhon Rajabhat University is situated 6 kilometers from the city of Udon Thani province. It spans a total area of 101,9200 sq.m.. Historically, this land was owned by the Ministry of Interior and the Royal Thai Police Department, serving as the former location of the Police Training School of Sakon Nakhon, which catered to four provinces. However, the Ministry of Interior ceased its operations and merged with other regions. The Ministry of Education then acquired the land with the intention of constructing the Provincial Court of Sakon Nakhon. The construction of the new building was completed in 1963, but it remained unused by the Ministry of Education. Subsequently, the project was revised to construct the Provincial Court at the present location of the Provincial Government Center in Sakon Nakhon. Following this change, the Ministry of Education requested the land and the existing construction to establish a teacher training school. Field Marshal Sarit Thanarat, the former Prime Minister, directed the transfer of the land and construction to the Ministry of Education for the purpose of founding a teacher training school. Consequently, Sakon Nakhon Teacher Training School was established on July 17, 1964.

On February 14, 1992, His Majesty King Bhumibol Adulyadej graciously bestowed the name "Rajabhat Institute" upon all teacher colleges nationwide. Then, on June 9, 2004, His Majesty King Bhumibol Adulyadej proclaimed the Rajabhat University Act of 2004, which was published in the Royal Gazette, Volume 121, Special Issue 23, on June 14, 2004. Consequently, Sakon Nakhon Rajabhat Institute was elevated to the status of "Sakon Nakhon Rajabhat University," starting from June 15, 2004. The first acting president of Sakon Nakhon Rajabhat University was Associate Professor Dr. Wathana Suwannatraya, followed by the current acting president, Associate Professor Chakrit Chanpracha.

The Symbolic Colors of the University

Green and pink

The Symbolic Tree of the University

Golden shower (Cassia fistula L.)

Vision

Sakon Nakhon Rajabhat University is a leading educational institution that elevates the local area to the international level through innovations

Mission

- 1. Produce quality teachers and graduates to serve local and other communities.
- 2. Create research and innovations to develop knowledge and transfer it to local and other communities.
- 3. Provide academic services and transfer technology to local and other communities.
- 4. Preserve and promote arts and culture to create value and significance for local and other communities.
- 5. Manage with integrity and transparency to ensure quality governance.





Announcement of Sakon Nakhon Rajabhat University Subject: University development policy to promote sustainable development goals

(Sustainable Development Goals : SDGs)

Sakon Nakhon Rajabhat University has taken action to drive the university towards sustainable development, in line with the goals of Sustainable Development (Sustainable Development Goals: SDGs). The university has, therefore, established a policy to strengthen its operational and rehabilitation mechanisms and to foster global cooperation partnerships for sustainable development.

By virtue of Section 31 (1) and (2) of the Rajabhat University Act B.E. 2004, a university development policy has been established to promote the Sustainable Development Goals (SDGs) and to strengthen the operating mechanisms and rehabilitation, fostering a global partnership for the sustainable development of the university as follows:

- To set the main operational direction in moving towards the goal of sustainable development, the university has established all 17 Sustainable Development Goals (SDGs) as an integral part of its mission to achieve these goals through strategic and proactive management.
- 2. The budget allocation is meant to facilitate activities and support the Sustainable Development Goals. All 17 goals must be fully integrated with the university's mission.
- Promote the establishment of a network of cooperation for sharing Impact Rankings with different domestic and international agencies.
- 4. Promote personnel to acquire the knowledge and understanding of Impact Rankings so they can implement them correctly.

Henceforward

Announced on January 12, 2022

(Assistant Professor Chakrit Chanchitpreecha)

Chakit Chung

Acting President of Sakon Nakhon Rajabhat University

Introduction

The Sustainable Development Goals (SDGs) form a crucial part of Sakon Nakhon Rajabhat University's mission. The university is dedicated to establishing a sustainable educational institution that takes responsibility for building a robust economy, a just society, and a healthy environment. This commitment contributes to sustainable development and fosters quality and equitable growth within communities and societies, both at the national and regional levels. These objectives are realized through the pursuit of SDGs that align with our strategic goals, comprising four main objectives.

SO1 To enhance the quality of education and learning at the university, we aim to establish a learning environment that nurtures intelligent and capable learners. We are dedicated to supporting students in lifelong learning that is contemporary and aligned with the evolving needs of society and industries in the current era. Our focused development efforts will serve as an inspiration to create enduring knowledge and experiences for students, forming a crucial foundation in building a robust learning community.

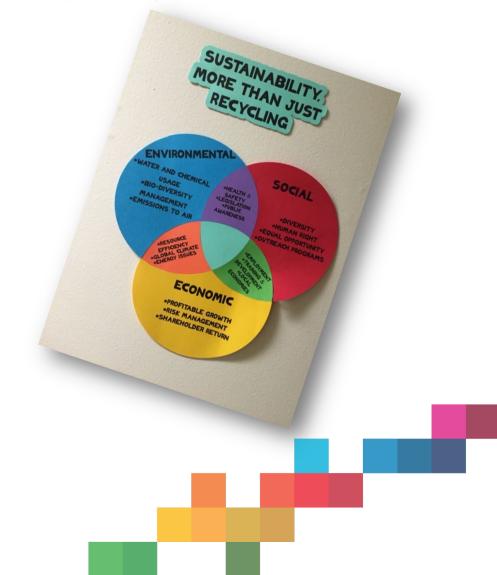
SO2 To create sustainable development in social equality and resilience by fostering an inclusive environment that ensures equal access to education, healthcare, employment, and participation in decision-making. We are committed to building a socially robust society that upholds equal rights and opportunities for all individuals to grow and develop. This endeavor represents a collective effort in constructing a friendly and equitable society that spans all dimensions of life.

