



2018

SWU SUSTAINABLE DEVELOPMENT GOALS REPORT

BY SRINAKHARINWIROT UNIVERSITY

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Introduction



Srinakharinwirot University was the first higher education institution in Thailand to focus solely on teacher training. It began as the Higher Teacher Training School at Prasarnmit. In 1953, it became the College of Education, having the authority to grant a bachelor's degree in education in the subject majors taught in Thai primary and secondary schools. Subsequently, programs at both the bachelor's and master's degrees were developed. In 1964, branch campuses were established for the regions of the country, which eventually split off into separate universities, although many still regard Srinakharinwirot as their mother university.

The university has 16 faculties, four colleges, one graduate school, two research institutes, seven centers and four demonstration schools. There are two campuses, one at Prasarnmit, and the other at Ongkharak in the Ongkharak District, Nakhon Nayok Province.

The newer health science faculties, plus the faculty of engineering, are in rural Ongkharak. The Princess Maha Chakri Sirindhorn Medical Center was established, to provide medical students with the modern means for research and training. It also provides medical care for students, staffs and the general public.

Philosophy: Education is growth.

Vision

Srinakharinwirot University is a leading institution for learning and research based on education, virtue and social service aiming to create innovation to global level.

Missions

1. To generate and develop individuals with high quality for learning and integrity through learning processes and learning society
2. To create high quality research and innovation that are sustainably useful for the society both at national and international levels
3. To provide academic service of high quality, awareness and social responsibility
4. To study, analyze and preserve art and culture
5. To develop administrative system of high quality and good governance

SWU Sustainable Development Goals

Srinakharinwirot University has realized the importance of helping society and taking social responsibility seriously. The actions of enhancing knowledge, presenting opportunities, promoting education and transferring technology to the local areas have been taken to align with the concept “One Province, One University”. Embracing the "Philosophy of Sufficiency Economy" by His Majesty King Bhumibol Adulyadej and putting into practical actions, the university therefore plays an important role in both social and rural development which is an integration of working with communities and regions to promote sustainable community development. Furthermore, all of these help to reduce social inequality, support and strengthen the relationship with the university and society, inspiring knowledge exchange, promoting network participation between domestic universities and foreign universities.

In 2018, Srinakharinwirot University has promoted and supported faculty members to participate more by making them understand the goal of sustainable development and creating a system "SWU supports the Sustainable Development Goals" to gather and report operational data that is consistent with the UN goals of all 17 SDGs. In the future, Srinakharinwirot University aims to push the operation to be more aligned with the goals and indicators of the UN and create cooperation both domestically and internationally to set goals and indicators together.

1 NO POVERTY



SDG 1 NO POVERTY

End poverty in all its forms everywhere



Projects

- 1 Cultural Capital Development Program**
- 2 Establishment of the Center for Research and Development of Natural Products to Support Small and Medium Enterprises**
- 3 Human Resources Development for Creative Industry : Jewelry Products**

Cultural Capital Development Program



Cultural Capital Development Program is arranged in 2 phases with the design and implementation of sustainable tourism promotion policy to create works and promote local cultures and products.

Phase 1: Workshop “Natural dyeing skill and technique development ”is to develop Saotom cloth product at Nong Kowit and Sai Ngam Villages, Sakaew Province .There are 50 villagers from Nong Kowit and Sai Ngam Villages attended this program. In return, the community receives the knowledge to develop local products including cloth dyeing skill and technique made from natural materials found in local area such as marigold, mud etc .This program focuses on local strengths and wisdom of Sakaew Province as cultural capital to be combined with the development of know-how regarding fibers and natural dyeing to add values and create unique loc

Phase 2: Light and Sound Performance at Khundan Prakarnchon Dam by cooperating with Nakhonnayok Province. Activities in this program are as follows

1. Light and sound performance " Inheriting routes, creating streams at Khundan Prakarnchon Dam" with the exhibition of artworks, street art and colorful glow- in- the- night decorations around the front of Khundan Prakarnchon Dam. Such performance is to promote tourism of Khundan Prakarnchon Dam of Nakhonnayok Province, inspired by historic stories of Khun Han Pitakphrai who passed this inspiration to King Rama 9 to initiate the construction of this dam to be useful for people. Performers include artists, actors, alumni, students of Srinakharinwirot University and schools in Nakhonnayok Province who joined Dance of Thai Puan, which is another important ethnic group in Nakhonnayok Province.

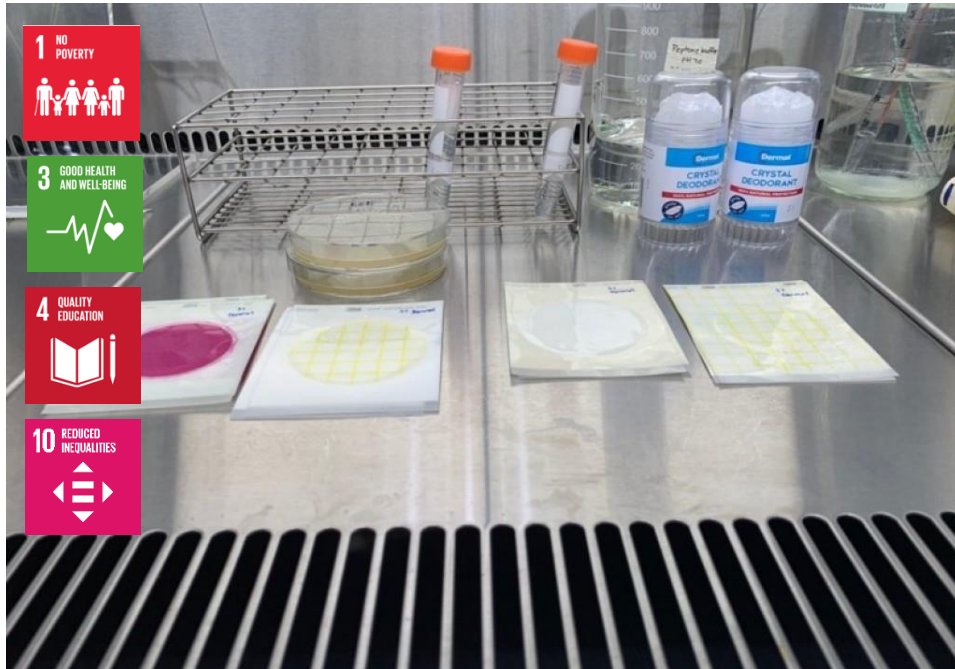
2. The activities include opening booths for community products provided that Nakhonnayok Province coordinates with community shops to put their products for distribution to bring income to people in the community. There are approximately 50 community shops opening their booths in the event.

