

SUSTAINABLE DEVELOPMENT GOALS REPORT

Rajamangala University of Technology Srivijaya

https://sdgs.rmutsv.ac.th/

20 23



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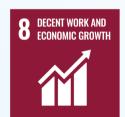
























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MESSAGE FROM THE PRESIDENT

SUSTAINABILITY REPORT 2023 FOREWORD BY THE PRESIDENT "THE UNIVERSITY OF INNOVATION FOR SOCIETY"

RUTS is fully committed to the United Nations' Sustainable Development Goals (SDGs), which were adopted in 2015. The university is dedicated to sustainability in all its forms and is actively preparing to take a leadership role in areas such as research, SDG-focused education, stewardship, and collaboration with the wider community.

By monitoring campus initiatives that align with its sustainability goals, RUTS is able to evaluate current projects through the framework of the three pillars of sustainability-economic, social, and environmental. This approach not only allows the university to assess its progress but also highlights the initiatives and organizations on campus that are working toward creating a more sustainable future for all.



The previous submission we were delighted to be pronounced and recognized for the Impact Rankings 2023 including the top 4 SDGs as follows in SDGs 17, 12, 2 and 6. Our University will continuously participate in the Impact Rankings 2024 and agreed to submit all 17 SDGs goals.

I would like to give a special thanks to RUTS SDGs committees, staff and students for the great support and commitment to this work.

Prof.Dr.Suwat Tanyaros
President

Sout Toyers







INTRODUCTION TO RUTS

Rajamangala University of Technology Srivijaya, (abbreviated as RUTS), is one of the universities in the group of Rajamangala University of Technology (RMUT), RUTS is located in the south of Thailand. The university pays great attention to the management of higher education, particularly in the fields of science and technology as well as services. The main aims are to produce graduates who have both the professional ability to manage a career and to be highly aware of the practical ethics in society and the nation. Additionally, the policy focuses on the development of teaching and learning, research, community service, cultural preservation and environment sustainability as well as the staff development to keep pace with globalization so as to complete the vision of the university.

RUTS offers education at the high vocational and graduate levels, and it is composed of 7 areas as follows:

- 1. Rajamangala University of Technology Srivijaya, Songkhla Campus
- 2. Rajamangala University of Technology Srivijaya, Rattaphum College
- 3. Rajamangala University of Technology Srivijaya, Trang Campus
- 4. Rajamangala University of Technology Srivijaya Nakhon Si Thammarat, Sai Yai Campus
- 5. Rajamangala University of Technology Srivijaya Nakhon Si Thammarat, Thung Yai Campus
- 6. Rajamangala University of Technology Srivijaya College of Industrial Technology and Management Nakhon Si Thammarat, Khanom Campus
- 7. Srivijaya Agricultural Development Center, Chumphon



VISION

THE UNIVERSITY OF INNOVATION FOR SOCIETY

MISSION

- 1.To provide high-quality professionalism at the higher education level by focusing on science and technology and to make sure that graduates are ready for the job market.
- 2.To create research activities, inventions and innovations on science and technology that can be transferred into value-added goods and services for the country.
- 3.To provide academic services and creative education with a purpose to prepare graduates for independent careers to stay competitive in their profession.
- 4. To preserve religion, culture and the environment.



FACTS & FIGURES



Songkhla Campus (rai) 262 Rattaphum College (rai) 160 **Trang Campus (rai)** 1700 Sai Yai Campus (rai) 552 Thung Yai Campus (rai) 2025 **Khanom Campus (rai)** 589

Total number of academic and supporting staff (person) 1,470



218/300



Total number of regular student (person) 15,236

Number of faculties/colleges 3 colleges 12 faculties





Number of courses 84 courses



1 NO POVERTY



END POVERTY IN ALL ITS FORMS EVERYWHERE

Research and Innovation

Creating added value of shrimp paste products

Researcher, Asst. Prof. Dr. Ananich Chumsri and team aims to increase the potential of local shrimp paste producers and fishermen to produce high-standard products, increase income and preserve marine resources at the same time. The research team also provides training and advice on environmentally friendly and standardized production methods. To enable communities to access basic knowledge to improve product quality and this research is also a model to support the formulation of sustainable development policies and poverty alleviation at local and regional levels. As the production process improves, coastal communities can sell their shrimp paste at a higher price, from 150 baht per kilogram to 400 baht per kilogram. This increase in income has a direct impact on reducing poverty among coastal households, as it gives them enough income to live on and save for the future.





Related Link : https://sdgs.rmutsv.ac.th/goal/en-1/



Project promoting the cultivation and processing of organic sea grapes

Asst. Prof. Dr. Prasert Thongnunui and Assoc. Prof. Dr. Chutinut Sujarit honest established a research and learning center for organic sea grapes. This process has helped coastal communities start sustainable businesses. Ready to support communities to have long-term economic strength and stability. The research team also shared the method of transforming sea grapes into new products including the preparation of cost - benefit accounts and calculation of production costs which helps communities to have basic skills and knowledge in doing business. Including helping them access new marketing opportunities.



Related Link : https://sdgs.rmutsv.ac.th/goal/en-1/

Outreach and Engagement

Liberal Arts Start Up Contest

Faculty of Liberal Arts held "Lib Arts Start Up Contest between 22-25 March 2023 focuses on building relationships and community engagement by enabling young entrepreneurs and students to exchange knowledge and resources with experts and community groups. Throughout the project participants will receive necessary support in terms of resources and budget from the university and relevant agencies. The project not only creates a new generation of entrepreneurs who are capable of competing in the free market, but also supports local economic development by exchanging knowledge and resources from both academic sectors and the wider community. This project is therefore an example of participatory development that helps generate guidelines and policies for creating sustainable community economies at the local and regional levels.





Related Link : https://sdgs.rmutsv.ac.th/goal/en-1/



Upgrading entrepreneurs and the production process of Trang pepper

Rajamangala University of Technology Srivijaya (RUTS) has developed a research project on pepper. This project does not only study the characteristics of Plian pepper but also includes the production process by giving importance to the careful selection of products.

The university has expanded this project by developing an inventory system. Public relations in the premium market and systematically creating brand awareness of Trang's Plian pepper and are also training activities and promotion of local farmers in using environmentally friendly farming methods. Including the development of marketing skills to enable farmers to confidently export high-quality pepper to the market.











Related Link : https://sdgs.rmutsv.ac.th/goal/en-1/

Teaching and Learning

Online Business Skills Training Project to Generate Income and Prepare for a Digital Career

Rajamangala University of Technology Srivijaya focuses on developing students with skills necessary for careers in the digital age and learning to earn extra income during studies By training students to sell products online. The project is therefore important not only in terms of developing specific business skills. But it also helps to enhance readiness for employment after graduation. Students who have experience in selling products online and running their own business during their studies.

In addition The university also encourages students to understand how to run a sustainable business. Using online sales skills to build a customer base and manage products that meet consumer needs. It also helps build confidence for students in generating their own income and gaining practical and applicable learning.



Related Link : https://sdgs.rmutsv.ac.th/goal/en-1/



Culinary Wellness Class for Students

The Culinary Wellness Class for students, part of the Food and Nutrition program, is designed to equip students with essential culinary skills while emphasizing health and nutrition. This course teaches students how to prepare balanced meals using fresh, wholesome ingredients, fostering both physical well-being and culinary creativity.

Throughout the class, students participate in hands-on cooking sessions where they learn various cooking techniques, meal planning strategies, and the nutritional benefits of different foods. The curriculum covers a range of topics, including making healthier food choices, understanding portion control, and addressing the dietary needs of diverse populations. The goal is to empower students with the knowledge and skills to promote wellness through nutritious and delicious meals.





Related Link : https://sdgs.rmutsv.ac.th/goal/

<u>en-1/</u>

Policy and Operation

Premium Graduate Project : RUTS and CP All Limited (Public Company)

Rajamangala University of Technology Srivijaya has set a policy together with the company. CP All Limited (Public Company) to organize "Premium Graduate" This includes comprehensive financial support with full scholarships. Reduce the cost barriers to further education The policy covers welfare care for students who lack financial resources and provides opportunities for practical training in workplaces. To prepare them to effectively enter the labor market, the project focuses on business skills development activities. By setting the framework for training in 7 - Eleven stores which is an important part in enhancing retail and management skills. By supporting learners to be able to take their knowledge back to develop their local areas. This will help create a sustainable economy and promote the quality of life of the community in the long term.





Related Link: https://sdgs.rmutsv.ac.th/goal/

<u>en-1/</u>



2 ZERO HUNGER



END HUNGER, ACHIEVE
FOOD SECURITY AND
IMPROVED NUTRITION AND
PROMOTE SUSTAINABLE
AGRICULTURE

Research and Innovation

The White Dok Ka Chicken

The White Dok Ka Chicken breed has been developed by a research team from RUTS (Sai Yai campus). The research focused on promoting local chicken production to enhance sustainable community economic development in Southern Thailand. The research team identified opportunities for expanding the production of local chickens for distribution by engaging with restaurant operators in the Trang area. Also enhancing distribution channels for local chicken producers while raising consumer awareness of this quality local product, which is a safe new alternative characterized by its large breast, firm and tender meat, and non-chewy texture. Information can be found on the Facebook page "Southern Local Chicken."



Related Link : https://sdgs.rmutsv.ac.th/goal/en-2/



Enhancing the Products of Goat Farming Cooperatives



RUTS in collaboration with the Animal Product Research and Development Center in Pathum Thani share knowledge and technology related to goat meat processing with farmers and the general public, aiming to enhance the value of goat meat products and promote its consumption in Nakhon Si Thammarat Province and surrounding areas.





Related Link : https://sdgs.rmutsv.ac.th/goal/en-2/

Outreach and Engagement

The Training Hub for Thai Chicken



Faculty of Agriculture provided The Training Hub for Thai Chicken project, aimed at fostering knowledge, enhancing the capabilities of farmers through a participatory approach, and promoting community economic development based on scientific and technological principles aligned with the BCG economic model. During the program, participants exchanged ideas on developing production and marketing strategies for native chickens in the southern region of Thailand. This initiative not only equips farmers with practical skills and knowledge but also fosters collaboration and innovation within the agricultural community, ultimately contributing to the sustainability and growth of local economies.







Related Link : https://sdgs.rmutsv.ac.th/goal/en-2/



RUTS Walking Street



RUTS Walking Street, held every Wednesday at the Faculty of Industrial Education and Technology, offers a lively marketplace dedicated to promoting healthy eating and wellness. The event provides students and the local community with access to a variety of nutritious food options, including fresh fruits and vegetables, whole grains, and lean protein sources. Beyond its focus on healthy eating, Walking Street also fosters a strong sense of community, bringing together students, faculty, and local residents in a welcoming, social environment. It serves as a vibrant space where people can connect, enjoy wholesome meals, and learn about healthy eating habits. Overall, RUTS Walking Street is a valuable initiative that enhances the health and well-being of both the campus and the surrounding community.









Related Link: https://sdgs.rmutsv.ac.th/goal/

en-2/

Teaching and Learning

Students from CQUPT participated in a Thai cooking workshop



Students from CQUPT participated in a Thai cooking workshop held at the Faculty of Liberal Arts, where they learned to prepare both savory and sweet dishes, including Tom Kha Gai (chicken in coconut soup) and Sticky Rice with Mango. Students had the chance to explore the use of fresh, nutritious ingredients and learn the proper techniques for preparing authentic Thai cuisine. Beyond the culinary skills, the activity provided an opportunity for cultural exchange and helped strengthen relationships between students and Faculty.











Related Link: https://sdgs.rmutsv.ac.th/goal/ en-2/



Students in the Plant Science program utilize the "Smart Farm Saiyai" for their teaching and learning activities





Students in the Plant Science program at RUTS use the facility for hands-on learning, applying their theoretical knowledge to real-world agricultural practices. The produce harvested from the Smart Farm, grown as part of various courses, is sold to the local community, providing fresh, sustainable food options.

In addition to serving as a practical teaching tool, the Smart Farm also acts as a hub for knowledge exchange between the university and local residents. Through workshops and educational outreach, the farm shares valuable insights into modern farming techniques and sustainable practices. This collaboration not only enhances the learning experience for students but also supports the community's agricultural development, fostering long-term sustainability in local food production.