SO3 Sustainable development in the environment and energy sector is a crucial approach that universities employ to advance toward their desired sustainability goals. This is accomplished by initiating activities and projects that encourage the adoption of energy-efficient and environmentally friendly practices. Moreover, it fosters awareness and accountability in addressing environmental challenges and their impact on communities and the world.

SO4 Sustainable development through international and regional collaboration is a critical approach for universities to facilitate effective knowledge sharing, experiences, and resource-sharing with other educational institutions. It generates opportunities for collaborative learning and fosters the creation of valuable and efficient partnerships. The collaboration between universities and regions serves as an inspiration for cultivating sustainable development that increases in value and effectiveness across various dimensions.

With a strategic focus on all four objectives of the SDGs, Rajabhat Sakon Nakhon University aims to develop a friendly and sustainable environment that promotes economic, social, and environmental growth. We also strive for equality and social resilience, while collaborating with countries and regions to foster sustainable development in educational institutions and communities at both regional and global levels.

In addition, we are pleased to present Rajabhat Sakon Nakhon University's SDGs report, which demonstrates our dedication and success in achieving the strategic objectives we have set for creating sustainable development within our organization.



The Sustainable Development Goals (SDGs) SDG 1 : No poverty SDG 2 : Zero hunger (No hunger) SDG 3 : Good health and well-being SDG 4 : Quality education SDG 5 : Gender equality SDG 6 : Clean water and sanitation SDG 7 : Affordable and clean energy SDG 8 : Decent work and economic growth SDG 9 : Industry, Innovation and Infrastructure SDG 10 : Reduced inequality SDG 11 : Sustainable cities and communities SDG 12 : Responsible consumption and production SDG 13 : Climate action SDG 14 : Life below water SDG 15 : Life on land SDG 16 : Peace, justice and strong institutions : Partnership for the goals **SDG 17**



PROJECT BOOSTS PROFESSIONAL YOUTH VOCATIONAL CLASSROOMS FOR INCOME GROWTH

In an effort to strong promote, sustainable community and alleviate poverty, a team of researchers initiated the 'Lung Oyster Cultivation' project in collaboration with social engineering students from Sakon Nakhon Rajabhat University (MRSN) and the local 'Kong Kam Ngap Farm' mushroom cultivation group. This project represents the inaugural step toward establishing a food-secure community while increasing household income. Its main objective is to combat poverty in all its manifestations by applying the concept of vocational mushroom cultivation to boost income and create sustainable livelihoods for both the youth and local community.

Moreover, the project strives to establish a platform for mutual learning between social engineering students and the local community, facilitating the exchange of knowledge and experiences in sustainable mushroom cultivation and agriculture. The project's 85 participants received training in mushroom cultivation, as well as encouragement to develop the '4 C skills' based on Soft Skills principles, thereby enhancing their ability to live and work together.

The project yielded 4,500 angel mushrooms (valued at 45,000 baht) and fresh mushrooms (valued at 315,000 baht), serving as motivation for future production. As a result of this initiative, the community now enjoys food security, and students and households within the community have a newfound source of income from mushroom cultivation. Additionally, the school can enhance learning activities within the vocational curriculum, nurturing entrepreneurial skills for the future.





2 ZERO HUNGER

End hunger, achieve food security and improved nutrition, and promote sustainable agriculture

ADVANCING SUSTAINABLE AGRICULTURAL PRACTICES AND WASTE REDUCTION THROUGH EARTHWORM CULTIVATION

AND AGRICULTURAL EDUCATION



Assistant Professor Dr. Ratmanee Channabun. a faculty member of the Faculty of Agricultural Technology at Sakon Nakhon Rajabhat University, and the Center of Excellence in Modern Agriculture conducted a study on the utilization of various species of earthworms in Thailand. They collected Thai earthworm species from different regions of the northeastern part of the country and conducted experiments on their cultivation. These earthworms were fed with leftover food scraps from the university's cafeteria, aiming to reduce waste. The research findings revealed that Thai earthworm species have a strong capacity for decomposing food scraps, and there are plans to expand this initiative to the public who are interested in sustainable waste management.

Within the campus, teaching and learning related to agricultural farm management are organized by the Faculty of Agricultural Technology, which has provided facilities for teaching purposes. The faculty has established a learning resource center focused on agricultural management.



The campus features various activities, including the Indy vegetable garden, fish farming using the bio-floc system, grass plots for animals, and a chicken farm. These facilities serve as learning resources for both students and individuals outside the university who are interested in agricultural management technology, safe food farming, and sustainable farming practices. One of the activities undertaken by the Faculty of Agricultural Technology Rajamangala University at Technology Isan is focused on honing students' skills beyond the classroom. The objective is to preserve diverse cultures associated with rice cultivation and sustainable agricultural practices. Additionally, this activity aims to improve life skills and learning, ensuring food security within the university, and promoting local agricultural wisdom.