Impact

Nakhonnayok and Sakaew have been promoted for cultural tourism and community products developed from “cultural capital” of each province and extended to be cultural and local works and products under cooperation of the community.

Organized by Faculty of Fine Arts

Establishment of the Center for Research and Development of Natural Products to Support Small and Medium Enterprises



This project has an impact on cosmetics quality control in Nakhonnayok itself. After discussion with the manufacturers whose products are found contaminated, we requested to test their products again after allowing them to improve their products and the result found that 100% of all products are not contaminated after they improve their products. The improvement can be done by changing the type of water used for product preparation, sterilization of natural extract added as an active ingredient in cosmetics, and adding preservative in the products.

The result of irritation and hypersensitivity test suggests that cosmetic products in Nakhonnayok are safe to use and will not induce hypersensitization to human skin. This has an impact on the reputation of the manufacturers and the province as well.

Organized by Faculty of Pharmacy

Human Resources Development for Creative Industry: Jewelry Products



Impact

- Creating community networks of exchanging knowledge among students, communities, faculties and students for self-development.
- Public relations is managed by the community and local youth.
- The youth are proud to be involved in community development and public relations.

Organized by College of Creative Industry

2 ZERO HUNGER



SDG 2 ZERO HUNGER

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



Projects

- 1 Botanical Garden of the Faculty of Pharmacy,
Srinakharinwirot University**
- 2 Thai-Phaun Development Community Museum Project at
Nongseang Subdistrict, Pakphli District, Nakhonnayok
Province**

Botanical Garden of the Faculty of Pharmacy, Srinakharinwirot University

1 Botanical garden Before and After



Impact

1. Community (figure 2, 3, 4)

As a resource base for medicinal plant utility, the botanical garden is open for people who are interested in growing medicinal plants, studying medicinal use, or visiting for relaxation. The Faculty arranges workshop activities especially for the elderly and school children in the community and nearby area. There are three workshop activities; (1) processing herbs as a medicine for primary care, (2) generating bio-compost, and (3) “know your herbs” (activity for school children). Moreover, the Faculty establishes facebook and website as alternative hubs to provide knowledge and current information about medicinal plants. These activities help community understand how to use the herbs safely so that they are confident to use these herbs for primary health care.

Therefore, the cost for medicines will be ultimately reduced.

2. Pharmacy students and staff members (Figure 4)

Pharmacy students study plant morphology and medicinal properties so that they have contributed these knowledge to the botanical garden by growing medicinal plants. They also create several learning media, such as video clips and infographics, related to the use of medicinal plants. A group of pharmacy students pleasantly works as leader and facilitator in the “know your herbs” activity for school children. These activities should greatly enhance awareness of public mind of pharmacy students and improve their knowledge which will be further applied for pharmacy career. In addition, staff members continuously gain and keep up to date with knowledge about medicinal plants.

3. Environment (Figure 5)

The botanical garden of Faculty of Pharmacy is now a shady and pleasant area located in the community. In addition to plants, various kinds of animals, such as indigenous birds and tree squirrels, are often found. Thus, a biodiversity has already been established. The botanical garden is performing a project to collect DNA fingerprint of the plants. Since the botanical garden hosts a number of microorganisms living on the plants and in the soil, the Faculty has planned to set a project to collect these microorganisms in the next few years.

Organized by Faculty of Pharmacy

Thai-Phaun Development Community Museum Project at Nongseang Subdistrict, Pakphli District, Nakhonnayok Province



TARGET 2·A



INVEST IN RURAL INFRASTRUCTURE, AGRICULTURAL RESEARCH, TECHNOLOGY AND GENE BANKS

Local people are sharing and learning about local knowledge at the Agricultural Learning Center of the Thai-Phuan community.

Impact from collection and follow up of the performance found that:

- 1) Community leaders, volunteers, and villagers become more active and aware of the importance of agriculture wisdom in their Thai Phuan way.
- 2) Community leaders have collaborated with the project and established agricultural learning resources at Nong Saeng community at the rice mill, Village No4 ., Ban Noen Hin Rae, Nong Saeng Sub-district, Pak Phli District, Nakhon Nayok Province to disseminate knowledge to student, people in the community and tourist groups who have visited the village.
- 3) People in the community are proud, they jointly conserve and create activities, inheriting the agricultural practice in accordance with the Thai-Phuan way.

Organized by Institute of Culture and Arts

3 GOOD HEALTH AND WELL-BEING



SDG 3 GOOD HEALTH AND WELL-BEING

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



Projects

- 1 Botanical Garden of the Faculty of Pharmacy, Srinakharinwirot University**
- 2 Establishment of the Center for Research and Development of Natural Products to Support Small and Medium Enterprises.**
- 3 Pharmacy Volunteer Academy Camp.**
- 4 Development of Thailand Hearing Healthcare Services System on the World Hearing Day Thailand Event.**
- 5 The Mobile Medical Unit Project**
- 6 The Tobacco Consumption Control Project: Medical Professional Network.**

