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# Message from the President



Prof. Banchong Mahaisavariya, M.D. Acting President of Mahidol University

Mahidol University has been living a long history for over 129 years since the establishment of "Siriraj Hospital" in 1888, then developed to a medical school in the next year. The name was bestowed upon by His Late Majesty King Bhumibol Adulyadej after His Royal Highness Prince Mahidol of Songkla.

Mahidol University had continued to progress in all aspects to stay relevant and conform to the rapidly changing world and society. The significant role of the university is to produce quality graduates, who are knowledgeable in their chosen fields and mindful of morality, to serve as human capital for the country's current development. Moreover, the university has vouched for academic development, research support for innovations, improvements of university's physical systems and environment as an eco-university as well as internationalization. All strategies are aligned with Mahidol University's aspiration towards a world class university. The university's current milestone is being ranked as the top university in the region and No.1 in Thailand.

Mahidol University is recognized as a large higher education institution comprising of academicians and professionals in every field, both in arts and sciences. Therefore, the current university administration has set our target to maintain our status as the leading university in the country and the region. We are aspired to be the source of knowledge for the benefits of society and country as Mahidol University's slogan "Wisdom of the Land".

# **General Information**

Motto Do unto others as you would have others do unto you.

Philosophy True success is not in the learning, but in its application

to the benefit of mankind.

**Vision** Mahidol University is determined to be a World Class University.

Mission: To excel in health, the sciences, the arts and innovation with integrity

for the betterment of Thai society and the benefit of mankind.

**Determination Statement** Wisdom of the Land

#### Symbols



Mahidol University Emblem

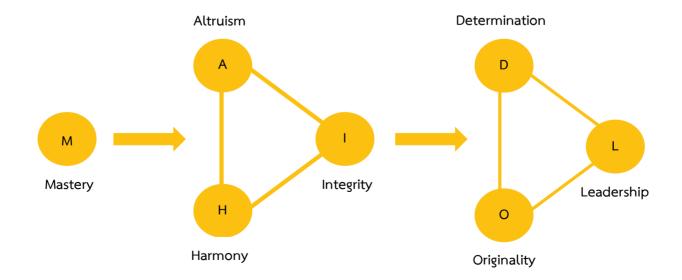


Kanphai Mahidol Plant (Symbolic Plant)

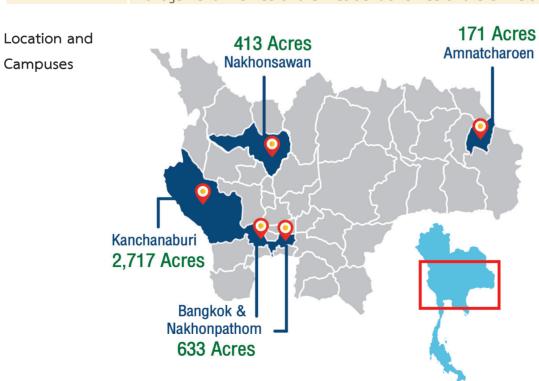


Dark Blue Color

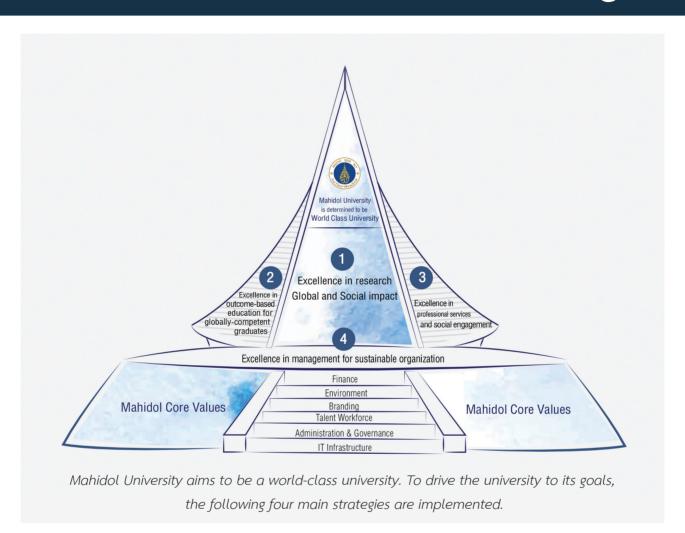
#### Core Values



Health Science	1. Faculty of Physical Therapy 2. Faculty of Dentistry 3. Faculty of Medical Technology 4. Faculty of Nursing 5. Faculty of Medicine Ramathibodi Hospital 6. Faculty of Medicine Siriraj Hospital 7. Faculty of Tropical Medicine 8. Faculty of Veterinary Science 9. Faculty of Public Health 10. Faculty of Pharmacy 11. College of Sports Science and Technology 12. ASEAN Institute for Health Development 13. National Institute for Child and Family Development 14. Amnatcharoen Campus 15. Nakhonsawan Campus
Science and Technology	1. Faculty of Science 2. Faculty of Engineering 3. Faculty of Environment and Resource Studies 4. Faculty of Information and Communication Technology 5. Kanchanaburi Campus 6. Institute of Molecular Biosciences 7. Institute for Innovative Learning 8. Institute of Nutrition
Social Sciences and Humanities	1. Faculty of Liberal Arts 2. Faculty of Social Sciences and Humanities 3. College of Management 4. College of Music 5. Mahidol University International College 6. Ratchasuda College 7. College of Religious Studies 8. Institute for Population and Social Research 9. Research Institute for Languages and Cultures of Asia 10. Institute of Human Rights and Peace Studies 11. Contemplative Education Center
Supporting Units	1. Faculty of Graduate Studies 2. Mahidol University Library and Knowledge Center 3. National Doping Control Center 4. National Laboratory Animal Center 5. Golden Jubilee Medical Center 6. Institute for Technology and Innovation Management 7. Office of the President 8. Office of the University Council



# **Mahidol Strategies**



# Strategies 1 Excellence in research with global and social impact

It aims at guiding the university to carry out research with international standards and create new knowledge and innovations in order to meet social needs.

# Strategies 2 Excellence in outcome-based education for globally- competent graduates

It is intended to offer premier programs certified by international standards with an emphasis on outcome-based education, creating graduates who can develop their potential in knowledge, skills, morals, ethics and qualifications of

transformative leaders as well as building student-alumni engagement for the university development and Mahidol University's pride.

# Strategies 3 Excellence in professional services and social engagement

The objectives include promotion of excellence in academic services and international standard professionals, resulting in driving force to quality of life development as well as responding to social needs particularly for health and well-being.

# Strategies 4 Excellence in management for sustainable organization

To ensure effective management, the

university emphasizes six main factors including 1. financial, 2. environment, 3. branding, 4. talent workforce, 5. administration & governance, and 6. IT Infrastructure.

The strategy focuses on the university's preparedness for human resources in both quality and quantity, the stability of financial situation for present and future operations, and the information

technology system which can support the organization efficiently and effectively. Additionally, the quality control is highlighted in order to ensure a good model in management that will lead to excellent and sustainable development as well as create clear images of Mahidol University with the same sustainable direction.

## Implementation of Integrity and Transparency Assessment (ITA)



Mahidol University participated in integrity and transparency assessment (ITA) for government agencies in fiscal year 2017. ITA has been set by the Office of National Anti-Corruption Commission as a major strategy of the strategic plans in corruption prevention and suppression which has continuously implemented until fiscal year 2018. The university has been paying attention to moral, transparency and good governance which will push forward all of its systems to the same direction. To accomplish this goal, a particular committee has been appointed for the operation.

# Legal Training Program for University Executives

The executive development program of

Mahidol University entitled "Legal Training for University Executives" was organized to enhance legal skills for university executives, to strengthen efficient executive capability, and to exchange knowledge, skills, and experiences as well as concepts and guidelines necessary for university management.

### **No-Cheating Thai Graduates Project**

Mahidol University has proposed a value creation project "No-Cheating Thai Graduates" and a collaboration network of value building regarding "Social Responsibilities". The Council of University Presidents of Thailand (CUPT) has approved the projects and invited all universities affiliated CUPT together with Rajabhat Universities and Rajamangala Universities to participate in the projects and to organize campaign activities for the projects in order to persuade all students and the university staff to reject all types of corruptions.