Related Link : https://sdgs.rmutsv.ac.th/goal/en-2/

Policy and Operation

Campus Food Waste Tracking



Within the university, there are various food establishments in 3 campuses. There are 7 main food service areas. Food waste management for RUTS is a well-structured process. Food waste is separated from other types of waste, and different types of waste are collected in clearly labeled containers according to established standards.

The food waste is effectively managed by repurposing it as animal feed. External operators from outside the university oversee this waste management process, which is regulated by a central department responsible for managing leasing activities at the university, aimed at creating various forms of benefits.











Related Link : https://sdgs.rmutsv.ac.th/goal/en-2/



3 GOOD HEALTH AND WELL-BEING



ENSURE HEALTHY LIVES
AND PROMOTE
WELL-BEING FOR ALL
AT ALL AGES

Research and Innovation

Shrimp Paste (Kapi) – A Traditional Thai Seasoning with many health benefits

Researcher, Asst. Prof. Dr. Ananich Chumsri with the research team has been involved in developing the shrimp paste production process by using infrared shrimp paste drying cabinet technology, which enables precise control of the humidity, color, and quality of the shrimp paste, which helps to produce products with higher quality and meet consumer needs.

Moreover, Shrimp paste (kapi) has been a key ingredient in Thai cuisine and have health benefits as such as Shrimp paste contains vitamin D, which is essential for maintaining strong bones and teeth. Also The microorganisms in shrimp paste combat harmful bacteria in the mouth, protecting against tooth decay. The calcium in shrimp paste is fully released when it is heated, making it a good source of calcium for the body. Moreover, Shrimp paste is packed with various vitamins and may also help alleviate symptoms of depression.









Related Link : https://sdgs.rmutsv.ac.th/goal/en-3/



Outreach and Engagement

RUTS health collaboration with outside organization and hosted Songkhla Marathon event



Rajamangala University of Technology Srivijaya together with the Alumni Association, signed a Memorandum of Understanding (MOU) with Songkhla Province, the Songkhla Provincial Administrative Organization, the Songkhla Municipality, the Hat Yai Municipality, the Singhanakhon Municipality, and the Sports Authority of Thailand to organize the "Songkhla Marathon 2023." This event took place from August 26 to 27, 2023, at Chalatat Beach

The marathon aimed to promote and publicize tourism in Songkhla Province, raise public awareness about health, and make Songkhla well-known in the field of sports. The event attracted around 7,000 Thai runners and over 400 international participants. Additionally, students from the university volunteered to assist with the marathon and also participated in the fun run.



Related Link: https://sdgs.rmutsv.ac.th/goal/

en-3/

Rajamangala University of Technology Srivijava provides HPV vaccinations and free condoms to students

Rajamangala University of Technology Srivijaya, in collaboration with local healthcare facilities, organized an HPV vaccination campaign to enhance immunity in female students and provide adequate protection against cervical cancer. The initiative aims to reduce the incidence of illness and mortality related to cervical cancer among Thai women. A total of 339 students from all campuses participated in the vaccination, which took place on December 13, 2023, at nearby healthcare facilities.

Additionally, the university provides free condoms to help prevent sexually transmitted infections and unwanted pregnancies among students. These services are available daily during working hours at the university's health clinic, where students and staff can also receive information and counseling on preventing sexually transmitted infections and unplanned pregnancies.



Related Link: https://sdgs.rmutsv.ac.th/goal/ en-3/



Biofeedback activities for screening mental health and providing initial counseling for RUTS staff and students.



RUTS organize biofeedback activities for screening mental health and providing initial counseling for executives, staff, and students before the final examinations. A total of 89 participants attended the activity, including 64 staff members and 25 students. This initiative aims to effectively screen and care for the mental health of personnel and students and is part of the collaboration outlined in the Memorandum of Understanding (MOU) for the "Mental Health Care Network Project: Advancing Quality Thai Citizens" among the nine Rajamangala universities, held at the university president's office building in Songkhla.









Related Link : https://sdgs.rmutsv.ac.th/goal/en-3/

Teaching and Learning

RUTS "Ruansriwichai" Traditional medicine training clinic



The services related to traditional or alternative medicine offered by students from Rajamangala University of Technology Srivijaya, as part of their academic training or community outreach programs. Offering these services as part of their studies or community involvement, and it highlights the aspect of traditional medicine, which could include practices such as herbal treatments, acupuncture, massage, or other forms of traditional health practices as the development of future entrepreneurs who can contribute positively to society and the economy.

These services are likely offered under supervision or as part of clinical training, and they may be provided at a reduced cost or free of charge as part of a community outreach effort. The students gain hands-on experience while offering these services to local communities or individuals seeking alternative and complementary healthcare options.



Related Link: https://sdgs.rmutsv.ac.th/goal/

<u>en-3/</u>



Policy and Operation

Metal health care for RUTS staff and students.

Rajamangala University of Technology Srivijaya is driving the Memorandum of Understanding (MOU) for the "Mental Health Care Network Project: Advancing Quality Thai Citizens." This follows the participation of Prof.Dr. Suwat Tanyaros, the university president, in the signing ceremony for the MOU between nine Rajamangala universities under the Ministry of Higher Education, Science, Research, and Innovation and the Department of Mental Health, Ministry of Public Health. The goal is to promote comprehensive mental health support for students across the nine Rajamangala universities and to integrate collaboration among relevant agencies within the Ministry of Public Health and the nine Rajamangala universities.

To ensure that students and relevant personnel at RUTS receive promotion and prevention regarding mental health, as well as support for those with mental health issues, including continuous monitoring to watch for mental health problems.

This initiative aims to effectively screen and care for the mental health of personnel and students and is part of the collaboration outlined in the Memorandum of Understanding (MOU) for the "Mental Health Care Network Project: Advancing Quality Thai Citizens" among the nine Rajamangala universities, held at the university president's office building in Songkhla.



Related Link: https://sdgs.rmutsv.ac.th/goal/

<u>en-3/</u>

Rajamangala University of Technology Srivijaya organized a campaign against drug abuse. Promoting a smoke-free society and addressing issues related to smoking and e-cigarettes.

In collaboration with the Health Promotion Foundation, Rajamangala University of Technology Srivijaya, through the Student Development Division, organized a training project for student leaders to combat drug abuse and vice (developing students' mental health capacity) from June 14 to 16, 2023, a team of lecturers from Mental Health Center 12 provided knowledge and practical training on mental health care for students and staff to stay away from drugs and vice.

The objectives of this training are to enhance the mental health care capacity of students and staff, keeping them away from drugs and vice, and to create initial counselors to provide support. Also support students and staff in strengthening their mental resilience against drug abuse and vice in educational institutions, this training involved 79 participants from various campuses and faculties, including 50 students and 29 staff members. To support students and staff in strengthening their mental resilience against drug abuse and vice in educational institutions, this training involved 79 participants from various campuses and faculties, including 50 students and 29 staff members.



Related Link : https://sdgs.rmutsv.ac.th/goal/

en-3/



4 QUALITY EDUCATION



ENSURE INCLUSIVE AND
EQUITABLE QUALITY
EDUCATION AND PROMOTE
LIFELONG LEARNING
OPPORTUNITIES FOR ALL

Research and Innovation

Research into Community Education Activities

On August 7-8, 2023, Faculty of Agro-industry Rajamangala University of Technology Srivijaya, Nakhon Si Thammarat Campus organized research project on enhancing production and marketing standards of beef cattle in Likhor for commercial competition. The objective was to create income and job opportunities for the community. The training included knowledge transfer and demonstrations of food processing, such as hamburgers, German sausages, sun-dried beef, and beef skewers.

These activities were designed to teach participants how to diversify and add value to their beef products, enabling them to enter competitive markets and increase sales. The project also emphasized the development of entrepreneurial skills, ensuring that community members could establish sustainable businesses by processing and marketing beef products.





Related Link: https://sdgs.rmutsv.ac.th/goal/en-4/

RUTS valuable research

Faculty of Science and Technology, Nakhon Si Thammarat Campus researchers' team and students collaboratively developed promotional media for the processing of Phatthalung sago products. This initiative culminated in presenting the work to Sopittha Farm Sago Enterprise Group in Phatthalung Province, aiming to enhance the brand image and expand market opportunities for this local product. Also conduct a research on Using an Animation Movie to Develop Ability of Stress in English of Primary School Students in Thailand, few research studies have been conducted on the



use of an animation movie to improve primary school students' stress ability in English.

The aim of this study is to examine the effectiveness of animated movies in improving stress placement in English among primary school students. The results of the study provide valuable insights and quidelines for teachers instructing English speaking or pronunciation. Additionally, students who wish to enhance their stress patterns in English can utilize animated movies as a tool to improve their pronunciation skills.









Related Link: https://sdgs.rmutsv.ac.th/goal/

en-4/

Outreach and Engagement

RUTS activities in the community

Food project for children and youth in remote areas, organized by the Faculty of Agro-Industry, Nakhon Si Thammarat Campus, in collaboration with the Agricultural Land Reform Office of Nakhon Si Thammarat, was held on February 27, 2023. The goal of the project was to transfer knowledge and enhance food processing skills, with a focus on demonstrating how to process oyster mushrooms into various products, including mushroom snacks, fermented mushroom sausage, and oyster mushroom meatballs





Additionally, Rattaphum College organized a Comprehensive Workshop Course on Designing, Installing, and Applying Solar Cells on January 25-26 and 28-29, 2023 in collaboration with Southern Solar Cell Co., Ltd. and Siam Blue Technology and Environment Co., Ltd. The objective of the workshop was to provide valuable knowledge to the public. The training covered a range of topics, including workplace safety and electrical hazards, general electrical system knowledge, the use of electrical measuring instruments, an introduction to solar cell systems, as well as the equipment and tools needed for solar panel installation. The workshop also included practical training on installing solar panels on metal sheet roofs.





Related Link: https://sdgs.rmutsv.ac.th/goal/ en-4/



Teaching and Learning

RUTS organized educational activities for public.



Rajamangala University of Technology Srivijaya hosted an Open House exhibition, with each faculty showcasing their academic programs. The event aimed to provide information about the university's courses and teaching methods, helping to raise awareness among prospective students and parents interested in enrolling at the university.



Thung Yai Agricultural Fair 2023

Moreover, from February 4–13, 2023 Rajamangala University of Technology Srivijaya hosted the annual Thung Yai Agricultural Fair 2023.

Various activities were featured at the fair, including knowledge-sharing sessions on agriculture, agro-industry, and animal health care; science and technology exhibitions; short training courses; and the 8th National Conference on Agricultural Science and Technology for Graduates. This year's theme was "Agricultural Innovation for a Sustainable High-Value Economy."

Related Link : https://sdgs.rmutsv.ac.th/goal/

en-4/

The University conducts vocational training programs for the general public throughout the year in 2023.

In 2023, Rajamangala University of Technology Srivijaya placed a strong emphasis on enhancing the skills of the general public and promoting lifelong learning opportunities. The university organized over 16 vocational training events throughout the year, hosted by various faculties and departments. These initiatives were aimed at providing valuable skills and knowledge to individuals in the community.

















Related Link : https://sdgs.rmutsv.ac.th/goal/en-4/



RUTS Organizing educational activities for schools

The "Volunteer Teachers for Community Development" project was held at Wat Laem Po School in Ko Yo Sub-district, Mueang District, Songkhla Province, on March 10, 2023. The project aimed to integrate teaching practices from the Teacher Training course, encouraging students to design educational activities that address the real learning needs and challenges within the school. Additionally, the initiative sought to instill a sense of social responsibility in students by involving them in activities that enhance the school environment. The project also focused on imparting engineering and technology skills to the students of Wat Laem Po School. Furthermore, it provided students with opportunities to develop project planning and systematic group work skills, while improving their teaching abilities and fostering a spirit of public service. A total of 29 students participated in the project.





Related Link: https://sdgs.rmutsv.ac.th/goal/en-4/

Policy and Operation

RUTS Lifelong learning access policy

The university has implemented a policy aimed at providing lifelong learning opportunities for individuals from all backgrounds, irrespective of race, religion, social status, or physical ability. To support this policy, the university has established regulations for undergraduate education and lifelong learning that enable individuals to engage in self-paced learning tailored to their interests, readiness, and abilities. These regulations emphasize outcome-based assessments and encourage a wide range of learning experiences, including knowledge gained from people, personal experiences, social interactions, media, and other resources. To further promote accessibility, the university offers various resources, such as libraries, digital learning platforms, and specialized services for individuals with disabilities or physical limitations. Additionally, the university provides training guides and programs to help users navigate these resources, ensuring that those in need of special assistance can access learning materials in an inclusive and equitable manner







Related Link : https://sdgs.rmutsv.ac.th/goal/en-4/



5 GENDER EQUALITY



ACHIEVE GENDER
EQUALITY AND EMPOWER
ALL WOMEN AND GIRLS

Research and Innovation

Sea grapes for women's health

Rajamangala University of Technology Srivijaya, Trang Campus led by Asst. Prof. Dr. Prasert Thongnunui and Assoc. Prof. Dr. Chutinut Sujarit establishing a research and learning center for organic sea grapes.

