ENVIRONMENTAL DEFENSE FUND (EDF)
SUSTAINABLE LOBSTER AND CONCH FISHING COOPERATIVES IN BELIZE

Problem Statement
What are the key success criteria for attracting private, international investment in Belizean fishing cooperatives (coops), in order to achieve economic sustainability?

Background Information
Nearshore fishing in Belize - The Mesoamerican Reef is the largest barrier reef in the Atlantic Ocean, and provides fishery-based food and income for communities along its 600-mile length. The fish populations around this reef have suffered from overfishing related to traditional open-access fishing practices.

EDF-Oceans - EDF is a nonprofit environmental advocacy group that promotes market-based solutions to solve problems in four main areas: climate and energy, oceans, ecosystems and health. We worked with the EDF-Oceans organization, which promotes rights-based fishing methods to reverse overfishing and revitalize local fishing communities. EDF-Oceans’ stated goal is to, “Catalyze reforms so that sustainable fishing becomes the norm in 12 nations that represent 62% of the global fish catch, a tipping point to ensure we have fish forever.”

EDF in Belize - EDF’s efforts in Belize focus on implementing a fisheries management system (called managed access) in order to reverse damage done to the Mesoamerican Reef, which has seen significant declines of lobster and conch due to open access fishing policies. EDF championed two pilot sites starting in 2011 and national expansion is in progress, based on positive results from the pilot sites. EDF helped establish catch shares, “a system of rights, responsibilities, and rewards that gives fishermen a financial incentive to fish more carefully and protect marine habitat.” In other words, scientists determine a healthy total amount of fish that can be caught in a certain area, and fishermen are allotted a percentage of the total catch. Within those bounds, fishermen are allowed to determine when and where they catch the fish, and as the total allowable catch increases, so do their shares.

EDF works with the two largest fishing cooperatives in Belize that manage this process, and has been working to determine best practices for operating these businesses to ensure that their environmentally and socially sustainable efforts are also economically feasible. To date, the fishing coops have raised funds from mostly local sources, namely Belizean banks, and have had trouble paying the interest on their loans. Fishermen used to be paid an upfront price for their fish, and a dividend (or “second payment”) at the end of the season based on the proceeds from the coop. Unfortunately, the inability to pay off their loans has led to dividends being used to make interest payments, and fishermen resorting to illegal fishing in order to make up lost income.

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1 http://www.edf.org/oceans/help-us-restore-belizes-stunning-coral-reef-system
2 http://www.edf.org/oceans
3 Presentation, “Managed Access Templates MACs”, EDF Oceans.
4 Ibid.
Analytic Approach
In order to structure our thinking and directly address the above problem statement, we developed an issue tree framework with our partners at EDF (see Figure 1 below). Through conversations with EDF representatives here in Boston and on the ground in Belize, we broke down the key factors of fishing cooperative performance into three main buckets: organizational processes, cost structure, and pricing. We further segmented each group into specific issues that we hypothesized could be key success criteria, and researched case studies around the world that would shed light on each of these factors.

Figure 1: Issue tree

Application of Approach in Belize
From conversations with EDF we understand that stakeholders are interested in attracting private, international investment in Belize’s fishing cooperatives in order to promote economic sustainability and improved livelihoods. Our approach reviews the importance of and types of financing available, and then goes in-depth on the three primary performance factors for fishery coops that may help attract financing (organizational processes, cost structure, and revenue), and what this means for Belize.

Overview of Financing
With declining fish stocks and related environmental damage occurring around the globe, it is clear that action is needed. Traditional oceans and fisheries protection efforts have involved political advocacy and media campaigns around specific endangered species and habitats. These efforts can be very effective, but their reach and sustainability are limited. The

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5 Interviews with Larry Epstein and Jake Kritzer, Environmental Defense Fund.
necessary actions frequently involve on-the-ground changes in the business models or fishing gear and methods used by fishers. Fishermen often lack the capital to make the changes in practice and equipment that are necessary to increase fishery sustainability, and philanthropic capital does not have the scale or bearing on a fisherman’s credit history to make a long-term impact.

