Annual Report

SDG 17 Partnerships for the Goals

Partnerships to Advance SDG 14 Life Below Water

1. Introduction

In 2025, Thaksin University worked with schools, fishing communities, public agencies, and international organisations to support aquatic conservation and sustainable livelihoods. Activities combined environmental education, invasive species awareness, the reuse of fishing waste, habitat restoration, and aquaculture innovation. Through these partnerships, the university connected research and teaching with local needs, particularly around Songkhla Lake and communities in Songkhla, Satun, and Phatthalung.

2. Partnership Objectives

The partnerships aim to strengthen environmental knowledge, encourage community participation in aquatic conservation, promote the reuse of fishing waste, and develop aquaculture practices that reduce pressure on wild resources. They also connect university expertise with national support and international knowledge exchange. Progress is reflected in learning activities, products, training, and conservation initiatives; long-term ecological and livelihood benefits require continued monitoring.

3. Collaborative Projects and Activities

The following six projects illustrate collaboration across university units, communities, and wider networks.

3.1 GLOBE Protocols and Climate Change Education

On 17 May 2025, Thaksin University Demonstration School (Secondary Division) organised a practical environmental science programme for Grade 8 students. Linked to GLOBE Academy 2025, it introduced standardised environmental measurements and climate change learning.

University and School Collaboration

The school worked with the Faculty of Science and Digital Innovation to provide four learning stations: soil, land cover, water, and climate change impacts on coral reefs.

Students practised environmental observations, scientific questioning, and developing research ideas. Teachers applied knowledge from their own training to classroom activities.

National and International Cooperation

The programme was linked to cooperation with the Institute for the Promotion of Teaching Science and Technology (IPST) and UNICEF Thailand on environmental STEM education and practical use of GLOBE Protocols.

Outputs Outcomes and Impact

Outputs: A workshop with four practical learning stations introduced students to environmental measurement and research design.

Outcomes: Students had opportunities to develop scientific skills, understand climate change, and explore the relationship between water quality and ecosystems.

Potential impact: The programme supports environmental literacy and provides a foundation for student research and responsible care for aquatic environments.

Supporting Evidence



Participants and school leadership supporting the programme



Practical soil measurement activities



Water measurement activities



Learning about freshwater organisms as indicators of water quality

Source: https://sdg.tsu.ac.th/detail.php?aNum=20250719104301&id_list=1143

3.2 Blackchin Tilapia Awareness

On 6 June 2025, university researchers delivered a learning activity for 49 upper-secondary students at Matthayom Ko Mak School, Pak Phayun District, Phatthalung. It covered blackchin tilapia (Sarotherodon melanotheron), an invasive aquatic species.

Topics included the fish's biology and adaptability, effects on biodiversity and fishing livelihoods, and approaches to monitoring and prevention.

The activity formed part of a public knowledge resource on blackchin tilapia supported by the university's fiscal year 2025 research fund for urgent challenges.

University and Community Collaboration

The Faculty of Technology and Community Development and the Faculty of Science and Digital Innovation combined expertise in aquatic biology, ecology, and resource management to share locally relevant knowledge with young people in the Songkhla Lake Basin.

Working with the school enabled researchers to discuss local environmental concerns with students and encourage youth participation in aquatic conservation.

Wider Application

The knowledge resource was intended for use by schools, local agencies, and coastal communities elsewhere in Thailand. This represents potential national outreach rather than a documented partnership with a national agency.

Outputs Outcomes and Impact

Outputs: An interdisciplinary learning activity reached 49 students and contributed to the development of public learning materials on blackchin tilapia.

Outcomes: Students learned about invasive species, their effects on fisheries and communities, and the roles of young people in monitoring and conservation.

Potential impact: The activity provides a foundation for environmental awareness and community responses to invasive aquatic species. Longer-term effects require follow-up.

Supporting Evidence



Researchers sharing knowledge with students



Students discussing effects on ecosystems and communities

Source: https://sdg.tsu.ac.th/detail.php?aNum=20250720155218&id_list=1180

3.3 Turning Discarded Fishing Floats into Accessories

Reported on 20 October 2025, this project involved students working with fishing communities in Kao Seng and Singhanakhon, Songkhla, and Pak Bara, Satun. They explored how discarded fishing floats could become useful products under a circular economy approach.

