

Chiang Mai University

A Leading University Committed to Social Responsibility
and Sustainable Development

SDGs

**CHIANG MAI
UNIVERSITY**

2019 - 2020





SDGs

Chiang Mai University

Chiang Mai University (CMU) has set its main operational direction towards achieving the Sustainable Development Goals: SDGs. By defining them as the organization's strategic objectives, it reflects the fact that CMU has become a leading university which values the community, both nationally and globally. The SDGs selected are also in compliance with the six strategic objectives of the university.

INTRODUCTION

As the vision of Chiang Mai University is to be “A Leading University Committed to Social Responsibility and Sustainable Development”, CMU has taken the 17 Sustainable Development Goals (SDGs) as an integral component of the proactive and mission-based strategies which are deemed as necessary towards achieving the university’s six Strategic Objectives (SO).

SO1 : Energy and Environment Sustainable Development which complies with 3 SDGs, including SDG 7: Affordable and Clean Energy, increase accessibility to sustainable energy, SDG 11: Sustainable Cities and Communities, create cities and safe settlements, and SDG 13: Climate Action, stop global warming.

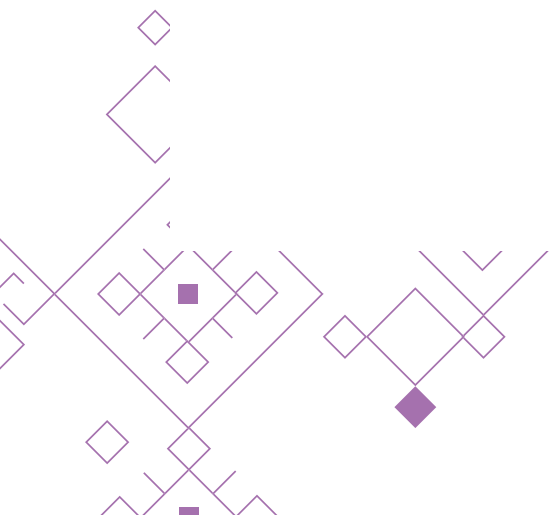
SO2 : Food and Health Sustainable Development which complies with 2 SDGs, including SDG 2: Zero Hunger, eliminate starvation and establish food security, and SDG 3: Good Health and Well-being, promote health and well-being for all.

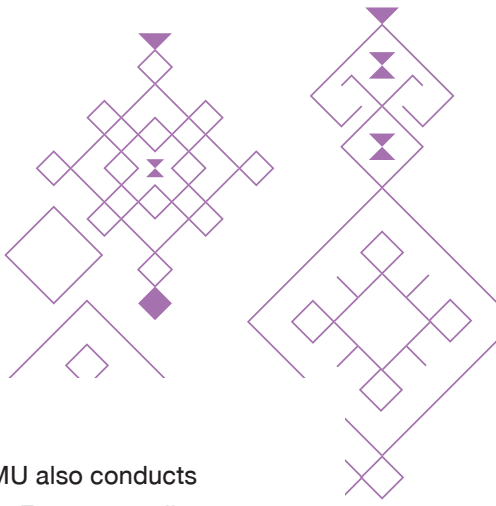
SO3 : Creative Lanna (Northern Thai) Sustainable Development which complies with 2 SDGs, including SDG 1 : No Poverty, eliminate poverty and SDG 11 : Sustainable Cities and Communities, create cities and safe settlements.

SO4 : Education Sustainable Development which complies with 2 SDGs, including SDG 4 : Quality Education, promote learning opportunities and SDG 17 : Partnerships for the Goals, build collaboration agreements at the international level towards sustainable development

SO5 : Innovation Management Sustainable Development which complies with SDG 9 : Industry, Innovation and Infrastructure, develop sustainable industries and innovation.

SO6 : Organization Management towards Excellence which complies with 2 SDGs, including SDG 1 : No poverty, eliminate poverty and SDG 11 : Sustainable Cities and Communities, create cities and safe settlements as per EdPEX/TQA assessment.

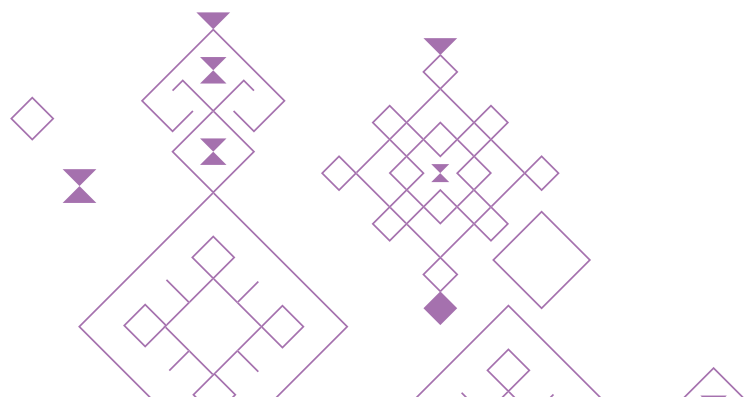


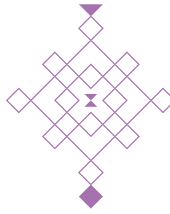


In addition to proactive and mission-based strategies, CMU also conducts activities that support all SDGs, including SDG 5 Gender Equality: Ensure equality for women and girls, SDG 6 Clean Water and Sanitation: Manage water sustainably for everyday use, SDG 8 Decent Work and Economic Growth: Promote economic growth, SDG 10 Reduced Inequality: Reduce inequality domestically and nationally, SDG 14 Life Below Water: Preserve and sustainably utilize marine resources, SDG 15 Life on Land: Foster the sustainable use of terrestrial ecosystems, SDG 16 Peace and Justice Strong Institutions: Promote peace and equal access to justice, and SDG 17 Partnerships for the Goals: Build collaboration agreements at the international level towards sustainable development. Images of the activities and operations have been included in this SDG Report. These images represent only a part of all activities and results that have been performed in order to achieve the sustainable development goals.



PR CMU





Message from President

Chiang Mai University is Thailand's first regional university, established in accordance with the nation's policy and the educational requirements of the Northern people. It is a center for academic and high-level professions that provides benefits both locally and nationally.

Chiang Mai University's vision is to be a leading university committed to social responsibility and sustainable development by introducing the Sufficient Economy Philosophy (SEP) and the Sustainable Development Goals (SDGs) as part of its operational framework. It aims to deliver societal values both domestically and on a global scale through Education, Research, and Academic service (outreach) and Integrated Management (Stewardship). As a leading national university, Chiang Mai University's academic services remains sharpened through its proactive strategies including 1. Environment and Energy Innovation; 2. Food, Health, and Elderly Care Innovation; 3. Creative Lanna (Northern Thai). These strategies support the university to produce graduates who have integrity, quality and global citizenship skills. It also enables the university to produce meaningful research and valuable innovations, while delivering academic services that benefit society through its application of integrated management.