Mahidol University set up the ceremonies of paying homage to H.R.H Prince Mahidol of Songkla, the oath-taking, and the freshy student orientation. In these ceremonies, all first year students usually acknowledge the university resolution and have awareness-raising when taking an oath of allegiance to H.R.H. that they will not be involved with corruption, cigarettes, alcohol, and narcotics.

## Stakeholder Management

Mahidol University has formulated quality policies in order to effectively achieve its quality development goals. Self-assessment reports of each faculty have been prepared for the continuity of quality development process to become a learning organization with development of operational quality as well as regulating and monitoring systems along with regular and continuous quality assessment according to the university and international standards. In addition to evaluating and analyzing needs and expectation of clients, the same process has been done to stakeholders to systemize and

standardize services provided for the public and the Mahidol community.

#### **Health Services**

At present, Mahidol University offers several medical science programs to produce graduates to work in two medical schools, eight hospitals, one dental hospital and two animal hospitals. There are 4,000 beds (150,000 approximate inpatients per year and 6,000,000 outpatients per year) provided in these hospitals.











	Number			ı	nPatient		
Work unit/ Hospital	of	Nur	mber of b	eds	Number	Patient/	Bed
Tronk and Trospital	outpateint/ Year	Extra	Normal	Total	of patients	Bed/ Year	Occupancy/ Patient
Faculty of Medicine Siriraj Hospital	3,624,596	1,093	1,220	2,313	102,810	1eai 44	8
Siriraj Hospital	3,148,183	825	1,220	2,045	87,632	43	9
Siriraj Hospital Piyamaharajkarun	476,413	268	-	268	15,178	57	6
Faculty of Medicine Ramathibodi Hospital	2,015,046	552	624	1,176	50,662	43	8
Ramathibodi Hospital	518,160	210	624	834	33,849	41	9
Somdech Phra Deparatana Medical Center	1,453,627	257	-	257	13,407	52	7
Queen Sirikit Medical Center	43,259	85	-	85	3,406	40	9
Faculty of Tropical Medicine	94,157	51	50	101	2,475	25	15
Hospital for Tropical Diseases	94,157	51	50	101	2,475	25	15
Golden Jubilee Medical Center	301,063	64	-	64	2,464	39	9
Faculty of Physical Therapy	188,942	-	-	-	-	-	-
Total	6,223,804	1,760	1,894	3,654	158,411	43	8.42

## Number of Dental Patients in 2017

Department / Division	Number of Dental Units	Number of Patients	Patients / Dental Units
Faculty of Medicine Siriraj Hospital	26	39,114	1,504
Dental Clinic	20	25,181	1,259
Piyamaharajkarun	6	13,933	2,322
Faculty of Medicine Ramathibodi Hospital	26	54,616	2,101
Ramathibodi Hospital	16	29,878	1,867
Somdech Phra Deparatana Medical Center	10	14,738	2,474
Faculty of Dentistry	611	528,599	855
Faculty of Physical Therapy	117	181,529	1,552
Total	780	803,858	1,031

## Number of Animals to be treated in 2017

Hospital/Type	Number of animals	Hospital/Type	Number of animals
Prasuarthon Hospital	74,100	Livestock & Wildlife Hospital	9,779
- Out-patient	49,503	- Small animal	6,552
- In-patient (Ward, CCU)	920	- Livestock	2,239
- Emergency	2,279	- Wildlife	549
- Surgery	3,193	- Horse	391
- Patients in specialized clinics	18,205	- Specialized pet	48





#### Communication with stakeholders

Mahidol University has brought its research results and knowledge with academic excellence in sciences and arts to produce easy and interesting media programs which are broadcasted via Mahidol Channel. The program producers use a combination of knowledge and entertainment concepts to create a program content called "An Edutainment Variety of Arts and Sciences". The programs are also distributed through online and public media (some programs) to forward useful knowledge from experts to the public.

To make the Mahidol Channel programs to cover more target groups, in 2017, three Mahidol Channels were opened including Mahidol Channel Kids for 7 to 14-year-old kids, Mahidol Channel Teens for 15 to 35-year-old teenagers and working people and Mahidol Channel World for foreign students aiming at creating Mahidol University images as an international university.

	Number	of View	Number of subscribe			
Channel	5 years	1 year	5 years	1 year		
	(March 2013 -	(April 2017 -	(March 2013 -	(April 2017 -		
	March 2018)	March 2018)	March 2018)	March 2018)		
Mahidol Channel	91,343,479	25,597,627	359,249	131,275		
Mahidol Kids	17,460,808*	10,694,423*	61,684*	37,863*		
Mahidol Teens	896,670*	855,065*	8,538*	7,854*		
Mahidol World	35,860**	30,760**	742**	600**		

(Note: \* is opened in 2015 and \*\* is opened in 2016)

#### The outstanding projects in line with strategies on health and academic services include:

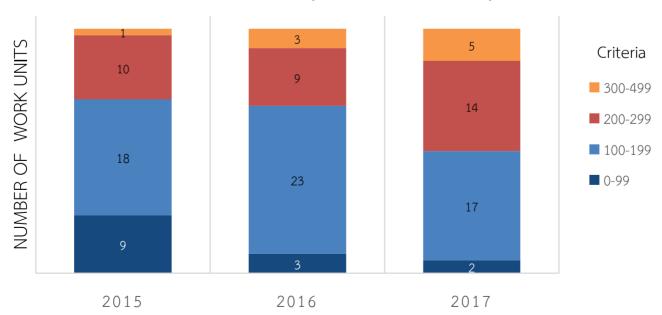
- 1. Nutrition Symbols "Healthier Choice" for Anti-NCDs
- 2. Thailand First Robot-Assisted Neurological Surgery
- 3. Thailand First Heart Surgery with Heart Mate 3
- 4. Breast Cancer Treatment Equivalent to Global Standards
- 5. Liver and Pancreatic Cancer Treatments with Nano Knife
- 6. Healthy Young Ambassadors, Border Patrol Police School, Phase 2, Songkhla Province
- 7. Vegetable and Fruit Safety for the World Kitchen: Testing of pesticide residues in fruits and vegetables in Thailand market as a driving force of agricultural policies and food safety
- 8. Development of Health Service Model for ethnic-sensitive Lao Migrant Workers
- 9. Salaya Life
- 10. Startup Entrepreneur Development, 2017, Bung Boraphet Research and Training Center, Mahidol University, Nakhon Sawan
- 11. Mahidol Libraries E-Journals Mobile Application
- 12. Patent Registration of Three Dimensional Ocular Prosthesis
- 13. Mahidol Model: Preventing and Solving Teenage Pregnancy Problems

## **Development of University and Work Unit Quality**

To push forward the university towards its imposed visions, sustainable management strategies have been developed in order to set up efficient corporate management systems in compliance with the university's goals. Mahidol University started applying a quality control system for management in 2003 and the system was developed in 2005 into a new system called Mahidol University Quality Development/ MUQD. The system was continuously carried on until 2010 before the new criteria called Education Criteria for Performance Excellence (EdPEx) was introduced for quality development, and the following activities have been set up to support the operational system. The university

did the following: 1) Organized training on corporate quality development using EdPEx; 2) Organized seminars for chief assessors; 3) Created a network of the executives and quality management coordinators. 4) Established MU-EdPEx Special Clinic; 5) Improved quality assessors in compliance with EdPEx criteria; 6) Increased more TQA Assessors; 7) Participated in MU Quality Forum Share & Learn: EdPEx/AUN-QA; and 8) Created a knowledge base of quality development and other management tools to enhance the quality development level in accordance with the education criteria for performance excellence (EdPEx).

