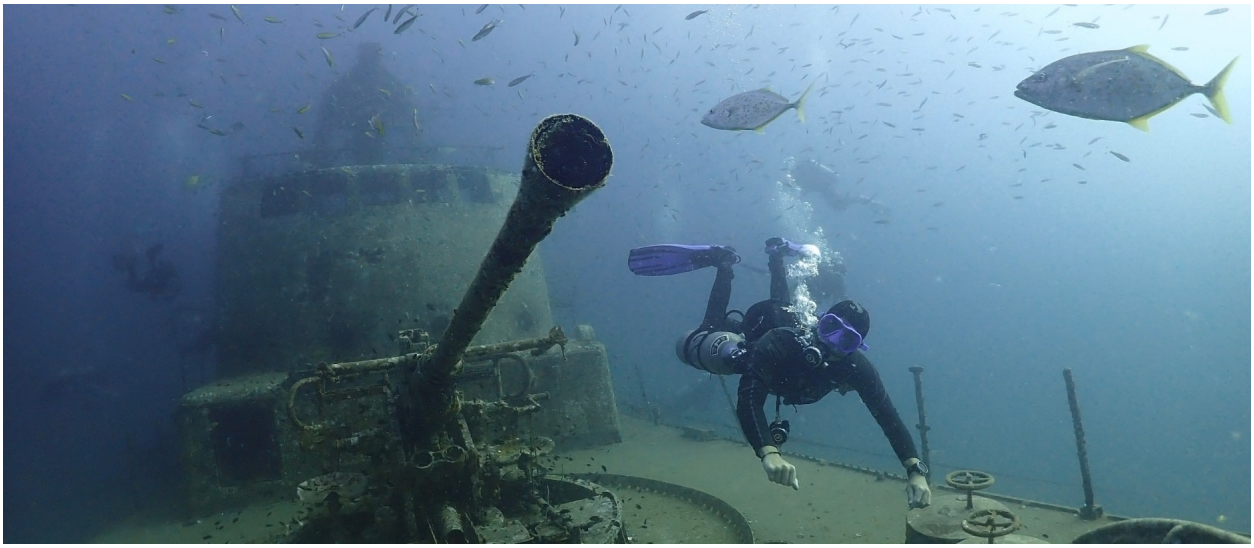
From Warships to Reef Guardians: Koh Tao's Community-Led Model for Regenerative Diving >>How a small island community turned tourism pressure into a practical model for reef protection, alternative dive-site management, and shared responsibility for the sea. Koh Tao's story begins with the sea, but it is ultimately a story about people. For decades, the island's coral reefs have supported livelihoods, shaped local identity, and attracted visitors from around the world. Yet as Koh Tao became one of Thailand's most important diving destinations, the success of marine tourism also created pressure on the natural reef systems that made the island special. In response, Koh Tao did not choose to stop tourism or wait for outside solutions. Instead, local dive instructors, tourism operators, community leaders, public agencies, and partners worked together to redesign part of the island's diving system. By transforming two decommissioned naval vessels into artificial reef dive sites, Koh Tao created new underwater habitats, alternative diving experiences, and a practical model for reducing pressure on natural reefs. This is the story of how former warships became reef guardians — and how a small island turned concern into collective action.

Koh Tao, Thailand

Thailand Sustainable Island Alliance (TSIA)

Local Destinations (including villages, cities, municipalities, islands)

Nature & Environment



Summary of Good Practice Story
Koh Tao, one of Thailand's leading dive destinations welcoming over 500,000 visitors annually before COVID-19, faced repeated diving pressure concentrated on a limited number of fragile natural reef sites, where coral grows only 2-4 cm per year. Local dive instructors proposed sinking two decommissioned Royal Thai Navy vessels as artificial reef dive sites to divert pressure away from sensitive coral, a plan delayed by the pandemic but revived when the Navy issued an urgent transfer deadline just before monsoon season — giving the community only 15 days to raise funds. More than 60 organisations and countless individuals contributed labour, equipment and money, raising THB 8,657,000 in that window, enabling the vessels' deployment plus a reserved fund for long-term maintenance and monitoring. Within two years the wreck sites showed healthy water quality and early coral colonisation, now drawing over 40,000 divers annually and generating an estimated THB 450 million in yearly tourism revenue while easing pressure on natural reefs. The lesson: managing tourism pressure doesn't require limiting tourism — it can mean redesigning it, and successful conservation depends on strong multi-sector partnerships plus stewardship commitments that continue well beyond the initial project.

