

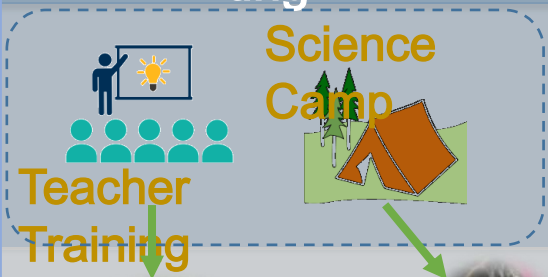


GLOBE Thailand Report 2019

The Institute for the Promotion of Teaching Science and Technology (IPST),
Ministry of Education

GLOBE Overview

Global
Asia Pacific
National
Schools



Collecting Data

Data Entry

Science Projects

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Cooperation with Universities in Promoting Environmental Science Research Based on STEM Education Concept

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Thailand Environmental Science Research Competition 2019

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GLOBE activities promotion in Thailand and enhancing environmental awareness

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20th Anniversary of GLOBE Thailand

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23th GLOBE Annual Meeting

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GLOBE Asia-Pacific Regional Meeting 2019

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GLOBE Website

1

Cooperation with Universities in Promoting Environmental Science Research Based on STEM Education Concept

IPST collaborating with universities to promote local environment via STEM Education

North

Mae Fah Luang Univeristy (MFU)

South

Thaksin University (TSU)

Walailak University (WU)

Prince of Songkhla University Surat Thani Campus (PSU)

Surat Thani Rajabhat University (SRU)

North Eastern

Loei Rajabhat University (LRU)

Udon Thani Rajabhat University (LRU)

Ubon Ratchathani Rajabhat University (LRU)

Rajamangala University of Technology Isan (RMUTI)

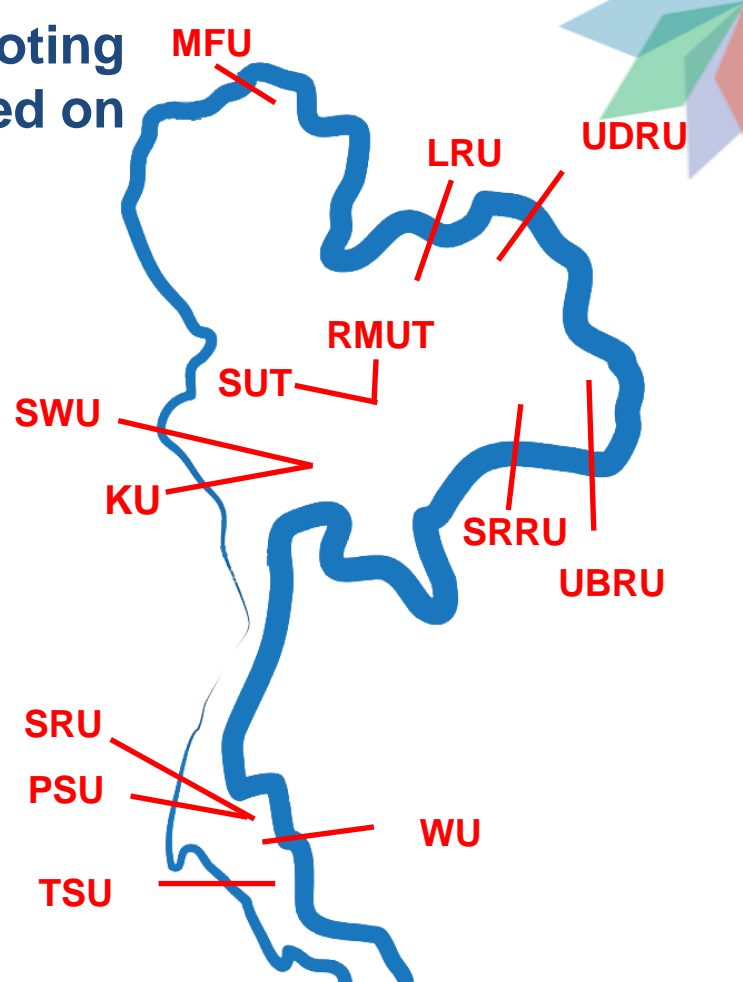
Surindra Rajabhat University (SRRU)

Suranaree University of Technology (SUT)