Ensure healthy lives and promote well-being for all at all ages

"Healthy FITT"

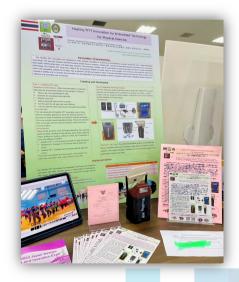
A NEW EXERCISE PROGRAM PROMOTING HEALTH FOR ALL AGES



To promote public health, the team has developed guidelines and produced a video introducing a new exercise program known as 'Healthy FITT.' This program seeks to promote and share exercise-related information with the community, reaching a broad audience in the Mueang District of Sakon Nakhon Province. The program is intended for exercise clubs, local health promotion hospitals, and elderly clubs. On the international stage, the innovative exercise program 'Healthy FITT' received a silver medal at the '2023 Japan Design, Idea and Invention Expo' in Tokyo, Japan.



Promoting health through exercise is essential for preventing and reducing the incidence of non-communicable diseases. Researchers have developed the 'Healthy FITT' dance innovation by incorporating basic daily postures or activities of Thais, such as bathing, washing the face, brushing teeth, washing hair, sweeping the floor, and washing dishes, comprising a total of 28 postures. These postures are set to an enjoyable rhythmic music, combined with designed exercise postures that are easy to follow and can be used to promote health for all age groups.





Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all



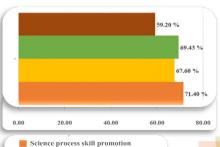
Eco Friendly Straw





The Faculty of Education, Rajamangala University of Technology Isan, has initiated the 'Development of STEAM Education Management' project to promote students' scientific process skills, creativity, and environmental awareness. Within this project, the STEAM education learning management set, titled 'Eco Friendly Straw,' was used to conduct activities with students from both Sakon Nakhon and Nakhon Phanom provinces. The activity had a total of 290 participants, including 90 middle school students, 150 high school students, and 50 pre-service teachers. The learning and teaching media set, focused on STEAM education, included the production of nature-friendly straws. A patent application (No. 2303001853) for this product was submitted on July 6, 2023.

The transfer of knowledge was assessed for scientific process skills, creativity, teamwork, and the safety of the learning set. It was found that these aspects were at a high level.



Creativity skill promotion
 Collaboration skills
 Safety of the STEAM education kit







EMPOWERING WOMEN IN RURAL AGRICULTURE: ADVANCING LAND AND RESOURCE MANAGEMENT DECISION-MAKING

AND GENDER EQUALITY



Sakon Nakhon Rajabhat University, in collaboration with a network of five organizations, organized a project called 'Empowering Women to Enhance Decision-Making Power in Land and Community Resource Management.' This project consisted of three sub-activities: Activity 1: 'Women - The Power of Women,' Activity 2: 'Discussing Various Words: Women and the Power to Access Land and Resource Management,' and Activity 3: 'Promoting Women's Practices in Accessing Power in Resource Management.' The objective of these activities is to empower women in rural agriculture to participate equally in decision-making regarding land and community natural resource management, thereby helping reduce gender disparities and the emotional and practical burdens on households' livelihoods.



By supporting both academic knowledge and legal knowledge, and creating public awareness, the outcomes include the affected group of women who have experienced land grabbing. They have established community networks at the village level to formulate proposals for addressing shared issues with government agencies at the provincial level. They have also prepared policy proposals for the government.





Ensure availability and sustainable management of water and sanitation for all





PROMOTING COMMUNITY TAP WATER SERVICES

Community tap water systems are services that provide clean and quality water to various points of use in the community to meet local consumption needs. Rajabhat Sakon Nakhon University has transferred knowledge about tap water systems and the production of clean, quality water that meets standards through training in quality control of water production, inspection, and maintenance of equipment in 22 villages across two sub-districts: 11 villages in Lao Phon Khok Sub-district and 11 villages in Dan Mung Kam Sub-district, Khok Si Suphan District, Sakon Nakhon Province.

DEVELOPING PROTOTYPE RAINWATER HARVESTING SYSTEMS FOR DRINKING WATER PRODUCTION

Rajabhat Sakon Nakhon University has designed and developed a prototype rainwater harvesting system for the safe production of drinking water in the community using solar energy. This prototype system can collect and treat rainwater to make it clean and suitable for consumption, leveraging scientific and technological knowledge to drive progress toward achieving SDG 6.1, which aims to ensure that everyone has access to safe and affordable drinking water by the year 2030.







KITA2022 - KNOWLEDGE TRANSFER OF INNOVATION

AND TECHNOLOGY IN ALTERNATIVE ENERGY

On July 22, 2022, Assistant Professor Chakrit Chanpracha, representing the President of Rajabhat Sakon Nakhon University, inaugurated the practical training program 'Knowledge Transfer, Innovation, and Alternative Energy Technology in 2022.' This event was organized by the Center of Excellence in Alternative Energy, in collaboration with the Thai Thermoelectric Society and the National Research Council of Thailand. The objective of the practical training was to facilitate a learning process in science, innovation, and technology, fostering scientific skills that can be developed for future projects and research. Dr. Tosawat Sittawan, the Deputy Director for Research and Innovation at the Rajamangala University of Technology Thanyaburi and his team of researchers from the Center of Excellence in Glass and Materials Technology, Nakhon Pathom Rajabhat University, served as lecturers to provide knowledge to 526 enthusiastic teachers, lecturers, and students who willingly





ISDA2022 INNOVATION COMPETITION FOR SUSTAINABLE LOCAL DEVELOPMENT



On August 9, 2022, the Center of Excellence for Alternative Energy, Research and Development Institute, Rajabhat Sakon Nakhon University, in collaboration with the Thai Thermoelectric Society and the National Research Council of Thailand, organized the 'Innovation for Sustainable Local Development Award 2022' (ISDA2022) competition at the Jamjuri 1 Hall, Rajabhat Sakon Nakhon University. There were more than 47 entries participating in the competition, including 38 entries from secondary schools and 9 entries from universities. The entries covered innovations in the energy sector (18 entries), agriculture (11 entries), and new infectious diseases (9 entries). A total of 224 participants from 13 institutions took part in the competition.