In addition, the university has established guidelines for the creation of research and academic services to build a network of cooperation with various agencies including the government, private and social sector, and especially within academic circles. It also aims to raise the staffs' awareness and the significance of their participation in fulfilling the university's SDG targets.

Chiang Mai University is committed to strengthening the community, the nation, and the globe by building a network of collaboration between all stakeholders both regionally, nationally, and internationally enabling Sustainable Development Goals (SDGs) targets to be reached via integrated action.

Clinical Professor Niwes Nantachit, M.D.

President



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17 Sustainable Development Goals (SDGs)

- SDG 1 **No Poverty** : Eliminate poverty
 - SDG 2 **Zero Hunger** : Eliminate starvation and establish food security
 - SDG 3 **Good Health and Well-being** : Promote health and well-being for all
 - SDG 4 **Quality Education** : Promote learning opportunities
 - SDG 5 **Gender Equality** : Ensure equality for women and girls
 - SDG 6 **Clean Water and Sanitation** : Manage water sustainably for everyday use
 - SDG 7 **Affordable and Clean Energy** : Increase accessibility to sustainable energy
 - SDG 8 **Decent Work and Economic Growth** : Promote economic growth
 - SDG 9 **Industry, Innovation, and Infrastructure** : Develop sustainable industries and innovation
 - SDG 10 **Reduced Inequalities** : Reduce inequality domestically and nationally
 - SDG 11 **Sustainable Cities and Communities** : Create cities and safe settlements
 - SDG 12 **Responsible Consumption and Production** : Establish sustainable pattern of production and consumption
 - SDG 13 **Climate Action** : Stop global warming
 - SDG 14 **Life Below Water** : Preserve and sustainably utilize marine resources
 - SDG 15 **Life on Land** : Foster the sustainable use of terrestrial ecosystems
 - SDG 16 **Peace, Justice and Strong Institutions** : Promote peace and equal access to justice
 - SDG 17 **Partnerships for the Goals** : Build collaboration agreements at the international level towards sustainable development
- 



SDG CMU

1 NO POVERTY



No Poverty

“Cooperate with the locals and local organizations to eliminate poverty and promote sustainable self-reliance”



Community services

133

projects (2015-2019)



10,895

Scholarships
for 280+ Million Baht

Community projects on preventing poverty

The Ban Rai Flower Plant Development Service Center, Chiang Mai University is part of the Royal initiative to create a center for education services, experimentation, and research for farmers or youth who are interested in group farming agriculture. Apart from the regular operations, the center collaborates with organizations such as the Provincial Agriculture Extension Office in providing demonstrations and training with the aim of disseminating knowledge to farmers.

Focusing mainly on tuberous plants, the Flower Plant Development Service Center has developed flowers that are indigenous to Thailand, and which have immense potential in the world market. The Center has also developed flowers that originate outside the country, in order to obtain varieties suitable for the climate of Thailand. It studies the propagation of fruit trees and offers necessary service to the people by disseminating knowledge regarding the propagation of a range of flowers and plants, provides plants and flowers to farmers who might be suffering from severe natural disasters, advises the former villagers on any other problems relating to production, as well as helping them gain more knowledge regarding their profession. The outcome is that locals become more self-reliant, which is in accord with the concept of sustainable sufficiency economy.



Lanna Thai Coffee Hub

The Lanna Thai Coffee Hub was established by Chiang Mai University with the goal of promoting knowledge and increasing the processing efficiency of coffee bean products. The Faculty of Agriculture, Chiang Mai University focuses on the Strengthening of Quality Lanna Coffee Production in the Upper North project or the Lanna Thai Coffee Hub to increase the quantity and quality potential in coffee production, promote the cultivation of coffee with perennial plants, as well as contribute to the conservation of forests in northern Thailand. The project also aims to create identity and raise the quality of coffee production to meet the needs of different market standards. It is committed to building a network, through a collaboration of farmers, organizations, and entrepreneurs in the private sector by holding workshops on site regarding planting techniques, product processing, and use of post-harvest management technology. These initiatives are designed to lead to the exchange of information and application of knowledge, thereby increasing the capacity of coffee production and sustainable development.



Quality dairy products, yogurt, and cow's milk lotions (Short-term supplementary vocational training course)

The Livestock and Aquatic Products Processing Unit was established by the Faculty of Agriculture, Chiang Mai University to promote variety in product value enhancement. The unit offers a short-term supplementary vocational training course on Quality dairy products, yogurt, and cow's milk lotions through hands on training, demonstrations, and practice for farmers, communities and other interested parties. The unit also cooperates with local organizations and communities to create career opportunities and promote income generation for sustainable self-reliance.



2 ZERO HUNGER



SDG CMU

“Generate income:
Highlight community
products to the national
and international markets”

Zero Hunger



Community services

35

projects (2015-2019)



6

Activities for 227 communities
and entrepreneurs (2019)



98

publications (2015-2019) / 11%
of all Thailand publications

Chiang Mai University Food Safety Project

The Chiang Mai University Food Safety Project aims to strengthen food management in local restaurants that operate on campus, as well as increase food security, safety, and nutritional value through hygiene and safety training for food preparation. An organic farmer market has also been established, where farmers can sell their organic products. This initiative was taken to encourage them to produce agricultural products without using chemicals that are used to prevent and eliminate diseases, pests, and weeds. These steps have laid the foundation for CMU's mission to ensure access to quality, safe, and organic food for students and staff of Chiang Mai University.



Business development and matchmaking project of OTOP in the northern region for the food market of AEC seniors

The Business development and matchmaking project of OTOP in the northern region for the food market of AEC seniors is a project of the Food Innovation and Packaging Center (FIN) which aims to develop the potential of OTOP manufacturers in the North by using knowledge and technology, developing potential of entrepreneurs, and applying technology to strengthen product and packaging development.

The project also aims to create sales opportunities by connecting the market and conducting business matching between importers and exporters in AEC countries. It is committed to strengthening the ability to operate businesses for entrepreneurs, create OTOP product network innovation in the region, establish business alliances, expand both domestic and international markets effectively, as well as increasing the strength of small and medium sized businesses in the North, in order to compete sustainably.

Kong Khong Market

The Kong Khong Market is a local market established by the Faculty of Agriculture, Chiang Mai University to provide an area for enterprises, locals, farmers, entrepreneurs, and housewives in the upper North to sell their products without having to go through a middleman and generate income back into the community. Keeping the customers' best benefit in mind, the standards and safety of the products are highly regulated. Vegetables, fruits, food and cooking oil products must pass the standards of the pesticide residues examination, to prove that they are safe for consumers, as well as to encourage safe and sustainable local trading.



