

Rajamangala University of Technology Lanna

# Sustainability Report 2022







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# MESSAGE FROM THE PRESIDENT

Rajamangala University of Technology Lanna was established from a collaboration of educational institutions up in the north. The name Rajamangala symbolizes the King's blessings and it stands as a center for professional and technological education, emphasizing hands-on learning and producing skilled graduates. The university also encourages students of vocational programs to pursue specialized professions at the degree level.

Guided by the principles of the King's Philosophy, RMUTL strives to align our efforts with the Sustainable Development Goals (SDGs) as we firmly believe that the global development must happen hand in hand, as no university can thrive alone. Hence, we are dedicated to adopting sustainable development approaches that drive our progress.

Moreover, we integrate the King's teachings on sufficiency economy into our university's development, recognizing its significance in modern student learning. As a university deeply embedded in the community, we extend our development principles beyond our campus through collaborative projects that align with the ethos of sustainable development for collective growth.

This report serves as a brief glimpse into the university's operations and encourages all university sectors to integrate sustainable development principles. Our selection of various projects reflects our commitment to the SDG objectives. We invite everyone to embrace these principles, acknowledging that progress is a collective effort. Rajamangala University of Technology Lanna remains dedicated to aligning its goals with global sustainable development initiatives.



1026.

Asst.Prof.Dr.Jutturit Thongpron Action President





# 1 Poverty

# No Poverty ขจัดความยากจน

Rajamangala University of Technology Lanna, also known as "The King's Auspicious University," has responded to the Royal Project and the Royal initiative projects. It has adopted the King's Philosophy as a guideline for providing academic services. The university has established an Institute for transferring technology to the community, aiming to be a central agency in driving academic services for the communities. The institute focuses on transferring scientific knowledge, technology, and innovation that aligns with the university's context of professionalism and technology. It also aims to respond to the local needs of the community and society, aiming to reduce inequality and support the socially disadvantaged both inside and outside the university. Moreover, it aims to help develop the economy, society, and households to escape poverty and lead a better life.

# Fostering Sustainable Community Development

The university has initiated a "RMUTL School in Community" project in collaboration with the Royal Project Foundation and surrounding areas of responsibility. This initiative aligns with the Royal Project's objectives of educating and developing villagers in the highlands. Additionally, university faculty and staff can contribute to providing knowledge to Royal Project personnel, villagers, and local youth. This assistance aids in cultivating careers and nurturing a new generation of farmers, including those returning to the vicinity of the Royal Project. The program helps younger generations to study in the area and practice in their gardens or animal farms, fostering practical skills and problem-solving abilities. Furthermore, students can earn credits in the university's credit bank, which can be transferred for further studies leading to a certificate or bachelor's degree. This project is instrumental in fostering the development of farmers and community members, enhancing their career prospects, and elevating their agricultural production levels. It also contributes to the enhancement of professional expertise, enabling individuals to break free from the poverty cycle.



### RMUTL's Scholarships and Support Programs for Underprivileged Students

The university offers scholarships and aid to financially disadvantaged students whose average household income does not exceed 3,000 baht per person per month. This assistance helps underprivileged students to access education and develop their skills in occupations, empowering them to become self-reliant. The university collaborates with the Equitable Education Fund (EEF) to cover tuition fees, as well as monthly expenses such as living costs, books and school supplies, study-related expenses, and accommodation. For diploma-level students, the monthly scholarship amount is 6,500 baht, while for higher vocational certificate-level students, it is 7,500 baht per month. Additionally, the university provides scholarships for bachelor's and master's degree students from Cambodia, as per the royal initiative of Her Royal Highness Princess Maha Chakri Sirindhorn.







2 ZERO HUNGER

# Zero Hunger ขจัดความหิวโหย

In recent years, RMUTL has initiated various university policies to tackle issues concerning food insecurity such as supporting students' projects in organic farming on campus to encourage sustainable food production and environmentally-friendly consumption. RMUTL promotes the "Stop Food Waste" policy as a means to reduce excessive food consumption and food waste on campus and also implement campus food waste tracking as a system to minimize food waste. In addition, RMUTL has created awareness about food value, hygienic food, and nutrition through food hygiene training workshops for students and university staff. Along with these, the "Bank of Goodwill" is provided to share food, water, life assets, and vegetable seeds for campus students and those who are in need.

#### **Campus Food Waste Tracking**

In 2022, RMUTL has been keeping records of food waste. Comparing the amount of food waste in 2019 and 2022, it appears that the current policies on food and food waste management are effective in reducing the excessive food consumption on campus. However, the data from 2020 and 2021 are not informative because the campus is mostly closed for onsite learning due to Covid-19 situations.

Year	2019	2020	2021	2022
Amount of waste	9.67 tons	4.05 tons	Less than 1 ton	9.00 tons
Remarks	Before Covid-	Online learning	Combined Online and	Full time
	19	due to Covid-19	onsite learning due to	onsite
	Full-time		Covid-19	learning
	onsite learning			



### Tackling Food Waste on RMUTL Campuses to Reduce Excessive Food Consumption and Prevent Food Shortage

Excessive food consumption is one of the major issues that causes food waste on RMUTL campuses. In the long run, a lack of effective food waste management could lead to a shortage of food consumption. RMUTL has acknowledged this issue and realized the urgent need to take the initial steps to prevent this foreseen future in many ways such as having a policy to "Stop Food Waste". This attempts to encourage RMUTL staff and students to be aware of food value and issues involved in food insecurity. In addition to the implementation of the "Stop Food Waste" Policy, RMUTL has also financially invested in putting up waste bins across campuses for the separation of waste into general, recycled, hazardous, and composed waste categories to build awareness of staff and students regarding the urgent need of effective waste management.



Furthermore, canteen staff and shopkeepers across campuses are required to report the amount of waste generated per day. The waste report is then taken for calculation. This policy is promoted to help minimize the amount of waste produced from university food consumption.



### Smart Consumption and The Green CISAT: An Organic Farming Project on RMUTL Campuses

To address the need to promote healthy and sustainable food production on campuses, the College of Integrated Science and Technology (CISAT), one of RMUTL's campuses supports students' projects "Smart Consumption" and "The Green CISAT" to promote sustainable farming in the campus. This activity offers dormitory staff, students, and canteen staff organic foods from students' smart and green farming projects. Along with this activity, nutritionists are invited to organize a workshop for canteen staff. Dormitory students are involved in the preparation of soil, sowing, and adding organic fertilizer. Vegetables from this organic farming project are given to canteen staff to prepare free lunch and dinner for dormitory staff and students in CISAT, especially students from less privileged groups and students who lack access to nutritious and hygienic food. Some of the remaining vegetables are used for cooking free lunch boxes for visitors who occasionally visit the campus for events such as offering merit to monks.





"Bank of Goodwill": Our source of equality and sharing of food, water, and life assets for campus students and those who are in need."

RMUTL has played a significant role as a food bank center of goodwill in initiating and participating in events and working with all sectors in society. These activities are organized as a measure to prevent, relieve, and fight against hunger both in time of crisis and peace.

2022 Was the year of anxiety, uncertainty, fear, and gradual recuperation from the effects of COVID-19 the period of which countless families and businesses were facing unprecedented falls and dangers. Youths were caught in the state of despair. People around the world were left mentally wounded and financially deprived.

Thailand, apart from being affected directly in the economy from the pandemic, has also faced numerous disastrous floods in various parts of the country. The situation has been made more dire by political unrests and riots in the neighboring Myanmar which resulted in refugees crossing the border into Thailand. The areas in which the refugees come seeking help are in the vicinity of RMUTL campuses, such as Tak, or Chiang Rai, etc. Once in Thailand, the refugees either legally or illegally find jobs to survive. The legally employed refugees in Chiang Mai, in which RMUTL main campus is located, are numbered 147,069, according to the data from the Department of Employment as of December 2022.