Thus, interest is growing in transitioning from philanthropic fishery conservation investments to a blend of conservation and business investments. These market-based mechanisms bring together commercial and conservation interests to offer innovative alternatives for financing sustainable fisheries.6

A review of specific examples in “Financing Fisheries Change: Learning From Case Studies” found three major themes in fishery financing:7

1. Ensuring conservation through ownership: Using equity for asset purchase with an exit strategy.
2. Promoting conservation through targeted lending: Filling credit gaps with debt instruments.
3. Enabling conservation by combining services and capital: Incubating and providing information, connections and financing to promote business development.

Within each of these themes, the researchers identified the potential to increase the supply of fish protein, potentially helping to feed vulnerable low-income coastal populations, and the opportunity to strengthen local and national fishery management systems. In building these systems, local leadership capacity is enhanced, communities can better access capital, marginalized communities can find a voice, and long-term ecosystem protection is developed.

In “Sustainable Fisheries Financing Strategies,” EKO Asset Management Partners conducted research in the fishing communities of Brazil, Chile, India, and the Philippines. EKO identified three impact-investing strategies to promote sustainability:8

1. A microfinance/small and medium-sized enterprise (SME) route-to-market vehicle that finances a) low-cost improvements to processing activities including icing, packaging, and cold storage; b) distribution logistics such as trucks and interim storage depots; and c) marketing capacity to manage sales efforts to higher-value buyers of fish products.
2. A public-private partnership vehicle that utilizes new technologies and systems to enhance enforcement of fisheries regulations and provide jobs that benefit local communities.
3. A fisheries impact vehicle that would work with the broader fisheries supply chain to structure long-term purchasing commitments that can in turn be used to finance a transition to a more sustainable fishery.

7 Ibid.
These strategies offer alternatives for Belize, and other countries, to consider when looking at possible impact-investing opportunities. EKO also identified the following key drivers of value in the financing of fisheries that represent the risks and opportunities when considering fishery investments:

- **Commercial**: Potential stock recoveries; Rising seafood demand and seafood prices (Rising global demand for protein and seafood, Rising retailer demand for sustainable seafood, Wild catch supply constraints); Price and supply volatility; Supply chain complexity; The credit quality of counterparties
- **Regulatory**: Inadequate regulatory management and oversight; instability of the regulatory regime
- **Scientific**: The scientific dynamics associated with the fisheries and seafood sector include scientific uncertainty.

Belize, like many other countries, would benefit from this transition to conservation and business investments to support fishery sustainability and improve the livelihoods of its countries’ fisherman. The following sections highlight the specific organizational processes, cost structure, and revenue factors that may help Belize to pursue these types of sustainable seafood investments.

**Organizational Processes**

In order to attract financing, international investors need to be certain that their money is in good hands. Our research suggests that a strong organizational structure not only builds confidence among potential investors, but also is linked to more successful fishing cooperatives. Among fishing cooperatives internationally, two major areas that are important to focus on are the relationship the cooperative has with the local government, and the relationship between cooperative management and its members.

The relationship between the local/state governments and cooperative management is a necessary but insufficient factor in establishing a successful program. Our research suggests that the most successful cooperatives have local government support in the form of a legal framework and mechanism for managing requirements for fishing licenses, but otherwise leaves monitoring and enforcement to the cooperatives themselves. In the 1990’s, the most successful African small-scale fishing cooperatives had support from local governments for law enforcement, but left operational decision-making and local enforcement to the members themselves. The key to success here was to have recourse for legal action and enforcement if necessary, but leave the execution of enforcement (e.g., monitoring, license management) to the local teams.