Central

Srinakharinwirot University (SWU)

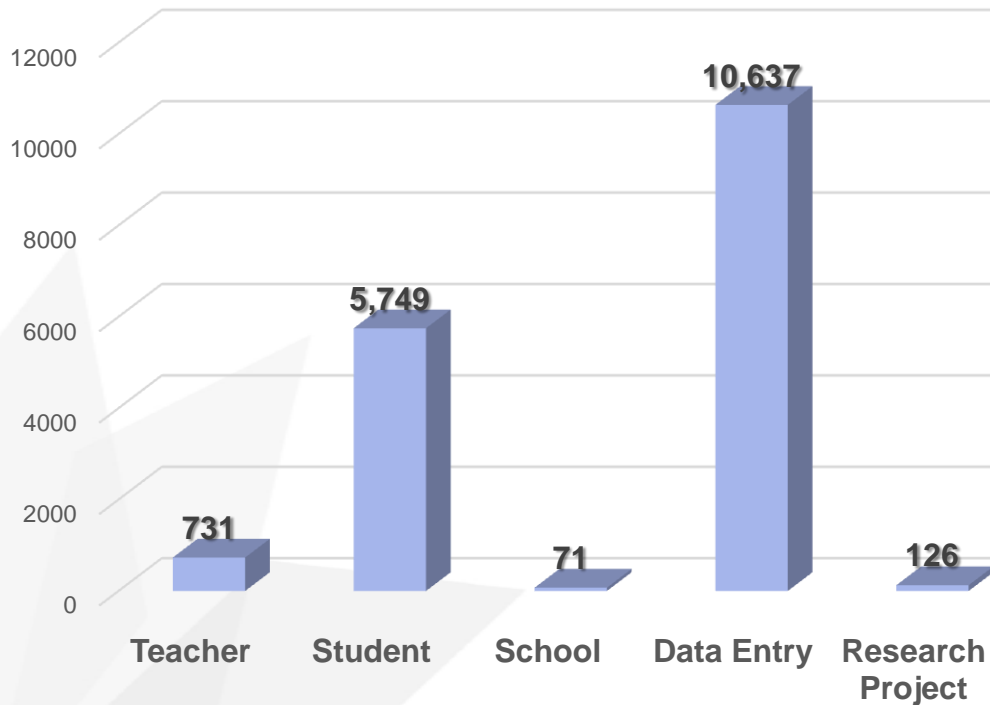
Kasetsart University Kamphaeng Saen Campus (KU)



2019: 13 Universities, 14 Projects

1

Cooperation with Universities in Promoting Environmental Science Research Based on STEM Education Concept (cont.)



No	University	Teacher	Student	School	Data Entry	Research Project
1	<u>Srinakharinwirot University</u>	13	265	5	125	4
2	<u>Walailak University</u>	58	409	5	5,146	5
3	<u>Kasetsart University Kamphaeng Saen Campus</u>	56	342	5	724	7
4	<u>Prince of Songkla University, Surat Thani Campus</u>	51	349	5	416	5
5	<u>Thaksin University</u>	74	568	8	325	24
6	<u>Loei Rajabhat University</u>	20	513	5	119	18
7	<u>Udon Thani Rajabhat University</u>	54	Plot Area	9	335	9
8	<u>Ubon Ratchathani Rajabhat University</u>	126	770	5	404	16
9	<u>Rajamangala University of Technology Isan</u>	42	435	5	597	9
10	<u>Mae Fah Luang University</u>	49	360	5	495	0
11	<u>Surat Thani Rajabhat university</u>	71	552	6	125	11
12	<u>Surin Rajabhat University</u>	51	255	3	197	3
13	<u>Suranaree University of Technology</u>	66	456	5	1,629	15
Total		731	5,749	71	10,637	126

2 Thailand Environmental Science Research Competition 2019

2.1 GLOBE Student Research Competition 2019 (GLOBESRC2019)

- During March 26 – 28, 2019
- Primary school, Lower Secondary school and Higher Secondary school category
- 26 oral presentations and 55 poster presentations



2

Thailand Environmental Science Research Competition 2019 (cont.)