Botanical Garden of the Faculty of Pharmacy, Srinakharinwirot University

1 Botanical garden Before and After





TARGET 3-B

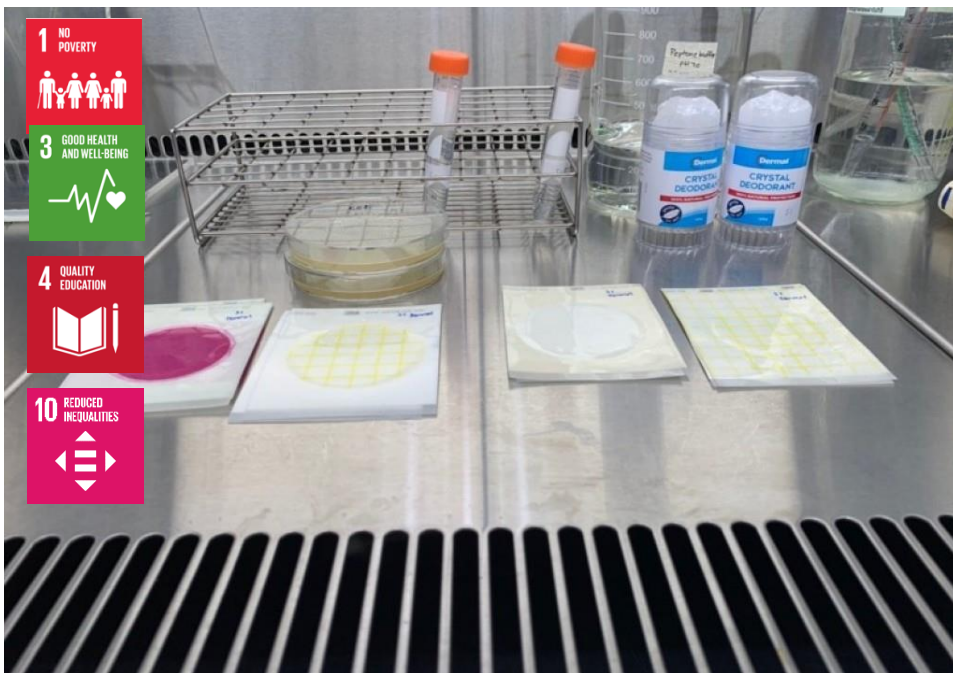


SUPPORT RESEARCH, DEVELOPMENT AND UNIVERSAL ACCESS TO AFFORDABLE VACCINES AND MEDICINES

As a resource base for medicinal plant utility, the botanical garden is open for people who are interested in growing medicinal plants, studying medicinal use, or visiting for relaxation. The Faculty arranges workshop activities especially for elderly people and school children in the community and nearby area. There are three workshop activities; (1) processing herbs as a medicine for primary care, (2) generating bio-compost, and (3) “know your herbs” (activity for school children). Moreover, the Faculty establishes a facebook page and website as alternative hubs to provide knowledge and current information about medicinal plants. These activities help community understand how to use the herbs safely so that they are confident to use these herbs for primary health care. Therefore, the cost for medicines will be ultimately reduced.

Organized by Faculty of Pharmacy

Establishment of The Center for Research and Development of Natural Products to Support Small and Medium Enterprises



TARGET 3>B



SUPPORT RESEARCH, DEVELOPMENT AND UNIVERSAL ACCESS TO AFFORDABLE VACCINES AND MEDICINES

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Organized by Faculty of Pharmacy

Pharmacy Volunteer Academy Camp



This project focused on health care of people around Tumbon Lumsompung, Saraburi province, where local people are poor and low educated. Most of the people here are farmer, they raise cow for milk. The activities included visiting people in Lumsompung and giving advices on safely storage for the medicine, how to use medicine correctly, and how to take care of themselves and their family. We worked together as a team with the FDA government who are pharmacists in that area. After visiting, we wrote reports and presented to them. This helped them solve problems. Moreover, our students could work from the real situation, which was much different from what they have learned in a classroom. This provided good experiences and helped to build good attitude towards them about Pharmacist. Since we stayed at Lumsompung School during the activities, we did a lot of volunteer jobs. For example, supplying books in a library and also medicine in the infirmary. We also created the events which we invited people around the area to see the exhibitions about medicines.

This project helped people around Tumbon Lumsompung to concern more about their health. People gained knowledge about how to use medicine in their daily life. Moreover, students have learned to work as a team. They would have good attitude towards Pharmacists.

Organized by Faculty of Pharmacy

Development of Thailand Hearing Healthcare Services System on The World Hearing Day Thailand Event.



TARGET 3·B



SUPPORT RESEARCH, DEVELOPMENT AND UNIVERSAL ACCESS TO AFFORDABLE VACCINES AND MEDICINES

HRH MAHA CHACHI SIRINDHON HOSPITAL, Medical Faculty of Srinakharinwirot University is a lead team of Thai Healthcare who used multidisciplinary approach joined with Obstetric, Pediatrics department, Audiology, Speech Rehabilitation segment and Department of Medical Services of Thailand. Policy of the Royal College of Otolaryngologists-Head and Neck Surgeons of Thailand (Royal college of ORL) are hearing for life, universal hearing screening in newborn, long term hearing loss management in aging group, development hearing rehabilitation system and pushing this policy for hearing healthcare services system in Thailand.

HRH MAHA CHACRI SIRINDRON Medical center with The Royal college of ORL, Medical department, Rural Ear Nose and Throat Foundation, institutes from government, private hospitals and World Health Organization have performed “The World Hearing Day Event”. This event held at Lumpini Public Garden, Pathumwan Bangkok, underwent the campaign “Check your hearing” via various media platforms such as Television, Radio, Line, Facebook, Google etc. The event provided knowledge via exhibition, discussion/questions- answers by specialist, Ear-Nose-Throat Examination by Otolaryngologists and also provided hearing test and audiogram for people free of charge.

Organized by Faculty of Medicine

The Mobile Medical Unit Project



3 GOOD HEALTH AND WELL-BEING

TARGET 3•B



SUPPORT RESEARCH, DEVELOPMENT AND UNIVERSAL ACCESS TO AFFORDABLE VACCINES AND MEDICINES

The mobile medical unit project was first implemented in 2002. The aims of this project are to provide medical treatment, health care education and dental services for people who live in the rural areas of Thailand.



Impact

Improve well-being of people in the rural area.

Organized by Faculty of Medicine

The Tobacco Consumption Control Project: Medical Professional Network.



TARGET	3-4	TARGET	3-A
			
REDUCE MORTALITY FROM NON-COMMUNICABLE DISEASES AND PROMOTE MENTAL HEALTH		IMPLEMENT THE WHO FRAMEWORK CONVENTION ON TOBACCO CONTROL	

Operation plan 1: Academic activities

1. Workshop : Tobacco cessation
2. Workshop : Smoking prevention in patients with chronic diseases.
3. Conference on tobacco control
4. Award winner in HA National Forum
5. Innovation : Mobile application for tobacco cessation
6. Training course : Tobacco Cessation Instructor for medical professionals, nurses, and pharmacists

Operation plan 2: Network building activities

1. National level : A member of National Alliance for tobacco-free Thailand.
2. International level : visitors from Myanmar member of parliament and Sri Lanka Ministry of Public Health personnel.

Impact

1. Decrease smoking prevalence
2. Improve quality of live in patient with chronic disease.
3. Decrease prevalence of second hand smoking among children

Organized by Faculty of Medicine

4 QUALITY EDUCATION



SDG 4 QUALITY EDUCATION

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



Projects

- 1 Field Trip and Fieldwork Project to Enhance Desirable Characteristics of Graduates on Environmental and Resource Management**
- 2 Botanical Garden of the Faculty of Pharmacy, Srinakharinwirot University**
- 3 Establishment of the Center for Research and Development of Natural Products to Support Small and Medium Enterprises.**
- 4 The Development of English Language Proficiency Among Locals Living Around Cross Border Economic Zones In Sakaeo Project**
- 5 Human Resources Development for Creative Industry: Jewelry Products**
- 6 ICT Capacity Development Project for Communities Phase 3**

Field Trip and Fieldwork Project to Enhance Desirable Characteristics of Graduates on Environmental and Resource Management



Field trip and fieldwork project to enhance desirable characteristics of graduates on Environmental and Resource Management is a project to create desirable graduate characteristics according to the PDCA standard framework. This includes learning to use tools to analyze natural resources by sea and by land to summarize the environmental quality and use as a database to scan research projects for graduate students.