3 GOOD HEALTH AND WELL-BEING



Good health and Well-being

“Use technology and international cooperation in promoting and developing good health of the population in the community”



1,695,677

Outpatient Department (OPD) (2019)



2,246

publications 2015-2019



11%

of all Thailand publications / 48% internationally co-Authored publications



(facebook)/DSSCMU

4 QUALITY EDUCATION

“Distribute knowledge without limits to reach the community at all levels”

Quality Education



Over

3,900

Online courses on KC-Moodle



Over

10,000

Registered learners at lifelong.cmu.ac.th



Over

130

Short courses/CMU-MOOC/
webinars



200

CMU presidential scholarship 2019



CMU Lifelong Education

Chiang Mai University has created an educational model that is not limited only to the student body. It offers a sustainable way of learning to create opportunities and social equality. CMU provides opportunities for everyone who is interested and ready to adapt to the rapid changes in the world. People of all walks of life can come in to develop their talents, abilities and skills, as well as to advance their career paths or their lives in various fields.

The 9th Northern Thailand Agricultural Fair, Faculty of Agriculture, Chiang Mai University

The Northern Thailand Agricultural Fair is organized by the Faculty of Agriculture, Chiang Mai University in collaboration with government agencies, private sectors, independent organizations and farmers under the theme of “Smart Agricultural Innovation for Next Generation, cooperate to provide knowledge to the community.” The objective is to disseminate knowledge and technology in agricultural science to farmers, academics, students, and the public. The event consists of exhibitions, royal projects, educational exhibitions, academic seminars, and short-term training to support and disseminate the model works of farmers or agricultural entrepreneurs, not only for development in academic and agricultural innovation but also to promote careers in the field of agriculture.



Nursing Service Center, Faculty of Nursing, Chiang Mai University (Annual training course 2019, specialization 4 months)

The Nursing Service Center, Faculty of Nursing, Chiang Mai University provides training courses for nurses with professional license throughout Thailand to develop their potential and ability to effectively adapt their roles to the changes that occur and be able to analyze problems, situations, trends in administration and nursing services. The courses are designed to prepare the trainees for the social, environmental, technological, economic and rapid political changes affecting the health of the people. The specialized nursing courses offered are Critical Care Nursing (adults and seniors), Infectious Disease Nursing and Infection Control, Nursing Administration, and Occupational Health and Environment Nursing.





“Develop female roles and achieve equality”

Gender Equality



22%

Female senior academic Staff 2020



62%

Female students 2020

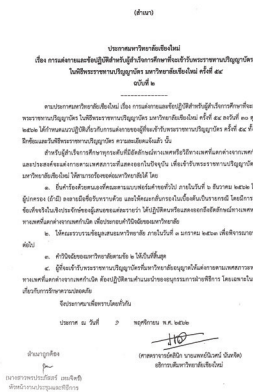
Promote Gender Equality and Female Participation: Center for Women Studies, Faculty of Social Sciences, Chiang Mai University

The Faculty of Social Sciences established a project called the “Women’s Education” project in 1986 which later became the Women’s Education Center in 1993 as part of the university’s plan (1992-1996) to support and expand academic work relating to women and society. Also, it is integral to promote equality between the sexes and benefit the community, locally and nationally. Leadership training is provided for legal volunteers, rural women, and researchers on women’s studies and human rights research has been conducted on women residing in the Asia-Pacific region such as Vietnam, Laos and China.



Promote Equality on Physical Matters: Dress Codes for the 54th Graduation Ceremony

Since 2017 Chiang Mai University has granted permission to graduates to dress according to their gender when receiving their diploma. Graduates may submit a request to dress according to their gender in order to protect their dignity and to allow them to express their sexual identity.



สำเนาประกาศนียบัตร

Encourage women to hold managerial positions: CMU Equal Administration

Previously most administrative positions were held by men, including the Chiang Mai University Council, and faculty and university executive positions. However there has been a growing number of female executives. In 2020, the number of females in the Chiang Mai University Council has increased to 4 positions, totaling 28 women, with a total of 7 female deans from the 25 faculties and 2 female institutional administrators from 5 institutions. In addition, in 2019, a female Chiang Mai University student was the president of the student council, and 7 faculty presidents were females from 23 faculties.





6

CLEAN WATER
AND SANITATION



PR CMU

“Reduce the water shortage
and treat waste water for
good sanitation”

Clean Water and Sanitation



100%

Waste water treatment on main
campus



100%

Drinking water production on
main campus

Quality Water Management System: Sustainable Waste Water Treatment

Chiang Mai University's Buildings, Grounds, and Utilities Division has a management system that collects waste water and directs it to the university's waste water treatment plant, operating 24 hours a day. Two waste water treatment systems are operating, the first at "Suan Dok" Hospital that can treat 10,000 cubic meters/day of waste water and the second in "Mae Hia" which can treat 1,750 cubic meters/day of waste water. Waste water is treated and processed according to the standards set by the Ministry of National Resources and Environment, before it is released into the public environment. The standards are set to ensure that the waste water treatment does not negatively affect the environment, aiming for effectiveness and a balanced use of water. Treated water is also used to provide water for trees and lawns in the central area of the university. Approximately 5,220 cubic meters of water is recycled per day, or approximately 52 percent of the water consumed by the university. For example, at the S1 parking building about 220 cubic meters of treated waste water is circulated per day and used to water the plants, 3,150 cubic meters per day at the gardens, and 1,850 cubic meters per day around the Faculty of Medicine.



Clean Water for CMU's Community

Chiang Mai University has a water production system where the tap water (not for drinking) comes from the reservoir. There are six natural creek streams that flow through the university, including Huay Kaew, Huay Ku Kao, Huay Tad Chompoo, Huai Mae Rangong, Huay Fai Hin and Huay Lai natural creek. The university has utilized these water sources, including rainwater, by diverting it from various streams into a basin with a capacity of not less than 300,000 cubic meters. Also, CMU has developed a policy to improve the Tad Chomphu Reservoir basin area, which has a capacity of at least 100,000 cubic meters and helps resolve the water shortage problem within the university. In addition, the Mae Hia reservoir is located at the Mae Hia Agricultural Research, Demonstration and Training Center, with a capacity to contain 1,020,000 cubic meters capacity, reserved for consumption by students and personnel within the Mae Hia region.

Restore the Mae Kha Canal and Develop Water Quality

Mae Kha Canal is an old canal in Chiang Mai Province that was polluted and covered with weeds and water hyacinth. Chiang Mai Province has developed the Mae Kha Canal Master Plan (2018 - 2022) in partnership with Chiang Mai University, led by the Faculty of Engineering providing academic knowledge to drive development and improve the water quality through extensive monitoring. An automatic water quality meter is installed in the Mae Kha Canal to collect data online. Public lectures were given on waste water management to the 22 canal communities that follow the canal (37.6 kilometers in length) to jointly develop and solve the Mae Kha Canal issues in order to achieve the objectives of the Mae Kha Canal Master Plan and create a "Beautiful, clear water, and a happy community."