Students developed bag charms from unused fishing floats, with prices starting at THB 99 and sales channels including online platforms and exhibitions.

University and Community Collaboration

The Faculty of Humanities and Social Sciences integrated the project into the Community Administration and Development course. Students applied classroom knowledge to community concerns, product design, and environmentally responsible entrepreneurship.

The university and fishing communities worked together to repurpose local waste materials. Knowledge was extended through the Bang Kaeo Model and skills activities involving students from six schools in Phatthalung.

National Support

The Bang Kaeo Model, which focuses on household livelihoods based on small-scale fisheries, received support from Thailand's Science, Research and Innovation Fund through the Program Management Unit on Area-Based Development (PMU A).

Outputs Outcomes and Impact

Outputs: A bag charm prototype, practical community learning, sales channels, and skills transfer to students from six schools.

Outcomes: Students developed community engagement, creative design, and entrepreneurial skills. The products created opportunities to reuse fishing materials and generate supplementary income.

Potential impact: Repurposing fishing floats supports approaches to marine waste prevention. The quantity of waste diverted and changes in ecosystem conditions have not yet been established.

Supporting Evidence



University news report on repurposing fishing floats



Students, their lecturer, and product-making materials



Discarded fishing floats and finished bag charms



School students learning to add value to discarded fishing materials

Source: https://www.tsu.ac.th/home/details.php?id=5548

3.4 Fish Habitat No 10

On 18 November 2025, Thaksin University and local partners created Fish Habitat No. 10 in Songkhla Lake, Moo 8, Khao Rup Chang Subdistrict, Mueang Songkhla District. The structures were intended to provide shelter and nursery habitat for aquatic animals, particularly juveniles.

Community and Multi Sectoral Partnerships

The project brought together university units, residents, conservation-minded anglers, government bodies, businesses, and civil society in joint design and implementation.

Partners included the Songkhla conservation angling association, Khao Rup Chang Municipality, Ban Thale Nok aquatic product processing community enterprise, the Rak Thale Thai Association, and SEVEN 7 SEA.

The Second Naval Area Command and Rajamangala University of Technology Srivijaya also participated. Their cooperation connected local resource users with public institutions and conservation networks.

Outputs Outcomes and Impact

Outputs: Fish shelter structures were created through cooperation among university and community partners.

Expected outcomes: The shelters are intended to protect juvenile aquatic animals and support their survival and growth. Actual population changes require monitoring.

The initiative links habitat conservation with communities' dependence on fisheries for food and livelihoods.

Potential impact: Habitat restoration could contribute to aquatic biodiversity, fisheries, and community well-being. Long-term ecological and economic benefits have yet to be confirmed.

Supporting Evidence



University news report dated 18 November 2025



Partners taking part in fish habitat construction

Source: https://www.tsu.ac.th/home/details.php?id=5616

3.5 Glass Catfish Breeding and Technology Transfer

Thaksin University developed breeding and nursery techniques for glass catfish (Kryptopterus vitreolus), a valuable ornamental fish collected from natural waters, including in Phatthalung and Narathiwat. The initiative applied hormone-assisted breeding, artificial fertilisation, recirculating biofiltration, and biofloc technology to support aquaculture alternatives to wild collection.

University and Community Collaboration

Researchers from the Faculty of Technology and Community Development connected breeding research with farmer capacity building and technology transfer under a project to develop commercial glass catfish aquaculture.

Fisheries academics, lecturers, vocational teachers, farm operators, and other participants received demonstrations and practical training in sperm collection, hormone administration, artificial fertilisation, and larval rearing in biofiltration systems.

National Support

The National Research Council of Thailand (NRCT) funded the project, supporting the transfer of university research into aquaculture practice and potential commercial production.

International Market Potential

The project aimed to improve production standards and competitiveness in European and Asian markets. This is an international market objective; direct cooperation with foreign institutions was not clearly documented.

Outputs Outcomes and Impact

Outputs: Breeding and nursery knowledge, biofiltration and biofloc technologies, and practical training for aquaculture stakeholders.

Outcomes: Participants gained access to techniques relevant to commercial production. The systems were designed to manage water quality, improve larval survival, and reduce reliance on natural water and wild fish.