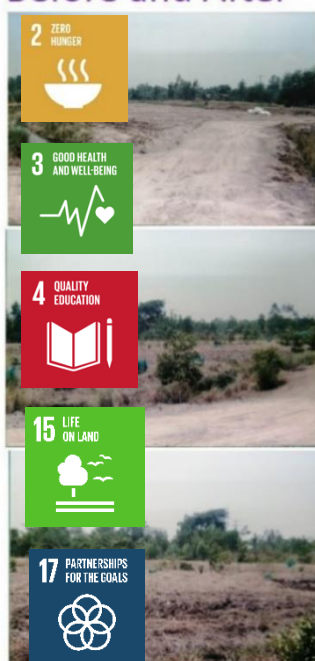
Impact

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Organized by Faculty of Environmental Culture and Ecotourism

Botanical Garden of the Faculty of Pharmacy, Srinakharinwirot University

1 Botanical garden Before and After



TARGET 4.7

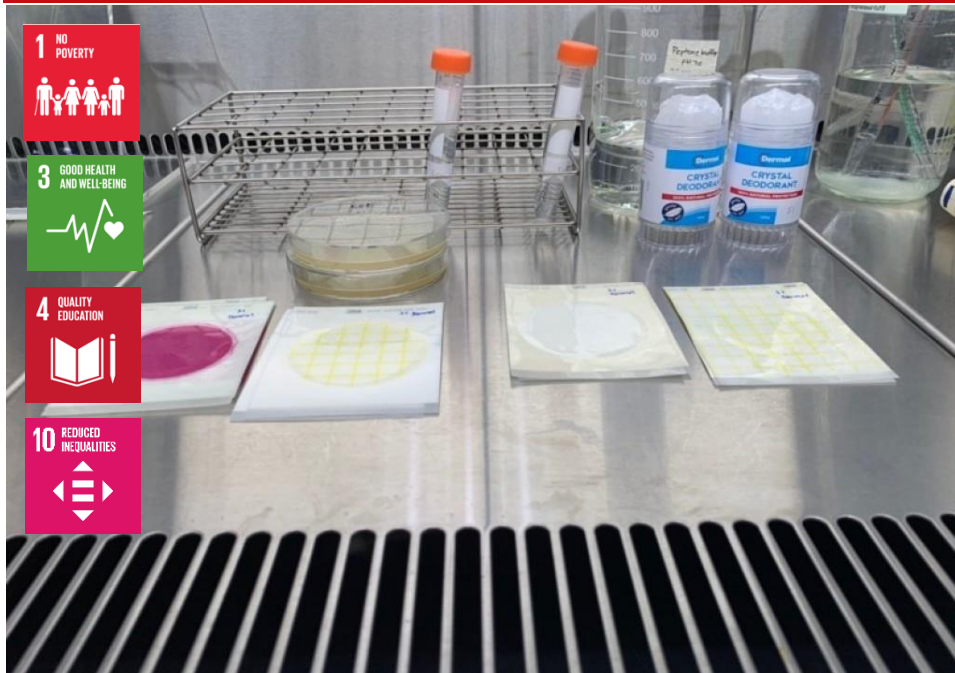


EDUCATION FOR SUSTAINABLE DEVELOPMENT AND GLOBAL CITIZENSHIP

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Organized by Faculty of Pharmacy

Establishment of The Center for Research and Development of Natural Products to Support Small and Medium Enterprises



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Organized by Faculty of Pharmacy

The Development of English Language Proficiency Among Locals Living Around Cross Border Economic Zones In Sakaeo Project



TARGET 4-3



EQUAL ACCESS TO AFFORDABLE TECHNICAL, VOCATIONAL AND HIGHER EDUCATION

Impacts on Society

1.1 Sa Kaeo immigration officials can improve their English skills and intercultural communicative competence. This impact provides a lot of benefits for the officials when doing their working routines because they can apply English communication skills and intercultural knowledge to their jobs. This knowledge ensures that the immigration officials can successfully communicate with foreigners in English with the awareness of cultural differences. As such, Thailand has earned a great reputation as a host country and kept it for the long term.

1.2 In term of preparing local people in in the rural border between Thailand and Cambodia in Sa Kaeo province for being ASEAN citizen, the project provides a practical guideline and model for teachers to improve their English teaching methods as well as develop good English tests in accordance with ONET. Teachers who attended the project can apply the knowledge to improve their students' English skills. Not only students, but locals also have opportunity to improve their English skills, and this fosters life-long learning environment where the communities depend on themselves in terms of improving English language proficiency.

2. Impacts on Economic by providing free training courses for students, teachers, and immigration officials, the stakeholders can reduce the budget that they have to spend on education, so they can use their money on other expenses. When having enough money to pay for all basic requirements of life such as food, medical, and housing, the communities can live happily with equal opportunities to get access to all basic needs.

Organized by International College for Sustainability Studies

Human Resources Development for Creative Industry: Jewelry Products



TARGET 4-3



EQUAL ACCESS TO AFFORDABLE TECHNICAL, VOCATIONAL AND HIGHER EDUCATION

TARGET 4-4



INCREASE THE NUMBER OF PEOPLE WITH RELEVANT SKILLS FOR FINANCIAL SUCCESS

Impact

- Creating community networks of exchanging knowledge among students, communities, faculties, students for self-development
- Public relations is managed by the community and local youth
- The youth are proud to be involved in community development and public relations

Organized by College of Creative Industry

ICT Capacity Development Project for Communities Phase 3



Society

- Emphasizing the importance of computer technology knowledge
- Understanding and applying that knowledge to create opportunities for students, teachers, educational personnel, local leaders, community leaders and personnel of Nakhon Nayok Provincial Administrative Organization
- Disseminating computer technology knowledge to the community by the personnel of the Computer Center at Srinakharinwirot University in order to transfer knowledge and help upgrade the potential of knowledge and understanding in computer technology resulting in greater dependence on each other in the community.

