# THE FISHERMAN'S HIDDEN TALENT

Since early 2017, the Dominican Ministry of Environment and the Dominican Council of Fisheries and Aquaculture (CODOPESCA) have taken several important measures to improve the conservation of marine fisheries, as well as endangered marine species. In addition to strengthening existing fishing laws and ban seasons (such seasonal bans on lobster, conch, crab, and prohibitions on certain fishing gear), they have included new species such as parrotfish, sharks, rays, and urchins in new fishing laws. The Ministry has also encouraged the creation of co-management agreements for marine protected areas with different non-profit organizations, the creation of fish reserves (known as "no-take fishing zones") and increased monitoring and control of coastal areas.

These necessary initiatives are scientifically proven to be effective, but extremely tardy, given the degraded state of Dominican marine ecosystems. Though much work remains to effectively implement these laws at the national level, for the first time in many years, a coherent regulatory structure and coordination between the responsible government entities seems to be happening.



However, despite these positive developments, the successful enactment of restrictions on fishing will also create a significant socio-economic challenge for the country. What will the impact be on the thousands of artisanal fishermen who depend on fishing for their livelihoods? For example, it is estimated in certain areas of the country, between 40% to 60% of the local catch is parrotfish, a species that has just been banned completely from fishing for two years. What viable alternatives do these fishermen have?



#### Photo Fundación Grupo Puntacana

The experience of the Fundación Grupo Puntacana can be illustrative for other regions of the country. Five years ago, we realized that due to the successful growth our coral restoration project, we were seriously lacking manpower. Coral restoration in underwater nurseries requires significant manual labor. But more than technical experience, restoration requires practical, underwater experience. Instead of interviewing marine biologists, we decided to do an experiment: we certified a group of local spearfishermen as PADI Open Water divers and then trained them in the basic techniques of coral restoration. Today, we have a small team of "coral gardeners" on staff, represented by former fishermen who have given up spearfishing to work on the project. Rather than spearing the beautiful colored reef fish that attract divers and snorkelers, today these fishermen contribute to coral conservation.



#### Photo Human Pictures

Encouraged by this positive experience, we began hiring local fishermen for work at the Foundation, at our parent company Grupo Puntacana and at other aquatic activities offered at our resort. Our objective is to provide viable employment opportunities for local fishermen, while at the same time lowering unregulated fishing pressure on the reef. Instead of concentrating our efforts on patrolling the reef, we try to incorporate the skills and talents of local fishermen into the tourism industry and our conservation projects. We now have fishermen working as boat captains, divers, coral gardeners, and other marine services.



#### Photo Blue Vision Adventures

In 2011, we faced a new challenge: a massive invasion of sargassum seaweed. The seaweed came in massive rafts and covered our beaches and coastlines in seaweed, making them unusable by tourists and visitors to the beach. After much research and numerous experiments, we decided to install floating barriers in front of our main beaches, protecting our most important beaches from the vast waves of seaweed. Our homemade barriers are highly effective in protecting our beaches, but they require regular maintenance, cleaning and replacement of pieces. Once again, we decided to take advantage of the local knowledge and skills in the water of local fishermen. We hired local fishermen to do maintenance on close to 1.5 miles of seaweed barriers, in their own boats. Our "anti-sargassum" team has worked for us for almost two years, providing an essential service to our hotels and beaches. Within this group, very few continue to depend on fishing for their livelihood.



## Photo Jake Kheel

With each small success, we began to devise a formal corporate strategy of integrating local fishermen into the tourism economy. Today, the Association of Artisans and Marine Services (ARSEMAR), an incorporated entity composed mostly of former fishermen and their families, offer a variety of services and products related to the oceans. In addition to the teams of "coral gardeners" and the "anti-seaweed" team, we work with a group of women who produce crafts and other products made from the invasive Lionfish species. We have helped facilitate access to sell their wares in gift shops, hotels, and at the Punta Cana International Airport.



## Photo Jake Kheel

We work with a group of local fishermen who specialize in spearing Lionfish to sell as fillets to local restaurants. We have another group of fishermen that participate in our Foundation's Saturday Farmer's Market, where they sell their catch directly to the public, rather than through intermediaries or fish-buyers, as long as they comply with sustainable fishing rules. We have close to two dozen fishermen that are finishing or have finished PADI open water dive certifications and recreational boat captain licenses.



# Photo Jim Franco

The most important from our experience has been the need to complement fishing laws and restrictions, with the creation of new opportunities for the fishing community and their

families. There will never be sufficient resources for total enforcement of fishing regulations and monitoring. The ocean is simply too big and complex and enforcement is expensive. We have found that enforcement needs to be accompanied by jobs. In our case, we have been able to utilize the talents and skills of local fishermen in the tourism industry. Despite some limitations in their academic and professional training, their seaworthiness and experience have been highly useful.



#### Photo Fundación Grupo Puntacana

Undoubtedly, the Punta Cana region, with a dynamic economy and significant employment opportunities, has a significant advantage over other regions of the country in terms offlering alternative livelihoods for fishermen. Each region of the country will require a different strategy to find viable employment options. Yet the effective implementation of fishing regulations at the national level will fail without providing economic solutions for fishing communities. The private sector can be a key player in finding new job opportunities. As entities that demand constant innovation, companies possess inherent strengths and advantages that can help identify new employment opportunities for artisanal shermen. The private sector has the potential to become positive players in the protection of marine biodiversity and natural resources. Integrating the private sector into government conservation initiatives is not only an admirable goal, it is crucial.