Without involving the local fishermen in the process, regulations are generally ignored and viewed negatively. Before Managed Access was implemented in Belize, the pain for local fishermen was so acute and stakes for the Mesoamerican reef so high that government stepped in with a series of top-down regulations that changed each year and frustrated local fishermen. Fishing industries typically start out by being open access, i.e. unregulated.

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9 “Cooperative Strategies in Fisheries Management,” Fujita, Honey, Morris, Wilson, Russell, 2011
markets. Over time, catch decreases, fishermen get frustrated, and governments such as Belize implement basic regulations such as minimum size requirements, closed seasons, and license issuance.\(^{11}\) In Belize, the Managed Access program was able to align government initiatives with fishermen’s long-term financial benefit. The result is a reduction of 75% in violations, as well as a functioning three-strikes rule, in which deputized rangers and the court system are effective in restricting license access to those who break the rules, and fishermen are able to self-report incidents to the rangers.

In addition to having overarching legal support and enforcement, fishing cooperatives must effectively integrate fishermen into the management of the cooperative at all levels. Cooperatives have many responsibilities, including: ensuring catch limit compliance, monitoring catch, tracking transfers of licenses, and enforcing regulations.\(^{12}\) As discussed above, one of the biggest successes of the EDF program has been engaging the fishermen in self-enforcement, but getting them involved in cooperative leadership is equally important. Not only does having a local leader inspire followership and confidence among the fishermen in the process, but they have shown to be talented managers of production and processing.

While Belize has made great strides, there seems to be an opportunity to increase the fishermen’s involvement in decision making within the cooperatives. While the number of registered lobster and conch fishermen has increased over the last decade, cooperatives report declining membership. In the 2013 Economic Alternatives and Fisheries Development (EAFD) Plan, researchers noted that, “there seems to be a general sense among fishers that the cooperatives are not fully representing and looking out for the the best interests of the membership, resulting in a lack of commitment to the cooperatives by the members.”\(^{13}\) As part of the Managed Access initiative, Managed Access Committees are being set up in each area to oversee activity, represent the fishermen and make recommendations for improvement.

However, there are additional challenges to integrating local fishermen into the organizational leadership of the coops that must be overcome. In Belize, while the fishermen have been successful at managing the operations of the cooperative, financial and marketing management has been a challenge. Cooperatives from Belize, to Maine, to West Africa have had trouble with these functions, and require financial training in order to have a better chance at controlling the business as a whole. We suggest implementing financial literacy training with the top leaders of the organization, but also establishing an external oversight body to regularly check in with the leadership team to ensure compliance. Having an external enforcement mechanism can keep the cooperative focus on financial responsibility and reduce fraud, which is an unfortunate component of many struggling fishing cooperatives.

Looking forward, the Managed Access system in Belize is a step in the right direction in terms of relationship building with the local fishermen and enforcement. Managed Access involves fishermen in ownership, leadership and enforcement and relies on local authorities to help employ a three strike rule, enforced on the court level to revoke a fishing license. They encourage fishermen to participate in the process, through a partnership with Crime Stoppers, and use technology and color coded boats to ensure that fishermen are in the right area.

\(^{11}\) Economic Alternatives & Fisheries Diversification Plan, 2013  
\(^{12}\) Catch Shares Design Manual, Volume 2 - Cooperative Catch Shares, EDF  
\(^{13}\) Economic Alternatives & Fisheries Diversification Plan, 2013
While these are great achievements, financial education and the introduction of an outside financial auditor to regularly check in with cooperative leadership will help protect the cooperative’s assets and attract long-term investments.

Cost Structure
As mentioned in the problem statement above, Belizean fishing cooperatives face an ongoing challenge with instituting and maintaining sustainable managed access fisheries because of problems accessing capital. A critical element of this problem appears to be the existing cost structure of Belizean fishing cooperatives. Specifically, the cooperatives face significant, unpredictable operating expenses and carry insurmountable debt that consumes revenue and undermines the cooperatives’ economic sustainability.

