Changing the Future of Wild Fish

An entrepreneurial approach to sustainable solutions

This document was commissioned by:
The David and Lucile Packard Foundation

It was prepared by the Discovery Group, an Ashoka initiative

For more information, please contact:
Cheryl Dahle
Project Co-Lead
Central

cheryl@centralstory.com

(415) 339-9418 office
(415) 271-8878 mobile

fof.centralstory.com

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ASHOKA INNOVATORS FOR THE PUBLIC

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The case for tenacious hope

The threat of overfishing and extinction of marine life is as complex a problem as one could imagine in our modern, hyper-connected world. It is a story whose span touches fishing villages in Sri Lanka, corporate executives at Wal-Mart, and diners at both four-star restaurants and McDonald's. At every link in this chain, as roles change, the incentives and motivations shift for the human beings involved. At many junctures, the links are not really links at all, but diffuse cascades of related, dependent events that seem impossible to trace to a single moment with the potential for change.

Ideally, sparking change or redirecting the flow of events in a system would be like pushing over the first domino in a string: each action would tumble forward to effect a successive action of change. But the myriad behaviors colliding in this picture—how people choose what to eat from a menu, how fishermen maximize profit, how governments police illegal fishing, how fish are caught, packaged, labeled (or often, mislabeled) and shipped around the world—do not connect very neatly. Critical dominoes are missing so that change can't ripple efficiently along the string. Some dominoes are stacked tightly together, increasing the difficulty of toppling them. These are signs of an immature solution set for a given social or environmental problem.

Though the challenge of ending unsustainable fishing is daunting, the good news is that the world's most inventive problem solvers have taken on similar missions in the past—and devised breakthrough solutions. Social entrepreneurs bring centuries of experience to the task of systems reinvention. Through years of studying countless innovations, Ashoka has discovered that there is never a lone, perfect solution or fix for a problem. There are only swirling systems of influence, motivations, decisions, relationships, and ideas. The key to fomenting change is to distill the experience and wisdom of the past into applicable insight, and to couple it with new ideas and strategies that are both powerful and appropriate.

Ashoka has intimately explored how the entrepreneur's mindset can unlock solutions to the world's most pressing problems.

As a champion for, and network of, social entrepreneurs, Ashoka has intimately explored how the entrepreneur's mindset can unlock solutions to the world's most pressing problems. In this project, we've taken what we've learned on that journey and applied it to the multifaceted challenge of sustainable fishing.

The purpose of this project (phase one of a three-phase engagement) was:

- to survey the entrepreneurial efforts addressing unsustainable fishing and distill from those a set of frameworks for understanding why these solutions succeed;

- to recommend potential funding strategies in existing solutions, given the context of those entrepreneurial frameworks;

- to identify areas of opportunity where the David and Lucile Packard Foundation could help invent and incubate a new solution; this last deliverable lays the foundation for Ashoka's work going forward with the foundation to use a design thinking approach to invent and prototype that solution.

This report contains the public portions of the project, the first and third objectives. The second was provided separately in a confidential report to the foundation.

THE DISCOVERY FRAMEWORK: OUR THEORY OF SYSTEMIC CHANGE

Our three decades of work with changemakers have shown us that the notion of a "tipping point" is a fallacy. Or, more accurately, it is a false construct that can be created only in retrospect, after a solution to a problem or trend has tipped. It is impossible to predict in advance what action could cause that final push. And the relationships and patterns among multiple, interrelated events are rarely visible without the benefit of hindsight. In other words, a tipping point is a name we give to a story explaining how change happened in the past. It is not a guide for divining or predicting what might create change in the future. Furthermore, framing systems-change in such a way undermines a more holistic outlook that credits the diverse solutions that come together to create a moment that is ripe for so-called tipping. The tipping point framing encourages a "silver bullet" mentality in which the focus is on the strength of an individual idea.

Our approach is an integrative one that relies on an understanding of how solutions work together in context to effect change. It considers the multiple components of a problem (which we call barriers) and the varied insights (which we call design principles) necessary to shift them. This approach, or Discovery Framework, is a different way of thinking about systems change—one that values practice over theory and on-the-ground invention over academic analysis.

The Discovery Framework encourages understanding change as more akin to heating a pot to the point of a rolling boil. The parsing of a problem into barriers acknowledges that there is an element of "even heat" required, or pressure applied, across multiple layers of a problem to raise the temperature. Likewise, that fire can come from different accelerants. We define multiple categories of successful insight into how to shift

a problem, or design principles, to better understand the diverse entry points into a problem. Fundamentally, the Discovery Framework enables understanding of how clusters of solutions work in concert. In other projects, we've built these frameworks for diverse challenges, ranging from ending human trafficking to delivering health care in the developing world.

The strengths of the Discovery Framework:

- **It creates an entrepreneur's view of the world.** Entrepreneurs—of necessity—design solutions that address the thorniest aspect of effecting change: the human interactions in a system. Recommendations based on entrepreneurial solutions can predict and show ways of circumventing the behavioral barriers to change that strategies crafted from a more idealized viewpoint often cannot address.

- **It allows successful solutions to be examined in context with one another.** The framework shows how ideas relate to one another, as well as to the core elements of the problem. The result is the emergence of clear patterns: Which aspects of a problem are going unaddressed? Are some strategies underutilized? Overutilized? Is there an aspect of a problem that has yet to be named? Are there holes in the system that await the design of a new solution?

- **It provides the map for deriving a theory of change at a systems level.** The patterns and insights revealed by the framework allow a funder to develop a coherent strategy around what mix of solutions could lead to an overall increase in heat applied to the problem. While any theory of change is subjective, this contextual mapping allows for a holistic approach that merely quantifying the success of individual grantees can't provide.

- **It creates clear criteria for predicting success.** The design principles and barriers provide a roadmap for evaluating new grantees and for guiding the invention of new ideas.

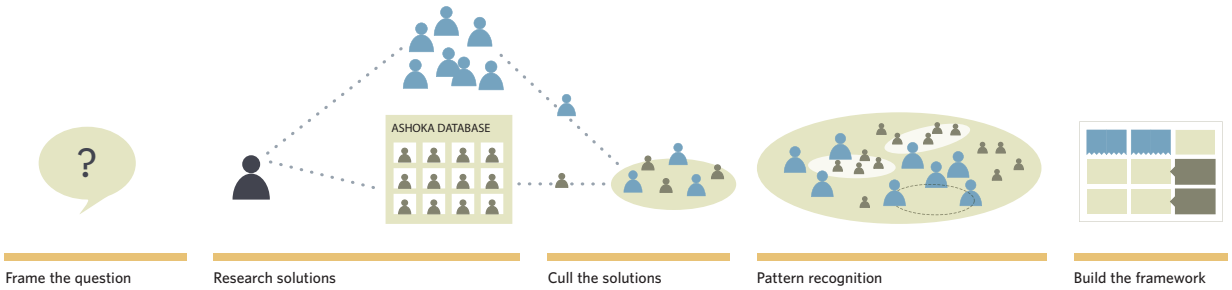
OUR PROCESS: BUILDING THE FRAMEWORK

The credibility of the framework comes from the success of the solutions we include in our analysis, rather than from statistical certainty or organizational metrics. The frameworks in this report are based on the successful solutions that entrepreneurs (from both the for-profit and nonprofit worlds) have invented to promote sustainable fishing practices.

For any framework, we begin by sifting projects from Ashoka's database of more than 2,300 solutions from social entrepreneur fellows. Before their election to the fellowship, these fellows go through a rigorous approval process, which includes a thorough vetting of their ideas and performance. To that group, we add solutions recognized in the field as effective, whether they are hatched by individuals, companies, or institutions and government agencies. Our definition of success for those outside the Ashoka fellowship in this case was twofold. First, the solution had to prove movement in the direction of its intended goal. Second, it had to make a reasonable case that its goal contributed to incremental progress toward sustainability, broadly defined as better outcomes for marine life. We did not require that solutions provide quantified metrics, or aspire to a scientifically provable contribution to a data-driven definition of sustainability.

Next, looking at the core innovations of each entrepreneur, we cull a set of solutions to the most relevant and innovative. Finally, we cluster the core innovations and look for patterns in both how the entrepreneurs define the problem they face and what they invent to solve it. These patterns can point to powerful ways of reframing a problem, as well as new ways of addressing it. Fundamentally, this analysis reveals the "Aha!" moment of recognition, in which an entrepreneur accurately pairs a powerful idea with a compelling need.

Those solutions are then placed in the Discovery Framework grid, which reveals patterns and holes in the collective approach to a social or environmental challenge. For this project, we constructed three Discovery Frameworks: one addressing solutions targeting consumers, one including solutions aimed at buyers, and one encompassing strategies for fisheries.



The Discovery Framework Development Process

OUR PROCESS: MAPPING OPPORTUNITY

We used these three Discovery Frameworks, and the research we did to construct them, to identify potentially powerful entry points into the problem of unsustainable fishing. At what points/phases could a new invention spur greater change? We named eight of these opportunities in our report, which we narrowed to three recommended choices in the final section.

The adjacent graphic explains the process we used to arrive at these three opportunity areas. From the initial research, we listened to the context—the background noise—and discerned the underlying tensions that govern all the entrepreneurial activity in the space. The tensions (along with the barriers and principles that compose the axes for each Discovery Framework) are reviewed in Part 2 of the report. Examining the individual frameworks allowed us to make specific observations about what was working and what was missing. Those observations led directly to the eight opportunities covered in Part 3.

Finally, we looked across all three frameworks together to discern themes that span the entire supply chain. These themes define the intractable problems in the space. They tell us where and why the system is stuck. Using those themes, we filtered our eight opportunities to discover which ones might successfully address these key challenges in the deepest and broadest ways. The three opportunities that measured most effectively against these themes are reviewed in Part 4.

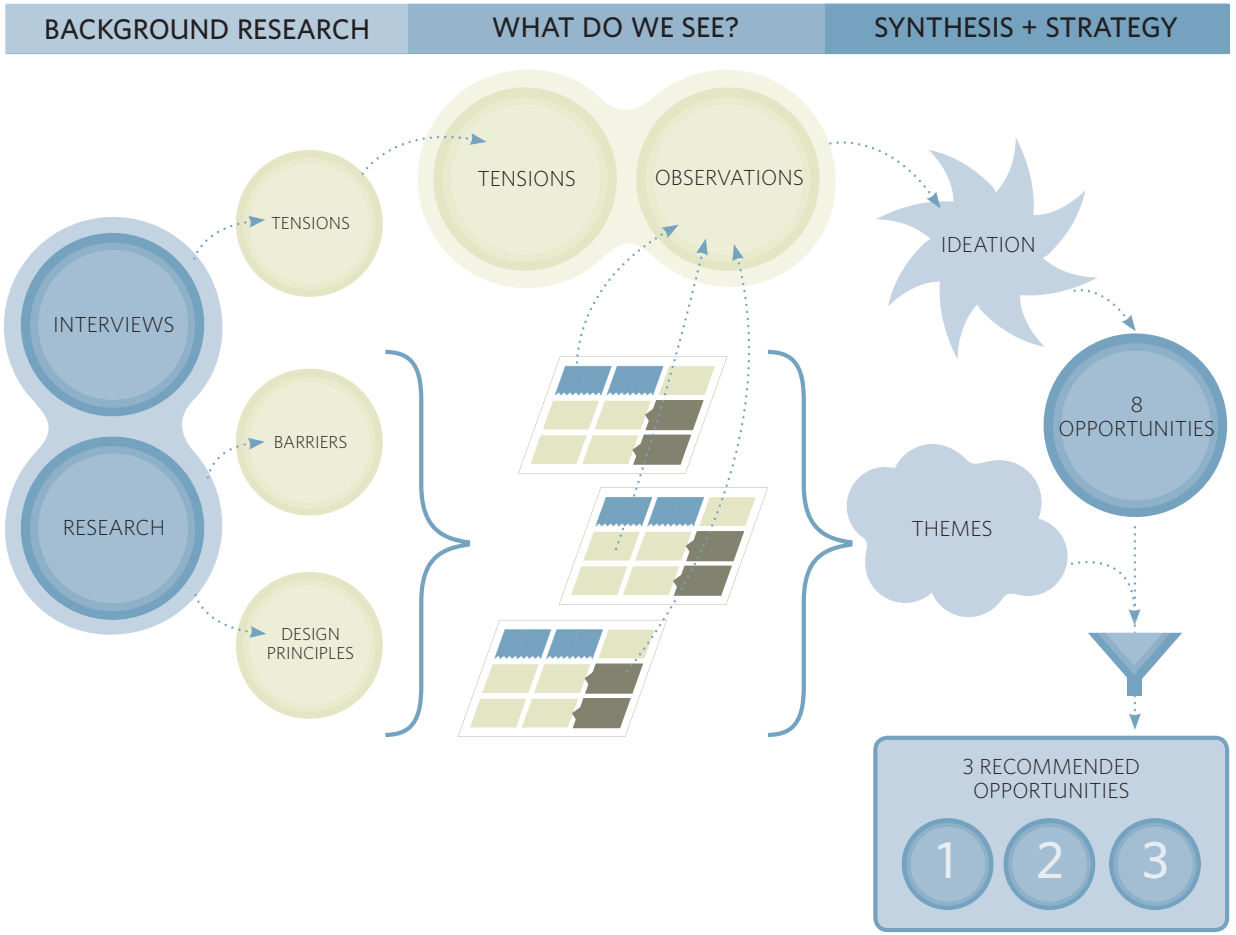
OUR VISION: THE POWER OF ENTREPRENEURS

The problem of unsustainable fishing is one often defined by a negative casting: counts of fish species decline every year, and the discouraged sense that "things are only getting worse" is rife among marine scientists and advocates. But through the research of this report, we saw reason for tenacious hope. Solutions are all around us: an Indonesian villager who halted the practice of potassium bombing as a fishing method by teaching local fishermen's children about the value of coral reefs; the chef who (almost single-handedly) built a supply chain for sustainable fish in Portland, Oregon, by launching a sushi restaurant that he insisted use only benignly harvested fish; the Peruvian woman who changed the eating habits of her entire country—and stopped the waste of tons of edible fish—by running a deft marketing campaign on behalf of the humble anchovy.

The lessons of these stories point to a future that can get better. This report identifies a path and specific strategy for the Packard Foundation itself to take

that journey of innovation—by discovering bold opportunities for change and leading other partners and stakeholders in a process of inventing a compelling, powerful solution.

Ultimately, these pages should be seen as an invitation: to re-envision what is possible, through the eyes of entrepreneurs.



Opportunities Mapping Process


The entrepreneur’s view
of a problem

PART 2: DISCOVERY FRAMEWORKS

To assemble these three Discovery Frameworks, we reviewed more than 120 solutions addressing the problem of unsustainable fishing. Some of these were strategies from for-profit companies; others came from social entrepreneurs or from nonprofit organizations. In each case, we attempted to research or discern the "Aha!" moment behind each invention, when an idea was coupled with an identified need.

We segmented these solutions based on which part of the supply chain they targeted: consumers, buyers, or fisheries. (In a few, rare cases, solutions addressed more than one of these groups.)

Each Discovery Framework includes the following components:

- **TENSIONS:** These are areas of friction that represent challenges to—and openings for—change. They identify points at which a system is stuck, and are therefore fruitful places towards which to channel effort and new ideas.

- **BARRIERS:** These are core components we identify of a problem that, if changed, could allow for a true shift in paradigm and behavior. Barriers are not market conditions or underlying causes that merely describe a situation. They must be movable and specific to the problem.

- **DESIGN PRINCIPLES:** These are insights we distill from the work of leading social innovators. They do not encompass tools (such as technology or education), nor do they name specific organization-level approaches. They are clarifying insights that identify levers of change.

- **ORGANIZATION PROFILES:** Brief descriptions of the innovations.

- **WHAT WE LEARNED:** Our observations about patterns, trends and holes.

- **THE FULL FRAMEWORK:** A fold-out grid of all the organizations placed according to the barriers they address and the design principles they employ.

At the close of this section, we'll review patterns and trends across all three frameworks.

CONSUMERS

How can we get more consumers to demand and buy sustainable seafood?

"Policy, in marine terms, is pretty useless. Really, what are your options, other than a consumer campaign?"

–Peter Knights, WildAid

Most consumers have no idea that the world's oceans are in an alarming decline, or how their purchase of unsustainably harvested fish, whether in the form of frozen fish sticks or sushi rolls in swank restaurants, affects the looming crisis. In the midst of that blissful ignorance, per capita fish consumption has nearly doubled in the past four years. Add projected population growth, and scientists predict a 37-percent increase in consumption by 2050. That demand could collapse the world's fisheries by mid-century.

What are the current efforts to engage consumers? Sustainability awareness campaigns abound, particularly in the US, Canada, and Europe. Seafood lists have raised awareness without changing buying patterns. Numerous labeling initiatives offer varying credibility and some market penetration but confuse consumers: Which label is correct? Successful campaigns have used a multipronged approach to address corporate policy and behavior, while plucking customers' heartstrings.

Unfortunately, these efforts combined often are redundant or underfunded and lack a clear target market. Save for a small handful of species-specific campaigns, there has been minimal success in changing consumer behavior.

Many question whether a consumer-led revolution is possible, given the short supply and limited availability of sustainable fish. Yet ultimately, consumers will change, either as leaders of a conscience-driven shift in buying habits, or as followers, left with the options that retailers' decisions, soaring prices, or species extinctions dictate. One thing is certain: consumer attitudes will never drive substantial change on the water as long as the sustainability community continues to engage them in the same old ways.

The following framework explores points of leverage, examples of instructive successes, and unexploited opportunities that could move consumers to demand and buy more sustainable seafood. The core question underlying this framework is, How can we get consumers to buy and demand more sustainable seafood?

USEFUL FRICTION

Tensions

These are areas of friction that represent challenges to—and openings for—change. They identify points at which a system is stuck, and are therefore fruitful places toward which to channel effort and new ideas.

Consumers decide based on brand. Fresh seafood is brand-free.

Brands become shorthand guarantees of reliability, consistency, and trustworthiness. With most fresh seafood unbranded, and most packaged seafood controlled by a few large processors, sustainable fish products have difficulty taking advantage of the way consumers typically relate to brand and storytelling. The brand logo that does exist for sustainable seafood—the Marine Stewardship Council certification—looks like a clinical, scientific stamp invented by people in lab coats, not a symbol with emotional resonance or relevance to anything consumers value.

"I polled 2,000 people by cell phone and asked if they understood the meaning of the MSC logo. Most did not. Once I explained the meaning, 90 percent said they would choose products that are labeled MSC."

-Kozo Ishii, Marine Stewardship Council, Japan

Fisheries are in crisis. Consumers don't see it.

The abundance of choices at the typical supermarket seafood counter belies the dwindling supply of fish in the ocean. Additionally, government subsidies for fishermen have insulated consumers from paying the true price of harvesting wild fish. To a consumer, fresh seafood is relatively cheap and plentiful. So, what's the problem?

"I think people don't get it. They think, 'If there is a problem with the oceans, how come the case in my grocery store is so full?' There's a disconnect."

–Jane Lubchenco, marine biologist

Conservationists care about the ocean's needs. Consumers care about their own needs.

Consumer priorities include price, convenience, quality, and personal health. Fisheries conservation organizations target their messages based on their own ethical priorities, not by appealing to consumer priorities. Consumers aren't motivated by conservationists' call to care about fish.

"I don't go to the supermarket to save the world. I go there to get good products to feed myself. It's okay to attach ethical value to a product—but I don't think it will ever work to spell out the ethical value alone. No matter how ethical it is, if it isn't delicious, people will not eat it."

–Barton Seaver, chef and sustainability advocate

Consumers want a portfolio of eco-conscious foods. Sustainable fish is not seen as one of them.

While free-range chicken is logically grouped by consumers with local produce and organic, hormone-free milk, that purchase grouping doesn't seem to extend to sustainable fish. In part, this disconnect seems to stem from the opacity of the word sustainable. Terms that are more specific (like free-range), or have positive connotations (like organic) resonate better with consumers.

"Henry and Lisa [Lovejoy, owners of EcoFish and Henry & Lisa's brand of sustainable seafood products, see p. 29] are the most eco, crunchy people, but they decided to take 'eco' off their label. They thought, why confuse people? Just put 'natural.' When you can cast your whole brand around delivering health, you do really well."

–Mike Boots, Seafood Choices Alliance

OUR PROCESS:

Barriers

These are core components we identify of a problem that, if changed, could allow for a true shift in paradigm and behavior. Barriers are not market conditions or underlying causes that merely describe a situation. They must be movable and specific to the problem.

discovery

Lack of access to product

In developed countries, where consumers demand convenience, too little sustainable fish is available in mainstream retail locations. When it is available, it costs more than unsustainable options, putting it out of reach for price-sensitive shoppers. Developing countries face access problems too. In Peru, for example, suppliers historically diverted an abundant supply of anchovies to fishmeal processing plants for export, denying Peruvians a locally available protein source that could be easily harvested sustainably.

Lack of clear information at point of purchase

Consumers like simplicity; seafood is complicated. Even motivated shoppers cannot get critical information about sustainability where they need it most: at the point of purchase. Labeling programs try to distill complex issues into simple, trusted, and actionable information, but their sheer number and variability confuse consumers. Seafood wallet cards and lists provide useful information, but those tools are rarely carried by customers or accessible at the point of purchase. The individuals who could help consumers make sustainable

choices—retail seafood managers and restaurant servers—are typically uninformed.

Consumer motivations at odds with conservation messaging

Most marketing experts agree on certain consumer hooks: price, convenience, wellness, and quality. Ads also exploit consumers' tendency to buy products that appeal to their sense of self and particular lifestyle and image. But ocean conservation organizations have focused on complex messaging that emphasizes benefits to the environment, as opposed to personal benefits. Branding, which instills loyalty, trust, and appeal, is lacking at the fresh-fish case, at restaurants, and on packaging of processed seafood products.

Apathy toward fish, fishermen, and the ocean

In Western culture, people tend to relate more easily to cowboys than to scarecrows. Few people anthropomorphize fish, or have a strong emotional tie to marine life. Fish do not figure into the collective history (the way, say, cattle do). It is not easy to show people their vital connection to our vast, unexplored oceans. Instead, they tend to see oceans as mysterious and dangerous. In cultures that do revere the ocean, that connection has not been exploited to engage consumers.

OUR PROCESS

Design Principles

These are insights we distill from the work of leading social innovators. They do not encompass tools (such as technology or education), nor do they name specific organization-level approaches. They are clarifying insights that identify levers of change.

Simplify the choice

Consumer messaging around sustainable seafood works best when it is simplified to clear-cut, obvious, and compelling criteria. This simplification must come from a trusted source. Stores (such as Whole Foods Market) and brands (Henry & Lisa's Natural Seafood) leverage their credibility to eliminate consumer confusion and to save their customers the effort of thinking through decisions. In addition, the sustainable seafood movement must learn to "brand" products to meet consumer needs. This requires a targeted effort that simplifies the choice and focuses on consumers' priorities: affordability, convenience, and personal health.

Make it personal

Consumers in both developed and developing countries are often detached from their food: they don't know what's in it, where it comes from, or how it got there. The movement to change that is gaining traction. In the US, thanks in part to popular cultural phenomena such as the book *Omnivore's Dilemma* and the film *Supersize Me*, consumers are asking more questions about what they're eating. In Europe and Latin America, more people are eager to redis-

cover the history of food's centrality to their culture. Recent food scares in China have heightened public concern over food safety worldwide. This increased interest in the narrative about where food comes from is an opportunity for the sustainable seafood movement.

Focus on the positive

Consumers often hear guilt-inducing diatribes about the negative environmental impact of their actions. But people don't want to hear what they're doing wrong. Leading people to feel good about their choices and showing them their power to positively affect their world requires a very slight shift in tone and message. "Sell the solution," says chef Barton Seaver. "Get people excited, not disappointed."

Streamline/simplify supply systems

Creating the simplest route from ocean to table can circumvent several of the barriers to engaging consumers. Online stores and restaurants that source directly from fishermen and offer consumers only sustainable options take the guesswork out of the consumers' decision. Minimizing the number of players in the chain of supply reduces opportunities for mislabeling, which leaves consumers confused, untrusting, and cynical. In coastal communities in developing countries, the opportunity to provide locally sourced sustainable seafood is enormous, but the trend is toward exporting.

Reinvent the customer experience

Differentiating sustainable fish only by its ocean-friendliness is not persuasive enough for most consumers. A unique approach that enhances the shopping or dining experience can convert customers to the cause. Consumers engage when they enjoy a novel or creative experience. Examples include offering recipes for seafood dishes at the fish counter, making heat-and-eat sustainable seafood meals, and making table-side restaurant education entertaining as well as informative.

DESIGN PRINCIPLE ONE

Simplify the choice

Consumer messaging around sustainable seafood works best when it is simplified to clear-cut, obvious, and compelling criteria. This simplification must come from a trusted source. Stores (such as Whole Foods Market) and brands (Henry & Lisa's Natural Seafood) leverage their credibility to eliminate consumer confusion and to save their customers the effort of thinking through decisions. In addition, the sustainable seafood movement must learn to brand products to meet consumer needs. This requires a targeted effort that simplifies the choice and focuses on consumers' priorities: price, convenience, and personal health.

DOLPHIN SAFE TUNA

The Dolphin Safe Tuna campaign, launched in 1986 by the Earth Island Institute, was an awareness campaign about dolphin bycatch aimed at tuna companies, policymakers, and consumers. The effort was greatly advanced in 1988 when the campaign released dramatic video of dolphins dying in nets and EII called for a boycott of offending canned tuna brands. By 1990 the negative public relations effects of the boycott prompted the three major canned tuna companies to change their practices. That same year the US Congress passed the Dolphin Protection Consumer Information Act, which created the Dolphin Safe label. Today nearly 90 percent of the world's canned tuna comes from certified Dolphin Safe sources—a change that came more as a result of changed corporate behavior from shaming than from shifts in consumer purchasing. BARRIERS: Lack of clear information at point of purchase · Apathy toward fish, fishermen, and the ocean

FISHPHONE

FishPhone is a cellphone text-messaging service that provides instant information about the sustainability of individual fish species plus sustainable alternatives to species not recommended. Consumers contemplating a purchase at a retailer or restaurant can type in the name of the fish they are

considering, send it to FishPhone, and in 10 seconds receive information and recommendations based on the Blue Ocean Institute's seafood list. The information is short, clear, and actionable. FishPhone is the first consumer-controlled point-of-sale information delivery system. BARRIERS: Lack of clear information at point of purchase

OCEAN WISE • MIKE MCDERMID

Ocean Wise is a Vancouver Aquarium conservation program, created in 2005 to help restaurants and their customers make environmentally friendly seafood choices. The program succeeds by researching and facilitating the sourcing of sustainable product, providing a logo for identifying menu items that qualify, and publicizing participating establishments through public events, media exposure, and a dining guide. Restaurants that join the program agree to gradually convert their menus to greater and greater sustainability. Ocean Wise trains and educates restaurant staff so they, in turn, can engage consumers in the conversation about seafood. Ocean Wise also eases the burden on chefs by providing them with up-to-date information about the complex and changing realities of seafood supplies and sourcing—a job that is too time-consuming and difficult for most chefs to manage. BARRIERS: Lack of clear information at point of purchase

VITAL CHOICE • RANDY HARTNELL

A former commercial salmon fisherman in Alaska, Randy Hartnell felt the negative economic effects of large retailers switching to farmed salmon. It was an act of personal financial desperation that sparked his idea to start an online direct-to-consumer wild salmon retail business, using the success of Omaha Steaks as a model. Hartnell knew consumer education would be an important part of generating business, and he capitalized on the health benefits of sustainable fish, which was being advocated by popular medical and lifestyle experts. Testimonials from best-selling authors such as Dr. Andrew Weil appear on the Vital Choice website, and Hartnell believes that it is these endorsements and the proven nutritional advantages that most inspire consumers to buy what he calls "worry-free" seafood. BARRIERS: Lack of access to product

WHOLE FOODS MARKET

Whole Foods, a publicly held company and one of the world's foremost organic and natural foods markets, leverages its influence over producers, suppliers, and consumers to advance fishing and aquaculture practices that minimize environmental impacts, ensure ecosystem health, and increase the abundance of marine life. Because Whole Foods cannot meet its customers' needs with MSC-certified seafood alone,

it has developed its own purchasing standards for non-certified wild and farmed fish. Whole Foods Market's aquaculture standards, which are the most stringent among the major retailers, were developed through partnerships with conservation organizations, an in-house seafood quality standards coordinator, and a fisheries management expert. Whole Foods works directly with suppliers and producers of sustainable fish and owns and operates four facilities that serve as bases for monitoring and distributing their seafood, which they sell under a private label. BARRIERS: Lack of access to product

DESIGN PRINCIPLE TWO

Make it personal

Consumers in both developed and developing countries are often detached from their food: they don't know what's in it, where it comes from, or how it got there. The movement to educate them is gaining traction. In the US, thanks in part to popular cultural phenomena such as the book *Omnivore's Dilemma* and the film *Supersize Me*, consumers are asking more questions about what they're eating. In Europe and Latin America, more people are eager to rediscover the history of food's centrality to their culture. Recent food scares in China have heightened public concern over food safety worldwide. This increased interest in the narrative about where food comes from is an opportunity for the sustainable seafood movement.