Primary school category:

The effect of different environmental and ecology in the different district on Dengue situation in Chiang Mai Province, Thailand.

from Montfort College Primary Section, Chiang Mai Province

Lower Secondary school category:

The study of physical factors that affect the growth of mussels. (*Perna viridis*) at the gulf of Thailand to create the patterns of simulated pole raising shellfish that can affect the flow rate in the growth of the mussels.

from Bangkok Christian College, Bangkok

Higher Secondary school category:

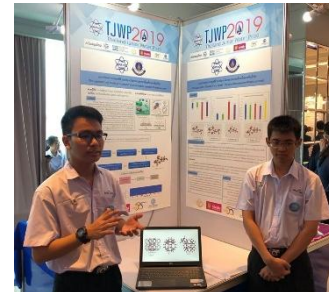
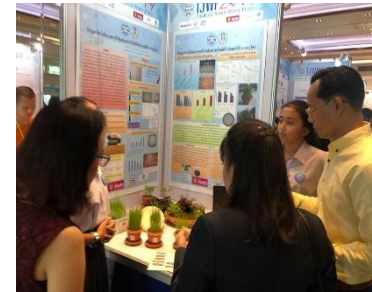
The study of relationship between the quality of water and soil on the covering of varied species of seagrass around varied distance of the shore at Pak Khlong beach, Bo stone Sub-District, Sikao District, Trang Province

from Princess Chulabhorn Science High School Trang, Trang Province

2 Thailand Environmental Science Research Competition 2019 (cont.)

2.2 Thailand Junior Water Prize 2019 (TJWP2019)

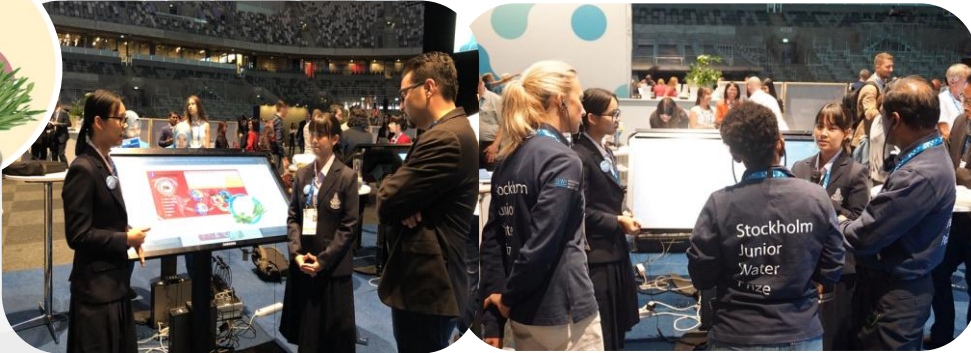
- On 3 May 2019
- Students, 14 – 19 years old
- 66 innovative researches on water conservation.
- The winner was the research title **“The study of inhibition the decay of mosquito’s shell along with water improvement”** from Sa-nguan Ying School
- submit their innovative water conservation methods to **Stockholm Junior Water Prize 2019**, Sweden.



2 Thailand Environmental Science Research Competition 2019 (cont.)

2.3 Stockholm Junior Water Prize 2019 (SJWP2019)

- On 25 – 30 August 2019
- The prize was presented to winner and diploma of excellence by **H.R.H. Crown Princess Victoria** of Sweden



Winner: Australia; The SODIS Sticker



Diploma of Excellence; UK; Discovery of a New Photocatalyst to Solve Water Pollution

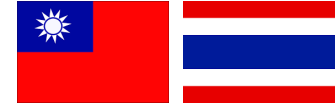
3 Student Exchange Program

3.1 Expedition to the Sea in Maldives

- On April 1 - 5, 2019 at Ministry of Environmental, Male, Maldives
- **3 students, teachers** from Princess Chulabhorn Science High School Trang and 2 IPST
- **5 Countries** attended this event
- GLOBE ZIKA Education & Prevention and GLOBE Teachers Training Workshop



3 Student Exchange Program

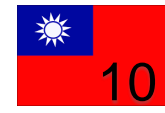
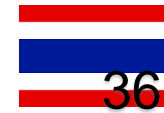


3.2 2019 GLOBE Taiwan Science Festival

- On July 9 – 13, 2019 at Pingtung, Taiwan
- 16 students, teachers from 4 schools, scientists and IPST
- Shared and exchanged experiences on their researches



3 Student Exchange Program



3.3 GLOBE Student Exchange Program in Thailand 2019

“GLOBE Youth Camp”

at The King’s Royally Initiated Laem Phak Bia Environmental Research and Development Project (LERD) on November 2 – 3, 2019



“World Environment Education Congress 2019 (WEEC2019)”

at BITEC, Bangkok. On November 4, 2019



3 Student Exchange Program

3.4 TFI-NUS STEP Environment Camp 2019

- on November 10 – 16, 2019 at Singapore
- 4 students and IPST staff
- to share and exchange experiences with participants from 12 countries in South East Asia, China and India.
- Won the 1st Place of Environment Poster presentation.