The Center of Excellence in Alternative Energy, in collaboration with the Thai Thermoelectric Society (TTS) and the Malaysian Thermoelectric Society (MTeS), organized the 7th Southeast Asia Conference on Thermoelectrics (SACT2022).

7th Southeast Asia Conference on Thermoelectrics : SACT2022



The Center of Excellence in Alternative Energy, in collaboration with the Thai Thermoelectric Society (TTS) and the Malaysian Thermoelectric Society (MTeS), organized the 7th Southeast Asia Conference on Thermoelectrics (SACT2022). This conference provided a platform for professors, researchers, scientists, students, and individuals interested in thermoelectrics and alternative energy to share their academic work, exchange ideas, and foster international academic cooperation. The event took place in a hybrid format from December 7 to 8, 2022, with an on-site component held at Phupan Place Hotel, Sakon Nakhon Rajabhat University, and an online component through Zoom Cloud Meeting. It attracted 65 participants from six different countries, including Thailand, India, Malaysia, Japan, Portugal, and the United States.

Furthermore, the conference had the honor of hosting a special lecture by renowned global thermoelectric scientist, Prof. Dr. G. Jeffrey Snyder, a professor of Materials Science and Engineering at Northwestern University, USA. He presented on the topic of 'Strategies for Engineering Complex Thermoelectric Materials' and conducted a workshop on 'What makes a good story for a publication and how to word it.

Outstanding Innovation and Technology









Biodiesel

Electric car

2020

EV Charger

EV Bus









Water Pump Solar Cart

Solar Floating

Solar cell for drying





Energy



Rice Dryer Solar Energy

Alternative **Energy Station**

2022

2023



Journal by Sakon Nakhon Rajabhat University

Solar Rooftop Monitoring by Sakon Nakhon Rajabhat University



Center of excellence on alternative energy

Development Research, Innovation and technology of alternative energy

- 1. Thermoelectric research laboratory
- 2. Biomass Energy Research Laboratory
- 3. Electro-Mechanical Energy Laboratory
- 4. Thin Film Research Laboratory
- 5. Battery Research Laboratory
- 6. Optic Research Laboratory





Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

FOSTERING INCLUSIVE ECONOMIC GROWTH AND FULL EMPLOYMENT THROUGH FOOD AND BEVERAGE SERVICE CAREER DEVELOPMENT











The key activities aimed at promoting human resource development for the food and beverage service industry in restaurants, hotels, and international cruise ships are detailed as follows:

- 1. Meetings and Cooperation Agreements: These activities involve actively engaging with business networks and professional organizations related to the food and beverage service industry.
- 2. Training on Food and Beverage Service Management: To equip individuals with the necessary skills and knowledge, training programs are organized.
- 3. Practical Work in Private Sector Establishments: Practical experience is a crucial component of human resource development. To provide participants with hands-on experience, arrangements are made for them to work in private sector establishments.
- 4. Basic Training for University Students and the Public: University students and the public are targeted audiences for basic training in food and beverage service. These training programs offer foundational knowledge and practical skills necessary for a career in the industry.

The overarching goal of these activities is to enhance the capacity and competence of individuals seeking careers in the food and beverage service industry. By forging partnerships, providing training, and facilitating practical experience, these initiatives contribute to the development of a skilled and capable workforce, ultimately promoting the industry's growth and sustainability.





COLLABORATIVE INITIATIVE FOR SUSTAINABLE DEVELOPMENT: PRACTICAL TRAINING IN LITHIUMION BATTERY MANUFACTURING FOR ELECTRIC VEHICLES, AGRICULTURAL ELECTRIC MACHINERY, AND ALTERNATIVE ENERGY

On Tuesday, July 24, 2023, the Center of Excellence in Industrial Technology, Faculty of Industrial Technology, Sakhon Nakhon Rajabhat University, in collaboration with S.P.S. Source Co., Ltd., signed a Memorandum of Understanding (MOU) and Memorandum of Agreement (MOA) and launched a project to drive sustainable development goals (SDGs) for the fiscal year 2023. The project, titled "Practical Training for Lithium-Ion Battery Manufacturing for Electric Vehicles, Agricultural Electric Machinery, and Alternative Energy". Both organizations have a comprehensive plan for collaboration in various areas, with a focus on developing skills for students and university personnel. This partnership provides significant opportunities for students to enhance their capabilities through seminars, workshops, innovation, and research in modern automotive industries.



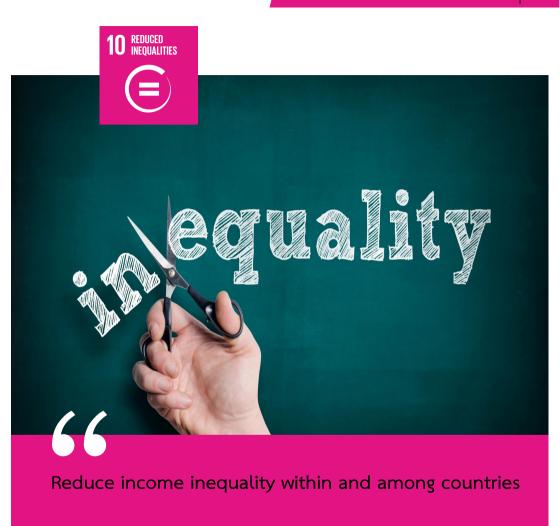
DEVELOPMENT OF ALL-TERRAIN ELECTRIC UTILITY VEHICLES SUITABLE FOR DROUGHT-PRONE AREAS