DISCOVER THE ANCHOVY • PATRICIA MAJLUF

A Peruvian conservationist, Majluf sought to address an environmental problem and illogical waste in her country: Peru exported millions of tons of anchovies (10 percent of the global harvest) as fishmeal for use as feed for pigs, chickens, and fish farms, while nearly a quarter of the country's children went malnourished. The anchovy depletion was also harming penguin populations and the health of coastal waters. Majluf partnered with chefs and scientists to launch a Discover the Anchovy campaign. With cook-offs, media attention, and the endorsement of the country's president and its top celebrity chef, the campaign salvaged the reputation of the anchovy, which despite its culinary and nutritional merits, had come to be considered unsavory. The demand for anchovies for human consumption increased 130 percent in the 20 months following the start of the campaign.

BARRIERS: Lack of access to product

CHEFS IN RAINGEAR • RILEY STARKS

Chefs in Raingear introduces restaurateurs to the world of reef net salmon fishing through day-long outings aboard a salmon fishing vessel in the area around the San Juan Islands off the coast of Washington State. Believing that the best education of consumers occurs in restaurants (two-thirds of all

US expenditures for seafood are made in restaurants), Starks decided to engage chefs in the story of where seafood comes from, what life is like for fishermen, and why sustainability is so important. Chefs in Raingear also focuses on promoting locally caught fish and provides fish directly to nearby Puget Sound area restaurants. About 25 chefs attend his program annually. After a day aboard a fishing vessel, the chefs return to the kitchen at Starks' inn and prepare a meal with the day's catch. The chefs return to their restaurants able to educate their kitchen and waitstaff and to engage their customers. BARRIERS: Lack of clear information at point of purchase

VITAL CHOICE • RANDY HARTNELL

See profile on page 25. BARRIERS: Consumer motivations at odds with conservation messaging

ECOFISH • HENRY AND LISA LOVEJOY

The Lovejoys launched EcoFish, a for-profit venture-capital-funded company, and pioneered sustainability within the seafood category in the United States in 1999. Since then they have built a retail brand, called Henry & Lisa's Natural Seafood, that is available in 3,000 grocery stores and 150 restaurants across the country. The brand is marketed foremost as a healthy choice that takes the guesswork out of purchasing decisions for consumers. Sustainability is a secondary selling point. Many of their products are canned or frozen, bucking the misconception that convenience foods cannot be healthy or ocean-friendly. EcoFish sees the Organic Valley branding as a model—a trusted brand carried in mainstream stores with strong annual growth. BARRIERS: Consumer motivations at odds with conservation messaging

WHOLE FOODS MARKET

See profile on page 25. BARRIERS: Lack of access to product • Consumer motivations at odds with conservation messaging

KIDSAFE SEAFOOD • SEAWEB

KidSafe Seafood, a program of SeaWeb, is a collaborative effort of chefs, pediatricians, and sustainable-seafood experts designed to help parents serve more nutritious seafood to their children. They provide information about how to avoid mercury and other pollutants that can be found in fish, along with guidance for making ocean-friendly seafood choices. Their target audience is parents and pregnant women, and they appeal most specifically to personal health, with sustainability as an attendant bonus. KidSafe Seafood has an online "Best Choices" list, kid-friendly seafood recipes, fish facts, and a list of fish species that includes health concerns and

sustainability for each. BARRIERS: Consumer motivations at odds with conservation messaging

WILDAID • PETER KNIGHTS

WildAid, which is dedicated to ending the illegal wildlife trade, launched a shark conservation program in 2000 with an aggressive consumer awareness element. Targeting Asia, the largest market of sharks and shark fin soup, the strategy has included producing mini-documentaries and PSAs, garnering celebrity spokespeople, and lobbying corporations that host large catered events. Consumption of shark meat declined as much as 30 percent in Hong Kong, Thailand, Singapore, and Taiwan in the years following the launch of the campaign. WildAid surveys show that public awareness was a large part of the success. Widely distributed celebrity PSAs and billboards can reach a billion people a week. Knights says that in the face of policy and enforcement hurdles, raising awareness is sometimes the best chance for success. BARRIERS: Apathy toward fish, fishermen, and the ocean

DOLPHIN SAFE TUNA

See profile on page 24. BARRIERS: Apathy toward fish, fishermen, and the ocean

TOGNAZZINI'S DOCKSIDE RESTAURANT • MARK TOGNAZZINI

Mark Tognazzini, a former commercial fisherman, owns Tognazzini's Dockside Restaurant, which is designed to draw a direct connection between customers and the fishermen who caught the seafood on their plates. Each table in the restaurant is dedicated to a particular fisherman—with information and images of the crew at work—and the waitstaff goes through a rigorous training program (including spending time at the fish market) to be prepared to answer customer questions and tell a compelling story about the origins of the fish. Tognazzini says the consumers go away with a deep appreciation not only for fishermen but also for sustainable seafood. BARRIERS: Apathy toward fish, fishermen, and the ocean

DESIGN PRINCIPLE THREE

Focus on the positive

Consumers often hear guilt-inducing diatribes about the negative environmental impact of their actions. But people don't want to hear what they're doing wrong. Leading people to feel good about their choices and showing them their power to positively affect their world requires a very slight shift in tone and message. "Sell the solution," says chef Barton Seaver. "Get people excited, not disappointed."

DISCOVER THE ANCHOVY • PATRICIA MAJLUF

See profile on page 28. BARRIERS: Lack of access to product • Consumer motivations at odds with conservation messaging

HOOK • BARTON SEAVER

Hook, a restaurant founded by chef Barton Seaver in Washington, DC, serves only sustainable fish. His idea is that offering even a few unsustainable options would be a tacit endorsement, and that demonstrating that sustainable offerings are plentiful and delicious presents a model for other restaurants and a lure for engaging consumers. An advocate of diversifying menu offerings to expose consumers to new kinds of fish, Seaver believes chefs and waitstaff can change consumer habits and tastes. Seaver focuses on giving consumers a positive message, rather than the punitive one the public tends to hear about the environment. Seaver's success can be measured in dollars: first-year sales exceeded projections by 85 percent. BARRIERS: Lack of access to product • Consumer motivations at odds with conservation messaging • Apathy toward fish, fishermen, and the ocean

FISHPHONE

See profile on page 24. BARRIERS: Lack of clear information at point of purchase

HABITAT MEDIA • STEVE COWAN

Habitat Media is the production company behind the PBS documentaries *Empty Oceans* and *Farming the Seas*. Producer Steve Cowan focused on providing viewers concrete examples of positive consumer action. Using the powerful visuals the ocean and sea life provide, along with disturbing images of the destruction of sea life and pollution, the documentaries engage viewers in understanding the ramifications of human activities and behaviors. They then offer solutions by profiling innovators in the sustainable seafood arena, highlighting consumers changing their behavior, and providing further information on the show's website. The audience for subsequent showings of the documentaries reached into the millions, Cowan says, and each time they aired, there was a spike in the number of downloads of the seafood guide provided on the show's website. BARRIERS: Apathy toward fish, fishermen, and the ocean

DESIGN PRINCIPLE FOUR

Streamline/simplify supply systems

Creating the simplest route from ocean to table can circumvent several of the barriers to engaging consumers. Online stores and restaurants that source directly from fishermen and offer consumers only sustainable options take the guesswork out of the consumers' decision. Minimizing the number of players in the chain of supply reduces opportunities for mislabeling, which leaves consumers confused, untrusting, and cynical. In coastal communities in developing countries, the opportunity to provide locally sourced sustainable seafood is enormous, but the trend is toward exporting.

VITAL CHOICE • RANDY HARTNELL

See profile on page 25. BARRIERS: Lack of access to product

CHEFS COLLABORATIVE • LEAH BELLANGER

Chefs Collaborative publishes "Seafood Solutions: A Chef's Guide to Sourcing Sustainable Seafood," which is distributed at conferences, through like-minded organizations and websites, and as a free download on their own site. The resource, published since 2000, is a primer that outlines the basic questions to ask and issues to consider when sourcing seafood. Chefs Collaborative is also creating a culinary school curriculum for training new chefs in the many aspects of sustainable seafood, including wild vs. farmed, local seafood, seasonal species, imported fish, food miles, and sourcing and preparation. The program launched this winter, with more than 20 schools already expressing interest in the curriculum. BARRIERS: Lack of clear information at point of purchase

DESIGN PRINCIPLE FIVE

Reinvent the customer experience

Differentiating sustainable fish only by its ocean-friendliness is not persuasive enough for most consumers. A unique approach that enhances the shopping or dining experience can convert customers to the cause. Consumers engage when they enjoy a novel or creative experience. Examples include offering recipes for seafood dishes at the fish counter, making heat-and-eat sustainable seafood meals, and making table-side restaurant education entertaining as well as informative.

ECOFISH • HENRY AND LISA LOVEJOY

See profile on page 29. BARRIERS: Lack of access to product

VITAL CHOICE • RANDY HARTNELL

See profile on page 25. BARRIERS: Lack of access to product

OCEAN WISE • MIKE MCDERMID

See profile on page 25. BARRIERS: Lack of clear information at point of purchase

WHOLE FOODS MARKET

See profile on page 25. BARRIERS: Lack of clear information at point of purchase • Consumer motivations at odds with conservation messaging • Apathy toward fish, fishermen, and the ocean

TOGNAZZINI'S DOCKSIDE RESTAURANT • MARK TOGNAZZINI

See profile on page 30. BARRIERS: Apathy toward fish, fishermen, and the ocean


dis·cov·er |dis 'kə vər|
verb
1. to obtain sight or knowledge of for the first time
2. to make known or visible
discovery

Barriers

LACK OF ACCESS TO PRODUCT	LACK OF CLEAR INFORMATION AT POINT OF PURCHASE	CONSUMER MOTIVATIONS AT ODDS WITH CONSERVATION MESSAGING	APATHY TOWARD FISH, FISHERMEN, AND THE OCEAN	CONSUMERS FRAMEWORK
VITAL CHOICE WHOLE FOODS MARKET	DOLPHIN SAFE TUNA FISHPHONE OCEAN WISE		DOLPHIN SAFE TUNA	SIMPLIFY THE CHOICE
DISCOVER THE ANCHOVY	CHEFS IN RAINGEAR	VITAL CHOICE ECOFISH WHOLE FOODS MARKET KIDSAFE SEAFOOD	BLUE OCEAN INSTITUTE WILDAID DOLPHIN SAFE TUNA TOGNAZZINI'S DOCKSIDE RESTAURANT	MAKE IT PERSONAL
DISCOVER THE ANCHOVY HOOK	FISHPHONE	DISCOVER THE ANCHOVY HOOK	HABITAT MEDIA HOOK	FOCUS ON THE POSITIVE
VITAL CHOICE	CHEFS COLLABORATIVE			STREAMLINE/ SIMPLIFY SUPPLY SYSTEMS
ECOFISH VITAL CHOICE	OCEAN WISE WHOLE FOODS MARKET	WHOLE FOODS MARKET	WHOLE FOODS MARKET TOGNAZZINI'S DOCKSIDE RESTAURANT	REINVENT THE CUSTOMER EXPERIENCE

Design Principles

OBSERVATIONS

What we learned from the framework

Successful consumer campaigns are about perception first, action second.

Widely successful campaigns have not sparked widespread consumer action. Rather, they've created a perception of a consumer movement that prompted policymakers and companies to act, which then, in turn, drove behavioral change.

Notably, single-species campaigns, such as Dolphin Safe Tuna, Caviar Emptor, and Give Swordfish a Break, successfully changed consumption patterns only after guidelines for sustainable harvesting practices, import bans, and quota restrictions had been adopted—achievements explicitly stated as major goals of those campaigns. Threatened boycotts, aggressive lobbying, and elite chefs' endorsements were among the key elements of these programs, combined with public information campaigns.

Many sources we interviewed dismissed consumer campaigns altogether as a strategy. The thinking goes, If the supply cannot meet the demand created by shifted consumer mindsets, then why bother to target mindsets? That logic falsely assumes that one strategy (targeting consumers vs. targeting supply) is provably more powerful than the other, and that both work equally well in isolation. It also mistakes as the primary goal of consumer campaigns to generate consumer demand, when in fact, the first goal is to create public pressure.

"I think we shouldn't differentiate consumer campaigns from policymaker education campaigns. It's all part of a political will campaign, really."

–Peter Knights, WildAid

OBSERVATIONS

What we learned from the framework

Reluctance to agree on and simplify the definition of sustainability sabotages the message to consumers.

Omitted from the framework, perhaps surprisingly, are the seafood lists and wallet cards that North American, European, and international conservation organizations promote aggressively. Simply put, these tools have not been shown to influence consumer purchases. They are redundant, confusing consumers about which is the "right" list. Consumers (as well as buyers) point to the relatively minor yet very real inconsistencies as a reason to be cynical about the science. Even the portable lists are rarely available at the crucial point of purchase.

Similarly, seafood labels aim to clarify the issue and reduce guesswork for consumers. But the labels' lack of agreement suggests that there is no clear definition of sustainability. Consumers become confused and skeptical. Other label certification programs took decades to succeed, even when, as in the case of organics, government guidelines ultimately defined label requirements. Eventually, credible labeling evolved over time and through many different channels. The same could be happening with sustainable seafood, but the field itself is surely slowing the process in its inability to embrace one simple standard.

"It would take until the next century for everything that's labeled sustainable to be totally sustainable in every case by all standards. What you need is a rough coalescence around what that means. The market will move past us if we wait until we have the labeling perfect."

-Mike Boots, Seafood Choices Alliance

We've asked scientists to do a marketer's job.

No sustainable fisheries group has created a targeted, aggressive marketing campaign that draws on the expertise of those with proven success in changing consumer behavior. Campaign strategies rarely include marketing consultants, advertising executives, and social scientists (sociologists, psychologists, anthropologists, and economists)—the very people corporations engage the moment they launch consumer campaigns. Campaigns rarely make the tradeoffs necessary to create change in a specific consumer segment. Instead, they push a broad agenda to an undifferentiated audience—leaving no real message and no real target.

"When we ask, Why can't we get the public more engaged? and Why can't we get consumers more engaged? Well, we're having that conversation with biologists and policy wonks. To them, it's completely apparent why this is important. To the consumer, it's not."

-Mike Boots, Seafood Choices Alliance

OBSERVATIONS

What we learned from the framework

Targeting affluent consumers in the industrialized world to the near exclusion of all other audiences is a strategic blunder.

While the US and European markets for seafood are large, much of the consumption of fish is happening in the developing world. Fish is the primary source of protein for much of the world's population, particularly in Asia. Today, Asians consume two-thirds of the world's seafood, and this proportion is rapidly increasing. Meanwhile, public education campaigns are virtually nonexistent. Markets elsewhere in the developing world, especially in Africa and South America, are growing in numbers and affluence. All these audiences require a different marketing approach to sustainable fishing. In Japan, for instance, a cultural connection to the sea represents an opportunity to engage consumers that does not exist in all countries, but supply is not prepared to meet demand even if an awareness campaign were launched.

"To date, very few Asian consumers discriminate between products in the context of environmental issues and, therefore, are not targeted by groups like the Marine Stewardship Council. Furthermore, future expansion in demand for fish and fishery products is expected to rise not only in Asia, but also in Latin America and Africa, where consumers are also likely not to be responsive to eco-labeling of fish."

-Jennifer L. Jacquet and Daniel Pauly
researchers at the Fisheries Centre
at the University of British Columbia

We've left potentially powerful audiences out of the equation.

Kids have been important change agents in recycling and anti-litter campaigns and have a powerful voice in family purchasing decisions. Yet we do not include them in the equation for sustainable fishing. Environmental issues resonate strongly with kids, and the entertainment business has capitalized on this. They have made money producing blockbuster animated films such as *Finding Nemo, Happy Feet, Madagascar, and Wall-E*, the wall-to-wall TV shows for kids interested in science and nature on Discovery Kids, National Geographic Kids' high subscription magazine and strong website, and novelist Carl Hiaasen's bestselling pro-environment screwball books for young readers.

Corporations successfully tie characters from these narratives into marketing initiatives. Elmo is on boxes of organic macaroni and cheese, SpongeBob SquarePants lends his face to packages of carrots and spinach, and Nemo the clown fish is in McDonald's Happy Meals. Can fish benefit from these kinds of cross-promotion too?

Another overlooked audience is people of faith. Faith and religion are primary motivators for many people. Some faiths already teach reverence for the earth and the oceans. Others are just beginning to see environmental stewardship as a religious responsibility. While nascent efforts at engaging this group are under way, most notably by the Blue Ocean Institute, there are no demonstrated successes recorded to date.

BUYERS

How we can mobilize more buyers to source sustainable seafood?

"We're successful in the sense of sustainability, not in terms of economics"

–Alan Hummel, New Seasons Markets

At first glance, the enormous and powerful network of seafood buyers seems the most obvious and influential point of entry for producing systemic change around sustainable fishing. This massive web of actors—including secondary processors and importers, brokers and wholesalers, suppliers and distributors, and retailers and foodservice buyers—appears well-positioned to force compliance on the part of fishermen and to drive consumer purchasing by controlling what's for sale.

But when this supply chain is dissected into its individual parts, it is the human interactions that take center stage, and the formidable barriers to change come clearly into focus.

Each year, over 140 million metric tons of wild-caught fish and shellfish funnel through docks, ports, and massive offshore factory processors into the global seafood market. The average catch can go through four or more different suppliers, distributors or processors before it lands on a plate. Thirty-eight percent of this production travels internationally, flowing largely from the developing to the developed world. Transparency and traceability are the exception rather than the rule: more than one-third of all fish sold in the US is mislabeled, in some cases intentionally so, by distributors or final retailers, to increase profits. The Food and Drug Administration inspects just 1 percent of all seafood imports.

Large buyers hold unique positions of economic, societal, and political influence. Ultimately, they determine the seafood choices available to consumers. Yet with few exceptions, major buyers have not made sustainable seafood a priority.

The core question underlying this framework is, How can we mobilize more buyers to source sustainable seafood?

USEFUL FRICTION

Tensions

These are areas of friction that represent challenges to—and openings for—change. They identify points at which a system is stuck, and are therefore fruitful places toward which to channel effort and new ideas.

Long term, sustainability will save the seafood business. Short term, it costs business.

Most seafood buyers recognize that their future relies on the security of a long-term supply of fish, and thus sustainable fisheries management. Still, the seafood industry treats seafood as a commodity and prices it as such. Margins are slim, and seafood sellers rely on volume to earn profits—if they earn any at all.

Many buyers believe that, to a consumer, protein is protein; if seafood prices are too high, people will merely switch to chicken or beef. Before buyers aggressively seek sustainable supplies, they will need to see clear business benefits, among them higher profits, improved public image, increased customer loyalty, competitive advantage, and investor approval.

"People are looking for economic value in the short term, whereas sustainability is all about having seafood in 10 or 20 years."

-Phil Fitzpatrick,
Marine Stewardship Council - Americas

Ideal transactions for a buyer are rote, efficient, and easily profitable. Sustainable purchasing has none of these qualities.

Purchasers for retail and foodservice companies respond to one directive: buy good quality and get it cheap. Often, their jobs include categories other than fresh fish. So conversations about sustainability have no tie to their success, particularly when lessening the toll on the planet is not often a corporate priority.

"Traditional supermarkets may sell 15,000 different things. And many retailers have a few people within their ranks who do the purchasing. One month you might be purchasing seafood; the next month you might be purchasing staplers."

-Matt Elliot, Sea Change Investment Funds

Buyers are asking for help. NGOs lack the capabilities to deliver.

Major buyer engagement is widely considered to be the most strategic and productive approach to shift the seafood market toward sustainability. Most NGOs focus on targeting buyers as central to their theory of change. But the majority of experts in all corners of the field interviewed for this report (including the NGOs themselves) referred to typical NGO engagement tactics as ill-informed, arrogant, and ineffectual. Examples included the all-or-nothing approach of demanding that a buyer make sustainable sourcing commitments, even if those commitments lost profits for the company and wouldn't produce actual change in fishing practices. In some cases, NGOs reportedly violated nondisclosure agreements with clients and (perhaps inadvertently) shared information about suppliers, producers, or sourcing strategies with their competitors.

In spite of the criticisms levied against NGOs for their shortcomings, the demand for their services is more than they can handle. In many cases, companies approach NGOs for help with sustainability, not the other way around. NGOs often lack both the

person-power and the expertise to build meaningful and successful partnerships with all the businesses expressing interest.

"Over 25 companies have come to us, and we've turned a lot away. We haven't had time to do a lot of marketing. We're just trying to field existing inquiries. Now that we have more capacity, we're fine-tuning our project goals and approaches. We've hired consultants to help us move forward, since we don't have much experience building relationships with businesses."

-Lydia Bergen, New England Aquarium

"I own a seafood business and want to advance sustainability. What can I do? And don't tell me to not sell red-listed products, because I won't do it, and that's what your colleagues always tell me to do."

-Bob Sullivan, a seafood buyer for Plitt Co., in his first meeting with Ocean Conservancy

NGOs want standards to protect fish. Buyers need standards to sell them.

While conservation groups continue to fall short in their efforts to build consensus over sustainability criteria, demand for sustainable seafood continues to grow. The fact that buyers are moving forward, regardless of where the conservation community stands on the sustainability definition, can be viewed as both positive and potentially dangerous.

For example, when retailers like Whole Foods are unable to source the quantity and variety of sustainable seafood needed to meet demand, it makes sense for them to create their own internal sourcing criteria. These requirements, while not necessarily universal and perhaps not as stringent as those of the MSC, are at least consistent with the idea of sustainability as an incremental process and are helping to drive more sustainable fishing practices. Yet, without verifiable and accepted sustainable criteria for non-MSC-certified seafood, less-conscientious buyers can use and define the term "sustainable" however they choose.

Indeed, despite the fact that MSC-certified seafood makes up, at most, 4 percent of the global annual harvest, noteworthy numbers of US chain restaurants (28 percent), retailers (20 percent), and wholesalers (52 percent) report that at least half the seafood they sell is "sustainable." This apparent eagerness to provide customers with sustainable product is an opportunity for NGOs to collaborate further on viable, incremental strategies to ensure that "sustainable" is meaningful—yet also attainable—and does not become another casualty of greenwashing.

"There are a lot of environmental organizations out there doing different things with respect to seafood, and there's a general confusion response by retailers as to how they should proceed, what their approach should be."

-Tobias Aguirre, FishWise

OUR PROCESS

Barriers

These are core components we identify of a problem that, if changed, could allow for a true shift in paradigm and behavior. Barriers are not market conditions or underlying causes that merely describe a situation. They must be movable and specific to the problem.

NGOs convey naïveté about business

Going hand-in-hand with the tight-knit nature of the seafood industry is mistrust of outsiders and outside ideas. Whether or not these perceptions are justified, many in the seafood business believe the conservation community is antibusiness, unreasonable, or out of touch. The sources of these perceptions are varied. Media portrayals of environmental groups have played a part, along with antagonistic countermessaging from special-interest industry groups. Some opinions stem from experiences with NGOs that communicated poorly, lacked a nuanced worldview, were inflexible, or approached industry players with insufficient deference. Such attitudes limit partnership opportunities between the conservation community and seafood buyers and contribute to underlying hostility toward sustainability.

Skepticism, confusion around “sustainable”

Seafood buyers are skeptical about sustainable seafood. Some cite the lack of a clear definition of sustainability, as well as uncertainty as to whether sourcing sustainable seafood actually produces

positive change in the water. Buyers who understand the importance of sustainability—for the long-term future of their business and/or for appealing to socially minded consumers—are often bewildered, intimidated, or discouraged by the volume of information involved when sourcing sustainable fish. Few have the time or resources to figure it out on their own. Many conservation organizations adopted versions of a red-yellow-green rating system to simplify the decision, but these systems often conflicted. They exacerbated the buyer's challenge, and may have reinforced less-than-complimentary perceptions of NGOs.

Sourcing difficulties

The current supply of sustainable seafood cannot meet total seafood demand. The gist of the problem is that too few species are harvested sustainably. Should a major buyer replace all its currently unsustainable stock with approved species, its bottom line would suffer. Further, most buyers follow consumer demand, and the average consumer doesn't recognize or want many of the verified sustainable species. Finally, buyers interested in sourcing sustainable seafood can't find a distributor or producer to supply the sought-after species. The cause may be the closed nature of the traditional supply chain or the fact that the many sustainable producers are small voices that do not resonate in the market.

Lack of interest, lack of incentive

Many seafood buyers think sustainable seafood costs more than it's worth. They don't see any economic or business value, and they don't believe their customers would pay more for sustainable product. Some don't have a corporate social responsibility policy that includes sustainability; others don't see themselves as advocates of social causes. For smaller buyers or retailers, their lack of interest in sustainable seafood precludes any sustainability program. The task of educating employees to answer consumer questions, especially in low-status, minimally skilled jobs, dooms any sustainability program to failure.

Insufficient, unverified seafood product information

The lack of transparency within the seafood supply chain, coupled with well-known instances of mislabeled seafood, erodes buyer and consumer confidence in sustainability claims. Buyers interested in sourcing sustainable seafood want accurate information about species, country of origin, the legality of the catch, the status of the fishery and the gear used, especially if they pay a higher price for sustainable fish. If a customer asks about the specifics of a product labeled sustainable, buyers need accurate and confidence-producing information.

OUR PROCESS

Design Principles

These are insights we distill from the work of leading social innovators. They do not encompass tools (such as technology or education), nor do they name specific organization-level approaches. They are clarifying insights that identify levers of change.

Make the business case at multiple levels

Sourcing sustainable seafood necessarily alters the status quo. Companies resisting change need evidence that sustainability is good for business. Corporate decision makers want solutions that build their brand, increase profits, or provide a competitive advantage. Buyers can work better with solutions that involve steady, incremental change within their existing supply systems as opposed to a complete overhaul.

Leverage the power of branding

A trusted brand can motivate or facilitate sustainable seafood sourcing. Proactive strategies include creating a new, trusted sustainable seafood product brand, marketing sustainable seafood under a trusted private label, and publicly recognizing industry champions for sustainability with an annual award. A reactive strategy is to exploit the power of brands in the media by publicizing their relative record on sustainable seafood sourcing.

Cultivate readiness

Effectively changing a buyer's behavior requires a productive, long-term relationship, not just lobbying or negotiating. In some cases, multiple players might work different angles of persuasion (both stick and carrot) in concert. In others, a productive collaboration produces safer, less combative venues and forums. In any case, the buyer's state of mind requires attention to more than the ultimate desired outcome.

Recruit and work with champions

A dedicated evangelist or champion can mobilize the supply chain toward more sustainable products. Champions include business consultants who facilitate NGO–company partnerships, experts in fisheries management hired to develop a corporate sustainable seafood program, NGOs brought in to mediate buyer-supplier communication, and individuals within the industry who advocate for better fisheries management or expanded certification. These are the trusted voices that build buyers' confidence so they commit to sustainable seafood. Recruiting and grooming these champions is a powerful way to secure a company's buy-in.

Simplify and ease access to information

The sustainable seafood market will not expand if the job of finding, deciphering, understanding, and implementing complex and detailed information lies with the buyer. Buyers need information systems that work within their purchasing systems. They need good information that's accurate and easy to obtain. Successful solutions include an online database of fish species and their sustainability rankings, an organization that works in-house to help with seafood sourcing and point-of-purchase labeling, or a directory of buyers and producers that provides a platform for aligning supply and demand.

Disintermediation, direct engagement

For sustainable sourcing to be viable for buyers, each link in the complex supply chain must preserve the integrity of the sustainable product. One strategy is to get as close to the fishermen as possible by removing links in the chain. Such direct engagement can breed trust, reduce dishonest information, and produce interest and enthusiasm.

DESIGN PRINCIPLE ONE

Make the business case at multiple levels

Sourcing sustainable seafood necessarily alters the status quo. Companies resisting change need evidence that sustainability is good for business. Corporate decision makers want solutions that build their brand, increase profits, or provide a competitive advantage. Buyers can work better with solutions that involve steady, incremental change within their existing supply systems as opposed to a complete overhaul.