The conservation advocacy organization Rare commissioned a market research analysis of Belizean lobster and conch that was published in February 2015. The study points to several promising opportunities for Belizean fishing cooperatives to create and capture economic value in international markets, but also highlights cost considerations of the current operations. A value chain analysis estimate of dock costs for grading, culling, and packaging frozen lobster, for example, suggests an expense range in which the high side is 400% higher than the low end. Dock and other operating expenses could be standardized and highly predictable fixed costs, but instead represent an uncertainty that directly affects cooperatives’ (and in turn fishers’) bottom lines. A cooperative that can control these operating costs and drive them to the low end stands to increase their gross margin from 4.7% to 19%.

The scope of this project precludes a comprehensive root-cause analysis of these fluctuating costs, but several reasonable assumptions can be made to highlight the issue at hand. The lack of business acumen within cooperative membership referenced elsewhere in the paper is a likely culprit. Efficient (i.e. cost effective) operations are a critical element of profitable enterprises, and require broad-based understanding of supply chains, inventory control, timely and well thought out capital expenditure, and other topics which the cooperatives’ membership and staff may lack. The EDF’s Catch Share Design Manual offers a framework and guidance for some of these considerations—and cooperatives specifically—but is a daunting read at nearly 500 pages across three volumes.

With regard to the cooperatives’ debt woes, it appears that the full measure of the issue is not fully understood either inside or outside of the cooperatives themselves. The Belizean cooperatives operate as private entities, and are not required to disclose financial data. Furthermore, the cooperatives’ staffs do not include business professionals focused on business development, accounting, marketing, or other business functions. The EDF Oceans team is working with the cooperatives and their debt-holding banks to understand the structure, terms, and status of the outstanding debt. They believe that a comprehensive audit

14 “International Market Analysis and Opportunities for Lobster and Conch from Belize”, Sea Fare Group, Seattle, 2015. This study examines dock costs for a number of for-export Belizean seafood offerings.
15 Ibid. This calculation is based on the study’s estimated costs and ex-vessel and dock values of whole frozen lobster for export.
16 Interviews with Larry Epstein and Jake Kritzer, Environmental Defense Fund.
is required to “untangle the financials” and determine how, when, and where the debt money was spent by the cooperatives.\(^\text{17}\)

Despite the seemingly dire circumstances facing Belizean fishing cooperatives, it is possible that with deliberate choices and forward-thinking strategy they can overcome cost structure issues to become economically sustainable organizations. There are several cases of fishing cooperatives outside of Belize successfully managing debt and expenses to reach profitability, while simultaneously producing a sustainable product that commands a price premium. The consideration of price premium and revenue model are discussed in the next section of this paper, but the case studies mentioned provide an interesting best-practices roadmap for Belizean cooperatives.

The first case involves Integradora, a for-profit company made up of the six primary fishing cooperatives in Mexico’s state of Quintana Roo. Prior to establishing Integradora and a comprehensive overhaul of the supply chain, fishers sold their catch to middlemen who paid cash at the dock. These middlemen sold the fresh product at a significant markup to local buyers and exporters, but had sufficient financing that allowed the flexibility to defer payment collection for up to 60 days after product delivery. Poor fishers typically living day-to-day off of proceeds from the day’s catch were not nearly equipped to match the competitive advantage of the middleman’s invoice pricing. Middlemen also had access to freezers and storage facilities that allowed stockpiling of product to take advantage of up to 30% off-season price increases. Once established, Integradora instituted a shortened supply chain to cut out the middlemen and acquired freeze/store capabilities to harvest this increased revenue.\(^\text{18}\)

The changes and capital expenditure required to achieve this success were not easily accomplished. Integradora required significant capital, which they received in the form of loans from outside investors. The investor loan structure was deliberately chosen over the more common philanthropic donation or government grant, and included very specific contract terms. The financing provided working capital, but was also a forcing function to develop and implement business capabilities and skills such as financial modeling of the cooperatives’ revised distribution channels.\(^\text{19}\) From an expense perspective, it is worth noting that Integradora’s changes represented a significant increase in operating costs. While not directly related to the issue at hand in Belizean cooperatives, it is important to highlight that the advantages of the increased revenue justified the costs of restructuring and capital expense.