The research team also shared that the products help in women health as they are rich of benefits as follows:

- Rich in Vitamins and Minerals: Sea grapes are packed with essential vitamins and minerals, such as vitamin A, which supports eye health, vitamin B, which helps alleviate symptoms of numbness (like in the case of sciatica), and vitamin K, which promotes healthy blood and bone tissue.
- Helps Prevent and Reduce the Risk of Goiter and Thyroid Issues: Sea grapes are rich in iodine, a crucial mineral that helps prevent and manage thyroid-related conditions, including goiter.
- Used in Cosmetics: Due to their ability to promote skin elasticity, radiance, and hydration, sea grapes are commonly used as ingredients in skincare products like creams and lotions.
- Slows Down the Aging Process: Sea grapes contain nutrients that help slow the aging process of the body. They also aid in detoxifying the body by eliminating waste.
- Prevents Constipation and Hemorrhoids:
 One lesser-known benefit of consuming sea grapes is their ability to reduce the risk of constipation and hemorrhoids.



Related Link: https://sdgs.rmutsv.ac.th/goal/en-5/



Smart Start Idea by GSB Startup

RUTS Students participated in the Smart Start Idea competition by GSB Startup under the Micropreneur Academy project for the year 2023 at Prince of Songkla University Science Park.

During the event, there was a contest for video clips not exceeding 3 minutes in length based on the BCG Economy theme. The team from Ratthaphum College, led by Ms. Thanitha Kochintharoj a student in Applied Artificial Intelligence Engineering, Ms. Theeranart Thotham, a student in Accounting, Mr. Wichitchai Dermlim, a student in Agricultural Machinery, and Mr. Vorapong Phongsuwan, a student in Automotive Engineering, won the first prize under the team "Talook Diew Mai Kiew Look Khrai." Students received a cash prize of 5,000 baht under the guidance of their advisors, Assoc. Prof. Suphawadee Makoun and Mr. Nantapong Pongpiriyadecha.





Related Link: https://sdgs.rmutsv.ac.th/goal/en-5/

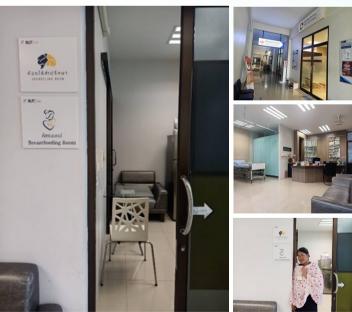
Outreach and Engagement

Child care facilities and services by RUTS

RUTS has made provisions to support female employees with child care facilities and services. Including areas for breastfeeding with breast pumps and refrigerators for storing breast milk. Also, there are accommodations available for pregnant employees to rest as needed.

These facilities and services make it more feasible for women to continue their careers while taking care of their family responsibilities.





Related Link : https://sdgs.rmutsv.ac.th/goal/en-5/



Teaching and Learning

RUTS Female in Marine Engineering

Rajamangala University of Technology Srivijaya is dedicated to promoting gender equality across its academic programs. A prime example of this commitment is the Marine Engineering program within the Faculty of Engineering, which actively encourages female enrollment alongside male students. Currently, there are four female students enrolled in the Marine Engineering program. Their presence is a positive step toward bridging the gender gap in engineering disciplines.







Related Link : https://sdgs.rmutsv.ac.th/goal/

<u>en-5/</u>

Policy and Operation

RUTS promotes gender equality policy

The university has been actively promoting gender equality and preventing gender discrimination in line with the Gender Equality Act of 2015. Through official announcements and public commitments, the university ensures that all individuals are treated fairly and equally, without discrimination based on gender.

In summary, Rajamangala University of Technology Srivijaya's initiatives to promote gender equality and prevent discrimination play a crucial role in creating a welcoming and equitable environment for everyone. These efforts reflect the university's commitment to providing equal opportunities and protections for all, regardless of gender identity, and fostering a more inclusive and respectful campus culture.













Related Link : https://sdgs.rmutsv.ac.th/goal/en-5/



6 CLEAN WATER AND SANITATION



ENSURE AVAILABILITY AND SUSTAINABLE MANAGEMENT OF WATER AND SANITATION FOR ALL

Research and Innovation

RUTS develop alerts and salinity forecast for Songkhla Lake



RUTS focuses on advancing research and innovation in natural resource management and climate change adaptation, particularly in response to changes in water resources. By advance community-based networks using the BCG model which contributed by RUTS to develop alerts and salinity forecast for Songkhla Lake in order to assist in planning and mitigating crop damage for rice farmers near the lake, as well as exploring renewable energy applications for irrigation systems in rice paddies. Which fosters stronger ties between the university and the local population, building trust and encouraging future collaboration.







Related Link : https://sdgs.rmutsv.ac.th/goal/en-6/



Water Management for Agriculture in Pattani Province



RUTS and Water Allocation Division of the Pattani Irrigation conduct a research aiming to enhance water management by integrating innovative technology for monitoring water quality and analyzing agricultural areas. This approach supports systematic water management to adapt to environmental changes. The ongoing research are vital components in strengthening community resilience, enabling them to adapt effectively to climate change and increase agricultural productivity.







Related Link: https://sdgs.rmutsv.ac.th/goal/en-6/

Outreach and Engagement

RUTS and The National Water Resources NWRO



The National Water Resources partnered with RUTS signing academic MOU aimed at enhancing education, promoting research, and advancing technology to bring innovation to communities and address water issues. This partnership, leveraging the knowledge and experience of both organizations, will drive sustainable water resource management.







Related Link : https://sdgs.rmutsv.ac.th/goal/en-6/



Collaboration with community to Improve Water Management



The National Water Resources partnered with RUTS signing academic MOU aimed at enhancing education, promoting research, and advancing technology to bring innovation to communities and address water issues. This partnership, leveraging the knowledge and experience of both organizations, will drive sustainable water resource management.













Related Link : https://sdgs.rmutsv.ac.th/goal/en-6/

Teaching and Learning

Smart Melon Farm



RUTS Trang Campus have developed a smart melon farm system fully managed by Internet of Things (IoT) Technology. The system, connected to the internet and controlled via mobile devices, promotes optimal growth conditions for melons grown in greenhouse environments while minimizing resource use, especially water consumptions, and environmental impact. By adjusting watering, fertilizing, and temperature to precise levels, the system helps farmers save on water and fertilizer while enhancing product quality. As a result, farmers can monitor and control farm operations via smartphone, offering convenience and reducing time spent on manual tasks.



Related Link: https://sdgs.rmutsv.ac.th/goal/en-6/



Policy and Operation

RUTS Free Drinking Water Stations & Refill Points



RUTS provided about 50 free clean drinking water stations and water filtration systems throughout the five main campuses, for students, staff, and visitors, as well as the general public who visit or use university services in order to ensure there is enough drinking water to meet their consumption needs. Also, allows all users to refill bottles, which leads to a reduction of plastic waste which essential to reach all users the importance of staying hydrated and avoiding sugary drinks. This habit-building effect can lead to long-term health benefits.



Related Link : https://sdgs.rmutsv.ac.th/goal/

<u>en-6/</u>

RUTS conserving water

To promote the importance of conserving water, RUTS has taken action actively promote conscious water usage across campuses which aiming to encourage faculty, students, and staff to recognize the importance of responsible water use. By display facts and reminders about water usage near high-use areas like sinks and restrooms.

Also implement wastewater recycling systems for recycling, especially in settings with high water use, like toilets or cafeterias to use treated wastewater for campus landscaping, irrigating plants, ensuring sustainable use of reclaimed water within the university grounds for creating a more environmentally friendly campus.



















Related Link : https://sdgs.rmutsv.ac.th/goal/en-6/



7 AFFORDABLE AND CLEAN ENERGY



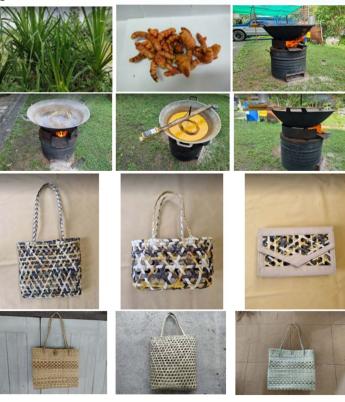
ENSURE ACCESS TO AFFORDABLE, RELIABLE, SUSTAINABLE AND MODERN ENERGY FOR ALL

Research and Innovation

Application of Top-Lit Up-Draft (TLUD) Biomass Stove for Dying of Toei Nam with Turmeric

This research aimed to develop a TLUD (Top-Lit Updraft) biomass stove and apply it to the process of dyeing pandanus leaves using turmeric. The TLUD stove was constructed from a 200-liter drum as the outer structure, and its performance was evaluated using the Water Boiling Test (WBT). Afterward, the stove was used to dye pandanus leaves with turmeric, and the dyed leaves were then processed into products.

The results showed that the turmeric dye adhered well to the pandanus leaves without compromising the mechanical properties, such as tensile strength. When the turmeric-dyed leaves were woven into bags, they maintained their structural integrity, demonstrating their suitability for use in product manufacturing. This research highlights an environmentally friendly natural product that enhances the value of community-based goods.



Related Link : https://sdgs.rmutsv.ac.th/goal/en-7/



RUTS Trang, invented a floating platform to promote small-scale agriculture (Smart Farm)

March 23, 2023, Rajamangala University of Technology Srivijaya, Trang Campus, Engineering and Technology students have invented a floating platform to promote small-scale agriculture (Smart Farm). This innovation is designed for modern farming practices by utilizing technology for agricultural management. They conducted experiments growing hydroponic vegetables and tomatoes alongside fish farming in cages on a floating platform measuring 6 x 6 meters. The innovation of the floating platform for hydroponic vegetable cultivation and fish farming addresses common issues faced in managing hydroponics and fish, particularly the lack of time for care due to other work commitments. The success of this agricultural innovation not only serves as a model for dissemination among farmers but also fosters teamwork and the practical application of knowledge.







Related Link : https://sdgs.rmutsv.ac.th/goal/en-7/

The ultimate innovation: a solar-powered herbal tea drying machine for community enterprises



The academic service project at the College of Industrial Technology and Management, led by Dr. Suporn Rithiphakdi and his team, has developed a solar-powered herbal tea drying machine for community enterprises. The project involved sourcing materials for the design and construction, with key contributions from Thanakorn Dam-O, a student in the Electrical Engineering program, and Khun Lek (nickname) from the Ban Tha Kham community enterprise. The machine was successfully completed on December 7, 2023, and has since been handed over to the Ban Tha Kham community enterprise for their use.



Related Link : https://sdgs.rmutsv.ac.th/goal/en-7/

30 |



Outreach and Engagement

Building with the highest energy consumption in faculty of engineering, RUTS



RUTS has formed a committee to evaluate energy-inefficient electrical consumption in buildings across the Songkhla area. The Faculty of Engineering building has been identified as the highest consumer of energy. This building houses large electrical equipment and machinery, including air conditioning systems. Furthermore, the Faculty of Engineering spans multiple buildings and contains a considerable amount of machinery and equipment, all contributing to its relatively high electricity consumption.



Related Link: https://sdgs.rmutsv.ac.th/goal/en-7/

Maintenance of power supply equipment for buildings to extend its lifespan.

Rajamangala University of Technology Srivijaya has established a dedicated team to oversee the inspection and maintenance of power supply equipment across its various buildings, ensuring that all electrical systems operate efficiently and reliably. The team, composed of skilled engineers, conducts regular assessments of the power supply infrastructure, identifying any potential issues that could affect energy performance or safety.

Furthermore, the team works to upgrade or replace outdated equipment, ensures proper calibration of energy meters, and provides recommendations for energy-saving initiatives. By focusing on preventive maintenance and proactive management of the power supply system, the university aims to create a more energy-efficient and cost-effective environment for all campus buildings.