SUSTAINABILITY PARTNERSHIPS • MARK POWELL, OCEAN CONSERVANCY

Ocean Conservancy creates custom designed programs to provide seafood buyers with concise information, reasonable action steps, and measurable goals that align with their business plans. These management changes not only contribute to the future of fisheries but also carry market benefits because they are favored by major buyers and savvy consumers. Whereas the sustainable seafood movement thus far has focused on advising seafood buyers and consumers on best and worst choices in seafood consumption based on certain sustainability criteria, Ocean Conservancy has proposed a model that allows buyers to make an impact on the water by helping fix troubled fisheries while continuing to source from them. This unique approach has won industry support and has already helped advance sustainability for Gulf of Mexico red snapper and shrimp by supporting fishing practices that improve both the quality and quantity of Gulf seafood.

BARRIERS: NGOs convey naïveté about business

FISHERY IMPROVEMENT PARTNERSHIPS • JIM CANNON, SUSTAINABLE FISHERIES PARTNERSHIP

The nonprofit Sustainable Fisheries Partnership helps stakeholders advocate for appropriate regula-

tion of fisheries and fish farms, choose their sources wisely, and meet their own sustainability commitments. SFP convenes the players involved in particular fisheries to form Fishery Improvement Partnerships, alliances that press for better policies and management while voluntarily changing purchasing and fishing practices to reduce problems such as illegal fishing, bycatch, and habitat impacts. To build trust along the supply chain, the Sustainable Fisheries Partnership works all the angles by finding and investing in trusted people (including community leaders and CEOs of major supplier companies) and running mainly as a virtual or network organization with few centralized staff and low overhead. BARRIERS: NGOs convey naïveté about business · Sourcing difficulties

FISHWISE

FishWise is a nonprofit seafood sustainability consultancy dedicated to promoting ocean conservation through partnerships with key players in the industry. FishWise works with retailers, distributors, fishermen, aquaculturists, and other stakeholders to create a more transparent chain of custody and increase the amount of sustainable seafood available to US consumers. FishWise uses a variety of tools and programs including point-of-purchase materials, employee training, strategic planning, publicity, scientific fishery analyses, and sourcing support. FishWise seeks to identify visionary retail companies that already have a commitment to environmental issues, are interested in transforming their seafood selection, and are willing to be transparent. The FishWise program is the leading science-based, sustainable seafood labeling program for grocery stores. BARRIERS: Skepticism, confusion around "sustainable" · Sourcing difficulties

OCEAN WISE · MIKE MCDERMID

See profile on page 25. BARRIERS: Skepticism, confusion around "sustainable"

DISCOVER THE ANCHOVY · PATRICIA MAJLUF

See profile on page 28. BARRIERS: Sourcing difficulties

BAMBOO SUSHI · KRISTOFOR LOFGREN

Kristofor Lofgren is co-owner of Bamboo Sushi in Portland, Oregon, one of the very few sustainable sushi restaurants in the US and the only stand-alone US restaurant to date to receive Chain of Custody certification from the Marine Stewardship Council. For a restaurant to use the MSC logo on its menu, Chain of Custody certification requires it to adhere to strict sourcing and traceability standards. Bam-

boo Sushi serves only seafood certified by MSC or approved by the Monterey Bay Aquarium's Seafood Watch program. Lofgren has accepted the challenge of providing sustainable seafood to customers at an affordable price. He has cut costs by eliminating middlemen, encouraging vendors to buy direct from fishermen around the world, and cultivating business relationships with seafood vendors. Because of his vision and this procurement strategy, Lofgren has single handedly ushered in a branch of the sustainable seafood supply chain to Portland, which has motivated other restaurants to join in the movement, bringing additional revenue to Lofgren's suppliers. BARRIERS: Sourcing difficulties

FISHCHOICE • RICHARD BOOT

A nonprofit organization founded in early 2008, FishChoice provides an online portal where commercial seafood buyers and suppliers can find seafood products rated by the environmental community. Because of the fragmented and information-poor nature of the seafood industry, producers of environmentally preferable fish can't connect efficiently with consumers who are demanding it. FishChoice allows supply to meet demand in a way that would not be possible through the traditional channels. FishChoice, which serves only as a third-party provider of information, has an in-house procurement team to source the product, gather information, and post data online. Buyers can log on and forward information about a particular supplier or producer to their distributor, who can then source and deliver the product. BARRIERS: Sourcing difficulties

TRACEREGISTER • PHIL WERDAL

TraceRegister is a for-profit, third-party seafood supply chain registry designed to track seafood through each step of production, distribution, and sales, pairing each product with information on the nature, origin, and quality of the seafood. The service is a lone technological solution for traceability amid an epidemic of illegal, unregulated, and unreported, or "IUU," fishing, as well as seafood mislabeling and food safety issues. TraceRegister serves certification organizations, certified producers, and downstream players throughout the global seafood industry by providing a multilingual Internet-based service with secure access and a safe, uniform data exchange format. BARRIERS: Insufficient, unverified seafood product information

DESIGN PRINCIPLE TWO

Leverage the power of branding

A trusted brand can motivate or facilitate sustainable seafood sourcing. Proactive strategies include creating a new, trusted sustainable seafood product brand, marketing sustainable seafood under a trusted private label, and publicly recognizing industry champions for sustainability with an annual award. A reactive strategy is to exploit the power of brands in the media by publicizing their relative record on sustainable seafood sourcing.

ECOFISH • HENRY AND LISA LOVEJOY

See profile on page 29. BARRIERS: Skepticism, confusion around "sustainable"

WILD PLANET

Wild Planet Inc. is a brand that distributes seafood only from ecologically sound, sustainable fisheries using line-caught or trap-caught products. In 2003 Wild Planet discontinued involvement in fisheries that used harvest methods that resulted in bycatch or ecosystem damage. Wild Planet serves as a liaison between catcher and consumer, attempting to use its influence in the seafood industry to educate, as well as lead—raising the bar of food excellence from within the industry for the good of all consumers. In addition to its distinguished marketing brand, Wild Planet is operated by Carvalho Fisheries. From the selection of the fish to the processing methods, to the marketing to buyers and consumers, it directly oversees all phases of its seafood product line. BARRIERS: Skepticism, confusion around "sustainable"

MARINE STEWARDSHIP COUNCIL

The MSC is the world's leading certification program and most recognized eco-label for sustainable seafood. Established in 1997 by Unilever and the World Wildlife Fund the MSC has developed

sustainable fishing and seafood traceability standards based on scientific data and verified by independent third-party accredited certifiers. The MSC has joined forces with some of the world's leading retailers, brands, and seafood businesses to help transform global seafood markets and improve the status of fisheries and ocean ecosystems worldwide. The MSC label is used at fresh fish counters in supermarkets and on supermarket private-label products, as well as on branded frozen, smoked, and canned products. Currently 38 fisheries are certified to the MSC standard, and fisheries that are certified or are in the assessment process represent just over 5 percent of global wild capture fisheries by volume. BARRIERS: Skepticism, confusion around "sustainable" · Insufficient, unverified seafood product information

WHOLE FOODS MARKET

See profile on page 25. BARRIERS: Sourcing difficulties

VITAL CHOICE · RANDY HARTNELL

See profile on page 25. BARRIERS: Sourcing difficulties

SEAFOOD SEE LIFE · GREENPEACE UK

Greenpeace, a nonprofit conservation organization, is currently using the power of public perception to motivate major branded retailers around the world to develop and implement policies for sourcing sustainable seafood. Greenpeace has developed and published ranking lists, first developed in 2005 in the UK, to show which retailers in a particular country are sourcing sustainable seafood. In some regions, the strategy has been successful in persuading retailers to change sourcing policies so that they can move up on the ranking list, maintain a positive public image, and gain competitive advantage. Leading retailers taking action to improve the sustainability of fisheries worldwide are developing sourcing policies that are based on three key principles: remove the worst, support the best, and change the rest. BARRIERS: Lack of interest, lack of incentive

SEAFOOD CHOICES ALLIANCE · MIKE BOOTS, SEAWEB

When Seafood Choices Alliance was founded in 2001, many in the seafood industry were openly hostile to sustainability efforts, a situation the nonprofit organization has helped shift through its work with the conservation community and the seafood, retail, and foodservice industries. With offices in North America and Europe and partners in more than 50

countries, Seafood Choices Alliance invites corporations to behave more responsibly and uses the collective power of key players to drive change across the seafood marketplace. Alliance-sponsored business-to-business dialogues provide a forum where same-sector businesses can discuss problems and develop creative solutions. Seafood Choices Alliance offers a detailed online database of sustainable seafood choices and an online Alliance member directory of buyers and suppliers that have committed to not source species on the red list. BARRIERS: Lack of interest, lack of incentive

WAL-MART STORES INC.

Founded by Sam Walton in 1962, Wal-Mart is now a mammoth discount retailer with 7,390 stores and 176 million customers. Within the past few years, Wal-Mart has developed a set of sustainability goals: "To be supplied 100 percent by renewable energy; to create zero waste; and to sell products that sustain our resources and the environment." As part of this mission, Wal-Mart has committed to procuring 100 percent MSC-certified seafood within three to five years. Wal-Mart is partnering with several NGOs to work with current suppliers, explain the ins and outs of sustainable seafood, and help those suppliers work with existing producers to get certified. Wal-Mart is also pilot-testing a tracking system of seafood procurement that will be linked to incentives for buyers, whose bonuses will be tied to the percentage of sustainable seafood they purchase. BARRIERS: Lack of interest, lack of incentive

CLEANFISH • TIMOTHY O'SHEA

CleanFish is a privately held for-profit company that is attempting to revolutionize the generic seafood marketplace by advocating sustainable wild and farmed fish from small operations around the world. CleanFish is building a network of artisanal seafood producers in markets that were unreachable through the traditional seafood supply and distribution system. Rather than build a CleanFish brand, the company attempts to build brands for particular seafood supplied by specific producers. CleanFish focuses on rewarding producers that are fishing or farming more sustainably than average by promoting their seafood in the marketplace. The objective is that by fostering better practices—even if those practices have not yet reached MSC standards—more and more fishermen will see the value of sustainable fishing. BARRIERS: Insufficient, unverified seafood product information

DESIGN PRINCIPLE THREE

Cultivate readiness

Effectively changing a buyer's behavior requires a productive, long-term relationship, not just lobbying or negotiating. In some cases, multiple players might work different angles of persuasion (both stick and carrot) in concert. In others, a productive collaboration produces safer, less combative venues and forums. In any case, the buyer's state of mind requires attention to more than the ultimate desired outcome.

SEAFOOD CHOICES ALLIANCE • MIKE BOOTS, SEAWEB

See profile on page 61. BARRIERS: NGOs convey naïveté about business

FISHERY IMPROVEMENT PARTNERSHIPS • JIM CANNON, SUSTAINABLE FISHERIES PARTNERSHIP

See profile on page 56. BARRIERS: NGOs convey naïveté about business • Sourcing difficulties • Lack of interest, lack of incentive

UNILEVER

Unilever is an international manufacturer of prominent food, household, and personal care product brands. Unilever's program on sustainable seafood began in the mid-1990s when it committed to sourcing fish from sustainable stocks. In 1996 Unilever reached out to the World Wildlife Fund—an unprecedented move for a major player within the seafood industry—for assistance with creating the Marine Stewardship Council. Unilever contacted other major buyers to align its messages regarding sustainable fishing practices. By the end of 2005, the company had succeeded in sourcing over half its seafood in Europe from sustainable and certified fisheries, which represented roughly 75 percent of its global fish sales. BARRIERS: Sourcing difficulties

SUSTAINABLE SEAFOOD CHOICES PROJECT • WORLD WILDLIFE FUND

The World Wildlife Fund's fisheries strategy is to work with industry stakeholders around the world to promote sustainable seafood from well-managed fisheries and responsible aquaculture operations. WWF collaborated with Unilever in the creation of the MSC and has assisted with the development of best practices for aquaculture. WWF, along with industry and conservation partners, has engaged with major seafood buyers and retailers, such as Wal-Mart, to leverage their purchasing power to influence the global seafood market and ensure the continuity and quality of the fishing industry. BARRIERS: Sourcing difficulties

ALASKA SEAFOOD MARKETING INSTITUTE

Alaska's official seafood marketing agency is a partnership between the Alaska seafood industry and the Alaska state government created to advance the common goal of a successful and sustainable seafood industry in Alaska. ASMI increases positive awareness of the Alaska seafood brand, which is promoted as "wild, natural, and sustainable," but which is not advertised explicitly as an eco-label. Alaska's fisheries management regime is widely considered to be a model for sustainability, and is credited with advancing sustainable practices in the US and abroad. ASMI is one of few organizations expanding the market for sustainable seafood by promoting product from a particular state or region, most (if not all) of which meets the FAO standards for sustainably managed wild-capture fisheries. Along with standard marketing promotions to retailers and foodservice establishments, ASMI conducts fishery tours with reporters from industry publications to raise awareness and appreciation of Alaska seafood in the trade and consumer sectors. The tours are intended to generate stories in the business and consumer press that explain the uniqueness of Alaskan seafood. BARRIERS: Insufficient, unverified seafood product information

DESIGN PRINCIPLE FOUR

Recruit and work with champions

A dedicated evangelist or champion can mobilize the supply chain toward more sustainable products. Champions include business consultants who facilitate NGO-company partnerships, experts in fisheries management hired to develop a corporate sustainable seafood program, NGOs brought in to mediate buyer-supplier communication, and individuals within the industry who advocate for better fisheries management or expanded certification. These are the trusted voices that build buyers' confidence so they commit to sustainable seafood. Recruiting and grooming these champions is a powerful way to secure a company's buy-in.

discovery

BON APPÉTIT MANAGEMENT COMPANY

An onsite restaurant company that provides café and catering services to over 400 corporations, colleges and universities, and specialty venues in 28 states, Bon Appétit is a foodservice industry leader working to create a more sustainable food system. Not only is all Bon Appétit seafood purchased in accordance with the Monterey Bay Aquarium's Seafood Watch guidelines for sustainability, but a dedicated advocate works within the organization to assist with its sustainable seafood strategy, build trust among the various stakeholders, and grow the seafood program according to the company's business model and corporate social responsibility (CSR) commitments. Bon Appétit is also working with Sustainable Fisheries Partnership to determine whether some of its imported seafood meets (or could be made to meet) its sustainability standards. BARRIERS: NGOs convey naïveté about business

SUSTAINABLE FISHERIES INITIATIVE ADVISORY SERVICES • LYDIA BERGEN, NEW ENGLAND AQUARIUM

The New England Aquarium is building powerful incentives to improve the environmental responsibility of seafood supply chains by supporting sustainable fishing, rewarding progressive action on the part of business and industry, and promot-

ing programs that encourage consumers to favor marine conservation. As one of the first conservation organizations to work behind the scenes with a major seafood buyer on sourcing sustainable product, the aquarium's corporate partnership program aims to help partners shift seafood sourcing toward environmentally responsible products without sacrificing quality or significantly increasing expenses; brand themselves as environmentally responsible; and gain a competitive advantage over their competitors. The aquarium works directly with a buyer's procurement team, as well as with the company's suppliers on improving the fishing practices of current producers, or identifying new producers that meet sustainability criteria. Because of its lack of expertise in working with and building relationships with businesses, the aquarium has hired consultants to help smooth communications difficulties. BARRIERS: NGOs convey naïveté about business

WHOLE FOODS MARKET

See profile on page 25. BARRIERS: Skepticism, confusion around "sustainable"

SEA CHANGE INVESTMENT FUND, LLC

This fund invests in seafood suppliers that promote market access to seafood from sustainable fisheries, and that meet strict conservation and financial criteria. The fund seeks to expand the market for environmentally preferable seafood by demonstrating that sustainable seafood is good for businesses and for investors. Sea Change helps its portfolio companies with chain-of-custody certification under the MSC; messaging and marketing about sustainability; partnering with NGOs on particular issues; becoming new voices to advocate conservation; and communicating conservation goals to upstream producers and suppliers and encouraging them to get MSC-certified. BARRIERS: Sourcing difficulties

SUSTAINABILITY PARTNERSHIPS • MARK POWELL, OCEAN CONSERVANCY

See profile on page 56. BARRIERS: Sourcing difficulties

MARINE STEWARDSHIP COUNCIL

See profile on page 60. BARRIERS: Sourcing difficulties

WAL-MART STORES INC.

See profile on page 62. BARRIERS: Sourcing difficulties

EDF OCEANS PROGRAM • ENVIRONMENTAL DEFENSE FUND

EDF's Oceans Program uses practical, science-based and market-based solutions to harmonize human activities with the health of the oceans. EDF views the global fisheries crisis as an opening for businesses to build profits while exercising responsible stewardship. Armed with good information, companies can play a powerful role in supporting sustainable fisheries and fish farming operations. In this way, firms can both address consumer concerns and invest in their own long-term viability. EDF works with leading seafood buyers to adopt purchasing standards that require suppliers to reduce destructive impacts of fish farming as well as unsustainable fishing. Its strategy is to partner with corporate market leaders that either have a large enough share of the supply chain to affect the way products are created or to begin a domino effect among competing buyers. BARRIERS: Lack of interest, lack of incentive

ALASKA SEAFOOD MARKETING INSTITUTE

See profile on page 65. BARRIERS: Lack of interest, lack of incentive

SEACHOICE • SUSTAINABLE SEAFOOD CANADA

SeaChoice provides concerned consumers with a simple way to gently encourage foodservice and retail establishments to source sustainable seafood. The SeaChoice website provides downloadable drop cards that customers can leave behind on a restaurant table or in a retail comment box. The drop card reads, *"We love your establishment. We urge you to promote and sell sustainable seafood. We'll be buying! Please visit the SeaChoice website on the front of this card for information and assistance. Your concerned and loyal custome*r." Retailers and restaurants that respond to the drop card and visit the SeaChoice website are provided guidance and assistance on how to source and promote sustainable seafood. BARRIERS: Lack of interest, lack of incentive

DISCOVER THE ANCHOVY • PATRICIA MAJLUF

See profile on page 28. BARRIERS: Lack of interest, lack of incentive

DESIGN PRINCIPLE FIVE

Simplify and ease access to information

The sustainable seafood market will not expand if the job of finding, deciphering, understanding, and implementing complex and detailed information lies with the buyer. Buyers need information systems that work within their purchasing systems. They need good information that's accurate and easy to obtain. Successful solutions include an online database of fish species and their sustainability rankings, an organization that works in-house to help with seafood sourcing and point-of-purchase labeling, or a directory of buyers and producers that provides a platform for aligning supply and demand.

FISHWISE

See profile on page 57. BARRIERS: Skepticism, confusion around "sustainable" · Sourcing difficulties

FISHSOURCE · JIM CANNON, SUSTAINABLE FISHERIES PARTNERSHIP

FishSource is a web-based resource that compiles and summarizes the scientific and technical information about particular fisheries so that companies, vendors, and distributors can evaluate the sustainability of fisheries before buying from them. FishSource overcomes the huge knowledge barrier by making this information freely available to seafood buyers as well as the public. The online tool provides a platform for open sharing of data from fisheries sustainability analyses, including stock status, illegal harvesting, management regime, regulation of bycatch, and environmental impacts. Each fishery receives a FishSource Score, which is a snapshot rating of the relative sustainability of a fishery based on certain criteria. FishSource is a neutral information portal that provides the information buyers need to source seafood according to their own sustainability standards. BARRIERS: Skepticism, confusion around "sustainable" · Sourcing difficulties · Insufficient, unverified seafood product information

SEAFOOD CHOICES ALLIANCE • MIKE BOOTS, SEAWEB

See profile on page 61. BARRIERS: Skepticism, confusion around "sustainable"

FISHCHOICE • RICHARD BOOT

See profile on page 58. BARRIERS: Sourcing difficulties

ANTONIO GARCÍA ALLUT (ASHOKA FELLOW 2006, SPAIN)

In Spain's traditional fishing sector unstable demand and the lack of market information hinder fishermen from managing their catch in an efficient way. García Allut is transforming traditional fishermen from simple "fish gatherers" with a subsistence mentality to stewards of the marine environment who efficiently manage their resources and guarantee sustainability for future generations. He is developing an electronic marketplace owned by fisherman organizations, which increases market transparency and bypasses middlemen to link directly with consumers and restaurants. He is also promoting a variety of initiatives to increase the value of the catch, including a system for traceability (from catch to final consumer) and a Seal of Ecological Quality to guarantee the quality of fish as well as its origin and catch methods. Furthermore, he is creating a network of restaurants for the conservation of the marine ecosystem. BARRIERS: Insufficient, unverified seafood product information

TRACEREGISTER • PHIL WERDAL

See profile on page 58. BARRIERS: Insufficient, unverified seafood product information

DESIGN PRINCIPLE SIX

Disintermediation, direct engagement

For sustainable sourcing to be viable for buyers, each link in the complex supply chain must preserve the integrity of the sustainable product. One strategy is to get as close to the fishermen as possible by removing links in the chain. Such direct engagement can breed trust, reduce dishonest information, and produce interest and enthusiasm.

FISHCHOICE • RICHARD BOOT

See profile on page 58. BARRIERS: Skepticism, confusion around "sustainable"

FISHWISE

See profile on page 57. BARRIERS: Skepticism, confusion around "sustainable"

BAMBOO SUSHI • KRISTOFOR LOFGREN

See profile on page 57. BARRIERS: Sourcing difficulties

CLEANFISH • TIMOTHY O'SHEA

See profile on page 62. BARRIERS: Sourcing difficulties

VITAL CHOICE • RANDY HARTNELL

See profile on page 25. BARRIERS: Sourcing difficulties

WHOLE FOODS MARKET

See profile on page 25. BARRIERS: Sourcing difficulties • Insufficient, unverified seafood product information

CHEFS IN RAINGEAR • RILEY STARKS

See profile on page 28. BARRIERS: Lack of interest, lack of incentive

BON APPÉTIT MANAGEMENT COMPANY

See profile on page 66. BARRIERS: Insufficient, unverified seafood product information


dis·cov·er |dis 'kə vər|
verb
1. to obtain sight or knowledge of for the first time
2. to make known or visible
discovery

Barriers

NGOS CONVEY NAÏVETÉ ABOUT BUSINESS	SKEPTICISM, CONFUSION AROUND "SUSTAINABLE"	SOURCING DIFFICULTIES	LACK OF INTEREST, LACK OF INCENTIVE	INSUFFICIENT, UNVERIFIED SEAFOOD PRODUCT INFORMATION	BUYERS FRAMEWORK
SUSTAINABILITY PARTNERSHIPS FISHERY IMPROVEMENT PARTNERSHIPS	FISHWISE OCEAN WISE	DISCOVER THE ANCHOVY BAMBOO SUSHI FISHCHOICE FISHWISE FISHERY IMPROVEMENT PARTNERSHIPS		TRACEREGISTER	MAKE THE BUSINESS CASE AT MULTIPLE LEVELS
	ECOFISH WILD PLANET MARINE STEWARDSHIP COUNCIL	WHOLE FOODS MARKET VITAL CHOICE	SEAFOOD SEE LIFE SEAFOOD CHOICES ALLIANCE WAL-MART STORES INC.	MARINE STEWARDSHIP COUNCIL CLEANFISH	LEVERAGE THE POWER OF BRANDING
SEAFOOD CHOICES ALLIANCE FISHERY IMPROVEMENT PARTNERSHIPS		UNILEVER FISHERY IMPROVEMENT PARTNERSHIPS SUSTAINABLE SEAFOOD CHOICES PROJECT	FISHERY IMPROVEMENT PARTNERSHIPS	ALASKA SEAFOOD MARKETING INSTITUTE	CULTIVATE READINESS
BON APPÉTIT SUSTAINABLE FISHERIES INITIATIVE ADVISORY SERVICES	WHOLE FOODS MARKET	SEA CHANGE INVESTMENT FUND SUSTAINABILITY PARTNERSHIPS MARINE STEWARDSHIP COUNCIL WAL-MART STORES INC.	EDF OCEANS PROGRAM ALASKA SEAFOOD MARKETING INSTITUTE SEACHOICE DISCOVER THE ANCHOVY		RECRUIT AND WORK WITH CHAMPIONS
	FISHWISE FISHSOURCE SEAFOOD CHOICES ALLIANCE	FISHCHOICE FISHWISE FISHSOURCE		ANTONIO GARCÍA ALLUT TRACEREGISTER FISHSOURCE	SIMPLIFY AND EASE ACCESS TO INFORMATION
	FISHCHOICE FISHWISE	BAMBOO SUSHI CLEANFISH VITAL CHOICE WHOLE FOODS MARKET	CHEFS IN RAINGEAR	WHOLE FOODS MARKET BON APPÉTIT	DISINTERMEDIATION, DIRECT ENGAGEMENT

Design Principles

OBSERVATIONS

What we learned from the framework

Success rates are higher for buyers that are more centralized.

Engagement with major buyers tends to be most successful when purchasing policies are centrally controlled and not made locally. A national chain's CEO demanding that the company go sustainable is much more efficient and effective than lobbying for piecemeal change within a decentralized chain. If the buying function for the retailer or foodservice buyer happens in just a few locations, there is increased ability for executing environmental policy. Finally, if large stakes in the organization are in the hands of a few, policy can be set quickly and decisively.

Wal-Mart is an organization that fits this profile well. It has centralized buying in Bentonville, Arkansas. The Walton family still controls a significant part of the company, and they have been able to influence the CEO, Lee Scott, to focus on sustainable fishing. The combination of these factors is unusual, and it may be that Wal-Mart is an anomaly rather than a leader that others will or even can follow.

"We've had lots of success where there's central procurement. But lots of retail chains buy regionally. It's somewhat hard to get a corporate mission through those chains."

-Phil Fitzpatrick,
Marine Stewardship Council - Americas

OBSERVATIONS

What we learned from the framework

NGOs undermine their own efforts.

When NGOs display business naïveté they produce or reinforce mistrust or a lack of respect. In some cases, NGOs themselves are among the most pervasive barriers to change. Most NGOs in the sustainable fisheries sector want to collaborate with seafood buyers, so this barrier may be the most crucial to overcome. The majority of the interviews conducted for this framework surfaced unsolicited criticisms of NGO programs, mentalities, approaches, and interrelations. This appears to be no small issue.

Additionally, NGOs competing for pieces of the same pie suffer from insecurity and mutual suspicion. NGOs are reluctant to collaborate and share information. They fear losing their unique character amid the crowd, which motivates them to cling to their reasons for dissent as a competitive distinction.

"The challenge with agreeing on a vision is that a lot of these groups are competing for the same funding. So there's a propensity to highlight differences instead of similarities."

-Matt Elliot, Sea Change Investment Funds

On the business side, no integrating systems exist.

The Buyer's Discovery Framework demonstrates that most successful NGO buyer strategies tend to involve one-on-one hand-holding. These partnerships require significant investments of time, money, and human resources on both sides. Trying to effect change one buyer at a time is a slow battle. But this may be the only option until the industry creates uniform sustainability standards or technology platforms. Buyers can have confidence in their own sourcing decisions only when clear definitions and standards are embedded directly in the buying processes.

Currently, very few NGOs are leveraging technology as a tool to grow the buyers' market. Even this type of innovation cannot stimulate an increase in the supply of sustainable seafood. Working at both the buyer and fisheries level harnesses buyers' purchasing power to pressure fishery management councils, policy regulators, and fishermen. There is a significant opportunity here to be part of shaping and speeding the creation of systems that will help drive change on the water more efficiently.

"We have stumbled in trying to identify who makes the decisions around fish buying policy within corporations. Even once you reach them, you have to be able to tell this story in a way that tailors it to the math that the industry is trying to accomplish. They have their marching orders: buy it the cheapest you can."

-Howard Johnson, seafood industry consultant, H.M. Johnson and Associates

OBSERVATIONS

What we learned from the framework

Buyers don't have a collaborative platform for unifying decisions and practices.

Notice that one of the empty boxes in the framework is at the intersection of using "disintermediation and direct engagement" to bypass the "NGOs convey naïveté about business barrier." A solution that would fit this category would be one designed to allow businesses to communicate with each other and cut out the NGO mediator. This group might look similar to forestry's Global Forest Trade Network, which allows companies to jointly manage information and transaction costs and to navigate standards together.

There is already some discussion of convening a business-to-business forum for seafood players. Undoubtedly, NGOs will be present, but there will be tremendous pressure on them to abandon differences and align under meaningful, yet reasonably attainable, sustainability criteria. How might the establishment of such a group be hastened? What might be done to help this group shape coherent, business-friendly solutions that drive change on the water?

"At the end of the day, we won't be able to do this on our own. We need to focus on collaboration. What I've learned from supply chain sustainability over the past nine years, is that there's only so much you can get done by being a leader. By all the buyers doing their own thing, and using their own terminology and standards with respect to sustainability, we're only bringing more inefficiency into the supply chain. We need to bring people to the same table and find the 80 percent we can agree on."

-Ian Olson, Darden Restaurants

There are too few hybrid thinkers.

Successful solutions always involve hybrid thinkers—people who fully understand both the science of sustainable fisheries and the seafood business. These people think, advocate, and act on behalf of mutually beneficial programs and compromises. People like Jim Cannon, Mark Powell, and Mike Boots and their respective organizations know how to harmonize the "good for business" message with the "good for fish" message to please buyers and enable real change on the water.