🥮 🖉 มทร.ด้านมา คงมิ้นที่น่ารถผลิตน้ำฉิ่ม เพื่อผลิตน้ำฉิ่มกำหรับแจกจ่ายให้กับสาวบ้านที่ประสบอุกกภัยในมิ้นที่อำเภอสามเงา จ.ดาก

Rajamangala University of Technology Lanna initiated a project to provide clean drinking water to villagers affected by flooding in the Sam Ngao District of Tak Province. The university dispatched a vehicle equipped for producing and distributing drinking water within the area. More details about this initiative can be found on the Institute for Technology Transfer to the Community's website (rmutl.ac.th).





Academic Services Department of the Education Division at Rajamangala University of Technology Lanna, Nan, provided vegetable garden seeds in Thung Chang District, Nan Province. More information about this initiative can be found on the Rajamangala University of Technology Lanna Nan website (rmutl.ac.th).



Rajamangala University of Technology Lanna deployed drinking water production vehicles to assist the people affected by flooding in Nong Hoi Subdistrict Municipality. Further details about this effort can be found on the Rajamangala University of Technology Lanna website (rmutl.ac.th).

As seen from instances above, RMUTL, being one of the organizations under the supervision of the Thai government, needs to act according to the required duties and its specialties. Furthermore, the university can subsequently use this as a way to reach the set goals of SDGs, by which it can involve different offices and departments of the university to perform as an agent of cooperation by sharing knowledge, providing assistances and support through various projects, activities, food funds, vegetable farms, distributions of drinking water, and funds for life. These assets are reachable for all and at the same time are distributed throughout the country from national level down to local community, without discrimination against race, gender, age, region, or ethnicity.

#### **Alternative Food Choice**

RMUTL is a learning institute that encourages learning and activities for the community from inside and outside the classroom. This is according to the mission of the university which aims to create the campus as "the second home for students and staff". Therefore, it is pivotal that food is given utmost priority, the university guarantees that the food served on campus has the highest possible quality, the cheapest price, hygiene, and organic food sources. Food production and water purification for consumption is guaranteed to be high quality. There is also a variety of food to be served regardless of religion, preferences, trending, or belief. Canteens on RMUTL campuses offer food that caters to everyone's preferences such as halal, vegetarian, and vegan foods.









#### **Healthy and Affordable Food Choices**

Food ingredients such as meat, vegetables, fruits, and seasonings are selected from organic sources or those that are produced organically. This is one of the rules that the committee for Food and Drink Quality Control is trying to drive which is under the supervision of Office of Asset Administration. Initially, RMUTL had set the requirements for the shops that were interested in opening business on campus. The applicant shops had to meet the standards set by the university: cheap price, food preparation, ingredient sources, food presentation. These procedures were under the supervision of food science experts.

Food Production and Innovation, College of Integrated Science and Technology, has worked in collaboration with the Office of Asset Administration to organize training programs for the shopkeepers in the university and at the same time set the regulations for quality control to be conducted on a regular basis. The procedure is set with the purpose for the best quality of food and water for students, staff, and visitors to university.

### Training and Workshops for Local Farmers and Food Producers: Uplift Local Farmers and Food Producers' Knowledge and Skills

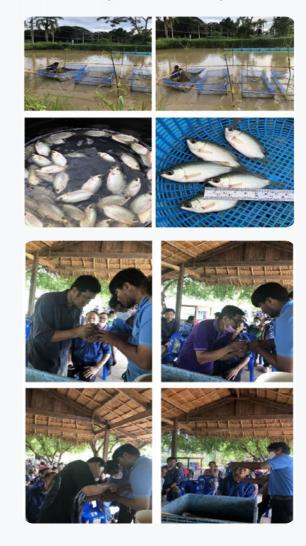
The Department of Technology Transfer, RMUTL organized free training courses for local farmers and food producers in 4 operational workshops, including 1) raising catfish in plastic cages 2) raising frogs in plastic cages 3) raising black tailed chickens, and 4) making soils for planting.

These workshops were organized at Sufficiency Economy Learning Centers, Technology Transfer Center, RMUTL on 26–27 July 2022 and 4–5 August 2022.

These free training courses invited public or those who were interested to develop their career or those who wanted to change careers to learn and share their knowledge and skills with RMUTL farming and agricultural experts.



RMUTL also helps to uplift the quality of life of the local community through research. In 2022, two major research were carried out on the "Development for improving the quality of life of the elderly under the context of highland fishing to promote the competitiveness of communities at the grassroots economic level in the area of Nan Province" and "Project for the production of walleye fish to increase the quality of life of the community".





#### **Events for Local Farmers and Food Producers**

Rajamangala University of Technology Lanna, led by Asst. Prof. Worachet Wansiang, Industrial Engineering, Faculty of Engineering, Rajamangala University of Technology Lanna, delivered rose water and herbal extraction technology to the Royal Thung Reng Project Development Center. On July 2, 2022, the processing group used extraction technology to produce raw materials to be processed into food, beverage and cosmetics, enhancing the quality of life of local communities, society and drive the economy of the community sustainably.

# Stimulating Local Economy and Supporting Local Businesses

Being the university for community, RMUTL helps to support local businesses and stimulate local economy such as buying local products like "sa paper", a famous type of paper from Sankhampang district in Chiang Mai, to make New Year gift packs for visitors and media persons.







RMUTL also helps the community in product development such as packaging design, re-branding, research and development of product quality, etc., for example, tea leaves, flowers, fruits, and vegetable from Doi Ang Khang mountains were taken for product development and branding as Royal Project. This helps to elevate the quality of local products, increase its values, and encourage sustainable farming. 3 GOOD HEALTH

# Good Health and Well-being

การมีสุขภาพและความเป็นอยู่ที่ดี

#### Good Health and Well-being

Rajamangala University of Technology Lanna aims at ensuring that the university remains a welcoming and reliable second home for all students and staff. There is also a strong emphasis on the sense of responsibility, with the university fostering partnerships with organizations, institutions, and agencies involved in healthcare at the local, national, and international levels to improve the health and well-being of students, staff, community members, displaced individuals, refugees, and other vulnerable groups.

These efforts include:

- Initiatives to provide access to healthcare services, examinations, treatment, and counseling for physical and mental health, either on an annual basis (1–2 times/year) or upon request and as needed.
- Establishment of a medical center within the university, equipped with doctors, nurses, and psychologists available across all educational areas.
- Formation of healthcare partnerships with leading hospitals, enabling students and staff to access healthcare services as per their entitlements under the framework of social insurance and various insurances, including access to a standard dental center 1–2 times/ year.
- Promotion of health and hygiene through the provision of open spaces for recreational activities, sports, and sports competitions, along with monitored cafeterias/shops adhering to the principles of good nutrition, safe ingredients, and a variety of affordable and palatable options.
- Establishment of a fund to provide assistance based on human rights principles, encompassing educational funds, food and water provisions, clean water production and distribution, housing development projects, winter clothing provisions, and more, both in times of crisis and under normal circumstances.

 RMUTL also raises awareness about mental health issues and has various projects in place to provide support for students dealing with mental health challenges. For instance, the university organizes training seminars to educate individuals on stress management related to work or academic pressure. Additionally, guidance and counselling services are available to offer advice on academic matters.

These efforts reflect RMUTL's commitment to ensuring that the policies, projects, and activities undertaken show results, contributing to the physical, mental, and spiritual well-being of all individuals. This commitment further strengthens the university's intellectual foundation, fostering an environment conducive to sustainable growth and endless possibilities.



# 4 QUALITY EDUCATION

# Quality Education การศึกษาที่เท่าเทียม

### **Empowering Education for All**

With the aim of providing learning opportunities for all, RMUTL offers a variety of courses that can be categorized into four educational levels: vocational certificate, higher vocational certificate, bachelor's degree, and master's degree. This diverse range of courses enables us to deliver quality education to individuals from 15–year-old students to middle-aged individuals. In the academic year 2022, RMUTL provided 179 programs for admission, granting 4,169 new students the opportunity to access quality education equally.







### **RMUTL Lifelong Learning**

Regarding lifelong learning, RMUTL has established regulations that aim to increase the number and broaden the range of learners. The university is currently developing short courses to provide local communities with access to and education on various new technologies, such as agricultural and fine art courses. These initiatives are expected to improve both the productivity and quality of life for local residents.