The National Research Council of Thailand (NRCT), under the Ministry of Higher Education, Science, Research, and Innovation in collaboration with the Academic Subcommittee on Science, Research, and Innovation, Sakon Nakhon Province, and Sakon Nakhon Rajabhat University, has initiated a research and innovation network project to enhance the country's competitiveness. This project aims to create a network that elevates the potential of community products, utilizing research and innovation to address challenges and contribute to national development. The key focus is on elevating the living standards of the population through community development. This involves enhancing the efficiency of production processes and upgrading the quality of life for the people. The project targets the integration of local knowledge, cooperative groups, and the restoration of indigenous rice varieties, particularly "Hom Dok Hang" rice, in Kok Sa-at, Umpajan, Kusuman, Sakon Nakhon Province. The significance of this project lies in the research and development of technology and innovations that are suitable for addressing the specific needs of the local community. The innovation delivered in this instance is an all-terrain electric utility vehicle.

The project's objective is to contribute to sustainable community development by improving agricultural production using technology and innovation that aligns with the local community's requirements.





PROVIDE KNOWLEDGE ABOUT THE ARBITRATION PROCESS TO THE COMMUNITY IN TAMBON KHAMIN, MUEANG DISTRICT, SAKON NAKHON PROVINCE.

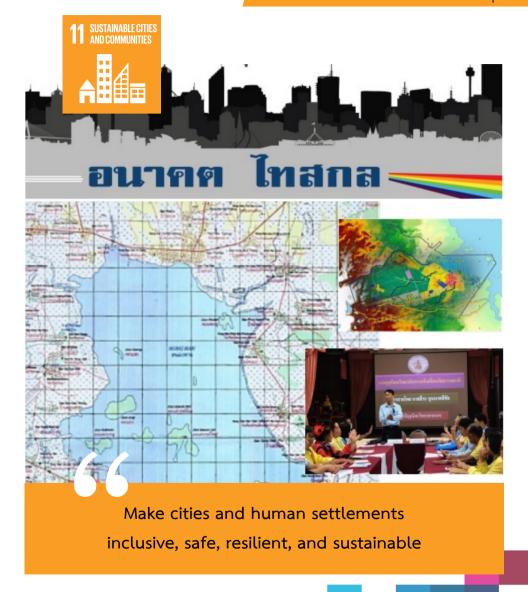
The Sustainable Development Goal (SDG) 10 aims to reduce inequality within countries. It focuses on key indicators, particularly 10.2, which seeks to promote inclusivity and social cohesion, regardless of age, gender, disability, race, ethnicity, or economic status. Additionally, 10.3 aims to establish safeguards for equal opportunities, reduce inequality in outcomes, eliminate discriminatory laws and practices, and promote appropriate actions to ensure that everyone has access to justice. The legal experts and volunteers from the Sakon Nakhon Provincial Arbitration Office delivered a lecture on access to the arbitration process in various government agencies.







the lecture, community community members gained knowledge and understanding of accessing the arbitration process through various government agencies, such as the Office of the Attorney General, the judiciary, provincial arbitration offices, police stations, and justice centers. Furthermore, the community can now access the arbitration process through appropriate government agencies promotivia response to the issues they encount







The participatory process of the ThaiSakol Network in reducing the risk of urban flooding in Sakon Nakhon can be summarized into three main steps:

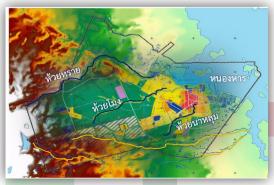
Step 1: Survey and Risk Assessment

Step 2: Development of Communication Systems Step 3: Strengthening Community and Network Capacities

These steps represent the collective effort of the ThaiSakol Network to mitigate the risk of urban flooding in Sakon Nakhon and enhance the resilience of the community and network.

SUMMARIZING THE LESSONS: THE PARTICIPATION OF THE THAISAKOL NETWORK IN REDUCING THE RISK OF URBAN FLOODING IN SAKON NAKHON

To make the city and human settlements safe, resilient, and sustainable, the ThaiSakol Network has initiated a project in the community areas of Sakon Nakhon Municipality. These community areas include the sub-districts of Phang Khwai and Tha Tuanawong in Mueang Sakon Nakhon District. The project involves three target groups: 1) Representatives from government agencies at the provincial level, including the Sakon Nakhon Provincial Office of Disaster Prevention and Mitigation, Sub-District Health Promotion Hospitals in the research area, Sakon Nakhon Provincial Fisheries Office, Sakon Nakhon Provincial Office of Natural Resources and Environment, and the Tha Tuanawong Sub-District Municipality. 2) Representatives from private sector organizations, including the Sakon Nakhon Chamber of Commerce, and representatives from the retail chains of Robinson, Tesco Lotus, and Big C. 3)Representatives from educational institutions, including Sakon Nakhon Rajabhat University, Sakon Nakhon Technical College, the Office of Educational Service Area, and Tha Tuanawong Vitthavakon School.







Ensure sustainable consumption and production patterns





FRUIT PEEL TRANSFORMATION FOR HIGH-VALUE RESOURCES PROJECT

Sakon Nakhon Rajabhat University has partnered with Doi Kam Food Products Co., Ltd. to repurpose 262.2 tons of tomato peels from a factory into animal feed, compost, and bioextracts. Furthermore, they are utilizing 3.25 tons of palm kernel shells to produce materials for soil improvement, benefiting local farmers.