Related Link : https://sdgs.rmutsv.ac.th/goal/en-7/



Teaching and Learning

Solar Cells at University of Technology Srivijaya



As the rising electricity costs due to extreme heat have led many to seek ways to save on bills during the hot season, particularly through solar energy systems. On April 3, 2023, Rattaphum College opened the Solar Cell Innovation and Technology Center. This center serves as a comprehensive learning resource for solar cell systems, providing academic services for students and external individuals interested in enhancing their skills, including professionals and farmers looking to utilize solar energy in their areas. Training programs will be available for those keen to learn.







Related Link : https://sdgs.rmutsv.ac.th/goal/en-7/

Comprehensive solar cell system training to support smart grid technology

Rattaphum college, under Electrical Engineering program has organized the training sessions for two batches: on January 25-26, 2023, and the second on January 28-29, 2023, at the Solar Cell Innovation and Technology Center, as part of the main mission of Rajamangala University of Technology Srivijaya. This initiative aims to provide knowledge and skills to students, communities, and society. The training ensures that participants can apply their knowledge in accordance with professional standards, prioritizing safety for themselves and others. Additionally, it contributes to the advancement of Thailand's smart grid in three key areas: economic and industrial development, business and investment development, and technological knowledge development.



Related Link: https://sdgs.rmutsv.ac.th/goal/

<u>en-7/</u>



Policy and Operation

Announcement from Rajamangala University of Technology Srivijaya on Environmental and Energy Management Policy

RUTS is committed to addressing energy and climate change as part of our alignment with the 2030 Sustainable Development Goals, particularly Goal 7 (Affordable and Clean Energy) and Goal 13 (Climate Action). Our efforts focus on implementing policies aimed at reducing energy consumption, increasing the use of renewable energy, and lowering greenhouse gas emissions. We prioritize the use of energy-efficient appliances, the adoption of smart building practices, and initiatives for electricity conservation. Additionally, we are committed to climate change adaptation and mitigation strategies.

Our university is also actively engaged in clean energy research, the development of innovative technologies, and investments in energy infrastructure and clean energy solutions. Through these actions, we aim to contribute to a more sustainable future while promoting environmental responsibility across campus and in the wider community.



Related Link : https://sdgs.rmutsv.ac.th/goal/en-7/

Renewable energy used at RUTS aquarium based on solar rooftop for reduce energy consumption

In 2023, the university made significant improvements to its aquarium building, a popular visitor attraction on campus. The enhancement included replacing the building's existing roof with a solar power system, which greatly improved the building's electrical efficiency. A grid-connected photovoltaic (PV) system was installed on the rooftop, along with a 150 kWp capacitor, enabling the building to generate its own renewable energy. This upgrade has resulted in energy savings and a reduced reliance on external electricity sources. The initiative is expected to reduce carbon dioxide equivalent (CO2e) emissions by approximately 83,850 kg per year, contributing to the university's sustainability goals.



Before



After

Related Link: https://sdgs.rmutsv.ac.th/goal/en-7/



DECENT WORK AND ECONOMIC GROWTH



PROMOTE SUSTAINED,
INCLUSIVE AND
SUSTAINABLE ECONOMIC
GROWTH, FULL AND
PRODUCTIVE
EMPLOYMENT AND
DECENT WORK FOR ALL

Research and Innovation

Enhancing Beef Production

RUTS researchers in Faculty of Agro-Industry study a wide range of issues related to enhance production and marketing standards of beef cattle in Likhor for commercial competition. the research results were disseminated to provide vocational training for the public. This was done through a practical training program on meat product processing for teachers and students from the Non-Formal Education (NFE) in Nakhon Si Thammarat Province. The objective was to create income and job opportunities for the community. The training included knowledge transfer and demonstrations of food processing, such as hamburgers, German sausages, sun-dried beef, and beef skewers. Through this initiative, the researchers aimed to foster sustainable economic development in the community by empowering local residents with the skills to improve the quality of beef products and explore new markets. The knowledge transfer also helped to bridge the gap between academic research and practical applications, ensuring that the community can leverage the latest industry trends to enhance their livelihoods and promote local beef production.









Related Link : https://sdgs.rmutsv.ac.th/goal/en-8/



Outreach and Engagement

Upgrading Community Product



Faculty of Industrial Education and Technology offers deep experiential learning and networking on Training and Development of peanut roll production process with innovation to enhance vocational skills for the community in Rattaphum, Songkhla Province.

The project are to promote, support, and create vocational skills for underprivileged individuals and those with fewer opportunities and empower participants with the knowledge and skills to support themselves and improve their livelihoods. Furthermore, it seeks to develop the production process and elevate the local community's peanut roll products to a broader recognition. Moreover, over 30 participants have chances to shared experiences, learn from each other. and apply the learning back to their own community.







Related Link: https://sdgs.rmutsv.ac.th/goal/ en-8/

Living Well @ RUTS

RUTS commitment to the well-being of faculties and staff. All RUTS campuses initiative promotes physical, cultural, and intellectual activities aimed at fostering health and wellness. Offers a variety of free programs, including fitness, sports facilities and residents. Additionally, RUTS also provide customized wellness services. such as hand and foot massages support employees' overall health.













Related Link: https://sdgs.rmutsv.ac.th/goal/

en-8/



Teaching and Learning

Business Model Canvas for Entrepreneurs



Faculty of Industrial Education and Technology organized the Entrepreneurship and New Technology Business Entrepreneur Program. The session was to provide entrepreneurs with a comprehensive understanding of the Business Model Canvas, a valuable tool for shaping and refining their business strategies. By exploring each of the nine key components of the Canvas-such as value propositions, customer segments, revenue streams, and key resources-entrepreneurs gained the skills to design, describe, and analyze their business models more clearly and effectively.

As a result, participants left with the ability to create well-structured business models that are aligned with their goals, reduce risks, and enhance their ability to attract investors, partners, and customers.



Related Link : https://sdgs.rmutsv.ac.th/goal/en-8/

RUTS Programme

Studying at RUTS offers more than just academic knowledge; it provides students with the skills and practical experience needed to succeed in the workforce. RUTS emphasizes a hands-on approach to learning, integrating real-world applications into its curriculum. This means students are not only equipped with theoretical knowledge but also gain practical skills through internships, field projects, and collaborations with industry partners.

Graduates leave RUTS with a solid foundation of both technical and soft skills. The university's career services and alumni network also provide ongoing support, offering job placement assistance, career advice, and opportunities to connect with potential employers.



Related Link: https://sdgs.rmutsv.ac.th/goal/

en-8/



Policy and Operation

RUTS Fair Trade

Faculty of Industrial Education and Technology organized an event aimed at fostering the entrepreneurial ecosystem and promoting entrepreneurial development. The event utilized the "Nad Nai Suan Market" or "RUTS Walking Street" every Wednesday, which serves as a platform to connect local entrepreneurs, small businesses, and aspiring startups. Entrepreneurs from various sectors gathered to exchange ideas, explore collaborations, and discuss innovative approaches to business development.

This event was part of the Faculty's ongoing commitment to enhancing the entrepreneurial skills of students, entrepreneurs, and the broader community. It supports the goal of empowering individuals with the knowledge and tools needed to succeed in today's competitive business environment and contribute to the local economy.



Related Link : https://sdgs.rmutsv.ac.th/goal/en-8/

Coastal Tourism Festival by Faculty of Liberal Arts



The Coastal Tourism Festival, organized by Faculty of Liberal Arts at in collaboration with the Songkhla Council, is a vibrant event aimed at promoting the beauty and cultural heritage of the coastal areas of Songkhla. This festival brings together locals, tourists, and students to celebrate the region's natural landscapes, traditions, and tourism opportunities. The event showcases a range of activities designed to highlight the best of coastal tourism, offering a blend of leisure, culture, and community engagement. The festival serves as a platform for RUTS students to engage with the community and develop skills in event management, hospitality, and tourism promotion.



Related Link : https://sdgs.rmutsv.ac.th/goal/en-8/



9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



BUILD RESILIENT
INFRASTRUCTURE,
PROMOTE INCLUSIVE
AND SUSTAINABLE
INDUSTRIALIZATION AND
FOSTER INNOVATION

Research and Innovation

Participating Intentional, Innovation & Technology Exhibition



Asst. Prof. Dr. Tawich Klathae, lecturer in the Civil Engineering Program, Engineering Department, College of Industrial Technology and Management, Rajamangala University of Technology Srivijaya, participated in the competition and exhibited his work on the topic "Shellcrete: Sustainable concrete utilizing seashells for seaside communities" at the World Invent Singapore 22+23 (WoSG) in the Republic of Singapore. Between September 4-6, 2023, in the Republic of Singapore. Received the Silver Award from the National Research Council of Thailand (NRCT)







Moreover, Asst. Prof. Dr. Tawich Klathae and Asst. Prof. Chookiat Choosakul, lecturer in the Civil Engineering Program, Engineering Department, College of Industrial Technology and Management, Rajamangala University of Technology Srivijaya, participated in the competition and exhibited their work on the topic "Sandless concrete pavement: reinforced concrete pavement uses stone as the aggregate 100 percent" at the 34th Intentional, Innovation & Technology Exhibition" ITEX-WYIE 2023 in



the Kuala Lumpur Convention Centre between May 11 and 12, 2023 in Malaysia. Received the gold and special award. This project explores a sustainable alternative to traditional concrete by replacing sand with stone as an aggregate and addressing sand scarcity issues. By eliminating sand, a finite and heavily extracted resource, the project promotes more sustainable practices in concrete production.

Related Link : https://sdgs.rmutsv.ac.th/goal/en-9/

Product Champions

From receiving support in various fields throughout 2023, researchers at Rajamangala University of Technology Srivijaya developed products in various areas. Researchers have created a diverse range of commercially developed products. Researchers and entrepreneur worked together to create products e.g. Thai Herbal Body Massage Cream, Phukrak snack, Plant growth enhancers, Trang pepper corn (crushed bottle/flat bottle), Palm sugar cubes, Manista, and Robusta. These products were distributed by the Office of Innovation Management and Technology Transfer (IMTT) through various channels, such as JungHuu platform and livestreaming e-commerce.









Related Link : https://sdgs.rmutsv.ac.th/goal/en-9/

Outreach and Engagement

Community-based value creation product development project



To enhance market visibility and sales, Office of Innovation Management and Technology Transfer (IMTT), in collaboration with the Department of Industrial Promotion (DIPROM), organized a community-based product development project the project organized promotional activities, including video production and social media campaigns. These efforts helped to raise awareness of community products and build brand recognition. Additionally, the project facilitated networking opportunities between entrepreneurs and potential buyers, fostering collaboration and partnerships. For instance, the Manorah bead handicraft community enterprise explored new product lines and packaging designs to appeal to a wider market.





Related Link : https://sdgs.rmutsv.ac.th/goal/en-9/



Leveraging Innovation to Drive New Business Potential in SMEs

Rajamangala University of Technology Srivijaya's Office of innovation management and technology transfer organized a project to show innovative research, products, and services by SMEs. The convergence of research, innovation, and entrepreneurship has the potential to drive significant societal and economic change. By fostering collaboration between academia, industry, and government, we can create a vibrant ecosystem that nurtures innovation, stimulates economic growth, and addresses societal challenges.

Ultimately, the success of such initiatives depends on several factors, including the quality of the projects showcased, the effectiveness of event organization, and the follow-up actions taken to sustain the momentum. By carefully considering these factors, we can maximize the impact of innovation and entrepreneurship on society.

Example as follows:



1) Akin Farm Limited Partnership: Quail Egg Sorting Machine with Image Processing Technology



2) Innovative Coffee Co., Ltd.: Kombucha from Coffee Blossom Bark and Tea



3) APN IT Solution Co., Ltd.: Automated Hatching Control System with IoT Technology

The convergence of research, innovation, and entrepreneurship has the potential to drive significant societal and economic change. By fostering

Related Link : https://sdgs.rmutsv.ac.th/goal/

en-9/

Teaching and Learning

Practical Training in Academic Services with Industry and Commerce

RUTS IMIT RUTS RUTS RUTS



During 13th - 18th November 2023 Office of Innovation, Management, and Technology Transfer, in collaboration with the Faculty of Engineering, hosted a training program on Boiler Operators or Boilers Using Liquid as a Heat Conductor.