But such people are in short supply. Not many scientists have the savvy or the interest needed to learn the business side of this equation. Business executives are not likely to get a crash course in fisheries issues unless they seek it out. The result is that the organizations with the most effective approaches can't expand rapidly because they can't find the right people.

"Our ability to drive change has to do with how quickly we can find the right people and get them on board and get them funded."

-Jim Cannon, Sustainable Fisheries Partnership

FISHERIES FRAMEWORK

How can we persuade more fishermen to adopt sustainable practices?

About 35 million people make their living directly from fisheries or aquaculture, and this number increases to 200 million if fisheries-related jobs are included. Ninety-five percent of these jobs are in the developing world.

The complexity of the challenge facing the world's fisheries is reflected by the fact that the term fishery itself is usually used to describe not only a particular kind of fish, but also the place where it is caught, the councils that make the rules governing it, and the fishermen—ranging from employees of commercial large-fleet companies to subsistence hunters who live off what they catch. To speak of "fisheries" is to speak of a tangle of often conflicting motivations around profit, conservation, and survival. Given the UN assessment that more than 75 percent of fisheries are in "urgent need of better management," it is fair to say that a successful balance for these competing interests has been elusive.

Similarly, no one description fits the diverse group of people who actually catch fish. Fishermen are solo entrepreneurs who fish to feed their families. They are captains of 100-meter-long industrialized hunting machines that gather thousands of tons of fish daily. They come from generations of skilled fishermen, or they work for multinational companies to meet demand halfway around the world. They are respected producers in a local tradition, or one of the 5.8 million last-resort fishermen making less than $1 a day.

Most fishermen own and operate their own boats, catching product at sea and selling it at the dock in small-scale operations. Multinational fishing companies (mostly based in Japan) do the same on a larger scale, owning the whole business from catching fish to processing to distributing, using 1.3 million ships over 24 meters long. As a result, the strategies necessary to persuade fishermen to change their behavior are as varied as the profession itself.

The core question underlying the framework we've created for fisheries is, How can we persuade fishermen to adopt more sustainable practices?

USEFUL FRICTION

Tensions

These are areas of friction that represent challenges to—and openings for—change. They identify points at which a system is stuck, and are therefore fruitful places toward which to channel effort and new ideas.

Fishermen have the least power. Fishermen have the most direct impact on the water.

Fishing is a harsh and unpredictable business. Despite hard days at sea, a fisherman might return to the docks empty-handed, or find the price has dropped since the ship the shore. Fishermen are at the mercy of nature, of regulators who determine how much and what they can legally catch, and of the buyers who determine price.

Local communities often offer few other economic opportunities to fishermen. Tied to a declining industry and forced to fish depleted resources for smaller profit, fishermen are understandably resistant to outsiders telling them to fish less.

In most areas of the world, governments, not fishermen, are in charge of monitoring and managing the resource. Thus the very fishermen who most directly affect the health of a fish stock are never held accountable for any harm to that fishery, including its collapse. They may be fined for catching more than their limit, or for harvesting undersized fish,

but the burden of proof is placed on the government to rationalize and design quotas.

To survive today in an open-access fishing system, a fisherman must aim to catch as much as possible, as quickly as possible, and get it to market fast—along with everyone else. This leads to shorter fishing seasons, destructive gear, and declining prices when similar catches or poor-quality products flood the market. Fishermen are caught in a vicious cycle, the so-called race to fish, without the incentive or means to change. Individual action does nothing to bolster the health of the fishery or affect the price in the market.

"Even if you [as a fisherman] want to conserve fish and know what you are doing is wrong, it's hard to resist because the beneficial action you take is dissipated by the other guy. So it doesn't do any good as an individual to conserve."

-Rod Fujita, Environmental Defense Fund

Certification is powerful. Certification scales slowly.

Significant progress has been made in the tactics and approaches to MSC certification of fisheries, which now (at 38 fisheries) represents just over 5 percent in volume of the total wild capture worldwide. But many fisheries can't qualify for certification and will be unlikely ever to do so, for several reasons: Some governments can't or won't pay for the scientific data necessary. Some fisheries can't get secure enough buy-in from the fishing vessels to qualify. Others lack the will or money for policy enforcement.

Because certification is simply an unreachable goal for many fisheries, other complementary strategies are necessary to foment incremental change.

"MSC certification is a fairly reasonable process. It's not that it's overly rigorous. It's just time -consuming."

-Peter Redmayne, Seafood consultant
The SeaFare Group

OUR PROCESS

Barriers

These are core components we identify of a problem that, if changed, could allow for a true shift in paradigm and behavior. Barriers are not market conditions or underlying causes that merely describe a situation. They must be movable and specific to the problem.

discovery

Powerful incentives to fish unsustainably

In the present open-access system, fishermen have no vested interest in long-term preservation of the resource because if they don't catch the last fish, someone else will. Where designated access systems divvy up the total catch to solve the race to fish problem, poorly drafted policies prevent fisheries from using new types of gear, less damaging methods, or more creative approaches (quota sharing, gear switching) that can reduce bycatch and increase efficiency. Effectively, there is no incentive for anyone to attempt sustainability and continue to fish.

Haphazard accountability and enforcement of policies

Fishermen have no ownership of fisheries, and therefore no incentive to care for any part of the ecosystem except their target species. Governments often fail to regulate use of the natural resource by ignoring science or because they lack adequate funding to gather data or enforce regulations. Quota regulators for both high-seas and coastal fishing are easily (and often) bribed. Similarly, the supply chain lacks

transparency and trust: more than 30 percent of fish ultimately sold to consumers is mislabeled, a clear violation of expectation and law that goes widely unpunished.

Declining power, rising disconnect

In general, there has been a consolidation of power among big industry and a loss of power, reputation, and engagement of smaller-scale, local fishermen both within the industry and in their communities. Fishermen are at the mercy not only of nature, but of governments, buyers, culinary fads, and the economics of communities that offer few alternative employment options. Governments say when, where, and how fishermen may harvest their catch. Buyers control the prices that a fisherman can get for the catch. Chefs decide what's worth catching. Other fishermen are competitors, and many communities offer no other options but to keep on fishing. Against these forces, fishermen are often powerless, which creates resentment in a community that is already suspicious of outsiders.

Murky business case for sustainability

While protecting the marine ecosystem is crucial for any fisherman, the future, abstract threat of collapsed marine resources makes it difficult for fishing businesses to forgo tangible short-term profit to ward-off possible disaster. Sustainable fishing practices can benefit fisheries and fishermen, but these gains are not clear-cut and require up-front investments of cash and time in a low-margin industry.

OUR PROCESS

Design Principles

These are insights we distill from the work of leading social innovators. They do not encompass tools (such as technology or education), nor do they name specific organization-level approaches. They are clarifying insights that identify levers of change.

Name a new value

Savvy entrepreneurs find ways to uncover hidden value and incentives in the equation, describe those to stakeholders, and create systems that reward and increase that value. Value changes include focusing on quality over quantity, building alternative economic models using nontraditional sources of income (tourism, sportfishing, local product branding), and mobilizing children to creatively and energetically alert parents and communities to the possibility of change. Groups have also found new ways of using data and information to scientifically evaluate a fishery more effectively. This information can create obvious rewards to fishermen for sustainable actions.

Cultivate collective ownership

Forming cooperatives and coalitions that deliver a benefit to the whole group, including local fishing communities, is an effective strategy for creating change. Such groups drive responsibility for sustainability closer to the fisherman and give fishermen more control over the rewards and punishments that most affect their specific location. These

organizations may be within a fishery, across fishery sectors, between fisheries and NGOs, or among all stakeholders. In many cases, decentralized groups defined for national government agencies what and how to regulate. Some also eliminated the middleman in the supply chain, to give the fisherman more market control. These structures shift the "every man for himself" ethos to one of collective benefits when individual behaviors increase the value of the resource (fish, shellfish) for all.

Fish smarter

Creative and determined companies and fishermen will always find ways to innovate marketing techniques, increase efficiency, reduce bycatch, and cooperate, both to protect the marine environment and to make more money. Education and training are critical tactics for linking sustainability to habitat conservation and harvesting. New technologies make sustainable fishing more economically feasible for locals. The "fish smarter" approach includes continually re-evaluating what the term means in light of sustainability. These techniques remove damaging incentives and secure group commitment to a long-term benefit to all.

Create conversations of equals

Skilled negotiators have overcome decades of suspicion stemming from past arrogant or dismissive treatment of fishermen by aligning the needs of fishing communities with those of the stakeholders. These negotiators go beyond acknowledging or respecting an alternate view; they cross over to join former adversaries as allies, engage in activities or make concessions that prove a level of empathy and respect. This gains them a seat at the decision-making table. When conversations include all major stakeholders, the collaboration goes deep and wide and fosters transparent, open communication.

Turn outside money into local power

Outside resources (mostly private financial capital) create new leverage to slowly erode the status quo power structure. The strategy works within the general inertia of the system (such as the movement toward rights-based access) but reharnesses the momentum to suit the needs of the local community. Directly tying local access rights to local community organizations is especially effective.

DESIGN PRINCIPLE ONE

Name a new value

Savvy entrepreneurs find ways to uncover hidden value and incentives in the equation, describe those to stakeholders, and create systems that reward and increase that value. Value changes include focusing on quality over quantity, building alternative economic models using nontraditional sources of income (tourism, sportfishing, local product branding), and mobilizing children to creatively and energetically alert parents and communities to the possibility of change. Groups have also found new ways of using data and information to scientifically evaluate a fishery more effectively. This information can create obvious rewards to fishermen for sustainable actions.

discovery

NORTH ATLANTIC SALMON FUND • ORRI VIGFUSSON (ASHOKA FELLOW, ICELAND)

Orri Vigfusson founded the North Atlantic Salmon Fund, to buy-out coastal fishing operations throughout the North Atlantic that use drift nets and draft nets. The fund brings together river conservators, anglers' associations, landowners along rivers, and scientists to raise private money and lobby governments for political and financial support for salmon conservation. The fund has partners in 15 countries supporting the financial, legal, and political aspects of the buyouts. Protecting salmon in the open ocean is just the first step in Vigfusson's vision. The next will be to develop local economic incentives for making salmon a more lucrative natural resource. Catch-and-release sportfishing, related tourism, and branding of local salmon products can increase the economic value of the fishery. For Vigfusson, salmon conservation is a driving force for improving the economic health and security of rural communities.

BARRIERS: Powerful incentives to fish unsustainably • Murky business case for sustainability

ANTONIO GARCÍA ALLUT (ASHOKA FELLOW 2006, SPAIN)

See profile on page 71. BARRIERS: Powerful incentives to fish unsustainably • Murky business case for sustainability.

AT-SEA PROCESSOR'S ASSOCIATION (ALASKA POLLOCK FISHERY)

The At-sea Processor's Association consists of offshore catcher-processor ships in the Alaska pollock industry that operate within a cooperative structure to increase efficiency and value, even while catching fewer fish. They successfully lobbied for legislation that allowed them to pool quotas among cooperatives and reduce costs associated with monitoring. Within cooperatives, each vessel is assured of a specific portion of the catch. By eliminating competition, fishermen can focus on targeting the highest-quality fish and reducing bycatch, both of which increase value of catch. In addition, by monitoring the catch at the cooperative level rather than vessel by vessel, industry saves on observer and management costs. The cooperative structure also relieves monitoring pressure from the government, as the industry is responsible for reporting and monitoring within the cooperative. BARRIERS: Powerful incentives to fish unsustainably

MARINE STEWARDSHIP COUNCIL

See profile on page 60. BARRIERS: Haphazard accountability and enforcement of policies

WESTERN ZONE ABALONE DIVERS ASSOCIATION • JEREMY PRINCE, AUSTRALIAN ABALONE FISHERY

Jeremy Prince is an associate professor at the Center for Fish and Fisheries in Australia working on a novel co-management strategy within the Australia abalone fishery to address the barriers of accountability/enforcement and declining local power. Abalone's complexity as a species resists government-scale monitoring and enforcement. Prince worked closely with industry associations to promote an individual transferable quota (ITQ) system and help the industry lobby for reduced total allowable catch. Prince and the industry designed a management system in which abalone divers visually assess the condition of the stock and use this information to determine when to close small reef areas. Using real-time technology, they monitor the daily catch and establish voluntary closures that are "enforced" via executive officers within the industry. As a result, abalone numbers are increasing, as are the values of the permits. BARRIERS: Haphazard accountability and enforcement of policies

COMMUNITY FISHERIES PROGRAM • WORLD WILDLIFE FUND

This program helps small-scale community-based fisheries achieve MSC certification using a unique selection and on-the-water support approach. Local field offices allow WWF staff to work closely with fishermen, helping secure financial and logistic support through the MSC process. CFP uses unique software that combines scientific, social, economic, and cultural information (quantitative and qualitative) in identifying potential fisheries for certification. Workshops bring together local officials, experts, and industry members to narrow the options and select viable candidates. The program has worked closely with the MSC to construct data-deficient risk-based criteria that can be used by certifiers to evaluate fisheries that lack traditional scientific data records. These criteria are in the final testing stages. Introduction of the MSC process has increased regulation and reforms within fisheries, sometimes even before the certification process has been completed.

BARRIERS: Haphazard accountability and enforcement of policies

AMERICAN ALBACORE FISHERIES ASSOCIATION, USA

The AAFA was established to unite and distinguish the few fishermen who pole- and troll- catch tuna. These fishermen invested in MSC certification and promote their catch through the media as a higher-value, more environmentally friendly product, caught not by faceless factory ships but by hard-working American families. The association worked closely with the WWF and dedicated a full-time employee to the MSC certification process. Set apart by the MSC label and its unique family-based, traditional fishing techniques, the AAFA has created a distinct profile for its product among a sea of producers of the most commonly caught fish in the world. The price they now receive has increased significantly since MSC certification, and media coverage has helped generate growing demand for their product. Still the majority of demand remains overseas.

BARRIERS: Murky business case for sustainability

FISHERY IMPROVEMENT PARTNERSHIPS • JIM CANNON, SUSTAINABLE FISHERIES PARTNERSHIP

See profile on page 56. BARRIERS: Murky business case for sustainability

KARYA SEGARA FISHERMEN'S COOPERATIVE • WAYAN PATUT (ASHOKA FELLOW, INDONESIA)

Combating the barriers of a murky business case, unsustainable incentives, and declining local power, Wayan established a cooperatively owned company that allows fishing communities to trade in entirely new industries. Wayan first engaged local children in growing coral species to increase awareness of the destructive coral mining practices of the adults. Moved by their children's efforts, fishing communities now cultivate and transplant coral for ecological and commercial purposes, which requires skills completely different from their traditional fishing activities. Besides developing the technical skills required, members of the company also arrange for certification and permits for extracting and exporting coral. As a result, they are developing a new relationship with the government and are becoming part of the formal economy. BARRIERS: Murky business case for sustainability

THE COOPERATIVE OF MIXED SMALL-SCALE FISHERMEN AND FISHERWOMEN OF PARÁ • CLAUDIONOR DA SILVA (ASHOKA FELLOW, BRAZIL)

Da Silva is extending the small-scale fisherman's role into the processing and retailing business. A cooperative system pools fishing families' resources in order to transport the fish to port, maintain and prepare fish for sale at special depots, and sell them at sanitary fish markets opened and operated in cooperation with government. Da Silva's strategy is to compete with commercial fish traders on quality, not quantity. Da Silva works to develop diverse skills in the cooperative, including aspects of environmental studies, small enterprise development, and aquatic resource management. He is seeking capital investment for construction of a fish depot, owned and operated by the cooperative, that can keep fish cool and covered while awaiting distribution to the market. The cooperative will also secure financing to help ensure loans for gear, retirement benefits, and unemployment insurance during closed seasons. BARRIERS: Declining power, rising disconnect

MIDCOAST FISHERMEN'S COOPERATIVE • PORT CLYDE, MAINE

In 2007 fishermen formed a cooperative with local community members to deliver a predetermined quantity of fish at a predetermined price each week. Similar to an agricultural co-op, members pay a fee and collect their Port Clyde Fresh Catch from certain locations, or have it delivered directly. The fish is sold for about $3/lb—far less than in the supermarkets, but at a premium price for the fishermen. This allows

fishermen to catch less and has permitted them to impose a voluntary area-management scheme, changing their bottom trawling gear to less damaging forms and fishing only within designated areas. The co-op also works to strengthen ties within the community. The Midcoast Fishermen's Association, of which the cooperative is a part, is working with scientific research institutions to test gear changes and document the effects of their conservation actions. BARRIERS: Murky business case for sustainability · Haphazard accountability and enforcement of policies · Declining power, rising disconnect

DESIGN PRINCIPLE TWO

Cultivate collective ownership

Forming cooperatives and coalitions that deliver a benefit to the whole group, including local fishing communities, is an effective strategy for creating change. Such groups drive responsibility for sustainability closer to the fisherman and give fishermen more control over the rewards and punishments that most affect their specific location. These organizations may be within a fishery, across fishery sectors, between fisheries and NGOs, or among all stakeholders. In many cases, decentralized groups defined for national government agencies what and how to regulate. Some also eliminated the middleman in the supply chain, to give the fisherman more market control. These structures shift the "every man for himself" ethos to one of collective benefits when individual behaviors increase the value of the resource (fish, shellfish) for all.

CALIFORNIA COASTAL AND MARINE PROGRAM • CHUCK COOK AND MICHAEL BELL, THE NATURE CONSERVANCY

Cook and Bell are using a novel and effective approach to public-private partnerships for protecting California's overharvested groundfish populations. They worked directly with fishermen to map sensitive habitats to be protected through formation of a marine protected area. To motivate fishermen to engage in this effort, the program offered to buy-out permits and vessels, which reduced competition in remaining open areas as a way of compensating for the lost trawling area. By offering business-savvy alternatives, the program successfully banned trawling in 3.8 million acres and purchased seven permits and four fishing vessels. This project is now testing alternative gear impacts on habitats by securing the right to use the trawl permits for line and trap technologies by local fishermen as a conservation testing program. BARRIERS: Powerful incentives to fish unsustainably • Murky business case for sustainability

DEEPWATER GROUP, NEW ZEALAND

In 2005 deep-sea fishing companies in New Zealand waters joined together to work directly with the government to address management of the fisheries. They are combating the barriers of incentives,

and accountability and enforcement. Although varied, these diverse fisheries shared a vision of how to manage the deep-sea ecosystem and believed that a united front would better secure their resources. Access to the association is open to all quota holders with a $1 membership fee. DWG conducts scientific research, paid for by members, and uses the data in proposals to create closed areas and study bycatch reduction techniques. The association often solves problems faster than the government bureaucracy. By working together, they substantially lowered seabird and seal bycatch, and voluntarily closed vast areas of the seafloor to trawling. Next, they plan to include NGO input and more government studies to map bottom habitats.
BARRIERS: Powerful incentives to fish unsustainably · Haphazard accountability and enforcement of policies

CAPE COD COMMERCIAL HOOK FISHERMEN'S ASSOCIATION · PAUL PARKER

The CCCHFA is a nonprofit organization that focuses on community-based fisheries management in New England. The organization uses several innovative approaches to secure economic, ecological, and social sustainability for local fishermen. First, the CCCHFA organizes its member fishermen to lobby policymakers, creating a direct link between the fishermen on the water and those setting the rules and regulations. Second, they have created a group harvest (co-op) structure of their own initiative to end the open access to their fishery. Third, they are reconnecting communities with their local resource base by purchasing fishing permits through the Cape Cod Fisheries Trust. The trust leases the rights to access quota at affordable rates to local fishermen provided they abide by certain ecological restrictions. The CCCHFA is a successful model of a nonprofit run by fishermen that focuses on the financial, social, and environmental benefits of sustainability.
BARRIERS: Powerful incentives to fish unsustainably · Declining power, rising disconnect

AUSTRALIA PRAWN FISHERY, SPENCER GULF

This co-managed fishery has developed a unique, self-regulating, real-time monitoring system. Faced with declining catches, the industry organized into an association that worked with the government to improve management. By conducting surveys themselves to assess the status of the prawns, fishermen save on government monitoring costs. Information is relayed through real-time technology to government scientists who analyze the data. An at-sea commission, with members elected from and by the industry, evaluates data each night during the fish-

ery open season and works with scientists to determine whether areas of the fishery should remain open or whether to close an area and move to a different section. Combining new real-time monitoring techniques with self-governance, this industry is successfully harvesting the prawn fishery more efficiently, resulting in greater profits and less environmental damage. BARRIERS: Powerful incentives to fish unsustainably · Haphazard accountability and enforcement of policies

TUNA-DOLPHIN PROGRAM · MARTIN HALL, INTER-AMERICAN TROPICAL TUNA COMMISSION

Hall has worked to reduce bycatch in longline fisheries along the Pacific Coast of Central and South America. He engages directly with fishermen and regulators to develop business-savvy solutions. He invented the idea of individual vessel bycatch quotas, making each fisherman responsible for reducing his bycatch. This allowed responsible fishermen to keep fishing, and weeded out the reckless ones. He also worked with incremental quota limits to provide realistic possibilities for change to the industry. For sea turtles, Hall has traveled and spent extensive time with fishermen along the coasts, encouraging a gear swap to improve hooks that reduce turtle bycatch. Working with industry, NGOs, and governments, Hall is replicating his model in Southeast Asia and other fisheries. BARRIERS: Powerful incentives to fish unsustainably · Declining power, rising disconnect

ASSOCIATION OF TRADITIONAL FISHING FOLKS · SUWIMON PIRIYATHANALAI (ASHOKA FELLOW, THAILAND)

Suwimon helps marginalized Muslim Malay fishing communities secure protection of their coastal resources by providing scientific studies of the degradation of the environment and hosting workshops and training sessions for local fishermen. She collaborates with other organizations and the media to campaign for better law enforcement and helps villagers raise funds to patrol their own protected coastal zones. She has created vast networks of fishing communities and encourages local fishermen to visit other villages to see firsthand the declines that can occur if they do not protect their resources. BARRIERS: Haphazard accountability and enforcement of policies

RONNY DIMARA (ASHOKA FELLOW, INDONESIA)

Ronny builds associations of remote fishing communities to make small fishermen more competitive,

more environmentally conscious, and better able to negotiate the use of public resources. He develops small businesses that preserve profits by cutting out the middleman. Ronny is helping communities to pool resources to transport fish themselves, using refrigerated boats. He also hosts informational workshops to educate fishermen about the problems they face and helps them network with local government and seafood purchasers. In addition to raising incomes, such enterprises allow local fishermen to compete without resorting to destructive fishing practices, like using dynamite and cyanide to improve their catch. BARRIERS: Haphazard accountability and enforcement of policies

MARINE PARK PROJECT AND OCEANIUM • HAIDAR EL ALI (ASHOKA FELLOW, SENEGAL)

The Marine Park Project creates protected areas, builds awareness, and disseminates information about maritime environments and resources. Using visual aids, most notably videos he has produced, Haidar educates fishing and seaside communities about preserving marine life to promote rational use of ocean resources and fight ocean pollution. Haidar involves the public in both creating and managing protected areas. For example, local groups create artificial reefs using old tires and then patrol them. These reefs prevent fishermen from physically entering the parks and casting their nets within protected areas. Haidar's initiative aims for social sustainability too, with a goal of enhancing the earnings potential of communities. Ecotourism centers will be created for each marine park, to allow members of the monitoring committee and other members of the village to conduct income-generating activities. BARRIERS: Haphazard accountability and enforcement of policies • Murky business case for sustainability

RAINDROP ASSOCIATION (YADFON) • PISIT CHANSANOH (ASHOKA FELLOW, THAILAND)

The organization Yadfon (Raindrop Association), founded and directed by Chansanoh, helps fishermen protect their local fishing grounds and mangrove forests, the nurseries of their future catch. The staff lives with and learns from villagers, gaining the local people's confidence. Yadfon shows villagers how to organize effectively in support of their interests, setting up village watches for illegal logging and destructive activity, which helps local law enforcement officials. They coordinate and lobby with other citizens' organizations to protect the coastal area and share information. Chansanoh effectively enlists the media to gain attention and arouse public sympathy for his causes. Yadfon also initiated the net-

work of fishermen and farmers to create a stronger force for conservation and sustainable development. BARRIERS: Haphazard accountability and enforcement of policies

WESTERN ZONE ABALONE DIVERS ASSOCIATION • JEREMY PRINCE, AUSTRALIAN ABALONE FISHERY

See profile on page 89. BARRIERS: Haphazard accountability and enforcement of policies

MARINE STEWARDSHIP COUNCIL

See profile on page 60. BARRIERS: Haphazard accountability and enforcement of policies • Declining power, rising disconnect

AT-SEA PROCESSOR'S ASSOCIATION (ALASKA POLLOCK FISHERY)

See profile on page 89. BARRIERS: Haphazard accountability and enforcement of policies • Declining power, rising disconnect

FISHERIES IMPROVEMENT PARTNERSHIP • JIM CANNON, SUSTAINABLE FISHERIES PARTNERSHIP

See profile on page 56. BARRIERS: Murky business case for sustainability

LOCALLY MANAGED MARINE AREAS NETWORK

The network provides a platform for marine conservation scientists/practitioners who work with traditional communities to exchange information and ideas about the successes and failures of different approaches. The network grew rapidly and provides multiple services to conservation practitioners, all aimed at promoting sustainable fisheries for both the community and the local environment. Information packets provide protocols for how to work with communities most effectively and the decentralized organizational structure brings the most local expertise and self-sustaining capacity to the program. This network established dozens of protected marine areas and documented increases in LMMA fisheries, from bivalves to sea cucumbers. BARRIERS: Murky business case for sustainability • Declining power, rising disconnect

COMMUNITY DEVELOPMENT QUOTA

Created in 1992, the CDQ was the result of community, NGO, and government negotiations toward guaranteeing small communities access to fisheries as they shift from open-access to designated-access systems. The CDQ allocates a portion of the Bering Sea and Aleutian Island harvest to CDQ groups, which

represent dozens of coastal communities along the Bering Sea. By assigning a portion of the quota to communities, the CDQ prevents large industries from buying all available quota. In addition to revenue generated by the allocations, each CDQ group provides different economic development programs, including job training in fields related to fisheries. Programs cover small-business management and engineering and offer scholarships for education (undergraduate and graduate) to local residents. The goal of the program is to secure community participation in the fishery and develop the communities' economic opportunities. BARRIERS: Declining power, rising disconnect

INDONESIAN SELF GROWTH FOUNDATION

The Indonesian Self Growth Foundation (YTMI) helps communities develop economic independence through conservation-oriented activities. The organization has pioneered a model that combines the cultivation of mudcrabs with the conservation of mangrove forests along the coast and in integrated coastal ponds. YTMI focuses on the communities and raises people's awareness and skills by fostering self-management and conducting year-long training programs in environmental conservation, group management, mangrove rehabilitation, and crab cultivation. Through mapping and educating communities about local land policies and regulations, program participants have also gained bargaining power in dealing with local governments and investors who want to develop businesses directly on the shore, thus becoming an influential and integral part of coastal resource management. BARRIERS: Declining power, rising disconnect

KARYA SEGARA FISHERMEN'S COOPERATIVE • WAYAN PATUT (ASHOKA FELLOW, INDONESIA)

See profile on page 91. BARRIERS: Declining power, rising disconnect

THE COOPERATIVE OF MIXED SMALL-SCALE FISHERMEN AND FISHERWOMEN OF PARÁ • CLAUDIONOR DA SILVA (ASHOKA FELLOW, BRAZIL)

See profile on page 91. BARRIERS: Declining power, rising disconnect

MIDCOAST FISHERMEN'S COOPERATIVE • PORT CLYDE, MAINE

See profile on page 91. BARRIERS: Murky business case for sustainability • Haphazard accountability and enforcement of policies • Declining power, rising disconnect

DESIGN PRINCIPLE THREE

Fish smarter

Creative and determined companies and fishermen will always find ways to innovate marketing techniques, increase efficiency, reduce bycatch, and cooperate, both to protect the marine environment and to make more money. Education and training are critical tactics for linking sustainability to habitat conservation and harvesting. New technologies make sustainable fishing more economically feasible for locals. The "fish smarter" approach includes continually re-evaluating what the term means in light of sustainability. These techniques remove damaging incentives and secure group commitment to a long-term benefit to all.