### 5 GENDER EQUALITY

# Gender Equality ความเท่าเทียมทางเพศ

RMUTL deems to be a "safe space" for people of different genders. We welcome everyone with open arms and treat them with respect and equality.

We consider all students, personnel, and the global population as "humans" with the freedom to choose their dreams and the right to equality, fostering mutual understanding and peace.

- Freedom to dress and express one's identity based on gender appropriateness.
- Provision of a platform for showcasing diverse talents openly.
- Admission to education or employment without discrimination based on personality or sexual orientation.
- Support, advocacy, mobilization, and celebration for emerging equality.
- Focus on competence rather than gender or ethnicity in administrative positions.
- Promotion of understanding and knowledge on diversity in various relationships, such as student-to-student, student-to-teacher, university-to-society, and graduateto-business establishments.
- Equal access to opportunities and fair access to various funds or support.
- Establishment of gender-appropriate facilities meeting reasonable needs.
- Maternity and childcare leave available to students on a full-time or part-time basis without graduation duration restrictions.
- Establishment of a confidential channel for receiving feedback, complaints, and opinions through direct management communication.
- Placement of psychologists in various educational management areas to provide appropriate counseling on all issues.

These clear principles reflect RMUTL's heightened sensitivity and commitment to gender equality, encompassing all dimensions and fostering an environment where everyone can study, live, and work with the assurance of overcoming barriers such as traditional beliefs, discrimination, hatred, and disrespect. RMUTL remains committed to upholding the principles of human rights and ensuring that all individuals, irrespective of physical, mental, status, or identity differences, are treated without discrimination.







6 CLEAN WATER AND SANITATION

### **Clean Water and Sanitation**

### การจัดการน้ำและสุขาภิบาล

Water is essential for life. His Majesty King Rama IX emphasized its significance in his royal speech on March 17, 1986, at Chitralada Royal Villa, stating that water is vital for human existence. Rajamangala University of Technology Lanna, established with the royal grace of His Majesty King Bhumibol Adulyadej, aims to produce graduates dedicated to serving society. The university actively engages in academic services, aligning with His Majesty's aspirations and collaborating with the government, private sectors, and communities, particularly in natural resource management and water resource assistance.

#### **Promoting Sustainable Water Management**

To ensure sustainable water management and sanitation systems, the university has implemented various strategies, including promoting agricultural production, ensuring efficient energy use, and fostering economic growth while prioritizing natural resource conservation. RMUTL emphasizes the importance of responsible resource use in line with the Sustainable Development Goals (SDGs), integrating this principle into academic works and knowledge transfer initiatives facilitated by the Strategic Prototype Unit (SPU) and the Southern Under the Royal Benevolence Group.



### Empowering Sustainable Agriculture Integrating IoT in Water Management at RMUTL

Moreover, the university has supported water resource management through various projects and activities. Faculty of Science and Agricultural Technology at Rajamangala University of Technology Lanna Nan recently organized a training session on water management using the Internet of Things for students, graduates, and farmers in Nan Province. This initiative is part of the larger project "Digital Agriculture Learning Center on Water Management Using Solar Energy IoT Technology for Growing Local Herbs." The project aims to foster a comprehensive understanding of intelligent water management, product transformation, and online marketing, empowering participants to become proficient in modern agriculture or Smart-Farm practices.



### Water Production Aid for Flood-Affected Communities

Furthermore, the university actively contributes to relief efforts during times of crisis, such as providing a mobile drinking water production system (Hydro Pure) to support villagers affected by flooding in the Sam Ngao District, Tak Province. This intervention followed a recent rainfall event that resulted in the overflowing of water reservoirs and dams, affecting numerous villages and agricultural areas downstream. Rajamangala University of Technology Lanna swiftly responded to the crisis, providing vital assistance to the affected communities in Tak Province.





# **Affordable and Clean Energy**

### พลังงานสะอาดที่ทุกคนเข้าถึงได้

Rajamangala University of Technology Lanna recognizes the utmost importance of natural resources insufficiencies. As an educational institute, RMUTL is thriving to enhance the quality of life in communities and societies in a sustainable manner within the northern region (Area Based), since we believe there are many ways to help combat energy problems. The university aims to achieve this by developing and promoting the integration of teaching and learning among teachers, staff, and students, as well as offering short career courses and initiating a significant amount of research projects.

### RMUTL Helps Communities Combat Water Shortages Through Sustainable Agriculture

In the northern region of Thailand, agriculture serves as the primary occupation. However, the community faces challenges due to water shortages for agriculture caused by changes in global weather conditions, resulting in heavy rainfall or drought. These changes impact agricultural production and the economy. To address these issues, a group was formed to manage water resources, pooling their resources to purchase oil for water pumping into the reservoir. Rajamangala University of Technology Lanna is involved in this initiative by 1) offering a career course that promotes the use of clean energy and transfers knowledge about the design of the field watering system to empower young people and farmers and 2) facilitating the cooperation of government agencies, Khuean Phak Subdistrict, and a group of farmers to design and construct a solar cell water pumping plant to support agricultural production in the area.



#### RMUTL Brings Light and Education to Marginalized Communities

Marginalized areas in Thailand still lack educational opportunities and necessary development. People in these communities rely heavily on agriculture and animal husbandry for survival. The University's efforts in these areas include 1) conducting a survey of energy sources to design an appropriate energy production system, revealing that the area uses energy from water and sunlight and 2) designing usage periods for different activities such as promoting online teaching during the daytime and using electricity for teaching activities, rice milling machines, and household lighting and street lighting in the village during the night. These initiatives aim to promote education and improve the quality of life in marginalized areas sustainably.





8 DECENT WORK AND

# Decent Work and Economic Growth การจ้างงานที่มีคุณค่าและการเติมโตทางเศรษฐกิจ

Rajamangala University of Technology Lanna has a vision to be a leading university in professional and technological fields, producing graduate practitioners to raise the quality of life of communities, localities, and society sustainably. This vision is supported by three main missions consistent with SDG8

- Organizing vocational and technological education and producing professional teachers both nationally and internationally, focusing on cultivating graduates who are moral, ethical, and self-reliant, and serving as an academic leader for countries, regions, and communities in both the public and private sectors.
- Producing research work that creates and applies knowledge, generating innovation or intellectual property that responds to the national strategy needs of society, communities, public and private sectors, and the country.
- Providing academic services that focus on transferring scientific knowledge, technology, and innovation in line with the university's context of professionalism and technology, while responding to local needs of the community and society.

In 2022, the university has collaborated with the public and private sectors, including domestic and international educational institutions, to carry out academic and research projects. These efforts aim to support the development of students and personnel, equipping them with skills, knowledge, abilities, and social responsibility necessary for producing quality graduates and practitioners for the labor market. Additionally, the university supports all faculties in conducting research and academic service projects to transfer professional and technological knowledge to the community, thereby fostering careers and enhancing the quality of community products. This initiative includes various establishments and networks dedicated to developing individuals, jobs, and areas that align with national development and social progress, ultimately fostering sustainable learning



#### **Policy on Human Resource Management**

The university gives importance to human resource management, considering it a highly valuable asset for university development. Operating under the Rajamangala University of Technology Lanna Regulations on Personnel Management for Employees in Higher Education Institutions, published in 1990 (Issue 2), 2012 (Issue 3), 2016 (Issue 4), and 2017 (Issue 4), the university has a policy to operate based on principles of good governance, honesty, transparency, and equality throughout the organization. This is aimed at fostering trust and confidence among personnel, encouraging a participatory process within the university community. The university emphasizes three key aspects:

- Human development: fostering morale and motivation.
- Work development: promoting collaboration.
- Resource support: strengthening resources.

# Enhancing Personnel Well-being and Maximizing Potential

The university has a policy to enhance the quality of life and elevate the potential of its personnel, while also fostering cooperation, unity, equality, and morale. The aim is to create happiness for university personnel in a win-win manner, with the goal of providing personnel with a good quality of life in every dimension. The university places importance on both physical and mental health, considering them crucial to society and the environment. It aims to provide an appropriate and equal quality of life for university personnel, including fair and adequate remuneration in accordance with the law. A university provident fund has been established to promote progress and stability in the work of personnel in a systematic way and to ensure a safe working environment. Additionally, the university encourages personnel to prioritize their health, providing facilities such as gyms, volleyball courts, football fields, and organizing various health promotion activities.

