

ECOTIPPING POINTS VIDEO SCRIPT

THE APO ISLAND STORY: SAVING A CORAL-REEF FISHERY IN THE PHILIPPINES

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Among the thousands of islands in the Philippines is a fishing village, a tropical paradise of coral reefs and sandy beaches, called Apo Island.

The Philippines' coral-reef fishery is one of the world's most important fisheries. A few decades ago, it was yielding a catch of a million tons per year. But it has been in serious trouble for quite some time. Fish stocks have dwindled to less than 5% of what they were before. Fishing villages in some areas are dying. One such village, Apo Island, nearly experienced the same fate. However, its fishermen found a way to save their fishery and their cherished way of life.

This story began about fifty years ago with the introduction of destructive fishing methods such as the use of dynamite and cyanide. These methods were very effective for catching fish, but they were not sustainable, as they needlessly damaged the fish's coral habitat. The fishery descended into a slow but unrelenting vicious cycle, leading from habitat destruction and overfishing to dwindling fish stocks, which in turn forced fishermen to intensify their use of destructive fishing methods to catch anything at all. Apo Island fishermen—like so many others—had to travel farther from their village, work longer hours searching for places that still had enough fish, use harmful fishing methods to catch as many fish as they could, and ignore the future health of the fishery. Sometimes, a fisherman would catch only one or two small fish in a day – or perhaps none at all. The Philippine government reacted with laws banning destructive fishing, but the laws were not enforceable, and therefore did little to solve the problem.

It seemed impossible to escape this downward spiral, but in 1980 Dr. Angel Alcala, a marine scientist at nearby Silliman University, began a two-year dialogue with Apo Island fishermen. They discussed what was happening to the reef ecosystem that surrounded the island to a distance of 500 meters from the shore. And Alcala took some of the fishermen to an uninhabited island where he had protected several hundred meters of coral reef from fishing for several years. Although no-fishing zones were a new idea for the Philippines, the fishermen were impressed with the number of fish in the protected area – and saw that fish from there were helping to replenish fish stocks around the rest of the island.

This example convinced the fishermen to try it for themselves. In 1982, Apo Islanders set aside 10% of the islands' fishing grounds as a no-fishing marine sanctuary. Enforcement was easy. It took just one person on the beach to watch the sanctuary, a task that rotated among families who lived on the island. Within three years, their patience had paid off. The sanctuary was overflowing with fish. Fishing near the edge of the sanctuary was far better than before.

Most importantly, Apo Islanders were so inspired by their sanctuary that they decided to do something about the rest of the island's fishing grounds. The island community enacted three rules:

1. Fishing there was limited to only Apo Island residents.
2. No destructive fishing methods were allowed.
3. No one was allowed to fish within the marine sanctuary.

But there were obstacles. For a local community to exclude other fishermen from its fishing grounds was a radically new idea. Only after intense negotiations with the government were Apo islanders allowed to move ahead with this bold action.

The fishermen returned to traditional fishing methods such as hook-and-line, fish traps, and large-mesh gillnets; and for enforcement, Apo fishermen created a “marine guard” consisting of local volunteers.

The fishery improved rapidly, though it took 10 years for stocks of the largest fish to recover fully. Apo fishermen can now do their fishing right at home around the island. And with a short day’s work, they can catch all the fish they need.

The restoration of Apo Island’s coral reef ecosystem set in motion a cascade of spin-offs reinforcing sustainable fishing methods. With the increases in fish populations, ecotourism activities such as snorkeling and diving brought in additional income and strengthened the incentive to maintain a healthy marine ecosystem. The island’s primary school added a marine ecology curriculum, and the islanders used part of the tourist income to create scholarships for many of their children to attend high school and college on the adjacent mainland. Some Apo students are now in graduate school studying marine ecosystem management.

The Islanders also started a very successful family planning program to ensure that their future population does not exceed what their fishing grounds can provide. The children are already committed to small families when they grow up.

In addition, visitors from other fishing villages have come to Apo to learn from the success there. Now, 700 villages in the Philippines have marine sanctuaries.

Working together, Apo islanders pulled back their ravaged ecosystem from a precipice of unsustainability – tipping it to a path of sustainability. They reversed the vicious cycle, and the gains were reinforced by newly created “virtuous cycles” – driven by continuously growing awareness, experience, pride, and commitment. The Islanders care deeply about the future of the fishery because it is theirs, and they now have the knowledge and tools to reap its bounty with confidence.

Apo Islanders consider their sanctuary to be sacred. They say it saved the marine ecosystem, their fishery and their way of life, but in fact, the sanctuary was only the lever that got it started. It was an EcoTipping Point.

Details of the Apo Island story and dozens of other environmental success stories can be seen at the EcoTipping Points website: www.ecotippingpoints.org.