Setting the Scene: Destination & context
Located in the Gulf of Thailand, Koh Tao is a small island with a global reputation as one of Thailand’s leading diving destinations. For visitors, it is a place of coral reefs and marine life. For local residents, dive instructors, boat operators, and tourism businesses, the sea is more than a natural asset—it is home, livelihood, identity, and future.

Before COVID-19, Koh Tao welcomed more than 500,000 visitors annually. Diving supported a wide local economy, from dive schools and boats to accommodation, restaurants, and small businesses whose livelihoods depended on the health of the sea.

But natural reefs are fragile. Coral grows slowly, only around 2–4 centimetres per year, while tourism activity can concentrate pressure on the same dive sites again and again. Alongside diving pressure, coastal development and broader environmental changes added further stress to the marine ecosystem.

Those who worked underwater every day recognised a difficult reality: the island's economy depended on healthy reefs, yet the reefs themselves needed more space and time to recover.

Koh Tao was therefore both vulnerable and ready for change. Strong local knowledge, a deep-rooted diving culture, and a community closely connected to the sea created the foundation for collective action.

The Turning Point: Why change was needed

The turning point began before the pandemic, in discussions among Thai dive instructors on Koh Tao.

The concern was not only about business. It was about the future of the reefs. Diving activity was concentrated on a limited number of natural sites, creating repeated pressure on fragile coral areas. The challenge was to protect the reefs while keeping the local tourism economy alive.

From this concern came a practical idea: transform decommissioned naval vessels into artificial reef dive sites. These new sites could attract divers away from sensitive reefs, reduce congestion, and create new habitats for marine life.

The idea moved from the dive community to island leaders, then to collaboration with the Royal Thai Navy, Surat Thani Province, and the Department of Marine and Coastal Resources. What began as a local concern gradually became a formal conservation and destination-management initiative.

Then COVID-19 changed everything. Tourism stopped, businesses struggled, and public budgets were redirected to urgent national priorities. The project was postponed, and its future became uncertain.

Yet the pause gave Koh Tao time to reflect. With the island quieter than before, local people looked again at their resources, their tourism model, and the future they wanted to rebuild after the crisis.

The question became larger than one project: How could Koh Tao recover in a way that strengthened both the community and the sea?

The Vision: What you set out to do
Koh Tao's vision was never simply to sink ships underwater.

The deeper aim was to turn tourism pressure into a managed pathway for reef protection, marine restoration, and community-led destination management. The project sought to create alternative dive sites that would reduce pressure on natural reefs, provide new habitats for marine life, maintain economic opportunities, and invite divers to become part of a wider stewardship system.

This approach became known as the Koh Tao Reef Guardian Model.

The model follows six connected steps: recognising pressure on natural reefs, creating alternative dive experiences, building multi-sector partnerships, mobilising community ownership, managing sites responsibly, and monitoring ecological outcomes over time.

More than an artificial reef initiative, it became a practical framework for balancing visitor experience, local livelihoods, and ecosystem recovery. The vision was not to limit tourism, but to redesign it so that conservation and economic resilience could reinforce one another.

The Journey: How change happened
The journey began with people who knew the reefs closely.

After Thai dive instructors raised concerns about pressure on natural dive sites, the idea of using decommissioned naval vessels was brought to island leaders. The community then coordinated with the Royal Thai Navy and learned that some retired vessels might be suitable for conservation use. Further discussions followed with Surat Thani Province and the Department of Marine and Coastal Resources.

Turning the idea into reality required cooperation across sectors and careful environmental preparation to ensure the vessels would become safe dive sites and valuable marine habitats.