A second interesting comparison is the Midcoast Fishermen’s Association (MFA) in Port Clyde, ME. The MFA sought capital for environmentally focused sustainability improvements in the interest of price premiums. Although the program was ultimately successful, the challenges faced included interesting debt and operating cost implications. The MFA implemented an experimental community supported fishery model—based in concept on community supported agriculture—in which community members pre-ordered shares of the fleet’s catch. The pilot was successful and eventually expanded to encompass the majority proportion of the MFA’s business. The benefits of this model included pre-order cash flow and

\(^{17}\) Email from Larry Epstein.


\(^{19}\) Ibid.
a direct sales method that translated to shortened supply chain and almost-doubled revenue compared to sales to processors. The pre-order cash flow was insufficient to cover capital expenses for a single season, however, and additional financing was required to grow operations. Sources of additional capital included commercial-source credit lines secured by personal guarantee by MFA members. The viability of such an option for Belizean cooperatives is unclear, given the unknowns surrounding finances of the cooperatives and their members.

The MFA’s chosen business model, like Integradora’s, yielded increased operating costs. The direct sales method translated to rising expenses as the MFA worked to keep up with expanding geographic reach and the associated logistical requirements of internal processing, packing, and shipping. Similar to the lesson of Integradora, this conclusion is not directly related to the Belizean cooperatives’ dilemma. Rather, it highlights the fact that risk in the form of increasing capital expenditure and operational costs may be required before recognizing meaningful gains.

The organizations described in the case studies above did in fact reach economic sustainability, but only after spending borrowed money to change their structure and operations. Belizean cooperatives are presumably already (or very nearly) structured for sustainable operations, but lack the cohesion and finances successfully transition to profitability. To that end, we present a series of recommendations for the Belize fishing cooperatives.

Our first cost structure related recommendation underscores EDF’s interest in a financial audit of the Belizean cooperatives. Building a comprehensive financial picture is a critical first step in understanding the cooperatives’ path to success. In conjunction with an audit, we recommend a presentation of findings to cooperative membership. Understanding that the cooperatives lack the expertise that may have prevented the current financial dilemma, it would be wise to include an educational element in the presentation. It should define and explain critical financial metrics, present the cooperatives’ current status using these metrics, and compare them to a hypothetically sustainable model as a means to identify goals. Such a presentation would also introduce transparency and collective understanding, and serve to better align incentives of cooperative members.

A second recommendation is an independent audit of Belizean cooperatives’ operations as they move forward with managed access. EDF’s Catch Share Design Manual lays out a framework for administration of a cooperative catch share, and it should be the basis of the audit. The manual discusses cost-effective management practices for catch tracking, accounting, bulk resource purchasing, and other measures to minimize operating expenses. Uniform adherence to these practices will at least stabilize operating costs to a point at which they can accurately and realistically be accounted for and incorporated into future cash flow analysis and other financial modeling. Minimization of operating costs should be a long-term goal, but the cases above demonstrate that it is not a prerequisite for short-term success. A related follow-on recommendation is to develop an abbreviated version of the EDF manual.

\(^{20}\) Ibid.  
\(^{21}\) Catch Share Design Manual, Volume 2: Cooperative Catch Shares. EDF.
focused on concrete steps and checklist-style implementation tools. The manual would yield better success if presented in clear, concise form.

A third recommendation would be most effectively implemented only upon completion of the first two. This recommendation is to seek philanthropic donations or government grants with a defined, closely monitored purpose of paying off the cooperatives’ debt. Comprehensive audits would clearly define current financial status and verify economically sustainable operations; it is reasonable to assume that even with this information in hand a cooperative carrying significant debt would face an ever-worsening cash flow situation. While likely possible to implement a recovery strategy without additional grants or donations, the worse-before-better dynamics of the system may result in outright collapse of the cooperative and loss of livelihood for its members. A specifically focused, closely monitored, one-time influx of capital could provide the necessary boost for economic sustainability in cooperative operations.