#### MU EDPEX SCORING (YEAR 2015 -2017)



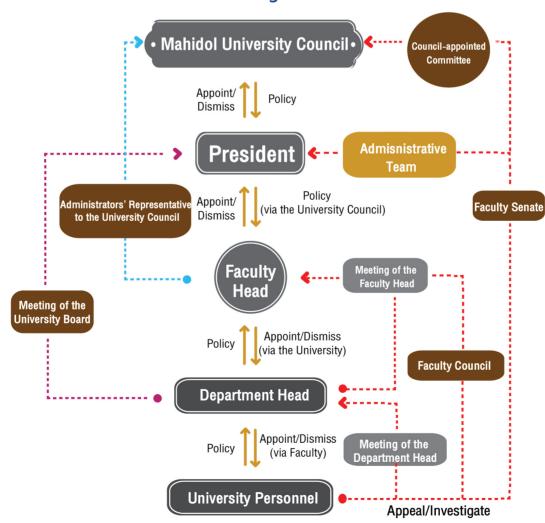
### Mahidol and the Code of Good Governance

To fulfill its objectives and missions, Mahidol University upholds the following Code of Good Governance:



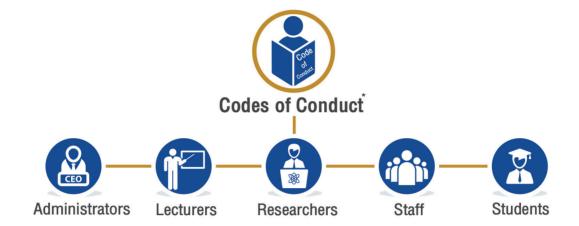
Mahidol University defines 8 principles of administration following the Code of Good Governance as follows:

#### 1. Checks and Balances of the organizational structure



### 2. Codes of Conduct for University personnel

With a diverse group of personnel and stakeholders, Mahidol University has set the codes of conduct as follows:

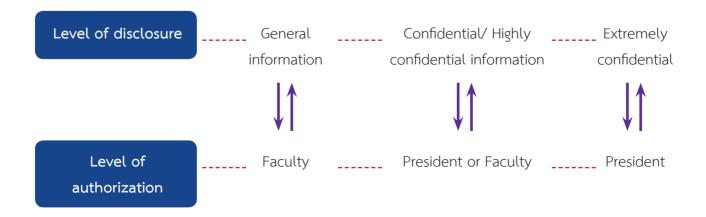


# 3. Systematic, Impartial and Non-discriminatory Information Disclosure Policies

The University's procedures in dealing with government information are as follows:

- 1. Official information is handle in compliance with the principle of disclosure (with concealment as an exception) to allow appropriate and fair public access to information, whilst maintaining its legal obligations.
- 2. Personal information in possession of the University is regarded as confidential. The owner of the information has the right of access and can change it with a valid reason and in situations of necessity.

#### The University's policy on information disclosure is as follows:



#### 4. Transparent Procurement Policies:

Mahidol University is committed to transparent procurement policies. All vendors and contractors will be treated with honesty, transparency, and fairly. The University code of Conduct and regulations should be applied to procurement requests, the selection of vendors/service providers, and termination of contracts for the benefit of both the University and the vendors/service providers.

#### 5. Clear Anti-corruption policy:

Relevant announcements on anti-corruption have been released in accordance with the University's belief that the principles of "honesty, transparency, impartiality, and verifiability" will lead the University to its sustainable development goals.



#### 6. Determination of Academic Freedom:



Academic freedom is important for the achievement of the University's vision: by which

- 1. Promotion of academic freedom which includes freedom of speech, searching for research funding agencies, creative presentations as well as being allowed to give speeches, and write articles as an academic without prohibition or disciplinary restrictions.
- 2. Academic responsibility includes
  - 2.1 Searching for and stating facts to progress and maintain academic potential.
  - 2.2 Respecting different opinions, sharing new knowledge and discoveries with peers, and to review, examine, promote and protect academic integrity.
  - 2.3 Suggesting appropriate solutions to strengthen the security of our society, country and other nations as well as promoting academic output based on the concept of social responsibility.

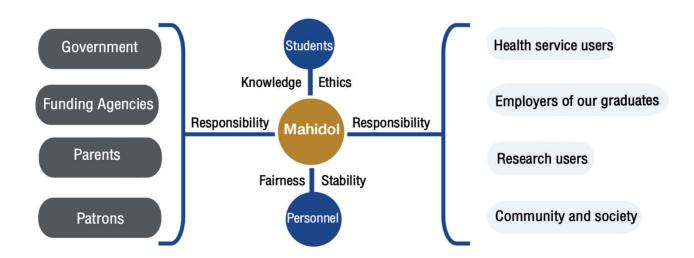
#### 7. Upholding Morality and Ethics, and Social Responsibility:

University personnel must execute their duties in accordance with the laws, regulations, and policies of the University. They should also maintain morality and ethics, social and political impartiality, and use their body of knowledge to guide society.



#### 8. The University's roles upon the stakeholders:

The University is committed to producing graduates with knowledge, skills, quality, ethics, and the ability to be good citizens who are considerate of the University's stakeholders; namely, the government, personnel, students and parents, employers of our graduates, health service users, research users, academic service users, funding agencies, partners, patrons, as well as the community and society.



## Risk Management

#### Risk Management Policies

In order to carry out Mahidol University risk management efficiently and effectively in compliance with good governance as well as management processes to deal with any circumstances or uncertainties which may arise to cause damage and affect the achievement of Mahidol University objectives, the risk management policies have been formulated as follows:

- 1. Mahidol University is committed to operating risk management throughout the organization according to good and universal practice by considering standards of education quality, research studies, health services, and academic services in order to add value to the organization.
- 2. All executives and staff shall build awareness of management and deal with any circumstances either risks or opportunities which may affect the achievement of objectives of the university and its work units; the management must be at an acceptable level.
- 3. The university and its work units shall monitor and review risky situations regularly in line with changing internal and external environment.
- 4. The university and its work units shall consider risk management as a part of regular work procedures.

### **Business Continuity Plans of Mahidol University**

The business continuity plans (BCP) has prepared for all areas and campuses of Mahidol University to implement them in response to crises or emergencies involving natural disasters such as floods, fire, storms and earthquakes as well as threats of civil disorders, for instances, protests, riots, sabotage and so on. These urgent situations may result in discontinuity of university operations regarding services, students, staff and the loss of life and property in particular. Additionally, in case of the worst situation, it might affect the community, the environment and society as a whole. The business continuity plans are therefore essential for the university to encounter the mentioned chaos, enable the important operational tasks and return to normal in a timely manner.

## **Research Strategies**

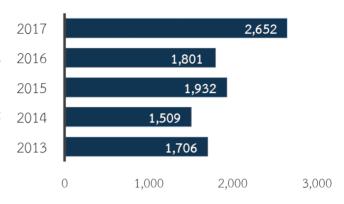
According to its visions, Mahidol University is intended to be a world-class university and encourages research programs emphasizing technology development, innovation and entrepreneurship; that is the hub of technology and innovations which play a vital role in development of important economic infrastructure in the national and regional levels. Besides, the university is committed to developing creation of value from innovations, enhancing researcher potential for both basic and applied research as well as transferring knowledge, technology and innovations to the community and commercial sector for the betterment of Thai Society.

Mahidol University has established a strategic functional framework in implementing research plans set in the university Strategy 1 with its intention to conduct research that will benefit the academic sector, Thai people and the world society.

### Research Budgeting

In 2017, Mahidol University sponsored researchers and sought external research funding to produce more research outcomes with high quality. The university has received research grants from different sources including the university revenue, fiscal budget and external funding. On average, more than 8,000 research projects are subsidized by various sources of research funding each year.

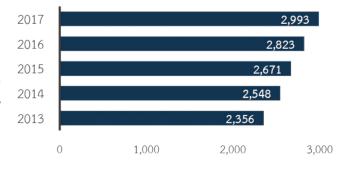
#### Research Budgeting (Million baht)



#### **Research Publications**

From the received fundings, Mahidol University has more research publications in international journals and also in international database. In 2017, it had a total number of 2,993 published research papers most of which were medical papers, accounting for 37.5% of all Mahidol publications, and the outstanding disciplines included immunology and microbiology.