REDUCING FOOD WASTE WITH EARTHWORMS PROJECT

The team has promoted the reduction of food waste on campus by organizing activities to cultivate earthworms. This method has proven effective in processing food scraps within the school, resulting in a reduction of food waste by up to 5.8%.





A'MAZE GREEN SOCIETY PROJECT

Sakon Nakhon Rajabhat University has participated in the A'MAZE Green Society project, using dyeing techniques to transform over 1,000 pieces of flawed clothing into new products in collaboration with Boutique New City Co., Ltd.



Take urgent action to combat climate change and its impacts by regulating emissions and promoting developments in renewable energy

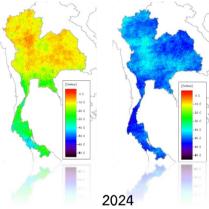


The number of days with PM2.5 levels exceeding the WHO standard (37.5 ug/m³) increases every year.





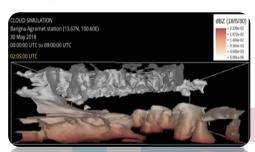
To reduce the number of days when PM2.5 levels exceed the WHO standards and the monthly average PM2.5 concentration (37.5 ug/m³).



Associate Professor Dr. Vilawan Kamhan and a team of researchers from the Center for Atmospheric and Space Science, Faculty of Science and Technology, Sakon Nakhon Rajabhat University, are developing a cloud formation model in hot zones to assess the possibility of rain cloud formation during PM2.5 dust pollution. The project utilizes satellite data and is supported by the NRCT under the Haze Free Thailand and PM2.5 Problem Research Plan (Year 2). Additionally, the university is working on a study to reduce CO2 emissions within the campus. The aim is to find strategies for future CO₂ reduction.

2022 - 2023

Associate Professor Dr. Vilawan Kamhan and a team of researchers from the Center for Atmospheric and Space Science at the Faculty of Science and Technology, Sakon Nakhon Rajabhat University, have developed a cloud formation map and model for hot regions. This initiative aims to assess the likelihood of rain cloud formation during periods of PM2.5 dust pollution using satellite data. The research project receives support from the NRCT as part of the Haze Free Thailand and PM2.5 Problems Research Program for its first year.



Cloud model during high PM2.5 concentrations





Conserve and sustainably use the oceans, seas and marine resources for sustainable development



SUSTAINABLE CONSERVATION AND UTILIZATION

The Center of Excellence for Nong Han, Research and Development Institute at Sakon Nakhon Rajabhat University, in partnership with WWF, SIDA, the Sustainable Development Promotion Association of the Northeastern Region, and the Thai PBS Viewers and Listeners Association, collaborated on a project aimed at creating a platform for receiving feedback and exchanging academic knowledge on 'Smart and Sustainable Water Management in the Northeastern Region.' The project focused on waterlogged areas within four networks (Bung Khong Long, Kut Ting, Nam Songkhram Lower Basin, and Nong Han) and took place on March 17, 2022, at Phuphan Palace Hotel in Sakon

Nakhon Province.

CONSERVATION OF ECOSYSTEMS

AND BIODIVERSITY

On February 25, 2022, the Faculty of Agricultural Technology at Sakon Nakhon Rajabhat University, in collaboration with the Center of Excellence for Biodiversity at Chulalongkorn University, organized a mixed seminar titled "On Various Fronts: The Results of Cultivating Golden Apple Snails." The event was held at the Jamjuree 1 Convention Hall and featured presentations by eight qualified speakers. The primary objectives were to foster collaboration in restoring natural populations of golden apple snails and to create economic value from both Thai strains and golden apple snails.

The seminar aimed to establish a common understanding for collaborative efforts, focusing on research related to socio-economic and environmental impacts, as well as sustainable resource utilization for farmers. This event garnered participation from over 400 attendees, both in person and online, contributing to the promotion of ecosystem and biodiversity conservation.



This initiative brought together experts and academics from various fields, including avian ecology, fisheries resources, water resources, and social sciences. It also involved representatives from the Department of Natural Resources and Environment and the Environmental Office of Sakon Nakhon Province. Additionally, the project welcomed representatives from 34 communities around Nong Han, three Ramsar sites in the Upper Northeastern Region, NGO leaders, students, the Provincial Fisheries Office of Sakon Nakhon, and the research network of community organizations in the Nong Han area. With more than 80 participants, the project facilitated collaborative problem-solving that engaged the public, academia, and relevant organizations. It also provided a platform for listening to suggestions and promoting joint efforts with the community network in waterlogged areas to support inclusive development.



Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss



THE FOREST REFORESTATION PROJECT FOR WATER CONSERVATION AND BIODIVERSITY PRESERVATION

The Faculty of Agricultural Technology, in collaboration with the Steering Committee for Sustainable Development Goal 15 (SDG 15: Life on land), has initiated a series of activities and projects for the community, schools, and government agencies in Phuphan District, Sakon Nakhon Province. The project involved more than 30 participants, including students, staff, and working groups from the Municipal Office of Kokphu Sub-district, Phuphan District, Sakon Nakhon Province, the community water reservoir of Ban Yanglon Sub-district, Phuphan District, Sakon Nakhon Province, and Ban Yanglon Chaloemratphibul School, Phuphan District, Sakon Nakhon Province. These activities took place on July 25-26, 2023, and were categorized into three sub-activities: 1) A lecture emphasizing the importance of forests, water sources, and ecosystems. 2)





In addition to the valuable cooperation from various organizations, the Department of National Parks, Wildlife, and Plant Conservation in Sakon Nakhon Province has generously provided more than 3,000 local tree species. These trees are dedicated to fulfilling the needs of the participants in the SDG15 working group project at Sakon Nakhon Rajabhat University and community leaders who understand the profound significance of forest resources and water sources in creating green spaces, fostering biodiversity, enhancing livelihood opportunities, and preserving community trees.

