

Annual Report on SDG14 Life Below Water

14.3 Supporting aquatic ecosystems through action

14.3.1 University Support for Conservation and Sustainable Use of Aquatic and Marine Resources

The **Songkhla Lagoon** and connected river–marine systems have faced rapid environmental degradation from overfishing, urban expansion, and pollution. Local communities and youth lacked platforms to exchange knowledge and participate in conservation-oriented learning. There was a need for events that connected science, law, art, and community participation to foster long-term stewardship of aquatic ecosystems.

Thaksin University, through collaboration among faculties and local networks, established **multi-sectoral events and learning programs** promoting aquatic conservation and sustainable resource use. The concept emphasizes “*Learning by Doing and Learning Together*”—integrating science, law, art, and local knowledge to create awareness and inspire practical actions toward sustainability.

Activities / Innovations

1. Songkhla Lagoon Restoration and “Living Fish House” Project

A flagship programme promoting habitat restoration through construction of community-based artificial fish shelters (บ้านปลามีชีวิต). Implemented in multiple areas around the lagoon with participation from fishers, students, and local governments.

Workshops included habitat design, mangrove planting, and water-quality monitoring.

2. Exhibitions and Public Events on Aquatic Conservation

- **Exhibition:** “Fishing Gear and Sustainable Catch Practices” and “Gyotaku: Printing Life from the Lagoon” – merging science and art to raise awareness of local fish biodiversity.
- **Workshops:** Hands-on fish-printing and community product processing demonstrations.
- **Audience:** Over 2,000 visitors including students, tourists, and local families.

3. Watershed Forums and Youth Camps

- **Songkhla Lagoon Basin Forums:** Annual multi-stakeholder meetings and quarterly dialogue platforms among researchers, community leaders, and policymakers.
- **Youth Camps:** “Love Songkhla Lagoon” camps promoting conservation knowledge and citizen science among students.

4. Green Market (Talad Tai Thun) and Community Eco-Tourism

A model event integrating sustainable fisheries, waste reduction, and local tourism. Promotes low-plastic markets, local eco-products, and community-driven tourism under the theme “*Use Wisely, Restore Nature.*”

5. Legal and Policy Research on Marine Environmental Management

Faculty of Law conducted research on “*Legal Measures to Control Environmental Impacts of Marine Shrimp Farming*” and shared findings in public seminars to strengthen environmental governance.

6. University-Level Conservation Networks

TSU prepared for the establishment of the **Botanical Garden and the Office of Natural Resources and Environmental Studies (อพ.สธ.)**, expanding its conservation mission to local ecosystems.

Quantitative Results

- **>30 events and exhibitions** organized between 2023–2025 on aquatic and marine conservation.
- **Over 3,000 participants**, including students, researchers, community members, and tourists.
- **20 “Living Fish House” sites** built, resulting in 80–100% increase in fish diversity.
- **5 watershed forums** and **3 youth camps** organized annually.
- **50% reduction** in plastic use during community market events.
- **3 academic research outputs** published on aquatic ecosystem management and law

Thaksin University actively organizes events and outreach activities to promote **aquatic and marine conservation** through research, art, and community engagement. Key initiatives include the *Living Fish House Project*, *Songkhla Lagoon Forums*, and *Green Market (Talat Tai Thun)* for sustainable use of water resources. Over **3,000 participants** have joined in restoration, exhibitions, and youth programs across the lagoon basin. These initiatives foster **awareness, participation**.

SDG 14.3.1 – Promotion of Conservation and Sustainable Utilization of Oceans, Seas, Lakes, Rivers, and Marine Resources

The university is committed to promoting the conservation and sustainable use of oceans, rivers, lakes, and aquatic ecosystems. These efforts aim to ensure the long-term balance between resource utilization and ecological preservation through academic engagement, community collaboration, and public awareness.

To achieve this, activities are organized in cooperation with academics, government agencies, local communities, and tourists, encouraging participation and shared responsibility for environmental protection.

Key activities include:

Conservation Exhibitions and Forums, such as the “Songkhla Lake Conservation Forum and Exhibition”.

Fish Habitat Restoration Projects, including fish-home restoration and conservation zones.

Community and Youth Engagement, such as watershed community forums, youth camps, and green markets promoting sustainable living and environmentally friendly products.

Green Market Initiatives, including “Under-the-House Green Market” to support eco-friendly consumption and community awareness.

Research Projects, such as the Living Fish House Project, focusing on ecological rehabilitation and conservation-based legal studies.

These activities demonstrate the university’s clear role in organising and supporting initiatives that promote the sustainable use and conservation of marine and freshwater resources.