AT-SEA PROCESSOR'S ASSOCIATION (ALASKA POLLOCK FISHERY)

See profile on page 89. BARRIERS: Powerful incentives to fish unsustainably

INTERNATIONAL SMART GEAR COMPETITION • MIKE OSMOND

The Smart Gear competition inspires and rewards practical, innovative fishing gear designs that reduce bycatch. The competition provides a platform for previously disparate, isolated innovations in gear technology within the industry, academia, and government to be shared with the global community. Starting in 2007, Osmond led an effort to restructure the program to run every other year in order to help winners secure widespread application of their product. The competition now not only successfully attracts innovation but also has helped push through bureaucratic and financial barriers to gear installation within the industry. Since 2005, Smart Gear has attracted over 80 applications a year. Three winning technologies are now available commercially and/or in use by industry, while another four are undergoing trials by governments and industry. BARRIERS: Powerful incentives to fish unsustainably • Haphazard accountability and enforcement of policies

TUNA-DOLPHIN PROGRAM • MARTIN HALL, INTER-AMERICAN TROPICAL TUNA COMMISSION

See profile on page 96. BARRIERS: Powerful incentives to fish unsustainably • Haphazard accountability and enforcement of policies

CAPE COD COMMERCIAL HOOK FISHERMEN'S ASSOCIATION • PAUL PARKER

See profile on page 95. BARRIERS: Powerful incentives to fish unsustainably

WESTERN ZONE ABALONE DIVERS ASSOCIATION • JEREMY PRINCE, AUSTRALIAN ABALONE FISHERY

See profile on page 89. BARRIERS: Powerful incentives to fish unsustainably • Declining power, rising disconnect

THE COOPERATIVE OF MIXED SMALL-SCALE FISHERMEN AND FISHERWOMEN OF PARÁ • CLAUDIONOR DA SILVA (ASHOKA FELLOW, BRAZIL)

See profile on page 91. BARRIERS: Powerful incentives to fish unsustainably

KARYA SEGARA FISHERMEN'S COOPERATIVE • WAYAN PATUT (ASHOKA FELLOW, INDONESIA)

See profile on page 91. BARRIERS: Powerful incentives to fish unsustainably • Declining power, rising disconnect

CORAL TRIANGLE NETWORK INITIATIVE • WORLD WILDLIFE FUND

This project links WWF offices worldwide to improve fisheries in Southeast Asia. Using on-the-ground field workers to engage with fishermen, and with staff working with buyers from around the world, the initiative creates incentives for fishermen to reduce bycatch in the longline tuna industry from both the supply side and the fishing efficiencies angle. CTNI provides new technology to fishermen on a voluntary basis, using examples from other fisheries to persuade fishermen to try new gear. CTNI and specific fisheries tackle one issue at a time while working toward overall sustainability within the fishery. CTNI highlights the fishery's new technologies in the media to improve its reputation and win greater industry buy-in to the initiative. BARRIERS: Powerful incentives to fish unsustainably • Murky business case for sustainability

CALIFORNIA COASTAL AND MARINE PROGRAM • CHUCK COOK AND MICHAEL BELL, THE NATURE CONSERVANCY

See profile on page 96. BARRIERS: Haphazard accountability and enforcement of policies

ANTONIO GARCÍA ALLUT (ASHOKA FELLOW 2006, SPAIN)

See profile on page 71. BARRIERS: Haphazard accountability and enforcement of policies

STOP DESTRUCTIVE TRAWLING • MIKE HIRSHFIELD, OCEANA

Oceana is a marine conservation NGO that uses media, litigation, and lobbying to change fisheries policies. It exposes problems and works on solutions by offering pragmatic policy options. By approaching multiple management bodies (local fisheries councils, national fisheries agencies, and Congress) simultaneously and using powerful media campaigns to draw attention to the problem, Oceana ensures that the decision-makers at all steps in the process are informed. It thus applies pressure to the industry from the regulatory and demand sides. This makes its campaigns legitimate threats to status quo policy, which then opens doors for communication with the industry. Using sound legal basis to inform its alternative policy options, Oceana then engages local councils and industry in order to formulate an acceptable policy. BARRIERS: Haphazard accountability and enforcement of policies

ASSOCIATION OF TRADITIONAL FISHING FOLKS • SUWIMON PIRIYATHANALAI (ASHOKA FELLOW, THAILAND)

See profile on page 96. BARRIERS: Haphazard accountability and enforcement of policies

OCEAN CONSERVANCY • MARK POWELL

Powell designs conservation actions that align the interests of fishermen and business with sustainability goals. In the West Coast groundfish fishery he worked with fishermen and government to allow fishermen to increase their quota of groundfish relative to a decrease in their bycatch of rockfish. Fishermen then invented ways of avoiding bycatch rockfish so as to increase their groundfish catch. In the Gulf of Mexico, Powell worked with the Environmental Defense Fund to create a market-based quota system that limited total catch and total vessel number. He helped end the race to fish and establish more efficient, less environmentally damaging techniques by working with fishermen who had the capital and initiative to invest in long-term stewardship.
BARRIERS: Murky business case for sustainability

AUSTRALIA PRAWN FISHERY, SPENCER GULF

See profile on page 94. BARRIERS: Murky business case for sustainability

INDONESIAN SELF GROWTH FOUNDATION (YTMI)

See profile on page 99. BARRIERS: Murky business case for sustainability

COMMUNITY FISHERIES PROGRAM • WORLD WILDLIFE FUND

See profile on page 90. BARRIERS: Declining power, rising disconnect

FISHERMAN'S DAUGHTER WILD SONORA COAST SHRIMP • OSCAR VALDEZ, BAJA, MEXICO

Inspired by their daughter's questioning of the ethics of their fishing practices, the Valdez-Cervantes family has taken steps to significantly reduce bycatch and minimize habitat damage caused by its shrimp trawling fleets. Improved net and trawl door design reduces contact with the ocean floor, while satellite vessel-monitoring systems and third-party observers ensure that boats fish only in designated areas. Bycatch reduction devices and larger mesh size allow sea turtles and other unwanted fish species to escape. These efforts have shown up to a threefold reduction in bycatch. The company also offers traceability throughout the supply chain. BARRIERS: Powerful incentives to fish unsustainably

ERIC GILMAN • BYCATCH REDUCTION IN LONGLINE FISHERIES

Gilman is a scientist who straddles the realms of government and industry to test the effectiveness of new technology for reducing bycatch in longline fisheries. By working on the boats with fishermen, Gilman has successfully tested several types of gear modification, including dyeing bait different colors and reconfiguring deck equipment to allow for setting hooks off the side (rather than the stern) of the boat. His results are statistically sound, providing hard evidence to fishermen of what works, both in terms of what is most practical and feasible for them and what makes a difference in the bycatch. Gilman is now working to spread his results to other countries, with hopes of getting other fleets to adopt these effective practices. BARRIERS: Murky business case for sustainability

MIDCOAST FISHERMEN'S COOPERATIVE • PORT CLYDE, MAINE

See profile on page 91. BARRIERS: Murky business case for sustainability • Haphazard accountability and enforcement of policies • Declining power, rising disconnect

DESIGN PRINCIPLE FOUR

Create conversations of equals

Skilled negotiators have overcome decades of suspicion stemming from past arrogant or dismissive treatment of fishermen by aligning the needs of fishing communities with those of the stakeholders. These negotiators go beyond acknowledging or respecting an alternate view; they cross over to join former adversaries as allies, engage in activities or make concessions that prove a level of empathy and respect. This gains them a seat at the decision-making table. When conversations include all major stakeholders, the collaboration goes deep and wide and fosters transparent, open communication.

DEEPWATER GROUP (DWG), NEW ZEALAND

See profile on page 94. BARRIERS: Powerful incentives to fish unsustainably

LOCALLY MANAGED MARINE AREAS NETWORK

See profile on page 98. BARRIERS: Powerful incentives to fish unsustainably • Murky business case for sustainability

CALIFORNIA COASTAL AND MARINE PROGRAM • CHUCK COOK AND MICHAEL BELL, THE NATURE CONSERVANCY

See profile on page 94. BARRIERS: Haphazard accountability and enforcement of policies

STOP DESTRUCTIVE TRAWLING • MIKE HIRSHFIELD, OCEANA

See profile on page 102. BARRIERS: Haphazard accountability and enforcement of policies

CAPE COD COMMERCIAL HOOK FISHERMEN'S ASSOCIATION • PAUL PARKER

See profile on page 95. BARRIERS: Haphazard accountability and enforcement of policies

INTERNATIONAL SMART GEAR COMPETITION • MIKE OSMOND

See profile on page 100. BARRIERS: Haphazard accountability and enforcement of policies • Declining power, rising disconnect

OCEAN CONSERVANCY • MARK POWELL

See profile on page 102. BARRIERS: Murky business case for sustainability

CORAL TRIANGLE NETWORK INITIATIVE • WORLD WILDLIFE FOUNDATION

See profile on page 101. BARRIERS: Murky business case for sustainability

TUNA-DOLPHIN PROGRAM • MARTIN HALL, INTER-AMERICAN TROPICAL TUNA COMMISSION

See profile on page 96. BARRIERS: Haphazard accountability and enforcement of policies

COMMUNIDAD Y BIODIVERSIDAD (COBI)

COBI is a Mexican nonprofit organization driving multiple outreach programs to engage local fishing communities in more sustainable fishing practices. To facilitate adoption of more sustainable gear and fishing methods, COBI hosts exchanges between fishermen, government officials, academics, and other stakeholders. In the *de pescador a pescador* (from fishermen to fishermen) exchange. In these exchanges established and successful fishermen from designated-access systems discuss the benefits of the restricted-access model with other fishermen from open-access systems. Learning directly from fellow fishermen is an effective way of sharing information and persuading fishermen to consider more beneficial policy structures. BARRIERS: Haphazard accountability and enforcement of policies

MARINE STEWARDSHIP COUNCIL

See profile on page 60. BARRIERS: Declining power, rising disconnect

DESIGN PRINCIPLE FIVE

Turn outside money into local power

Outside resources (mostly private financial capital) create new leverage to slowly erode the status quo power structure. The strategy works within the general inertia of the system (such as the movement toward rights-based access) but reharnesses the momentum to suit the needs of the local community. Directly tying local access rights to local community organizations is especially effective.

CALIFORNIA COASTAL AND MARINE PROGRAM • CHUCK COOK AND MICHAEL BELL, THE NATURE CONSERVANCY

See profile on page 94. BARRIERS: Powerful incentives to fish unsustainably

CAPE COD COMMERCIAL HOOK FISHERMEN'S ASSOCIATION • PAUL PARKER

See profile on page 95. BARRIERS: Haphazard accountability and enforcement of policies • Declining power, rising disconnect

NORTH ATLANTIC SALMON FUND • ORRI VIGFUSSON (ASHOKA FELLOW, ICELAND)

See profile on page 88. BARRIERS: Haphazard accountability and enforcement of policies • Declining power, rising disconnect


dis·cov·er |dis 'kə vər|
verb
1. to obtain sight or knowledge of for the first time
2. to make known or visible
discovery

Barriers

POWERFUL INCENTIVES TO FISH UNSUSTAINABLY	HAPHAZARD ACCOUNTABILITY AND ENFORCEMENT OF POLICIES	MURKY BUSINESS CASE FOR SUSTAINABILITY	DECLINING POWER, RISING DISCONNECT	FISHERIES FRAMEWORK
NORTH ATLANTIC SALMON FUND ANTONIO GARCÍA ALLUT AT-SEA PROCESSOR'S ASSOCIATION	MARINE STEWARDSHIP COUNCIL WESTERN ZONE ABALONE DIVERS ASSOCIATION COMMUNITY FISHERIES PROGRAM	AMERICAN ALBACORE FISHERIES ASSN FISHERY IMPROVEMENT PARTNERSHIPS KARYA SEGARA · ANTONIO GARCÍA ALLUT MIDCOAST FISHERMEN'S COOPERATIVE NORTH ATLANTIC SALMON FUND	COOPERATIVE PARÁ	NAME A NEW VALUE
CALIFORNIA COASTAL AND MARINE PROGRAM DEEPWATER GROUP CAPE COD COMMERCIAL HOOK FISHERMEN'S ASSN. AUSTRALIA PRAWN FISHERY TUNA-DOLPHIN PROGRAM	ASSOCIATION OF TRADITIONAL FISHING FOLKS WESTERN ZONE ABALONE DIVERS ASSOCIATION DEEPWATER GROUP RONNY DIMARA MARINE PARK PROJECT AND OCEANIUM RAINDROP ASSOCIATION AUSTRALIA PRAWN FISHERY MARINE STEWARDSHIP COUNCIL AT-SEA PROCESSOR'S ASSOCIATION MIDCOAST FISHERMEN'S COOPERATIVE	CALIFORNIA COASTAL AND MARINE PROGRAM SUSTAINABLE FISHERIES PARTNERSHIP LOCALLY MANAGED MARINE AREAS NETWORK FISHSOURCE MARINE PARK PROJECT AND OCEANIUM MIDCOAST FISHERMEN'S COOPERATIVE	INDONESIAN SELF GROWTH FOUNDATION (YTMI) KARYA SEGARA · CCCHFA TUNA-DOLPHIN PROGRAM LOCALLY MANAGED MARINE AREAS NETWORK MARINE STEWARDSHIP COUNCIL AT SEA PRODUCTIONS ASSOCIATION COOPERATIVE PARÁ MIDCOAST FISHERMEN'S COOPERATIVE COMMUNITY DEVELOPMENT QUOTA	CULTIVATE COLLECTIVE OWNERSHIP
AT-SEA PROCESSOR'S ASSOCIATION INTERNATIONAL SMART GEAR COMPETITON TUNA-DOLPHIN PROGRAM CCCHFA · WILD SONORA COAST SHRIMP WESTERN ZONE ABALONE DIVERS ASSOCIATION COOPERATIVE PARÁ · KARYA SEGARA CORAL TRIANGLE NETWORK INITIATIVE FISHERMAN'S DAUGHTER	MIDCOAST FISHERMEN'S COOPERATIVE STOP DESTRUCTIVE TRAWLING CALIFORNIA COASTAL AND MARINE PROGRAM INTERNATIONAL SMART GEAR COMPETITION ANTONIO GARCÍA ALLUT TUNA-DOLPHIN PROGRAM ASSOCIATION OF TRADITIONAL FISHING FOLKS	OCEAN CONSERVANCY CORAL TRIANGLE NETWORK INITIATIVE AUSTRALIA PRAWN FISHERY ERIC GILMAN INDONESIAN SELF GROWTH FOUNDATION (YTMI) MIDCOAST FISHERMEN'S COOPERATIVE	WESTERN ZONE ABALONE DIVERS ASSOCIATION COMMUNITY FISHERIES PROGRAM KARYA SEGARA MIDCOAST FISHERMEN'S COOPERATIVE	FISH SMARTER
DEEPWATER GROUP LOCALLY MANAGED MARINE AREAS NETWORK	CALIFORNIA COASTAL AND MARINE PROGRAM STOP DESTRUCTIVE TRAWLING · CCCHFA COMMUNIDAD Y BIODIVERSIDAD INTERNATIONAL SMART GEAR COMPETITION TUNA-DOLPHIN PROGRAM	LOCALLY MANAGED MARINE AREAS NETWORK OCEAN CONSERVANCY CORAL TRIANGLE NETWORK INITIATIVE	INTERNATIONAL SMART GEAR COMPETITION TUNA-DOLPHIN PROGRAM COMMUNIDAD Y BIODIVERSIDADI MARINE STEWARDSHIP COUNCIL	CREATE CONVERSATIONS OF EQUALS
CALIFORNIA COASTAL AND MARINE PROGRAM	CCCHFA NORTH ATLANTIC SALMON FUND		CCCHFA NORTH ATLANTIC SALMON FUND	TURN OUTSIDE MONEY INTO LOCAL POWER

Design Principles

ORGANIZATIONS HIGHLIGHTED IN BLUE ARE SOLUTIONS OUTSIDE THE MARINE STEWARDSHIP COUNCIL CERTIFICATION PROCESS.

OBSERVATIONS

What we learned from the framework

Designated access is a prerequisite for change.

Most successful initiatives that reduce overfishing either involve establishing individual- or community-based quotas or take place in environments where that apportionment has already occurred. Once the race to fish has been stopped by allotting quotas to each boat or cooperative, fishermen can focus on increasing the value of the catch rather than the volume. This change helps increase profits while protecting the resource from overharvesting and collateral damage from reckless harvesting techniques. Even in developing countries where top-down government control is lacking and quota systems are difficult to establish and enforce, designated access allows communities to set aside marine protected areas that effect as de facto reductions in fishing pressure, effectively limiting the total allowable catch by limiting the size of fishing grounds.

On the high seas, where these quotas are still just open-access total catch quotas, progress in fishing tactics has been minimal. While a few NGOs are experimenting with how apportioned quotas can be executed for migratory species, for the time being the competitive structure of fishing in international waters remains.

"The secret to success is no secret at all. It is having the philosophy and intestinal fortitude to set catch limits."

-Chris Oliver, Alaska Fisheries Council

OBSERVATIONS

What we learned from the framework

Collective activity produces short-term incentives for change.

Several initiatives teach local fishermen how to organize in order to concentrate their diffuse power into a collective bargaining power. With this strategy, fishermen can gain access to fishing grounds, prices, and gear and in some cases, lobby successfully to set their own quotas or rules. All these motivations prove more powerful than the distant threat of fishery collapse.

These projects typically appeal to fishermen's connection to the community and the community's connection with and reliance on the health of the marine resource. When fishermen are clearly proud of their fishery and local community, they aim for sustainability. This approach has successfully been applied in the Coral Triangle Project (WWF) with longline fishermen in Indonesia, and in Spain (Antonio García Allut).

Processors and distributors are not heavily targeted by sustainability projects.

Processors and distributors hold the power but they are conspicuously absent from fisheries initiatives, in part because their activities are seen as merely moving fish through the supply chain as opposed to related to action on the water or to the demand that produces that change. But processors hold a unique seat of power at the fisheries table: they typically set the price fishermen must accept at the dock, and they control the flow of product and prices to the distributors in the supply chain. In some larger-scale fisheries, processors also own several boats, providing the catch that they process.

Few sustainability activities are directly targeted at processors. Within the MSC system, transparency and the ability to separate certified from uncertified fish are the processors' only sustainability role.

Additionally, that the bulk of processing occurs in China and the developing world means these companies are disconnected from any local pressure from fishermen or communities. In other cases, the processors own the boats, hiring fishermen to fish for them, which leaves little opportunity for fishermen themselves to take steps toward more sustainable practices.

OBSERVATIONS

What we learned from the framework

There are few high-tech developments for sustainability.

While the fishing industry has benefited from modern electronics in the form of fish finders, GPS, and radar, little effort has been made to use real-time technology and information flow to increase sustainability on the water. Antonio García Allut's Loxanet system is an exception, as is the real-time scientific monitoring of the Australia Spencer Gulf prawn fisheries. These initiatives are evidence that while relatively unexplored, linking catch data with monitoring and marketing systems may prove fertile ground for future exploration.

Real-time technology can also monitor catches and enforce regulations. The Environmental Defense Fund is testing electronic on board cameras for monitoring catch and reducing the costs of observers. Vessel monitoring systems have been controversial, but the technology is available and required in several fisheries. What has so far been lacking is the resources and will to put such systems in place in a widespread manner.

More solutions are needed that work outside the certification process.

The certification process is gathering speed, but so is the rate of stock decline in world fisheries, especially for some species. It is therefore important that all available tools be applied simultaneously to reverse these trends. Working to reduce overcapacity by developing alternative incomes for fishermen is one strategy that can be applied in several forms. The Indonesian Self Growth Fund and the Karya Segara initiatives are two local community projects that provide alternative income (raising mud crabs or corals) while protecting the environment (mangroves and coral reefs). Another model is to shift fishermen into other professions, such as ecotourism or the marketing or technical support fields for the fisheries. Alaska's Community Development Quota and the work of Antonio García Allut are examples of this latter approach.

Another avenue for change comes in the form of reducing bycatch through gear modifications. Whether or not the target fishery itself is sustainable, reductions in bycatch can often be made with simple gear changes, helping prevent the collapse of nontarget populations. Martin Hall is a pioneer in this work, with successful examples even from large-scale, commercial, high-seas tuna fisheries.

"The smartest, innovative fishermen find a way to get out of rules. No matter how hard we work to invent constraints, they get around them. It's better to design a way for people to continue to make a living, so we have more influence on their behavior."

-Mark Powell, Ocean Conservancy

FRAMEWORK CONCLUSION

Key themes distilled from the three frameworks

> "If you get people to care about the ocean, will consumers buy sustainable fish or just choose lasagna instead?"
>
> –Carrie Brownstein, Whole Foods

So, what do these Discovery Frameworks, design principles and barriers add up to? They provide us with two important things: 1) raw material (the tensions and observations) to direct our ideation about which parts of the system offer the most powerful opportunity areas and 2) patterns to discern across all three segments of the supply chain to help guide the process of choosing which opportunity area to pursue.

The next section will lay out the opportunity areas we've devised. Here, we'll conclude with an overview of the patterns across all three frameworks, which we've distilled into themes.

The word "sustainability" is a problem.

The term "sustainable" is identified as a barrier for two of the three frameworks. For communicating with consumers, this suggests perhaps an opportunity to leapfrog the current term (and the battle to define it) and supplant it with something more powerful. Baffled by the term's lack of intuitive meaning (and the myriad "official" definitions), consumers respond more readily to individual brands that hang their messaging on health and other more personal benefits.

For those further up the supply chain, the definition is problematic as well. The all-or-nothing options offered by most NGO partners (simply stop selling and buying all red-listed fish) has driven retail companies to create their own criteria for seafood sourcing to meet demand. Likewise, the efforts of companies such as CleanFish, as well as many Ashoka fellows working with artisanal fishermen, are moving into the space of defining activities that help ecosystems but fall short of the more rigorous definition required for sustainability certification. Buyers at all levels want pathways for incremental change, which isn't supported by a term defined in such a black-and-white fashion.

The immaturity of the supply chain prevents it from being an effective conduit for rapid change.

Five of the 13 barriers refer to issues around transparency and information flow in the supply chain. This suggests that the efficiency of the supply chain itself as a conduit for change is compromised. The perceived slowness of the market response to efforts around buyer engagement is explained in part by this observation: the "Wal-Mart effect," describing the giant retailer's ability in other areas to drive change in the behavior of its suppliers, is less compelling for seafood than for other products with greater efficiency and transparency in their processes for production and distribution.

In the seafood supply chain, information doesn't flow freely or uniformly. For that reason, the supply chain is marked by personal, longstanding relationships that are hard to shift. It is also one reason that the strategy of disintermediation has such a powerful effect.

These inefficiencies in the supply chain are also an opportunity: any solution that simultaneously fixes business problems with distribution itself, while embedding incremental change toward sustainability, will be readily embraced.

Many NGOs are ill-equipped to effectively play the role currently outlined for them.

All the frameworks contain barriers suggesting that NGO messaging and activities are misaligned with the primary motivations of all three constituent groups considered. Many of the players in this space lack the ability to adequately engage with stakeholders. The overwhelming response we heard questioning the business savvy and tactics of NGOs suggests that it may be unwise to continue to focus within this group on driving consensus as a vehicle for change.

Clearly, the initial stage of any transformation of unethical or harmful business practices begins with the need for NGOs to be an oppositional force. Naming, shaming, and holding business accountable are critical strategies and must continue. However, developing enough understanding of the real-world constraints of businesses to function as a respected partner at the negotiating table is crucial to a maturing engagement strategy.

The current demand for this type of partner far outstrips the willingness and capacity of NGOs to function in this role. This leads to the already developing outcome of companies looking for ways to engage and address sustainability outside of advisory partnerships with NGOs. There is an urgent need to be part

of the design stage of these alternative strategies, or even to initiate such approaches, to prevent them from becoming a wholesale greenwashing tactic.

The system needs more "hybrid thinkers."

In both the buyers and fisheries frameworks, several of the design principles hinge on hybrid thinking, the ability to simultaneously make a case for the environment and for business. This echoes a need for a type of capacity building in the field that Packard has already recognized and is outlined above.

Key influencers in the system are going untargeted.

While a fair amount of energy is being expended to change buyers' behavior, solutions are unevenly targeted throughout the rest of the system.

- Artisanal fisheries, many of which cannot engage around certification, are getting some attention via a localized, community-by-community approach. These individual solutions are effective, but currently no network or collaboration connects these initiatives or allows fishermen to learn them faster.

- Large, multinational commercial fishing companies are almost wholly absent from the solution set, because of either a perceived lack of receptiveness (few of these multinationals are publicly held) or a lack of tools for engaging them.

- Processors and distributors are also underaddressed. Given that processors hold immense power in price setting and that distributors are likely key to any effort to scale the total supply of sustainable fish that's available, this also seems to point to an area of opportunity.

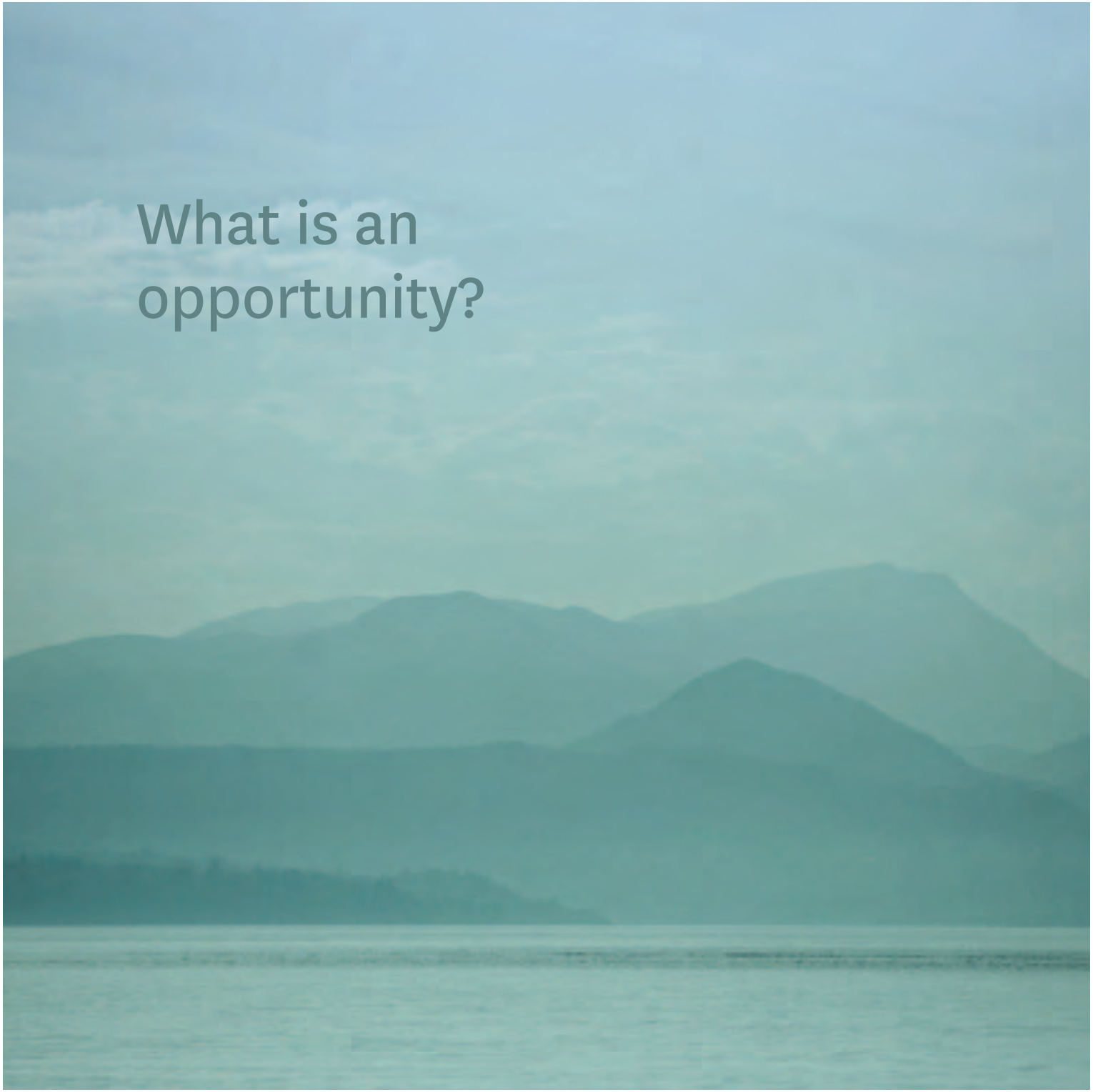
The market is already circumventing certification.

The effort to certify fisheries and standardize labeling around solid, scientifically driven data is crucial. It is also unlikely to produce rapid or widespread transformation alone. Buyers expressed significant frustration around the lack of a clear pathway to incremental change, or even the willingness to offer that option on the part of NGOs. That retailers are developing their own standards speaks to that frustration.

If MSC certification were a viable universal standard, this would all be an expected shaking out of duplicative or competing certification schemes. But the non-MSC standards are arising to address a real need: at less than 4 percent of the total supply, the amount of sustainable, certified fish is staggeringly smaller than the overall demand. Yet few of these

alternative certification or sourcing methods get much buy-in from NGOs. The danger is that if buyers and businesses begin to coalesce around a set of standards that are less stringent than the MSC's, and more effectively market those to consumers, the ability to move corporations along a continuum of improvement is lost.