8 DECENT WORK AND

# Decent Work and Economic Growth การจ้างงานที่มีคุณค่าและการเติมโตทางเศรษฐกิจ

# Promoting Personnel Development and Academic Advancement

The university prioritizes the promotion of the development of its personnel's potential. It has a plan to foster the growth of the faculty and educational personnel of Rajamangala University of Technology Lanna in both the short and long term. This plan is designed to align with the development needs of the faculty and educational personnel and continuously meet genuine needs, in accordance with professional standards, the university mission, and specific requirements. For instance, it supports teachers and educational personnel in pursuing higher education domestically and abroad through both full and partial scholarships. The university also provides support for research, services, and academic endeavors aimed at generating new knowledge and enhancing professional competencies, facilitated through the Research Promotion Fund. Moreover, the university supports faculty members in producing academic works to enhance their academic positions and assists educational personnel in taking on increased workloads to advance to higher positions. This support includes the establishment of a fund to promote the production of academic works and the determination of appropriate and sufficient workloads.

Additionally, the university has established mechanisms and incentives for personnel who align with the organization's mission and goals, enabling them to achieve success commensurate with their abilities and potential. It has a compensation system and benefits that are appropriate and in line with the economic situation. The university has also implemented a system for monitoring and evaluating development, ensuring a transparent and merit-based consideration system.

In 2022, the university initiated a project to develop the potential of students and personnel in academics, research, and professional skills. This project consisted of eight initiatives with a budget of 94,509,460 baht.



# The Faculty and Civil Servant Council at the University

The university has appointed faculty representatives elected from all six areas of the university. Their duty is to serve as a hub for exchanging opinions within the university community and proposing creative approaches for systematic university development. They also strive to promote career stability and a high quality of life for university personnel, fostering the development of their professional potential. Additionally, these representatives act as channel for receiving opinions, suggestions, and providing personnel information. The Faculty and Civil Servant Council committee convenes once every two months to deliberate on various issues. The Faculty Council Chairman reports the information to the President and the University Council, while also monitoring performance and disseminating relevant information to personnel.

#### **President Hotline**

The university maintains an online direct hotline to the president at https://www.rmutl.ac.th/hotline. This serves as a communication channel for students, teachers, staff, personnel, and stakeholders to submit comments, suggestions, complaints about issues, and reports of corruption. The university has assigned staff to manage this hotline. Once information is received, it is presented to the President for consideration and necessary action, and the results are communicated back to the provided email or telephone number. Alternatively, matters can be submitted directly to the central office, specifically the Office of the President on the 2nd floor of Rajamangala University of Technology Lanna.



8 DECENT WORK AND FCONOMIC GROWTH

# Decent Work and Economic Growth การจ้างงานที่มีคุณค่าและการเติมโตทางเศรษฐกิจ

### Projects to Support Job Creation and Careers

In 2022, the university implemented 51 academic service projects and 225 research projects. The notable projects that the university has facilitated for job creation and career development include:

### Project to Drive Economic Recovery and Foundations Post-COVID with the BCG Economy (U2T for BCG)

The university executed a project to drive economic recovery and establish foundations post-COVID, known as the BCG economy (U2T for BCG). This project received financial support from the Office of the Permanent Secretary, Ministry of Higher Education, Science, Research, and Innovation for a duration of 9 months, starting from July 1, 2022, to March 31, 2023. The initiative leveraged the knowledge of existing personnel, technology, and innovation, along with collaboration with provincial-level agencies, local government organizations, and other relevant entities. This comprehensive approach integrated the area's biodiversity and cultural diversity to elevate the economic and social status, enhance the potential and competitiveness of the manufacturing and service sectors, and develop a skilled workforce equipped with the necessary competencies for current employment demands. The project effectively increased and sustained employment opportunities for graduates and local individuals, resulting in increased income levels and contributing to poverty reduction. In 2022, the university executed various projects, including the community product upgrade project, agricultural skill promotion and development project, agricultural technology and product processing project, and the Tourist Attraction Development Project. These initiatives collectively impacted 176 sub-districts in 6 northern provinces, while actively promoting and marketing products and services through distribution channels, resulting in income generation for no less than 15 sub-districts. This effort facilitated employment for 4,740 individuals, including graduates and local residents, and prepared a range of 365 products for commercial release, such as;

### Yuwapat Rak Thin Project, Power of 2 (RMUTT Lanna) for the year 2022

The university collaborates with the Government Savings Bank to execute the Yuwapat Rak Thin Project, accessible at https://aomsin.rmutl.ac.th/. The objective is to encourage faculty members and students to work together as a team, devising projects that address economic issues at the micro level. This initiative aims to generate employment and careers for community groups across various localities, utilizing knowledge in science, technology, and modern innovation to enhance and leverage local wisdom and resources to their full potential. The goal is to add value to products to meet market demands, fostering stable careers and sustainable income, supported by 80,000 baht for operational expenses each.

**Team 1** - SMILING: Bringing Smiles to Ban Rai Dong: This interdisciplinary innovation community enterprise group operates in Ban Rai Dong, Saraphi District, Chiang Mai Province.

Team 2 - Youth Volunteers Developing Tourism in the Karen Community: This team operates in Mai Pa Miang Community Enterprise Group, encompassing Village No. 2 and Village No. 5, Doi Saket District, Chiang Mai Province. Team 3 - Sai Fai Lai Tho Jai: This team focuses on the Karen ethnic group, specifically the visually impaired in Omkoi District, Chiang Mai Province.

**Team 4** - PromptPay: Hot Processed Food Group, Hot District, Chiang Mai Province

**Team 5** - Prai-Wet: Community Enterprise Group, Thai Herbal Processing Group in Ban Luk, Mueang District, Lamphun Province

**Team 6** - Gen New Technology: This community enterprise group is engaged in the production of Khao Taen Watermelon Juice for Health, located in Ban Saraphi, Mae Wang District, Chiang Mai Province.



8 DECENT WORK AND ECONOMIC GROWTH

# Decent Work and Economic Growth การจ้างงานที่มีคุณค่าและการเติมโตทางเศรษฐกิจ

# Institute for Technology Transfer to the Community

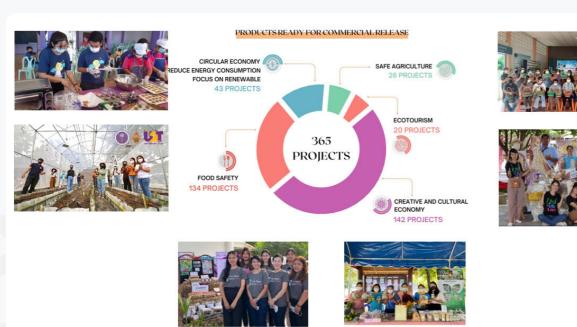
The university acts an institute dedicated to transferring technology to the community. This institute serves as the primary agency tasked with supporting operations related to the dissemination of scientific knowledge, technology, innovation, and various professional skills tailored to meet the needs of the local community and society. Alongside the faculties and colleges, the university engaged in a series of continuous activities throughout the past year, 2022. The notable activities conducted are as follows:

On December 14, 2022, an academic service activity was organized to impart knowledge and foster critical thinking skills and innovation for the Tai Lue community at the Tai Lue Wisdom Learning Center, located in Ban Bai Buun, Ban Luang Nuea, Doi Saket District, Chiang Mai Province.

On September 19 - 23, 2022, a training workshop was conducted, focusing on setting up professional groups for farmers involved in Bhutan oyster mushroom and black oyster mushroom cultivation. This initiative was part of the project to apply the Royal Project principles of practice in the expansion area of the Ban Kha Jao community, situated in Fa Ham Subdistrict, Mueang District, Chiang Mai Province. On August 20 and 21, 2022, Rajamangala University of Technology Lanna, in collaboration with the Institute for Technology Transfer to the Community and the Faculty of Business Administration and Liberal Arts, conducted a training workshop in association with the Royal Project Development Center Le Tor. The workshop focused on studying the context and analyzing tourism potential, designing tourist routes, and developing tourism programs based on local identity for the communities surrounding the Le Tor Royal Project Development Center, located in Mae Tuen Subdistrict, Mae Ramat District, Tak Province.