7 AFFORDABLE AND CLEAN ENERGY



SDG CMU

“Create energy from nature to develop sustainable clean energy”

Affordable and Clean Energy



Electricity usage intensity:

0.25

GJ/m² of floor space/year

6.03

GJ/person/year



Energy generation by solar roof and solar collector

17,831 GJ



Renewable energy generation by biodiesel, biomethane

1,038 GJ

Affordable and Clean Energy

Chiang Mai University has a clearly defined clean energy policy with strategies on environmental innovation and energy, which serves as an example for the society and community. Accomplishments in 2018 include:

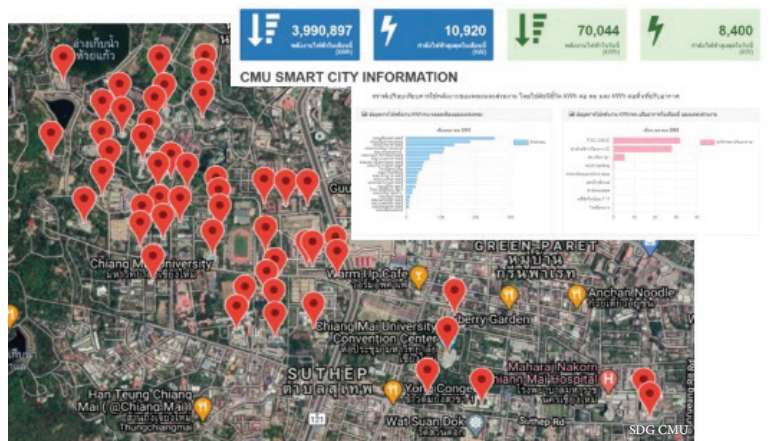
- **Smart Renewable Energy:** More than 50% of the university buildings and laboratories have solar panels (>9 MWp) capable of generating 11,000 GJ/year of clean solar energy, a hot water system via solar collectors on the rooftops that are 1,420 meters in size, and capable of generating 6,830 GJ/year of usable hot water.

- **Renewable Energy from Waste:** The Chiang Mai University Integrated Biomass Management Center, processes more than 17 tons of food waste, fat residue, and agricultural waste, converting organic waste into clean energy with dry fermentation and replacement technology. The converted energy consists of electric energy that can be used in the center at 95 GJ/year and compressed bio-methane gas for motor vehicles at more than 938 GJ/year.

- **Smart Energy Monitoring:** The real-time energy monitoring system covers all buildings and more than 160 of the university's offices, provides efficient services in energy management, and is a prototype of smart energy.

- **Smart Mobility:** The transportation system of Chiang Mai University consists of more than 60 electric buses for staff and students within the university, operating more than 6 routes, every 5 - 15 minutes. In 2019, more than 1.8 million people were transported by electric busses, instead of cars, saving more than 2,161,400 km/year, and reducing the consumption of diesel fuel by 270,000 liters/year. The system communicates with users through CMU applications, which can be downloaded to their mobile phones and show the position of the train as well as the number of seats available.

- **Community Outreach:** Chiang Mai University has expanded research in energy to the community and industry through projects such as the community biogas project, school renewable energy project, governmental energy efficiency improvement project, and renewable waste energy project for the Royal Thai Air Force.





shorturl.asia/p/EHnt

8 DECENT WORK AND
ECONOMIC GROWTH



Decent Work and Economic Growth



83

Publications 2015-2019



12%

of all Thailand publications

“Promote income growth
and create sustainable
happiness from work”



Happinometer

Chiang Mai University, in cooperation with Mahidol University, has signed an academic cooperation agreement that has led to the formation of organizations that supports the university’s staff and students well-being. A survey in 1994 (Happinometer: Measurable Happiness) measured the satisfaction of the staff, organizational engagement, and work life balance in 9 dimensions. The results were used for quality assessments and the CMU-KM Day allowed staff to exchange best practices to promote, “Developing full-time staff along with the university’s happiness goals.” The project is also integrated into the University of Happiness framework created by the ASEAN University Network Health Promotion Network (AUN-HPN). This framework focuses on creating a happy and healthy university organizational culture through activities and employee engagement.

Create Income Growth for the Organization

Faculties/Divisions/Centers of Chiang Mai University hosts activities for staff that enable them to run fundraisers for education and academics.



Increase Income through the Chiang Mai University Provident Fund

Chiang Mai University established a provident fund as a welfare and an encouragement for members to save money, as well as to provide a guarantee for members and their families upon death, disability or retirement from the fund. The funds are sourced from the deposits that members pay into it called “savings” set between 5-15% of their monthly salary. The university “Contribution” is assigned at a rate not lower than the staff’s contribution. Members are required to choose an investment plan based on how much they wish to risk and they can change their investment plan twice a year. Participation in the fund also offers members a tax deduction benefit



9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



facebook/CMUSTEP

“Develop research for utilization, and driving the economy from the basic to the national and international levels”

Industry, Innovation and Infrastructure



Socio economic impact

> 7,000

million baht (2017-2019)



Industrial income

1,854

million baht (2017-2019)



31

Licensings (2017-2019)



Leader in Entrepreneurship and Creating Value in Research

The Science and Technology Park (STeP) of Chiang Mai University provides a variety of services through their resources, personnel, and the foundations of scientific technology and innovation. The agency is facilitated by the university through CMU's industrial services. Through mutual cooperation and various service mechanisms to support the university, it has been possible to commercialize research. This includes the conducting of research with the private sector, business incubation, technology transfer and support, the use of patent technology, innovative design, the provision of operative room services and equipment, factory services, and models that focus on the creation of business opportunities.

In terms of resources, Chiang Mai University has demonstrated that it has the quality and competence to research the development of new technologies; to analyze the development of technology, and highlight valuable services that enhance investment and commercialization. Researchers in agriculture are encouraged to focus on entrepreneurship opportunities and establish new business units. CMU currently supports 20 business units and cooperates with the community to solve technological issues to raise the economic status of the country.





facebook/DSSCMU

10 REDUCED INEQUALITIES



“Create opportunities and reduce inequalities for equitable education”

Reduced Inequalities



190

Students with disabilities 2018-2020



34

Publications 2015-2019



15%

of all Thailand publications

Understanding and Assisting: Disability Support Service

Disability Student Support Service Center, under the supervision of the Student Development Division, Chiang Mai University, has the following 4 strategies: Create educational opportunities; Develop and manage learning of differently abled people; Develop knowledge and promote employment of disabled graduates. Its main mission is to provide media and technological facilities for learning and educational assistance to students with disabilities in an efficient and reasonable manner. There are students with 5 types of disabilities including hearing, vision, autism and cognitive disabilities (reading, writing, numeracy), and they study in 14 faculties such as the Faculty of Education, Faculty of Humanities and the Faculty of Science. Students with disabilities have access to quality education in a suitable format. They are equally educated with regular students, offering them good educational opportunities and a quality of life. Notably in 2019, a disabled student was selected for the Royal Student Award in the category of students with disabilities by the Faculty of Education.