The purpose of this course is for boiler operators to play a critical role in ensuring the efficient and safe operation of industrial and commercial facilities. This comprehensive training program is designed to equip individuals with the knowledge, skills and certifications necessary to excel in this demanding field. The program covers boiler fundamentals, boiler controls and instrumentation, fuel handling and combustion, water treatment and chemistry, boiler safety and emergency procedures, and hands-on training and certification. The program's benefits include improved job prospects, increased earning potential, improved safety, environmental stewardship and career advancement.

This program is crucial for ensuring the safe, efficient, and environmentally responsible operation of boilers. By equipping operators with the necessary skills and knowledge, these programs contribute to a more sustainable and competitive industrial landscape.







Related Link: https://sdgs.rmutsv.ac.th/goal/en-9/



Policy and Operation

RUTS' Role in Advancing Prince of Songkhla University Science Park

Rajamangala University of Technology Srivijaya (RUTS) is playing a pivotal role in the development of the Songkhla University Science Park. On December 22, 2023, Associate Professor Warapong Boonchuaythan and Ms. Thanathida Kaewwangsakul represented RUTS at the inaugural working group meeting.

The meeting focused on establishing guidelines and strategies for leveraging the region's scientific and innovative infrastructure. The goal is to enhance the competitiveness of local businesses and drive economic development while fostering a thriving innovation ecosystem. This collaboration will provide local enterprises with access to advanced technology and resources, contributing to the growth of the Southern economy.

Additionally, the project aims to promote research, development, and collaboration between academia, industry, and government sectors. By fostering these partnerships, the initiative seeks to position the region as a hub for innovation, science, and technology, ultimately boosting regional economic growth and strengthening the innovation ecosystem.







Related Link : https://sdgs.rmutsv.ac.th/goal/en-9/

Business concept competition



Office of Innovation Management and Technology Transfer (IMTT), organized a business concept competition aimed at fostering an entrepreneurial ecosystem among university students. A total of 61 business concepts were submitted by students from various faculties and campuses, reflecting strong interest and engagement across the university. Participants gained valuable experience in pitching their ideas, which helped them develop critical skills in communication, problem-solving, and business planning, all of which are essential for entrepreneurial success.

Overall, the competition strengthened the university's entrepreneurial ecosystem, nurturing a culture of innovation and encouraging future initiatives, workshops, and incubator programs to support aspiring student entrepreneurs





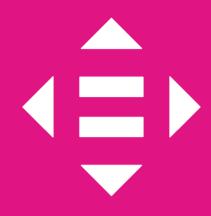




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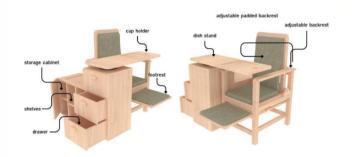
10 REDUCED INEQUALITIES



REDUCE INEQUALITY WITHIN AND AMONG COUNTRIES

Research and Innovation

Products for Thai Elderly



Faculty of Engineering, RUTS studied development of innovative products in Living Room for the Thai Elderly. Researcher are focusing on furniture that meets the specific needs of the elderly, who have different usage patterns due to physical limitations. By designing furniture products, multi-purpose table-chair sets for the elderly, utilizing quality function deployment techniques. The average overall satisfaction of the product was 4.12 points, which is at a good level of satisfaction.





Related Link: https://sdgs.rmutsv.ac.th/goal/

<u>en-10/</u>



Elderly Friendly Living Room

Creating an appropriate home environment for families with elderly members is essential to facilitate daily activities for the elderly, caregivers, and other family members. Faculty of Architecture, RUTS study titled "Development of Home Textile Products for Thai Senior-Friendly Living Rooms." The innovation aims to enhance health and improve the suitability of living room textiles for the elderly on optimizing the use of space and the physical environment within homes. Such as exploring traditional patterns of ancient rush mats together with the community and physical properties of rush fibers to replace the used one.









Overlapping of functions in a living space





Adhesion test of krajood mat with anti-slip rubber underlay









Knowledge transfer on process and techniques for edge binding

Related Link: https://sdgs.rmutsv.ac.th/goal/

en-10/

Outreach and Engagement

RUTS and Disabilities Event



The Office of Academic Resources and Information Technology (ARIT) supported the donation of gifts for the International Day of Persons with Disabilities event at the Songkhla Provincial Disability Service Center. This event provides individuals with disabilities an opportunity to show their talents, celebrate disability organizations, and promote life skills and inclusive development for people with disabilities.





Related Link: https://sdgs.rmutsv.ac.th/goal/en-10/



International Day of Persons with Disabilities Exhibition



RUTS took part in the "Audio Descriptions" exhibition at the International Day of Persons with Disabilities event in Songkhla province. The exhibition highlighted innovations in media accessibility for individuals with disabilities.

In addition, the event featured a variety of activities, including the distribution of insurance policies, the presentation of wheelchairs to persons with disabilities, a lucky draw, health and dental check-ups, and more than 100 exhibition booths showcasing products made by individuals with disabilities.



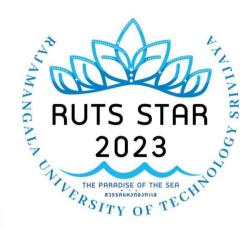




Related Link : https://sdgs.rmutsv.ac.th/goal/en-10/

Teaching and Learning

RUTS Star Contest 2023



RUTS organized the 14th Freshmen Night Contest, known as RUTS STAR 2023. The event aimed to identify first-year students who exemplify outstanding personality, talents, and attitudes, and who could serve as role models for the university community. These selected students will represent RUTS in a variety of public events and university-level activities throughout the academic year.

RUTS STAR 2023 provided an opportunity for new students to demonstrate their leadership potential, communication skills, and collaborative spirit, all while promoting the core values of respect, equality, and mutual understanding that the university strives to uphold.



Related Link : https://sdgs.rmutsv.ac.th/goal/en-10/

SUSTAINABLE G ALS



เกราะเป็นที่กล้ากาแหน่ง RUTS STAR 2023 21 สิบหาคม 2566 เฉลา 19:00 เป็นต้นไป เน อาการเครื่อกระอักษา คณะอัควกระบาศสตร์ บหาวิทยาลัยเกตโนโลยีธาชมยคลศรีวิธัย









Policy and Operation

RUTS Provide Learning Equipment (Tablets)

To support students from economically disadvantaged backgrounds who lack essential educational resources, RUTS has implemented a policy to provide academic assistance to those in need. As part of this initiative, the university offers 210 tablets for students to borrow for educational purposes. Additionally, RUTS provides online learning equipment that can be loaned to students to facilitate their studies.

The selection of students who will receive this support will be determined by a committee at the faculty or college level, ensuring that those with the greatest need are prioritized.





บระกาศมหาวทยาละเทศเนเลยราชมงคลศรวชย เรื่อง นักศึกษาที่เห็นสมควรจะได้รับการช่วะเหลือจากทางเหาวิทยาลัย ในการซิมลูปกรณ์การเรียนการสอน (แท็บเล็ต) ประจำภาคการศึกษาที่ ๑ ปีการศึกษา (๑๕๖๖

ตามที่ มหาวิทยาลัยเทคโนโลยีราชมงคลทรีวิชัย มีนโยบายส่งสรัมการศึกษา แก้นักศึกษาที่มี ฐานะยากจบ จาดแคลนอุปกรณ์ในการเรียนการสอน และเห็นสมควรที่จะได้รับการช่วยเหลือจากหาง มหาวิทยาลัย โดยการจัดหาอุปกรณ์การเรียนการสอนให้นักศึกษาชิ้มเรียน เป็นหรืองครมที่จะสอร์แท็นเล็ต เพิ่น มหาวิทยาลัยได้ตำเนินการคัดเลือกนักที่เห็นสมควรจะได้รับการช่วยเหลือจากหารมหาวิทยาลัย เรียบร้อยแล้วนั้น จึงประกาศราชชื่อนักศึกษาที่เห็นสมควรจะได้รับการช่วยเหลือจากหารมหาวิทยาลัย ในการ ซีมอุปกรณ์การรับมหารสอน แห่งแล้วตั้งครับชื่อแมวทำรบระกาศนี้

ทั้งนี้ นักศึกษาที่ได้รับการคัดเลือก สามารถยืมลูปกรณ์ได้ระยะเวลา ๑ ภาคการศึกษา โดยสามารถดาวน์โหลดแบบยืม-คืนพัสดุ ให้ที่เว็บโซต์ http://dsd.mnutsv.ac.th กรอกรายละเอียด ให้ครบถ้วม และยื่นขอรับอุปกรณ์การเรียนการลอบ (แท็บเล็ด) ใต้ที่พอสุดหน้องสดุดในพื้นที่สังกัด

การคืนอุปกรณ์ให้ดำเนินการให้แล้วเสร็จ ภายใน ๑๕ วัน ภายหลังจากวันสุดท้ายของการ สอบปลายภาค ได้ที่พอสมุด/ห้องสมุดในพื้นที่สังกัด

> (ศาสตราจารย์สุรัจน์ อัญรส) อธิการบุทีมหาริทยาลัยเทคโนโลยีราชมงกลศรีริรัช

Related Link : https://sdgs.rmutsv.ac.th/goal/en-10/



11 SUSTAINABLE CITIES AND COMMUNITIES



MAKE CITIES AND HUMAN SETTLEMENTS INCLUSIVE, SAFE, RESILIENT AND SUSTAINABLE

Research and Innovation

Community-Led Sustainable Development through Architectural and Design Innovation



Faculty of Architecture, led an initiative to design community learning pathways as part of the project "Community-Based Resources and Technology in Pa Khat Subdistrict." This project is focused on promoting sustainable, community-driven tourism and supporting agricultural tourism in Singhanakhon District, Songkhla Province.

The initiative aims to enhance economic resilience and preserve cultural heritage within Pa Khat, transforming local resources into sustainable tourism pathways. Through a participatory design approach, the project fosters community pride and social cohesion, as local stakeholders actively collaborate and contribute their resources and knowledge.

The outcome of the project is to position Pa Khat as a model for sustainable rural tourism, advancing the community's economic, social, and environmental well-being while also boosting local pride and tourism.





Related Link: https://sdgs.rmutsv.ac.th/goal/en-11/



Outreach and Engagement

STREET ART: Collaboration with Various **Local Networks in Trang**



Faculty of Architecture, in collaboration with Si Kao Municipality, organize the "STREET ART: Likay Pa and the Si Kao Way of Life" project, under the creative cultural approach aimed at promoting and preserving local culture.

This creative cultural initiative aims to raise awareness of this unique art form while enhancing the area's tourism potential. The impact of the "STREET ART: Likay Pa and the Si Kao Way of Life" project is multifaceted, contributing to cultural preservation, community engagement, and tourism development. Cultural Preservation, by featuring Likay Pa, a traditional Thai performance, through street art, the project helps preserve and revive an important aspect of local culture, ensuring its continuity for future generations.

In summary, the project serves as a platform for cultural revitalization, community cooperation, and economic stimulation through tourism. creating a lasting positive impact on Si Kao and its cultural legacy.







Related Link: https://sdgs.rmutsv.ac.th/goal/ en-11/

Teaching and Learning

Field visit on Urban Planning in Penang, Malaysia



Urban Planning program from Faculty of Architecture organized an experiential learning project in Penang, Malaysia. This initiative aimed to provide students with practical insights into urban planning processes and challenges in a diverse urban setting.

Through initiatives like the Penang study trip. RUTS's Urban Planning program not only enhances students' academic knowledge but also prepares them for real-world applications in sustainable urban development. The program aims to cultivate professionals who can contribute positively to the enhancement of urban environments, aligning with global sustainability initiatives.









Related Link: https://sdgs.rmutsv.ac.th/goal/

en-11/



The 8th Academic Week Festival and the exhibition at Rattaphum College

คณาอารย์และนักศึกษาหลักสูตรสาขาวิชาทัศนศิลป์ น้ำผลงานศิลปะไปจัดนิทรงศการ ในงานมหกรรมสัปดาห์วิชาการ วิทยาลัยรัตภูมิ ครั้งที่ 8 วิทท์ 14-15 ธันวาคม 2566 ณ วิทยาลัยรัตภูมิ มหาวิทยาลัยเทกในโลยีราชมงคลศรีวิจัย มหาวิทยาลัยรัตภูมิ หาวิทยาลัยรัตภูมิ มหาวิทยาลัยเทกในโลยีราชมงคลศรีวิจัย คณะสถาปัตยกรรมศาสตร์ มหาวิทยาลัยเทคทีมโลยีราชมงคล ศรีวิจัย -

Faculty of Architecture celebrated the opening ceremony of the 8th Academic Week Festival at Rattaphum College. The exhibition prominently featured works created by students from the Visual Arts Program in the Faculty of Architecture, RUTS. These artistic contributions not only highlighted the students' creativity and skills but also demonstrated their ability to engage with local culture and express community narratives through art.