On August 4, 2022, the institute facilitated a technology transfer workshop for the community. Rajamangala University of Technology Lanna organized a workshop on soil cultivation as part of the project to enhance sufficiency agricultural plots at the Royal Initiative Demonstration Center in Doi Saket, with the aim of creating careers, increasing income, and reducing daily living expenses.





INDUSTRY, INNOVATIO

## Industry, Innovation and Infrastructure

### ้อุตสหกรรม นวัตกรรม โครงสร้างพื้นฐาน

The transformation of Thai higher education institutions (Re-inventing University) is currently considered an important goal of Thai education policy. It is a project of the Office of the Permanent Secretary of the Ministry of Higher Education, Science, Research, and Innovation (OHEC) that requires higher education institutions to undergo administrative system reform, modify the curriculum, and modernize teaching methods, all aimed at strengthening the country's competitiveness through research and innovation. This initiative aims to produce high-quality manpower by promoting, supporting, and allocating budgets for higher education institutions to excel in accordance with their individual strengths, which align with the country's development direction. The goal is to create points of differentiation based on expertise and variety according to the mission and expertise under the mechanism of five platforms:

- 1. Quality development of teaching and learning
- 2. Development and recruitment of personnel
- 3. Internationalization
- 4. Research and innovation management

Creation of a cooperation platform, categorizing universities across the country into five groups as follows:

Group 1: The world's leading research development group Group 2: Technology Development Group and Innovation Promotion Group

Group 3: Local community development group or other communities

Group 4: Development of wisdom and morality with religious principles

Group 5: Production and development of professional personnel in specific fields

a. Manpower by producing highly skilled practitioner graduates and entrepreneurs who meet the country's needs.

b. Brainpower by creating and developing personnel, including the recruitment of highly skilled personnel in each field of study.

c. Research and Innovation by creating technologies and innovations that improve the quality of life, society, and economy at both community and industrial levels.

d. Internationalization by developing concrete cooperation with leading universities and international private organizations.

e. Platform creation by fostering cooperation with other agencies through a Quadruple Helix system.

To oversee and support the movement of professional and technological personnel and ensure alignment with the strategic work of Rajamangala University of Technology Lanna, a working group has been established, namely the Strategy Group of Rajamangala University of Technology Lanna (Strategy Prototype Unit: SPU). This group supervises and monitors operations related to the re-inventing university and supports effective, flexible, agile, and transparent collaboration with entrepreneurs. The group oversees the following key areas:

- Project work on the potential resource management platform of the Rajamangala University of Technology Group to reform the country's workforce development system (Talent Resource Management: TRM).
- Program work to support technology and innovation development in the Rajamangala University of Technology Lanna Network (Innovation and Technology Assistance Program: ITAP).
- Project work to encourage research personnel in higher education institutions to solve problems and increase production capacity for the industrial sector (Talent Mobility: TM).
- Project work to study guidelines for developing mechanisms to transform operations in technological higher education institutions in the upper northern region to meet national development needs (Reinventing University).

**9** INDUSTRY, INNOVATION AND INFRASTRUCTURE

### Industry, Innovation and Infrastructure

### ้อุตสหกรรม นวัตกรรม โครงสร้างพื้นฐาน

The work group has driven and supported various projects and activities at both internal units and faculty levels. For instance, the SPU Strategy Group attended a meeting to visit the area, monitoring the performance of the Pre-TM project, and assessing the needs of business establishments for further research. This visit encompassed business establishments in Chiang Mai Province, including community enterprises such as Tea and Coffee Growers Quality of Ban Pok, Huai Kaew Subdistrict, Mae On District, and Ban Huai Bong Organic Farming Group Community Enterprise, Tha Nuea Subdistrict.

# Enhancing Product Value and Sustainability in Coffee and Baby Corn Industries

On November 7, 2022, the SPU Strategy Group at Rajamangala University of Technology Lanna, together with the team, followed up on the results of operations under the personnel movement project. This initiative aimed to enhance research potential in the industrial sector, solving problems and increasing production capacity. The following projects were reviewed:

- The "Development of guidelines for coffee extract products from coffee beans to be used as functional ingredients" project, led by Miss Wasitha Ratchakhom, in collaboration with the Tea and Coffee Growers Quality of Ban Pok, Huai Kaew Subdistrict, Mae On District, Chiang Mai Province.
- The "Development of baby corn into a high-value food product in the form of healthy food" project, led by Ms. Atchara Chaiya, in collaboration with the Ban Huai Bong Organic Farming Group Community Enterprise, Tha Nuea Subdistrict, Mae On District, Chiang Mai Province.



During the project organization, the group worked with the president of the community enterprise, an Agricultural Extension Specialist Officer responsible for the farmers' market. They provided information about the community enterprises and addressed the needs for further research and product introduction. The community enterprises primarily sold their products in the form of roasted coffee beans and had developed ready-to-drink instant coffee products. The enterprise group aimed to enhance their products' quality and value. The community actively participated in evaluating the strengths and weaknesses of the Ban Mae Pok coffee-growing enterprise group, contributing to the development of a coffee bean extract prototype using ultrasonic sound waves at a frequency of 40 kHz, serving as a guideline for further product development.

Regarding the progress of the project by the Ban Huai Bong Organic Farming Community Enterprise, the group of farmers produced an excessive amount of baby corn, leading to economic challenges and low prices of agricultural products. Recognizing this issue, the researchers worked on extending the value of the raw materials by evaluating the possibility of developing healthy products from baby corn. Consequently, they experimented with various pretreatment conditions for ready-to-eat baby corn products, aiming to produce consumer-approved products. The researchers explored appropriate conditions for developing a healthy food prototype from baby corn, using freeze-drying as a guideline for further community product development.



**9** INDUSTRY, INNOVATION AND INFRASTRUCTURE



### Industry, Innovation and Infrastructure

้อุตสหกรรม นวัตกรรม โครงสร้างพื้นฐาน

### Driving Sustainable Innovations: Synthesizing the BCG Economy through Collaborative Research and Knowledge Exchange

On December 8, 2022, Assistant Professor Dr. Nopporn Patcharaprakiti, the Director of the Research and Development Institute, chaired the opening of the workshop titled "Synthesize and Exchange Knowledge: Driving the BCG Economy with Research and Innovation." The workshop was conducted as part of the Bioeconomy Potential Research and Development Project, focusing on the circular economy and green economy of Rajamangala University of Technology Lanna. The event fostered an open and proactive innovation process in collaboration with the Four Alliances Network, taking place between December 8 and 9, 2022, at the Chiang Saeng Conference Room, Duangtawan Hotel, Chiang Mai Province.

The primary objective of the workshop was to synthesize knowledge and create a roadmap for research and innovation in the realms of the bioeconomy, circular economy, and green economy of Rajamangala University of Technology Lanna. Additionally, the workshop featured a special lecture on "The Role of Universities in Driving the New Economic Model BCG" by Associate Professor Dr. Pitiwat Wattanachai, Acting Director of the Science and Technology Park, Chiang Mai University. Participants engaged in workshops to exchange knowledge and contribute to the research roadmap. The Quadruple Helix alliance network was divided into four groups, including agriculture and food, energy and materials, health and medical, and tourism and service groups, with the participation of universities, government agencies, private sector entities, establishments, enterprises, and communities



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# Reduced Inequality ลดความเหลื่อมล้ำ

#### Inclusive Education for Disabled Students

Rajamangala University of Technology Lanna (RMUTL) is actively committed to the principles of Sustainable Development Goal 10 (SDG 10), which aims to reduce inequality within and among countries. RMUTL's initiatives in support of SDG 10 are evident through the following actions:

The Disabled Student Promotion and Service Center at RMUTL has implemented a plan to facilitate the admission of disabled students. This initiative ensures that students with disabilities have equal opportunities to pursue education at various levels, including Vocational Certificate, Higher Vocational Certificate, and Bachelor's degree programs. By providing financial support through waived tuition fees and considering the specific needs of disabled students in the teaching and learning process, RMUTL promotes inclusive education, thereby contributing to SDG 10's objective of reducing inequalities.