Create Space and Environment for Everyone

Chiang Mai University accepts students with disabilities to study in the university according to the disabled student admissions program. Since 2006, the university recognizes the importance of increasing accessibility to all members of society, where students, including those who are disabled, can find convenience and not experience obstacles in learning. Chiang Mai University has prepared educational support services and has set up the premises and facilities to enable disabled access, such as buildings with ramps, special model electric cars, handrails, bathroom elevators, adjustable school desks, hearing impairment support, and aids for students who find it difficult to walk, and support for high-level autistic students to ensure equal learning and societal involvement.

Higher Education Rights and Opportunities for the People with Disabilities

Chiang Mai University has a policy to produce graduates with good ethics, compassion, and knowledge, and who have international competence and skills to rationally observe the constant changes of society. The university encourages the disadvantaged persons and disabled and talented individuals with opportunities to participate in the public and private sectors. Scholarships are offered to disadvantaged students such as scholarships for mountain tribe students, the agricultural scholarship for families that work in agriculture and special programs for students with disabilities with their sight, hearing, learning, and those with autism. All of these scholarships/programs aim to maintain equal accessibility to pedagogy and education in which more than 500 disadvantaged people enrolled in the university in the 2019 academic year. In addition, Chiang Mai University in 2019 has awarded 100 scholarships to underprivileged students from various faculties, valued at approximately 2.5 million baht.



art-culture.cmu.ac.th

11 SUSTAINABLE CITIES AND COMMUNITIES



Sustainable Cities and Communities

“Preserve and extend local identity and the value of culture to create a sustainable community”



9

Lanna traditional houses



4

Rice granaries (Long Khao)



3

Lanna innovations (4-7 TRL)



83

Publications (2015-2019)/ 10% of all Thailand publications



The Ancient Lanna Museum: A Cultural Heritage

The Center for the Promotion of Arts and Culture, Chiang Mai University established the Ancient Lanna Museum with the goal of promoting education, conservation, and preservation of Lanna arts. The museum showcases different Lanna traditional houses including the Pan-ya style house (Anusarn Sunthorn), Fah Lai Mae Kum Tiang House, and the Rice barn house. Each house is financially supported by organizations and individual donors who recognize the significance of renovating Lanna traditional houses, as a means of educating future generations of the value of the Lanna lifestyle. What makes it special is that each house has its own unique history and reflects on the livelihood of the past.

Pilot Research Projects to Raise the Quality of Pottery Handicraft at Ban Muang Kung: local craftsmanship to produce creative architecture:

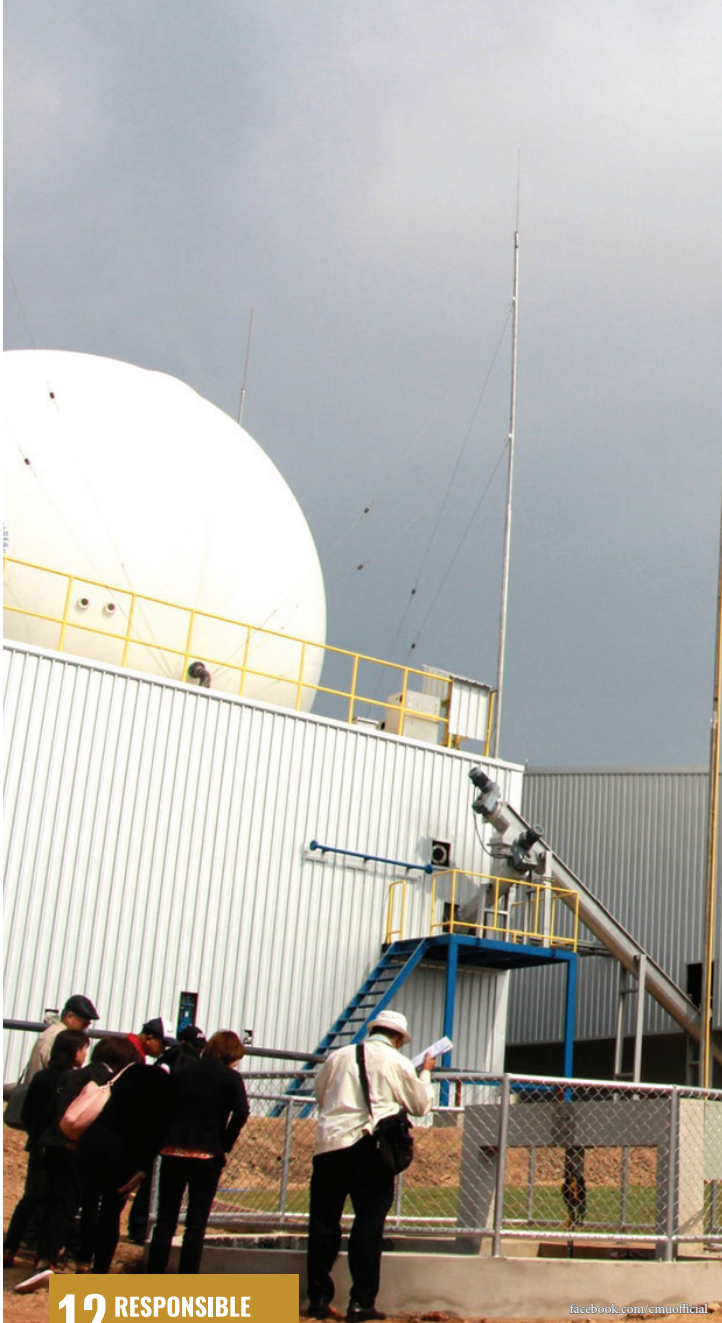
The Faculty of Fine Arts, Chiang Mai University in cooperation with the Provincial Community Development Office of Chiang Mai, Ban Muang Kung, is currently engaged in the preparation of a pilot research project to enhance value of Muang Kung pottery and handicraft. The aim is to highlight the prestige of Lanna wisdom as well as promote cultural tourism via exhibitions at the Muang Kung community located at Moo 7, Nong Kwai Subdistrict, Hang Dong district, Chiang Mai, Thailand.



Sri Nawarat Temple (Thung Siao): Local community art

The Faculty of Fine Arts launched the local community art project which is located in San Patong Subdistrict at Wat Si Nawarat . The goal of the project is to promote Lanna culture and innovation, foster a local spirit of appreciation and create new opportunities, not only in the community, but also in public and private organizations. It is dedicated to the preservation and showcasing of the arts, culture, and valuable local customs and traditions.