#### Nunber of International Publications

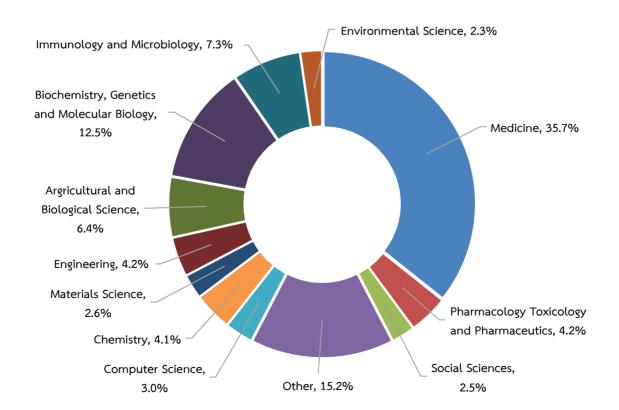


### Awards Received by the Researcher

Fiscal	Internatio	ternational Level		Thailand Level		Organization Level		tal
Year	Number of awardees	Number of awards	Number of awardees	Number of awards	Number of awardees	Number of awards	Number of awardees	Number of awards
2016	14	12	85	63	46	34	145	109
2017	25	18	83	60	50	40	158	118

#### Number of Research Publications of Various Disciplines in International Journals (2014-2017)

Most of internationally published papers in all disciplines found in international databases – Web of Science, PubMed, Medline Ovid, IEEE, World Scientific, HighWire, AFS Journal On-line, Science Direct, Electronic Journal Online, Academic Search Premier, Scopus, EBSCO – were conducted by Mahidol researchers, and more than half of research publications in international journals were from Mahidol University. In 2017, additionally, 2,634 research papers were published in Scopus Database, and there were more research awardees in international, national, and institutional levels than those in 2016



## **Educational Strategies**

With regard to educational strategies, the content of all programs has to be adjusted according to outcome-based education, and needs standard certification in compliance with international criteria AUN-OA or other standard criteria equivalent to international level. Moreover, four desirable characteristics of the 21st century graduates have been imposed as follows: T-shaped breadth and depth, globally talented, socially contributing - in order to make them to be future social transformation leaders. The new educational strategies have created clear direction for development of Mahidol University study programs in response to online learning programs using MOOC, and SPOC which allow the outsiders to participate in some undergraduate classes with regular students. This will help the outsider students to use their study records for credit transfers in order to develop their potential and encourage lifelong learning to reduce social inequality.

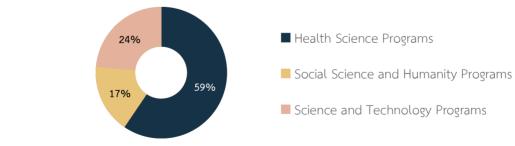
The university has assessed 27 AUN-QA programs proposed by 11 faculties according to Mahidol University's criteria, and the 7 programs qualified for



further assessment in accordance with AUN-QA criteria (ASEAN level) in fiscal year 2018 include 1) Doctor of Philosophy Program (biochemistry), Faculty of Science; 2) Bachelor of Applied Traditional Thai Medicine Program, Faculty of Medicine Siriraj Hospital; 3) Bachelor of Business Administration Program (international hospitality management), Mahidol University International College; 4) Bachelor of Technology Program (medical education technology), Faculty of Medicine Siriraj Hospital; 5) Bachelor of Science Program (occupational therapy), Faculty of Physical Therapy; 6) Bachelor of Nursing Science Program, Faculty of Medicine Ramathibodi Hospital; and 7) Doctor of Philosophy (epidemiology), Faculty of Medicine Ramathibodi Hospital

In fiscal year 2017, Mahidol University, offered 377 programs including 244 health science programs, 64 social science and humanity programs, and 89 science and technology programs. (\*professional programs not included)

#### programs In fiscal year 2017 (\*professional programs not included)





#### **International Collaboration**



#### Double Degree

- B.Sc. in Bioresources and Environmental Biology with State University of New York, USA Joint Program
- MA in Population and Social Gerontology with Miami University, USA
- Master of Nursing Science with University of Michigan, USA Transnational Education Program (TNE)
- B.Eng. in Biomedical Engineering/ B.Eng. in Chemical Engineering with University of Strathclyde, Glasgow, UK
- B.Sc. in Bioinnovation with University of Sussex, UK

#### Double Degree

- B.Sc. in Biomedical Science with University of Sussex, UK
- M.Sc. in Computer Science with University College London, UK
- MM in General Management with Toulouse University, France
- Ph.D. in Biopharmaceutical Science with University of Groningen, the Netherlands
- Ph.D. in Sports Science with Liverpool John Moores University, UK Joint Program
- M.Sc. in Implant Dentistry with Westphalia Wilhelms University, Germany

#### Double Degree

- B.Sc. in Actuarial Science with Curtin University, Australia
- B.Sc. in Industrial Mathematics with Curtin University, Australia
- B.Sc. in Materials Science and Nano Engineering with University Technology Sydney, Australia
- Ph.D. in Materials Science and Engineering with University Technology Sydney, Australia Joint Program
- MA in Human Rights and Democratization with University of Sydney, Australia

#### Double Degree

- M.Sc./ Ph.D. in Biotechnology with Chiba University/ Niigata University, Japan
- M.Sc. in Biotechnology with Osaka University, Japan
  - 50 years with University of Oslo, Norway, in Neuroscience
- Long-term International Research Partnerships:
- 35 years with Oxford University, UK, in Tropical Medicine
- 30 years with Osaka University, Japan, in Biotechnology



**Mahidol University** has been supporting its vision in commitment to becoming a world-class university under Mahidol University strategic plans (2016-2019); Strategy 2: Excellence in outcome-based education for globally-competent graduates; Goal 2 – To create graduates who are able to develop self-potential in knowledge, skills, morals, and ethics as well as the characteristics to be transformation leaders; and Goal 3 – To build student alumni engagement for the university development and creation of Mahidol pride. To achieve these goals, all activities are performed through three main work processes of Division of Student Affairs, including 1) student development; 2) service management and student welfare; and 3) student and alumni engagement in purpose to promote Mahidol graduates' desirable characteristics as world citizens who use their knowledge for the university development and the benefit of mankind.

#### The main projects and activities include

- Preparation of New Students to Mahidol University – WE MAHIDOL Project (Breath & Depth - Student Transform)
- 2. Transformative Learning (T-Shape Graduates: Self-awareness)
- 3. Handover of Bicycles for Community Tourism Project (Social Contributing and T-Shape Graduates)
- 4. Driving Development Project in accordance with Sufficiency Economy Philosophy by Student Power (Social Contributing and T-Shape Graduates)
- 5. Development of Student Volunteers:

- Mahidol Volunteer Project (Social Contributing and T-Shape Graduates)
- Student of Development with Religious Philosophy (Social Contributing and T-Shape Graduates)
- Mahidol Student Leader Training Project, Session 8 (Breath & Depth -Student Transform and Socially Contributing)
- 8. Training Project on Counseling Skills for Students and Student Affair Personnel (Social Contributing and T-Shape Graduates)

## **Students**

In fiscal year 2017, Mahidol University had a total 32,713 students consisting of 32,001 Thai students and 702 foreign students, and in the academic year 2016, there were a total of 8,228 graduates.

	The acaden	The academic year 2015	
Education	Number of new student	Number of total student	Number of graduated student
Total Students	8,206	32,713	8,228
University Courses	7,109	30,242	7,133
Certification	444	633	492
Bachelor Degree	4,596	20,794	4,199
Graduate Diploma	52	62	58
Master Degree	1,265	6,062	1,724
Higher Graduate Diploma	451	455	421
Doctoral Degree	301	2,236	239
Professional Courses	1,097	2,471	1,095
Medical Resident	510	1,573	440
Medical Specialty	215	415	197
Medical Fellow	64	66	56
Dental Resident/Specialty	35	144	46
Nursing Specialty	273	273	356
International Student	439	702	330
Bachelor Degree	86	350	79
Graduate Diploma	25	26	16
Master Degree	270	262	209
Higher Graduate Diploma	2	2	1
Doctoral Degree	56	62	25

# Financial Project

In fiscal year 2017, Mahidol University was allocated a total budget of 56,543.4829 million baht which included 14,223.6981 million baht of the annual government budget and 42,319.7848 million baht of the university revenues. The budget is categorized according to types of budget and the university's outcomes as shown in the table below.