Overall, the participation of faculty members and students in the festival exemplifies the commitment of Rajamangala University of Technology Srivijaya to fostering an environment of learning, creativity, and community engagement, ultimately contributing to the cultural vibrancy and sustainability of the region.









Related Link: https://sdgs.rmutsv.ac.th/goal/en-11/

Policy and Operation

RUTS Trang Campus Launches Free Pedestrian and Transportation



RUTSTrang Campus has initiated an awareness campaign aimed at reducing foot traffic and vehicle usage on campus. As part of this initiative, the university is offering complimentary rickshaw services for students, staff, and visitors to promote safer commuting within the campus area. To enhance campus safety while encouraging a more eco-friendly lifestyle among the university community.

Overall, this campaign highlights RUTS Trang Campus's commitment to creating a safer, healthier, and more environmentally conscious campus environment.









Related Link: https://sdgs.rmutsv.ac.th/goal/en-11/

SUSTAINABLE G ALS

Hat Yai: Healthy City Co-Design



Faculty of Architecture and The Urban Studies and City Center, in collaboration with the Health Promotion Foundation (Thai Health Promotion Foundation) has initiated a new approach to developing a healthy city through the concept of Healthy City Co-Design. This participatory design framework involves multiple sectors and disciplines, aiming to create a healthy urban environment and enhance the quality of life for city residents.

The initial meeting to understand the project "Hat Yai: A Participatory Healthy City" involved all parties expressing their expectations to develop Hat Yai into a model healthy city. Everyone is committed to collaborating on this effort, and there is a strong hope that the co-design process among various stakeholders will contribute to improving the quality of life for the residents of Hat Yai. In conclusion, all the work presented is the result of students who have engaged in the process, conducted field studies, and actively participated in the design efforts.



Related Link : https://sdgs.rmutsv.ac.th/goal/en-11/















12 RESPONSIBLE CONSUMPTION AND PRODUCTION



ENSURE SUSTAINABLE CONSUMPTION AND PRODUCTION PATTERNS

Research and Innovation

Food container from fibers and bananas peels



Every part of the banana plant can be utilized and transformed into a wide variety of products. However, as leftover materials such as a lot of banana fibers and banana peels often become waste and harm the environment. Engineering Faculty is adding value to banana waste, specifically banana fibers and peels. The research team conducted training for 58 members of the "Kerd Jark Din" community enterprise in Songkhla Province. As a result, the group now has a machine that produces plates made from a mix of banana fibers and peels, intended to replace plastic plates for tourists.







Related Link: https://sdgs.rmutsv.ac.th/goal/en-12/



Using Disposal Materials for Aquaculture

Faculty of Fisheries Science and Technology has expanded its initiative to repurpose household and fisheries waste materials, such as baskets and PVC pipes, as training equipment for aquaculture students. This project has now evolved into research focused on developing technologies and innovations to reduce aquaculture investment costs for fishers.

One notable innovation is the creation of "basket condos" for oyster farming. Traditional oyster farming methods have often resulted in low survival and growth rates, but the research team's stacked basket system has significantly improved oyster survival and health. Additionally, PVC pipes, typically discarded from household use, have been repurposed to create structures for cultivating algae, offering an eco-friendly and cost-effective solution for aquaculture.

This knowledge has been shared with fishers in Trang Province, and the research team plans to expand these practices to other regions. aiming to benefit local communities and enhance the sustainability of aquaculture in the future.









Related Link: https://sdgs.rmutsv.ac.th/goal/

en-12/

Outreach and Engagement

Pepper Research Unit of RUTS



The pepper field, located within the area of Rajamangala University of Technology Srivijaya, by faculty of Agriculture. The station employs an automatic irrigation system, as well as fertilizer and post-harvest management. The result is a production of dried pepper seeds packaged for sale to university personnel and the general public for food safety. Through the expansion of knowledge on integrated pepper management, a model pepper training hub for the Pepper Growers Community Enterprise was established.

The overall results in the area showed that farmers succeeded in registering Palaean Pepper as a signature product of Trang Province and farmers also received awards as model farmers at both the provincial and national levels, and the training hub has been elevated to a provincial learning center.









Related Link: https://sdgs.rmutsv.ac.th/goal/

en-12/



"Help Separate Plastic Waste for Khanom Beach" by Pink Dolphin Team

Currently, the global waste crisis is impacting lives worldwide. Especially for plastic waste. As the awareness. RUTS formed the "Pink Dolphin" team and established a Facebook page, "Help Separate Waste for Khanom Beach," to promote plastic waste management. In 2023, students from the Civil Engineering program joined the Pink Dolphin team to sort plastic bottles collected from within the university and outside sources such as the Khanom Power Plant. Tha Kham community enterprises. Wat Khaokiriwong School, and donors via mail. They are currently running the "One Month, One Time, One Hour" volunteer program, where they collect plastic bottles monthly, sorting and transforming them into products like paving blocks, chairs, coasters, and tables. For example, they recycle bottle caps and rings by heating and reshaping them into chair mats.

Comparing 2022, before the Pink Dolphin team was established, to 2023, they have achieved a 32% increase in waste reduction and recycling for the Khanom district in Nakhon Si Thammarat Province.









Related Link: https://sdgs.rmutsv.ac.th/goal/en-12/

Teaching and Learning

Waste separation at Khanom's Sea Project

Team of lecturers from RUTS, Nakhon Si Thammarat Campus, launched the "Waste Separation at Khanom's Sea" project address the growing waste management issue along the Gulf of Thailand's coastline. Khanom, a popular tourist destination, faces significant challenges with waste overflow, particularly plastic pollution. The project's primary goals are to support academic services, research, and teaching while raising environmental awareness and promoting the reuse of plastic waste.

The initiative leverages the expertise of the professors in various fields, including waste reduction, plastic waste collection and sorting, waste management, recycling plastic bottles, producing biodiesel, creating eco-friendly materials, and manufacturing interlocking bricks using stone dust and recycled polycarbonate sheets. These valuable insights are shared with students, local communities, and the general public to foster a deeper understanding of environmental issues and encourage the sustainable reuse of plastic waste.









Related Link : https://sdgs.rmutsv.ac.th/goal/en-12/



Waste management project at College of Industrial Technology and Management



College of Industrial Technology and Management hosted a project to help separate plastic bottle waste. The activities were organized in the form of a learning base divided into 5 bases as follows: 1. Sorting plastic bottle 2. Processing bottle waste 3. Biodiesel 4. Environmentally friendly materials 5. Interlocking brick blocks mixed with stone dust and used polycarbonate sheets. It was found that waste management is a problem of the government sector in the area. Therefore, the project committee was aware of the problem of overflowing garbage in the city and jointly organized the project to help sort plastic bottle waste to help. The project has organized activities to provide knowledge on separating plastic bottle waste. Activities are integrated with university teaching and learning, including the creation of research works and innovations such as using scrap materials.



Related Link: https://sdgs.rmutsv.ac.th/goal/en-12/

Policy and Operation

Plastic Reduction for a Green University



โรงเรียนเทพมิตรศึกษา



RUTS has adopted a green university policy, encouraging all staff to be mindful of conservation and environmental protection in their activities and operations.

These efforts reflect the university's commitment to reducing plastic use and fostering sustainable practices within the campus and community.

RUTS is dedicated to reducing plastic use in all forms, particularly by replacing a plastic bottle with plastic bottle fighting fish tank. Also encourages the use of fabric bags instead of plastic bags for various activities, including teaching, student guidance, and counseling. Through these actions, RUTS not only reduces its ecological footprint but also sets a positive example for students and external partners in the pursuit of a more sustainable future.







Related Link: https://sdgs.rmutsv.ac.th/goal/en-12/



13 CLIMATE ACTION



TAKE URGENT ACTION TO COMBAT CLIMATE CHANGE AND ITS IMPACTS

Research and Innovation

Water Management with IoT Technology in Pattani Province



RUTS research project collaborates with community and local farmer groups in order to develop and test the water management system using loT technology. Enhancing water usage for agriculture and consumption by using real-time monitoring and control technology, enabling the community to efficiently track and manage water usage. It also opens up opportunities for local communities and farmers to learn about and access modern technology, equipping them to handle future environmental challenges effectively.







Related Link: https://sdgs.rmutsv.ac.th/goal/en-13/



Expansion of Salinity Meter Innovation for Rice and Shrimp Farmers

One of RUTS's notable projects, the Expansion of Salinity Meter Innovation for Rice and Shrimp Farmers in Sathing Phra and Singhanakhon Districts, Songkhla Province, addresses the challenges of water salinity management in the Songkhla Lake area. This collaboration ensures that the tool is tailored to directly benefit shrimp farmers, helping them better monitor and manage salinity levels in the water. which is critical to their farming success.

The project has received positive feedback, with local farmers expressing appreciation for the practical, real-world applications of RUTS's research. The salinity meter has proven to be a valuable tool that helps farmers adapt to changing environmental conditions and improve their agricultural practices.



Related Link: https://sdgs.rmutsv.ac.th/goal/

en-13/

Outreach and Engagement

RUTS Environmental Awareness Project

RUTS has organized various projects and activities to raise awareness about environmental conservation and carbon reduction. The university promotes broad community participation through sustainable natural resource use initiatives, encouraging communities to engage in projects that enhance knowledge and skills for climate change resilience. Such as project in collaboration with Hat Chao Mai National Park involves managing waste from tourism, aiming to mitigate global warming. The project raises local awareness of environmental conservation and promotes active community involvement in protecting natural resources.









As well as the seagrass ecosystem restoration workshop conducted by the Faculty of Science and Fisheries Technology. This project provides conservation knowledge and encourages community participation in the sustainable protection of natural resources.











Related Link: https://sdgs.rmutsv.ac.th/goal/ en-13/



RUTS Empowering Southern Thai Communities

RUTS has built collaborations with various organizations and communities. Aiming to enhance career development, support the transfer of knowledge, and bring innovation to communities in various areas across southern Thailand. For instance, project undertaken by RUTS is the promotion of livelihood groups in Satun Province, with the main objective of supporting career development and enhancing the economic value of local communities. This project was initiated to provide knowledge and consultancy to entrepreneurs in aquaculture, particularly seaweed farmers, mantis shrimp farmers, and sea cucumber farmers. This approach not only increases the community's income but also fosters economic sustainability.









Another significant RUTS initiative that enhances local community engagement through hands-on learning is the development of an automated feather algae farming project. With the collaboration between the university and Princess Chulabhorn Science High School in Satun.

The practical learning approach helps prepare young community members with advanced knowledge and skills, promoting sustainable development and economic resilience.







Related Link: https://sdgs.rmutsv.ac.th/goal/en-13/

Teaching and Learning

Water Management for Community Supporting

Challenges posed by climate change, RUTS is leading the way in developing and deploying innovative solutions in partnership with local agencies. One such initiative involves the installation of 10-inch pipe flow rate sensors in mountain water supply projects. These sensors enable communities to monitor and manage their water resources more efficiently and sustainably.

This technology also plays a key role in supporting flood and drought forecasting, allowing communities to prepare for and respond to changing environmental conditions with greater agility. By enhancing local water management, RUTS's work helps ensure that communities can better adapt to climate fluctuations and maintain a reliable water supply.













Related Link : https://sdgs.rmutsv.ac.th/goal/en-13/



RUTS Promotes Climate Education: loT for Sustainable Community Empowerment

IoT and Computer Networking Training Program



To prepare students for a technology-driven world, RUTS organized an loT (Internet of Things) and computer networking training program for 40 third-year high school students at Sawat Ratnaphimuk School in Trang Province. This program focuses on equipping students with fundamental skills in using loT technology to monitor and control devices remotely, as well as introducing them to networking systems. These skills are intended to prepare them for applications in agriculture and other industries related to sustainable resource management.

The project emphasize sustainable technology and resource management to make a positive impact on communities and the environment.