12 RESPONSIBLE CONSUMPTION AND PRODUCTION



Responsible Consumption and Production

“Cultivate awareness on resource usage and protect the environment through the 3Rs process (Reduce, Reuse, Recycle)”



100%

Food waste on main campus converted to biogas



Less than

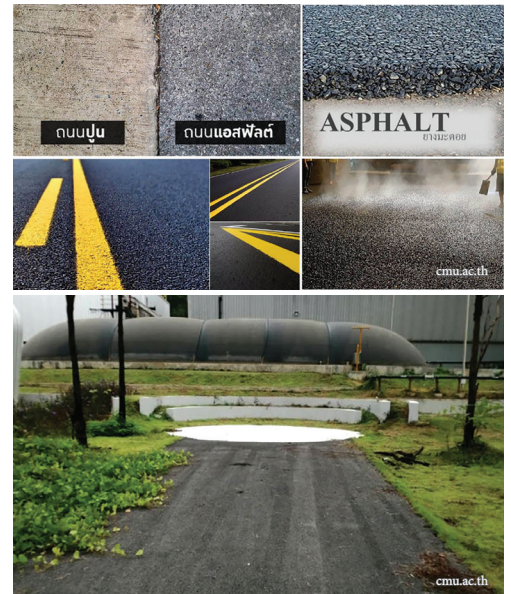
20%

of waste sent to landfill

Zero Waste CMU

In accordance with Chiang Mai University's policy on Green and Clean Campus which aims to develop a good, green, and sustainable environment, the Zero Waste CMU project was established with goals to reduce landfill waste, reduce the use of plastic bags, sort waste, and convert waste into alternative energy by converting food waste into clean energy and use it 100% for transportation within the university.

Additionally, the sorted waste has been transformed into plastic roads which have undergone standard laboratory testing and used in various private areas such as R.I.L Industrial Estate, Rayong and Amata City Rayong and Amata City Chonburi Industrial Estate, Chonburi. A road made of recycled plastic, 1 kilometer long can reduce about 3 tons of plastic or equivalent to 900,000 plastic bags.



CMU Waste Management: Cultivating awareness for CMU, Sorting Waste with Color-coded Bins

In the past, Chiang Mai University produced 7,300 tons of waste per year or an average of 20 tons per day. As a result Chiang Mai University has introduced a comprehensive policy to promote the use of renewable energy and environment reservation as well as giving priority to the waste management process. Under the policy, the CMU Waste Management Project was established and the first pilot activity was organized to separate waste within departments of the university central office in 2018. Aiming to be a model for other departments within the University, the central office personnel are encouraged to sort waste by their types before sending them to the Energy Research and Development Institute – Nakorping, Chiang Mai University. The central office has classified the waste according to the color of the bins and distributed the bins to the departments. Income from selling recycled waste is contributed to the Office Personnel Welfare Fund. Food waste is processed into bioenergy while hazardous and infectious waste is sent to the Faculty of Medicine to be eliminated.



Converting Waste into Energy: Energy Research and Development Institute – Nakorping, Chiang Mai University

Chiang Mai University has applied the management principles of "Smart CMU" by taking into account the university community and surrounding communities. The goal is to be the leader in civil society in sustainably managing life for the entire city in the areas of energy and environment, wastewater, air quality and wastrel. Towards this goal, Chiang Mai University established the Energy Research and Development Institute (ERDI) which is located in the Mae Hia farm area. The center works with the Chiang Mai Municipality to collect all waste from both the Suan Sak and Mae Hia campuses to be sorted by machine at the center. Organic waste is separated from other wastes to be converted to biogas fermentation using Dry Fermentation technology to produce renewable energy such as electricity and automotive fuel. The sorted plastic waste can be utilized by mixing with asphalt to pave roads. The remaining waste is crushed and compacted to be used as RDF (Refuse Derived Fuel). As a result, it can reduce waste sent to landfills by more than 90%.





facebook/DSNCSICMU



Climate Action

“Handle the changes of the climate by the use of clean energy”



Electricity usage intensity:

0.25

GJ/m² /year



Achieved carbon neutral university:
Reduced GHG emission

> 2,400,000

tons CO₂/year

Climate Action

Chiang Mai University has established a policy to pursue a strong low-carbon society with environmental and energy innovation strategies to serve as an example for communities and society.

Key achievements in 2019 are as follows:

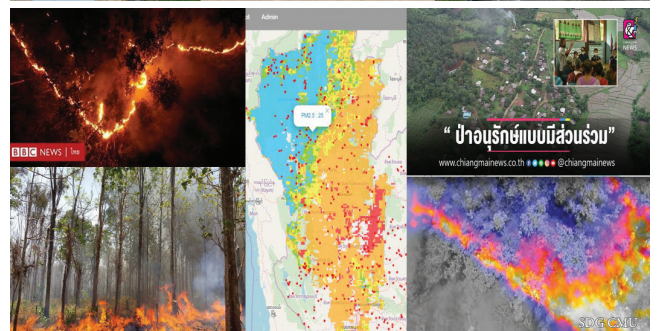
- **Low Carbon Energy:** Chiang Mai University has low indoor energy consumption. The floor space is 0.25 GJ / m² of floor space / year, which is lower than the average electricity consumption of foreign universities by around 60%. This is done through the installation of a Solar Roof Top 9 MWp on the rooftops of school and office buildings, as well as the offices of the different divisions throughout the university. 50% of this operation has the potential to generate low-carbon energy, accounting for more than 15% of the total electricity consumption in the university.

- **Education on Climate:** Change is implemented through teaching and learning on climate change in programs at the undergraduate and diploma level. A Climate Change Data Center has been established, which includes a research and academic development project in the private sector to assess greenhouse gas emissions in power plants and industries.

- **Disaster Preparation:** An academic center has been established to solve the problem of northern haze which has intensified due to changing weather conditions. The Chiang Mai Air Quality Health Index (CMAQHI) application has been developed to alert and provide the public with accurate information and allow them to be well-prepared for different situations. The Chiang Mai Breath Council has also been established to support the work in the communities most effected by pollution.

- **Climate Action:** Chiang Mai University has established a project promoting the use of biogas technology in agricultural industries and animal farms to reduce carbon emissions. In addition, CMU has set up a technology transfer center and prototype compressed biomethane gasification system for vehicles (CBG) which has the potential to reduce carbon emissions by more than 6 million kilograms per year.

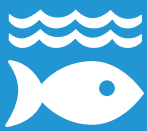
- **Commitment to a Carbon Neutral University:** Due to direct greenhouse gas emissions of 18,820 tons, which is carbon equivalent (tCO₂), 47,470 tCO₂, indirectly from electricity consumption, totaling up to 66,290 tCO₂, Chiang Mai University is focused on being a university with good environmental management under the “Green & Clean Campus” project, as well as reducing greenhouse gas emissions in the university by establishing a comprehensive biomass management center to manage general waste, food waste, grease, and food residues. In addition, landfill and organic waste is converted into clean energy with 17 tons of agricultural products and dry fermentation technology, resulting in a reduction of greenhouse gas emissions by more than 10,900 tCO₂. The university has also received funding to promote biogas technology for chicken farms and various communities in 1,000 locations throughout the country, extending to more than 20 ASEAN regions in five countries, reducing Thailand’s greenhouse gas emissions by more than 2,400,000 tCO₂ per year.





scangsakhononline.com

14 LIFE
BELOW WATER



Life Below Water

“Promote the fertility of
the system and restore the
fertility of the sea”



Collect for the Better: Chiang Mai University Collects Waste at Mangrove Forest

The “Collect for the better:” Chiang Mai University collects waste at mangrove forest project, program held at Mahachai East Coast Learning and Operation Center for Natural Resources and Environment, Samut Sakhon was organized by the College of Marine Studies and Management, Chiang Mai University in collaboration with the Marine and Coastal Resources Administration Office 3, Phetchaburi. 120 participants, comprising of high school and university students, Coastal Resource Conservation Groups, and the Coastal Fisheries Network, collect and sort approximately 1,634 kilograms of waste around the mangrove area and deliver it to the local organization for further disposal.