Organized by Computer Center

6 CLEAN WATER AND SANITATION



SDG 6 CLEAN WATER AND SANITATION

Ensure availability and sustainable management of water and sanitation for all



Projects

Water Conservation and Recycling Programs Implementation

Water Conservation and Recycling Programs Implementation



TARGET 6-3



IMPROVE WATER QUALITY, WASTEWATER TREATMENT AND SAFE REUSE

TARGET 6-4



INCREASE WATER-USE EFFICIENCY AND ENSURE FRESHWATER SUPPLIES

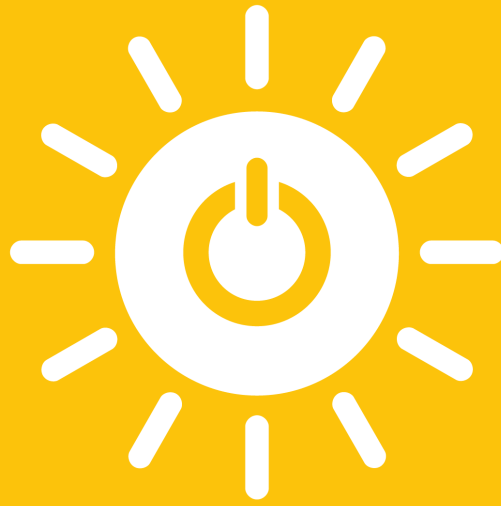
Water supply at SWU (Ongkharak Campus) is abundant. There are a number of large lakes and interconnecting waterways throughout the campus. The several large lakes and interconnecting waterways throughout the campus serve as both repositories for conserving water runoff and also as a source from which the vast swathes of vegetation across campus can be watered.

Impact

The use of water efficient appliances: The replacement campaign of old appliances with more water efficient appliances is currently ongoing. So far in 2018, around 1,590 of the 5,007 water appliances (taps and flushes) found across SWU's Ongkharak Campus are classified as efficient. This equates to 31.76%. In addition, we also use a low-cost technique by replacing a water bottle inside the water tank of the flush toilets across the campus to decrease water usage.

Organized by OFFICE OF THE PRESIDENT

7 AFFORDABLE AND CLEAN ENERGY



SDG 7 AFFORDABLE AND CLEAN ENERGY

Ensure access to affordable, reliable, sustainable and modern energy for all



Projects

Renewable Energy

Renewable Energy



There are three renewable energy sources—Solar, Biomass power plant and Bio-methane and Pyrolysis oil—being in used in Ongkharak campus. There are solar powered lighting in several carpark and in newly-installed pedestrian walkways while Pyrolysis oil are used as fuels for gardening equipment and heating.

Impact

We have 3 renewable energy sources in campus.

Organized by OFFICE OF THE PRESIDENT

8 DECENT WORK AND ECONOMIC GROWTH



SDG 8 DECENT WORK AND ECONOMIC GROWTH

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



Projects

Cultural Capital Development Program

Cultural Capital Development Program



Cultural Capital Development Program is arranged in 2 phases with the design and implementation of sustainable tourism promotion policy to create works and promote local cultures and products.

Phase 1: Workshop “Natural dyeing skill and technique development” is to develop Saotom cloth product at Nong Kowit and Sai Ngam Villages, Sakaew Province. Around 50 villagers from Nong Kowit and Sai Ngam Villages attended this program. In return, the community received knowledge to develop local products including cloth dyeing skill and technique made from natural materials found in local area such as marigold and mud etc. This program focuses on local strengths and wisdom of Sakaew Province as cultural capital to be combined with the development of know-how regarding fibers and natural dyeing to add values and create unique local products for increasing income of the community.

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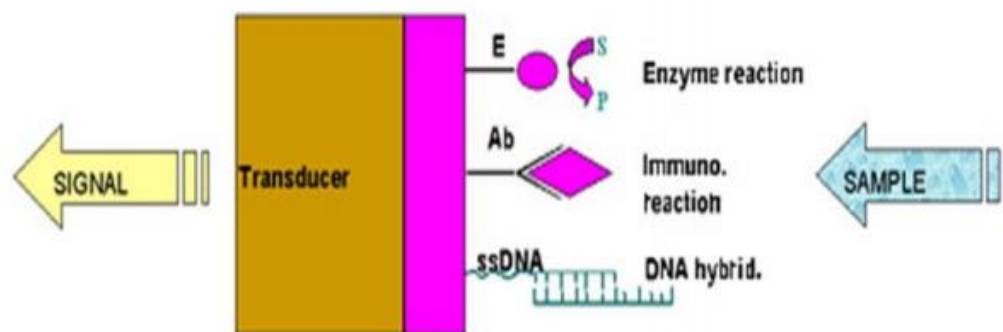
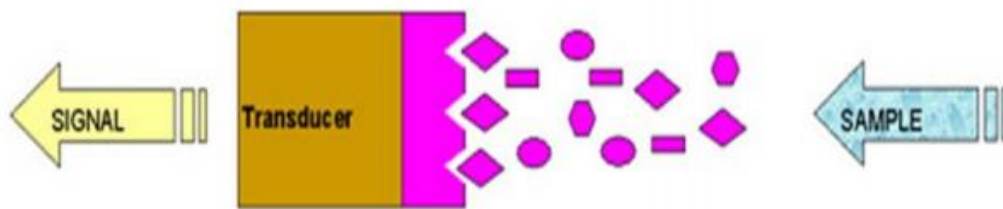
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Impact

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Organized by Faculty of Fine Arts

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



SDG 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

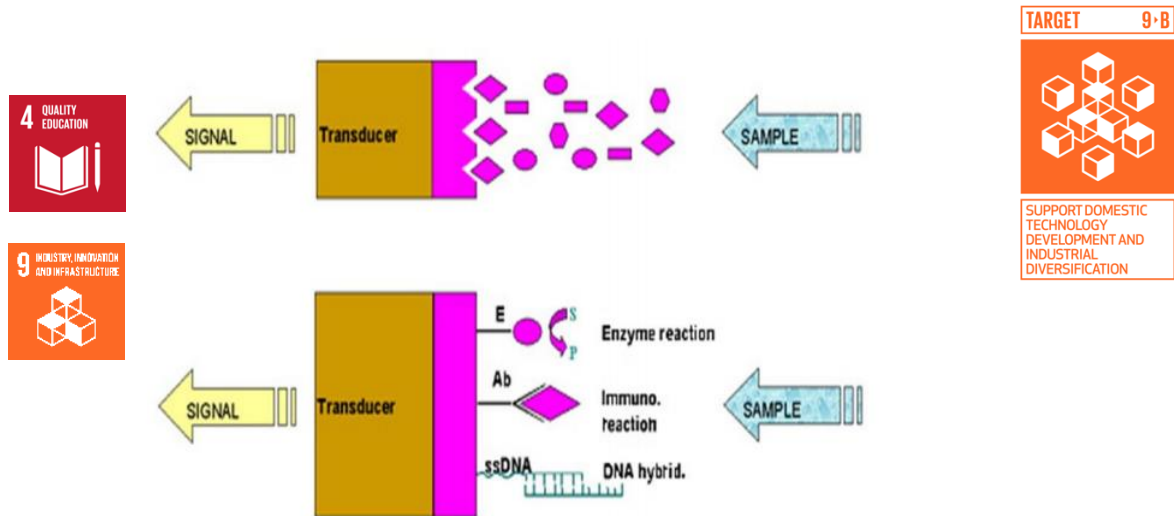
Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation



