Pesca Sustentable de Langosta en Quintana Roo David Nuñez

Deep within the Sian Ka'an Biosphere Reserve on Mexico's Caribbean coast of the Mexican State of Quintana Roo, about 40 km south of Tulum, is the prosperous fishing village of Javier Rojo Gomez, better known as Punta Allen. It is a community unlike any other we know of in Mexico. In addition to its privileged location, what makes this village unique is it commercial success. Ever since it was founded in 1968 it has been the regional leader in



The Co-op's dock and boats.

the lobster fishery, as measured both by total catch and the size of lobsters caught. Even more remarkable is the fact that the wealth from this industry is not concentrated in a local boss, but rather spread out among the fishermen, with many being wealthy enough to have second homes in Merida, or elsewhere in the Yucatan Peninsula. But one learns about these things after a while. Perhaps the first thing one notices is the town itself.

This is a small village, with a population of only several hundred, and access to electricity only a few hours a day. So after two hours of bad dirt road one expects the usual impoverished village of cardboard shacks and tin roofs. Instead, houses are made of cement blocks. Many of them are rather large, and painted in bright colors. More importantly, there is a recycling center, a library, and a health clinic, as well as a very nice playground that seems eerily empty, because unlike other isolated rural communities in Mexico, Punta Allen has one of the lowest birth rates in the nation. In fact, since the mid-nineties, its population growth has been comparable to that of developed nations with the lowest birth rates such as Russia and Estonia.

In the 1930s the Federal Government granted exclusive fishing rights of the Caribbean Spiny Lobster (and other lucrative species) to fishing cooperatives. (These cooperatives are essentially the marine equivalent of the *ejido* communal land system.) In the 1960s, island fishermen from the

Cozumel Fishing Cooperative moved into the Punta Allen region on the mainland to fish for lobster. In 1968, primarily in response to their isolation from Cozumel island, 49 fishermen formed their own Coop, naming it Vigia Chico after the nearby center of coconut farming, which until then was the primary economic activity in the region. The current population of Punta Allen is around 400, with nearly 100 fishermen.

After a few false starts, the lobster fishery finally took off in the 1980s. Not only had the resort destination of Cancun grown enough to demand regular shipments of lobster, but investment from the federal & state governments in equipment allowed large enough catches to make the long trips to Cancun worthwhile.

But these opportunities also existed for other fishermen throughout the region. What makes the Punta Allen example so special? The simple answer is that while other cooperatives opted for an "open access" approach to lobster fishing, in which anyone can fish anywhere, the Vigia Chico Coop decided on a different strategy.

Back in the 1960s, when the village was even more isolated than it is today, its only contact with the rest of the world was by boat. Occasionally a group of Cubans would sail in to trade whatever they could. It was from these visits that the locals learned to use lobster shelters, also known as "sombras" or "casitas Cubanas". Don Antonio Perreira, founder of the Coop, was the first to experiment with these shelters, making them from the Chit Palm. After the Sian Ka'an Biosphere Reserve was created in 1986, harvesting the palm tree was no longer allowed, and the locals experimented with flattened drums and asbestos sheets before settling on the current cement structures.



Lobster shelters.

Harvesting lobster usually requires teams of two: one to lift the shelter, and another to sweep up lobster with the butterfly net. The catch is then measured and examined for eggs, as fines can be stiff: nearly US\$100 per undersize lobster or gravid female.

Lacking much reef, the Vigia Chico lobstermen are

forced to capture juvenile lobsters in Ascencion Bay. By placing these structures, they provide shelter from predators and thus increase the lobster population relative to what it would be without these artificial habitats. Because the building, placing and maintenance of "casitas" requires a significant investment, the Vigia Chico Cooperative alloted property rights over "lots" of ocean floor, to prevent fishermen from fishing from shelters laid by someone else. These lots, known as "campos" were distributed to members, and may be renegotiated prior to each season.

To enforce these property rights, strict penalties are applied to those who break the rules. Fishing in someone else's campo is punished by confiscating all equipment, including the boat, turning it over to the rightful owner of the campo and banishing the offending party from the Cooperative.

Equally important has been the support of the Mexican Courts in upholding the rights of the Cooperative. The first members to be expelled challenged the very notion of having "lots" in the ocean. After all, if the sea belongs to the nation, one could argue that all nationals should have access to it. However, the courts upheld that the fishing concession granted to Coops includes the rights to manage the fishery as deemed fit by Coop management.