This project helps create a better environment and reduce contaminated waste. It also cultivates awareness in preserving the environment and marine resources and balancing the ecosystem and life below water.

Promoting and Exchanging Knowledge of Various Groups of Organisms: The 9th Conference on Taxonomy and Systematics in Thailand: TST9

The Faculty of Science, Chiang Mai University hosted the 9th Conference on Taxonomy and Systematics in Thailand: TST9 – Peak of the Country, Peak of Biodiversity with the goal of encouraging the presentation and dissemination of taxonomic and systematic research on different groups of organisms, as well as to foster exchange of knowledge and experiences among teachers, researchers, academics, students, and the public. The conference successfully created a platform for establishing academic partner networks in taxonomy and systematics, both nationally and globally. The conference was held from 2 - 4 October, 2019 at the University Academic Service Center: UNISERV CMU with a total of 308 participants from 45 national and international institutions. At the conference, lectures and posters were presented on a wide range of topics including plants, animals, microorganisms, ecosystems, and the Center of Excellence on Biodiversity, as every subject is important to humanity and is the foundation for national development.





15 LIFE ON LAND



Facebook: ISNGSCLCMU

“Learn with the community to develop areas and conserve Thai plant species”

Life on Land



Plants and animal conservatory area

97

Acres



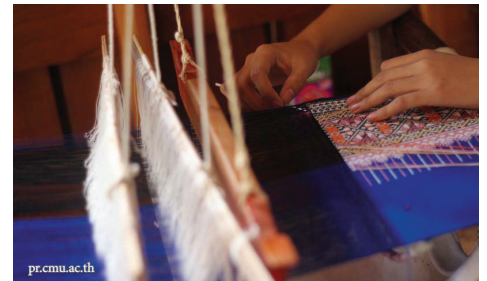
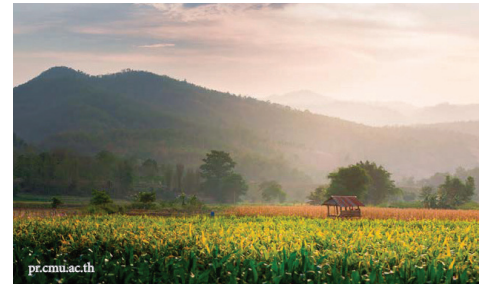
10

Plants registration 2019

Mae Jam Model Plus: From Mae Jam Model to Sustainable Development

Since 2016, the Mae Jam Model Project, Chiang Mai University has been cooperating with locals, government agencies, private and civil society sectors in planning and working towards the prevention and mitigation of haze. Villagers in Mae Jam District use an area of more than 39,526 acres for agricultural purposes and growing crops for animals, resulting in 95,000 tons of agricultural waste which can easily be converted to fuel. The project helps Mae Jam District solve the problem of incineration of agricultural waste, which reduces the incineration into smog by 93 percent.

In addition, the Mae Jam Model Project leads to development in Mae Jam District focusing on utilization of the land, promoting the right to work for the villagers, and development of the right system for resource management. The Mae Jam Model Plus Project is developed through collaboration from villagers, community leaders, local organizations, and government agencies, and has led to further sustainable development in other areas.



Realizing the Beauty and Connection with Nature - Doi Suthep Nature Study Center Chiang Mai University in Honor of His Majesty the King, Chiang Mai University

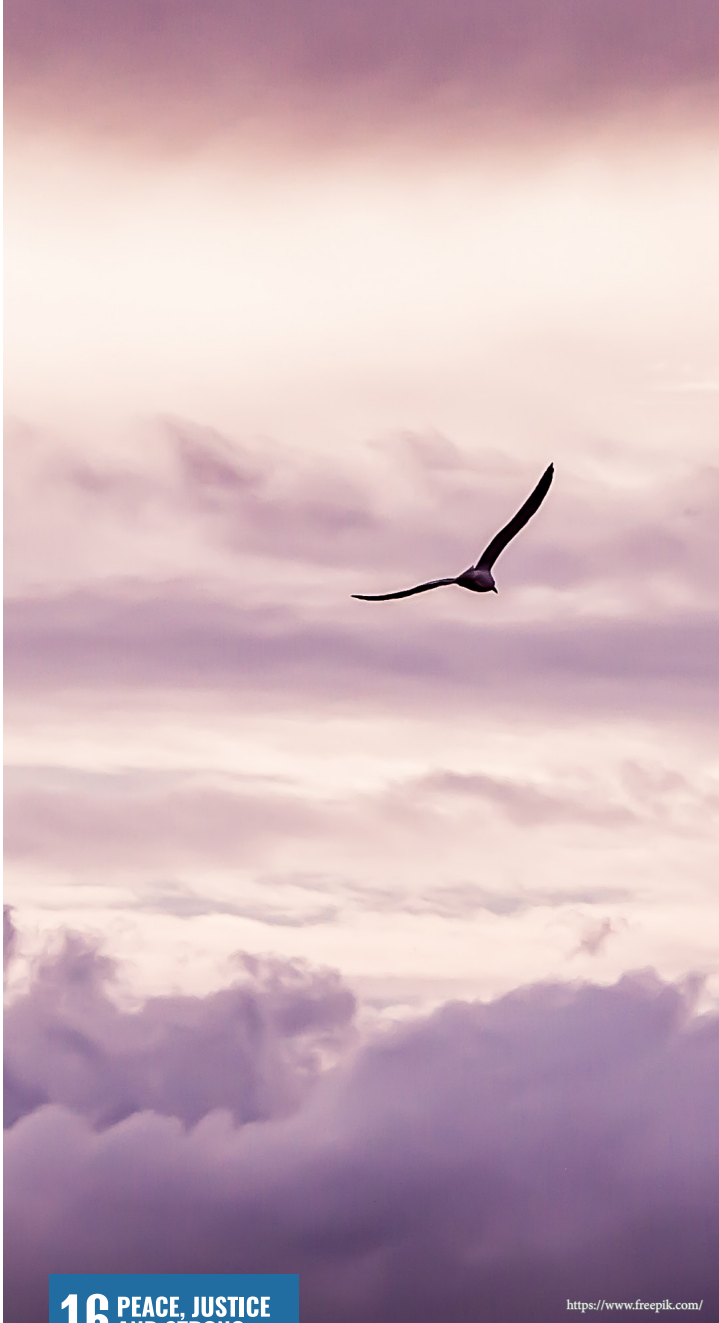
In honor of His Majesty the King, the Doi Suthep Nature Study Center, Chiang Mai University was established in 1996 and later became the responsibility of the Faculty of Science, Chiang Mai University in 2010. It is a center dedicated to exhibiting stories about Doi Suthep from the aspects of natural science, ecology, history, culture, and community. It is also a center for coordination and cooperation among scholars and agencies involved in tourism and the conservation of Doi Suthep. Being a source of knowledge and academic information dissemination on Doi Suthep, in 2019, there were 3,840 participants who joined the center's project to study and learn about nature. Apart from gaining valuable knowledge, they also raised awareness on terrestrial ecological conservation and maintaining forest biodiversity.