As a collective effort, our goal is to exceed the planting of 2,000 local trees in and around the community pond in Ban Yang Lon, Kok Phu Subdistrict, Phu Phan District, Sakon Nakhon Province. Ban Yang Lon School, situated in Phu Phan District, Sakon Nakhon Province, is particularly focused on planting edible trees. Furthermore, the remaining trees within the specified area will be distributed to the general public who actively participate in the planting activity. They are encouraged to plant these trees at their own homes, gardens, or personal spaces, fostering a wider impact on the environment and local communities.





Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels



The fundamental principle of sustainable development revolves around fairness and justice, with a keen emphasis on the equitable distribution of responsibilities and risks associated with development, encompassing both people and natural resources in the present and for future generations. This principle upholds the value of diversity among individuals and communities, ensuring that they can all partake in and benefit from ongoing development.

However, in numerous instances, government policies and business plans within the private sector have played a significant role in violating human rights and disregarding the core principles of sustainable development. These entities often overlook inclusive processes and neglect the health risks, environmental concerns, and socio-economic challenges that communities must consequently.

KHAM PA I AI:

PROJECT FOR THE RESTORATION OF JUSTICE

Sakon Nakhon Rajabhat University places great importance on sustainable development, guided by the principles of human rights and participatory involvement. In line with these principles, the university has initiated a series of activities aimed at promoting access to justice within the community's natural resource management operations. This endeavor is aptly named 'Restoring Justice on the Forested Plateau: Reclaiming Land Rights and Fostering Participatory Development and Resource Management. The project is a collaborative effort that involves government agencies, private development organizations, and local communities. It also embraces innovative tools such as 'Historical Land Use Maps,' 'Land Rights Confirmation Tools,' and 'Evidence in the Struggle for Justice.' These tools are provided to five villages in the Kham Pa Lai District, Dong Luang District, Mukdahan Province. These villages have faced challenges in obtaining justice concerning various development projects and government policies, including industrial mineral mining, land reclamation, and wind energy development. These initiatives have led to the encroachment upon private and public forest areas that serve as critical sources of food security and community water resources, including groundwater. The primary objective of this project is to serve as a valuable tool for confirming land rights and facilitating collaborative solutions for all stakeholders involved. It aims to address past injustices and promote equitable resource management, contributing to the overall well-being of these communities.





Strengthen the means of implementation and revitalize the global partnership for sustainable development

Data management mechanism system for entering Impact Rankings 2022 - 2023 by Times Higher Education Impact Ranking

The university has implemented a policy and emphasized the importance of participating in The Impact Ranking of higher education institutions to enhance the quality of education. This initiative aims to enhance the university's performance and reputation both nationally and internationally. To effectively participate in The Impact Ranking, the university has established a data management system for submitting the necessary information for the Impact Rankings 2022-2023.

- Establish policies to drive the implementation of university rankings in The Impact Ranking system in various areas.
- Set an action plan to driving the university's activities with its mission of collecting and managing data for the Impact Rankings 2022-2023.
- There is a committee to oversee and monitor operations to be in accordance with the system specified in item 1 and report the results of monitoring to the university-level committee for information.
- To allocate budgets for operations with the aim of achieving high rankings in Impact Rankings and aligning with the Sustainable Development Goals.
- To report the evaluation results to the University Executive Committee and the University Council.
- To emphasize the use of evaluation results and recommendations from the University Executive Committee and the University Council for continuous improvement

MEMORANDUM OF COOPERATION AGREEMENT (MOU) WITH PREMIER QUALITY STARCH COMPANY AND AFFILIATES

On February 8, 2022, Sakon Nakhon Rajabhat University, represented by Assistant Professor Permsak Yimin, Dean of the Faculty of Science and Technology, signed a memorandum of understanding on visa cooperation with Premier Quality Starch Company Limited, Premier Bio Energy Company Limited, Premier Modified Starch Company Limited (Mukdahan Province), and Premier Quality Starz 2012 Company Limited (Sakon Nakhon Province). Mr. Rattavirun Chanchungthaworn, Managing Director, and executives from both agencies participated in the signing ceremony at the main meeting room of the Science Center, Building 9. The agreement focuses on building cooperation, integration, resource sharing, and information exchange. It also includes joint activities to promote and develop academic knowledge for staff and students, research and development of learning innovations, and resource support for learning. Additionally, the cooperation extends to other activities as needed.





COLLABORATIVE MOU BETWEEN SAKON NAKHON RAJABHAT UNIVERSITY, OSMEP, AND 38 RAJABHAT UNIVERSITIES

On February 9, 2022, Privy Councilor General Dawong Ratanasuwan served as the honorary chairman at the signing ceremony for the pilot project 'Local SME Startup & Scale Up Development: Social Engineer (repair and build a strong society)' Phase 1. This project is a collaboration between the Office of Small and Medium Enterprises Promotion (OSMEP) and 38 Rajabhat universities across the country. Assistant Professor Chakrit Chanchitpreecha, Acting President of Sakon Nakhon Rajabhat University, participated in the signing ceremony via a Zoom Meeting. This collaboration aims to benefit students. faculty, local communities, and small entrepreneurs in two important areas: developing essential soft skills for the 21st century through social engineering processes and building entrepreneurial competencies using the SME Academic 365 learning platform. The goal is to nurture well-rounded, community-oriented young entrepreneurs who can identify business opportunities within their local communities.

