



## US IOTWS Small Grants Program

# Coral Conservation Empowers Communities

COASTAL COMMUNITY RESILIENCE AND CORAL REEF MANAGEMENT IN TAY MUANG DISTRICT, PHANG NGA, THAILAND



*Top: Coral reefs dominated by tabulated and massive forms with an area of more than 3 km<sup>2</sup>*

*Bottom: Villagers from Had Tay Muang installing devices to reduce pressure on the reef and enrich fisheries*

### US IOTWS Small Grants Program

The US Indian Ocean Tsunami Warning System (IOTWS) Program has funded 17 small grants in India, Indonesia, Sri Lanka, and Thailand as part of its \$16.6 million two-year effort to support the development of an end-to-end warning system in the region. The grants program catalyzed and promoted pilot activities that contribute to community and bottom-up results in disaster mitigation, preparedness, and response.

### Strengthening Coastal Community Resilience and Coral Reef Management Project

Coral reefs were recently discovered and officially reported just offshore from Had Tay Muang. The reefs provide an important fishing ground for communities in the immediate proximity of a national marine protected area along this stretch of the Andaman coast. As a result, the project was conceived to assist the government in developing a participatory coastal resources management model that could be replicated in Thailand's other coastal areas. The management model involved three main stakeholders: fishermen, dive operators, and government authorities. At least 16 communities including approximately 1,000 beneficiaries took part in the project.

### Project Achievements

The integrated coastal zone management principle was adopted to encourage public participation in the decision-making and implementation processes with the national park authority at Had Tay Muang. The Park Advisory Committee (PAC) accordingly was established in connection with core working teams from different communities to sustainably manage natural resources in and around the park. The measures put in place have helped strengthen resources conservation, which had been solely the national park's responsibility. The project commenced with an assessment of the communities' needs and promising measures to restore and protect the coral reef, such as installing mooring buoys, transplanting coral, cleaning the reef, enriching fisheries, and restoring coastal forests.

One of the key achievements is the establishment of a truly consultative process where public hearings enable discussion on important issues within the community. For example, the hearings facilitated agreement on rules for sustainable resource utilization that aimed to balance local practices with scientific understanding of ecological capacity. Awareness on the benefits of natural resources and conservation



Top: Villagers installing mooring buoys to reduce anchor damage to coral reefs

Bottom: Mangrove reforestation at Tay Muang to enrich fisheries habitats and reduce impacts of sediments and wastewater

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measures has been raised through school activities, radio broadcasts, signboards, and interpretative maps, among others. WWF also provided technical support and training for both national park staff and villagers on participatory natural resource management.

### Lessons Learned

- Management bodies at the community level which have the representation and active participation of community members are effective and promote strong cooperation.
- Consistent effort, sufficient resources, and integration among stakeholders are needed for an ongoing series of small activities to help complete the “bigger picture”, and this can not be achieved in a short period of time.
- Coastal communities are the main driver for effective coastal zone management.
- Community-based tourism is the one of the most effective tools for motivating people to conserve natural resources, which will also build community resilience.

### Next Steps

WWF worked with communities around Had Tay Muang to develop a sustainability and transition plan. The plan focuses on community-based tourism to help maintain good environmental quality and diversification of livelihoods within the target area. Through the partnership developed between the communities and the national parks authority, the participatory approaches will continue to reduce communities’ vulnerability and enhance their resilience.

### About WWF Thailand

WWF is a non-profit organization established in 1972. It began working in Thailand in 1976 with a mission to stop the degradation of the planet’s natural environment and to build a future in which humans live in harmony with nature by:

- Conserving the world's biological diversity
- Ensuring that the use of renewable natural resources is sustainable
- Promoting the reduction of pollution and wasteful consumption.

For more information on activities or partnership opportunities with WWF Thailand visit: [www.wwfthai.org](http://www.wwfthai.org).

### About the US Indian Ocean Tsunami Warning System (IOTWS) Program

The US IOTWS Program is part of the international effort to develop tsunami warning system capabilities in the Indian Ocean following the December 2004 tsunami disaster. The US program adopts an “end-to-end” approach—addressing regional, national, and local aspects of a truly functional warning system—along with multiple other hazards that threaten communities in the region. In partnership with the international community, national governments, and other partners, the US program offers technology transfer, training, and information resources to strengthen the tsunami warning and preparedness capabilities of national and local stakeholders in the region. For more information please visit [www.us-iotws.gov](http://www.us-iotws.gov).