Protecting Resources and Conserving Plant Genetics - Plant Genetic Conservation Project under the Royal Initiation of Her Royal Highness Princess Maha Chakri Sirindhorn

Chiang Mai University has served the Plant Genetic Conservation Project under the Royal Initiative of Her Royal Highness Princess Maha Chakri Sirindhorn (RSPG) since 1994. Chiang Mai University is now implementing the master plan for the Phase 5, 6th year of the project (1 October 2016 - 30 September 2021) through specific guidelines, 8 activities and three frameworks. The frameworks consist of Resource learning, Resource utilization, and Resource awareness frameworks in three areas: Physical resources, Biological resources, and Cultural and wisdom resources.

The Resource Protection Activities by the RSPG aim to serve the royal decree that Chiang Mai University has a responsibility to protect natural resources and apply knowledge from the study of plants and biodiversity as academic knowledge that leads to sustainable conservation and development. It is also a resource center which supports establishment and implementation of resource networks on many levels. The area of Chiang Mai University Hariphunchai Education Center, Lamphun Province comprising 32 acres is designated to be the RSPG natural resource protected area and was proposed to be expanded to 245 rai in 2018. There was one activity in the protected area at the Chiang Mai University Hariphunchai Education Center in 2019, with 17 more projects in 2020.



<https://www.freepik.com/>

“Create a platform for freedom, bring communities to peace”

Peace, Justice and Strong Institutions



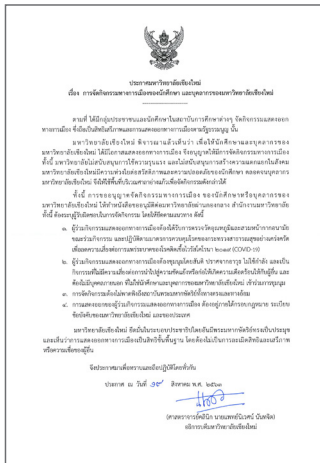
986

Graduates from Faculty of Law
2015-2019



8%

of all Thailand publications
(Top 3 in Thailand)



Chiang Mai University Provides Platform for Political Freedom

According to the constitutional principles of freedom and the right to political expression, on 19 August 2020, Chiang Mai University issued an announcement on the organizing of political activities for students and staff of Chiang Mai University, giving students and university personnel the opportunity to express their political views. Ang Keaw pavilion (Sala Ang Keaw) has been assigned to be a safe area to discuss politics. Chiang Mai University does not support violence nor social schism and believes that political expression is a fundamental right without violating the rights and freedoms or beliefs of others.

Mediation And Reconciliation Center, Chiang Mai University - Resolving Disputes, Developing, Preventing and Resolving Conflicts on a Fair Basis

In 2014, Chiang Mai University, Khon Kaen University, Court of Justice Office, and Office of the Higher Education Commission signed a memorandum of understanding to establish a Mediation and Reconciliation Center in the university. The aim is to cooperate in providing academic support for the development of an alternative dispute resolution system in educational institutions. The MOU also promotes conflict prevention and alternative dispute resolution processes which will lead to sustainable consensus agreements of negotiators resulting in disputes quickly terminated or resolved. This allows society to live in peace, free from corruption, and create reconciliation leading to becoming a peaceful organization at all levels. This complies with The Declaration of Intent and Integrity to Administrate of Chiang Mai University 2019, which is committed to carrying out its mission with transparency, managing tasks with honesty, morality, and free from corruption.



Academic Services Based on the Needs of the Local Community and Society - Legal Academic Services Center (LASC), Faculty of Law, Chiang Mai University

The role of the Legal Academic Services Center, Faculty of Law (LASC), Chiang Mai University is to provide academic legal services, by providing assistance and disseminating knowledge that respond to the needs of the community and society as well as establishing and developing partnerships with government agencies and the private sector. The Center provides legal assistance through projects such as the Legal Knowledge Dissemination Project on “Odor & Smoke Management,” volunteer training project to protect community rights, as well as a community legal assistant course. The operations are divided into 5 sub-centers: 1. Legal Counseling Center, 2. Development and Training Center, 3. Justice Education Center, 4. ASEAN Community Law Center, and 5. Legal and Technical Education Center. In 2019, there were 70 clients seeking legal consultation. While there were up to 34 clients seeking consultation on civil and commercial law, there were no clients seeking consultation regarding the Constitutional Law or Tax Law.





asianelephantresearch.com/gallery/

**17 PARTNERSHIPS
FOR THE GOALS**



Partnerships for the Goals

“Build collaboration agreements at the national and international level for sustainable development in all areas”



329

International collaborations
from 39 countries



18

Collaboration agreement with
international organization



1,136

Foreign students
from 40 countries



Integrating sound knowledge of science in healthcare to develop sustainable welfare: iCOMOS Conference (International Conference on One Medicine One Science)

Chiang Mai University has the honor of hosting the iCOMOS 2019 Conference which was initiated from the concept of, “One Medicine One Science.” CMU is working closely with the University of Minnesota to further the integration of new knowledge, instigate an exchange, and increase academic resources to tackle issues concerning healthcare and the environment. The aim of raising the quality of animal meat products and ensuring that the highest standards are maintained, not only for consumption, but also in regards to the wellbeing of livestock and the community.

Nurse Cooperation Center in Asia Southern Exposition: Global Organization’s Nursing Cooperation Center

A pioneer in the field of nursing both nationally and internationally, and dedicated to the capacity building of nurses in South East Asia, the Faculty of Nursing, Chiang Mai University established The Center for Nursing Cooperation in the South East Asian Region in 2003. The center emphasizes knowledge development and offers consultation of governmental and private institutions locally and nationally.



Extending the CMU identity to the conservation of species in the Asian region to promote sustainability in academics, tourism and the environment

The Elephant Research and Education Center (EREC), which is dedicated to the conservation of elephants in Asia, as well as the cultures where elephants have a significance, was established by the Faculty of Veterinary Medicine, Chiang Mai University in December 2010. Through support from national/international and public/private organizations, and its focus on healthcare management, breeding, and conservation, EREC has become a hub of education and research in the development of elephants in the Asian region. Individuals or organizations alike, anyone who is interested in Elephants, whether it be from a scientific, societal or tourism perspective, all are strongly encouraged to engage in professional practice with EREC.





Chiang Mai University

A Leading University Committed to Social Responsibility
and Sustainable Development

Chiang Mai University

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