What's missing is a formal ladder of incremental engagement, with clear rewards attached to each level. The fact that the ladder is evolving informally carries some of the same risks mentioned above around greenwashing and further confusion about standards in the marketplace. Codifying steps of incremental change outside the certification process could provide a more reasonable entry point for companies and faster scaling of change on the water.


What is an
opportunity?

PART 3: OPPORTUNITIES MAPPING

op•por•tu•ni•ty |ˌä pər ˈtü nə tē|

noun

1. a favorable juncture of circumstances
2. a good chance for advancement or progress

During the Discovery Phase of our research, we listened carefully to recent history. Who are the innovators? What have they done? What have they been working against? How have they been designing solutions? From this history we distilled the barriers that constrain the space and the design principles that successfully catalyze change.

Next we turned our vision to the future and began to define the broad areas of opportunity. Where is the biggest challenge? Which changes would have the most impact? What can we imagine?

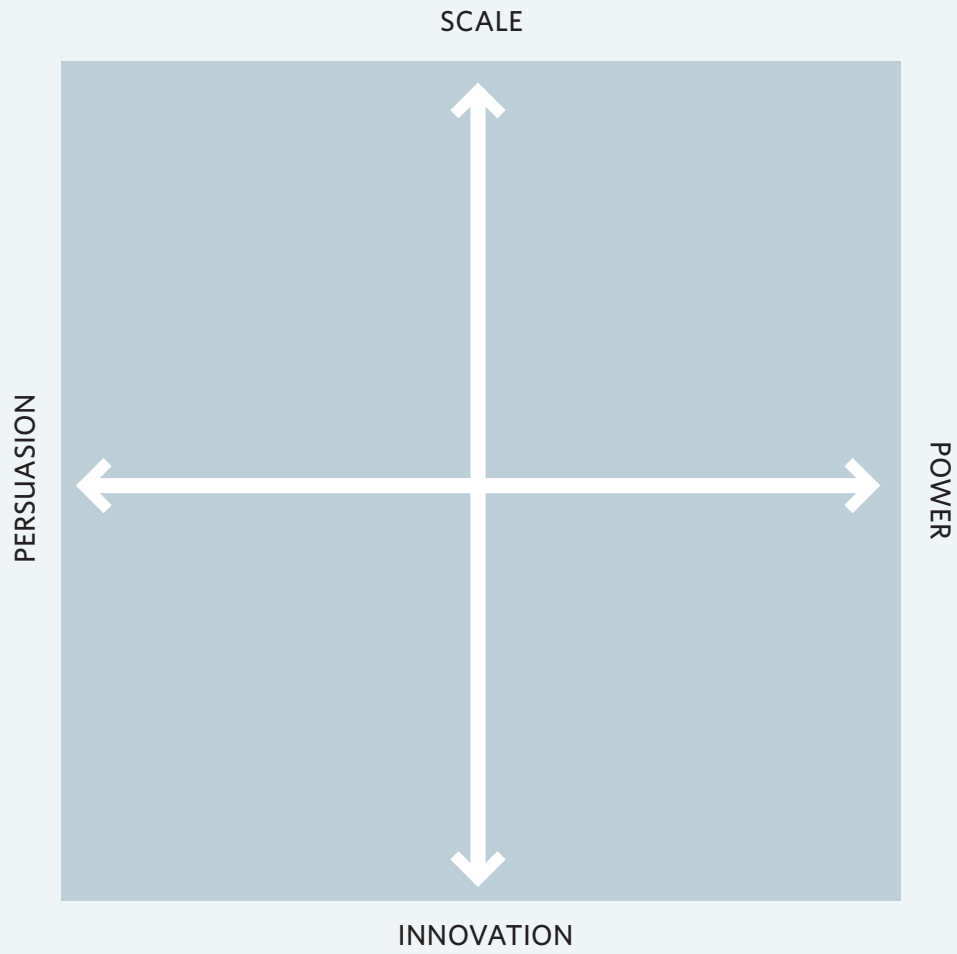
As we sorted through what we'd heard, we looked for burning needs, big ideas, and emerging trends. Pressing problems begged for smarter solutions. Small solutions begged for new growth. Brilliant inspirations begged for serious resources. Working methodically through what we'd heard, a vision of eight opportunity areas came into view, each with a core challenge. These eight are detailed in the following pages.

OPPORTUNITIES MAPPING

In developing the opportunities, we've assessed them along continua of two essential tensions: persuasion vs. power, and innovation vs. scale. PERSUASION is the art of making the captivating argument. It is the "Aha!" moment at which the overwhelming logic of the right solution is recognized. That quality is in tension with POWER, the brute force necessary to tackle the practical realities of market dominance, regulation, and industry standards. Ideas that are persuasive, but not powerful, risk becoming flash-in-the-pan inspirations that garner buzz but no traction in their execution. Ideas that are powerful but not persuasive are recipes for institutionalizing wrongheaded thinking and solutions. They are the bureaucratic nightmares of the future.

INNOVATION, the starting point for any new idea, describes the creative and inventive quality and appropriateness of a solution. Its strength is its newness and departure from traditional approaches. This quality is in tension with SCALE. The ability of an idea to grow and spread in large, incremental units with relative ease, SCALE is the widespread adoption of standard practices and technologies. Ideas that are innovative without scaling are niche solutions. Those that scale without being innovative rarely provide enough added benefit to qualify as a solution at all.

The move from PERSUASION to POWER requires ideas, messaging, and people to make the case. Continuity and consistency enable rapid movement. To move from INNOVATION to SCALE requires organization, market penetration, and capital. Cash is the key to scaling any innovation. For sustainable fishing practices to become themselves sustainable, they must find a way to the scale/power quadrant, one way or another.


SCALE
PERSUASION
POWER
INNOVATION

OVERVIEW OF EIGHT OPPORTUNITIES

Every solution matures along a trajectory. Using all that we learned from the design principles of the Discovery Frameworks, we predicted the potential of each area of opportunity. We considered the essential questions of growth: What forces will push toward maturity? What counter forces will push back? What is the promise if the challenge is met with a brilliant idea, a community of change agents, supportive organizations, and the resources to scale? What are the consequences if we fail to act on an idea that is ripe for change?

Each challenge has a different anticipated pattern of growth. For instance, a consumer campaign grows from a seed innovation, hitting scale and increasing persuasion as resources are applied. Experiments at the local fishery level also move along a growth path of persuasion until they reach a certain scale. Then they change direction to move along a power curve that standardizes and broadly disseminates the innovations. Technological ideas often follow another trajectory, moving as small innovations along a path of low-level power until they reach a rapid adoption curve and catapult into a fully scaled solution that is impossible to dislodge.

The following pages review the eight opportunity areas we identified. In each review, the core challenge is stated with a description of the landscape in which the opportunity rests. We detail the forces pushing it along its trajectory and the forces pushing it back. Finally, the promise of success is detailed.

	Opportunity	Challenge
1	Broaden the consumer target	Reach a new, broader audience with the message of sustainability in both developed and developing worlds
2	Shift branding/messaging away from “sustainability”	Reach consumers with a sophisticated (yet clear) marketing message about sustainability without using the term “sustainability”
3	Deal with usable bycatch	Invent a system for preventing the waste of tons of bycatch without creating a black market
4	Target the investor community	Create structures that allow capital pools to participate directly in fisheries-related solutions
5	Focus on the processing	Develop processing solutions that drive sustainability
6	Align strategies with business opportunities	Develop attractive business solutions that can allow sustainable behavior to piggyback
7	Shift the mindset of the players	Create more hybrid thinkers in the sustainable fishing sector
8	Develop systems that drive fisheries, suppliers, and retailers to engage in constant improvement of their practices	Create embedded technology and incremental ratings that allow for real-time, flexible interactions along the supply chain

1 | Opportunity:

Broaden the consumer target

Challenge:

Reach a new, broader audience
with the message of sustainability
in both developed and developing worlds

THE LANDSCAPE

While the sleeping giant of consumer demand might, indeed, drive a broad market for sustainable fish, if the ranks of the conscious consumer are confined to white, upper-middle-class households that patronize high-end retailers or dine at white tablecloth restaurants, then change will come very slowly, if at all. The failure of campaigns to strategically target consumers outside this group limits movement toward a broader audience. Who else buys or dines on seafood? Outside the upper-income diners, there is a vast market that is already consuming sustainable fish at McDonald's, Red Lobster, Olive Garden, Longhorn Steakhouse, and Capital Grille. They just may not know it. These chains don't always promote the sourcing of their products. And then there's the developing world. The majority of seafood consumption occurs in Asia, and consumption is on the rise in Africa and South America. These billions of consumers have scarcely been engaged in the conversation about sustainability.

1 |

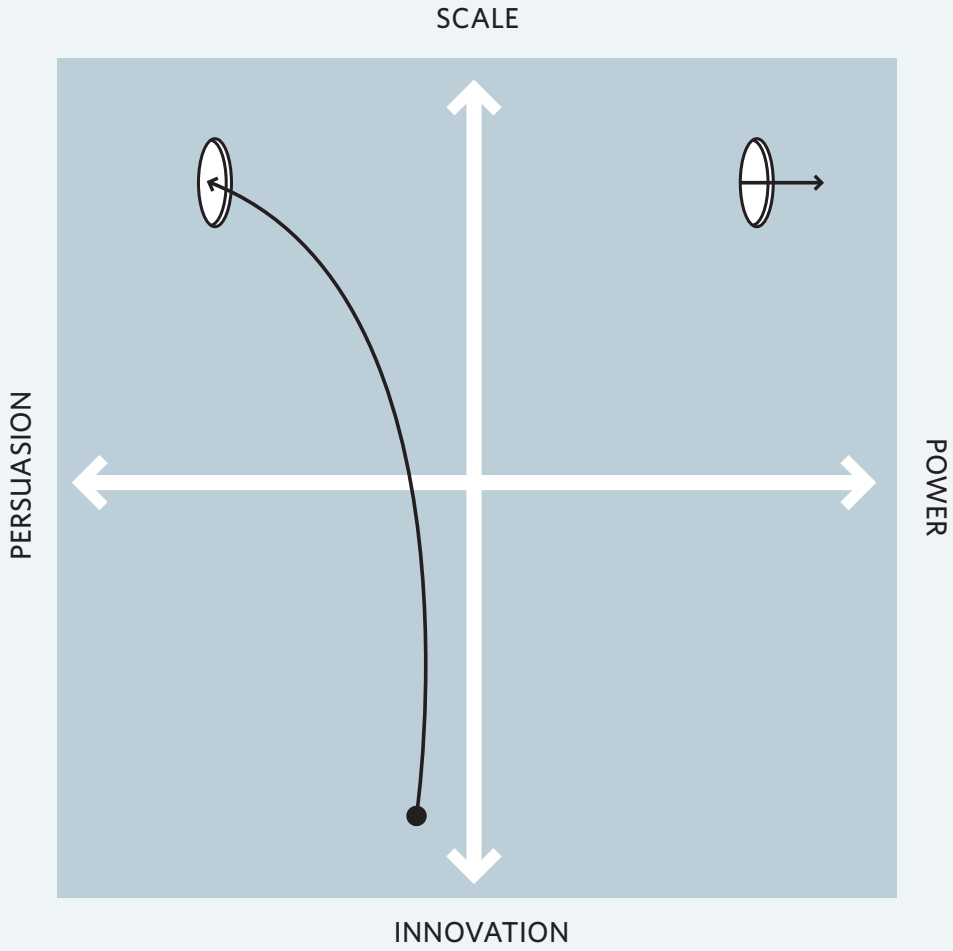
Opportunity: Broaden the consumer target

Challenge: Reach a new, broader audience with the message of sustainability in both developed and developing worlds

THE PUSH: Making fish a topic of conversation in at least every home that consumes fish could be a powerful way to drive change from the tail end of the supply chain. Organics and Fair Trade provide some models of how to move from fringe to fashion. The green movement also seems to be on an accelerating trajectory of scale and power. Al Gore's movie, *An Inconvenient Truth*, undoubtedly increased sales of green products. Additional factors drove that change, but the effect of global warming's becoming a dinner-table conversation topic certainly changed consumer behavior. Likewise, if sustainable fish can get broad word-of-mouth exposure, the receptivity of policymakers will shift, as will buying patterns.

THE PUSHBACK: Making a bet on a guerrilla marketing campaign to become viral is a risky proposition, and buying the eyeballs to ensure reach is an expensive one. Scaling this sort of change takes compelling messaging, accurate targeting, flawless execution—and lots of cash.

THE PROMISE: Inventing an approach that goes beyond pedestrian, one-off promotion stunts or costly media campaigns—and making it affordable—is a tall order. But it can be done. And the resulting effect on policy and the consumer mindset could be immense. While it's difficult to promise a consumer revolution, it is easy to predict that without a radical shift in messaging, sustainable fish will remain a marginal issue in consumer consciousness.



TRAJECTORY: Currently a quiet message around sustainability is heard by a small group of consumers. As money is spent and the audience expands, the message of sustainability will become more persuasive in the culture at large. Finally, when awareness hits a moment of critical mass, policy shift will happen, causing the power of the impact to instantly leap to a new level.

2 | Opportunity:

Shift branding/messaging away from “sustainability”

Challenge:

Reach consumers with a sophisticated (yet clear) marketing message about sustainability without using the term “sustainability”

THE LANDSCAPE

Designed by scientists and implemented by nonprofits: that's the problem with current consumer campaigns that use "sustainability" as their value proposition. Sustainability itself is a branding nightmare: it means nothing on its own, doesn't have a clear, unified definition among those who already care, doesn't roll off the tongue, and is complex enough to saddle a messaging campaign with a challenge akin to describing quantum physics on the side panel of a cereal box. Further complicating matters, "sustainability" has no recognized brand to carry the message into the marketplace. There's a clear opportunity to leapfrog the current lexicon and create a new way of thinking and speaking about buying and eating fish that isn't harvested by brutalizing the environment.

2

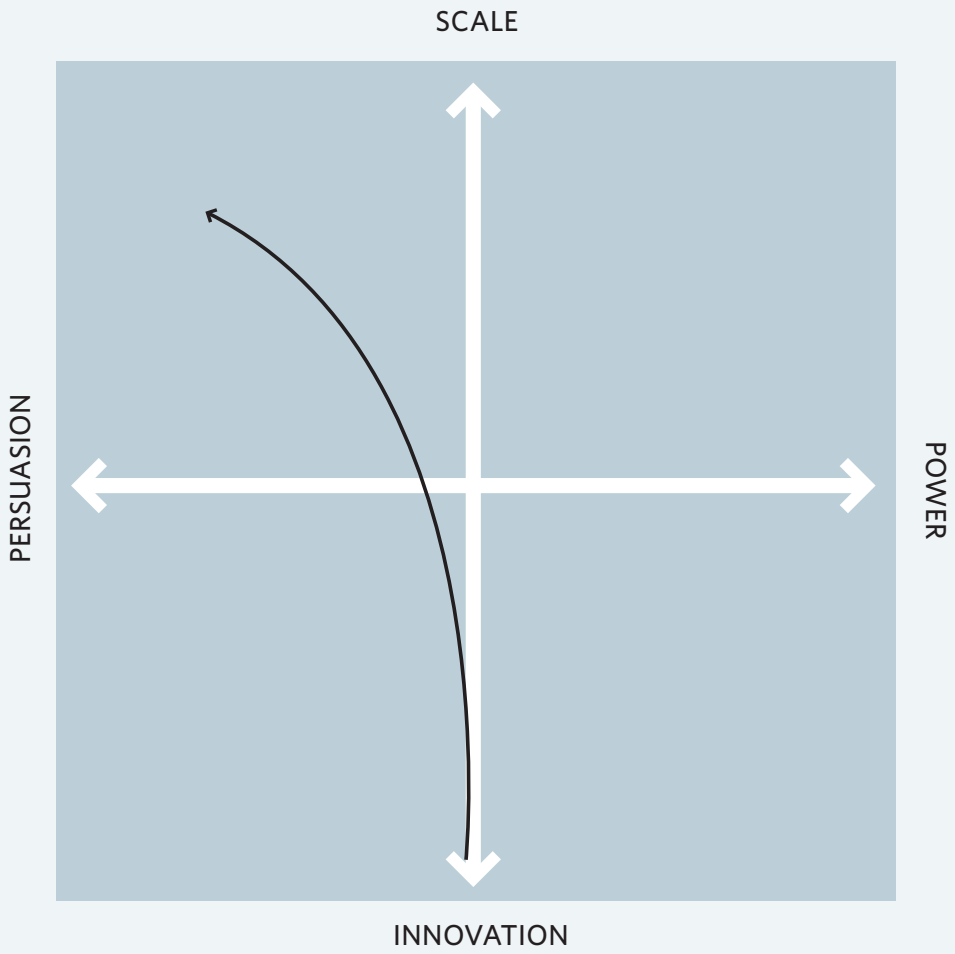
Opportunity: Shift branding/messaging away from “sustainability”

Challenge: Reach consumers with a sophisticated (yet clear) marketing message about sustainability without using the term “sustainability”

THE PUSH: First, leaving “sustainability” behind would create real traction for a consumer initiative based on the way people think and buy, not on the way scientists categorize and explain. Buyers would understand and be able to feel good about making a better choice. Consumers naturally understand choices that are framed as practices to support or good choices of what to eat. It is harder to get them to understand the need to embrace a system of management that promotes the fuzzy concept of sustainability. Second, the move would end the infighting among NGOs over the perfect definition of sustainability. If the term is supplanted by something better, less energy will go into the fight to be right.

THE PUSHBACK: “Sustainability” will not go away quietly. Without a serious brand to build messaging around, anchoring the right choice is nearly impossible. Additionally, no single term will capture it all. If we abandon sustainability it may be replaced by a proliferating set of ill-defined terms.

THE PROMISE: Jettisoning the word “sustainability” may not please the scientists and conservationists who fight over the definition, but it could prove pivotal in the campaign to win the attention of the public.



TRAJECTORY: New messaging that does not include the term "sustainability" will have to be invented. Careful targeting and significant cash outlays will be necessary to scale the message. Even so, this opportunity might never reach the power quadrant.

3 | Opportunity:

Deal with usable bycatch

Challenge:

Invent a system for preventing the waste of tons of bycatch without creating a black market

THE LANDSCAPE:

Each year fisheries toss more than 20 million tons of bycatch overboard. Much of this fish has or could have market value. Many fish are discarded due to “high grading,” the practice of retaining only the highest-quality fish (size, sex, species) to increase value of the catch. Others are thrown overboard because, even though valuable on the market, the fishermen do not have a permit for those species. These practices waste fish, deplete stocks by killing juveniles or adults of the wrong sex or species, and undermine scientific management by underreporting catch. There has been minimal effort and limited success with rethinking what happens to edible, legal bycatch, in part because of the high cost of monitoring bycatch and the legitimate worry that valuing bycatch of illegally caught species might either encourage fishing of these species or create a black market and thus reverse the incentives for reducing bycatch. The very complexity of navigating this challenge has probably prevented anyone from taking it on: it is beyond the purview of any one fishing co-op, or government or company. There are success stories, but they have been marked by favorable geography and weak oversight, allowing individual entrepreneurs to create a small market. Nowhere has an initiative of this sort scaled.

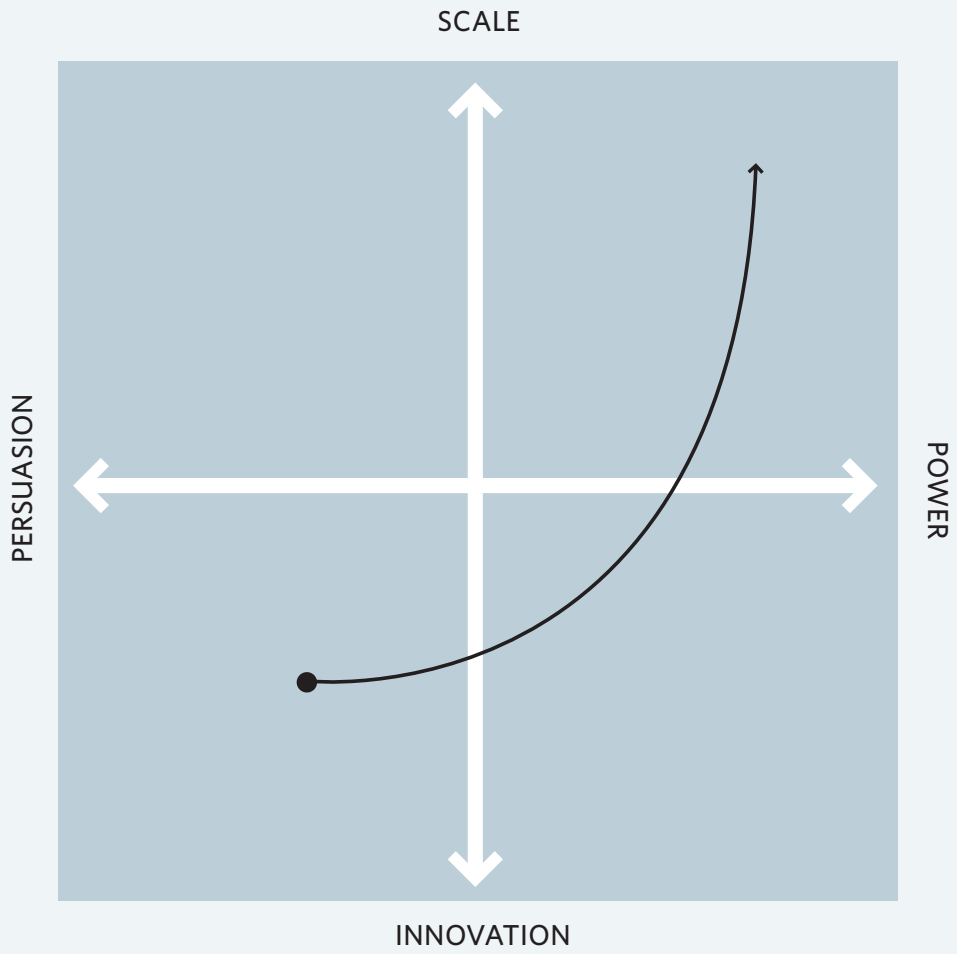
3 | **Opportunity:** Deal with usable bycatch

Challenge: Invent a system for preventing the waste of tons of bycatch without creating a black market

THE PUSH: Many models exist for the repurposing and valuing of waste, whether that's using sawdust from furniture factories to make paper or recycled plastic bottles to make fleece pullovers. Imagine how some ideas and technologies already in use on the water might be brought to bear against this problem. Fish processing boats might serve as a bycatch market, allowing fishermen to trade and sell their bycatch. Fishing vessels might record their catch in electronic logbooks feeding both scientific and commercial databases. Fishermen could use electronic markets akin to the NASDAQ or eBay or Craigslist to buy and sell their nontarget catch. Enabled by a freer trading environment, new markets for fish now being wasted could emerge and quickly grow to scale.

THE PUSHBACK: The current logistics of and regulatory constraints on bycatch make accomplishing this an extremely complex task. Even a simple experiment in this area would require regulatory flexibility, the elaborate coordination and swapping of permits, or a fundamental policy shift. On-the-boat changes to sorting and preserving bycatch will drive up time, space, and labor costs. The efficiency of putting nontarget species catch on the market could drive down price. Returning to port to deliver bycatch is not currently cost-effective, but at-sea collection of bycatch can also be costly and weather-dependent.

THE PROMISE: Rationalizing bycatch will allow fishermen to get more money for the same amount of work, decrease fuel costs and pressure on the water, and increase the availability of edible fish (which might be sold in an after-market catering to low-income communities). It will increase the accuracy of scientific data. Inventing a solution that respects current quota systems, feasibly navigates the logistics of fishermen at sea, and provides the right mix of motivations and disincentives is a perfect systems-redesign challenge.



TRAJECTORY: We begin with some existing innovative community experiments. As these models are replicated, the opportunity will scale in power rapidly.

4 | Opportunity:

Target the investor community

Challenge:

Create structures that allow capital pools to participate directly in fisheries-related solutions

THE LANDSCAPE

Investing in a new venture is always a risky business. At a time of global economic crises, dwindling fish stocks, consolidating businesses, and powerful foreign competition, investing in new fisheries-related business models can seem downright foolish. And yet there are vast capital pools beyond the traditional community of foundations and NGOs that, if invited to participate in familiar ways (market analysis, capitalization plans, revenue projections, profit expectations, exit strategies), would do so. Already, permit banking, the community-based purchasing and management of permanent fishing rights (an asset proved to increase in value over time), has provided a means for investors who otherwise never would have considered fisheries-related businesses to enter this sector and catalyze change. Right now, the sustainable fishing movement is largely driven by private foundations and NGOs with the Packard Foundation leading the way. What would sustainable fishing look like if Wall Street were to join the movement? In much the same way that CalPERS, the California pension fund for state employees, has spurred investment in green technologies, initiatives could be developed and packaged to seed new business initiatives that support sustainability.

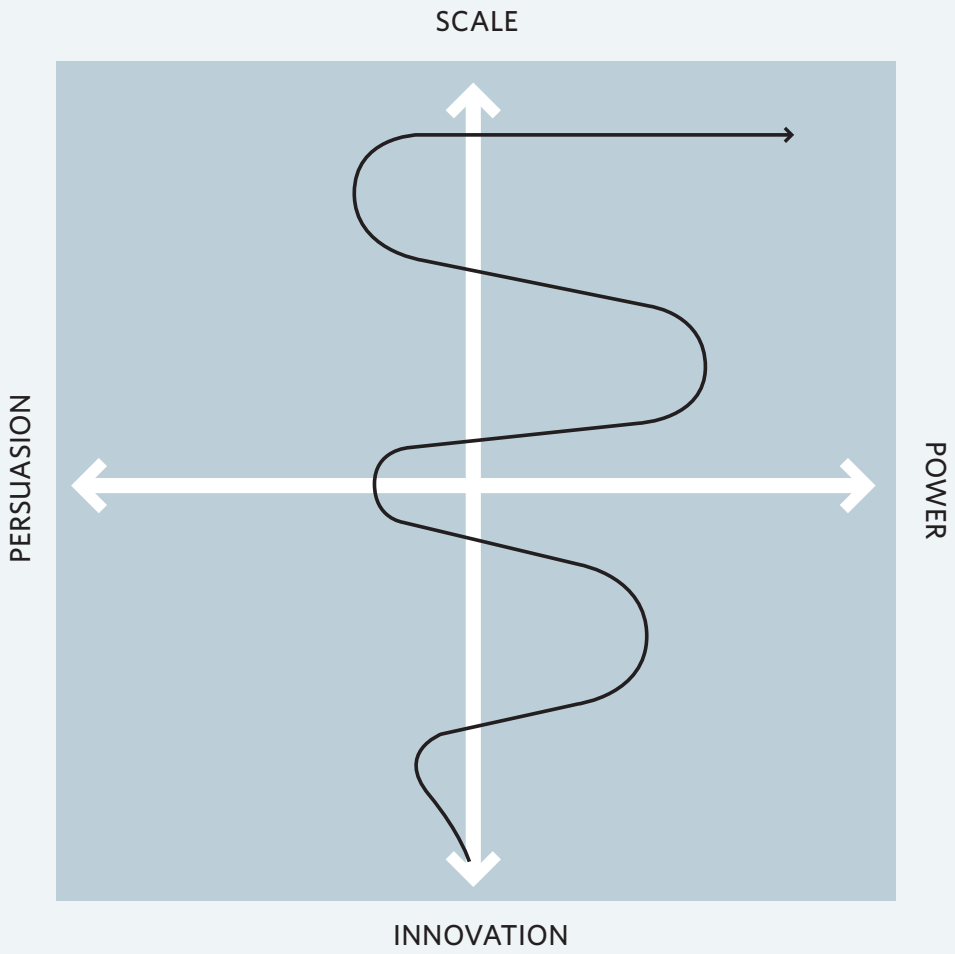
4| Opportunity: Target the investor community

Challenge: Create structures that allow capital pools to participate directly in fisheries-related solutions

THE PUSH: Getting to scale takes resources—more resources than we can ever hope to generate given the current set of players. There are many ways to responsibly include the investment community. The issues around waste and living conditions in the developing world, along with concerns about marine life, could spur interest from some of the large, religion-based pension funds. Or, creating real business plans could attract funds from Green Century and other eco-minded mutual funds to launch or develop new ventures. Building on the concern about climate change and other ocean-related issues relevant to that topic (e.g., acidification) might prove to be an easy way to broaden the appeal.

THE PUSHBACK: Wall Street investors will ignore or twist science to further their profits as they have for decades in mining, oil, and shipping. Even for responsible investors, creating awareness—let alone investment opportunities around sustainable fishing—faces some of the same challenges that current consumer awareness campaigns face. Finally, more opportunities exist for so-called blended-value investors—those who want social and financial return on their dollars—than there are investors in that category. These investors are hard to come by in a down market.