Projects

Center of Excellence in Biosensors

Center of Excellence in Biosensors



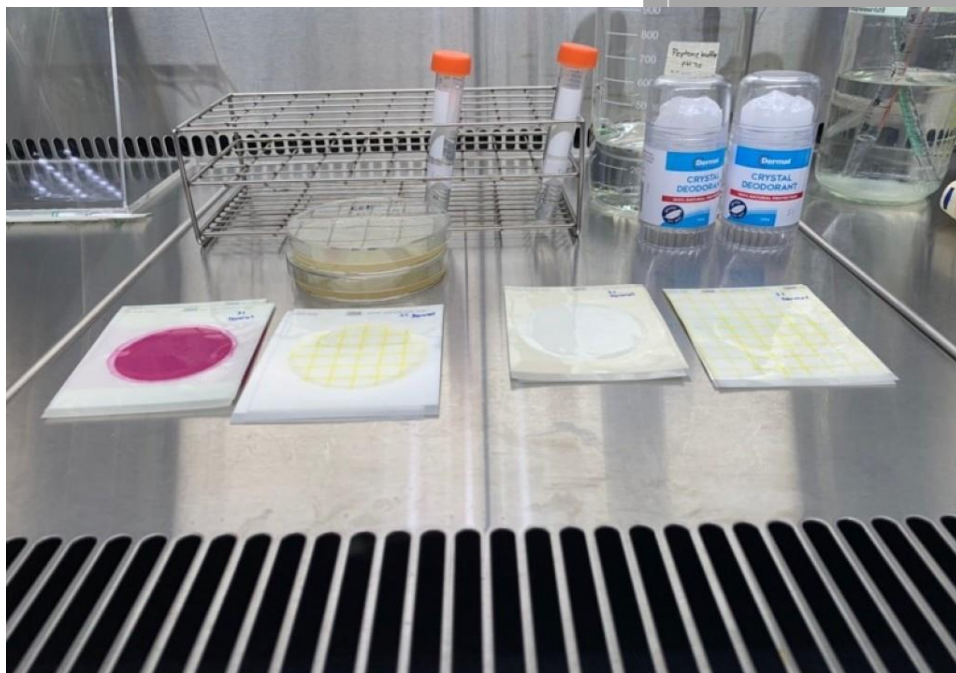
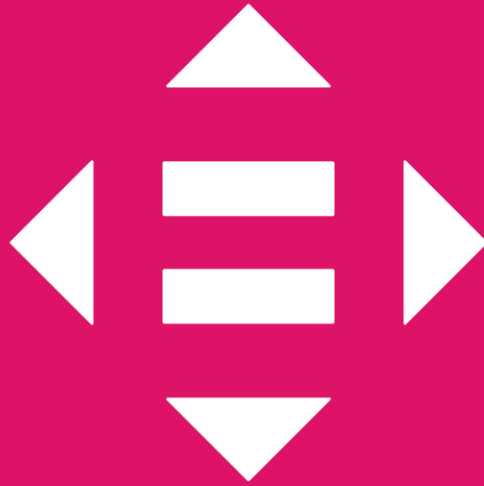
According to Thailand 4.0 policy, Center of Excellence in Biosensors has focused on research and development of “Rapid Diagnostic Tests (RDTs)” for detection and identification of various diseases which are the crucial problems of country. The main purposes of RDTs are to minimize the detection times and costs as well as rapid, sensitive, specific, and convenient result that can be completed as point-of-care test plus data analysis and management on smartphone application. The tests are suitable tool for surveillance, precaution, prevention and treatment planning of diseases.

Impact

- Number of Registered Patents and Petty Patents
- Number of Innovations present in International Conference

Organized by Faculty of Medicine

10 REDUCED INEQUALITIES



SDG 10 REDUCED INEQUALITIES

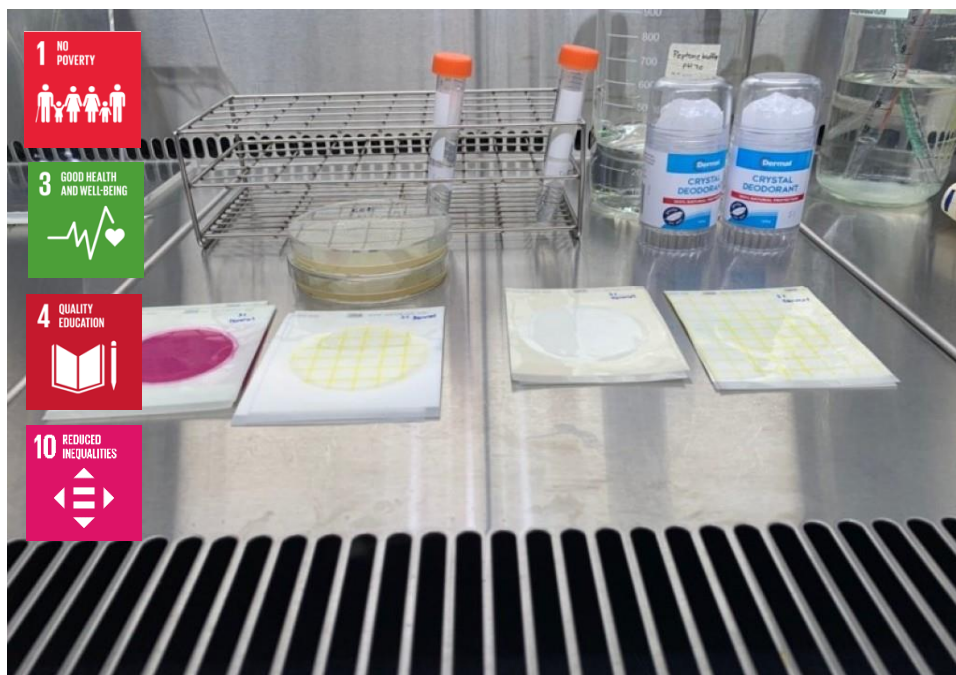
Reduce inequality within and among countries



Projects

Establishment of the Center for Research and Development of Natural Products to Support Small and Medium Enterprises

Establishment of the Center for Research and Development of Natural Products to Support Small and Medium Enterprises



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Organized by Faculty of Pharmacy

