

Annual Report on SDG14 Life Below Water

14.5 Maintaining a local ecosystem

14.5.4 Collaboration with Local Communities in Maintaining Shared Aquatic Ecosystems

Thaksin University plays a central role in fostering partnerships with local communities, government agencies, and civil society organizations to conserve and restore shared aquatic ecosystems, particularly within the **Songkhla Lagoon Basin** — Thailand’s largest brackish water lagoon. The university’s approach emphasizes **co-management, local empowerment, and community-based research**, ensuring that scientific knowledge supports sustainable resource use and biodiversity conservation.

1) University–Community Collaboration Networks

Thaksin University has established long-term collaborations with more than 30 local communities surrounding the Songkhla Lagoon Basin, Phatthalung, and coastal Songkhla Province to promote joint stewardship of aquatic ecosystems. Building upon these relationships, Thaksin University leads a series of participatory initiatives under the framework of “**Community-Based Resource Management and Living Fish House Innovation.**” These co-management efforts include the construction and maintenance of *Living Fish Houses* and fish conservation areas co-designed with local fishers, regular joint surveys of water quality and biodiversity, and the development of shared learning centers such as the **Aquatic Life Shelter Learning Center (Ban Mai, Singhanakhon)**. These centers serve as interactive spaces for knowledge exchange, field education, and intergenerational learning about aquatic ecosystem conservation.

Furthermore, local fishery groups around the Songkhla Lagoon have organized themselves into a **Community-Based Fishery Network**, establishing committees that coordinate conservation activities, enforce community regulations, and manage fishery resources collectively. Supported by Thaksin University, this network serves as a key platform for collaboration among local leaders, fishers, and conservation partners in protecting aquatic biodiversity, preventing illegal fishing, and promoting sustainable livelihoods. Collectively, these collaborations demonstrate a successful

model of academic–community partnership that integrates scientific expertise with local knowledge, empowering communities to take an active role in the sustainable management and restoration of the Songkhla Lagoon ecosystem

2) Research and Capacity-Building with Local Partners

Thaksin University integrates research with local engagement through collaborative partnerships and academic service initiatives designed to strengthen community capacity in aquatic ecosystem management. A key mechanism in this effort is the **Academic Service Unit for Natural Resource Management in the Songkhla Lagoon**, now in its second year of operation. This unit serves as a bridge connecting the university with local communities, government agencies, and independent organizations that share a commitment to conservation and sustainable resource use. The unit coordinates field-based studies, training programs, and participatory monitoring activities across the upper, middle, and lower zones of the Songkhla Lagoon. Major activities include workshops on water quality assessment, biodiversity monitoring, habitat mapping, and community planning for fish conservation areas. It also supports local fishery networks in developing and maintaining “Aquatic Life Shelter” models and learning centers that combine local wisdom with scientific knowledge. Through these initiatives, Thaksin University researchers and students work side by side with local fishers and youth groups, fostering the co-production of knowledge and enhancing the scientific capacity of communities. This approach not only generates applied research outputs relevant to sustainable management but also builds lasting trust and collaboration among academic, governmental, and civil society actors — reinforcing Thaksin University’s role as a regional hub for integrated aquatic ecosystem stewardship

In addition, Thaksin University has formalized its collaboration through the signing of Memoranda of Understanding (MOUs) with key agencies and community partners working in aquatic and coastal resource conservation. These agreements include partnerships with the **Department of Fisheries**, the **Department of Marine and Coastal Resources**, the **Thai Sea Watch Association**, and local administrative organizations in the Songkhla Lagoon Basin. The MOUs aim to promote joint management, community-based conservation, and sustainable use of aquatic and coastal ecosystems — particularly through the establishment of *Locally*

Managed Marine Areas (LMMA) such as the Ban Mai coastal conservation zone in Singhanakhon District. These cooperative frameworks strengthen policy coordination, technical support, and community participation, enabling the integration of local knowledge, academic research, and public policy toward long-term ecosystem restoration and stewardship. As a result, Thaksin University has become a model institution for academic–community–government partnerships driving sustainable aquatic resource management in Thailand

3) Knowledge Sharing and Public Awareness Events

Thaksin University organizes a range of community-wide outreach programs and exhibitions to promote awareness and collaboration in sustainable aquatic ecosystem management. Key activities include the **Songkhla Lagoon Conservation Forum**, an annual multi-stakeholder platform where representatives from local communities, government agencies, academic institutions, and NGOs discuss ecosystem health, share scientific findings, and identify policy directions for aquatic resource management. In addition, **Youth Camps** and **Service Learning Programs** connect students directly with community partners through hands-on conservation projects such as fish habitat restoration, water quality monitoring, and environmental education. These initiatives foster dialogue, mutual learning, and intergenerational engagement, strengthening partnerships between academia and local communities while cultivating environmental stewardship and long-term collaboration for the sustainability of the Songkhla Lagoon and surrounding aquatic ecosystems

In summary, Thaksin University plays a central role in promoting collaborative conservation and co-management of aquatic ecosystems in the Songkhla Lagoon Basin — Thailand’s largest brackish water lagoon. The university has established long-term partnerships with more than 30 local communities, government agencies, and organizations to restore and manage shared water resources through joint projects such as Living Fish Houses, community-managed conservation zones, and biodiversity monitoring. Local fishery groups have formed a Community-Based Fishery Network with formal committees that coordinate conservation efforts, enforce community rules, and promote sustainable livelihoods. These initiatives are further strengthened by the university’s Academic Service Unit for Natural Resource Management in the Songkhla Lagoon, which serves as a bridge connecting academic research with community action

and public policy. Thaksin University has also formalized cooperation through Memoranda of Understanding (MOUs) with the Department of Fisheries, the Department of Marine and Coastal Resources, the Thai Sea Watch Association, and local authorities to promote joint management and the creation of Locally Managed Marine Areas (LMMA). Public outreach activities such as the annual Songkhla Lagoon Conservation Forum, youth camps, and service-learning programs foster environmental awareness, intergenerational learning, and long-term collaboration. Together, these efforts demonstrate a strong model of university–community–government partnership that integrates scientific knowledge and local wisdom for the sustainable management and restoration of aquatic ecosystems in alignment with SDG 14.5.4

Viral Video: Episode 21 “Pla Sam Nam”, Thaksin University

Public evidence: <https://www.youtube.com/watch?v=Of054EP1F0k>

Meeting to establish a fishing network in Songkhla Lagoon, 1st meeting



Meeting to establish a fishing network in SongkhlaLagoon, 2nd meeting



Meeting to establish a fishing network in SongkhlaLagoon, 3rd meeting





Signing of agreements between agencies carrying out conservation activities in Songkhla Lagoon