THE PROMISE: Solutions for sustainability that are packaged in a way that the investment community can support would quickly lead to scalable and powerful businesses that have sustainability as part of their operating paradigm.



TRAJECTORY: The path to scale and power with investors proceeds alongside a series of conversations. Each new round of the fundraising dialogue that persuades investors will cycle in the same fashion, gaining power with each influx of money. As momentum builds, the amounts raised and the impact in the market will grow.

5 | Opportunity:

Focus on the processing

Challenge:

Develop processing solutions
that drive sustainability

THE LANDSCAPE

Little energy has been expended looking at, or trying to drive the sustainability of, seafood processors. Additionally, while some processing plants still operate in North America, much of the processing industry has moved to the developing world. Because processors buy fish directly from fishermen and few locations exist where this can happen, fishermen are often at the mercy of processors in setting prices. Huge amounts of fuel and time are spent shipping fish from the developed world to the developing world, where the wage differential still offsets the cost but not the carbon footprint generated by this transport. In short, there is a significant opportunity to demonstrate how processors can be a force for change.

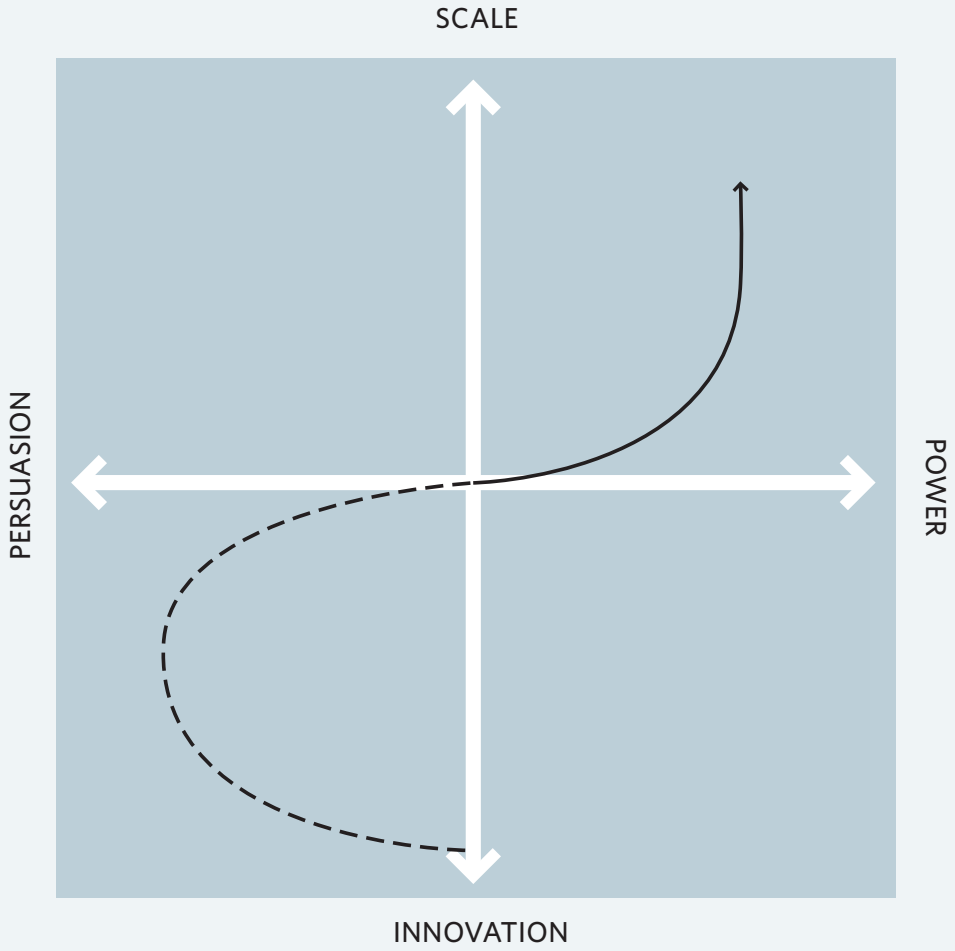
5 | **Opportunity:** Focus on the processing

Challenge: Develop processing solutions that drive sustainability

THE PUSH: If fishing co-ops opened, owned, and operated their own processing plants, the power dynamic in the supply chain would shift to give fishermen more control over supply and prices. Adjustments to the current inefficiencies of processing could make plants in the developed world more competitive. For instance, plants could be set up as biodynamic closed cycles, using effluents and producing usable waste (e.g., fish guts as organic fertilizer). With many processors poised to go under, it might be exactly the right time to cheaply acquire a plant to reinvent.

THE PUSHBACK: Processing is a sustainability-agnostic part of the supply chain. Whether fish are caught sustainably or not generally has no impact on the methods of processing. Any improvements to processing procedures would probably benefit sustainable and unsustainably caught fish alike. Further, the costs of building new plants or retooling existing plants is unknown. Which communities would be receptive to have one sited there? Which fishing co-ops would be sophisticated enough to operate such a facility? How long would it take for this type of endeavor to become profitable? Given the economic downturn, how willing would investors be to support such a venture?

THE PROMISE: The shift that cooperatively owned, local processors might represent cannot be underestimated. Local processing plants would provide locally sourced food for retailers and restaurants, employment in fishing communities, a higher level on the value chain for fishermen themselves, and a smaller carbon footprint for the industry.



TRAJECTORY: At first, the changeover to better processing will be slow with a lot of missteps. This is symbolized by the dotted line. As better, replicable models are worked out, the solutions will accelerate toward the scale and power quadrant. Processors are already a powerful force in the supply chain. The dotted line indicates the predicted slowness of the process.

6 | Opportunity:

Align strategies with business opportunities

Challenge:

Develop attractive business solutions that can allow sustainable behavior to piggyback

THE LANDSCAPE

The primary approach NGOs have used in their corporate outreach programs focuses on making the business case for sustainability, either with the carrot (cost savings; delivery of higher-quality fish; secure long-term buyer relationships) or the stick (shaming through bad publicity and rating systems). They have not explored how initiatives that are good for the businesses might align with sustainability practices. It's likely that an initiative that is primarily embarked on to save companies money (in transportation, packaging, and preservation methods) can become a strategy on which sustainable practices piggyback.

6

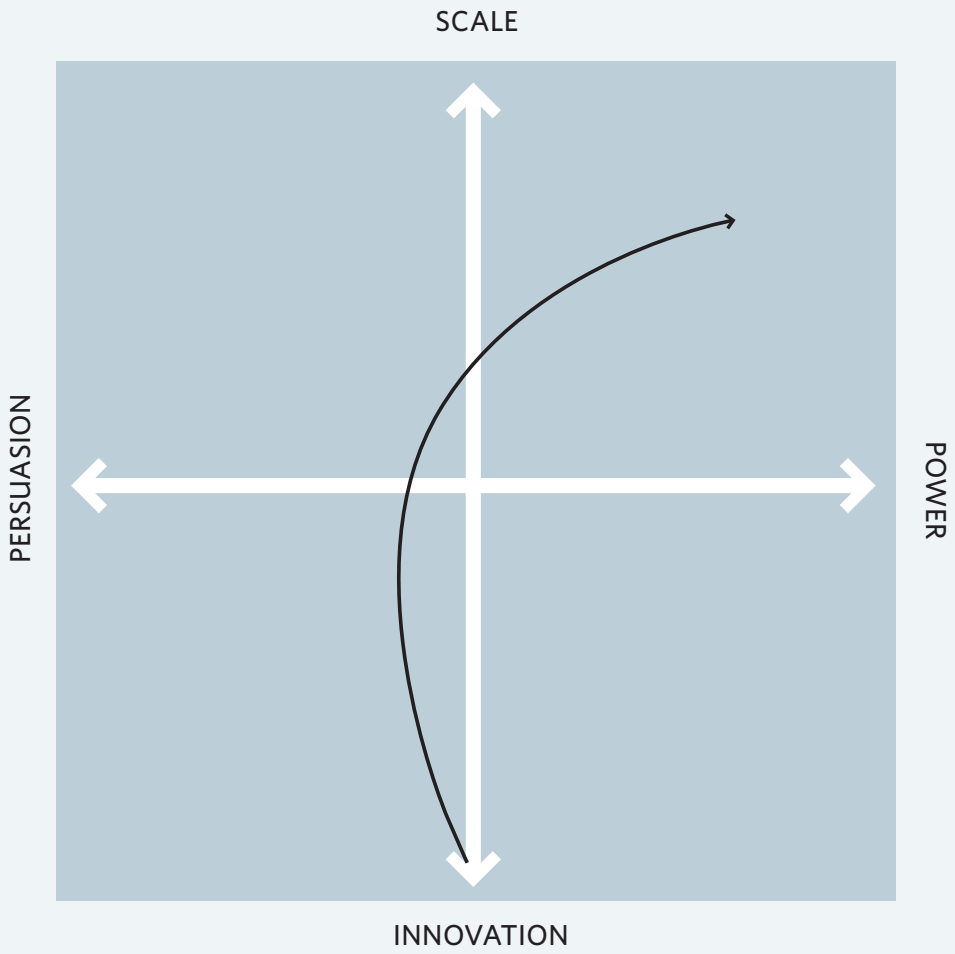
Opportunity: Align strategies with business opportunities

Challenge: Develop attractive business solutions that can allow sustainable behavior to piggyback

THE PUSH: Imagine that a packaging innovation can shave 30 percent off the supplier's cost of shipping, but that the packaging design is available only for certified fish. Imagine that a buying pool for fuel is established for distributors to join—if they are working toward sustainability. Drill down into the business to figure out where reducible costs exist and where benefit can be delivered, and then tie that to sustainability. Ideally, this results in the launch of a new, profitable business that can serve the field. If we can make the argument to retailers in a profit language they understand, scaling quickly becomes inevitable.

THE PUSHBACK: Picking a part of the current business process that is ripest for a transformative change, not just an incremental one, will be the first challenge. The second challenge, naturally, will be tying the sustainable behavior to the model. If the link is artificial or too costly, it will fail. Finally, protecting the benefit exclusively for sustainably caught fish will be a difficult task. Business process improvements have a way of spreading throughout the chain and thus will reduce the value proposition for sustainably caught fish.

THE PROMISE: The uphill battle to get companies to incorporate green business practices flattened when the cost savings on energy became clear. Wherever an economic motivator is coupled to a behavior change, momentum builds of its own accord.



TRAJECTORY: Once the breakthrough case is finally found, this solution will quickly scale and become powerful. It is the long journey of persuasion and innovation to find that case that will be the challenge.

7 | Opportunity:

Shift the mindset of the players

Challenge:

Create more hybrid thinkers
in the sustainable fishing sector

THE LANDSCAPE

The chasm between the mindsets of the NGO/scientist community and the business community constrains problem solving around sustainable fishing. The players involved in successes always have appreciation for, deep knowledge of, and respect for the decision-making framework of the other. They are hybrid thinkers. These are scientists like Jim Cannon, who has spent enough time on fishing boats to understand the motivations and the business constraints that fishermen face. Or Carrie Brownstein, who, although working in the retail end of the chain, has a science background. Such folks are rare. Designing a systemic way to populate the field with more hybrid thinkers is the challenge. While several groups exist to connect businesspeople to general environmental or social issues (e.g., Net Impact, the Business Alliance for Local Living Economies, and Business for Social Responsibility), there are no platforms or forums in which scientists and business types are encouraged to collaborate or learn from one another.

7

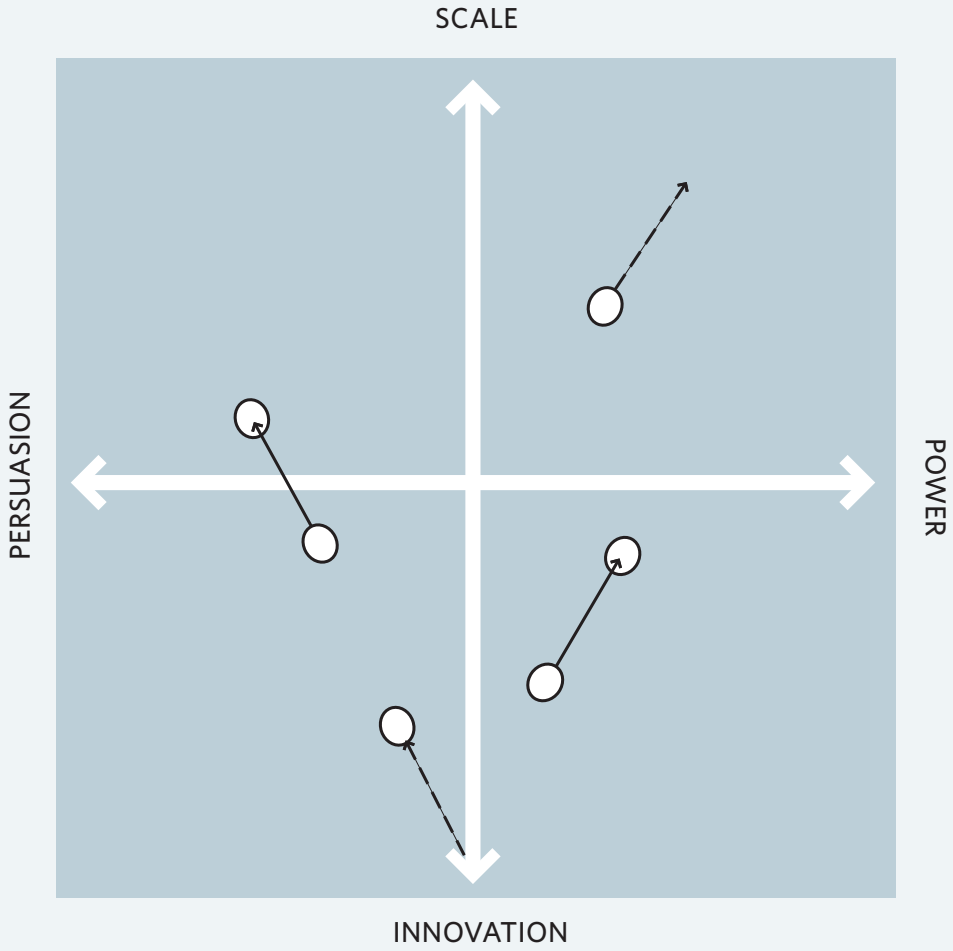
Opportunity: Shift the mindset of the players

Challenge: Create more hybrid thinkers in the sustainable fishing sector

THE PUSH: Programs of "secondment" can be powerful ways to allow people from one sector to intern in another. Helene York (of Bon Appétit) and Carrie Brownstein (of Whole Foods) are examples of sustainability experts who have crossed over into business, proving their worth, and then becoming incorporated as a permanent position. These successful experiments underscore the potential of designing something much broader and systemic: what if a similar sort of secondment were a requirement of a marine biology degree? Or MBA programs offered marine biology immersion for a term? What if an immersive academy formed to bring fishermen, NGOs, and business leaders together for intermittent one-week sessions over two years to inculcate them with empathy for what drives their counterparts.

THE PUSHBACK: Designing a program with enough depth that it ensures a real shift in mindset, with enough ease (in terms of both access and commitment), and within a reasonable time is extremely difficult. Relying on the infrastructure of existing educational institutions will take a long time and reduce scale. Finding a way to incorporate hybrid thinking and experiences into the career trajectory of those already working on this issue is paramount. Where would the time come from?

THE PROMISE: Change is created by people and their choices, not by abstract systems. If you create profound awareness of different perspectives in people, you deepen their capacity to effect change.



TRAJECTORY: Creating hybrid thinkers is a slow process. But a single hybrid thinker in a position of power has the ability to effect significant change. Therefore, this opportunity will proceed along a path of discontinuous innovation and scale as more hybrid thinkers enter the field. Some movement might be rapid (solid lines), while other movement might be slow (dotted lines).

8 | Opportunity:

Develop systems that drive fisheries, suppliers, and retailers to engage in constant improvement of their practices

Challenge:

Create embedded technology and incremental ratings that allow for real-time, flexible interactions along the supply chain

THE LANDSCAPE

While the NGOs argue over the "right" definition of sustainability, the businesses are building their own structures to rationalize how to behave and measure their impact on the ocean. A significant opportunity exists for shaping the initial design and implementation of these systems, as none have been widely adopted or integrated with other business process software. This opportunity has two aspects: First, standards must be created that support incremental change and that dovetail with the current needs of business. That might look like a ratings agency or analyst function for the field. Operating akin to a credit rating agency that responds dynamically to new information, a fisheries rating agency could upgrade or downgrade a fishery based on new science, calls with fishery stakeholders, changes in business processes, or changes out on the water. Second, technology must be adopted that will help these standards cascade along the entire supply chain. A nascent example of this type of approach is Jim Cannon's work with Wal-Mart and McDonald's, for which he is building software that tracks how much fish a buyer purchases from suppliers that are rated as to their sustainability. The simple rating system (A, B, C, D, with D indicating suppliers that don't report sustainability information and A indicating an MSC-certified player) is potentially a meme-shifting way to embed a path of flexible, continuous improvement. These specific software and rating agency suggestions are merely ideas in a broader space of opportunity to shape new corporate standards and technology systems. Like the defining of MSC certification, this opportunity could be a powerful way of creating a framework that drives behavior.

8

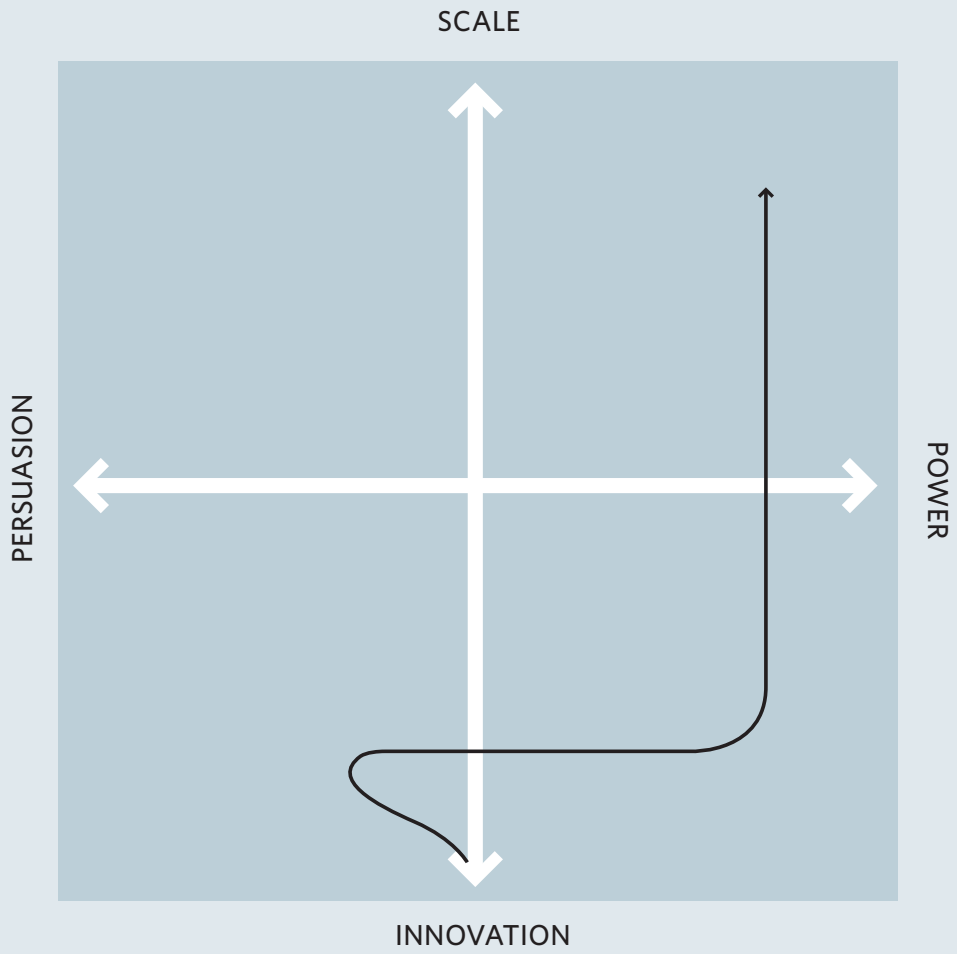
Opportunity: Develop systems that drive fisheries, suppliers, and retailers to engage in constant improvement of their practices

Challenge: Create embedded technology and incremental ratings that allow for real-time, flexible interactions along the supply chain

THE PUSH: To achieve market power, a system must be an immovable part of the business. Developing enterprise systems to collect, track, and disseminate data along the entire supply chain would embed sustainability into the business processes at the fishery, buying, processing, and retailing levels. An independent rating agency that allows fisheries, buyers, and retailers to report on their practices is a path to both scale and power. Buying behavior could drive purchasing to the most sustainable suppliers. Purchasing data could be anonymously aggregated and used by nonprofits to create irrefutable business cases for fisheries, buyers, and retailers to change. The incentive for suppliers to report their practices, and move up in their rating, would be significant.

THE PUSHBACK: Complex, enterprise-wide systems are often at the root of both business operations and competitive advantage. Organizations are understandably protective of these systems, since change to them can be disruptive and costly. Finally, the ranking of suppliers will require an organization that is universally respected. Entering the realm of real business, with real power to influence detailed purchasing decisions, carries real liability.

THE PROMISE: Creating standards and a technology platform to embed those criteria as part of the business process would be a powerful driver in corporate behavior. A software system could be distributed worldwide, and a respected ratings agency could lead a real-time, continual improvement in practices along the entire supply chain.



TRAJECTORY: Innovating in this area will take some time. Developing standards for incremental change will also require time to secure buy-in. Once these two things are in place, there will be a rapid path to scale and power.


“There’s still a whole world of awe-inspiring, unique marine beauty to engage with. We must create a relationship to what is around us, not what’s been lost. That’s how to inspire change.”
-Barton Seaver, chef and sustainability advocate

PART 4: CONCLUSION

Where do we go from here?

The intention behind this report was never merely to produce a compelling reference or survey of the field. Our process has been designed to support action: the discovery of a new opportunity area to design into for Ashoka's subsequent work with the Packard Foundation. Because this work has been driving toward a decision, the methodology included cycles of gathering information, synthesizing that into insights, and then testing those conclusions (either with experts or against the principles, themes, and tensions we derived).

We began with a broad survey of innovation in the field and used that information to distill design principles for successful solutions. We looked across all three areas of the supply chain to see what consistent challenges and themes surfaced. And we used the insights we obtained to identify opportunity areas that could produce both power and scale. (See page 9 for a more detailed illustration of our process.)

All that brings us to the point of choosing: Of the opportunities described, which is the best area to pursue in the next phase of our solution design engagement? Which one is most likely to deliver the most significant impact? Since the decision must rely on prediction rather than on unequivocal data, we outline here some useful criteria to consider for selection and share our thinking as to why some opportunities seem riper or more potent than others.

One key way to evaluate these opportunity areas is to test them against the core ways in which the current system is stuck. We measured all of these opportunities using the themes that surfaced in our distillation of the three Discovery Frameworks. (See pages 115 through 118 for a complete list of these themes.) In this way, we considered not just the timeliness of each opportunity area, but also its relationship to the most pressing aspects of the problem of unsustainable fishing. It follows that a solution targeting the most persistent challenges across all three of the constituent groups we considered will represent a stronger chance for deep impact.

Another contributing factor to our evaluation was the relative predicted trajectories of innovations in these opportunity areas, reflected in the illustrations on pages 129 through 157. While these are all hypothetical renderings, they track to real challenges that we anticipate in each of these opportunity areas. Therefore, we looked at the degree to which opportunities spend time wandering in the quadrants of minimal power and persuasion. How consistently or rapidly did the solution reach that ideal combination of power and scale? How likely were the forces to spur a given solution? This last question often translated literally to: Who might fund or invest in this concept?

In light of these criteria, we suggest selecting one of the following three opportunity areas with which to move forward in subsequent work together:

OPPORTUNITY 3

Deal with the usable bycatch

Challenge: Invent a system for preventing the waste of tons of bycatch without creating a black market

Changes in consumer behavior (and even in buyer purchasing) do not often ripple out to produce change on the water. This opportunity area is a chance to engage with fishermen and create direct

incentives for them to change behavior. Thus, the effectiveness of this method does not rely on the supply chain to transmit change.

This opportunity also potentially migrates more power into the hands of fishermen and provides them with a means outside the MSC certification process (ideally, one driven by monetary benefit for them) of becoming more sustainable.

Dealing with bycatch also involves several of the undertargeted groups, including artisanal fisheries and processors. And by focusing directly on one of the most wasteful practices in the industry, it offers an incremental improvement without entangling itself in the larger problem of defining sustainability. The benefits of retaining and selling edible or otherwise useful fish that are harvested, rather than throwing them overboard due to regulation, poor incentive structure, and inadequate logistics, are immediately obvious to all stakeholders.

With respect to its predicted trajectory, we noted the existence of experiments off the coast of Africa and in the Caribbean in which artisanal fishermen are already using bycatch from industrial shrimp trawlers as a source of income. For this reason the starting point of this opportunity is ahead of others, for which there have been no previous models that foreshadow success.

Countries with small-scale projects in this vein include Madagascar, Tanzania, Mozambique, Cuba, and Gambia. In some cases, the business that has been developed is formal and part of a government strategy; in other cases it is not. There is great potential to further research these systems, find commonalities and motivations, and determine how they might be scaled and applied to other fisheries and how real-time trading technology could enhance the operation into a more strategic, viable business model.

OPPORTUNITY 5

Focus on the processing

Challenge: Develop processing solutions that drive sustainability

This opportunity addresses two key challenges: the lack of power that fishermen have in the system and the difficulty they have in getting recognition (and remuneration) for their sustainable practices. Bringing processing under the control of fishing co-ops, or even just localizing control, could substantially improve those dynamics.

In addition to targeting key unaddressed players, most obviously processors, this opportunity area also operates close to activity on the water. It won't rely on successive translations along the supply chain to effect change. Targeting processing also engages business and looks for market drivers for change, rather than relying on NGOs to partner and influence companies.

In relation to its trajectory, this opportunity also has had some experimentation that would serve as a starting point. One example comes from the Tofino waterfront on Vancouver Island, British Columbia, where a group of local residents, outside investors, First Nations, and Ecotrust Canada collectively invested $1 million to purchase, upgrade, and operate Trilogy Fish Co., a 1,500-square-foot processing plant and fresh seafood retail store that buys directly from fishermen. The endeavor was begun in hopes of helping local fishermen get better prices and be part of value-added processing, branding, and marketing.

While the initial investment and scaling of this opportunity area could be slow and difficult, the momentum once the model has been pioneered would be substantial, making it a prime candidate for widespread impact.

OPPORTUNITY 8

Develop systems that drive fisheries, suppliers, and retailers to engage in constant improvement of their practices

Challenge: Create embedded technology and incremental ratings that allow for real-time, flexible interactions along the supply chain

Like the other two opportunities we've emphasized, this one aligns itself with market drivers: buyers need more fish than can be supplied by sustainable fisheries. But the ability to make gradual increases in their purchases of sustainable fish, while still fulfilling their demand, could be the key to changing behavior.

While this solution would surely use NGO input and existing guidelines for establishing ratings or incremental standards, it would not rely on NGO lobbying to secure adoption. Instead, as a potentially embedded part of a company's purchasing systems, it would get buy-in because of the business benefits that it offered. It also deftly sidesteps the all-or-nothing "sustainability" label, providing a more nuanced and graded approach to change.