When the pandemic delayed the project, Koh Tao used the quiet period to rethink its future. During this time, the Koh Tao Tourism Association became an important platform for coordinating sustainability efforts and turning shared concern into collective action.
After the worst of the pandemic had passed, the project faced a decisive test.

The Royal Thai Navy informed the island of an urgent vessel transfer schedule. If Koh Tao missed the opportunity, the project could be delayed for months—or lost altogether. At the same time, the monsoon season was approaching. The community had only 15 days to raise the necessary funds and complete preparations.

This was not an easy moment. Many businesses and families were still recovering financially from the pandemic. The amount needed was high, and the time was short.

But the island chose to move forward.

Support came from dive operators, resorts, hotels, shops, conservation groups, public agencies, local networks, and community members. People contributed money, labour, equipment, food, coordination, and communication because they understood that the project was connected to the future of the island.
Within just 15 days, Koh Tao raised THB 8,657,000 through the support of more than 60 organisations and many individuals. More than THB 7 million was used for the deployment of the two vessels, while the remaining funds were reserved for vessel care and long-term environmental monitoring.

This became one of the strongest expressions of community ownership. What began as a conservation proposal had become a shared investment in Koh Tao's future. After environmental preparation and safety modifications, the two decommissioned naval vessels were deployed as artificial reef dive sites. The vessels began a new mission beneath the sea: providing habitat, creating alternative dive experiences, and helping manage tourism pressure more responsibly.

Following deployment, the sites were integrated into Koh Tao's tourism management system. Supported by monitoring and citizen-science activities, they enabled divers and visitors to contribute observations and become part of the island's marine stewardship efforts.

The Breakthrough: What you achieved
The project delivered ecological, economic, social, and institutional outcomes.

Ecologically, the artificial reef sites began developing into living marine habitats. Monitoring indicates healthy water quality, early coral colonisation, and increasing marine biodiversity within less than two years.

The sites also function as visitor-flow management tools. By attracting divers to alternative locations, they help reduce repeated pressure on sensitive natural reefs while supporting marine stewardship.

Economically, the wreck sites attract more than 40,000 divers annually and generate an estimated THB 450 million in direct tourism revenue each year, supporting local businesses and livelihoods.

Socially, the initiative strengthened community confidence after a period of crisis. The 15-day fundraising effort showed that local people and businesses were willing to contribute to long-term environmental care, even while recovering from economic hardship.

Institutionally, the project strengthened Koh Tao's capacity for coordinated destination management. Collaboration between the Koh Tao Tourism Association, public agencies, the Royal Thai Navy, and local stakeholders, together with the creation of a maintenance and monitoring fund, helped transform a one-time project into a long-term management approach.

The achievement was not simply the deployment of two vessels. It was the creation of a practical model that connects reef protection, tourism diversification, community ownership, and long-term stewardship.

For Koh Tao, the former warships became more than dive sites. They became visible evidence that a small island could unite around a shared purpose and take practical steps to protect the sea that sustains it.

Reflections: What you learned and what others can learn

Koh Tao's experience offers three key lessons for destinations facing similar coastal and marine tourism challenges.

First, managing tourism pressure does not always mean limiting tourism. The two wreck sites are developing into artificial reef habitats while helping distribute diving activity and reduce pressure on sensitive natural reefs.

Second, successful environmental initiatives depend on strong partnerships. Koh Tao's artificial reef initiative brought together the Koh Tao Tourism Association, dive operators, community leaders, public agencies, the Royal Thai Navy, local businesses, and visitors around a shared goal. Goodwill becomes more effective when supported by clear coordination and shared responsibility.

Third, stewardship must continue beyond implementation. Community-raised funds were reserved for vessel care, maintenance, and environmental monitoring, ensuring the initiative remains an ongoing commitment. Building on this experience, Koh Tao is also helping strengthen the Thailand Sustainable Islands Alliance.

Overall, Koh Tao demonstrates how a small island can transform tourism pressure into a shared management model that connects reef protection, visitor-flow management, community ownership, partnership, and long-term stewardship.

The Ripple Effect: Lasting impact
Today, the two vessels beneath Koh Tao's sea represent far more than artificial reefs.