# Promoting Accessibility and Support for Disabled Students

RMUTL's policies and strategies prioritize accessibility for people with disabilities. The university's commitment to providing support services and facilities that cater to the diverse needs of disabled students reflects its dedication to reducing inequality and promoting inclusivity. The Disabled Student Service Center (DSS) serves as a vital resource for disabled students, offering assistance and guidance to ensure their successful integration into the academic environment.

Through these efforts, RMUTL actively contributes to creating an inclusive and equitable educational environment, ensuring that individuals with disabilities have equal access to educational opportunities and necessary support services. By fostering an inclusive and supportive environment for disabled students, RMUTL aligns with the broader objectives of SDG 10, working towards reducing inequalities and ensuring equal opportunities for all.





**11** SUSTAINABLE CITIES AND COMMUNITIES

# Sustainable Cities and Communities ເມືອงແລະຄື່ນฐานมนุษย์อย่างยั่งยืน

#### Inclusive Education for Disabled Students

Civilization represents the highest level of cultural development, encompassing various aspects such as recorded history, cultural refinement, and human progress. It involves the establishment of administrative and religious institutions, contributing to societal integration and the quality of life. Thai national history demonstrates the fusion of diverse civilizational principles, including influences from Indian civilization, ancient Khmer politics, and a legal framework that respects cultural traditions. These cultural expressions manifest through art, architecture, education, and regional identity, exemplified in the northeastern Lan Xang Trail, the southern Srivijaya culture, and the distinct Lanna identity in the north.



Chiang Mai serves as the heart of Lanna culture, showcasing the rich cultural heritage and ethnic diversity of the upper northern region of Thailand. Rajamangala University of Technology Lanna, across six provinces, not only provides education but also serves as a platform for supporting and preserving local art, performances, and cultural heritage. Emphasizing sustainable transmission of clear regional identities, the university contributes to the conservation and promotion of cultural heritage and traditions.



RMUTL provides the general public with access to the Rajamangala University of Technology Lanna Art and Culture Exhibition Hall, showcasing various forms of local arts and cultural heritage. By offering this access, RMUTL contributes to the promotion and preservation of local culture, fostering a sense of community pride and identity.





#### **11** SUSTAINABLE CITIES AND COMMUNITIES



# Sustainable Cities and Communities ເມືອงແລະຄື່ນฐานมนุษย์อย่างยั่งยืน

# Community Development and Cultural Preservation

RMUTL's collaboration with the Ban Huai Sai community in Chiang Mai Province demonstrates its commitment to sustainable community development and cultural preservation. Through fundraising efforts for the construction of a temple, RMUTL supports the preservation of local heritage and contributes to community cohesion and resilience, thereby promoting sustainable development within the region.



#### **Preservation of Cultural Heritage Areas**

RMUTL maintains and makes accessible natural heritage areas of cultural importance across its campuses. These areas serve as spaces for students, faculty, and external stakeholders to study, visit, and engage with the cultural heritage of the region. This initiative contributes to the preservation of cultural identities and promotes a sense of community pride and connection to local heritage.



### Preserving Tradition: The Ban Nak Forest Temple Project in Thanh Hoa Province, Vietnam

In the area construction design of Ban Nak Forest Temple in Thanh Hoa Province, Vietnam, Rajamangala University of Technology Lanna, Chiang Mai Province, was led by Professor Phongsin Thaweepetch, an architect, and Apinan Podduangthong, an assistant architect. They were supported by the alumni of the Department of Architecture and the Electrical Team, including Asst. Prof. Montree Ngaoadet from the Department of Electrical Engineering. They collaborated with the abbot, Phra Achan Aun Chittaswaro (Su Thich Ho Tam), to initiate a project aiming to construct a hall for the preservation and propagation of religion and arts and culture in NgocLac District, Thanh Hoa Province, Vietnam. The design concept combines Lanna architectural style with Lan Xang architecture, incorporating elements reminiscent of the Mekong River Basin. This temple marks the first Theravada Buddhist temple in Vietnam. The abbot, a Vietnamese monk ordained under the Dhammayutti sect in the forest temple in Nong Khai province, is dedicated to promoting Buddhism in Vietnam.



Through these initiatives, RMUTL actively fosters an inclusive and sustainable environment that promotes local arts, culture, and heritage. By providing access to cultural spaces and supporting community development efforts, RMUTL contributes to the broader objectives of SDG 11, aiming to make cities and human settlements inclusive, safe, resilient, and sustainable.

CONSUMPTION

# Responsible Consumption and Production แผนบริโภคและการผลิตที่ยั่งยืน

#### **Different Bins for Different Waste Types**

Rajamangala University of Technology Lanna segregates all types of waste produced within the university premises. This segregation process begins at various waste disposal points around the campus, including school buildings, office buildings, staff and student accommodations, the cafeteria, parking areas, and the sports stadium. Different colored bins are utilized based on the specific waste type. This system enables students and staff to separate waste initially, with Green bins allocated for compostable waste, Yellow for recyclable waste, Blue for general waste, and Red for hazardous waste. Subsequently, the authorities collect the waste from different points and centralize it at the waste management facility. RMUTL also compiles data to track and monitor the daily and monthly amounts of each waste type generated and reused.





# Reduction of Disposable Waste Policies & Campaigns in Canteens

RMUTL adopts multiple strategies to minimize waste production, particularly through waste management policies. One such initiative mandates all university cafeteria establishments to use reusable dishes and cutlery, thereby reducing the use of disposable plastic items. After use, students and staff return the reusable dishes and cutlery to designated drop-off points where food scraps are separated for further processing. Furthermore, RMUTL introduced the "Eat the Entire Plate" project, encouraging students and staff to consume their entire meals. This practice has significantly reduced the waste generated from the cafeteria.



#### **Converting Food Wast**

RMUTL emphasizes the importance of sustainable waste management by implementing a recycling policy for reusable waste. Notably, all food waste from the university's canteens is donated to local farmers at no cost for use as animal feed, thereby reducing their feed costs and minimizing the environmental impact of this waste.





13 CLIMATE ACTION

Eng

### **Climate Action**

## การรับมือการเปลี่ยนแปลงสภาพภูมิอากาศ

Climate action refers to the collective efforts taken by institution, governments, organizations, communities, and individual to address and mitigate the adverse impacts of climate change. It is a critical component of the United Nations' Sustainable Development Goals (SDGs) and plays a central role in combating global warming. Climate action involves a wide range of activities, from reducing greenhouse gas emissions through renewable energy adoption and energy efficiency measures to adapting to the changing climate by implementing resilient infrastructure and sustainable land-use practices. It's a global imperative that requires international cooperation and a commitment to a sustainable, low-carbon future for the well-being of our planet and future generations.



#### Educational Initiatives in Climate Change Mitigation and Energy Conservation

The institution is aware of the importance of climate change and is constantly involved in efforts to reduce its impact. As an educational institution, its main responsibility is to provide education. The institution manages teaching by offering courses and subjects that promote energy conservation and efficient energy use, both at the undergraduate and graduate levels. For example, there are courses such as Renewable Energy, Energy Conservation and Management in Buildings and Industrial Factories. Additionally, the institution regularly organizes seminars and conferences on Power and Energy, both onsite and online.



### RMUTL Collaborations regarding Clean Energy

The institution has collaborated with various national agencies to jointly develop knowledge in the field of clean energy, energy storage systems, and new electric vehicles. In this collaboration, the institution promotes and develops the transfer of knowledge in engineering, research, technology, and innovation through joint project studies and academic data exchange to develop knowledge in clean energy, energy storage systems, and new electric vehicles. This collaboration also includes capacity building and promotion of opportunities for students to seek knowledge and enhance engineering skills.



Furthermore, the institution also cooperates internationally, such as with Nanjing Vocational Institute of Transport Technology under the operation of JINGSHI INSTITUTE, in collaboration with HUATEC, to develop the field of education, research, and innovation in the new energy vehicle industry (Electric Vehicles, EV). The collaboration aims to enhance teaching and learning methods and conduct innovative research.