Opportunities for Revenue Improvement

One of the keys to making Belizean fishing cooperatives successful at attracting private, international investment is proving that they can increase revenue from sustainably harvested conch and lobster, improving their own livelihood and ability to invest in the fishery but also allowing returns to investors. Some of this benefit will come purely from stocks recovering to the optimal levels, as shown in the “reform” case of the vivideconomics forecasting model. However, as outlined in the “International Market Analysis and Opportunities” study, more opportunities exist to leverage the marketing value of the coops sustainable practices, both locally and abroad. This section will focus on evaluating the feasibility of those opportunities, and provide lessons learned from relevant case studies.

One of the most referenced opportunities to capture value from sustainable fishing practices is the ability to charge a price premium for seafood that is certified as sustainably caught. Although the ability to charge a price premium is often referenced, there is limited research to prove that sustainable certification definitively leads to the ability to charge higher prices. While evidence exists showing that consumer will “express a preference for eco-labelled seafood” in surveys and interviews, there is limited academic evidence that consumers will actually pay a premium when given a choice. Blomquist et al compared prices of MSC-certified and non-MSC-certified frozen cod fillets in 1,068 retail stores in Sweden in 2012, finding an approximately 10% premium for the MSC-certified fillets. However, the researchers furthered their analysis, comparing prices paid at landing for fishers using MSC-certified techniques and fishers not using MSC-certified techniques in the Swedish Eastern Baltic cod fishery, and found that “there is no evidence of a MSC price premium at the producer level.” Blomquist et al hypothesize that this discrepancy in premium might exist because of limited market power of coops at landing, and mixing of MSC and non-MSC fish in the value chain.

22 vivideconomics. Fin Model Belize 09-07-2014 V15.xlsx. 2013
25 Ibid.
Both findings have implications for Belizean coops seeking MSC or other sustainable certification. First, the coops will need market power in dealing up their supply chain, or concentrated purchasers will negotiate to keep any premium for themselves. Second, the coops will need to ensure that their entire value chain separates MSC-certified seafood, and that the certification follows the catch all the way to the consumer.

Another major recommendation for improving the revenue from Belizean conch and lobster was to market sustainably sourced seafood to Belizean hotels and tourist restaurants, whose customers had a higher willingness to pay for sustainable seafood than domestic consumers. This effort, which would be supported by both the Belize Tourism Industry Association and the Belize Tourism Board, would be combined with some certification method to establish the credibility of their sustainability claims. The efforts of the Seychelles Hook and Line Fishermen association provide a strong roadmap for Belizean coops to follow in establishing a strong local sustainable certification process and monetizing that through deliberate marketing and brand-building. In this case, the local cooperative led the charge for certification, and worked with third-party organizations to develop standards, while also consulting the local hotel and restaurant industries.

First, the local organization initiated a two-step certification process with two outside agencies. In the first step, an external entity reviews each fisherman and owner, and asks both to sign a commitment to sustainable practices. In the second step, a separate entity randomly inspects each boat at least once per year, according to 20 different criteria. This two-step, external process ensures that the products have sufficient credibility within the marketplace. Next, the organization further ensures credibility by tagging each fish at capture with a small tag and a reference number, ensuring traceability of the fish all the way from the end consumer back to the fishing crew that caught the fish. Any person on the value chain can go to the Seychelles Hook and Line Fishermen website, enter the reference code, and see a web page listing the fish details, the approximate location of the catch, a description of the gear and sustainable methods used, and even a photo of the boat and crew who caught the fish. In an increasingly crowded market for sustainable goods, the Seychelles approach creates credibility through certification but also shows the start of the sustainable process, giving them direct evidence of the sustainable practices.