4

Earth System Science Workshop for Enrichment Science Classroom Teacher

- Cooperated with **Office of the Basic Education Commission (OBEC)**
- Using scientific process and problem based learning
- **4 protocols** (Hydrosphere, Pedosphere Atmosphere and Biosphere) + Mosquito protocol
- **2 workshops** in the **North** and **Central** of Thailand
- **180 teachers** 88 schools from 38 provinces.



5

GLOBE Mosquito Habitat Mapper Workshop



- **Develop the tutorial book in Thai version**; process of doing pre-training survey, Post-the training survey, GLOBE Mosquito habitat mapper application and Mosquito Training course.
- In 2018-2019, **IPST** cooperated with **13 universities** trained **9,257** participants of teachers, students, and citizen scientists in every region of Thailand
- Country Mosquito Training (CMT) **226** persons and Local Mosquito workshops (LMWs) **9,031** participants (IPST 2,551 + Universities 6,480)



6 GLOBE Media



- Developed online instructional GLOBE media for teachers and students to do the GLOBE protocol and also Climate change media.
- 10 medias**; Soil Salinity, Water Salinity, Soil Slope Measurement, Precipitation, Tree Height Measurement, Canopy cover Measurement, Portable microscope guide, GLOBE Overview, Share Your GLOBE Story (GLOBE student interviews), VTR “20th Anniversary of GLOBE Thailand”



7

GLOBE activities promotion in Thailand and enhancing environmental awareness

7.1 GLOBE Campaigns

8 Campaigns

Be the solution to soil pollution

Earth Day

How to reduce plastic waste?



Share your GLOBE story

World Water Day

Oct

Nov

Dec

Jan

Feb

Mar

Apr

May

Jun

Jul

Aug

Sep

2018

2019

2019 Mosquitoes Short film



PM 2.5-life threatening danger

Measure trees around your school

7 GLOBE activities promotion in Thailand and enhancing environmental awareness

7.2 Envi Youth Camp

- **Enhanced environment awareness of students**
- On July 5 – 7, 2019 at Health Land Resort & Spa, Chonburi province
- 111 participants; 37 teachers, 74 Students from 37 schools.
- Climate Change learning activities such as What do you know about disaster?, Trees around us, Carbon cycle, Mosquito larvae hunter etc.



8 20th Anniversary of GLOBE Thailand

on September 30, 2019

- Presided over this ceremony by Dr. Khunying Kalaya Sophonpanich, Deputy Minister of Education
- Exhibition of “20 years of GLOBE Thailand”, the presentation of research projects conducted by students, GLOBE implementation in schools and university network
- The GLOBE star awards 2019 presented to **9 teachers, 8 scientists, 15 schools and 6 universities.** 184 participants joined this special activity.



9 23rd GLOBE Annual Meeting

- On July 14 – 18, 2019 at Detroit, USA
- **9 Students and 5 teachers** from 4 schools present the researches (Montfort College, Pa Phayom pittayakhom school, Princess Chulabhorn Science High School Trang and Princess Chulabhorn Science High School Nakhon Si Thammarat) and **2 IPST**
- 35 countries, 19 participants from Thailand