Locally, they provide alternative dive sites, support habitat creation, and strengthen marine tourism management. They also serve as learning spaces where divers can better understand the connection between tourism and reef conservation.

For the community, the project strengthened confidence and demonstrated the power of collective action. It showed that Koh Tao's greatest asset is not only its marine environment, but also the people willing to protect it.

Beyond the island, the initiative offers a replicable model for destinations seeking to move from sustainable tourism toward regenerative tourism. The approach is not about copying the same intervention, but applying the same principles: assessing pressure, creating alternatives, building partnerships, mobilising community support, and monitoring long-term outcomes.

Former warships now rest beneath the sea as reef guardians. Their new mission reflects a simple but powerful lesson: the future of tourism depends on healthy ecosystems, and healthy ecosystems depend on people who care for them.

Awards or Certifications
1)International destination ranking: Koh Tao was named the 10th best island in the world in TripAdvisor's 2014 Travellers' Choice Awards, reflecting its strong global reputation as an island and marine tourism destination.

2)Sustainable island leadership: The Koh Tao Declaration was announced on World Ocean Day 2023, bringing together 21 island communities and more than 23 partner organisations to commit to sustainable island tourism and net-zero carbon tourism. [Public Relations Department of Thailand (prd.go.th)]

3)Sustainable tourism finance model: UNDP/BIOFIN recognised the "Koh Tao Model" as an innovative tourism user-fee mechanism for biodiversity conservation, with replication planned for Koh Phangan and other non-protected areas in Thailand. [UNDP Thailand (UNDP)]

4)Model for biodiversity conservation replication BIOFIN reported that the Koh Tao model is being expanded to other island municipalities, including Pa-Ngan District, Yao Noi, and Klong Prasong, as a sub-national biodiversity finance solution. [BIOFIN/UNDP (biofin.org)]

5) Sustainable tourism festival / public recognition: Spotlight Koh Tao 2025 was held as a sustainable tourism festival highlighting Koh Tao's conservation, land and sea revitalisation, and local green economy. [Spotlight Koh Tao official site (spotlight.visitkohtao.org)]

6)National sustainable destination pathway: Surat Thani Province and local partners are driving Koh Tao toward becoming a world-class sustainable destination and seeking Green Destinations recognition. [Thai Government PRD / NBT (thainews.prd.go.th)]

7)Marine tourism reputation PADI presents Koh Tao as a key diving destination with year-round diving conditions, coral formations, marine life, and strong diving activity. [PADI destination guide (PADI)]

8)VDO Story of Koh Tao from TGP2030 A story of how the people of Koh Tao turned concern into collective action—restoring marine ecosystems, protecting coral reefs, and pioneering a regenerative tourism model that creates lasting benefits for nature, communities, and generations to come. [Koh Tao Tourism Association (KTA)]

Web Articles

1) Koh Tao rated world's 10th best island [https://www.bangkokpost.com/thailand/politics/397179/koh-tao-among-world-top-10-islands?utm_source=chatgpt.com]

2) Investing In Our Planet: Koh Tao [https://www.undp.org/thailand/stories/investing-our-planet-koh-tao?utm_source=chatgpt.com]

3)Koh Tao: A Model for Sustainable Tourism and Coral Reef Conservation [https://www.biofin.org/news-and-media/koh-tao-model-sustainable-tourism-and-coral-reef-conservation?utm_source=chatgpt.com]

Other Relevant Links

1) Public Relations Department of Thailand (prd.go.th) https://www.prd.go.th/th/content/category/detail/id/9/iid/189219?utm_source=chatgpt.com

2) Breathing Life Back into the Sea: Koh Tao : https://www.youtube.com/watch?v=8klr1eBGxVc&t=2s

Quotes or Testimonials

“The coral reefs are our life. They support our livelihoods, our community, and our identity. Seeing everyone come together to protect the ocean gives us confidence that future generations will continue to call Koh Tao home.”

— Local Dive Operator, Koh Tao

“We did not sink warships to create new attractions. We transformed symbols of conflict into guardians of the sea, giving nature the opportunity to recover and our community the confidence to shape its future.”

— Koh Tao Tourism Association