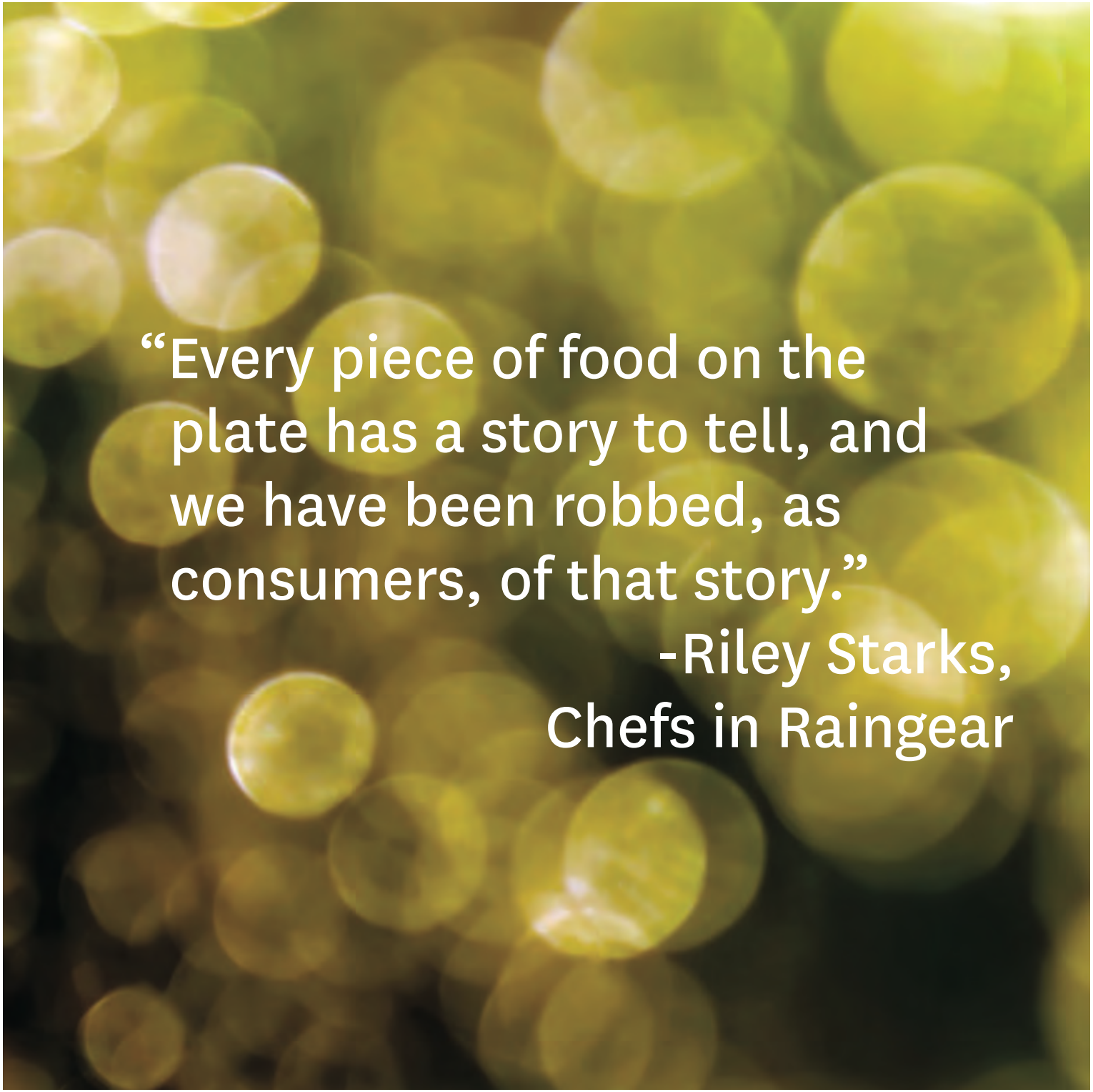
This opportunity harnesses the substantial momentum behind the market's circumvention of certification. And significantly, by improving the efficiency of the supply chain itself, it could also pave the way for other supply-chain targeted reforms to become more effective.

We predict that this opportunity would scale the fastest and become powerful more quickly than any other opportunity. Such a trajectory is likely because of the ability of standards and technologies—ones that perform vital functions for business—to be easily and quickly adopted. Ratings and supply-chain software, done right, could very well make sustainability inevitable instead of the uphill battle it has so far been.

A few final thoughts

It is worth noting that all these opportunities are areas for exploration rather than specific solutions or ideas. The details we have suggested of how various areas might be targeted are merely possible flavors. The narrowing of these opportunities into the articulation of specific ideas, with outcomes and goals described, will happen in the next phase of work. Because of that, we did not engage in an in-depth debate around the viability of all aspects of potential solutions. We fully expect the ideas to evolve (based on viability and difficulty, among other criteria) as we perform more field research in subsequent phases.

We are hopeful that this report will spark fruitful and impassioned discussions in the field about the opportunities outlined here, and also about this approach to effecting change. Ultimately, any insights we have discovered here can be traced back to the wisdom of social entrepreneurs. The hallmarks of their approach—empathizing first, building on successes, noticing what's working and why, and moving from a standpoint of what is possible (rather than what is broken)—could prove transformative for the thinking of the field—and for the future of wild fish.


“Every piece of food on the plate has a story to tell, and we have been robbed, as consumers, of that story.”
-Riley Starks,
Chefs in Raingear

Success stories from comparable challenges

Sourcing seafood sustainably presents unique challenges: marine life is a shared resource and so doesn't provide the individual benefits that an owned resource can provide to inspire behavior change; seafood is the only protein that is typically hunted in the wild; it is sourced out of view of most consumers; it is highly perishable. These challenges demand unique approaches, yet there are models of other consumer goods that embrace a similar ethic and have achieved broad adoption and scale. Aspects of the strategies that successfully promote organic food, fair trade products, and sustainable forestry can offer guidance for building a more sustainable global seafood industry. We offer a glimpse of some of these relevant comparisons, some of which would warrant further research, depending on the opportunity area Packard chooses to pursue.

Analogous solution area: Organics

THE MEANING OF THE LABEL

There is skepticism and confusion around the word "sustainable," just as there was for decades around the word "organic." First appearing in the 1940s to describe a pesticide-free way of growing produce, the term was not widely used until the '70s, when it was marginalized to describe a health-food culture. Today's consumer understands its meaning in terms of all the word connotes: natural, healthful, environmentally sound. The evolution of the word to its current stature was a long process that culminated in government standards in several countries. Compared with organics, sustainable seafood is in its infancy as a concept, but a general coalescing of opinion around a common definition of "sustainable" is key. An embrace of sustainable seafood by the very organizations that pushed organics into the mainstream might also be effective.

THE INTEGRITY OF THE TERM

As with sustainable seafood, products labeled organic once carried insufficient, unverified product information. But after years of refining the criteria, educating producers and consumers, and lobbying for legislative backing, organics advocates have significantly minimized the kinds of supply-chain lapses and deliberate greenwashing that are now happening with seafood labeling. Organizations such as the Organic Trade Organization in the US and the Soil Association in the UK helped unify the organic community, codify and standardize the definition of "organic," and push hard for stringent government standards. The Organic Consumers Association is a powerful protector of consumer rights. Currently, no counterparts to these advocacy groups exist for sustainable seafood.

THE COST OF CONVERTING

The expense of producing organic crops was often prohibitive to farmers, a problem that echoes among today's fisherman as a disincentive to adopting sustainable practices. Investments in equipment, training, and certification seem too costly, but support from outside sources and innovations at the local

level have worked for organic products. This innovative approach, for example, to assisting small farmers in going organic though a Community Supported Agriculture–style of commerce, could offer some solutions for fishermen:

Example:

Luiz Geraldo de Oliviera Moura

Ashoka Fellow in Brazil

Moura is using organic agriculture to encourage a more environmentally, economically, and socially sustainable relationship among consumers, producers, and the land they all depend on. Moura puts supply and demand together in a system that gives farmers advance payment, guaranteeing income throughout the year, and gives the consumer high-quality organic produce at a fixed and affordable price. The plan begins by training small farmers in use of organic farming technologies. The next step binds farmers and consumers in an economic relationship based on a commitment by both sides. The consumers participate in creating a production plan, deciding what varieties of products they require and how much they typically consume in a week, month, and year. They then contribute a monthly fee that is one-twelfth of the total projected cost of the year's production and in return have the right to receive a weekly basket of fruit, vegetables, poultry, dairy products, and other foods. The farmers promise to grow these products organically. Farmers and consumers are responsible for improving the lives of one another, ensuring a line of production that is free of middlemen and price fluctuations and that guarantees a fair monthly income for the producer. Moura is ready to take his approach to the mass-market level. He is negotiating partnerships with traditional food-distribution channels like supermarket chains.

Analogous solution area: Fair Trade

LACK OF POWER AT THE BASE OF THE SUPPLY CHAIN

Similar to fishermen, coffee farmers are the least powerful players in their supply chain. They are typically independent operators surviving on tiny profit margins in a multibillion-dollar international trading business. Through the Fair Trade movement, however, many coffee farmers have built powerful cooperatives that have given them more control over their product, significant economies of scale, and higher profits.

This has yielded opportunities for some cooperatives to invest in, among other things, coffee processing facilities of their own, helping ensure the integrity of the supply chain and limiting the number of profit-taking middlemen. Fishermen could develop democratic cooperatives to similar benefit, with one possible result being cooperative-owned local processing plants that would help limit transportation costs (and attendant environmental degradation), ensure supply-chain integrity, and give more control and profit to the fishermen. Fishermen's cooperatives would need to mature to the level of financial sophistication and governance structure that fair trade farmers have achieved, bringing better health care, schools, and infrastructure—concrete incentives for producers living on the margins.

THE CONSUMER WANTS

What began decades ago as a charitable initiative has evolved into a multimillion-dollar business that takes commerce very seriously. Fair trade products have successfully engaged consumers by focusing on what consumers want, namely quality, and also by fostering an emotional connection to suppliers (farmers)—an approach several small sustainable fish initiatives have embraced. Fair trade companies have successfully scaled with widespread media campaigns and a repositioning of their product:

Example:

CafeDirect

CafeDirect fair trade coffee has grown into the fifth largest coffee brand in the UK by concentrating on

consistency and quality, shifting into the gourmet coffee market, and launching a massive ad campaign called "Perfect coffee and how to make it," which featured images of the farmers who grow it. By differentiating its coffee as a superior product, the company, founded in 1992 by four fair trade NGOs, demonstrated its commitment to its customers as well as its producers, a departure from the singular focus on altruism that had previously been the product's main selling point.

Analogous solution area: Sustainable Forestry

THE BUSINESS CASE

Making the case for sustainability among fishermen has parallels in forestry. The case for sustainability in wood products is not clear from a business perspective. And for many fishermen the long-term viability of seafood supply seems at odds with the pressures of daily economic survival. As for loggers, the very life fishermen take is vital to their survival.

THE CERTIFICATION PROBLEM

For a small-scale operation, the benefits of becoming sustainable can seem especially dubious. Certification is prohibitively costly and time-consuming, access to markets that demand sustainable products is difficult, and local consumers may not be willing to pay a higher price. The well-known and successful Forest Stewardship Council certification is not an option for small operations in the developing world (much like the MSC certification is not an option for many of the world's fishermen), but a small-scale certification scheme for firewood in Chile, for example, offers some insight into how to address such barriers:

Example:

Niche Certification Alternatives

Ashoka Fellow René Reyes in Chile has created a certification system for locally produced firewood that reduces degradation of native forests, improves the livelihood of rural producers, reduces air pollution, and promotes fair trade. Chile depends on firewood as the its main source of fuel. Harmful forestry practices threaten the country's supply of wood, soil, and water, and overexploitation of resources is rapidly depleting the native forests and causing major air pollution. It is also trapping producers in a vicious cycle of unsustainable supply.

Consumers are interested only in buying firewood as cheaply as possible, with no concern for its origin or quality or the sustainability of the forests it comes from. So Reyes launched an information campaign stressing the values of fair trade and responsible consumption, supported by pamphlets, messages aired on radio and television, school information campaigns, and talks and workshops conducted by

trained volunteers. Reyes also targets large firewood consumers, such as hotels, factories, and hospitals, to seek commitments that they will use only certified wood. He also targeted mainstream consumers who had complained that they had problems with storage because traditionally in Chile, firewood is purchased only once a year. By offering the ability to order firewood by telephone each month, certified firewood vendors gain a true competitive advantage.

THE INFLUENTIAL BUYER

Daunted by the uphill battle to persuade consumers to demand more sustainable paper products, Canada's Markets Initiative targeted a single influential company with high public visibility and effectively turned an industry around:

Example:

Markets Initiative

Founded by Ashoka Fellow Nicole Rycroft in 1999, Canada's Markets Initiative collaborates with major paper buyers such as book and magazine publishers to shift the demand for paper products to sustainable options. Initially, Nicole went directly to the paper producers who said her vision would never be achieved. It was too risky for them to produce a paper without a guaranteed market.

The group's great success came in 2007 when it convinced the Canadian publisher of the last Harry Potter book to use only paper labeled Ancient Forest Friendly by Markets Initiative, to great media fanfare. Today, Markets Initiative has persuaded 70 percent of the Canadian book publishing industry to stop using paper that contains fiber from ancient and endangered forests. Signatory companies must agree to phase out their use of products derived from these forests within a three-year period—thereby allowing sufficient time for alternative products to be developed on a scale to fill the market gap.

APPENDIX: INTERVIEWEES

Tobias Aguirre *
Executive Director
FishWise
Santa Cruz, California
t.aguirre@fishwise.com

Antonio García Allut **
Barcelona, Spain
antonio.garcia.allut@fundacionloxanet.org

Leigh Belanger
Program Manager
Chef's Collaborative
Boston, Massachusetts
leigh@chefscollaborative.org

Michael Bell
Project Director
California Coastal and Marine Program
The Nature Conservancy
Morro Bay, California
mbell@tnc.org

Lydia Bergen
Associate Director
Strategy and Outreach Sustainable Fisheries Initiative
New England Aquarium
Boston, Massachusetts
lbergen@neaq.org

Richard Boot
President
FishChoice
Santa Barbara, California
richard@fishchoice.com

Michael Boots *
Director
Seafood Choices Alliance
Silver Spring, Maryland
mboots@seafoodchoices.org

Glen Brooks
President
Gulf Fishermen's Association
Clearwater, Florida
brooks3glen@yahoo.com

Carrie Brownstein *
Seafood Quality Standards Coordinator
Whole Foods Market
New York, New York
Carrie.Brownstein@wholefoods.com

Scott Burns *
Director Environment and Conservation Program
Walton Family Foundation
Annapolis, Maryland
sburns@wffmail.com

Jim Cannon *
Executive Director
Sustainable Fisheries Partnership
Jakarta, Indonesia
Jim.Cannon@sustainablefish.org

George Clement
Fisherman
New Zealand Deep Water Co. Fishery
Nelson, New Zealand
dwg@fishinfo.co.nz

Pisit Chansanoh **
Raindrop Association (Yadfon)
Thailand
yadfon@loxinfo.co.th

Giovanni Comin
President
Central Coast Seafood
Atascadero, California
gioc@ccseafood.com

Chuck Cook *
Project Leader
Sustainable Fisheries Group
Donald Bren School of Environmental
Science and Management
University of California, Santa Barbara
Morro Bay, California
ccook@tnc.org

Chris Costello
Associate Professor of Environmental
and Resource Economics
Donald Bren School of Environmental
Science and Management
University of California, Santa Barbara
Santa Barbara, California
costello@bren.ucsb.edu

Steve Cowan
Director, Producer
Habitat Media
San Rafael, California
steve@habitatmedia.org

Alison Cross
Program Associate-Fisheries
World Wildlife Fund - US
Palo Alto, California
Alison.Cross@wwfus.org

Shannon Crownover
Former Program Director
Caviar Emptor
SeaWeb
Hawaii
scrownover@tnc.org

Claudionor da Silva **
Cooperative of Mixed Small-scale Fishermen
and Fisherwomen of Pará
Brazil
claudionorabsilva@yahoo.com.br

Ronny Dimara **
Indonesia
rdimara@yahoo.com

Haidar El Ali **
Marine Park Project and Oceanium
Senegal
oceanium@arc.sn

Matt Elliott *
Conservation Director
Sea Change Investment Fund
San Francisco, California
matthew@ceaconsulting.com

Philip Fitzpatrick *
Commercial Director
Marine Stewardship Council - Americas
Seattle, Washington
Philip.Fitzpatrick@msc.org

Pablo Filippo
Maritime Fisheries Biological Institute, Almirante Storni
Argentina
pfilippo@ciudad.com.ar

Rod Fujita *
Senior Scientist
Oceans Program
Environmental Defense Fund
San Francisco, California
rfujita@edf.org

Andy Furner
Director of Strategy
TraceRegister
Seattle, Washington
afurner@traceregister.com

Eric Gilman
Marine Science Advisor
IUCN
Honolulu, Hawaii
eric.gilman@iucn.org

James Gowdy
Professor
Renssalaer Polytechnic Institute
Troy, New York
gowdyj@rpi.edu

Martin Hall
Chief Scientist
Tuna-Dolphin Program
Inter-American
Tropical Tuna Commission
Nicaragua/San Diego, California
mhall@iattc.org

Nick Hall
Seafood Program Manager
FishPhone
Blue Ocean Institute
Seattle, Washington
nhall@blueocean.org

Randy Hartnell
President
Vital Choice Seafood and Organics
Bellingham, Washington
rhartnell@comcast.net

Ray Hilborn
Professor of Aquatic and Fishery Sciences
University of Washington
Seattle, Washington
rayh@u.washington.edu

Michael Hirshfield
Senior Vice President, Chief Scientist
Stop Destructive Trawling Campaign
OCEANA
Washington, DC
mhirshfield@oceana.org

John Hocevar *
Director, Senior Oceans Specialist
Oceans Campaign
Greenpeace
jhocevar@greenpeace.org

Hollis Hope
Managing Director
KidSafe Seafood
SeaWeb
Denver, Colorado
hhope@seaweb.org

Alan Hummel
Market Director of Meat and Seafood
New Seasons Market
Portland, Oregon
alanh@newseasonsmarket.com

Teresa Ish
Project Manager, Corporate Sponsorships Oceans Program
Environmental Defense Fund
New York, New York
tish@edf.org

Kozo Ishii*
Program Director
Marine Stewardship Council - Japan
Tokyo, Japan
Kozo.Ishii@msc.org

Jennifer Jacquet
Ph.D. Candidate
Sea Around Us Project
University of British Columbia Fisheries Centre
Vancouver, British Columbia, Canada
j.jacquet@fisheries.ubc.ca

Monica Jain *
Principal and Founder
Manta Consulting, Inc.
Solvang, California
mantaconsulting@gmail.com

Howard Johnson *
Founder
H.M. Johnson & Associates
Jacksonville, Oregon
howard@hjm.com

Dane Klinger
Researcher
FishPhone
Blue Ocean Institute
Baltimore, Maryland
dhklinger@gmail.com

Peter Knights
Executive Director
WildAid
San Francisco, California
knights@wildaid.org

Kees Lankester *
Board Member
Marine Stewardship Council
Amsterdam, The Netherlands
k.lankester@scomber.nl

Glen Libby
Chairman, Midcoast Fishermen's Association
President, Midcoast Fishermen's Co-op
Maine
rider0503@aol.com

Kristofor Lofgren*
Owner
Bamboo Sushi
Portland, Oregon
ksl@bamboosushipdx.com

Meredith Lopuch *
Director
Community Fisheries Program
World Wildlife Fund - US
Palo Alto, California
meredith.lopuch@wwfus.org

Henry Lovejoy
President and Founder
EcoFish
Dover, New Hampshire
henry@ecofish.com

Stephanie Madsen
Executive Director
At Sea Processors Association
Juneau, Alaska
smadsen@atsea.org

Patricia Majluf *
Director
Discover the Anchovy
Centro para la Sostenibilidad Ambiental, Universidad Peruana
Cayetano Heredia
Lima, Peru
pmajluf@csa-upch.org

Mike McDermid
Coordinator
Ocean Wise
Vancouver Aquarium
Vancouver, British Columbia, Canada
mike.mcdermid@vanaqua.org

Michael Northrop
Director of Sustainable Development
Rockefeller Brothers Fund
New York, New York
mnorthrop@rbf.org

Chris Oliver
Executive Director
North Pacific Fisheries Management Council
Anchorage, Alaska
chris.oliver@noaa.gov

Ian Olson *
Director of Sustainability
Darden Restaurants
Orlando, Florida
iolson@darden.com

Tim O'Shea
Chairman and CEO
CleanFish
San Francisco, California
tim@cleanfish.com

Mike Osmond
Senior Program Officer
International Smart Gear Competition
World Wildlife Fund - US
Palo Alto, California
smartgear@smartgear.org

Hidayat Palaloi **
Indonesian Self Growth Foundation (YTMI)
Indonesia
ytmiup@indosat.net.id

Paul Parker
Executive Director
Cape Cod Commercial Hook Fishermen's Association
North Chatham, Massachusetts
pparker@ccchfa.org

Wayah Patut **
Karya Segara Fishermen's Cooperative
Indonesia
karyasegara@yahoo.com

Daniel Pauly
Professor and Principal Investigator
Sea Around Us Project
University of British Columbia Fisheries Centre
Vancouver, British Columbia, Canada
d.pauly@fisheries.ubc.ca

Dierk Peters *
Director, Sustainable Seafood Initiative
World Wildlife Fund - US
Washington, DC
Dierk.peters@wwfus.org

Lida Pet-Soede
Director, Marine Programme and
Coral Triangle Network Initiative
World Wildlife Fund-Indonesia
Bali, Indonesia
lpet@wallacea.wwf.or.id

Suwimon Piriyathanalai **
Association of Traditional Fishing Folks
Thailand
Efsuwimon@hotmail.com

Mark Powell
Vice President of Sustainability Partnerships
Ocean Conservancy
Seattle, Washington
mpowell@oceanconservancy.org

Jeremy Prince
Adjunct Associate Professor
Western Abalone Divers Association
Centre for Fish and Fisheries Research
Murdoch University
Perth, Western Australia
biospherics@ozemail.com.au

Peter Redmayne *
President
The Sea Fare Group, USA
Seattle, Washington
peter@seafare.com

Randy Rice
Technical Program Director
Alaska Seafood Marketing
Juneau, Alaska
rrice@alaskaseafood.org

Andy Rosenberg
Professor, Department of Natural Resources
University of New Hampshire
Durham, New Hampshire
Andy.Rosenberg@unh.edu

Dianne Saenz
Director of Communications
Oceana
Washington, DC
dsaenz@oceana.org

Andrea Saenz-Arroyo
Science Director
Comunidad y Biodiversidad
Mexico City, Mexico
asaenz@cobi.org.mx

Carl Safina
President
Blue Ocean Institute
East Norwich, New York
csafina@blueocean.org

Dewi Satriani
Communications and Outreach Manager
World Wildlife Fund - Indonesia Marine Program
Jakarta, Indonesia
dsatriani@wwf.or.id

Jackie Savitz
Senior Campaign Director
Hold the Mercury
Oceana
Washington, DC
JSavitz@oceana.org

René Schärer **
Amigos da Prainha do Canto Verde
Painha do Canot Verde, Brazil
fishnet@uol.com.br

Barton Seaver *
Chef (formerly with Hook and Tackle Box Restaurants)
Washington, DC
barton@bartonseaver.org

Pam Seeto *
Strategic and Technical Adviser
Papua New Guinea LMMA Network Western Pacific Program
at Packard Foundation and LMMA
Sydney, Australia
pseeto@packard.org

Katherine Short *
Fisheries Officer
Global Marine Programme
World Wildlife Fund International
KShort@wwfint.org

Melanie Siggs *
UK Director
Seafood Choices Alliance
London, UK
msiggs@seafoodchoices.org

Riley Starks
Cofounder
Chefs in Raingear
Lummi Island Wild Co-op LLC.
Lummi Island, Washington
innkeeper@willows-inn.com

Mark Stevens *
Senior Program Officer
Marine Program
World Wildlife Fund
mark.stevens@wwfus.org

Todd Stevenson
Graduate Student (Former Coordinator at Melanesia Center for
Biodiversity Conservation with Conservation International)
School of Earth and Environmental Sciences, Washington State
University - Vancouver
Vancouver, Washington
tcstevenson@gmail.com

David Strelneck
Project Director and Environmental Program Analyst
Ashoka
Washington, DC
dstrelneck@ashoka.org

Peter Trott
Fisheries Officer
World Wildlife Fund - Australia
Sydney, Australia
ptrott@wwf.org.au

Orri Vigfusson **
The North Atlantic Salmon Fund
Iceland

Laura Viggiano
Associate
California Environmental Associates
San Francisco, California
laura@ceaconsulting.com

Natalie Webster
Administrator
American Albacore Fishing Association
San Diego, California
nataliewebster@americanalbacore.com

Philip Werdal
Founder and CEO
TraceRegister
Seattle, Washington
pwerdel@traceregister.com

Meryl Williams
Chairperson
Commission for International Agricultural Research Australian
Centre for International Agricultural Research (ACIAR)
Malaysia
scylla@myjaring.net

Helene York *
Director
Bon Appétit Management Company Foundation
Palo Alto, California
Helene.York@bamco.com

* Part of Packard contact list
** Ashoka Fellow

APPENDIX: CITATIONS

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CHERYL DAHLE is the director of Ashoka's Discovery Group. As a journalist, entrepreneur, and thought leader, she has spent nearly 10 years working at the intersection of business and social innovation. She founded and led *Fast Company* magazine's Social Capitalist awards, a competition designed to surface top social entrepreneurs. As project manager for four years, she helped design an evaluation methodology and sifted through hundreds of nonprofit applications each year to find top performers with compelling models for change. She has written extensively on capital markets for nonprofits, sustainability, and social entrepreneurs in the US and abroad. As a consultant, Dahle has served leading organizations in the space of hybrid business/social solutions, including the World Business Council for Sustainable Development, the Skoll Foundation, and the Center for the Advancement of Social Entrepreneurship at Duke University.

MARAH J. HARDT, Ph.D., received her doctorate from Scripps Institution of Oceanography. Her research used a unique approach combining historical and ecological analyses to determine how fishing affects coral reef ecosystems throughout the Caribbean. Her work consisted of gathering data by conducting ecological surveys of reefs and reading historical accounts of fishing practices, including those from pirate journals. This doctoral work combined her passion for marine conservation and love for diving with her background in the history of science, which was her undergraduate major at Harvard University. She has presented posters and talks at scientific conferences, the Birch Aquarium at Scripps, and local elementary schools in California and Connecticut. She has also published several articles in peer-reviewed journals based on her research. Hardt is currently a research fellow working at the Blue Ocean Institute located at Stony Brook University, SUNY, where she writes primarily about how climate change affects marine ecosystems.

ALISON CRAIGLOW HOCKENBERRY is a researcher and veteran print and television journalist who has investigated and reported on human rights issues and families in crisis for 20 years. She has spearheaded reports on sensitive, difficult-to-unearth topics that have been neglected by the media. Such topics include the effect of a lifetime of war on the children in Afghanistan; abused and neglected children suffering from attachment disorder; the complex motivations of teenage girls choosing motherhood; and the first US network television report on female genital mutilation in Africa, for which she won a Peabody Award. Also an Emmy Award winner, Hockenberry has worked for ABC News, the *New York Times*, and NPR and held a Prudential Fellowship for Children and the News at Columbia University's School of Journalism.

COLLEEN HOWELL, Ph.D., is an environmental science researcher, writer, and sustainability consultant. Her interdisciplinary approach to environmental issues and her ability to communicate effectively to disparate audiences have led to a diverse repertoire of work in areas including resource-use policy, ecosystem modeling, the study of subjective well-being, consumer campaigns for environmental literacy, and carbon calculator design. She was the primary researcher for *You Are Here: Exposing the Vital Link Between What We Do and What That Does to out Planet* (HarperCollins) and contributed both scientific and creative content to *The Green Book: The Everyday Guide to Saving the Planet, One Simple Step at a Time* (Random House). Howell consults with several organizations to help promote environmental sustainability in tandem with ecosystem integrity, economic efficiency, social justice, and improved quality of life.

DAMIEN NEWMAN is the founding partner behind Central, a San Francisco Bay Area design strategy firm. He has spent nearly 20 years working on brand strategy, organizational transformation, and design thinking for leading firms such as IDEO, Frog Design, and Studio Archetype. Working on a variety of projects at IDEO, Newman helped organizations define their brand strategies and transform themselves around new business behaviors. His project experience spans internal brand strategy and articulation for one of Korea's largest Internet companies, Pepsi, Procter & Gamble, Novartis, and Marriott Hotels. Before joining IDEO, Newman worked with organizations in the UK and the US as an independent consultant, focusing on defining their business behavior to improve overall performance. For nearly two years, he also worked as Vice President of a private investment fund, managing the process of identifying new innovations for investment. Previously, he was a director of strategy at Frog Design, helping to incorporate research and strategy tools into the company's design process. Prior to that, Newman led brand strategy efforts for Studio Archetype, working with UPS, IBM, Sun Microsystems, and Coca-Cola.

PAUL RYDER, Ph.D., is an eclectic thinker and catalyst who has designed and led ideas and projects on everything from sales training for corporate managers to book design for business gurus to group process design for medical schools. His approach to pattern recognition, principle discovery, and learning design has been employed by a wide range of clients, from the federal government (DoD, FBI, CIA, NSA) to New Economy icons such as Tom Peters and Fast Company. A startup veteran and member of the executive team at Ninth House Network, Ryder went on to found two businesses, RevoMetrix, LLC and RNM Global. In an attempt to understand the widest range of ideas and modes of thought he has collected degrees in physics (A.B. Harvard College), development psychology (M.S. Rutgers), and mythology (Ph.D. Pacifica Graduate Institute). In addition to his commercial work, Ryder is an adjunct faculty member at the University of San Francisco, teaching classes in social ethics and American intellectual history.

ASHOKA INNOVATORS FOR THE PUBLIC