Outcomes	Budget	University Revenue	Total (Million Baht)
1. Preparation for the ASEAN Community Project	-	-	-
2. Development of Personnel Potential for Excellent Tourism in Southeast Asia Project	15.5776	-	15.5776
3. Free Education Support for 15 years Project	2.7929	-	2.7929
4. Science and Technology Graduates	1,315.1463	1,533.2796	2,848.4259
5. Health Science Graduates	4,324.8498	7,459.6365	11,784.4863
6. Social Science Graduates	410.7448	2,260.3901	2,671.1349
7. Graduates of Accelerated Program to Produce Graduates in Inadequate Disciplines	132.2000	-	132.2000
8. Academic Services	590.3330	1,171.4019	1,761.7349
9. Research for Technology Transfer	216.1044	176.6635	392.7679
10. Research for Knowledge Creation	117.8000	394.7370	512.5370
11. Increase in the Doctor and Nurse Production Program	718.9034	-	718.9034
12. Medical Services and Health Promotion for Studies and Research	5,906.7944	29,314.0731	35,220.8675
13. Arts and Culture Preservation	0.7711	9.6031	10.3742
14. Research Project for Creation and Collection of Potential Knowledge	161.2424	-	161.2424
15. Research and Development Project in Response to Manufacturing Sector for Strategies and Thailand Crucial Problem-Solving	113.5000	-	113.5000
16. Preclinical Building and Research Center Project, Chakri Naruebodindra Medical Institute	196.9380	-	196.9380
Total	14,223.6981	42,319.7848	56,543.4829

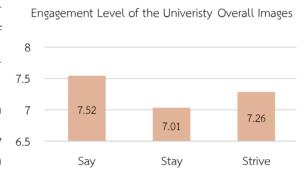
## **Human Resource Development Policies**



As for the university's strategic plans (2016-2018), Strategy 4 – Excellence in management for sustainable organization – stipulates human resource indicators "personnel engagement level (particularly talent group)" which are assessed by measuring personnel's engagement and happiness with a survey model called Happinometer. The survey is officially conducted once a year through an online model which is divided into two main parts:

1) Investigation of factors influencing staff engagement by classifying study results according to types of staff in order to form a suitable staff engagement model for each group.

2) Measurement of staff engagement level with three criteria of success factors: 1) pride and loyalty (Say), 2) being a part of organization (Stay), and 3) dedication to work (Strive)



According to the calculation of the mean scores of staff engagement and survey findings of nine happiness aspects, the results are shown in the figure below.

According to the study on engagement, satisfaction and happiness of Mahidol University staff in 2017, there were 5,881 questionnaire respondents participating in the study, and it was found that the highest mean scores of Mahidol University staff's happiness for each dimension included good spirits (70.1), good heart (67.9) and good health (64.5) respectively. In addition, the overall happiness score was 61.9. It was thus concluded that Mahidol University staff were happy.

### Mean Scores of Happiness categorized by Each Dimension (Overall images)

Mean scores of happiness	Good health	Good relaxation	Good heart	Good spirit	Good family	Good society	Good in- tellectual curiosity	Good	Good work	Overall
Mahidol										happiness
overall	54.5	53.3	67.9	70.1	60.3	58.6	63.8	55.6	63.0	61.9
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(5,881)										

The university aims to develop both academic staff and supporting staff by creating new generation executives with good attitudes, knowledge, skills, morals and ethics to prepare them to be highly potential executives with managerial competencies. Furthermore, the new staff were given opportunities to prepare themselves to learn about the university affairs, benefit eligibility, and MAHIDOL Core Values. In 2017, the number of university staff who participated in all training sessions was shown in the table.

Project	Number of Participants
1. Middle Level Executive Development Project (MU-EDP#16)	39
2. Head of Department Development Project (MU-HDP#2017)	61
3. Low Level Executive Development Project (MU-SUP#18,19)	122
4. New Staff Orientation Project	1,503
5. One Mahidol Project	117

Apart from the development of personnel and leadership, human resource staff are a main mechanism in driving human resource strategies to achieve goals. Human Resource Division therefore strengthened human resource networks to initiate an exchange of knowledge and opinions in management and human resource development. In 2017, Human Resource Division organized seminars to meet with the university's human resource networks (HR Network & HR Policy) in order that relevant personnel in different faculties acknowledged human resource information beneficial to the university operation. The seminars were organized in different topics as shown in the table.

Seminar Topics	Number of Participants
1 <sup>st</sup> Seminar: Human Resource Engagement Strategy for University	91
2 <sup>nd</sup> Seminar: Management of Human Resources in Promoting Strategies towards the World Class Universities	192
3 <sup>rd</sup> Seminar:	
1. Strategies of Human Resource Management: Roles of	
New Generation HR	122
2. Assessment on Core Competencies of New Model Universities	IZZ
3. Training Information Center System	
4. Guidelines for Development of Flexible Time and Workplace	

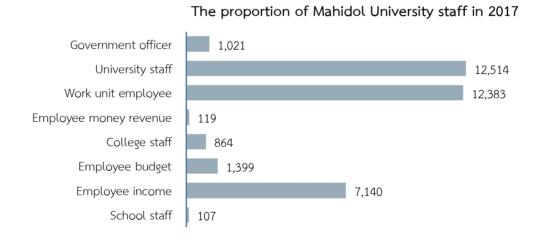
#### **Development of Mahidol University Lecturers**

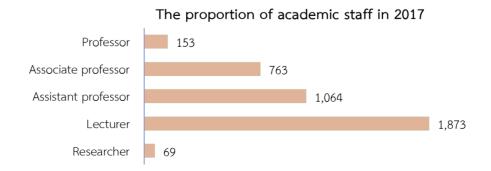
Mahidol University is aware of the importance of creation and promotion of its teaching staff's potential and preparedness to be effective lecturers. Division of Education Administration therefore organized a project to develop the lecturers in order to enhance their knowledge and skills in teaching management and strengthen their potential to be qualified and well-prepared to be a part of driving force to push forward the university strategic plans. The details of Mahidol University Lecturer Development Project included:

- 1. Basic Mahidol University Lecturer Development Project consisting of
  - Mahidol University Lecturer Development Project entitled Developing Teacher Identity
  - Mahidol University Lecturer Development Project entitled Mahidol University Lecturer
     Development in Teaching and Learning Management
- 2. Mahidol University Lecturer Continuous Development Project consisting of
  - Mahidol University Lecturer Development Project entitled Learning Process Management towards Changes

#### **Personnel Data**

In fiscal year 2017, Mahidol University had a total number of 35,547 staff members involving 31,625 supporting staff and 3,922 academic staff, and these figures included 9,330 males and 26,217 females.

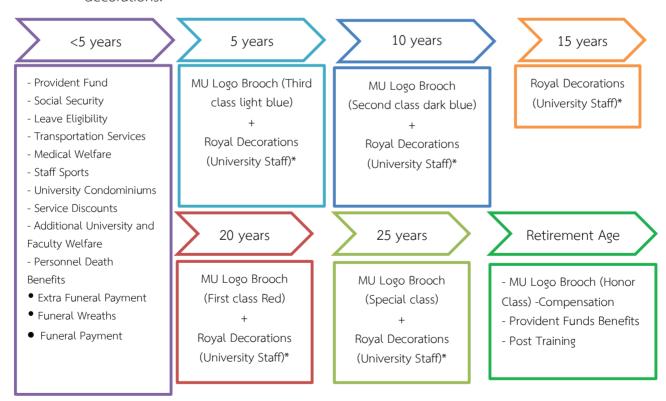




#### Welfare and Benefits

The university has provided welfare and benefits by considering different needs of its staff in each period of life, so 5 funds have been established to meet their needs:

- 1) University staff Welfare Fund for supporting staff and their families in case of sickness and physical health promotion;
- 2) Provident Fund for retired staff support;
- 3) Aid Fund for supporting government officers and permanent employees (budget and University revenues) in case of their death;
- 4) Compensation Fund for compensation of pensions;
- 5) Mahidol University/Faculty Welfare Fund for additional welfare managed by appointed committee from the university and Faculties in accordance with honor welfare policies. The funding process includes selecting deserved staff working for at least 3 consecutive years with no disciplinary punishments, good conduct and good performances to deserve praise as outstanding persons to be awarded Mahidol University brooches or royal decorations.