11 SUSTAINABLE CITIES AND COMMUNITIES



SDG 11 SUSTAINABLE CITIES AND COMMUNITIES

Make cities and human settlements inclusive, safe, resilient and sustainable



Projects

Thai-Phaun Development Community Museum Project at Nongseang Subdistrict, Pakphli District, Nakhonnayok Province

Thai-Phaun Development Community Museum Project at Nongseang Subdistrict, Pakphli District, Nakhonnayok Province



TARGET 11-4



PROTECT THE WORLD'S CULTURAL AND NATURAL HERITAGE

Impact

From collection and follow up of the performance found that

- 1) Community leaders, volunteers, and villagers become more active and aware of the importance of agriculture wisdom in their Thai Phaun way.
- 2) Community leaders have collaborated with the project and established agricultural learning resources at Nong Saeng community at the rice mill, Village No. 4, Ban Noen Hin Rae, Nong Saeng Sub-district, Pak Phli District, Nakhon Nayok Province to disseminate knowledge to student, people in the community and tourist groups who have visited the village.
- 3) People in the community are proud, they jointly conserve and create activities, inheriting the agricultural practice in accordance with the Thai-Phaun way.

Organized by Institute of Culture and Arts

12 RESPONSIBLE CONSUMPTION AND PRODUCTION



SDG 12 RESPONSIBLE CONSUMPTION & PRODUCTION

Ensure sustainable consumption and production patterns



Projects

Recycling Program for University Waste

Recycling Program for University Waste



Recycle bins are placed all over the campus. Plastic, aluminium and glass are separated at the point of disposal. Srinakharinwirot University (SWU) has introduced several campaigns to reduce the use of paper and plastic on campus. For example, reducing the use of plastic water bottles by providing free water distribution and reducing the use of plastic bags by providing all freshman students with cloth bags. In addition, as an effort to reduce waste – from 9th August 2018, third party vendors (shops, restaurants and a hospital) were instructed to minimize handing out plastic bags and plastic food containers. The recyclable waste are sorted and transferred to appropriate recycle plants.

Impact

We can reduce plastic bags 196,082 pcs.

Organized by OFFICE OF THE PRESIDENT

13 CLIMATE ACTION



SDG 13 CLIMATE ACTION

Take urgent action to combat climate change and its impacts



Projects

Implementation of Energy Efficient Policies and Energy Conservation Programs

Implementation of Energy Efficient Policies and Energy Conservation Program



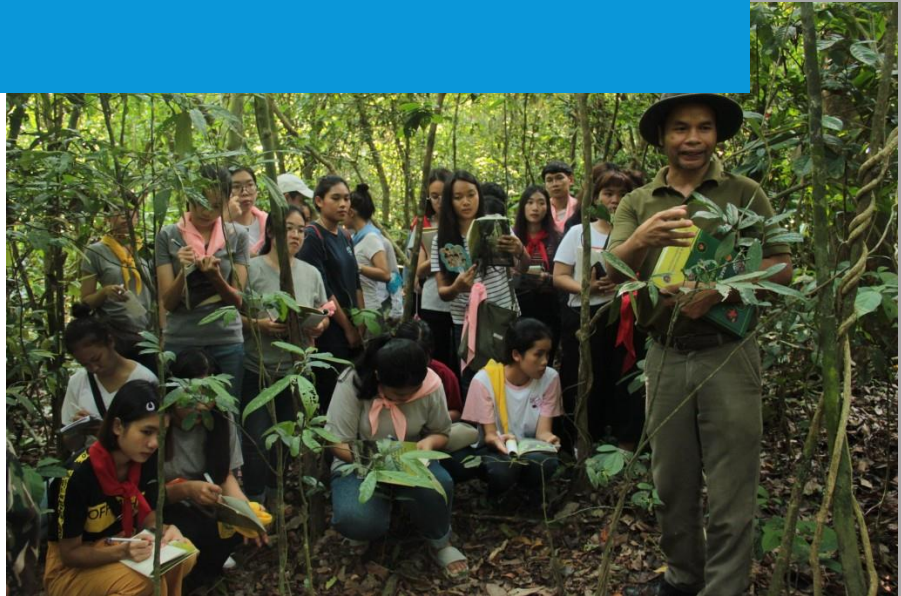
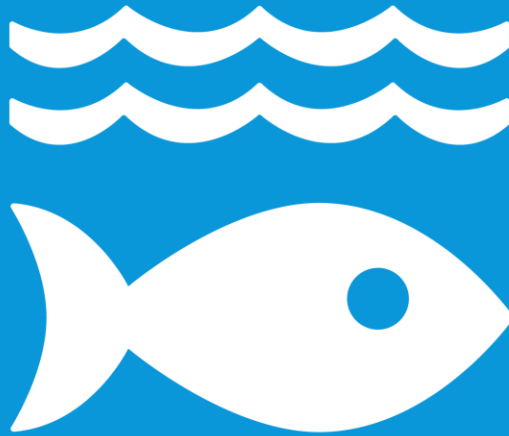
In 2018, SWU Ongkharak Campus has replaced 30,000 - out of 34,000 pieces - 36 watt halogen lightbulbs with 18-watt LED bulbs. Additionally, there are recently completed campaigns of replacing the air con units with brand new energy saving ones (some are inverters and VRFs) throughout the campus.

Impact

The total carbon footprint (CO₂) is 1.39 metric ton per person.

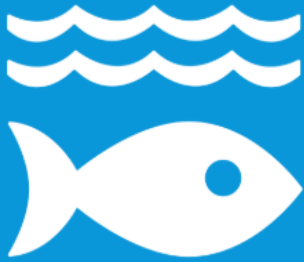
Organized by OFFICE OF THE PRESIDENT

14 LIFE BELOW WATER



SDG 14 LIFE BELOW WATER

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



Projects

- 1. Observation Project and Field Operation Project in environment and resource management to enhance desirable graduate characteristics.**
- 2. Research Project to develop methods for detecting infections of virus and bacteria in shrimp.**

Field Trip and Fieldwork Project to Enhance Desirable Characteristics of Graduates on Environmental and Resource Management



Field trip and fieldwork project to enhance desirable characteristics of graduates on Environmental and Resource Management is a project to create desirable graduate characteristics according to the PDCA standard framework. This includes learning to use tools to analyze natural resources by sea and by land to summarize the environmental quality and use as a database to scan research projects for graduate students.

Impact

Field trip and fieldwork project to enhance desirable characteristics of graduates on Environmental and Resource Management is a project to create desirable graduate characteristics according to the PDCA standard framework. This includes learning to use tools to analyze natural resources by sea and by land to summarize the environmental quality and use as a database to scan research projects for graduate students.

Organized by Faculty of Environmental Culture and Ecotourism

Research Project to develop methods for detecting infections of virus and bacteria in shrimp.