Perhaps this is the reason why in this village adherence to the rule of law also applies to Federal laws- something truly rare in rural Mexico- and those found fishing out of season are also expelled from the Cooperative.



The Co-op's offices.

Over the years, other rules have been implemented to ensure the sustainability of the catch. With the creation of the Reserve, fishing with SCUBA gear was banned which drastically limits the amount of lobster that can be caught. Fishing nets have also been banned, to the benefit of the area's dolphins, sea turtles, rays and other species. The use of hooks which can injure or kill lobsters before they have been inspected, has been replaced by butterfly nets

which allows fishermen to return gravid females or undersize lobster to the sea, unharmed.

This respect for the rules, whether self-adopted, imposed by the Reserve management, or by state and federal authorities far away is perhaps the biggest mystery of Punta Allen. In a nation that almost seems to take pride in those that skirt the law, why does this tiny village in the middle of nowhere take the rules seriously? "Everyone asks us that!" laughs Emilio Mendoza, a third generation resident and fisherman. Perhaps its isolation created a stronger sense of self-reliance and allowed the community to mature without the outside influence of corrupt officials. Perhaps a better question is, if this village can get it right, why can't the rest of us?

In 1988 Hurricane Gilbert devastated the lobster fishery. This reminder of the fragility of their prosperity led the residents of Punta Allen to reflect on their long-term wellbeing and after investing in a community health clinic, all



Downtown playground.

married females embraced contraception to limit the size of their families, embracing the popular family-planning slogan "pocos hijos, para darles más" (fewer children, to give them more). Now many children attend university, and many choose to return to fishing after graduating.

Hurricane Gilbert also landed the Coop in financial difficulties when plans for a regional processing plant had to be abandoned, causing

many members to leave rather than contribute to pay their collective debt. Those that stuck through the hard times decided against re-admitting former members and instead implemented a new rule stating that new memberships may only be extended to the children of current members. This rule, coupled with the low-birth rate, has helped maintain the Coop size relatively stable, further contributing to the sustainability of the fishery.

Impressively, the Vigia Chico Cooperative is undaunted by past failures, and is once again at the forefront of efforts to market is catch directly, skipping the middlemen they have relied upon in the past. Partnering with other

Coops within the Sian Ka'an Reserve, as well as the Chinchorro Reserve further south, they recently formed Integradora de Pescadores de Quintana Roo, a collective business venture which markets their products directly to consumers under the brand name "Chakay".

Government assistance obtained through the Federation of Fishing Cooperatives of Quintana Roo has been crucial at every step, from settling the village to obtaining financing and consulting services on their ventures. This type of federation has now been exported to other States in Mexico. And the Vigia Chico Cooperative experience itself has been replicated, with varying degrees of success, in neighboring Cooperatives and in communities on Mexico's Pacific and Gulf coasts. This model has also been applied in Panama, Dominican Republic, Belize and Honduras.

Students and researchers from Mexican and American universities are regular visitors to this isolated community. The United Nations Development Program & World Bank use the Vigia Chico Cooperative as a successful case study, and the Cooperative proudly displays an Equator Prize award obtained in 2007 at its offices in the city of Tulum.



The library.

The success of the lobster fishing cooperative has spilled over into other community ventures. More recently the community has embraced ecotourism as an alternative source of income, particularly during the off-season from February to July. Though sport-fishing had been a small side-business since the mid 1970s, the options for tourists have exploded since the late 1990s. There are now four different Tourism Cooperative ventures that offer snorkeling, birdwatching, and dolphin-

sighting tours, in addition to lodging. Tourism is fast catching up with lobster fishing in terms of income generated. Though some conflicts have arisen between the industries, they are minimized by the fact that many fishermen belong to both the Fishing Cooperative and to one of the Tourism Cooperatives. There is a widespread understanding that one cannot engage in both activities simultaneously, as doing so would cheat one's own

associates.

Obviously with economic growth, other changes have come to town, and everyone we speak to mentions that it is no longer the same place they grew up in. This sophisticated community is wary of what runaway development has done to resort destinations like Cancun and Playa del Carmen, and does not trust that their location within the Biosphere Reserve will spare them the same fate. And though the community welcomes all those who wish to study and learn from their experience, it is also fighting to limit harmful outside influences. Herencia Punta Allen (Punta Allen Heritage) is a non-profit foundation that, among other things, opposes the paving of road which links them to the outside world. They say their village is a paradise, and as such, should be hard to get into. We agree, and wish them the best of luck.



Punta Allen's paradise.