Potential livelihood benefits include new production opportunities for farmers and ornamental fish businesses, including possible export markets.

Potential impact: Cultured production could reduce pressure on wild glass catfish and support local livelihoods. Long-term conservation and economic effects require further assessment.

Supporting Evidence

The project built on successful research in hormone-assisted breeding, artificial fertilisation, hatching, and larval rearing.





Demonstrations of breeding and larval rearing techniques

Source: https://sdg.tsu.ac.th/detail.php?aNum=20251118092931&id_list=1412

3.6 United Nations Engagement through the Phatthalung Model

On 13 March 2025, Thaksin University exchanged knowledge and approaches to sustainable development with a United Nations delegation. The activities addressed the five dimensions of sustainable development: People, Prosperity, Planet, Peace, and Partnership.

The programme included discussions, research presentations, an exhibition featuring TSU Holding Company, and visits to Thale Noi and community development initiatives in Phatthalung.

Collaboration within the University

The International Relations Office coordinated UN engagement and welcomed the delegation. Research and innovation, student affairs and engagement, campus management,

faculties, and researchers contributed presentations and activities connecting university missions with sustainable development.

Community and Local Partnerships

The university introduced the delegation to local ecosystems, livelihoods, and community enterprises.

At Thale Noi, participants explored biodiversity, Melaleuca woodland, and traditional buffalo-rearing livelihoods.

At the Sri Naka Model in Srinagarindra District, participants joined workshops on tie-dyeing and fabric printing with natural materials.

At the Sin Phrae Thong Network Learning Centre in Lam Sin Subdistrict, participants visited a plantation of large-leaved riang vegetables and learned about community-based economic development.

The visits connected academic knowledge with local resources and traditional practices, creating opportunities for exchange among the university, UN representatives, and communities.

National Development Links

The programme connected university research and innovation with area-based development networks and Phatthalung's targeted poverty alleviation initiative.

International Cooperation

The delegation included Ms. Michaela Friberg-Storey, UN Resident Coordinator for Thailand, and officials working on development cooperation and peace and development.

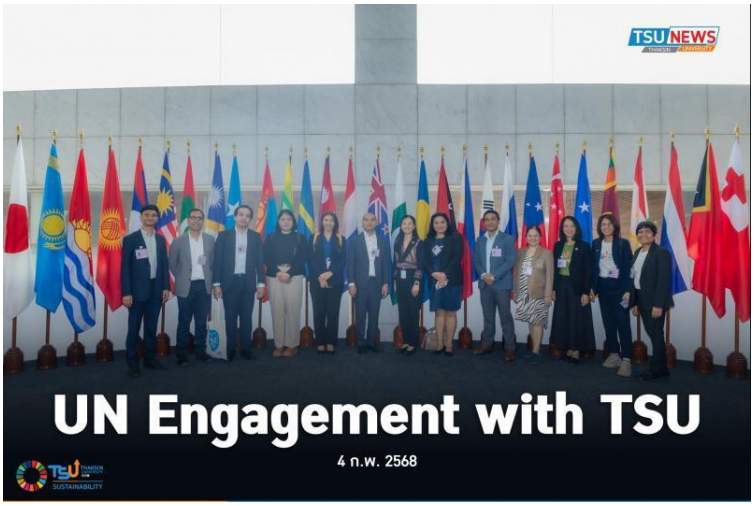
Outputs Outcomes and Impact

Outputs: University–UN discussions, research and student activity presentations, an exhibition, and visits to Thale Noi and community learning sites.

Outcomes: Participants exchanged approaches to sustainable development and explored connections among research, education, environmental management, and local livelihoods.

Potential impact: The engagement provides a foundation for continued cooperation across local and international networks. Its relevance to aquatic sustainability lies particularly in learning about Thale Noi's ecosystems and resource-dependent livelihoods; long-term impacts require further follow-up.

Supporting Evidence



University news coverage



Field visit to Thale Noi



Community workshops and activities





UN Resident Coordinator Ms. Michaela Friberg-Storey visiting Thale Noi

Source: https://sdg.tsu.ac.th/detail.php?aNum=20250702144413&id_list=1019