<sup>\*</sup> University staff (Budget) are eligible to request for the royal decorations when qualified (List Draft 18). See further information at http://op.mahidol.ac.th/orpr/newhr/award/
Complied by Human Resources Division, Mahidol University

In addition, the university enhanced its staff's quality of life balancing work and life such as organizing the university staff sports "Mahidol Games – The Majesty is always in our hearts" as well as participating in Higher Education Commission Sports to build good relationship with personnel affiliating Ministry of Education.

With regard to staff recruitment, the

university has developed the e-recruitment system to use for searching applicant information, job advertisement, and announcement of test and interview results as well as measuring the qualification of job applicants in terms of behavioral consistency to university values. The system has also reduced working process time and inconvenience of filling out application forms.



# Center of Occupational Safety, Health and Environment Management (COSHEM)

Mahidol University concentrates on the safety, occupational health and environment of students, staff and clients as well as the university environment and surrounding community. As a result, the safety committee for various fields has been appointed as follows:

- Executive Committee for Safety, Occupational Health and Environment
- 2. Safety, Occupational Health and Environment Policy Committee
- 3. Biosafety Committee
- 4. Radiation Safety Committee
- 5. Chemical Safety Committee
- 6. MU LabPass Committee
- 7. Network Committee for Occupational Safety, Health and Environment at Work

Additionally, the university has established Center of Occupational Safety, Health and Environment Management in order to create the management system of safety, occupational health and environment in accordance with laws that will lead to the international standard for the well-being of Mahidol University students, staff, and visitors. In 2017, the university encouraged all faculties and work units to develop their safety management system in compliance with laws and safety standards, and in the same year, 5 work units were awarded "2017 Safe and Healthy Educational Places" by the Department of Labour Protection and Welfare. The awarded work units included 1. Faculty of Information and Communication Technology, 2. Institute of Nutrition, 3. MU International College, and 4. College of Music and 5. Mahidol University Amnat Charoen Campus.



## Enhancement of Safety Level in Research Accident Report System Mahidol **Laboratories of National Universities**



The implementation of the project for enhancement of safety in the three laboratories of Mahidol University Faculties (Faculty of Public Health, Faculty of Pharmacy and Institute of Molecular Biosciences) marked the beginning of model laboratories with ESPReL safety standard, and two of them have been developed to the model laboratories in accordance with Thai Industrial Standard in Safety Management of Chemical Laboratories (TISI 2677-2558). To further the laboratory safety development, the project was in collaboration with 20 laboratories of Mahidol University and affiliated universities including 18 laboratories of 10 work units: Kanchanaburi Campus, Faculty of Medicine Siriraj Hospital, Faculty of Science, Faculty of Engineering, Faculty of Veterinary Sciences, Faculty of Medical Technology, Faculty of Tropical Medicine, Faculty of Public Health, Institute of Molecular Biosciences, National Laboratory Animal Center and two laboratories of affiliated universities: Silpakorn University and Petchaburi Rajabhat University. The purpose of this project was to allow the participants to have model laboratories in compliance with ESPReL Safety Standard.

# University

Raising awareness in occupational health, safety and risks is important for every organization as a result of several accidents caused by poor risk management systems which can lead to loss of life and property.

Mahidol University has announced occupational health and safety policies, and set a zero accident goal for 365 days. The accident report system and online investigations have been operated to monitor and keep accidental damage records. The sign displaying the records has been posted at the third entrance gate of Salaya Campus along with launching campaigns to promote the faculties commitment to preventing work-related accidents, based on the idea that work-related accidents can be prevented. All activities have been carried on in order to build awareness in prevention of work-related accidents.



## **University Rankings**

A university ranking can be used as a quality indicator, and the reputation of each university can be distinguished by its position on the ranking list. As the university ranking is considered to be important, Mahidol University is determined to be in the world and Asian ranking positions as well as in Thailand's.



In 2017, Mahidol University was ranked the first of Thai universities in 12 fields of study by Times Higher Education World University Ranking (THE) 2016 – 2017. Also, the university was ranked the first of Thailand and the 97th of Asian universities.



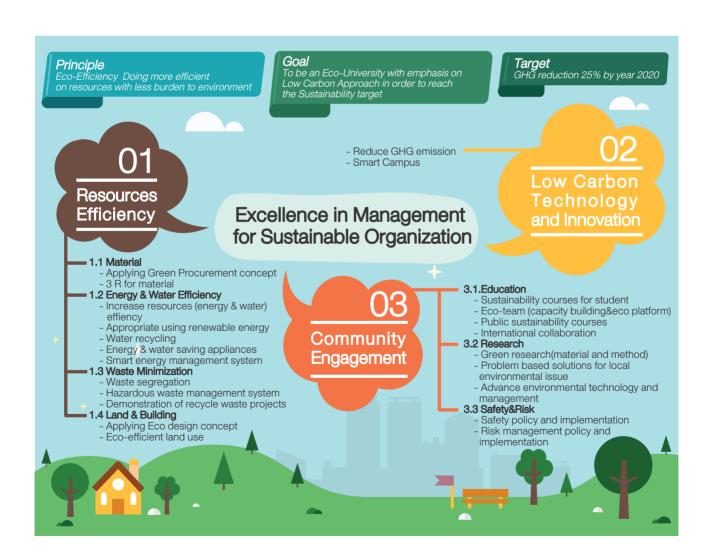
According to the survey of the UI Green Metric World University Ranking 2017, conducted by University of Indonesia (UI), Mahidol University was ranked the first out of 27 Thai universities, and the 86th of the world. It is obvious that Mahidol University was ranked as one of the world's top 100 green universities.



Moreover, Mahidol University was ranked the 1st of Thai universities and the 433rd of the world ranking by Webometrics Ranking of World Universities via website http://www.webometrics.info/en/Asia/Thailand

## Summary of Environmental Performances

Mahidol University has driven the eco-university policy for sustainable development on campus and in the surrounding community by creating a balance of economic, social and environmental dimensions which will lead to efficient use of resources, social equality and improved quality of life of staff, students and the surrounding community. The university aims to reduce greenhouse gases by at least no less than 25% within the year 2021 in comparison with gas emissions of the base year 2016. This plan complies with Thailand policies in accordance with its ratification of Paris Agreement in reducing greenhouse gases by no less than 20-25%. To achieve this goal, the university has adopted three strategies including 1) Promotion of an increase in resource efficiency; 2) Promotion of low carbon technology and innovation to reduce greenhouse gases; and 3) Promotion of community engagement.



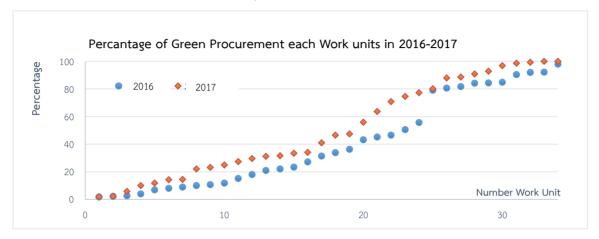
Mahidol University has emphasized sustainable corporate management which is a strategy in the university operation through work agreement to set operational goals between the university and faculties. With respect to this agreement, the faculties shall report their performances at the end of the agreement period, and one of the report topics shall be the performance results following six eco-university indicators including raw materials, energy use, water use, wastes, buildings and greenhouse gases. The 2017 performance results of all faculties have been summarized in the table below.