Alignment with SDG 14.3.1 – Conservation and Sustainable Utilization of Marine and Freshwater Resources

Thaksin University supports and organizes a wide range of activities, projects, and academic platforms consistent with SDG 14.3.1: “Does your university as a body support and/or organize events aimed to promote conservation and sustainable utilization of the oceans, seas, lakes, rivers, and marine resources?”

Through the Faculty of Science and Digital Innovation, the Faculty of Law, academic service units, and local civil society networks surrounding Songkhla Lake, the university has implemented various initiatives to promote sustainable conservation and utilization of water resources. These efforts span research, academic services, exhibitions, youth network development, and community engagement.

The key objectives are to encourage the responsible use of aquatic and marine resources, restore ecological abundance, and strengthen multi-sector participation within the Songkhla Lake Basin. The university’s work emphasises long-term sustainability, environmental awareness, and collaboration between scholars, government agencies, community groups, and the public.

These activities represent a combination of academic services, research initiatives, and community engagement efforts, all directly focused on conserving water resources and restoring the Songkhla Lake ecosystem.

1. Project on the Development of Models and Mechanisms for Sustainable Learning in Aquatic Resource Management

This project, led by Assoc. Prof. Dr. Tuenta Rahman and team, and supported by the Program Management Unit for Human Resources & Institutional Development, Research and Innovation (PMU-B), aims to develop a community-based learning system for the conservation of aquatic resources in the Songkhla Lake.

The project focuses on experiential learning through real practices, including the construction of fish homes and conservation zones, mangrove reforestation, and water quality monitoring. These activities enhance community knowledge, promote sustainable fishing practices, and restore aquatic biodiversity within the lake ecosystem.

2. Exhibitions and Activities on Water Resource Conservation

The university has organised exhibitions and learning stations highlighting brackish and marine ecosystems, including:

- Exhibition on “Fishing Gears and Sustainable Fishing Practices”
- Gyotaku (fish-printing) workshops to promote understanding of fish diversity in the lake
- Demonstrations on traditional fishery product processing, along with aquatic animal release activities

These activities provide accessible and hands-on learning experiences, helping participants understand fishery resource conservation through practical engagement.

3. Watershed Network Meetings and Youth Conservation Platforms

The university organises the Annual Songkhla Lake Watershed General Assembly, along with quarterly network meetings, to gather input from communities, government agencies, and researchers on sustainable fisheries management.

In addition, youth engagement activities such as the “Songkhla Lake Youth Conservation Camp” and the “Moonless Youth Network” are conducted to instill environmental awareness and conservation consciousness among younger generations.

4. Development of “Living Fish Homes” and Conservation Zones

The Living Fish Home initiative has been implemented in multiple areas around Songkhla Lake as both a research activity and a public conservation effort to restore aquatic habitats.

Training sessions and workshops have been organised to teach local communities how to construct fish homes, evaluate ecological outcomes, and manage conservation areas effectively. These activities support biodiversity restoration and community-based stewardship of aquatic resources.

5. Learning Activities and Green Market Initiatives

As documented in SDG 14.2.2, the university has supported the “Under-the-House Green Market,” a community-driven green market that reduces plastic consumption and promotes

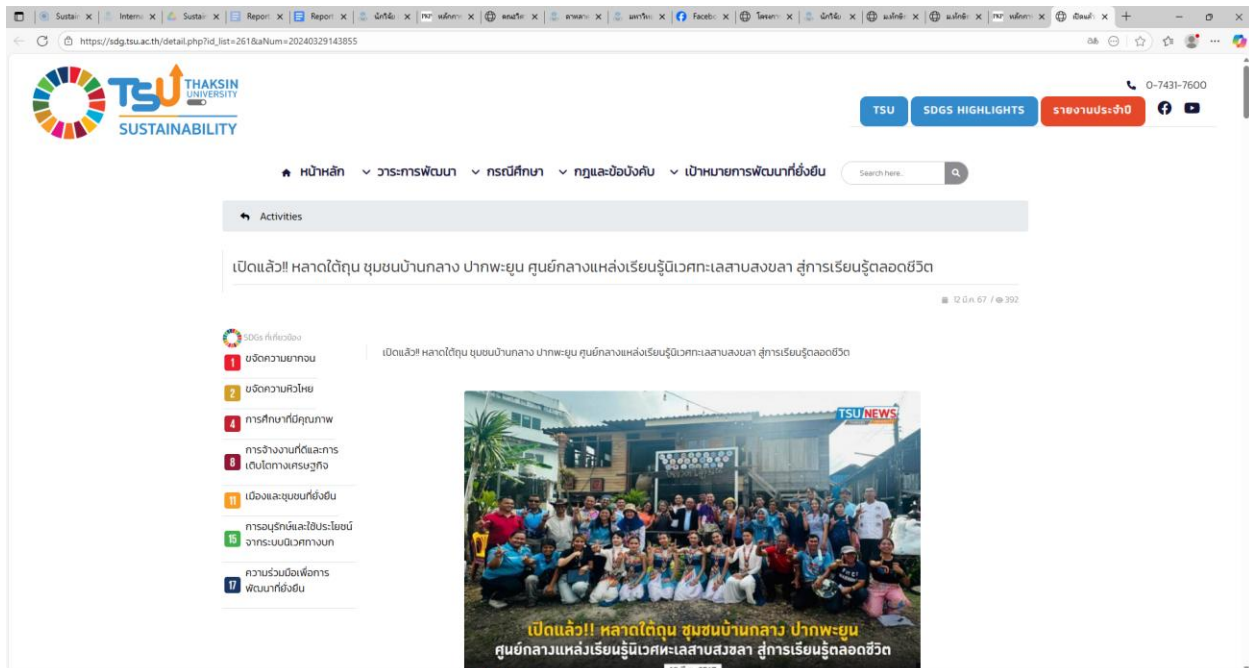
sustainably sourced fishery products. The initiative not only encourages environmentally friendly consumption but also creates a platform for local fishers and community groups to distribute products that comply with sustainable fishing practices.