Impact

The marine shrimp farming industry, such as white shrimp (*Penaeus Vannamei*) and black tiger shrimp (*P. monodon*), is the key occupation of Thai farmers that generates significant income to the country. Thus, to continue the aquaculture industry to operate efficiently and sustainably, the research and development of experts in various fields should be conducted to support the expansion of this industry and to solve various problems in the farming system in order to maintain the leader position of shrimp production in the future. However, the major problem causing damages to shrimp farmers is the various outbreak of virus and bacteria infection which resulted in permanent damage and loss. The development of methods for detecting virus and bacteria infections using immunology process by producing monoclonal antibodies (Mab) specific to viruses and bacteria. These antibodies can be used to develop a color strip test kit that enables farmers to use the test kit at the farm without the need of additional tools. As the test kits are highly sensitive and accurate, the results can be quickly obtained and useful for monitoring infections of virus and bacteria during breeding.

Organized by Faculty of Science

15 LIFE ON LAND



2 Botanical garden & community

Workshop activities for school students and community



SDG 15 LIFE ON LAND

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



Projects

1. **Botanical Garden of the Faculty of Pharmacy, Srinakharinwirot University**
2. **Field trip and fieldwork project to enhance desirable characteristics of graduates on Environmental and Resource Management**

Botanical Garden of the Faculty of Pharmacy, Srinakharinwirot University

1 Botanical garden Before and After



TARGET 15-1



CONSERVE AND RESTORE TERRESTRIAL AND FRESHWATER ECOSYSTEMS

TARGET 15-2



END DEFORESTATION AND RESTORE DEGRADED FORESTS

As a resource base for medicinal plant utility, the botanical garden is open for people who are interested in growing medicinal plants, studying medicinal use, or visiting for relaxation. The Faculty arranges workshop activities especially for elderly people and school children in the community and nearby area. There are three workshop activities; (1) processing herbs as a medicine for primary care, (2) generating bio-compost, and (3) “know your herbs” (activity for school children). Moreover, the Faculty establishes a facebook page and website as alternative hubs to provide knowledge and current information about medicinal plants. These activities help community understand how to use the herbs safely so that they are confident to use these herbs for primary health care. Therefore, the cost for medicines will be ultimately reduced.

Organized by Faculty of Pharmacy

Field trip and fieldwork project to enhance desirable characteristics of graduates on Environmental and Resource Management



Field trip and fieldwork project to enhance desirable characteristics of graduates on Environmental and Resource Management is a project to create desirable graduate characteristics according to the PDCA standard framework. This includes learning to use tools to analyze natural resources by sea and by land to summarize the environmental quality and use as a database to scan research projects for graduate students.

Impact

Field trip and fieldwork project to enhance desirable characteristics of graduates on Environmental and Resource Management is a project to create desirable graduate characteristics according to the PDCA standard framework. This includes learning to use tools to analyze natural resources by sea and by land to summarize the environmental quality and use as a database to scan research projects for graduate students.

Organized by Faculty of Environmental Culture and Ecotourism

17 PARTNERSHIPS FOR THE GOALS



1 Botanical garden Before and After



SDG 17 PARTNERSHIPS FOR THE GOALS

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



Projects

1. **Botanical Garden of the Faculty of Pharmacy, Srinakharinwirot University**
2. **Development of Thailand Hearing Healthcare Services System on The World Hearing Day Thailand Event.**

Botanical Garden of the Faculty of Pharmacy, Srinakharinwirot University

1 Botanical garden Before and After



Impact

1. Community (figure 2, 3, 4)

As a resource base for medicinal plant utility, the botanical garden is open for people who are interested in growing medicinal plants, studying medicinal use, or visiting for relaxation. The Faculty arranges workshop activities especially for elderly people and school children in the community and nearby area. There are three workshop activities; (1) processing herbs as a medicine for primary care, (2) generating bio-compost, and (3) “know your herbs” (activity for school children). Moreover, the Faculty establishes a facebook page and website as alternative hubs to provide knowledge and current information about medicinal plants. These activities help community understand how to use the herbs safely so that they are confident to use these herbs for primary health care. Therefore, the cost for medicines will be ultimately reduced.

2. Pharmacy students and staff members (Figure 4)

Pharmacy students study plant morphology and medicinal properties so that they could contribute these knowledge to the botanical garden by growing medicinal plants. They also create several learning media, such as video clips and infographics, related to the use of medicinal plants. A group of pharmacy students pleasantly works as a leader and facilitator in the “know your herbs” activity for school children. These activities would greatly enhance awareness of public mind of pharmacy students and improve their knowledge which will be further applied for pharmacy career. In addition, staff members continuously gain and keep up to date with knowledge about medicinal plants.

3. Environment (Figure 5)

The botanical garden of the Faculty of Pharmacy is now a shady and pleasant area located in the community. In addition to plants, various kinds of animals such as indigenous birds and tree squirrels are often found in the garden meaning a biodiversity has already been established. The botanical garden is performing a project to collect DNA fingerprint of the plants. Since the botanical garden hosts a number of microorganisms living on the plants and in the soil, the Faculty has planned to set a project to collect these microorganisms in the next few years.

Organized by Faculty of Pharmacy

Development of Thailand Hearing Healthcare Services System on The World Hearing Day Thailand Event.



TARGET 17-6



KNOWLEDGE SHARING AND COOPERATION FOR ACCESS TO SCIENCE, TECHNOLOGY AND INNOVATION

HRH MAHA CHACHI SIRINDHRON HOSPITAL, Medical Faculty of Srinakharinwirot University is a lead team of Thai Healthcare who used multidisciplinary approach joined with Obstetric, Pediatrics department, Audiology, Speech Rehabilitation segment and Department of Medical Services of Thailand. Policy of the Royal College of Otolaryngologists-Head and Neck Surgeons of Thailand (Royal college of ORL) are hearing for life, universal hearing screening in newborn, long term hearing loss management in aging group, development hearing rehabilitation system and pushing this policy for hearing healthcare services system in Thailand.

HRH MAHA CHACRI SIRINDRON Medical center with The Royal college of ORL, Medical department, Rural Ear Nose and Throat Foundation, institutes from government, private hospitals and World Health Organization have performed “The World Hearing Day Event”. This event held at Lumpini Public Garden, Pathumwan Bangkok, underwent the campaign “Check your hearing” via various media platforms such as Television, Radio, Line, Facebook, Google etc. The event provided knowledge via exhibition,

discussion/questions- answers by specialist, Ear-Nose-Throat Examination by Otolaryngologists and also provided hearing test and audiogram for people free of charge.

Organized by Faculty of Medicine



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