### 13 CLIMATE ACTION

Eng

### **Climate Action**



The institution aims to instill ideas in the youth and promote their participation in sustainable environmental conservation through Design Thinking activities. Under the theme of utilizing the benefits of green energy, the institution collaborates with private organizations to encourage young people to create innovative models. The goal is to cultivate environmental conservation ideas and foster creative thinking, enabling them to design prototypes that address environmental issues within their communities. The institution supports funding for youth development models, organizes creative thinking competitions, and drives collaboration among the public, farmers, government agencies, social organizations, and the education sector. Together, they aim to create a community with a quality of life that aligns with local lifestyles and culture, addressing sustainability in all dimensions. This includes restoring nature, generating jobs, creating income, promoting the growth of quality youth, knowledge transfer, establishing community management systems, and other comprehensive and sustainable dimensions.















การใช้ประโยชน์จากมหาสมุทรหรือทรัพยากรทางทะเล

Rajamangala University of Technology Lanna (RMUTL) is deeply committed to supporting the ideals outlined in Sustainable Development Goal 14 (SDG 14), which emphasizes the conservation and sustainable use of oceans, seas, and marine resources. RMUTL's dedication to this cause is reflected in the following initiatives:

#### Kong Model City Project for Sustainable Community Development

RMUTL's Science Community Incubation (SCI) platform, led by Dr. Dr. Navarat Phormupatham, is actively fostering the Kong Model City Project, an innovative village concept aimed at promoting sustainable tourism. The project focuses on infusing scientific principles into the local community, nurturing a sense of self-reliance, and cultivating "Community Innovators" who play pivotal roles in the sustainable development of their surroundings.



#### Workshop on Conservation of Local Fish and Closed Systems for Fish Breeding

Under the guidance of Assistant Professor Amornchai Lothongkham, RMUTL organized a comprehensive workshop on the conservation of local fish and the development of closed fish breeding systems. This initiative is designed to equip community members with the necessary knowledge and skills for sustainable fish farming. By emphasizing the importance of preserving aquatic resources and promoting responsible fish farming techniques, RMUTL actively contributes to the preservation and sustainable management of marine biodiversity.





Through these initiatives, RMUTL is making significant strides in promoting the conservation and sustainable utilization of marine resources and ecosystems. By integrating these sustainable practices into its community development endeavors and educational programs, RMUTL is playing an active role in advancing the objectives of SDG 14, with a keen focus on ensuring the long-term well-being of our oceans and marine life.



### Life on Land

### การใช้ประโยชน์จากระบบนิเวศทางบก

To protect, develop, and restore the Four Elements of nature: Forest, Soil, Water, and Life, through the help of "public mind" to preserve the beauty and spirit of the land.

15 LIFE ON LAND

Over the decades, Thailand has been among the group of developing countries that have aimed to drive and develop the nation, primarily focusing on the economic dimension. The belief was that a thriving economy would lead to improved lives and well-being for the people. This has indeed been the case in terms of national income. However, the rapid influx of investment in the industrial sector has resulted in the gradual disintegration of the modern world, leading to the accumulation of debilitating problems that significantly impact terrestrial ecosystems. One prominent factor is human activities, including agriculture, industry, urban communities, and the service and tourism sectors. These sectors have exploited natural resources rather than coexisting harmoniously with nature. Consequently, there has been a rapid degradation of natural resources, leading to an alarming state of extinction, population decline, and migration of various species. The loss of habitat for all living beings within the ecosystem has persisted over the past 18 years.

RMUTL plays a crucial role in human resource development through various educational programs, as depicted in Table 1. These programs encompass a range of fields dedicated to the protection, development, and restoration of natural resources and terrestrial ecosystems across all dimensions.

Table 1: Courses Related to the Commitment to Protect, Develop, and Restore "Forests, Soil, Water, and All Living Things"

Faculty	Courses	
Faculty of Engineering	B.Eng. Mining Engineering	
racuity or engineering	B.Eng. Environmental Engineering	
Faculty of Sciences and Agricultural Technology	B.Sc. Agriculture B.Sc. Agricultural Machinery	
Pacuity of Sciences and Agricultural rechnology		
Faculty of Business Administration and Liberal Arts	B.A. Tourism and Hospitality	

Because we understand that relying on natural resources as a base for development and usage to meet human needs is based on the principles of balanced conservation and sufficiency. This awareness comes with appropriate knowledge that "humans can continue to live with nature as preservers, not destroyers, on the path towards sustainability."











การใช้ประโยชน์จากระบบนิเวศทางบก

# Table 2: Area Size and Scope of Protection,Development, and Restoration of RMUTL's"Forests, Soil, Water, and Living Creatures"

15 LIFE ON LAND

University Area/Campus:	Size of Area and Scope of Protection, Development, and Restoration of "Forests, Soil, Water, and All Living Things"
Chines Mai	Forests, Soli, Water, and Ali Living Things
Chiang Mai	To big a second se
Jed-Lin Campu s	Taking care of green areas as well as ecosystems on the ground and in the water in the main area of responsibility spans over 115 rai. There is also a strong emphasis on cooperating with various agencies and the public sector to provide protection, development, and restoration of "forests, soil, water, and living creatures" in the Doi Suthep-Pu National Park area. This national park encompasses a total area of 163,162.5 rai, approximately 261 square kilometers. It serves as the source of numerous watersheds, including the Huai Khok Ma watershed that feeds into the Monthatharn Waterfall, located 730 meters above sea level. The water then continues its course through Pha Ngieb, Wang Bua Ban, and Huay Kaew Waterfall before eventually joining the Ping River, one of the four main rivers in the northern region of Thailand, and is and the provide the second of the second sec
2	regarded as one of the main lifelines of the country.
<ul> <li>Jed-Yod Campus</li> </ul>	Protect and develop green areas as well as terrestrial ecosystems within the
	main area of responsibility of more than 10 rai.
Doi Sa Ket Campus	Taking care of green areas as well as the ecosystems on the ground and in the water is a primary responsibility spanning over 900 rai. There has been a mission to convert degraded forests into more comprehensive forest areas, concurrently managing the area to serve as a source of botanical learning, agriculture, culture, innovation, and technology. The focus remains on cooperating with various agencies and the public sector to provide protection, development, and restoration of 'forest, soil, water, and living creatures'. This area is part of the Khun Mac Kuang Forest Area Development Project, encompassing no less than 300,000 rai.
Chom Thong Campus	Protect and develop green areas as well as terrestrial ecosystems within the main area of responsibility of more than 590 rai.
Lampang Campus	Protect and develop green areas as well as terrestrial ecosystems within the main area of responsibility of more than 1,381 rai.
Nan Campus	Protect and develop green areas as well as terrestrial ecosystems within the main area of responsibility of more than 230 rai.
Phitsanulok Campus	Protect and develop green areas as well as terrestrial ecosystems within the main area of responsibility of more than 572 rai.
Chiang Rai Campus	Protect and develop green areas as well as terrestrial ecosystems within the main area of responsibility of more than 5,000 rai.
Tak Campus	Protect and develop green areas as well as terrestrial ecosystems within the main area of responsibility of more than 287 rai.

In terms of area-based management, Rajamangala University of Technology Lanna has campuses covering a total of 6 provinces, 8 provinces, and an educational area of not less than 8,000 rai. Therefore, it is likely to participate with various agencies and sectors in budget allocation project preparation. It leads students and personnel to participate in activities related to the protection, development, and restoration of "forests, soil, water, and living creatures" both within the area of responsibility, nearby areas, and other public areas such as national parks, basin development areas, and agricultural areas. It uses interdisciplinary knowledge (Interdisciplinary), including science, engineering, social sciences, agriculture, and technical knowledge, as well as innovation and modern technology to join the process. It also promotes awareness among stakeholders to understand the benefits and give back to nature in the direction of sustainability.

"With a wide area combined, with a proactive mission in development, healing, and restoration, Rajamangala University of Technology Lanna is, therefore, like a wall and fortress. It leans in to protect and embrace forest resources, watersheds, streams, and terrestrial ecosystems with complete friendship, including the protection of local animal and plant species, ensuring they do not go extinct from being threatened by various factors. It aims to maintain biological diversity for a long time."