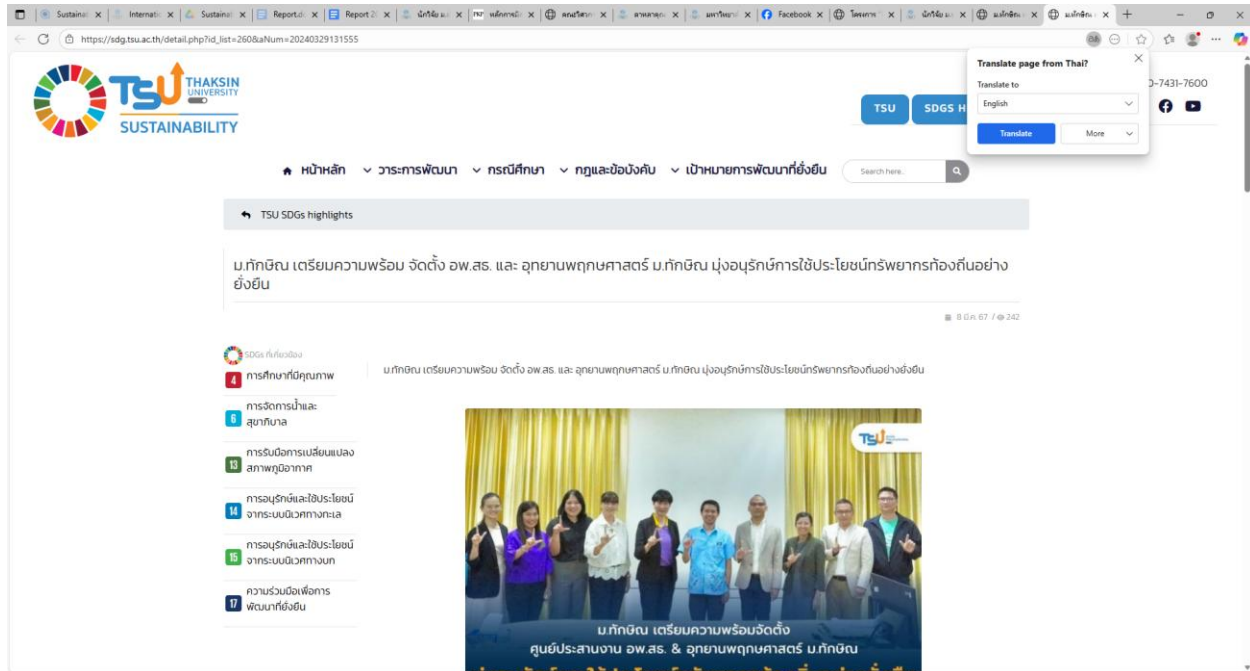
Additionally, training programs on community product development and eco-tourism have been organized in Ban Mai and Ban Klang communities. These programs help strengthen community-based enterprises, enhance local tourism capacity, and support environmentally responsible economic activities in the Songkhla Lake Basin.

6. Policy Research and Marine Environmental Law

The Faculty of Law at Thaksin University has conducted policy-oriented research titled “Legal Measures to Control Environmental Impacts from Marine Shrimp Farming.”

The study proposes mechanisms for law enforcement and community participation in monitoring and managing wastewater from aquaculture activities. The research highlights the need for collaboration between communities and government agencies to prevent marine pollution and protect coastal ecosystems.





Public evidence:

ม.ทักษิณ เตรียมความพร้อม จัดตั้ง อพ.สธ. และ อุทยานพฤกษศาสตร์ ม.ทักษิณ มุ่งอนุรักษ์การใช้ประโยชน์ทรัพยากรท้องถิ่นอย่างยั่งยืน

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