Related Link: https://sdgs.rmutsv.ac.th/goal/en-13/

Policy and Operation

RUTS Implements Sustainable Water Management, Disaster Preparedness, and Climate Adaptation Policies with Communities



RUTS plays a vital advisory role in shaping policies and strategies for disaster management and climate change adaptation in southern Thailand. Given the region's vulnerability to natural disasters, particularly floods and droughts, RUTS collaborates closely with local agencies to strengthen disaster preparedness and response efforts. By working alongside government bodies and other stakeholders, RUTS helps enhance the region's capacity to manage the impacts of climate-related challenges. In addition, RUTS prioritizes efficient water resource management and fosters collaboration with local communities, ensuring that their needs and knowledge are integrated into disaster management and climate adaptation initiatives.





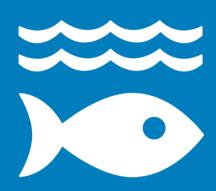




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14 LIFE BELOW WATER



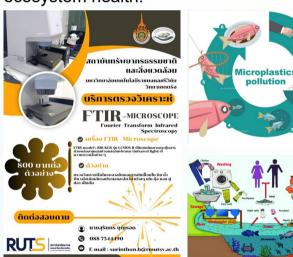
CONSERVE AND
SUSTAINABLY USE
THE OCEANS, SEAS AND
MARINE RESOURCES
FOR SUSTAINABLE
DEVELOPMENT

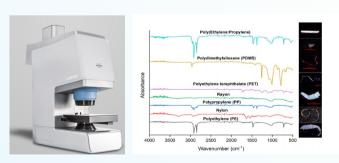
Research and Innovation

RUTS Laboratory Initiative: Monitoring Microplastic Pollution in Aquatic Ecosystem

RUTS researchers have collaborated with leading Thai universities, including PSU, to investigate microplastic contamination in aquatic ecosystems, with findings published in several research journals.

Since 2021, RUTS has established a laboratory dedicated to monitoring microplastics in coastal ecosystems using a BRUKER LUMOS II Fourier-Transform Infrared (FTIR) Microscope. This lab enables precise analysis of microplastic contamination in aquatic environments, focusing on species such as shrimp, shellfish, crabs, fish, and aquatic plants, as well as fishery products in Trang Province. This initiative aligns with RUTS's mission to monitor aquatic ecosystem health.





Related Link: https://sdgs.rmutsv.ac.th/goal/en-14/



Collaborative Research Project Between RUTS and SCM to Mitigate the Impact of Dredging on Coastal **Ecosystems**





Dredging near piers can transport and deposit sediment, negatively affecting coastal ecosystems such as seagrass meadows. In response to these concerns, Sang Charoen Marine Service Company Limited (SCM), a private sector entity specializing in dredging operations in Thailand has collaborated with Rajamangala University of Technology Srivijaya (RUTS) on a research project initiative aimed at analyzing sediment transport and deposition dynamics during dredging operations. The results of this study provide crucial insights that can inform the optimization of dredging practices, aiming to reduce sediment dispersal and protect coastal ecosystems.













Related Link: https://sdgs.rmutsv.ac.th/goal/

en-14/

Outreach and Engagement

RUTS Crab Bank Project: Restoring the Blue Crab Population



In response to declining blue swimming crab populations, RUTS launched the "RUTS Crab Bank Project" as part of a national effort to restore these resources. This community-based initiative aims to address social needs, foster partnerships, and promote stakeholder engagement. Since its inception in 2018, the project has expanded to include 77 crab banks and learning centers across 9 districts and 54 communities in Trang, Satun, and Krabi provinces.

RUTS Crab Bank Project is a well-structured initiative that plays a crucial role in conserving and sustainably managing blue swimming crab resources in Thailand.









Related Link: https://sdgs.rmutsv.ac.th/goal/ en-14/



Oyster Farming: Creating Alternative Livelihoods for Coastal Communities in Trang Province



The shortage of oyster seed is primarily due to the decline in natural populations, failing to meet consumer demand and driving up prices. RUTS by Faculty of Science and Technology of Fisheries Trang Campus aims to help coastal communities diversify their economies and reduce dependence on traditional fishing through the promotion of sustainable and low-cost oyster farming through a project titled "Transferring Technology of Oyster Farming Systems to Create Alternative Occupations for Coastal Communities in Trang Province As a result, the project supports farmers in adapting oyster farming methods to their local contexts for future commercial purposes.

















Related Link: https://sdgs.rmutsv.ac.th/goal/ en-14/

Teaching and Learning

RUTS Hosted the Youth Marine Science Camp

RUTS in partnership with the Libong Island community, organized the fourth RUTS Marine Science Camp for high school, engaged 23 youth participants through various activities aimed at promoting marine and coastal ecosystem conservation. Includeding Educating on the Sustainable Development Goals (SDGs), with a focus on SDG 14: Life Below Water, studying dugong behavior within seagrass beds and implementing seagrass restoration programs in the Libong Island area. The youth participants in the project acquired significant insights into the conservation and sustainable management of marine resources, while simultaneously experiencing the cultural and spiritual hospitality offered by the Libong Island community.







Related Link: https://sdgs.rmutsv.ac.th/goal/ en-14/

Seagrass Conservation Initiative Program

RUTS conducted a collaborative initiative with the Marine Science and Environmental Science program with Faculty of Fisheries Science and Technology. This project involved providing practical training on seagrass ecosystems to participants, including students, teachers, and staff from a local secondary school. Also aimed to foster awareness and understanding of the critical role of seagrass ecosystems in marine environments. Participants gain insight into seagrass's role in coastal ecosystems and the need for its sustainable conservation, supporting the Sustainable Development goals.







Related Link: https://sdgs.rmutsv.ac.th/goal/ en-14/



Policy and Operation

RUTS Action Plan for Marine Plastic Reduction at Trang Campus



RUTS Trang Campus launched a 2023 action plan to reduce marine plastic debris and promote beach cleanups. The initiative focuses on educating participants about the impact of marine plastic on ecosystems through interactive workshops and hands-on cleanups. Through the implementation of this action plan, RUTS can effectively contribute to the reduction of marine plastic waste, thereby supporting the long-term sustainability of the Andaman coastal ecosystem



Related Link : https://sdgs.rmutsv.ac.th/goal/en-14/

RUTS Policy to Reducing Marine Pollution





The impacts of plastic pollution on marine life are severe; it can entangle and suffocate animals, leading to injury or death, and ingestion can obstruct digestive tracts, resulting in malnutrition and starvation. Furthermore, plastic debris can leach harmful chemicals into marine ecosystems, which may bioaccumulate in food webs and ultimately pose health risks to humans through seafood consumption.

RUTS is dedicated to supporting the SDGs through its policies and practices. The university has implemented various policies, action plans, campaigns and initiatives aimed at reducing plastic waste and marine litter. To combat plastic pollution and marine debris are primarily carried out by students, faculty, and a range of RUTS partners.



Related Link : https://sdgs.rmutsv.ac.th/goal/en-14/



15 LIFE ON LAND



PROTECT, RESTORE AND PROMOTE SUSTAINABLE USE OF TERRESTRIAL ECOSYSTEMS, SUSTAINABLY MANAGE FORESTS, COMBAT DESERTIFICATION, AND HALT AND REVERSE LAND DEGRADATION AND HALT BIODIVERSITY LOSS

Research and Innovation

Development of Pellet Total Mixed Ration (PTMR) Feeding Patterns on Growth and Feed Efficiency of Weaning Calves



RUTS launched a research project titled "Development of Pellet Total Mixed Ration (PTMR) Feeding Patterns on Growth and Feed Efficiency of Weaning Calves." The team is investigating the effectiveness of PTMR as a comprehensive feeding solution that combines various feed ingredients in pellet form to ensure balanced nutrition. This project not only contributes to advancing agricultural research but also supports local farmers in improving livestock productivity and sustainability. Through this work, the research team hopes to impact the broader agricultural community by promoting cost-effective and efficient feeding practices for sustainable cattle farming.





Related Link : https://sdgs.rmutsv.ac.th/goal/en-15/



Community-Led Initiatives in Forest Area Expansion and Conservation

Research and Innovation Development of Sago Production for Commercial Purposes in Phatthalung Province, the ongoing research emphasizes that sago palm areas should be preserved through community-led efforts. This study has identified several villages in Chai Buri District, where residents are actively involved in both private and communal planting of sago palms, ensuring future generations can benefit from this resource.

This research not only promotes sustainable use of sago but also encourages community engagement in conservation efforts, thereby supporting both local livelihoods and ecological integrity.







Related Link: https://sdgs.rmutsv.ac.th/goal/en-15/

Outreach and Engagement

Enhancing Public Safety Through Snake Conservation Education



Faculty of Science and Technology RUTS organized a comprehensive training Help the Snakes for Ecological Balance The event was designed not only to impart knowledge but also to foster a more positive and informed attitude toward snake conservation. By understanding the ecological value of snakes, participants were encouraged to see them as allies in environmental management rather than threats to human safety.

By the end of the course, participants were not only more knowledgeable but also better equipped to manage snake-related emergencies in a way that protects human health and preserves wildlife.













Related Link : https://sdgs.rmutsv.ac.th/goal/en-15/



Bird Watching Camp



Bird Watching Camp, offering training to students and community members interested in bird conservation in collaboration by RUTS and Thung Song Municipality. Over 50 participants attended, engaging in hands-on activities designed to deepen their understanding of bird species commonly found in the region. The training covered essential topics, such as identifying local bird species, recognizing endangered species, and understanding the critical roles birds play in the ecosystem. Participants learned how to properly use binoculars for bird-watching and where to spot specific species in their natural habitats.

The camp not only imparted skills but also nurtured a shared responsibility for protecting local wildlife and ecosystems.









Related Link : https://sdgs.rmutsv.ac.th/goal/en-15/

Teaching and Learning

Mangrove Conservation



Faculty of Liberal Arts initiative designed to engage students in environmental conservation. The project focuses on hands-on activities such as planting mangrove trees using propagules and releasing blue swimming crabs raised by the Blue Swimming Crab Bank.

The hands-on experience of planting mangroves and releasing crabs gave them a sense of responsibility for the environment. As they worked together in nature, they developed a stronger bond with their peers and a greater appreciation for the coastal ecosystem. The project also reinforced the importance of preserving natural resources for future generations, allowing students to feel like active contributors to the health of their local environment.









Related Link : https://sdgs.rmutsv.ac.th/goal/en-15/



Training Animal for Science Students



One of the key skills science students learn is the vaccination process for Gumboro disease, which is crucial for maintaining the health and immunity of chickens. The training not only equips them with the knowledge of poultry care but also fosters a deeper understanding of animal welfare in agricultural settings. Graduates of Animal Science, specializing in poultry husbandry, are well-prepared to pursue careers in various sectors of agriculture. The comprehensive training they receive ensures they are adept at applying scientific principles to real-world farming practices, improving productivity while maintaining high standards of animal care. Furthermore, their ability to implement sustainable farming techniques aligns with modern agricultural trends, making them valuable assets in the industry. Whether they choose to work on a farm, in research, or in education, Animal Science graduates have a wide range of career options that allow them to make meaningful contributions to the field of agriculture.





Related Link : https://sdgs.rmutsv.ac.th/goal/en-15/

Policy and Operation

Repurposing Napier Grass



RUTS has introduced an innovative strategy to address the ecological impact of Napier grass, a known invasive species, by repurposing it as a resource for cattle feed. Recognizing the fast-growing nature of Napier grass, which often overtakes native vegetation and disrupts local ecosystems, the university has developed a program to manage its spread effectively. The university conducts outreach education to inform local farmers and stakeholders about sustainable practices in using this invasive species. The outreach program has already seen positive reception among local farmers who benefit from both the feed resource and the environmental guidance provided. This initiative not only promotes sustainable farming but also serves as a model for managing invasive species through community engagement. The university's action plan highlights the importance of education in balancing agricultural needs with environmental responsibility.







Related Link : https://sdgs.rmutsv.ac.th/goal/en-15/



16 PEACE, JUSTICE AND STRONG INSTITUTIONS



PROMOTE PEACEFUL AND INCLUSIVE SOCIETIES FOR SUSTAINABLE DEVELOPMENT, PROVIDE ACCESS TO JUSTICE FOR ALL AND BUILD EFFECTIVE, ACCOUNTABLE AND INCLUSIVE INSTITUTIONS AT ALL LEVELS

Research and Innovation

Research with Entrepreneurs



A research team from Rajamangala University of Technology Srivijaya led a project to transfer cocoa bean drying technology to enhance value for cocoa farmers in Nakhon Si Thammarat Province. The training covered topics such as selecting cocoa pods, preparing seeds, setting up fermentation containers. fermenting cocoa beans, adding leftover fermentation liquid, evaluating dried bean quality using the "cutting test," turning the beans, and monitoring temperature changes throughout the fermentation process. The event featured group workshops to brainstorm research questions aligned with local contexts and national goals, attracting substantial interest from researchers.