COLLABORATIVE MOU FOR RESEARCH SUPPORT IN LOCAL DEVELOPMENT AMONG RAJABHAT UNIVERSITIES



On February 9, 2022, with Assistant Professor Chakrit Chanchitpreecha serving as Acting President, Sakon Nakhon Rajabhat University participated in the signing of a Memorandum of Understanding (MOU) for the promotion and support of research in local development. This collaboration took place between research and development institutions from 38 Rajabhat universities via electronic media (Zoom Meeting). The signing ceremony was presided over by Assistant Professor Dr. Linda Kanma, President of Bansomdeichaopraya Rajabhat University, who served as the Chairman of the meeting of presidents of Rajabhat University (R.P.R.R.). In attendance, the executive team and research and development institutes of Sakon Nakhon Rajabhat University witnessed the signing in the Sarasachandra Meeting Room, 2nd Floor, Building 10. The main goal of this memorandum of understanding is to support and promote research according to the law, facilitate the organization of university groups for the development of local communities and other communities. Together, they aim to create research and innovation for sustainable local community development and apply knowledge that can be used to solve local community problems effectively, aligning with the development goals of each institution. This collaboration also involves promoting and supporting the analysis, synthesis, and lessons learned from the utilization of research and innovation, towards application for the benefit of commercial, social, and environmental policies, as well as other public interests. The participating institutions will work together to collect, filter, analyze, and synthesize urgent policy issues for decision-making within the senior management committee of the network of Rajabhat universities nationwide.



THE 5th NATIONAL AND
INTERNATIONAL ACADEMIC
CONFERENCE, "UNIVERSITIES
FOR LOCAL DEVELOPMENT
TOWARDS SUSTAINABLE
DEVELOPMENT GOALS,"



AT BURIRAM RAJABHAT UNIVERSITY

On February 14, 2022, Assistant Professor Chakrit Chanchitpreecha, Acting Rector of Sakon Nakhon Rajabhat University, along with Mr. Kasem Butdee, Director of the Office of the President, Teacher Surasit Uipadjawong, Director of the Language Institute for Arts and Culture, and personnel from Sakon Nakhon Rajabhat University participated in the 5th National and International Academic Conference, 'Universities for Local Development Towards Sustainable Development Goals,' held at the Wicha Atsat Auditorium, Buriram Rajabhat University, Buriram Province. The conference was chaired by Special Professor Dr. Anek Laothamathat, Minister of Higher Education, Science, Research, and Innovation, who delivered a special lecture on the topic, 'The Role of the University in Local Development Towards the Goal of Self-Sustainable Development.' This conference, the 5th of its kind, had administrators from different universities, and it was jointly organized by 21 educational institutions from 13 countries. Participants attended the meetings both in person and via the online Zoom Meeting system.



FORUM ON SMART AND SUSTAINABLE WETLAND MANAGEMENT IN NORTHEAST THAILAND

On March 17, 2022, the Nong Han Research and Development Institute of Sakon Nakhon Rajabhat University, in collaboration with organizations such as WWF SIDA, the Association for the Promotion of Sustainable River Basin Development, and the Council of Viewers and Listeners of Thai Phi BS Programs in the Northeastern region, organized a forum project to gather opinions and exchange academic information on smart and sustainable wetland management in the Northeast. The event focused on exchanging information about the wetland situations in the four wetland networks (Bung Khong Long, Kut Thing wetlands, Lower Nam Songkhram, and Nong Han). Participants brainstormed ideas and made recommendations during the discussion forum.

COLLABORATIVE MOU FOR INTEGRATIVE COOPERATION BETWEEN SAKON NAKHON RAJABHAT UNIVERSITY, TISTR, AND SAKON NAKHON PROVINCIAL ADMINISTRATIVE ORGANIZATION



On September 7, 2022, the Thailand Institute of Scientific and Technological Research (TISTR), in collaboration with Sakon Nakhon Rajabhat University and the Sakon Nakhon Provincial Administrative Organization, signed a memorandum of understanding to promote cooperative integration. The focus of this agreement is to harness research results and knowledge in the fields of science, technology, and innovation for the benefit of local communities, their economies, and the environment

MOU FOR EDUCATIONAL AND SCIENTIFIC COOPERATION BETWEEN SAKON NAKHON RAJABHAT UNIVERSITY, THAILAND, AND INSTITUT TEKNOLOGI SEPULUH NOPEMBER (ITS), INDONESIA



On January 19, 2022, This ceremony marked the collaboration between Sakon Nakhon Rajabhat University and the Institute Teknologi Sepuluh Nopember of the Republic of Indonesia through an online platform. The event was at the Saratchanthorn Meeting Room on the 2nd floor of Building 10, Sakon Nakhon Rajabhat University. This successful collaboration between the two institutions commenced with the signing of a memorandum of understanding for research collaboration on October 20, 2016. Then, various activities have been undertaken, including student and staff exchange programs for short-term research, co-publication of over 10 research articles, the development of research project proposals to secure research grants from the E-ASIA project, and the organization of operational and academic conferences. This signing ceremony signifies the ongoing research collaboration and foreshadows future cooperative activities that will bring mutual benefits and shared experiences to both institutions.

Sakon Nakhon Rajabhat University Sustainability Report 2023

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