	Indicator Criteria	Qualified Divisions			
Indicators		2016		2017	
		Number	Percentage	Number	Percentage
1. Raw Materials	Over 50% of procurement is environmentally friendly.	12	35.29	15	44.12
2. Energy Use	There is no increase in power use.	10	27.03	21	56.76
3. Water Use	There is no increase in water use.	12	32.43	21	56.76
4. Wastes	Waste separation has increased by 10%	Base Year		36	12.47
5. Buildings	There is over 50% of green building elements.	19	51.35	25	67.57
6. Green House Gases	100% of carbon footprint assessment in all work units has been completed.	Base Year		37	94.87

# Performance Report according to Eco University Indicators 1.1 Raw Materials

The university has paid attention to the environment and sustainable development, so it organized a seminar project of eco-friendly procurement in accordance with United Nations' sustainable development goals No. 12: Sustainable Production and Consumption. The seminar was intended to introduce criteria, rules and regulations of eco-friendly procurement to the university's work units, and it was honored by a guest speaker from Department of Pollution Control to give a speech on "Characteristics of Eco-Friendly Products and Services consisting of two topics: Lists of Eco-Friendly Products and Services Databases" on Wednesday, May 17, 2017 at Room 322, Mahidol Learning Center. Regarding the performances of the university work

units in 2017, 15 more work units were qualified according to raw material criteria, and each faculty had a tendency to use more eco-friendly procurement than in 2016.

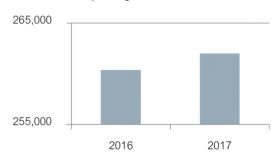


A growth of Mahidol University in building construction for teaching and learning and provision of services as well as improvement in infrastructure on Salaya Campus has caused more consumption of power and water resources.

#### 1.2 Energy Use

In 2017, Mahidol University used a total power of 261,989.04 MW, most of which was used by the work units providing medical services. It was indicated that 21 work units, or 11 more work units this year, were able to reduce use of electricity; compared with those in the previous year, accounting for 2,224.68 MW of decreasing power. In addition, Mahidol University has

Electricity Usage (MW) in 2016 - 2017



been operating energy saving projects, for instance, producing electricity from solar renewable energy and solar cells, production of biodiesel from used cooking oil. The university also organized activities to promote energy conservation and energy saving such as MU Light Out and MU Energy Award.



#### **MU Light Out**

The MU Light Out Project was honored by the President and executive team of Mahidol University to preside over its opening. The project aims at launching a campaign to remind students and staff to turn off unnecessary lights in the entire area of the campus for 1 hour on the 2nd and the 4th Wednesdays of every month from 12.00 to 13.00 hours.

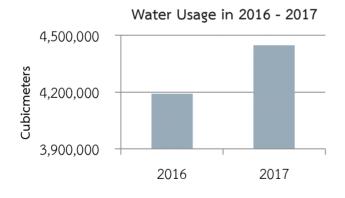
#### **MU Energy Award**

In 2017, there were 20 work units participating in the competition of the MU Energy Award Project, which was intended to

- Promote and encourage efficient resource management of Mahidol University
- 2. Urge all work units to develop resource management efficiently to reach the national level for Thailand Energy Awards and the regional level for ASEAN Energy Awards
- 3. Push all work units to develop and expand their knowledge towards development of resource management.

#### 1.3 Water Use

In 2017, Mahidol University used a total water of 4,447,043.57 cubic meters. There were 9 more faculties or a total of 21 work units reducing water consumption, which was a total decrease of 85,972.11 cubic meters, compared with that of the previous year.



## Wastewater Treatment System Mahidol University Salaya

Mahidol University at Salaya began its construction of central wastewater treatment system in 1981, using oxidation pond system. Due to a rapid increase in buildings and population on the campus as well as its lifetime of 30 years without suitable maintenance, the system became damaged. In addition, it was found that wastewater from some parts of the campus was dropped into public canals along with the rainwater drainage channels caused rotten surface water. As a result, an official survey on these problems was conducted, before the new central treatment system of the university was designed to deal with wastewater from current and future buildings. and it was able to handle 6,000 cubic meters of wastewater per day. In the first stage, the system supported wastewater from student dormitory buildings (Ban Mahidol). However, it was later found that there was severely rotten wastewater in the surrounding canals. Therefore, the reuse of treated wastewater project was developed, and it has been working most effectively, causing 71.2% of treated water to be reused on the campus, which can save 111 m3 of tap water per month (2,300 baht per month), and reduce greenhouse gas emissions by 3 kg CO2 eq/ month. In addition to its high capacity with only 150,000-baht investment and a 5-year payback period, the project became a good model for other workplaces of Mahidol University.

#### 1.4 Wastes

Mahidol University has been running a campaign on separation of garbage by providing waste sorting bins in all the work units; however, collection of waste sorting data is still challenging. In 2017, it was indicated that the waste database became improving and there was an increase in waste sorting by 12.47% compared with that in the previous year. This might have resulted from cooperation of all work units in data collection. In addition, the university developed the waste recycling bank project whose operational database was systemized. It was revealed in 2017 that the purchase of recycling wastes through the project rose to a total of 1,207 tons.



#### Waste Recycling Bank Project

The problem of wastes requires cooperation from all parties to campaign and resolve in order to reduce social and global burdens. To express its social responsibility to lessen wastes in the community and to be a good model for other sectors, Mahidol University has established the Waste Recycling Bank Project with the following purposes:

- 1. To campaign for raising awareness of its students and staff on their social responsibilities as well as disciplines in sorting and dumping garbage.
- 2. To create staff and student participation in maintaining the campus environment by reducing waste management burdens and waste pollution.
- 3. To develop an efficient waste management system of Mahidol University Salaya Campus and create economic value from wastes.
- 4. To create good images of the university in its awareness on environmental problems and social responsibilities.

The Waste Recycling Bank is located at the Environmental Conservation Building. It is open every day for students, staff and people from the surrounding community to sell recycling wastes to the project. Each member will get a bank book for keeping records of money received from sold waste items, and the members can withdraw money on the purchasing day or on any other days. As a result, not only the members can create their own continuous income but also it can help reduce a large amount of waste on the campus.



#### Mahidol Engagement: Eco Town

Due to the success of strategic development projects, Division of Physical Systems and Environment had the concept of using knowledge and experience from the implementation of projects to serve the community to improve the quality of life and environmental development. A pilot project of waste recycling bank was therefore set up at Phra Tamnak Suan Kularb Mahamongkol School along with demonstrating and guiding the project implementation as well as cooperating it in order to achieve sustainable and practical results. Moreover, it was expected to increase knowledge of students, teachers and parents to participate in reducing waste and earn income from selling recycling wastes. Further, the project helped create low-carbon community and promote The university public engagement. In total, the objectives of the project include:

- 1) To transfer knowledge and technology in environmental conservation to the community.
- 2) To enhance the quality of life and environment of target schools.
- 3) To create networks of the public engagement of Mahidol University and its community.

In 2017, a total of 6 schools joined the network: 1) Phra Tamnak Suan Kularb Mahamongkol School, 2) Wat Maklue School, 3) Wat Songkanong School, 4) Wat Suwannaram School, 5) Ban Nong Fab School, and 6) Wat Mabchalood School.



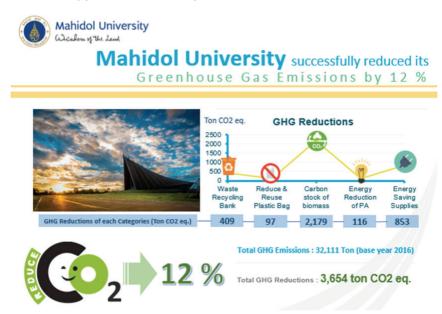
#### 1.5 Buildings

Mahidol University has pushed forward the eco-friendly features of the work unit buildings to meet green building criteria in order to minimize their impact on the environment and reduce negative effects on staff health. In comparison with the previous year assessment, in 2017, a total of 20 workplace buildings or 6 more of them were qualified to meet 50% of criteria for eco-friendly building features.