16 PEACE, JUSTICE AND STRONG

## **Peace Justice and Strong Institution**

### สังคมสงบสุข ยุติธรรม ไม่แบ่งแยก

### We believe in the Seven Pillars of Humanity: Love, generosity, humanity, morality, good governance, honesty, academic freedom.

Rajamangala University of Technology Lanna values justice and, consequently, has enacted all regulations, rights, requirements, a code of ethics, and penalties that adhere to five international principles: good governance, humanity, ethics, honesty, and beautiful academic freedom. It is divided into the context of personnel and students under the belief that "When all parties have complied with the principles of living together well, that is, not trespassing, not committing wrongdoing, not violating or using their freedom in a direction that exceeds the limits of moral rights that have been established when combined with the other two pillars of support, namely Love and Giving will result in the society within the university being peaceful and happy and being able to powerfully create peace with the outside world through this unity."

With quite a variety of statuses and overlapping roles within RMUTL's mission, whether as an agency of the Thai government, an educational institution, a service and research agency in science, technology, and innovation, a Cultural and Agricultural Promotion Center, including having a status as a partner or member under various cooperation partners, both within the country and at the international level. Therefore, the image of purity, transparency, honesty, and fairness must play a part in building confidence for all parts of the image and must be ready to be openly examined both from outside and inside. This is the source of an Announcement of various measures, such as

Announcement of Rajamangala University of Technology Lanna regarding anti-bribery measures to prevent corruption and misconduct, dated February 7, 2019.
Announcement from Rajamangala University of Technology Lanna regarding measures to promote transparency in procurement, dated February 7, 2019. - Announcement from Rajamangala University of Technology Lanna regarding measures to prevent bribery in procurement, dated February 7, 2019.

- Announcement of Rajamangala University of Technology Lanna regarding guidelines for preventing conflicts of interest, dated 25 April 2019.

-Project implementation plan to assess morality and transparency in the operations of government agencies. Fiscal year 2022 of Rajamangala University of Technology Lanna

-Declaration of honest intent. Policy on ethics and transparency in the administration of Rajamangala University of Technology Lanna 2022

-Declaration of honest intentions. Policy on ethics and transparency in the administration of Rajamangala University of Technology Lanna Separated by province 2022

In creating peace, Rajamangala University of Technology Lanna focuses on promoting and developing morality, ethics, awareness of the value of oneself and others for personnel and students, and always working in such dimensions with outside society in a comprehensive manner. This includes inserting morality and ethics into the teaching curriculum, listening to Dhamma, and practicing Dhamma according to the guidelines of Buddhism. Promoting respect for principles and the principles of belief in all religions without discrimination because we believe that all religions focus on peaceful coexistence based on the principle of kindness, giving, and love, which is a universal language without boundaries. Access to these things is bound to reduce problems related to sexual harassment, human trafficking, suicide, depression, drug problems, violence against children or women, and alleviating various inequality problems. It is considered part of bringing soft power to participate in reducing concerns and jointly solving problems in the social sector at the international level, which we believe is the most sustainable method.



# **Peace Justice and Strong Institution**

### สังคมสงบสุข ยุติธรรม ไม่แบ่งแยก

The final dimension to achieving this goal is to support all freedoms for the expression of ideas and academics by providing a forum for public dialogue, community coffee council and network organizations, student council, student club, academic council, alumni association, providing research freedom, academic work, and teaching. All of these are in the field of science, expertise, or integration without limitations but must be within the framework of ethics and working principles that are appropriate and correct according to the principles of the university, legal principles, and related social principles.

#### ประกาศ แสดงเจตจำนง

"ปฏิบัติหน้าที่ ตามแนวนโยบายคุณธรรม ความโปร่งใส ชื่อสัตย์สูจริต'



ตาประกาศแสดเฉลาปลุสรส ปรีบารกลุณรามและการไปไว้ได้ไปเการบริหารงาน ของเหาวิทยามัยเทคโปโดชีวาชมงคลล้านนา ข้ายแร้า ผู้ร้องกงครางกะได้หยูกซึ่ง พลงประม ค้นหน่า ร้องการการแหน เป็นการกลายในหนึ่งได้ชีวารมาคล้านนา และคณผู้บริหารเคาร้ายานั้น สำหรรดด้านนา

ที่ปร้างรรามคามแนวนในการคุณสรรมและความไปรัสม คือเความที่สร้างได้ ไม่ ใบสังค์พูดรรมและความไปรัสม คามหรักรรรมารักษา ครั้งแต่ผลในสนับคุณ คุณกร และเป็นศึกษา เมื่อเริ่นความสำคัญ มีจิตสำนึกในการปฏิบัติตเล้าอยาวา ส่งสุรรัด ความรู้กับการปร้างรรบได้ไประสิทธิภาพ สัมณฑร์ปลี่เกิดประโยบนั้นอุดู หลักร

> 26 2-6. เสียมพระการย์เอตุรย์ ทองประเป รักษารอกรรมระ







University personnel participated in the activities for the International Day of Peace.

17 PARTNERSHIPS FOR THE GOALS

# Partnerships for the Goals ความร่วมมือเพื่อการพัฒนายั่งยืน

#### **Cooperation for Sustainable Development**

The Sustainable Development Goals (SDGs) outlined by the United Nations serve as a comprehensive framework for global cooperation, aiming to address pressing challenges and foster sustainable development worldwide. Among these goals, SDG 17 emphasizes the critical need for international partnerships and collaborations to achieve sustainable development. Rajamangala University of Technology Lanna (RMUTL), situated in the region grappling with recurrent air pollution, has embraced the spirit of SDG 17 through various impactful initiatives and collaborations, demonstrating a commitment to promoting sustainable practices and global fostering cooperation for sustainable development.







#### **Working with Local Authorities**

In response to the alarming environmental issues, including air pollution and forest fires, plaguing the region, RMUTL has actively engaged in concerted efforts to mitigate these challenges. Collaborating with local and national authorities, RMUTL has played a leading role in forest fire prevention and management in Chiang Rai Province. By partnering with the Internal Security Operations Command (ISOC) and other relevant agencies, RMUTL has contributed to the establishment of a command center dedicated to combating wildfires and smog disasters. This proactive involvement highlights RMUTL's dedication to addressing environmental concerns, aligning with the principles of SDG 17.1.







17 PARTNERSHIPS FOR THE GOALS

# Partnerships for the Goals ความร่วมมือเพื่อการพัฒนายั่งยืน

# Green Tourism Exhibition for Sustainability with Tourism Industry Council

Furthermore, RMUTL has forged strategic alliances with stakeholders, both various domestically and internationally, to promote sustainable development practices. The university's partnership with the Tourism Industry Council of Chiang Mai Province underscores its commitment to fostering sustainable tourism. By organizing the Green Tourism Exhibition 2022 and promoting the "Promoting the Potential of Tourism Entrepreneurs with the BCG Economy Model" project, RMUTL has actively advocated for sustainable and responsible tourism practices, contributing to the advancement of SDGs within the local community and beyond.





# International Partnership with Singapore Polytechnic

In the spirit of global cooperation, RMUTL has also established international partnerships and collaborative projects, facilitated knowledge exchange and promoted sustainable development practices on a broader scale. Through initiatives such as the MOU with Nanhua University, Taiwan, and the Learning Express 2022 workshop project in collaboration with Singapore Polytechnic, RMUTL has demonstrated its commitment to fostering cross-border cooperation and knowledge sharing with respect to sustainability within local community. These partnerships not only foster a culture of collaboration but also contribute to the dissemination of sustainable development practices, aligning with the objectives of SDG17.

By actively participating in these diverse initiatives and fostering collaborations with various stakeholders, RMUTL has exemplified its dedication to the principles of SDG 17. Through its multifaceted approach to sustainable development, the university has not only contributed to addressing environmental challenges but has also promoted global cooperation and knowledge exchange, fostering a sustainable and inclusive future for all. As RMUTL continues to lead by example, its efforts serve as a testament to the transformative power of collaborative partnerships in achieving sustainable development goals, both locally and globally.





# University of Technology

and Lanna Innovation