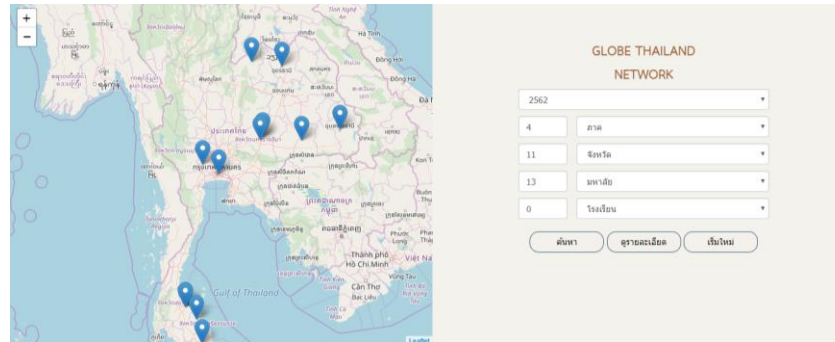
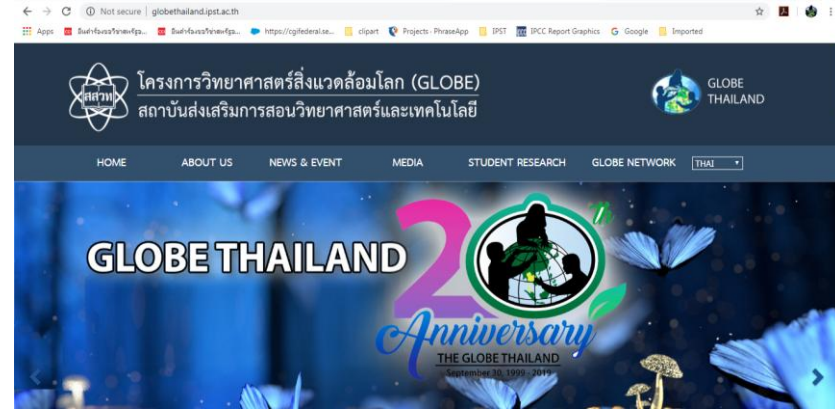
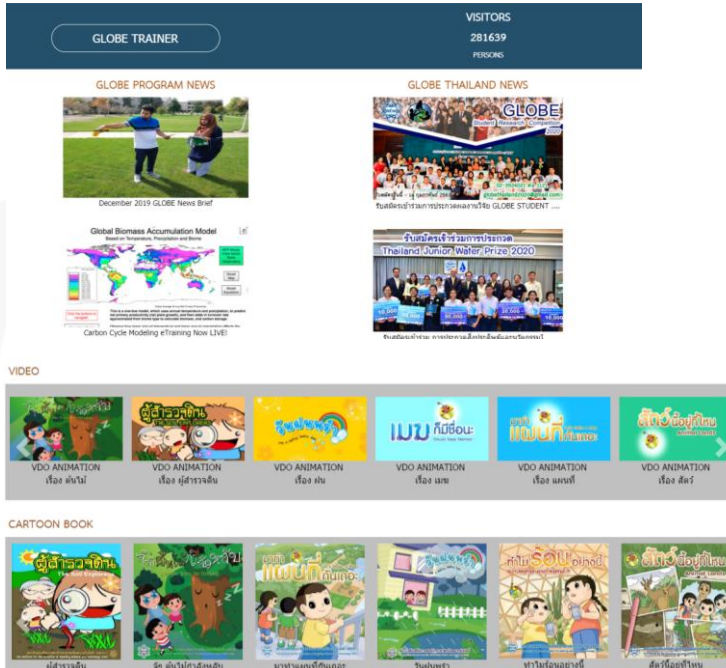
10 GLOBE Asia-Pacific Regional Meeting 2019

- On May 21 - 24, 2019 at Seoul, South Korea
- Visit the GLOBE school; **Hyunhwa Elementary School**



11 GLOBE Website

- Developed new look GLOBE website available at <http://globethailand.ipst.ac.th/>



Future Plan 2020



01

GLOBE Train-The-Trainer Workshop 2020

- Lecturer from University
- 60 participants
- @Walailak University

02

Implement GLOBE to IPST Standard quality schools in Science Mathematics and Technology

- IPST and Cooperation with 19 Universities

03

Promotion of Environmental Science Research

- GLOBE Student Research Competition 2020
- Thailand Junior Water Prize 2020
- Water Innovation Camp (Inspiring camp)
- Climate Change Teacher Training

04

GLOBE Media & Promotion

- Review Earth System Science curriculum
- GLOBE Campaign such as Earth Day , World Soil day, GLOBE Data Entry, Environmental hot issues in Thailand!!
- Mosquito Hunting Rally campaign
- Trees Around us campaign

Thank you

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