#### 1.7 Greenhouse Gases

The university has organized the MU Carbon Footprint Program in which the collected data of resource use have been calculated to find the quantity of greenhouse gases emitted by the organization. The program has been well-cooperated by all work units in providing required information. According to the previous year performance, a total of 16 work units emitted 9,264 tons CO2eq, and a total of 33,111 tons CO2eq was emitted from activities taking place on the campus

in 2017. As a result of these facts, the university set up some projects to reduce greenhouse gas emissions including 1. waste recycling, 2. reduction of plastic bags, 3. carbon capture and storage in biomass, 4. reduction of energy, and 5. changing appliances into power saving ones/energy conservation. After the implementation of the projects, the emission of greenhouse gases decreased by 3,654 tons CO2eq or 12% of the total greenhouse gas emissions in the same year.



## **HOW TO USE** Leave & Share Boxes



## "Mahidol Reduces and Reuses Plastic Bags" Project

The project aimed to encourage the Mahidol community to avoid using plastic bags and recycle them. It also encourages students, staff, and public to raise their awareness on the value of resources and use them in the most efficient way. The results of the project implementation are as follows:

Salaya Campus: A total of 10 convenience stores participated in the project and they reduced 880,395 plastic bags equivalent to 176 tons CO2eq of greenhouse gases.

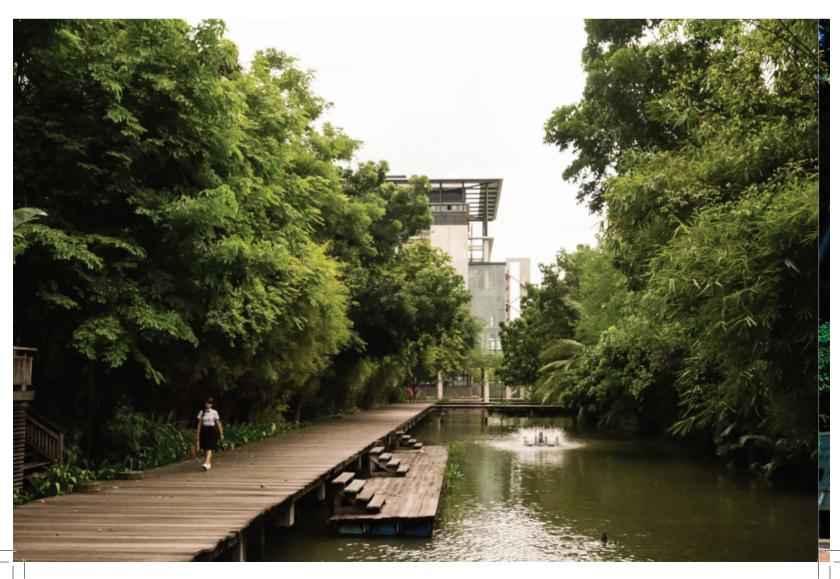
Phaya Thai Campus: Two convenience stores participating in the project reduced 72,000 plastic bags as well as 14.4 tons CO2eq of greenhouse gases.

# Carbon Capture and Storage in Biomass : Ruampon Khon Rak Tonmai (The Tree Lovers Rally Project)

Due to the fact that the measurement of greenhouse gas absorption in trees and green areas is an effective method to manage reduction of reduction of greenhouse gas emissions, Division of Physical Systems and Environment has organized a project called "Ruampon Khon Wat Tonmai (Tree Measuring Rally)" to collect information about greenhouse gas absorption by planting trees on the campus and increase knowledge on calculation of greenhouse gas capture and storage in tree biomass for students and staff. The project was also intended to strengthen the management of greenhouse gas emissions on Salaya Campus where 5,258 perennial trees have been planted in the central area of the campus, and these trees

are capable of absorbing 2,1790,09 tons CO2eq. As a result, Salaya Campus can be developed into a low carbon town and acts as a role model for other educational institutions in Thailand.

Besides, the university has a supporting project to assess greenhouse gas emissions of each work unit and register with Thailand Greenhouse Gas Management Organization (TGO). In the previous year, the Golden Jubilee Medical Center was a pilot work unit of the project and was certified by a TGO carbon footprint label. This year, the Faculty of Tropical Medicine and the Faculty of Information and Communication Technology have participated in the project and are pending verification for registration.



#### **Traffic on Campus**

Due to the concept of developmental strategies to improve the environment as well as quality of life of students and staff, Mahidol University has adopted policies to encourage walking and biking as regular means for travelling on the campus. As a result, one important project was to change roads for vehicles into walking streets by reducing three lanes from six lane roads for construction of walking paths and cycling lanes. The project aimed at promoting physical exercises by walking, jogging and biking, creating opportunities for pedestrians to greet each other, planting to create shade of trees, creating a green lifestyle by organizing creative activities in the new areas to add color and diversity of life. These activities

conform to the Toronto Charter for Physical Activity: A Global Call for Action which aims to promote well-beings, physical and mental health, disease prevention, social link development, quality of life development, and so on.

Additionally, the university has planned to develop and improve roads along with public transportation on the campus to all commuters and passengers. With regard to this service, there are a total of 16 trams (shuttles) with 4 lines, which was changed from using NGV fuel to use electricity in 2017, and there are also 52 intercampus buses to provide public transportation services for students and staff.



## **Mahidol Engagement**

Mahidol University is committed to driving its public engagement as a true stakeholder of the surrounding community by working in collaboration with institutional parties of the areas in long-term partnership. In addition, the university has been carrying on development of internal manpower with the following goals:

- 1) The university has a strong management system for driving its public engagement as well as integration of the core missions for the society.
- 2) The university has human resource development of committed staff members who have idealistic mindset, social knowledge and academic skills to work for society systematically and continuously.
- 3) The university can enhance the level of academic works from social performances resulting in academic quality assurance system as well as staff's professional development.

Four Basic Principles of Working with the Community are:

- 1) Partnership: Think and work together in partnership.
- 2) Mutual benefit: Create mutual benefits for all parties involved.
- 3) Scholarship of engagement: Apply knowledge and learn together.
- 4) Social impact: Generate assessable social impacts.

In the beginning, Mahidol University started driving its engagement operation as follows:

- 1) Appointed coordinators for Mahidol engagement for each area of the campus.
  - 2) Appointed research and community



development groups of the university as a central unit to be responsible for the engagement in the university and coordination of the community and Mahidol University.

3) Prepared databases of research works, projects and activities in accordance with Mahidol Engagement and also prepared its website for further public communication.

Driven-Development SEP-based Project by Student Power (Social Contributing and T-Shape Graduates)

In fiscal year 2017, a driven- development Sufficiency Economy Philosophy/ SEP-based project by Student Power was implemented in three target areas including Maha Sawat Subdistrict,



Salaya Subdistrict and Khlong Yong Subdistrict. In addition, the concept of sufficiency economy philosophy was included in the content of 35 courses in 16 study programs.



# Handover of Bicycle Project for Community Tourism

The Mahidol students under the Rakkaew Project along with the community dwellers of Salaya and Maha Sawat of Phutthamonthon District agreed to use sufficiency economy philosophy to promote community tourism by designing new eco-tourism routes. In addition, the students' bicycle handover project inspired development of tourism program by bicycles which were another choice for health lovers and those who were interested in eco-tourism. The implementation of this project encouraged students to participate in extracurricular activities, promoted learning through social activities. Also, the students used their multidisciplinary knowledge to solve actual problems in the community, leading to community development under the community sustainable development plans of Phutthamonthon District. Moreover, the Mahidol Rakkeaw students organized an activity to participate in collecting water hyacinth in the canals and learned how to make fertilizers from water hyacinth, develop seedlings and prepare planting areas for community agricultural development in the Sufficiency Economy Learning Center of Ban Khlong Yong and Khlong Maha Sawat communities.

# **About the Report**

The report on Mahidol University sustainable development 2018 is the first annual report of the university prepared in accordance with the guidelines of sustainability report of Global Reporting Initiative Volume 4 (GRI G4). The report aims to disseminate management information as well as the economic, social and environmental performances of Mahidol University to all stakeholders from October 1, 2017 to September 30, 2018.

This report has been prepared in English language, and it can be downloaded from the Mahidol University website.

For Further information, please contact

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