Related Link: https://sdgs.rmutsv.ac.th/goal/en-16/



Appropriate Technology to Enhance **Community Quality of Life**

RUTS held the Corn Model for Poverty Alleviation Technology Transfer Activity was held. This activity focused on training 40 target households in using an automated solar-powered precision irrigation system based on optimal soil moisture levels.

The households participating in this activity gained knowledge and hands-on skills in assembling, operating, maintaining, and repairing the precision irrigation system. By applying this technology, the households can enhance their corn crop yields and improve product quality, providing a sustainable approach to boosting productivity and income in the community.





Moreover, RUTS also held the project "Application and Expansion of Appropriate Technology to Build Social Capacity and Opportunities for Targeted Poor Communities," delivered solar-powered drying cabinet technology for drying peanut seeds.

This initiative, supported by PMUC, helps demonstrate the benefits of appropriate technology in improving quality of life. The community enterprise will now serve as a learning hub, allowing other peanut farmers to adopt this technology to boost income and family welfare.









Related Link: https://sdgs.rmutsv.ac.th/goal/

en-16/

Outreach and Engagement

Entrepreneurs Exhibition



Rajamangala University of Technology Srivijaya held an exhibition summarizing the outcomes of the area-based development project at Faculty of Industrial Education and Technology. The project aimed at developing the potential of local entrepreneurs in the Southern border areas.

It establishes a BCG business model with innovations that add value to products/services, creating opportunities, distributing income, and bringing prosperity to local communities. Furthermore, it fosters workforce quality to meet future urban expansion needs.













Related Link: https://sdgs.rmutsv.ac.th/goal/ en-16/



Young Smart Farmer



RUTS organized "Young Smart Farmer Innovative Entrepreneurship" program launched under the Agricultural Learning Station Development Project (Training Hub), designed to be a knowledge incubator to enhance farmer capabilities through a collaborative approach, promoting community economics with science and technology. The hands-on workshop focused on enhancing agricultural business management in plant production, held at the Local Plant Genetic Conservation Community Enterprise, Palian Pepper Group, in Trang Province.









Related Link: https://sdgs.rmutsv.ac.th/goal/en-16/

Teaching and Learning

RUTS MOOC





Universities have launched programs to enhance the workforce in the coastal tourism industry. This includes training to improve skills (Reskill, Upskill, and New Skill) start form 20 premium courses increase to 40 premium courses on the RUTS MOOC Platform in 2023. Which is open to the general public for free. It offers a diverse range of learning content across various fields, such as business administration, general education, innovation and communication technology, engineering and technology, architecture, and many other disciplines. Learners can access the content and instructional videos online through the website https://mooc.rmutsv.ac.th/.

Students can access and study on RUTS MOOC at their convenience and within a flexible learning system that can be tailored to individual needs. The MOOC includes testing and exercises to monitor progress in learning. Students will received certificates of expertise available in the chosen field to aid in career development and enhance expertise in various areas that require staying up-to-date and adapting to lifelong changes.



Related Link : https://sdgs.rmutsv.ac.th/goal/en-16/

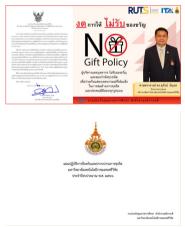


Policy and Operation

RUTS Preventing Corruption

RUTS organized a workshop under the activity "Proactive Work for Success Led by Prof.Dr.Suwat Tanyaros, the university president, along with university administrators, faculty, and staff. The event aimed to declare the "No Gift Policy," and Anti Corruption promoting awareness and cultivating a sense of public-mindedness regarding the non-acceptance of gifts or gratuities in the course of official duties. Participants were educated about the policy and actively engaged in a symbolic stand against corruption, reinforcing the university's commitment to an organizational culture that rejects corruption in all forms. This initiative highlights RUTS's dedication to integrity, fairness, transparency, and good governance, emphasizing the responsibility of all staff to act ethically and uphold the highest standards of conduct.







Related Link : https://sdgs.rmutsv.ac.th/goal/en-16/

Students' union



RUTS promotes student representation to manage operational benefits and student welfare at two levels: the University Student Organization Committee and the Faculty/College Student Club Committee. This committee represents students at the university level and is responsible for efficient student management and organizing activities. RUTS then participated in the 3rd "RMUT Global Leadership Workshop" held at Rajamangala University of Technology Rattanakosin in Nakhon Pathom Province and Dongeui University in Busan, South Korea.

Through this program, the student leaders gained new experiences and valuable knowledge, while also learning about South Korean culture, which differs significantly from Thailand, including cultural aspects related to dining and communication.











Related Link : https://sdgs.rmutsv.ac.th/goal/en-16/



PARTNERSHIPS FOR THE GOALS



STRENGTHEN THE MEANS
OF IMPLEMENTATION AND
REVITALIZE THE GLOBAL
PARTNERSHIP FOR
SUSTAINABLE
DEVELOPMENT

Research and Innovation

RUTS in Collaboration with UPSI on International Research Publication.

In September 2023, RUTS collaborated with Universiti Pendidikan Sultan Idris (UPSI) in Malaysia to publish joint research on the topic of "Proposed Precision Analysis of Water Quality Monitoring Embedded IoT Network." This study focused on a wireless water quality monitoring system integrated with multiple sensors, leveraging Internet of Things (IoT) technology. The research demonstrated a precision analysis of the system, particularly in relation to the calibration of pH levels, which measure the hydrogen ion concentration in water.

The study outlined the procedures for precision calibration, which involved both programming and hands-on measurements across various tests. The results indicated that the pH sensor, when paired with IoT communication, exhibited a remarkably low error rate of just 0.77%.



Related Link : https://sdgs.rmutsv.ac.th/goal/en-17/

RUTS and University Muria Kudus in Indonesia on International Conference Collaboration



RUTS in collaboration with University Muria Kudus (UMK) in Indonesia conducted the 1st ICEMA Conference "Green Economy Encourages Sustainability Business Development and Innovation of Inclusive Industry and SME in

SUSTAINABLE GALS DEVELOPMENT GALS

Era Society 5.0" on 29 November 2023 via Zoom Video Conferencing which was hosted by University Muria Kudus, Indonesia.

Dr Lamun Kayurin, Assistant to President and lecturer in Accounting, Faculty of Business and Administration at the RUTS was invited as Keynote Speaker on topic "Sustainability Lean Manufacturing Strategy and Management Control System: A Case Study of a Thai Manufacturing Company









Related Link : https://sdgs.rmutsv.ac.th/goal/en-17/

Outreach and Engagement

RUTS and International Collaboration on measuring data for the SDGs



International Affairs, led a training session on the Impact Rankings 2024 for nearly 60 participants from 17 SDGs Committees. focused on the general metrics and indicators used to calculate research and evidence for each of the Sustainable Development Goals (SDGs). The training also featured a special guest speaker, Mr. Todd Hornal, Regional Director (APAC) at Times Higher Education, who shared insights on Impact Rankings 2024, discussing strategies for achieving the best scores in the rankings. The training continued with a practical session on how to collect and input data into the designated platform, WordPress. Overall, the training emphasized the importance of international collaboration in SDGs data gathering. It provided the RUTS SDGs team with a platform to learn, share ideas, and implement effective data measurement strategies for each SDG.







Related Link : https://sdgs.rmutsv.ac.th/goal/en-17/

FinTech: Opportunities and Challenges

RUTS partnered with Nanyang Polytechnic International (NYPi) in Singapore to host the Capacity Building and Capability Development Programme on FinTech Opportunities and Challenges. Participants from RUTS, primarily from the Faculties of Business and Administration, attended the programme at NYPi.

The programme aimed to equip participants with a comprehensive understanding of the multifaceted dimensions of FinTech. It provided exposure to the key technologies being utilized by industry players, explored the implications of these technologies, and highlighted the critical role of governance and regulatory frameworks in supporting the success of a FinTech ecosystem, as well as their limitations.















Design Thinking: Building customer centric financial products, services and processes
 Workshop on Design Thinking: Building customer centric financial products, services and processes



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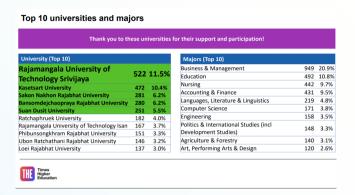




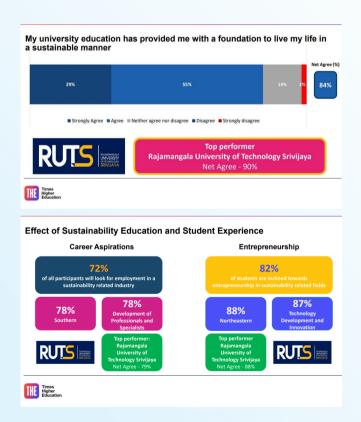
Related Link : https://sdgs.rmutsv.ac.th/goal/en-17/



RUTS Sustainable Literacy



In 2023, RUTS assessed its students' ability to grasp and retain key concepts of sustainability, focusing on education for sustainable development, sustainability-related activities, the cultivation of sustainable citizens, and the development of employability and work skills. This evaluation aligns with the approach used by Times Higher Education to assess students' learning outcomes in the same year.



Related Link: https://sdgs.rmutsv.ac.th/goal/

en-17/

Teaching and Learning

RUTS Education for the SDGs

In 2023, RUTS has designed various courses on sustainability to teach students for adopting sustainability in their lives. By integrated the course with the camp focused on activities aligned with the United Nations' Sustainable Development Goal 14: Life Below Water.







Dean School of Distance Education, Assoc.Prof. Dr.Zulnaidi Yaacob, Universiti Sains Malaysia joined into Management Accounting course to exchange ideas and discussion sharing for sustainability management accounting. It is a combination class for Undergraduates degree that address sustainability and the SDGs.





Additionally, RUTS partnered with UiTM for the International Accounting Camp 2023, promoting student mobility and fostering collaboration among accounting lecturers. The camp featured three main activities: an academic workshop on Sustainability Management Accounting and Finance, cultural performances and sports events, and visits to local community entrepreneurs to exchange ideas and learn about sustainable business practices.



Related Link: https://sdgs.rmutsv.ac.th/goal/

<u>en-17/</u>



Policy and Operation

RUTS Relationships with regional NGOs

RUTS Collaboration for Sustainable Water Management with the Office of National Water Resources by signing a Memorandum of Understanding (MOU) with the Office of National Water Resources to expand research and innovation for sustainable water management in Southern Thailand. This partnership focuses on policy development and operations in collaboration with local communities and organizations, enhancing the capabilities of university staff and government personnel to address water-related challenges resulting from climate change.





Moreover, RUTS also RUTS's Collaborate with communities, NGOs and government agencies in Southern Thailand to plan and manage water resources sustainably. This is particularly important in areas affected by saline intrusion and flooding, such as the development of salinity monitoring systems in Songkhla Lake to support farming activities in areas adjacent to the lake.

Collaboration among the university, NGOs, government agencies, and local communities is essential for enhancing water resource management efficiency.





Related Link : https://sdgs.rmutsv.ac.th/goal/en-17/

"Transforming Educational Institution into I4.0 & Smart Nation Ready" and MOU Ceremony between RUTS and NYPi

In 2023, RUTS collaborates with University in Singapore as Nanyang Polytechnic International, Singapore (NYPi). The program was held to support RUTS Top-Management to adjust the curriculum framework with concept of factory teaching, design and improve the Unique curriculum called "Premium course", In addition, RUTS and NYPi, presides over the Memorandum of Understanding (MoU) signing ceremony between RUTS and NYPi for partnership and discussion for the future collaboration.







- The Singapore Skill Development
- Sustainable Development for TVET Institutes
- Developing I&E Spirit of Students
- SIT Project Engagement
- Industry 4.0
- Digital Transformation
- Learning Journey :
- ➤ SIT CITI
- Marina Barrage URA Gallery
- Sanwa Intec
- MarkerSpace
- School of Engineering and Centres of Excellence for Industry 4.0



Related Link : https://sdgs.rmutsv.ac.th/goal/en-17/



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