This experience of local certification in the Seychelles provides a strong roadmap for Belize coops to pursue local certification within their home country. First, to ensure credibility of a sustainable brand, the coops should reach out to external entities for certification, though this doesn’t necessarily need to be through MSC. Second, the two-check system provides an added layer of credibility and assurance of quality, separating the ability to grant certification from the audit process. Third, the coop ensures that the credibility and value of their sustainable brand will follow all the way to the end consumer by tagging the fish with a specific code to trace the fish directly back to its origin. While both systems would require investment in the certification process and in the tagging technology, the combination of certification and traceability would ensure that Belizean coops could capture the price premium shown in the previous case study. These tagged lobster and conch could be sold not

28 Ibid.
only in the local tourist market, but also abroad. This step forms the next suggested strategy: to strengthen the Belizean brand abroad to open new markets, expand in existing markets, and differentiate to achieve price premiums.

The third major suggestion for Belizean coops to pursue revenue increases is to expand into new markets abroad and widen distribution in the U.S. to a more diverse customer group. The lessons learned from the previous case study, the Seychelles Hook and Line Fishermen, also prove helpful in export markets. The traceability of the seafood back to the source, along with the organization’s web page both provide great sources for marketing content to help build the Belize brand, but further marketing opportunities exist to drive revenue by proactively marketing for the Belize brand. The Norwegian Seafood Council’s marketing efforts within the UK market provide some lessons learned for Belize to greater market within the US and abroad. In order to increase sales within the UK market, the council launched a marketing campaign to “promote the quality of Norwegian seafood in the UK, with particular emphasis for wholesalers on its sustainability.” To that end, the council undertook numerous efforts, including running a seminar and dinner with representatives from import and export, retail, and local officials, seeking out public relations opportunities to highlight the sustainable nature of its exports (“guilt-free fish”), directly reaching out to local chefs with an offer for a free sample to test recipes, and even sponsoring the annual UK Fish and Chip Shop Awards. These efforts led to 149 media references, covering circulation of close to 3 million readers, and increased sales within UK stores between 30% and 200%, though some stores included additional in-store promotional activity. While the Belizean budget might not match that of the Norwegian Seafood Council, some of these tactics could be done within a more reasonable budget, especially combined with a traceable product, as referenced above.

With the base of a Belizean brand established, the coop could pursue the goal of further distribution of conch within the US, and a broader network of distributors within existing markets within the US, by hosting a seminar and dinner with representatives from the hotel and restaurant industry, as well as different players within the value chain. To further the demand for conch and spiny lobster, Belize could also offer a similar direct mail approach with different chefs, hotels, restaurants, and foodservice outlets within the US to allow them the opportunity to work with Belize products in-person, and hopefully expanding the export area within the US. Pursuing public relations opportunities within the US and other export markets would potentially prove costly, but creating a well-designed website that shows the sustainable efforts of Belizean fishers combined with the above activity could yield some low-cost media coverage.

**Additional Contexts**
Part of the aim of this project was to take the framework developed and lessons learned in Belize to help EDF implement their best practices across all of their sites. We have built our framework, and selected case studies and research to apply broadly to coastal fishing cooperatives in subtropical developing countries primarily, and perhaps around the world. While we have worked to keep our framework and case studies broadly applicable, our scope of research has been somewhat limited based on the extensive progress already accomplished in Belize, by EDF and other NGO’s, the Belizean government, and especially

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29 [http://www.themarketer.co.uk/how-to/case-studies/norwegian-seafood-council/](http://www.themarketer.co.uk/how-to/case-studies/norwegian-seafood-council/)

30 Ibid.
the existing fishing coops. Our framework presupposes an existing functioning cooperative and certain licensing and government controls already establishing some governance of the fishery commons. Given this scope limitation, our case studies and recommendations are most applicable to coops that are already functioning and cooperating with government, but need to improve their operations in order to attract further capital.